

6009-6017 Valley Way, Niagara Falls, ON
Phase Two Environmental Site Assessment



Project Location:

6009-6017 Valley Way
Niagara Falls, ON
L2E 1X9

Prepared For:

New Castle Communities
1725 Third Street Louth
St. Catharines, ON
L2R 6P9

Prepared By:

Niagara Soils Solutions Ltd.
3300 Merrittville Highway, Unit 4
Thorold, ON
L2V 4Y6



NIAGARA SOILS SOLUTIONS LTD.

Date: September 30, 2025

NSSL File No.: NS2560-02



EXECUTIVE SUMMARY

Niagara Soils Solutions Ltd. (NSSL) was retained by The New Castle Communities to conduct a Phase Two Environmental Site Assessment (ESA) of a property at 6009-6017 Valley Way, Niagara Falls, ON (herein referred to as the “Phase Two Property” or the “Site”). The purpose of the Phase Two ESA was to investigate the identified APECs at the Site based on the recommendation of the Phase One ESA. All work was completed in accordance with Ontario Regulation (O. Reg.) 153/04 (as amended) standards.

A Phase One ESA investigation completed by NSSL in May 2025 that identified 10 Potentially Contaminating Activities (PCAs) for the study area, resulting in two on-site Areas of Potential Environmental Concern (APECs) to the Site’s soil and/or groundwater. The on-site contaminating activities were attributed to the potential dry-cleaning activities at the adjacent former vocational school and historic agricultural land use.

The summarized findings are documented as follows:

- Three environmental boreholes were advanced at the Site to a maximum depth of 6.71 m bgs within the reworked and native materials on-site.
- Eleven hand augers were conducted throughout the field portion of the Site.
- Three environmental monitoring wells, BH/MW1 to BH/MW3, were installed into the associated boreholes to a maximum depth of 6.71 mbgs.
- Target contaminants of concern for the soil included Volatile Organic Compounds (VOCs), Organochlorine Pesticides (OCs), Hydride forming Metals, Lead and pH.
- Target contaminants of concern for the groundwater included VOCs.
- Seventeen select soil samples and two duplicate samples were submitted for laboratory analyses.
- Three groundwater samples with one duplicate were submitted for laboratory analyses.
- The soil and groundwater results met Table 2 Non-Potable Groundwater Condition standards for Residential/Parkland/Institutional land use for coarse-grained textured soil criteria.

Based on the reported NSSL concludes that the applicable Table 2 potable Groundwater Condition Standards for Residential/Parkland/Institutional land use for coarse-grained soil criteria are met and no further work is required. The site is considered suitable for residential development purposes and may proceed with the submission of a Record of Site Condition with the Ministry of the Environment, Conservation and Parks.



TABLE OF CONTENTS

1.0	<u>INTRODUCTION</u>	4
1.1	SITE DESCRIPTION	4
1.2	PROPERTY OWNERSHIP	5
1.3	CURRENT AND PROPOSED FUTURE USES	5
1.4	APPLICABLE SITE CONDITION STANDARD	5
2.0	<u>BACKGROUND INFORMATION</u>	6
2.1	PHYSICAL SETTING	6
3.0	<u>SCOPE OF INVESTIGATION</u>	7
3.1	OVERVIEW OF SITE INVESTIGATION	7
3.2	MEDIA INVESTIGATED	7
3.3	DEVIATION FROM SAMPLING AND ANALYSIS PLAN	7
3.4	IMPEDIMENTS	7
4.0	<u>INVESTIGATION METHOD</u>	8
4.1	PHASE TWO ESA GENERAL OVERVIEW	8
4.2	UTILITY CLEARANCE	8
4.3	BOREHOLE DRILLING	8
4.4	MONITORING WELL INSTALLATION	8
4.5	SOIL SAMPLING	9
4.6	SOIL: FIELD SCREENING MEASUREMENTS	9
4.7	GROUND WATER: FIELD MEASUREMENTS OF WATER QUALITY PARAMETERS	9
4.8	GROUND WATER: SAMPLING	9
4.9	ANALYTICAL TESTING	10
4.10	RESIDUE MANAGEMENT PROCEDURES	10
4.11	ELEVATION SURVEYING	10
4.12	QUALITY ASSURANCE AND QUALITY CONTROL MEASURES	10
5.0	<u>REVIEW AND EVALUATION</u>	11
5.1	GEOLOGY	11
5.2	SOIL TEXTURE	11
5.3	GROUNDWATER ELEVATIONS AND FLOW DIRECTION	11
5.4	HYDRAULIC GRADIENT & CONDUCTIVITY	12
5.5	SOIL QUALITY	12
5.6	GROUNDWATER QUALITY	12
6.0	<u>CONCLUSIONS</u>	13
6.1	CLOSURE	13
7.0	<u>LIMITATIONS</u>	14
8.0	<u>REFERENCES</u>	15



FIGURES

Figure 1:	Site Location
Figure 2:	Site Layout & Features
Figure 3:	Potentially Contaminating Activities
Figure 4:	Areas of Potential Environmental Concern
Figure 5:	Sample Locations
Figure 5B:	Sample Locations with Respect to APEC
Figure 6:	Topographic Contours
Figure 7:	Groundwater Contours
Figure 8:	Soil Results
Figure 9:	Groundwater Results
Figure 10:	Cross Section Planview: A-A', B-B'
Figure 11:	Cross Section: A-A'
Figure 12:	Cross Section: B-B'

TABLES

Table 1:	Site Condition Standards Applicable to the Phase Two Property
Table 2:	Results of Grain Site Analysis
Table 3:	Groundwater Details
Table 4:	Hydraulic Gradient

APPENDICES

- A. Borehole Logs
- B. Certificates of Analysis – Soil
- C. Certificates of Analysis – Groundwater
- D. Grain Size Analysis



ACRONYMS AND ABBREVIATIONS

APECs	Areas of Potential Environmental Concern
bgs	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
COC	Chain of Custody
EC	Electrical Conductivity
ESA	Environmental Site Assessment
MECP	Ministry of the Environment, Conservation and Parks
MOECC	Ministry of the Environment and Climate Change
NPCA	Niagara Peninsula Conservation Authority
O. Reg.	Ontario Regulation
PAHs	Polycyclic Aromatic Hydrocarbons
PCA	Potentially Contaminating Activity
PHCs	Petroleum Hydrocarbons
SAR	Sodium Adsorption Ratio
SOPs	Standard Operating Procedures
SCS	Site Condition Standard
VOCs	Volatile Organic Compounds



1.0 INTRODUCTION

Niagara Soils Solutions Ltd. (NSSL) was retained by The New Castle Communities to conduct a Phase Two Environmental Site Assessment (ESA) of a property at 6009-6017 Valley Way, Niagara Falls, ON (herein referred to as the “Phase Two Property” or the “Site”). The purpose of the Phase Two ESA was to investigate the identified APECs at the Site based on the recommendation of the Phase One ESA. All work was completed in accordance with Ontario Regulation (O. Reg.) 153/04 (as amended) standards. The Site location is shown in Figure 1.

Authorization to proceed with the Phase Two ESA was received from Mr. Christopher Adams. The contact information for Mr. Christopher Adams is:

New Castle Communities
1725 Third Street Louth
St. Catharines, ON
L2R 6P9

A Phase One ESA investigation completed by NSSL in May 2025 that identified 10 Potentially Contaminating Activities (PCAs) for the study area, resulting in two on-site Areas of Potential Environmental Concern (APECs) to the Site’s soil and/or groundwater. The on-site contaminating activities were attributed to the potential dry-cleaning activities at the adjacent former vocational school and historic agricultural land use.

1.1 Site Description

The Phase Two Property, approximately 1.09 hectares in size, is a vacant and undeveloped lot with no structures on-site. Historical records show that the Site was used for agricultural purposes from 1934 until the late 1960s, with no evidence of development prior to that period. Around 1969, the original, larger lot, approximately 3.97 hectares, was acquired by Lord Elgin Vocational School. The Phase Two Site remained undeveloped but was utilized for recreational purposes associated with the school, the building having been erected within the western part of the larger land parcel, due west of the Phase Two Site. In the 1990s, the Site continued to serve as a recreational space under the ownership of St. Michael High School and later, during the 2000s, by the Niagara Catholic School Board (NCSB). Following the sale of the lands in 2005 to Glengate Alliance Church, the northern portion of the Phase Two Property was repurposed for small-scale gardening. These uses have continued to the present day. The property is located approximately 85 m northwest of the intersection of Valley Way and Portage Road, and about 2.2 km west of the Niagara River. Adjacent properties include residential dwellings to the north and south, as well as residential dwellings and the “Grace Gospel Church” to the east. To the west is a multi-use complex comprising retail, office space, and a daycare.

1.2 Property Ownership

The Central Canadian District of the Christian and Missionary Alliance in Canada acquired the Site in November 2004 and held ownership until 2009, when it was transferred to the current owner, Valley Way Non-Profit Housing Corporation.

1.3 Current and Proposed Future Uses

The Site is currently a vacant and undeveloped lot with no existing structures on the site. The proposed plans submitted to NSSL at the time of the report is for future development for residential dwellings.

1.4 Applicable Site Condition Standard

Under Ontario Regulation (O. Reg.) 153/04, as amended, the MECP has outlined Site Condition Standards (SCS) in the document “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act” dated April 15, 2011. The SCS applicable to the Phase Two property has been evaluated based on the rationale listed in Table 1 below.

Table 1: Site Condition Standards Applicable to the Supplemental Phase Two Property

Property Use	The proposed future land use is residential therefore, the SCS for Residential/Parkland/Institutional (RPI) land use was applied.
Grain Size	As per the Niagara Testing & Inspection (NTIL) report provided in Appendix C, the grain size for selected samples was determined to be coarse-grained.
Water Wells	No domestic water wells were identified within 250 metres (m) of the Phase Two Property. The Site and the surrounding properties are serviced by the municipal water main. Therefore, Table 2 was applied.
Within 30 m of a Waterbody	In accordance with O. Reg. 153/04, land on the Phase Two Property is not located within 30 m of a waterbody.
Depth to Bedrock	Based on the drilling activities, there is more than 2.0 m of soil between the ground surface and the top of the bedrock surface at the Site. Therefore, shallow groundwater soils are not applicable.
pH	The pH levels across the site were noted as above 5 and below 9.
Environmentally Sensitive Area	The Phase Two Property has not been identified as being in an environmentally sensitive area.
Area of Natural Significance	The Phase Two Property is not classified as an area of natural significance under O. Reg. 153/04, as amended. The Phase Two Property does not include land or is within 30 m of land that would be classified as an area of natural significance as defined by O. Reg. 153/04, as amended.

Based upon the above characteristics, Table 2, Full Depth Generic Site Condition Standards in a Potable Groundwater Condition, Residential/Parkland/Institutional land use coarse-grained soil criteria were utilized for the Phase Two ESA investigation.



2.0 BACKGROUND INFORMATION

2.1 **Physical Setting**

A review of the Ministry of Northern Development and Mines, Geology Ontario Spatial Search tool as well as “Quaternary Geology of Southern Ontario”, Map 2496 and Map 2544, showing the “Bedrock Geology of Southern Ontario” and Map 2344, Paleozoic Geology Niagara, Southern Ontario, indicated that the native overburden is Late Wisconsinan, glaciolacustrine nearshore and deltaic sand and silt, underlain by dolostone and shale from the Lockport Formation. Depth to unconfined groundwater was recorded to be approximately 6 meters below ground surface (mbgs), and the confined aquifer is approximately 20 mbgs, based on a review of local well records, geologic maps and monitoring wells installation by NSSL in the field. The estimated depth to bedrock based on the surface and bedrock elevation is approximately 21 m bgs.

The Phase Two Property land cover is characterized by a layer of topsoil and organic material. As the Site is predominantly covered by a permeable surface, overland flow would be limited as infiltration would happen on-site. Any potential accumulation of surface water would be directed to localized low areas within the southeastern corner of the Site. The Site was noted to be gently sloping southeast. The inferred groundwater flow direction in the study area is southeast, based on a review of the elevations and hydrogeology of the area.

3.0 SCOPE OF INVESTIGATION

3.1 Overview of Site Investigation

The Phase Two ESA investigation at the Site consisted of the following components:

- Underground service utility locates were completed using Ontario One Call and a private locating service Ontario Utility Locates.
- Three environmental boreholes were advanced at the Site to a maximum depth of 6.71 m bgs within the reworked and native materials on-site.
- Eleven hand augers were conducted throughout the field portion of the Site.
- Three environmental monitoring wells, BH/MW1 to BH/MW3, were installed into the associated boreholes to a maximum depth of 6.71 mbgs.
- Target contaminants of concern for the soil included Volatile Organic Compounds (VOCs), Organochlorine Pesticides (OCs), and pH.
- Target contaminants of concern for the groundwater included VOCs.
- Seventeen select soil samples and two duplicates samples were submitted for laboratory analyses.
- Three groundwater samples with one duplicate were submitted for laboratory analyses.
- Borehole locations were survey referenced to a Site benchmark.

3.2 Media Investigated

Soil and groundwater media were investigated as part of this Phase Two assessment.

3.3 Deviation from Sampling and Analysis Plan

There were no deviations from NSSL's Sampling and Analysis Plan.

3.4 Impediments

No impediments were encountered during the Site drilling activities.

4.0 INVESTIGATION METHOD

4.1 Phase Two ESA General Overview

The investigation was carried out in accordance with the Sampling and Analysis Plan and NSSL's Standard Operating Procedures (SOPs). Three environmental boreholes and 11 hand augers were advanced across the Site. Boreholes were drilled to a maximum depth of 6.71 mbgs and terminated in native soils. Three of the boreholes were converted to monitoring wells. Three monitoring wells were installed solely for environmental monitoring, dedicated to environmental purposes.

Groundwater monitoring wells were installed in accordance with the Ontario Water Resource Act, R.R.O. 1990, Ontario Regulation (O. Reg.) 903 – Amended to O. Reg. 128/03. The sampling and decontamination procedures were conducted in accordance with the "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", May 1996, revised December 1996, as amended by O. Reg. 511/09.

Laboratory analytical methods, protocols, and procedures were carried out in accordance with the 'Protocol for Analytical Methods Use in the Assessment of Properties under Part XV.1 of the Environmental Protection Act', dated March 9, 2004, amended as of July 1, 2011, in accordance with O. Reg. 511/09 and O. Reg. 269/11.

4.2 Utility Clearance

Prior to the commencement of the subsurface investigations, underground service utility locates were obtained for the Site through Ontario One Call. Additionally, a private underground service locating company, Ontario Utility Locates, located the underground services (hydro, gas, water, sewer, and communications) at the Site.

4.3 Borehole Drilling

Three boreholes, BH1 to BH3, were advanced across the Site on August 20th, 2025, by Elite Drilling Services utilizing 100 mm solid stem augers. The maximum depth of the boreholes was 6.71 mbgs. The locations of the field activities are shown in Figure 5.

4.4 Monitoring Well Installation

Three monitoring wells, BH/MW-1 to BH/MW-3, were installed into the associated boreholes. The monitoring wells were constructed according to MECP-recognized industry standards and consisted of a 50-millimeter (2-inch) diameter slotted PVC screen surrounded by a silica sand pack. The screen was attached beneath a solid 50-millimeter(2-inch) diameter PVC riser, surrounded by bentonite grout, to ensure a seal between the ground surface and the water table. All wells were fitted with a steel stick-up protective casing. A waterra manual lift pump was installed into each well to allow for purging, development, and subsequent groundwater sample collection. The borehole field logs are provided in Appendix A, with the monitoring well locations depicted in Figure 5.

4.5 Soil Sampling

Thirty-two soil samples were collected from boreholes BH/MW1 to BH/MW3 and HA1 to HA11. Recovered soil samples were immediately logged for soil type, moisture, colour, texture, and visual evidence of impacts. The samples were then stored for potential laboratory analyses and placed in clean coolers with ice. Following field screening measurements, the selected samples were transported and submitted to AGAT according to Chain of Custody (COC) protocols for chemical analyses.

4.6 Soil: Field Screening Measurements

All soil samples were screened for combustible gases using an RKI Instrument Eagle Potable Multi-gas detector (with a Methane Elimination switch), operated in methane elimination mode. The monitor has a range of 0 to 50,000 parts per million (ppm) and an accuracy of $\pm 5\%$. The monitor was calibrated to hexane standards prior to field screening for both ppm and Lower Explosive Limit (LEL) in accordance with the calibration products outlined in the instruction manual for the instrument. The instrument is regularly calibrated and tuned by the supplier, Pine Environmental. Each soil sample corresponding to a specific spoon depth was bagged for soil vapour analysis. Headspace vapour screening was conducted for all retrieved soil samples and were measured to be non-detect. Results for each sample are depicted on the borehole logs located in Appendix A.

4.7 Ground Water: Field Measurements of Water Quality Parameters

Several visits were undertaken to record the groundwater levels within the monitoring wells. From these recordings, the groundwater was considered to have stabilized from the installation dates. Groundwater observations were recorded for colour, clarity, the presence or absence of any free product/surface sheen, and any odours present during the purging of the wells. After each measurement, the water level measuring device was cleaned using Alconox™ soap solution wash/scrub, followed by a distilled water rinse, to prevent potential cross-contamination between observation wells. Well purging occurred and continued until approximately eight well casing volumes were removed from each well, and recorded readings indicated that the condition in the purged well had stabilized. Purge water was contained and stored on-site in drums for future disposal.

4.8 Ground Water: Sampling

Groundwater sampling was conducted on September 11th, 2025. The groundwater sampling activities were carried out using dedicated low-density polyethylene tubing and a Spectra Field Pro Peristaltic Pump. Groundwater samples were collected into laboratory-supplied containers, which were prepared with preservatives for the analysis. Disposable latex gloves were worn at each sample location. The groundwater samples were immediately placed into coolers packed with ice, pending delivery to the analytical laboratory.

4.9 Analytical Testing

The soil and groundwater sample analyses were conducted by AGAT Laboratories Ltd., located at Glover Road, Stoney Creek, ON. AGAT is accredited by the Canadian Association for Laboratory Accreditation (CALA) in accordance with ISO/IEC 17025:1999 – “General Requirements for the Competence of Testing and Calibration Laboratories” for all the parameters analyzed during this investigation.

4.10 Residue Management Procedures

Soil material, purge and wash water from equipment cleaning were contained and stored on-site in steel drums for future disposal.

4.11 Elevation Surveying

The elevation of the existing ground surface at the sample locations was referenced to a site benchmark, described as the top of the fire hydrant located north of the Site with an assigned elevation of 100 m. The topographic contours of the site are depicted in Figure 6.

4.12 Quality Assurance and Quality Control Measures

All activities completed as part of this Phase Two ESA were conducted as per applicable regulatory requirements. Field blanks were prepared using laboratory provided deionized analyte-free water in order to evaluate the influence of field ambient conditions on the field groundwater sampling process. It was then submitted, without identification, to the laboratory for analysis. Trip blanks of deionized analyte-free water, in sealed containers, were provided by the laboratory and accompanied the groundwater investigative samples and field blank throughout the sampling chain of custody, round trip from the laboratory to the Site and back. The number of duplicate samples was determined at the planning stage, selected during the sampling event and were then submitted to the laboratory for exact analysis with no linking identifiers.

All soil and groundwater samples submitted as part of this Phase Two ESA investigation were handled in accordance with the laboratory’s analytical protocols regarding holding time, preservation method, storage requirements, and container type. A Certificate of Analysis, which contains all the laboratory QA/QC measures, has been received for each sample submitted for analysis and appended to this report. The quality of the field data collected during this Phase Two ESA is considered sufficient to meet this study's overall objective.

5.0 REVIEW AND EVALUATION

5.1 Geology

A thin layer of topsoil was noted across the Site, overlaying the reworked material. Reworked silt material was found beneath the topsoil at approximately 0.15 mbgs across the Site. The native material was identified to be a brown silt with traces of gravel and sand, and to be loose to compact in consistency. The native material transitioned from light brown to dark brown at approximately 1.52 mbgs, indicating an increase in moisture with depth. Bedrock was not encountered across all boreholes. The borehole locations are depicted in Figure 5, with cross-sections summarizing the subsurface soil conditions in Figures 11 and 12.

5.2 Soil Texture

Grain size analysis was performed by NTIL on select samples. Results indicated the soil matrices passed through the No. 200 sieve (Table 2), resulting in 40.7% (BH/MW2-7), 78.1% (BH/MW3-1), 80.6% (HA5-1) and 76.6% (HA10-1). Therefore, coarse-grained soils were applied. Coarse textured soil is classified as soil that contains less than 50 percent by mass of particles that are 75 micrometers or smaller in mean diameter. The reported results are located in Appendix C.

Table 2: Results of Grain Size Analysis

Sample ID	Sample #	Soil Sample Depth (mbgs)	Soil Type	Percent Passing 75 µm (No. 200) Sieve
BH/MW2	7	6.10 – 6.71	Silty Sand	40.7% - Coarse
BH/MW3	1	0 – 0.76	Silt	78.1% - Fine/Medium
HA5	1	0 – 0.40	Silt	80.6% - Fine/Medium
HA10	1	0 – 0.40	Silt	76.6% - Fine/Medium

5.3 Groundwater Elevations and Flow Direction

Prior to groundwater sampling activities, groundwater depth was measured in all monitoring wells.

Table 3: Groundwater Details

Monitoring Well ID	Well Elevation (BM in metres)	Screen Interval (metres bgs)	September 5 th , 2025		September 11 th , 2025	
			Ground-water Level (metres bgs)	Ground-water Elevation (metres)	Ground-water Elevation (metres)	Ground-water Elevation (metres)
BH/MW1	99.93	3.05 – 6.10	5.93	94.00	5.91	94.02
BH/MW2	99.69	3.05 – 6.10	6.16	93.53	6.10	93.59
BH/MW3	99.06	3.05 – 6.10	6.00	93.06	5.93	93.13

BM = benchmark, m bgs = metres below ground surface

Based on the measured groundwater across the Site, the groundwater flow direction within the unconfined aquifer was calculated to be southeast.

5.4 Hydraulic Gradient & Conductivity

The average horizontal groundwater gradient was calculated to be 0.004 with the maximum and minimum values of 0.0003 and 0.007, respectively. The vertical hydraulic gradient was not calculated as contaminants of potential concern (COPCs) were not reported in the groundwater, and only one aquifer was intercepted at the Site.

Table 4: Hydraulic Gradient

Monitoring Well	Water Level Difference (m)	Monitoring Well Distance (m)	Hydraulic Gradient
BH/MW1 - BH/MW2	0.19	35	0.005
BH/MW2 - BH/MW3	0.17	25	0.007
BH/MW3 - BH/MW1	0.02	61	0.0003

The K values for the hydraulic conductivity of the soils are estimated based on results obtained from on-site field notes, drilling activities, grain size analysis, and the recovery rate of the monitoring wells.

5.5 Soil Quality

Soil sampling was conducted on August 20th, 2025. Thirty-two representative soil samples were obtained from the reworked and native materials. Seventeen select soil samples and two duplicates were submitted to AGAT Laboratories Ltd. for analysis of VOCs, OCs, Hydride Forming Metals, Lead and pH.

The soil laboratory results met Table 2 Potable Groundwater Site Condition standards for Residential/Parkland/Institutional land use for coarse grained-textured soil criteria. The complete soil laboratory results are provided in Appendix B and displayed in Figure 8.

5.6 Groundwater Quality

The groundwater sampling was completed on September 11th, 2025. Three groundwater samples and one duplicate were collected from the monitoring wells on-site and submitted for laboratory analysis of VOCs. The groundwater results met Table 2 criteria. Complete groundwater laboratory results are provided in Appendix D and displayed in Figure 9.

6.0 CONCLUSIONS

Niagara Soils Solutions Ltd. was retained by New Castle Communities to conduct a Phase Two Environmental Site Assessment of the vacant property located at 6009-6017 Valley Way, Niagara Falls, ON. The summarized findings are documented as follows:

- Three environmental boreholes were advanced at the Site to a maximum depth of 6.71 m bgs within the reworked and native materials on-site.
- Eleven hand augers were conducted throughout the field portion of the Site.
- Three environmental monitoring wells, BH/MW1 to BH/MW3, were installed into the associated boreholes to a maximum depth of 6.71 mbgs.
- Target contaminants of concern for the soil included Volatile Organic Compounds (VOCs), Organochlorine Pesticides (OCs), Hydride forming Metals, Lead and pH.
- Target contaminants of concern for the groundwater included VOCs.
- Seventeen select soil samples and two duplicate samples were submitted for laboratory analyses.
- Three groundwater samples with one duplicate were submitted for laboratory analyses.
- The soil and groundwater results met Table 2 Non-Potable Groundwater Condition standards for Residential/Parkland/Institutional land use for coarse-grained textured soil criteria.

Based on the reported NSSL concludes that the applicable Table 2 potable Groundwater Condition Standards for Residential/Parkland/Institutional land use for coarse-grained soil criteria are met and no further work is required. The site is considered suitable for residential development purposes and may proceed with the submission of a Record of Site Condition with the Ministry of the Environment, Conservation and Parks.

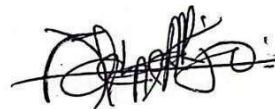
6.1 Closure

This report was prepared by Jacob Toldi under the direction of Philip Adene.

Respectively submitted,
Niagara Soils Solutions Ltd.

A handwritten signature in blue ink, appearing to read 'Jacob Toldi'.

Jacob Toldi, BES, GEM, EM, ER
Environmental Technician

A handwritten signature in blue ink, appearing to read 'Philip Adene'.

Philip Adene, P. Geo, QP_{ESA}
Professional Geoscientist

7.0 LIMITATIONS

Niagara Soils Solutions Ltd. prepared this Report for the account of New Castle Communities and is intended to provide a Phase Two Environmental Site Assessment of the property located at 6009-6017 Valley Way, Niagara Falls, ON. The material in it reflects Niagara Soils Solutions Ltd.'s best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Should additional parties require reliance on this report, written authorization from NSSL will be required. With respect to third parties, NSSL has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The investigation undertaken by NSSL with respect to this report and any conclusions or recommendations made in this report reflect NSSL's judgment based on the site conditions observed at the time of the Site inspection on the date(s) set out in this report and on information available at the time of preparation of this report. This report has been prepared for specific application to this Site and it is based, in part, upon visual observation of the Supplemental Phase Two Property, subsurface investigation at discrete locations and depths, and specific analysis of specific chemical parameters and materials during a specific time interval, all as described in this report. Unless otherwise stated, the findings cannot be extended to previous or future Site conditions, portions of the Supplemental Phase Two Property, which were unavailable for direct investigation, subsurface locations, which were not investigated directly, or chemical parameters, materials or analysis which were not addressed. Niagara Soils Solutions Ltd. has expressed professional judgement in gathering and analysing the information obtained and in the formulation of its conclusions.

NSSL makes no other representation whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

Yours very truly,
Niagara Soils Solutions Ltd.

A handwritten signature in blue ink, appearing to read 'Jodie Glasier', is written over a light blue horizontal line.

Jodie Glasier, H.BA., M.MM, EMA, EP
Founder & CEO



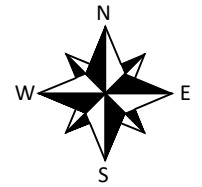
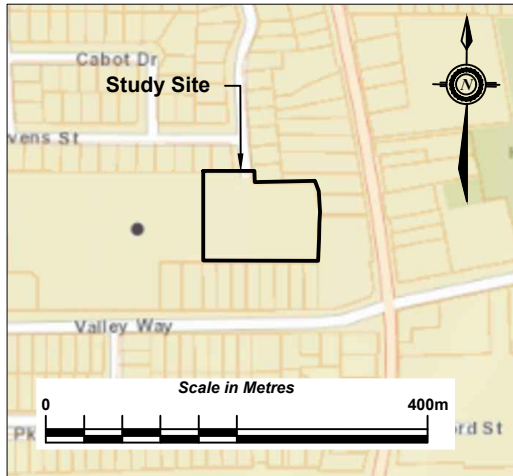
8.0 REFERENCES

The following resources were utilized as references:



- Ontario Division of Mines' "Paleozoic Geology of Southern Ontario, Map 2254".
- Ministry of Natural Resources' "Quaternary Geology, Niagara-Welland, Map P2496.
- Water Wells Ontario site.
- Ontario Oil, Gas, and Salt Resources Library
- Interactive Map – Niagara Navigator, <https://navigator.niagararegion.ca/>
- Ontario Base Mapping
- Niagara Peninsula Conservation Authority (NPCA) Watershed Explorer

FIGURES

- Figure 1: Site Location Map
- Figure 2: Site Layout & Features
- Figure 3: Potentially Contaminating Activities
- Figure 4: Areas of Potential Environmental Concern
- Figure 5: Borehole with Monitoring Well Location
- Figure 6: Topographic Contour
- Figure 7: Groundwater Contour
- Figure 8: Soil Results
- Figure 9: Groundwater Results
- Figure 10: Cross Section Planview
- Figure 11: Cross Section A-A'
- Figure 12: Cross Section B-B'



LEGEND

-  Property Boundary
-  250 m Study Area



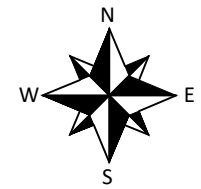
CLIENT:
NEW CASTLE COMMUNITIES

PROJECT:
**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:
SITE LOCATION

DATE:	SEPTEMBER 2025	
PROJECT NO:	NS2560-02	
SCALE:	AS SHOWN	
DRAWN:	CN	REVIEWED: PA
DATUM:	NAD 83	PROJECTION: 17T

NO:
Figure 1



LEGEND

 Property Boundary



CLIENT:
NEW CASTLE COMMUNITIES

PROJECT:
**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

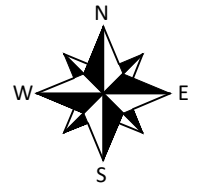
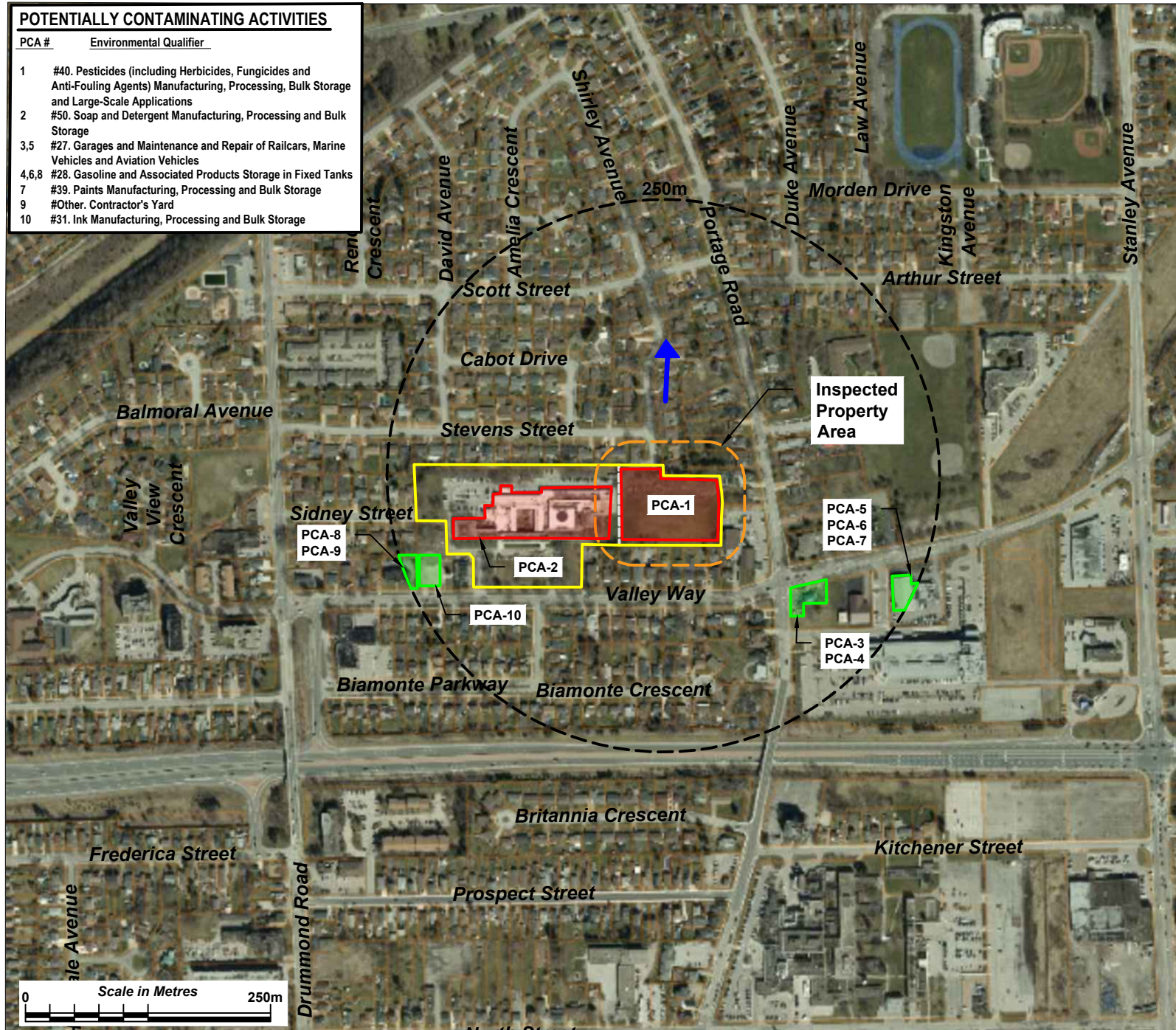
TITLE:
SITE LAYOUT & FEATURES

DATE:	SEPTEMBER 2025
PROJECT NO:	NS2560-02
SCALE:	AS SHOWN
DRAWN:	CN
REVIEWED:	PA
DATUM:	NAD 83
PROJECTION:	17T

NO:
Figure 2

POTENTIALLY CONTAMINATING ACTIVITIES

PCA #	Environmental Qualifier
1	#40. Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
2	#50. Soap and Detergent Manufacturing, Processing and Bulk Storage
3,5	#27. Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles
4,6,8	#28. Gasoline and Associated Products Storage in Fixed Tanks
7	#39. Paints Manufacturing, Processing and Bulk Storage
9	#Other. Contractor's Yard
10	#31. Ink Manufacturing, Processing and Bulk Storage



LEGEND

- Property Boundary
- 250 m Study Area
- PCA not Generating APEC
- PCA Generating APEC
- ↑ Inferred Groundwater Flow Direction



CLIENT:
NEW CASTLE COMMUNITIES

PROJECT:
**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:
**POTENTIALLY
CONTAMINATING ACTIVITIES**

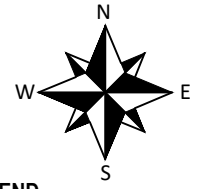
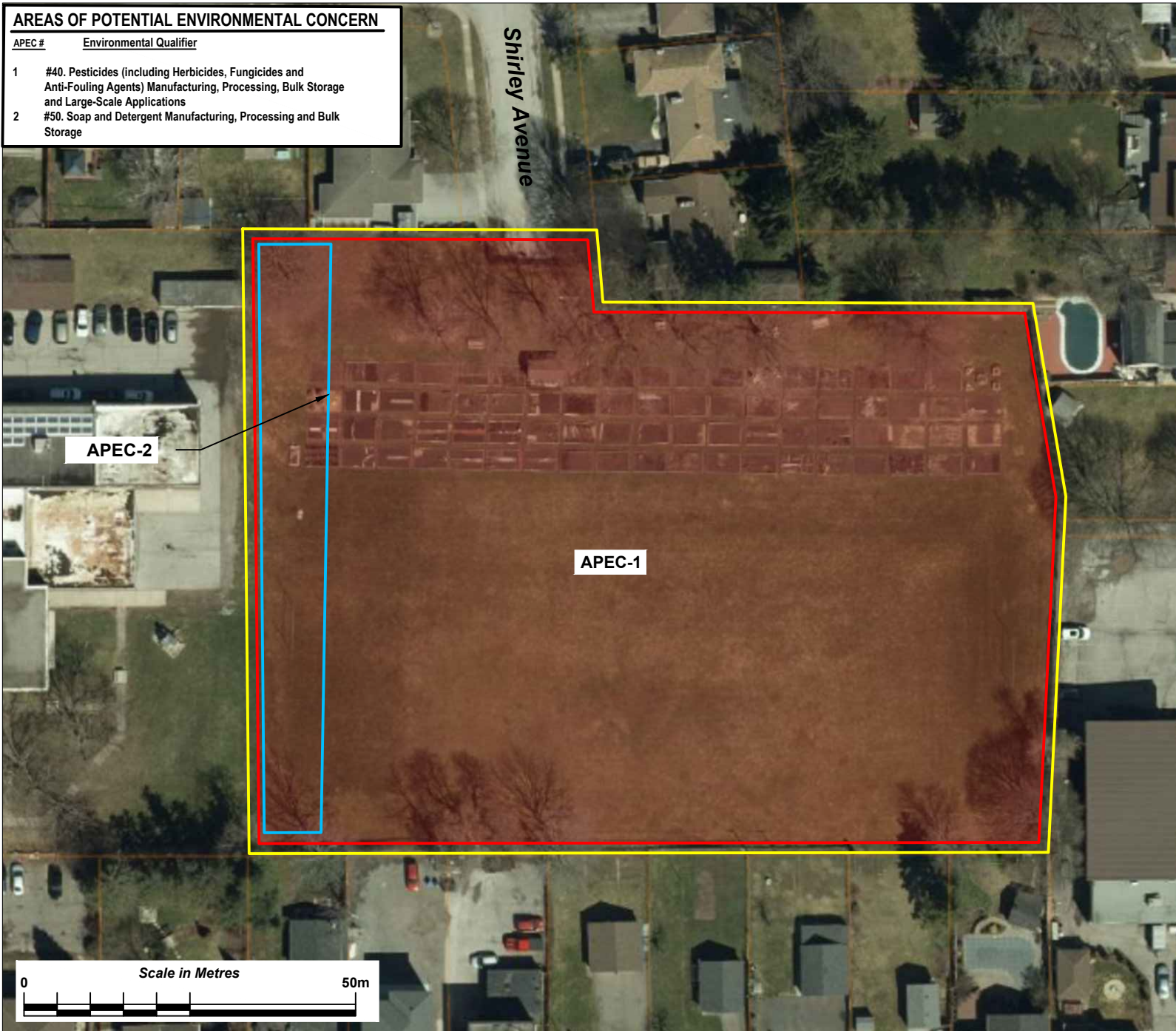
DATE: SEPTEMBER 2025
 PROJECT NO: NS2560-02
 SCALE: AS SHOWN
 DRAWN: CN | REVIEWED: PA
 DATUM: NAD 83 | PROJECTION: 17T

NO:
Figure 3

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, <https://maps-beta.niagararegion.ca/Navigator/2023>

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

APEC #	Environmental Qualifier
1	#40. Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
2	#50. Soap and Detergent Manufacturing, Processing and Bulk Storage



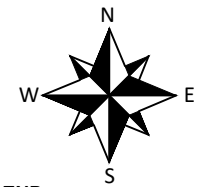
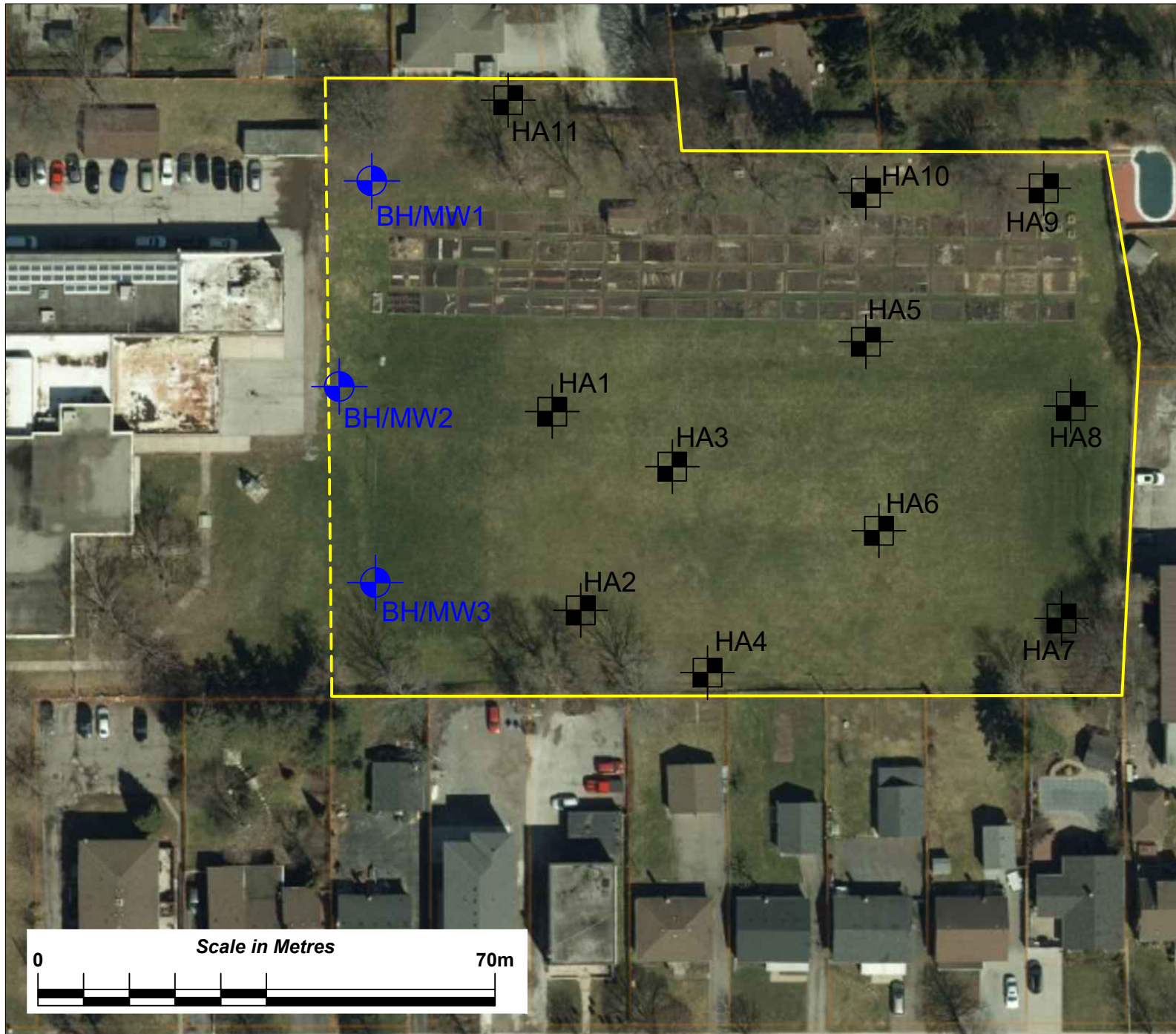
LEGEND

- Property Boundary
- APEC



CLIENT:	NEW CASTLE COMMUNITIES
PROJECT:	PHASE TWO ENVIRONMENTAL SITE ASSESSMENT 6009-6017 VALLEY WAY NIAGARA FALLS, ON
TITLE:	AREAS OF POTENTIAL ENVIRONMENTAL CONCERN
DATE:	SEPTEMBER 2025
PROJECT NO:	NS2560-02
SCALE:	AS SHOWN
DRAWN: CN	REVIEWED: PA
DATUM: NAD 83	PROJECTION: 17T
NO:	Figure 4

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, <https://maps-beta.niagararegion.ca/Navigator/2023>



LEGEND

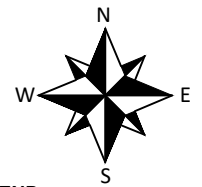
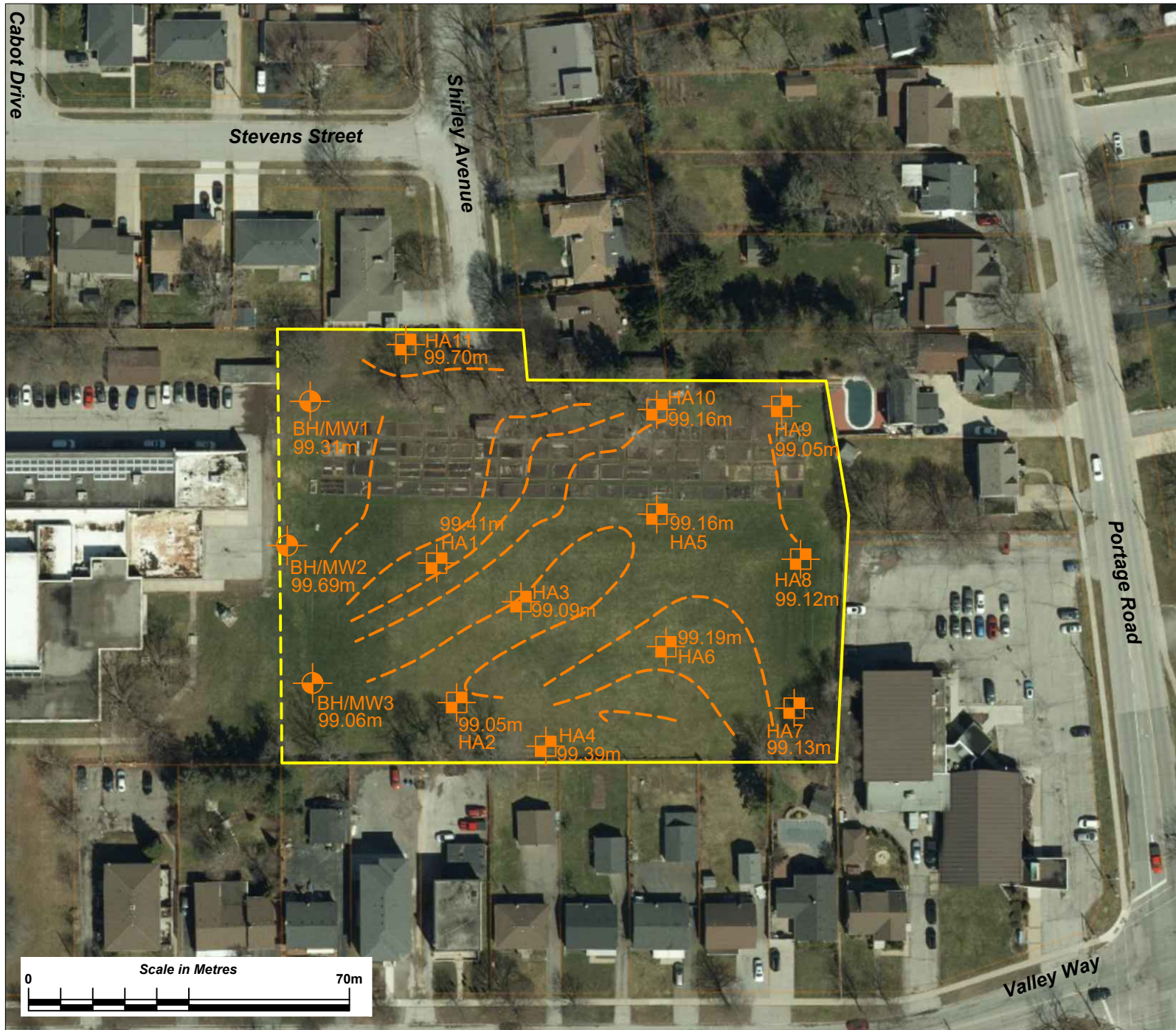
- Property Boundary
- BH 1 Borehole Location
- HA-1 Hand Auger Location
- BH/MW-1 Borehole with Monitoring Well Location










CLIENT:	NEW CASTLE COMMUNITIES
PROJECT:	PHASE TWO ENVIRONMENTAL SITE ASSESSMENT 6009-6017 VALLEY WAY NIAGARA FALLS, ON
TITLE:	SAMPLES LOCATION
DATE:	SEPTEMBER 2025
PROJECT NO:	NS2560-02
SCALE:	AS SHOWN
DRAWN: CN	REVIEWED: PA
DATUM: NAD 83	PROJECTION: 17T

NO: Figure 5

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, <https://maps-beta.niagararegion.ca/Navigator/2023>



LEGEND

-  Property Boundary
-  BH 1
-  Borehole Location
-  HA-1
-  Borehole with Monitoring Well Location
-  BH/MW-1
-  Topographic Contour



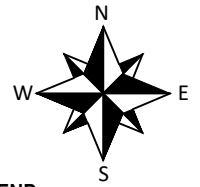
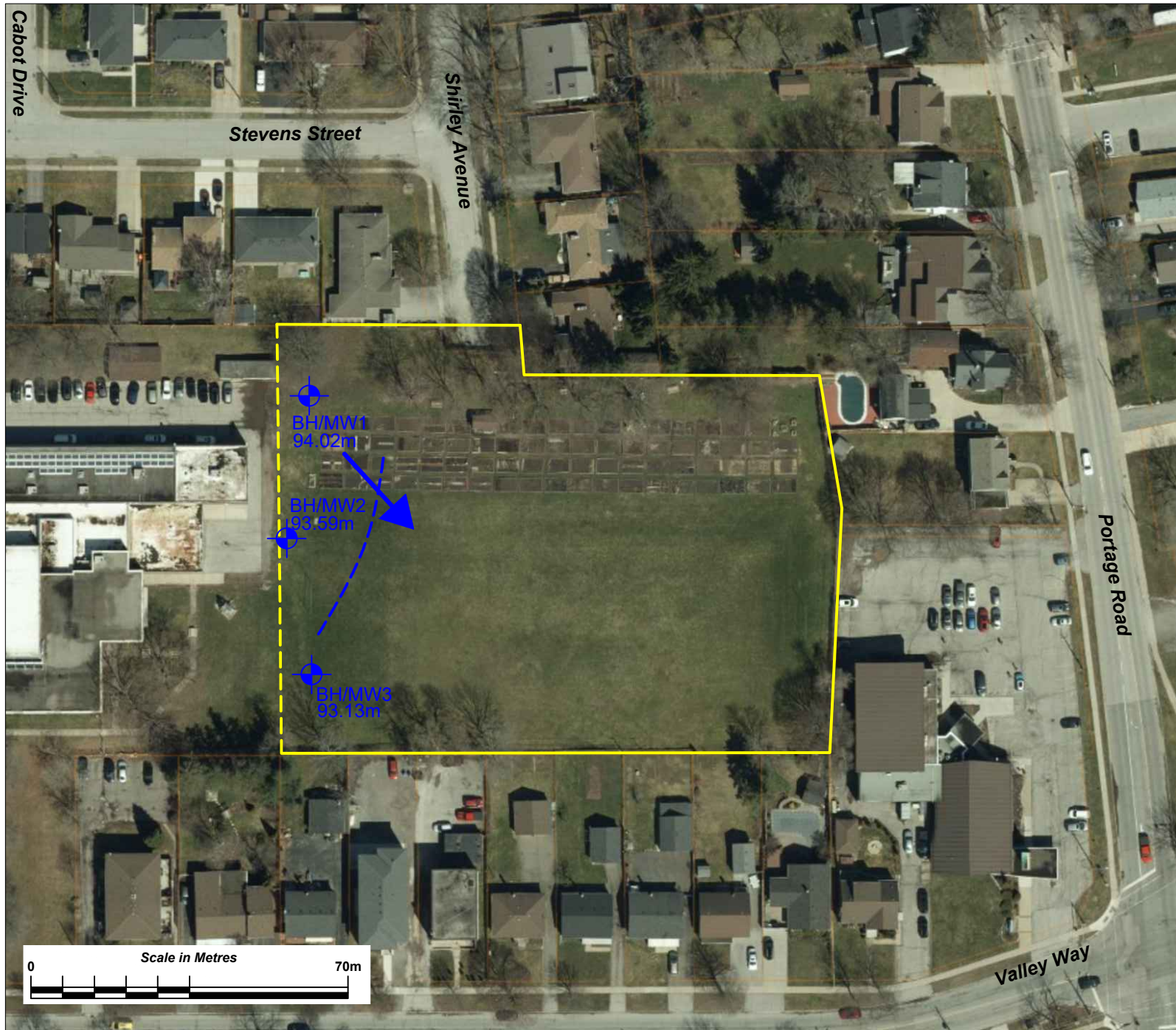
CLIENT:
NEW CASTLE COMMUNITIES

PROJECT:
**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:
TOPOGRAPHIC CONTOUR

DATE:	SEPTEMBER 2025
PROJECT NO:	NS2560-02
SCALE:	AS SHOWN
DRAWN: CN	REVIEWED: PA
DATUM: NAD 83	PROJECTION: 17T

NO:
Figure 6



LEGEND

Property Boundary

Borehole with Monitoring Well Location

Topographic Contour

Measured Groundwater Flow Direction

MW3 dup = MW4
MW5 = field/trip blanks



CLIENT:

NEW CASTLE COMMUNITIES

PROJECT:

**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:

GROUNDWATER CONTOUR

DATE: SEPTEMBER 2025

PROJECT NO: NS2560-02

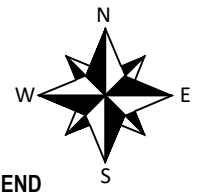
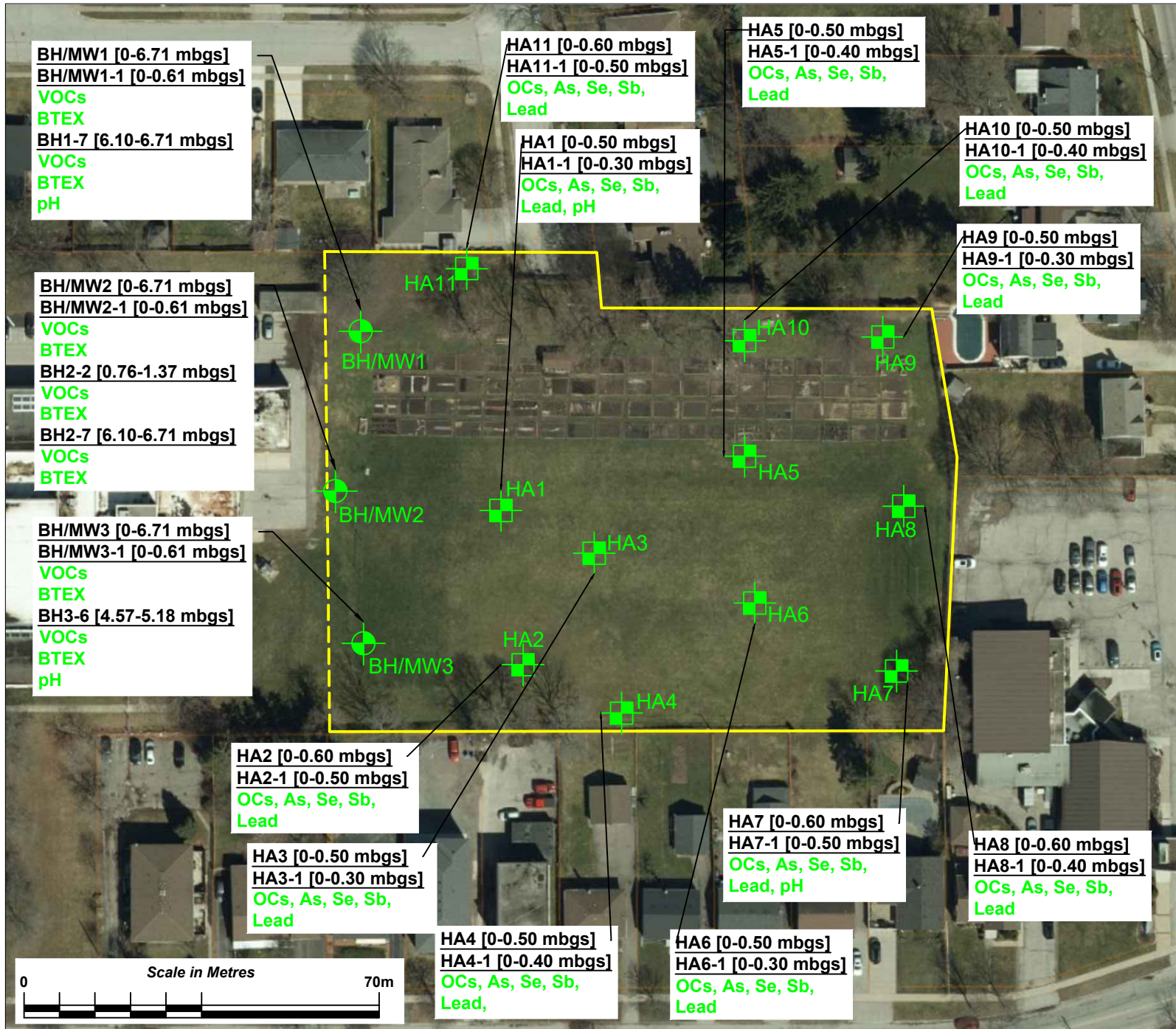
SCALE: AS SHOWN

DRAWN: CN REVIEWED: PA

DATUM: NAD 83 PROJECTION: 17T

NO:

Figure 7



- LEGEND**
- Property Boundary
 - BH 1 Borehole Location
 - HA-1 Hand Auger Location
 - BH/MW-1 Borehole with Monitoring Well Location
 - Results Meet Criteria
 - Results Exceed Criteria

HA5 dup = HA12

Results Compared to O.Reg 153/04,
 Table 2: Residential



CLIENT:
NEW CASTLE COMMUNITIES

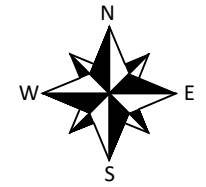
PROJECT:
**PHASE TWO ENVIRONMENTAL
 SITE ASSESSMENT
 6009-6017 VALLEY WAY
 NIAGARA FALLS, ON**

TITLE:
SOIL RESULTS

DATE:	SEPTEMBER 2025
PROJECT NO:	NS2560-02
SCALE:	AS SHOWN
DRAWN: CN	REVIEWED: PA
DATUM: NAD 83	PROJECTION: 17T

NO:
Figure 8

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, <https://maps-beta.niagararegion.ca/Navigator/2023>



LEGEND

Property Boundary

Borehole with Monitoring Well Location

Results Meet Criteria

Results Exceed Criteria

Results Compared to O.Reg 153/04, Table 2: Residential



CLIENT:

NEW CASTLE COMMUNITIES

PROJECT:

**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:

GROUNDWATER RESULTS

DATE: SEPTEMBER 2025

PROJECT NO: NS2560-02

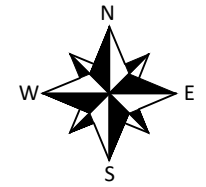
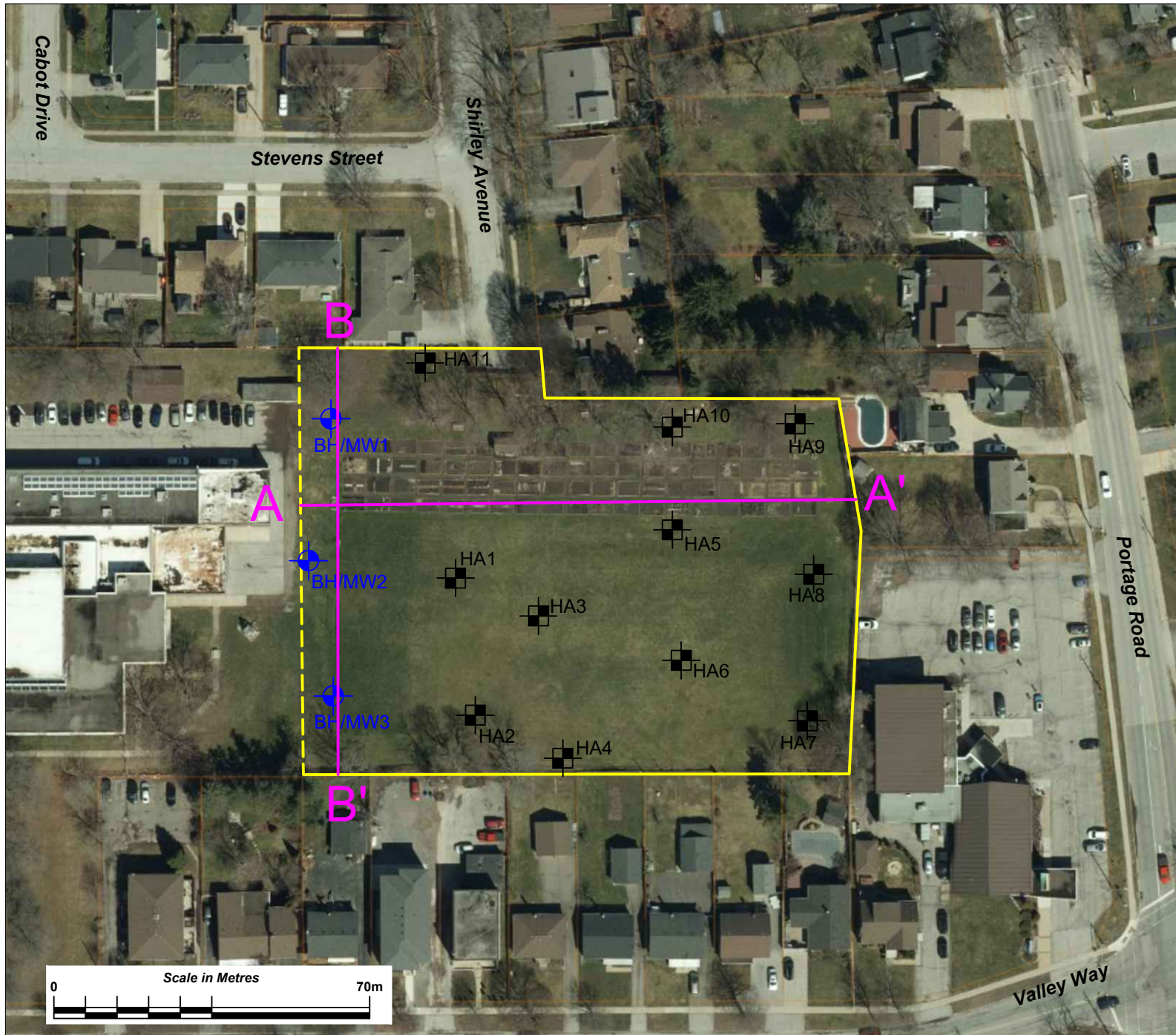
SCALE: AS SHOWN

DRAWN: CN REVIEWED: PA

DATUM: NAD 83 PROJECTION: 17T

NO:

Figure 9



LEGEND

Property Boundary

BH 1 Borehole Location

HA-1 Hand Auger Location

Borehole with Monitoring Well Location

BH/MW-1 Cross Section



CLIENT:
NEW CASTLE COMMUNITIES

PROJECT:
**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:
**CROSS SECTION PLANVIEW:
A-A', B-B'**

DATE: SEPTEMBER 2025

PROJECT NO: NS2560-02

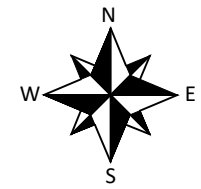
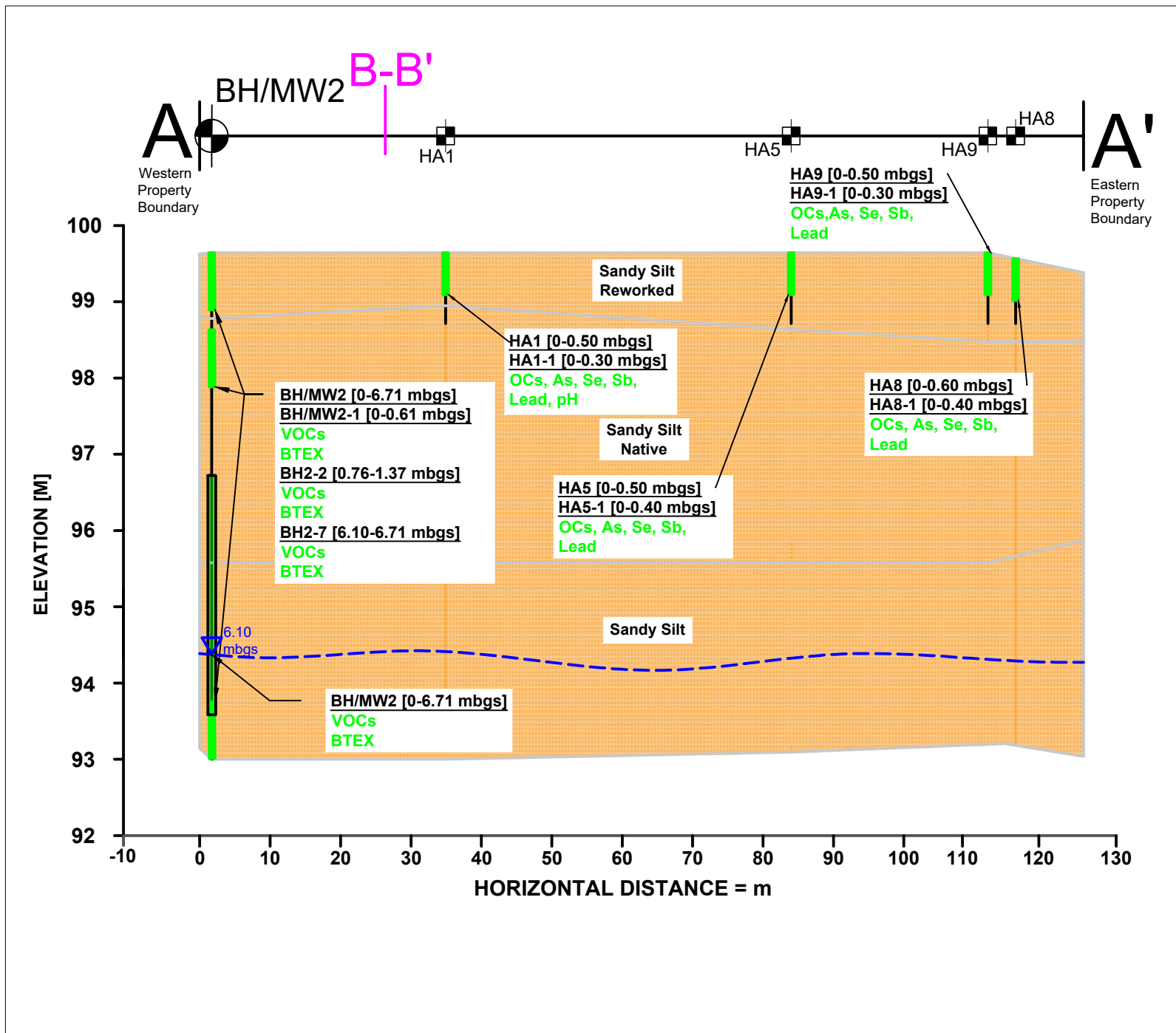
SCALE: AS SHOWN

DRAWN: CN REVIEWED: PA

DATUM: NAD 83 PROJECTION: 17T

NO:
Figure 10

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, <https://maps-beta.niagararegion.ca/Navigator/2023>



LEGEND

- Sandy Silt
- Results Meet Criteria
- Results Exceed Criteria
- Ground-water Level
- Screen Monitor

Results Compared to O. Reg. 153/04, Table 2: Residential



CLIENT:
NEW CASTLE COMMUNITIES

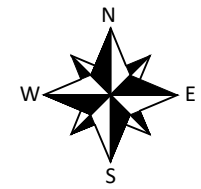
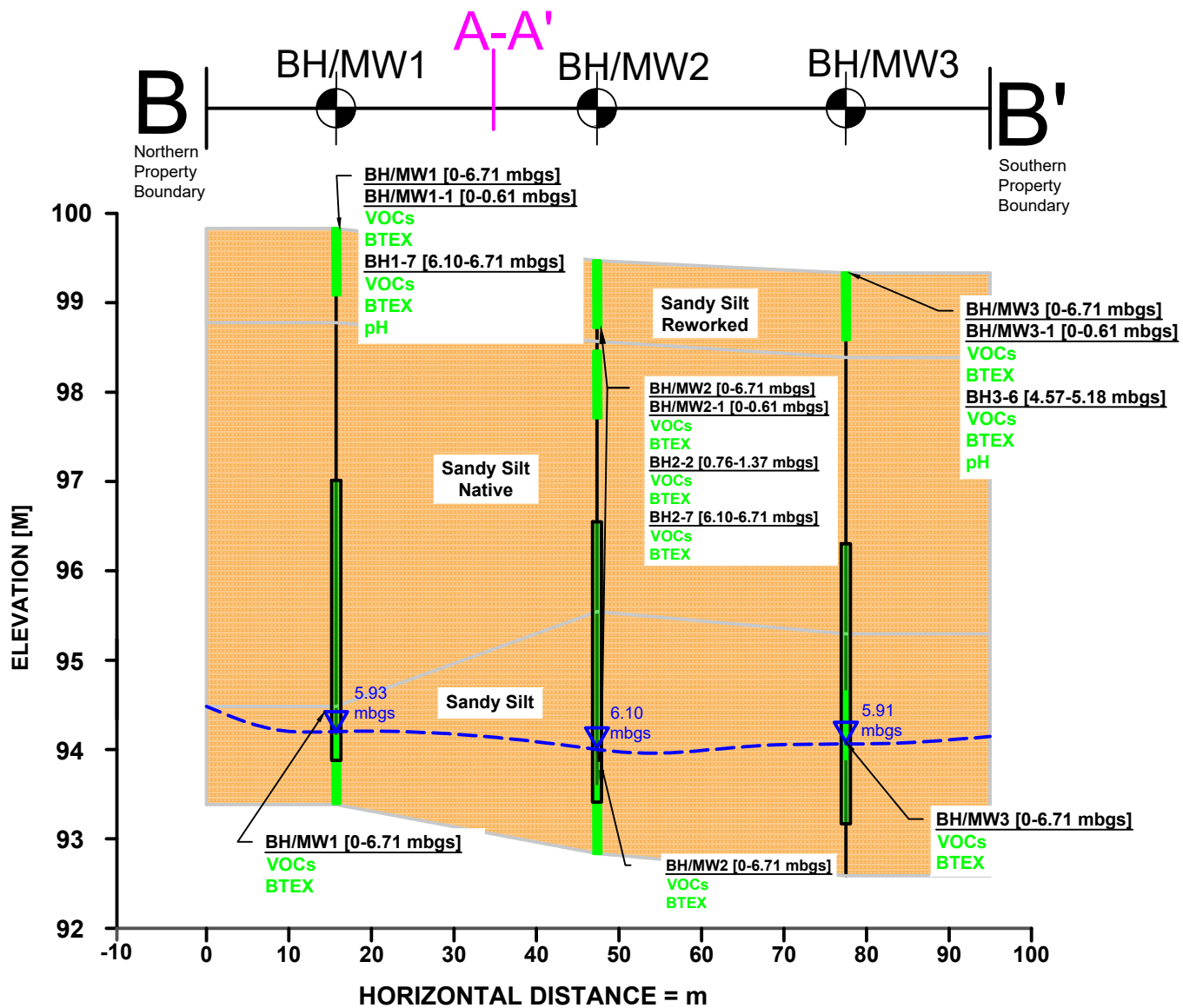
PROJECT:
**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:
CROSS SECTION: A-A'






DATE:	SEPTEMBER 2025
PROJECT NO:	NS2560-02
SCALE:	AS SHOWN
DRAWN: CN	REVIEWED: PA
DATUM: NAD 83	PROJECTION: 17T

NO: **Figure 11**

REFERENCE: BASE MAP PROVIDED BY NIAGARA NAVIGATOR, <https://maps-beta.niagararegion.ca/Navigator/2023>



LEGEND

-  Sandy Silt
-  Results Meet Criteria
-  Results Exceed Criteria
-  xxx Ground-water Level
-  Screen Monitor

Results Compared to O. Reg. 153/04, Table 2: Residential



CLIENT:
NEW CASTLE COMMUNITIES

PROJECT:
**PHASE TWO ENVIRONMENTAL
SITE ASSESSMENT
6009-6017 VALLEY WAY
NIAGARA FALLS, ON**

TITLE:
CROSS SECTION: B-B'

DATE: SEPTEMBER 2025
 PROJECT NO: NS2560-02
 SCALE: AS SHOWN
 DRAWN: CN | REVIEWED: PA
 DATUM: NAD 83 | PROJECTION: 17T

NO: **Figure 12**

APPENDIX A

BOREHOLE LOGS

RECORD OF BOREHOLE: BH/MW-1

PROJECT NO.: NS2560-02

PROJECT: Phase Two ESA

LOCATION: 6009 to 6017 Valley Way, Niagara Falls

CLIENT: New Castle Communities

DRILLING COMPANY: Elite Drilling Services

DRILLING METHOD: 150mm Solid Stem Auger

DRILL RIG: Trackmount D-50

BOREHOLE COORDINATE (UTM): 655180 E, 4773586 N

SHEET 1 of 1

DATE STARTED: August 20, 2025

DATE COMPLETED: August 20, 2025

DATUM: Benchmark

LITHOLOGY PLOT	SOIL PROFILE				DEPTH SCALE ft / m	ELEVATION (m / mbgs)	FIELD TESTING		LAB TESTING		WELL INSTALLATION	COMMENTS	
	DESCRIPTION	TYPE	NUMBER	SPT 'N' VALUE			RECOVERY (%)	SPT (N)	COV (ppm)	LAB ANALYSIS			
Ground Surface					0.0	99.93 0.00							
75mm Rootlets and Organics					1.0		14			0	Soil: VOCs		SS = Split Spoon
Silt Reworked Brown with trace sand and gravel Loose, dry	SS	1	4, 6, 8, 10	█	2.0		21		0				
Silt Native Brown with trace sand and gravel Compact, dry				█	3.0	99.02 0.91		49		0			
	SS	2	8, 9, 12, 23	█	4.0				0				
	SS	3	18, 22, 27, 23	█	5.0				0				
Silt Native Brown with trace sand and gravel Compact, dry				█	6.0			22		0			
	SS	4	11, 7, 15, 17	█	7.0				0				
	SS	5	9, 11, 12, 11	█	8.0				0				
Silt Native Brown with trace sand and gravel Compact, dry				█	9.0				0				
	SS	6	10, 14, 15, 16	█	10.0				0				
	SS	7	10, 11, 11, 12	█	11.0				0				
Silt Brown with trace sand and gravel Compact, wet					12.0	94.29 5.64				0	GW: VOCs		
Silt Brown with trace sand and gravel Compact, wet				█	13.0				0				
	SS	7	10, 11, 11, 12	█	14.0				0	Soil: VOCs, pH			
End of Borehole					15.0	93.22 6.71				0			
					16.0					0			
					17.0					0			
					18.0					0			
					19.0					0			
					20.0					0			
					21.0					0			
					22.0					0			
					23.0					0			

▼ Groundwater Level Upon Completion: **INITIAL WATER LEVEL:** 5.93 mbgs **INITIAL WATER LEVEL DATE:** September 5, 2025
▼ Secondary Groundwater Level: **SECONDARY WATER LEVEL:** 5.91 mbgs **SECONDARY WATER LEVEL DATE:** September 10, 2025
BOREHOLE CAVE UPON COMPLETION: N/A

LOGGED: JT
COMPILED: DN
CHECKED: PA

Niagara Soils Solutions Ltd.
 3300 Merrittville Highway, Unit 4
 Thorold, Ontario, L2V 4Y6

Note: This borehole log has been prepared for environmental purposes and does not necessarily contain information suitable for a geotechnical assessment of the subsurface conditions. Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Professional Engineer/Geoscientist.

RECORD OF BOREHOLE: BH/MW-2

PROJECT NO.: NS2560-02

PROJECT: Phase Two ESA

LOCATION: 6009 to 6017 Valley Way, Niagara Falls

CLIENT: New Castle Communities

DRILLING COMPANY: Elite Drilling Services

DRILLING METHOD: 150mm Solid Stem Auger

DRILL RIG: Trackmount D-50

BOREHOLE COORDINATE (UTM): 655173 E, 4773547 N

SHEET 1 of 1

DATE STARTED: August 20, 2025

DATE COMPLETED: August 20, 2025

DATUM: Benchmark

LITHOLOGY PLOT	SOIL PROFILE		SAMPLES				DEPTH SCALE ft / m	ELEVATION (m / mbgs)	FIELD TESTING		LAB TESTING		WELL INSTALLATION	COMMENTS
	DESCRIPTION	TYPE	NUMBER	SPT 'N' VALUE	RECOVERY (%)	SPT (N)			COV (ppm)	LAB ANALYSIS				
Ground Surface						0.0	99.69 0.00	•	•					
50mm Rootlets and Organics						1.0		18		0	Soil: VOCs			
Sandy Silt Reworked Brown with trace gravel Loose, dry	SS	1	6, 7, 11, 12			2.0		17		0	Soil: VOCs			
Sandy Silt Native Brown with trace clay within lower strata Compact to dense, dry	SS	2	8, 8, 9, 7			3.0	98.78 0.91			0	Soil: VOCs			
	SS	3	5, 5, 9, 11			4.0		14		0				
	SS	4	13, 16, 16, 22			5.0		32		0				
	SS	5	8, 14, 17, 18			6.0		31		0				
Sandy Silt Brown Compact, wet	SS	6	13, 14, 12, 10			7.0		26		0				
	SS	7	6, 9, 10, 11			8.0	95.58 4.11			0				
End of Borehole						9.0		19		0	GW: VOCs			
						10.0	92.98 6.71			0	Soil: VOCs			

▼ Groundwater Level Upon Completion: **INITIAL WATER LEVEL:** 6.16 mbgs **INITIAL WATER LEVEL DATE:** September 5, 2025
▼ Secondary Groundwater Level: **SECONDARY WATER LEVEL:** 6.10 mbgs **SECONDARY WATER LEVEL DATE:** September 10, 2025
BOREHOLE CAVE UPON COMPLETION: N/A

LOGGED: JT
COMPILED: DN
CHECKED: PA

Niagara Soils Solutions Ltd.
 3300 Merrittville Highway, Unit 4
 Thorold, Ontario, L2V 4Y6

Note: This borehole log has been prepared for environmental purposes and does not necessarily contain information suitable for a geotechnical assessment of the subsurface conditions. Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Professional Engineer/Geoscientist.

RECORD OF BOREHOLE: BH/MW-3

PROJECT NO.: NS2560-02

PROJECT: Phase Two ESA

LOCATION: 6009 to 6017 Valley Way, Niagara Falls

CLIENT: New Castle Communities

DRILLING COMPANY: Elite Drilling Services

DRILLING METHOD: 150mm Solid Stem Auger

DRILL RIG: Trackmount D-50

BOREHOLE COORDINATE (UTM): 655181 E, 4773519 N

SHEET 1 of 1

DATE STARTED: August 20, 2025

DATE COMPLETED: August 20, 2025

DATUM: Benchmark

LITHOLOGY PLOT	SOIL PROFILE				DEPTH SCALE ft / m	ELEVATION (m / mbgs)	FIELD TESTING		LAB TESTING		WELL INSTALLATION	COMMENTS
	DESCRIPTION	TYPE	NUMBER	SPT 'N' VALUE			RECOVERY (%)	SPT (N)	COV (ppm)	LAB ANALYSIS		
	Ground Surface				0.0	99.06						
	75mm Rootlets and Organics Sandy Silt Reworked Brown with trace gravel and rootlets Loose, dry				1.0	0.00	15	0	Soil: VOCs		SS = Split Spoon	
	Silt Native Brown with trace gravel Compact, dry				3.0	98.15	14	0				
					6.0	0.91	25	0				
					8.0		28	0				
					11.0		23	0				
					15.0		18	0				
					21.0		19	0				
	Silt Brown with trace gravel Compact, wet				15.0	94.95			GW: VOCs			
					16.0	4.11			Soil: VOCs, pH			
					20.0							
					21.0							
	End of Borehole				22.0	92.35						
					23.0	6.71						

▼ Groundwater Level Upon Completion: **INITIAL WATER LEVEL:** 6.00 mbgs **INITIAL WATER LEVEL DATE:** September 5, 2025
▼ Secondary Groundwater Level: **SECONDARY WATER LEVEL:** 5.93 mbgs **SECONDARY WATER LEVEL DATE:** September 10, 2025
BOREHOLE CAVE UPON COMPLETION: N/A

LOGGED: JT
COMPILED: DN
CHECKED: PA

Niagara Soils Solutions Ltd.
 3300 Merrittville Highway, Unit 4
 Thorold, Ontario, L2V 4Y6

Note: This borehole log has been prepared for environmental purposes and does not necessarily contain information suitable for a geotechnical assessment of the subsurface conditions. Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and require interpretative assistance from a qualified Professional Engineer/Geoscientist.

APPENDIX B

CERTIFICATES OF ANALYSIS –SOIL



**CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
3300 MERRITTVILLE HIGHWAY
THOROLD, ON L2V 4Y6
289-407-6341**

ATTENTION TO: Jodie Glasier

PROJECT: NS2560-02

AGAT WORK ORDER: 25H335674

SOIL ANALYSIS REVIEWED BY: Sukhwinder Randhawa, Inorganic Team Lead

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Aug 28, 2025

PAGES (INCLUDING COVER): 17

VERSION*: 1

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

***Notes**

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information is available on request from AGAT Laboratories, in accordance with ISO/IEC 17025:2017, ISO/IEC 17025:2005 (Quebec), DR-12-PALA and/or NELAP Standards.
- This document is signed by an authorized signatory who meets the requirements of the MELCCFP, CALA, CCN and NELAP.
- For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.

Certificate of Analysis

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE: 6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY: J Toldi

O. Reg. 153(511) - ORPs (Soil)

DATE RECEIVED: 2025-08-21

DATE REPORTED: 2025-08-28

Parameter	Unit	SAMPLE DESCRIPTION:		HA1-1	HA7-1	BH/MW1-7	BH/MW3-6
		G / S	RDL	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2025-08-20	2025-08-20	2025-08-20	2025-08-20
				6989682	6989689	6989696	6989700
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.25	7.11	6.94	6.99

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6989682-6989700 pH was determined on the 0.01M CaCl2 extract obtained from 2:1 leaching procedure (2 parts extraction fluid:1 part wet soil).

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



skaw



Certificate of Analysis

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

ATTENTION TO: Jodie Glasier

SAMPLING SITE: 6009-6017 Valley Way

SAMPLED BY: J Toldi

O. Reg. 153(511) - OC Pesticides (Soil)

DATE RECEIVED: 2025-08-21

DATE REPORTED: 2025-08-28

Parameter	Unit	SAMPLE DESCRIPTION:		HA1-1	HA2-1	HA3-1	HA4-1	HA5-1	HA6-1	HA7-1	HA8-1
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20
		G / S	RDL	6989682	6989684	6989685	6989686	6989687	6989688	6989689	6989690
Hexachloroethane	µg/g	0.089	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Gamma-Hexachlorocyclohexane	µg/g	0.056	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor	µg/g	0.15	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor Epoxide	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan I	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan II	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Alpha-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
gamma-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chlordane	µg/g	0.05	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDE	ug/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDE	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDE	µg/g	0.26	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDD	µg/g	3.3	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDT	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDT	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDT (Total)	µg/g	1.4	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Dieldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endrin	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Methoxychlor	µg/g	0.13	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobenzene	µg/g	0.52	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobutadiene	µg/g	0.012	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Moisture Content	%		0.1	12.7	12.9	12.0	13.1	13.0	13.2	12.4	13.5
wet weight OC	g		0.01	10.77	10.35	10.82	10.12	10.45	10.23	10.50	10.56
Surrogate	Unit	Acceptable Limits									
TCMX	%	50-140		80	109	101	95	80	106	97	108
Decachlorobiphenyl	%	50-140		97	110	95	100	80	100	104	94

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE:6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY:J Toldi

O. Reg. 153(511) - OC Pesticides (Soil)

DATE RECEIVED: 2025-08-21

DATE REPORTED: 2025-08-28

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE:6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY: J Toldi

O. Reg. 153(511) - OC Pesticides (Soil)

DATE RECEIVED: 2025-08-21

DATE REPORTED: 2025-08-28

Parameter	Unit	SAMPLE DESCRIPTION:		HA9-1	HA10-1	HA11-1	HA12-1
		SAMPLE TYPE:		Soil	Soil	Soil	Soil
		DATE SAMPLED:		2025-08-20	2025-08-20	2025-08-20	2025-08-20
	G / S	RDL	6989691	6989692	6989693	6989694	
Hexachloroethane	µg/g	0.089	0.005	<0.005	<0.005	<0.005	<0.005
Gamma-Hexachlorocyclohexane	µg/g	0.056	0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor	µg/g	0.15	0.005	<0.005	<0.005	<0.005	<0.005
Aldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor Epoxide	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan I	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan II	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005
Alpha-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
gamma-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
Chlordane	µg/g	0.05	0.007	<0.007	<0.007	<0.007	<0.007
op'-DDE	ug/g		0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDE	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
DDE	µg/g	0.26	0.007	<0.007	<0.007	<0.007	<0.007
op'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
DDD	µg/g	3.3	0.007	<0.007	<0.007	<0.007	<0.007
op'-DDT	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDT	µg/g		0.005	<0.005	<0.005	<0.005	<0.005
DDT (Total)	µg/g	1.4	0.007	<0.007	<0.007	<0.007	<0.007
Dieldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005
Endrin	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005
Methoxychlor	µg/g	0.13	0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobenzene	µg/g	0.52	0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobutadiene	µg/g	0.012	0.01	<0.01	<0.01	<0.01	<0.01
Moisture Content	%		0.1	12.0	12.0	11.9	11.6
wet weight OC	g		0.01	10.25	10.45	10.20	10.90
Surrogate	Unit	Acceptable Limits					
TCMX	%	50-140		96	119	101	96
Decachlorobiphenyl	%	50-140		86	94	106	90

Certified By:





AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE:6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY:J Toldi

O. Reg. 153(511) - OC Pesticides (Soil)

DATE RECEIVED: 2025-08-21

DATE REPORTED: 2025-08-28

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6989682-6989694 Results are based on the dry weight of the soil.
DDT total is a calculated parameter. The calculated value is the sum of op'DDT and pp'DDT.
DDD total is a calculated parameter. The calculated value is the sum of op'DDD and pp'DDD.
DDE total is a calculated parameter. The calculated value is the sum of op'DDE and pp'DDE.
Endosulfan total is a calculated parameter. The calculated value is the sum of Endosulfan I and Endosulfan II.
Chlordane total is a calculated parameter. The calculated value is the sum of Alpha-Chlordane and Gamma-Chlordane.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE:6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY:J Toldi

O. Reg. 153(511) - VOCs (Soil)

DATE RECEIVED: 2025-08-21

DATE REPORTED: 2025-08-28

Parameter	Unit	SAMPLE DESCRIPTION:		BH/MW1-1	BH/MW1-7	BH/MW2-1	BH/MW2-7	BH/MW3-1	BH/MW3-6	BH/MW2-2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20
		G / S	RDL	6989695	6989696	6989697	6989698	6989699	6989700	6989701
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE:6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY:J Toldi

O. Reg. 153(511) - VOCs (Soil)

DATE RECEIVED: 2025-08-21

DATE REPORTED: 2025-08-28

Parameter	Unit	SAMPLE DESCRIPTION:		BH/MW1-1	BH/MW1-7	BH/MW2-1	BH/MW2-7	BH/MW3-1	BH/MW3-6	BH/MW2-2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20	2025-08-20
		G / S	RDL	6989695	6989696	6989697	6989698	6989699	6989700	6989701
Bromoform	ug/g	0.27	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	ug/g	0.7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	4.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.083	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	3.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	2.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	3.4	17.8	7.0	18.3	7.5	13.0	8.5
Surrogate	Unit	Acceptable Limits								
Toluene-d8	% Recovery	50-140		<1	109	108	111	116	119	116
4-Bromofluorobenzene	% Recovery	50-140		<1	100	101	90	80	76	78

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6989695-6989701 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.

1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.

The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Quality Assurance

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
PROJECT: NS2560-02
SAMPLING SITE: 6009-6017 Valley Way

AGAT WORK ORDER: 25H335674
ATTENTION TO: Jodie Glasier
SAMPLED BY: J Toldi

Soil Analysis

RPT Date: Aug 28, 2025			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

O. Reg. 153(511) - ORPs (Soil)

pH, 2:1 CaCl ₂ Extraction	6989662	6.30	6.52	3.4%	NA	101%	80%	120%
--------------------------------------	---------	------	------	------	----	------	-----	------

Comments: NA signifies Not Applicable.
 pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.

Certified By:



J. Glasier

Quality Assurance

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
PROJECT: NS2560-02
SAMPLING SITE: 6009-6017 Valley Way

AGAT WORK ORDER: 25H335674
ATTENTION TO: Jodie Glasier
SAMPLED BY: J Toldi

Trace Organics Analysis

RPT Date: Aug 28, 2025			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

O. Reg. 153(511) - OC Pesticides (Soil)

Hexachloroethane	6989694	< 0.005	< 0.005	NA	< 0.005	81%	50%	140%	80%	50%	140%	86%	50%	140%
Gamma-Hexachlorocyclohexane	6989694	< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	87%	50%	140%	87%	50%	140%
Heptachlor	6989694	< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	88%	50%	140%	88%	50%	140%
Aldrin	6989694	< 0.005	< 0.005	NA	< 0.005	93%	50%	140%	105%	50%	140%	94%	50%	140%
Heptachlor Epoxide	6989694	< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	86%	50%	140%	90%	50%	140%
Endosulfan I	6989694	< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	87%	50%	140%	84%	50%	140%
Endosulfan II	6989694	< 0.005	< 0.005	NA	< 0.005	86%	50%	140%	86%	50%	140%	109%	50%	140%
Alpha-Chlordane	6989694	< 0.005	< 0.005	NA	< 0.005	86%	50%	140%	105%	50%	140%	104%	50%	140%
gamma-Chlordane	6989694	< 0.005	< 0.005	NA	< 0.005	88%	50%	140%	106%	50%	140%	104%	50%	140%
op'-DDE	6989694	< 0.005	< 0.005	NA	< 0.005	93%	50%	140%	109%	50%	140%	84%	50%	140%
pp'-DDE	6989694	< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	95%	50%	140%	104%	50%	140%
op'-DDD	6989694	< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	109%	50%	140%	86%	50%	140%
pp'-DDD	6989694	< 0.005	< 0.005	NA	< 0.005	88%	50%	140%	86%	50%	140%	88%	50%	140%
op'-DDT	6989694	< 0.005	< 0.005	NA	< 0.005	97%	50%	140%	97%	50%	140%	94%	50%	140%
pp'-DDT	6989694	< 0.005	< 0.005	NA	< 0.005	93%	50%	140%	102%	50%	140%	91%	50%	140%
Dieldrin	6989694	< 0.005	< 0.005	NA	< 0.005	88%	50%	140%	85%	50%	140%	105%	50%	140%
Endrin	6989694	< 0.005	< 0.005	NA	< 0.005	90%	50%	140%	105%	50%	140%	82%	50%	140%
Methoxychlor	6989694	< 0.005	< 0.005	NA	< 0.005	92%	50%	140%	86%	50%	140%	106%	50%	140%
Hexachlorobenzene	6989694	< 0.005	< 0.005	NA	< 0.005	99%	50%	140%	96%	50%	140%	94%	50%	140%
Hexachlorobutadiene	6989694	< 0.01	< 0.01	NA	< 0.01	99%	50%	140%	80%	50%	140%	84%	50%	140%

O. Reg. 153(511) - VOCs (Soil)

Dichlorodifluoromethane	6459448	<0.05	<0.05	NA	< 0.05	70%	60%	140%	83%	50%	140%	85%	50%	140%
Vinyl Chloride	6459448	<0.02	<0.02	NA	< 0.02	107%	60%	140%	109%	50%	140%	127%	50%	140%
Bromomethane	6459448	<0.05	<0.05	NA	< 0.05	93%	60%	140%	99%	50%	140%	102%	50%	140%
Trichlorofluoromethane	6459448	<0.05	<0.05	NA	< 0.05	82%	60%	140%	80%	50%	140%	90%	50%	140%
Acetone	6459448	<0.50	<0.50	NA	< 0.50	95%	60%	140%	88%	50%	140%	91%	50%	140%
1,1-Dichloroethylene	6459448	<0.05	<0.05	NA	< 0.05	62%	60%	140%	84%	60%	130%	99%	50%	140%
Methylene Chloride	6459448	<0.05	<0.05	NA	< 0.05	92%	60%	140%	96%	60%	130%	102%	50%	140%
Trans- 1,2-Dichloroethylene	6459448	<0.05	<0.05	NA	< 0.05	67%	60%	140%	92%	60%	130%	113%	50%	140%
Methyl tert-butyl Ether	6459448	<0.05	<0.05	NA	< 0.05	68%	60%	140%	74%	60%	130%	87%	50%	140%
1,1-Dichloroethane	6459448	<0.02	<0.02	NA	< 0.02	73%	60%	140%	78%	60%	130%	93%	50%	140%
Methyl Ethyl Ketone	6459448	<0.50	<0.50	NA	< 0.50	99%	60%	140%	133%	50%	140%	86%	50%	140%
Cis- 1,2-Dichloroethylene	6459448	<0.02	<0.02	NA	< 0.02	110%	60%	140%	97%	60%	130%	97%	50%	140%
Chloroform	6459448	<0.04	<0.04	NA	< 0.04	91%	60%	140%	77%	60%	130%	104%	50%	140%
1,2-Dichloroethane	6459448	<0.03	<0.03	NA	< 0.03	137%	60%	140%	108%	60%	130%	100%	50%	140%
1,1,1-Trichloroethane	6459448	<0.05	<0.05	NA	< 0.05	98%	60%	140%	98%	60%	130%	89%	50%	140%
Carbon Tetrachloride	6459448	<0.05	<0.05	NA	< 0.05	92%	60%	140%	100%	60%	130%	92%	50%	140%
Benzene	6459448	<0.02	<0.02	NA	< 0.02	91%	60%	140%	98%	60%	130%	85%	50%	140%
1,2-Dichloropropane	6459448	<0.03	<0.03	NA	< 0.03	111%	60%	140%	93%	60%	130%	77%	50%	140%

Quality Assurance

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
PROJECT: NS2560-02
SAMPLING SITE: 6009-6017 Valley Way

AGAT WORK ORDER: 25H335674
ATTENTION TO: Jodie Glasier
SAMPLED BY: J Toldi

Trace Organics Analysis (Continued)

RPT Date: Aug 28, 2025			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Trichloroethylene	6459448		<0.03	<0.03	NA	< 0.03	101%	60%	140%	103%	60%	130%	109%	50%	140%
Bromodichloromethane	6459448		<0.05	<0.05	NA	< 0.05	103%	60%	140%	87%	60%	130%	80%	50%	140%
Methyl Isobutyl Ketone	6459448		<0.50	<0.50	NA	< 0.50	99%	60%	140%	91%	50%	140%	93%	50%	140%
1,1,2-Trichloroethane	6459448		<0.04	<0.04	NA	< 0.04	90%	60%	140%	106%	60%	130%	94%	50%	140%
Toluene	6459448		<0.05	<0.05	NA	< 0.05	68%	60%	140%	92%	60%	130%	107%	50%	140%
Dibromochloromethane	6459448		<0.05	<0.05	NA	< 0.05	96%	60%	140%	101%	60%	130%	75%	50%	140%
Ethylene Dibromide	6459448		<0.04	<0.04	NA	< 0.04	83%	60%	140%	91%	60%	130%	72%	50%	140%
Tetrachloroethylene	6459448		<0.05	<0.05	NA	< 0.05	78%	60%	140%	99%	60%	130%	78%	50%	140%
1,1,1,2-Tetrachloroethane	6459448		<0.04	<0.04	NA	< 0.04	85%	60%	140%	96%	60%	130%	75%	50%	140%
Chlorobenzene	6459448		<0.05	<0.05	NA	< 0.05	85%	60%	140%	93%	60%	130%	94%	50%	140%
Ethylbenzene	6459448		<0.05	<0.05	NA	< 0.05	64%	60%	140%	83%	60%	130%	78%	50%	140%
m & p-Xylene	6459448		<0.05	<0.05	NA	< 0.05	77%	60%	140%	93%	60%	130%	101%	50%	140%
Bromoform	6459448		<0.05	<0.05	NA	< 0.05	87%	60%	140%	96%	60%	130%	60%	50%	140%
Styrene	6459448		<0.05	<0.05	NA	< 0.05	82%	60%	140%	95%	60%	130%	105%	50%	140%
1,1,2,2-Tetrachloroethane	6459448		<0.05	<0.05	NA	< 0.05	84%	60%	140%	84%	60%	130%	75%	50%	140%
o-Xylene	6459448		<0.05	<0.05	NA	< 0.05	83%	60%	140%	95%	60%	130%	105%	50%	140%
1,3-Dichlorobenzene	6459448		<0.05	<0.05	NA	< 0.05	89%	60%	140%	91%	60%	130%	110%	50%	140%
1,4-Dichlorobenzene	6459448		<0.05	<0.05	NA	< 0.05	94%	60%	140%	92%	60%	130%	109%	50%	140%
1,2-Dichlorobenzene	6459448		<0.05	<0.05	NA	< 0.05	99%	60%	140%	91%	60%	130%	109%	50%	140%
n-Hexane	6459448		<0.05	<0.05	NA	< 0.05	67%	60%	140%	96%	60%	130%	78%	50%	140%

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

Certified By:





Method Summary

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

AGAT WORK ORDER: 25H335674

PROJECT: NS2560-02

ATTENTION TO: Jodie Glasier

SAMPLING SITE:6009-6017 Valley Way

SAMPLED BY:J Toldi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
pH, 2:1 CaCl ₂ Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE



Method Summary

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
PROJECT: NS2560-02
SAMPLING SITE:6009-6017 Valley Way

AGAT WORK ORDER: 25H335674
ATTENTION TO: Jodie Glasier
SAMPLED BY:J Toldi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Hexachloroethane	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Gamma-Hexachlorocyclohexane	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Heptachlor	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Aldrin	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Heptachlor Epoxide	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Endosulfan I	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Endosulfan II	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Endosulfan	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	CALCULATION
Alpha-Chlordane	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
gamma-Chlordane	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Chlordane	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	CALCULATION
op'-DDE	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
pp'-DDE	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
DDE	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
op'-DDD	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
pp'-DDD	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
DDD	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	CALCULATION
op'-DDT	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
pp'-DDT	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
DDT (Total)	ORG-91-5113	modified from EPA 3570, 3620C & 8081B	CALCULATION
Dieldrin	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Endrin	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Methoxychlor	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Hexachlorobenzene	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Hexachlorobutadiene	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
TCMX	ORG-91-5112	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Decachlorobiphenyl	ORG-91-5113	modified from EPA 3570 & 3620C & 8081B	GC/ECD
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE

Method Summary

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
AGAT WORK ORDER: 25H335674
PROJECT: NS2560-02
ATTENTION TO: Jodie Glasier
SAMPLING SITE:6009-6017 Valley Way
SAMPLED BY:J Toldi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
wet weight OC	ORG-91-5113		BALANCE
Dichlorodifluoromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Acetone	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Chloroform	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Benzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Toluene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS

Method Summary

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
AGAT WORK ORDER: 25H335674
PROJECT: NS2560-02
ATTENTION TO: Jodie Glasier
SAMPLING SITE: 6009-6017 Valley Way
SAMPLED BY: J Toldi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Chlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS

Have feedback?
Scan here for a quick survey!



5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Tel: 905.712.5122
Fax: 905.712.5122
webearth.agatlabs.com

Laboratory Use Only

Work Order #: 25H 335474
Cooler Quantity: LG COOLER
Arrival Temperatures: 9.8 | 9.1 | 8.7
Depot Temperatures: 22.4 | 22.0 | 21.9
Custody Seal Intact: Yes No N/A
Notes: 1 LB PKGS; FREE ICE

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: NSSL
Contact: Jodie Gleker
Address: 3308 Merrittville Highway, UNIT 4
Thorold, ON (2N 4R6)
Phone: 289-407-6341 Fax: _____
Reports to be sent to: Jgleker@nssl.com
1. Email: _____
2. Email: Studi@nssl.com

Regulatory Requirements:

(Please check all applicable boxes)

Regulation 153/04 Regulation 406 Sewer Use
 Sanitary Storm
Table 2 Indicate One Ind/Com Ind/Com
 Res/Park Res/Park
 Agriculture Agriculture
Soil Texture (Check One) Regulation 558 Other
 Coarse CCME
Indicate One

Turnaround Time (TAT) Required:

Regular TAT 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

3 Business Days 2 Business Days Next Business Day

OR Date Required (Rush Surcharges May Apply): _____

Please provide prior notification for rush TAT
*TAT is exclusive of weekends and statutory holidays

For 'Same Day' analysis, please contact your AGAT CSR

Project Information:

Project: NS2560-02
Site Location: 6009-6017 Valley Way
Thorold
Sampled By: 29557615266EB PO: _____
AGAT Quote #: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

Is this submission for a Record of Site Condition (RSC)?

Yes No

Report Guideline on Certificate of Analysis

Yes No

Legal Sample

Sample Matrix Legend

GW Ground Water SD Sediment
O Oil SW Surface Water
P Paint R Rock/Shale
S Soil

Invoice Information:

Bill To Same: Yes No

Company: _____
Contact: _____
Address: _____
Email: _____

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y / N	Field Filtered - Metals, Hg, CrVI, DOC	O Reg 153	O Reg 406	Potentially Hazardous or High Concentration (Y/N)
								Metals & Inorganics	Regulation 406 Characterization Package	
								Metals - <input type="checkbox"/> CrVI, <input type="checkbox"/> Hg, <input type="checkbox"/> HWSB	pH, Metals, BTEX, F1-F4	
								BTEX, F1-F4 PHCs	EC, SAR	
								VOC	Regulation 406 SPLP Rainwater Leach	
								PAHs	mSPLP: <input type="checkbox"/> Metals <input type="checkbox"/> VOCs <input type="checkbox"/> SVOCs <input type="checkbox"/> OC	
								PCBs: Aroclors <input type="checkbox"/>	Landfill Disposal Characterization TCLP:	
									TCLP: <input type="checkbox"/> M&I <input type="checkbox"/> VOCs <input type="checkbox"/> ABNs <input type="checkbox"/> B(a)P <input type="checkbox"/> PCBs	
									Corrosivity: <input type="checkbox"/> Moisture <input type="checkbox"/> Sulphide	
1. HA1-1	08/20/25	AM	1	S						X
2. HA2-1		AM								X
3. HA3-1		AM								X
4. HA4-1		AM								X
5. HA5-1		AM								X
6. HA6-1		AM								X
7. HA7-1		AM								X
8. HA8-1		AM								X
9. HA9-1		AM								X
10. HA10-1		AM								X
11. HA11-1		AM								X

Samples Relinquished By (Print Name and Sign): <u>Kelly H. U. Jacobs Told</u>	Date: <u>08/20/25</u> Time: <u>4:30pm</u>	Samples Received By (Print Name and Sign): <u>DTMC Blh</u>	Date: <u>Aug 20/25</u> Time: <u>4:30pm</u>
Samples Relinquished By (Print Name and Sign): <u>DTMC Blh</u>	Date: <u>08/21/25</u> Time: <u>3pm</u>	Samples Received By (Print Name and Sign): <u>[Signature]</u>	Date: <u>08/21/25</u> Time: <u>4:05PM</u>
Samples Relinquished By (Print Name and Sign): _____	Date: _____ Time: _____	Samples Received By (Print Name and Sign): _____	Date: _____ Time: _____

Page 1 of 2
N#: T-165044

Client | Yellow Copy - AGAT | White Copy - AGAT

Have feedback?
Scan here for a quick survey!



5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Tel: 905.712.5122
www.vebeearth.agatlabs.com

Laboratory Use Only

Work Order #: 25H335674
Cooler Quantity: LG COOLER
Arrival Temperatures: 9.8 | 9.1 | 8.7
Depot Temperatures: 22.4 | 22.0 | 21.9
Custody Seal Intact: Yes No N/A
Notes: ICE PAKS

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:
Company: NSSL
Contact: Jodie Gaylor
Address: 3300 Merrittville Highway, Unity
Thorold, ON L2V 4M6
Phone: 289-407-6341 Fax: _____
Reports to be sent to:
1. Email: Jgaylor@nssl.ca
2. Email: Jgaylor@nssl.ca

Regulatory Requirements:
(Please check all applicable boxes)

Regulation 153/04
Table 2 Indicate One
 Ind/Com
 Res/Park
 Agriculture

Regulation 406
Table _____ Indicate One
 Ind/Com
 Res/Park
 Agriculture

Sewer Use
 Sanitary Storm
Region _____

Prov. Water Quality Objectives (PWQO)
 Other

Soil Texture (Check One)
 Coarse
 Fine

Regulation 558
 CCME

Indicate One

Turnaround Time (TAT) Required:
Regular TAT 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
 3 Business Days 2 Business Days Next Business Day
OR Date Required (Rush Surcharges May Apply): _____

Project Information:
Project: N52560-02
Site Location: 6009-6017 Valley Way
J. Toldi
Sampled By: 29557615266EB PO: _____
Please note: if quotation number is not provided, client will be billed full price for analysis.

Is this submission for a **Record of Site Condition (RSC)?**
 Yes No

Report Guideline on Certificate of Analysis
 Yes No

Please provide prior notification for rush TAT
*TAT is exclusive of weekends and statutory holidays
For 'Same Day' analysis, please contact your AGAT CSR

Invoice Information:
Company: _____
Contact: _____
Address: _____
Email: _____
Bill To Same: Yes No

Legal Sample

Sample Matrix Legend
GW Ground Water SD Sediment
O Oil SW Surface Water
P Paint R Rock/Shale
S Soil

Field Filtered - Metals, Hg, CrVI, DOC	O. Reg 153				O. Reg 406										Potentially Hazardous or High Concentration (Y/N)		
	Metals & Inorganics	Metals - CrVI, Hg, HWSB	BTEX, F-L4 PHCs	VOC	PAHs	PCBs: Aroclors	Regulation 406 Characterization Package pH, Metals, BTEX, F-L4 EC, SAR	Regulation 406 SPLP Rainwater Leach mSPLP: Metals, VOCs, SVOCs	Landfill Disposal Characterization TCLP: TCLP: M&I, VOCs, ABNs, BiAP, PCBs	Corrosivity: Moisture	Sulphide	XOCs	PH				

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y / N
1. HA12-1	08/20/25	PM	1	S		
2. BH/MW1-1		AM	1			
3. BH/MW1-7		PM	1			
4. BH/MW2-1		AM	1			
5. BH/MW2-7		PM	1			
6. BH/MW3-1		AM	1			
7. BH/MW3-6		PM	1			
8. BH/MW3-2		AM	2			
9.		AM				
10.		PM				
11.		AM				

Samples Relinquished By (Print Name and Sign): Jacob Toldi Date: 08/20/25 Time: 4:20pm

Samples Relinquished By (Print Name and Sign): DNAC RBH Date: Aug 20/25 Time: 3pm

Samples Received By (Print Name and Sign): DNAC RBH Date: Aug 20/25 Time: 4:30pm

Samples Received By (Print Name and Sign): [Signature] Date: 08/20/25 Time: 4:05pm

Page 2 of 2
N#: T-165043

Client: Yellow Copy - AGAT | White Copy - AGAT

**CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
3300 MERRITTVILLE HIGHWAY
THOROLD, ON L2V 4Y6
289-407-6341**

ATTENTION TO: Jodie Glasier

PROJECT: NS2560-02

AGAT WORK ORDER: 25H348941

SOIL ANALYSIS REVIEWED BY: Sukhwinder Randhawa, Inorganic Team Lead

DATE REPORTED: Sep 30, 2025

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

***Notes**

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information is available on request from AGAT Laboratories, in accordance with ISO/IEC 17025:2017, ISO/IEC 17025:2005 (Quebec), DR-12-PALA and/or NELAP Standards.
- This document is signed by an authorized signatory who meets the requirements of the MELCCFP, CALA, CCN and NELAP.
- For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.



Certificate of Analysis

AGAT WORK ORDER: 25H348941
PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
SAMPLING SITE: 6008-6017 VALLEY WAY

ATTENTION TO: Jodie Glasier
SAMPLED BY: J. TOLDI

Hydride-Forming Metals and Lead

Parameter	Unit	G / S	RDL	SAMPLE DESCRIPTION:		HA1-1		HA2-1		HA3-1		HA4-1		HA5-1		HA6-1		HA7-1		HA8-1															
				DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:	DATE SAMPLED:												
Antimony	µg/g	7.5	0.8	HA1-1	Soil	2025-08-20	12:00	HA2-1	Soil	2025-08-20	12:00	HA3-1	Soil	2025-08-20	12:00	HA4-1	Soil	2025-08-20	12:00	HA5-1	Soil	2025-08-20	12:00	HA6-1	Soil	2025-08-20	12:00	HA7-1	Soil	2025-08-20	12:00	HA8-1	Soil	2025-08-20	12:00
Arsenic	µg/g	18	1	HA1-1	Soil	2025-08-20	12:00	HA2-1	Soil	2025-08-20	12:00	HA3-1	Soil	2025-08-20	12:00	HA4-1	Soil	2025-08-20	12:00	HA5-1	Soil	2025-08-20	12:00	HA6-1	Soil	2025-08-20	12:00	HA7-1	Soil	2025-08-20	12:00	HA8-1	Soil	2025-08-20	12:00
Selenium	µg/g	2.4	0.8	HA1-1	Soil	2025-08-20	12:00	HA2-1	Soil	2025-08-20	12:00	HA3-1	Soil	2025-08-20	12:00	HA4-1	Soil	2025-08-20	12:00	HA5-1	Soil	2025-08-20	12:00	HA6-1	Soil	2025-08-20	12:00	HA7-1	Soil	2025-08-20	12:00	HA8-1	Soil	2025-08-20	12:00
Lead	µg/g	120	1	HA1-1	Soil	2025-08-20	12:00	HA2-1	Soil	2025-08-20	12:00	HA3-1	Soil	2025-08-20	12:00	HA4-1	Soil	2025-08-20	12:00	HA5-1	Soil	2025-08-20	12:00	HA6-1	Soil	2025-08-20	12:00	HA7-1	Soil	2025-08-20	12:00	HA8-1	Soil	2025-08-20	12:00
				HA9-1	Soil	2025-08-20	12:00	HA10-1	Soil	2025-08-20	12:00	HA11-1	Soil	2025-08-20	12:00																				
Antimony	µg/g		0.8	HA9-1	Soil	2025-08-20	12:00	HA10-1	Soil	2025-08-20	12:00	HA11-1	Soil	2025-08-20	12:00																				
Arsenic	µg/g		1	HA9-1	Soil	2025-08-20	12:00	HA10-1	Soil	2025-08-20	12:00	HA11-1	Soil	2025-08-20	12:00																				
Selenium	µg/g		0.8	HA9-1	Soil	2025-08-20	12:00	HA10-1	Soil	2025-08-20	12:00	HA11-1	Soil	2025-08-20	12:00																				
Lead	µg/g		1	HA9-1	Soil	2025-08-20	12:00	HA10-1	Soil	2025-08-20	12:00	HA11-1	Soil	2025-08-20	12:00																				

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.
Analysis performed at AGAT Toronto (unless marked by *)



Certified By:

Quality Assurance

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
 PROJECT: NS2560-02
 SAMPLING SITE: 6008-6017 VALLEY WAY

AGAT WORK ORDER: 25H348941
 ATTENTION TO: Jodie Glasier
 SAMPLED BY: J. TOLDI

Soil Analysis																
RPT Date: Sep 30, 2025			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits		
								Lower	Upper		Lower	Upper		Lower	Upper	
Hydride-Forming Metals and Lead																
Antimony	7089376	7089376	<0.8	<0.8	NA	< 0.8	70%	70%	130%	113%	80%	120%	85%	70%	130%	
Arsenic	7089376	7089376	3	3	NA	< 1	104%	70%	130%	107%	80%	120%	104%	70%	130%	
Selenium	7089376	7089376	<0.8	<0.8	NA	< 0.8	95%	70%	130%	107%	80%	120%	113%	70%	130%	
Lead	7089376	7089376	7	7	0.0%	< 1	107%	70%	130%	110%	80%	120%	110%	70%	130%	

Certified By: _____



Method Summary

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

AGAT WORK ORDER: 25H348941

PROJECT: NS2560-02

ATTENTION TO: Jodie Glasier

SAMPLING SITE: 6008-6017 VALLEY WAY

SAMPLED BY: J. TOLDI

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS

APPENDIX C

CERTIFICATES OF ANALYSIS –GROUNDWATER



**CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
3300 MERRITTVILLE HIGHWAY
THOROLD, ON L2V 4Y6
289-407-6341**

ATTENTION TO: Jodie Glasier

PROJECT: NS2560-02

AGAT WORK ORDER: 25H343227

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Sep 17, 2025

PAGES (INCLUDING COVER): 8

VERSION*: 1

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

***Notes**

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information is available on request from AGAT Laboratories, in accordance with ISO/IEC 17025:2017, ISO/IEC 17025:2005 (Quebec), DR-12-PALA and/or NELAP Standards.
- This document is signed by an authorized signatory who meets the requirements of the MELCCFP, CALA, CCN and NELAP.
- For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.



Certificate of Analysis

AGAT WORK ORDER: 25H343227

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE: 6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY: J Toldi

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2025-09-10

DATE REPORTED: 2025-09-17

Parameter	Unit	SAMPLE DESCRIPTION:		BH/MW1	BH/MW2	BH/MW3	BH/MW4	BH/MW5
		SAMPLE TYPE:		Water	Water	Water	Water	Water
		DATE SAMPLED:		2025-09-10	2025-09-10	2025-09-10	2025-09-10	2025-09-10
		G / S	RDL	7046355	7046363	7046364	7046365	7046366
Dichlorodifluoromethane	µg/L	590	0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Vinyl Chloride	µg/L	0.5	0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Bromomethane	µg/L	0.89	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L	2700	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Methylene Chloride	µg/L	50	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl tert-butyl ether	µg/L	15	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	1800	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	2.4	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	5.0	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	16	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	24	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	µg/L	25	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	µg/L	30	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ethylbenzene	µg/L	2.4	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 25H343227

PROJECT: NS2560-02

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

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD

SAMPLING SITE: 6009-6017 Valley Way

ATTENTION TO: Jodie Glasier

SAMPLED BY: J Toldi

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2025-09-10

DATE REPORTED: 2025-09-17

Parameter	Unit	SAMPLE DESCRIPTION:		BH/MW1	BH/MW2	BH/MW3	BH/MW4	BH/MW5
		SAMPLE TYPE:		Water	Water	Water	Water	Water
		DATE SAMPLED:		2025-09-10	2025-09-10	2025-09-10	2025-09-10	2025-09-10
		G / S	RDL	7046355	7046363	7046364	7046365	7046366
Bromoform	µg/L	25	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene	µg/L	5.4	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
o-Xylene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	59	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	3	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichloropropene	µg/L	0.5	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	300	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
n-Hexane	µg/L	51	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	Unit	Acceptable Limits						
Toluene-d8	% Recovery	50-140		73	76	74	70	99
4-Bromofluorobenzene	% Recovery	50-140		97	100	96	96	86

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

7046355-7046366 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

Quality Assurance

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
AGAT WORK ORDER: 25H343227
PROJECT: NS2560-02
ATTENTION TO: Jodie Glasier
SAMPLING SITE: 6009-6017 Valley Way
SAMPLED BY: J Toldi

Trace Organics Analysis

RPT Date: Sep 17, 2025			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Water)															
Dichlorodifluoromethane	7008880		< 0.40	< 0.40	NA	< 0.40	98%	60%	140%	95%	50%	140%	74%	50%	140%
Vinyl Chloride	7008880		< 0.17	< 0.17	NA	< 0.17	87%	60%	140%	85%	50%	140%	93%	50%	140%
Bromomethane	7008880		< 0.20	< 0.20	NA	< 0.20	85%	60%	140%	86%	50%	140%	92%	50%	140%
Trichlorofluoromethane	7008880		< 0.40	< 0.40	NA	< 0.40	95%	60%	140%	98%	50%	140%	98%	50%	140%
Acetone	7008880		< 1.0	< 1.0	NA	< 1.0	90%	60%	140%	105%	50%	140%	89%	50%	140%
Methylene Chloride	7008880		< 0.30	< 0.30	NA	< 0.30	98%	60%	140%	105%	50%	140%	96%	50%	140%
trans- 1,2-Dichloroethylene	7008880		< 0.20	< 0.20	NA	< 0.20	90%	60%	140%	100%	50%	140%	87%	50%	140%
Methyl tert-butyl ether	7008880		< 0.20	< 0.20	NA	< 0.20	85%	60%	140%	95%	50%	140%	98%	50%	140%
1,1-Dichloroethane	7008880		3.91	4.15	6.0%	< 0.30	93%	60%	140%	97%	50%	140%	74%	50%	140%
Methyl Ethyl Ketone	7008880		< 1.0	< 1.0	NA	< 1.0	92%	60%	140%	85%	50%	140%	75%	50%	140%
cis- 1,2-Dichloroethylene	7008880		< 0.20	< 0.20	NA	< 0.20	85%	60%	140%	86%	50%	140%	85%	50%	140%
Chloroform	7008880		< 0.20	< 0.20	NA	< 0.20	89%	60%	140%	104%	50%	140%	95%	50%	140%
1,2-Dichloroethane	7008880		< 0.20	< 0.20	NA	< 0.20	85%	60%	140%	98%	50%	140%	90%	50%	140%
1,1,1-Trichloroethane	7008880		< 0.30	< 0.30	NA	< 0.30	78%	60%	140%	78%	50%	140%	87%	50%	140%
Carbon Tetrachloride	7008880		< 0.20	< 0.20	NA	< 0.20	74%	60%	140%	85%	50%	140%	105%	50%	140%
Benzene	7008880		< 0.20	< 0.20	NA	< 0.20	96%	60%	140%	96%	50%	140%	97%	50%	140%
1,2-Dichloropropane	7008880		< 0.20	< 0.20	NA	< 0.20	86%	60%	140%	92%	50%	140%	89%	50%	140%
Trichloroethylene	7008880		6.86	7.16	NA	< 0.20	90%	60%	140%	96%	50%	140%	86%	50%	140%
Bromodichloromethane	7008880		< 0.20	< 0.20	NA	< 0.20	98%	60%	140%	95%	50%	140%	83%	50%	140%
Methyl Isobutyl Ketone	7008880		< 1.0	< 1.0	NA	< 1.0	77%	60%	140%	78%	50%	140%	95%	50%	140%
1,1,2-Trichloroethane	7008880		< 0.20	< 0.20	NA	< 0.20	98%	60%	140%	105%	50%	140%	98%	50%	140%
Toluene	7008880		< 0.20	< 0.20	NA	< 0.20	105%	60%	140%	100%	50%	140%	85%	50%	140%
Dibromochloromethane	7008880		< 0.10	< 0.10	NA	< 0.10	90%	60%	140%	86%	50%	140%	105%	50%	140%
Ethylene Dibromide	7008880		< 0.10	< 0.10	NA	< 0.10	95%	60%	140%	96%	50%	140%	97%	50%	140%
Tetrachloroethylene	7008880		8.99	9.23	NA	< 0.20	78%	60%	140%	85%	50%	140%	83%	50%	140%
1,1,1,2-Tetrachloroethane	7008880		< 0.10	< 0.10	NA	< 0.10	85%	60%	140%	90%	50%	140%	92%	50%	140%
Chlorobenzene	7008880		< 0.10	< 0.10	NA	< 0.10	90%	60%	140%	98%	50%	140%	96%	50%	140%
Ethylbenzene	7008880		< 0.10	< 0.10	NA	< 0.10	95%	60%	140%	96%	50%	140%	96%	50%	140%
m & p-Xylene	7008880		< 0.20	< 0.20	NA	< 0.20	105%	60%	140%	86%	50%	140%	85%	50%	140%
Bromoform	7008880		< 0.10	< 0.10	NA	< 0.10	89%	60%	140%	89%	50%	140%	78%	50%	140%
Styrene	7008880		< 0.10	< 0.10	NA	< 0.10	85%	60%	140%	85%	50%	140%	74%	50%	140%
1,1,2,2-Tetrachloroethane	7008880		< 0.10	< 0.10	NA	< 0.10	93%	60%	140%	86%	50%	140%	105%	50%	140%
o-Xylene	7008880		< 0.10	< 0.10	NA	< 0.10	100%	60%	140%	94%	50%	140%	94%	50%	140%
1,3-Dichlorobenzene	7008880		< 0.10	< 0.10	NA	< 0.10	98%	60%	140%	98%	50%	140%	77%	50%	140%
1,4-Dichlorobenzene	7008880		< 0.10	< 0.10	NA	< 0.10	89%	60%	140%	88%	50%	140%	75%	50%	140%
1,2-Dichlorobenzene	7008880		< 0.10	< 0.10	NA	< 0.10	85%	60%	140%	74%	50%	140%	90%	50%	140%
n-Hexane	7008880		< 0.20	< 0.20	NA	< 0.20	90%	60%	140%	85%	50%	140%	89%	50%	140%

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

Quality Assurance

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
PROJECT: NS2560-02
SAMPLING SITE:6009-6017 Valley Way

AGAT WORK ORDER: 25H343227
ATTENTION TO: Jodie Glasier
SAMPLED BY:J Toldi

Trace Organics Analysis (Continued)

RPT Date: Sep 17, 2025			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Certified By: _____



Method Summary

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
AGAT WORK ORDER: 25H343227
PROJECT: NS2560-02
ATTENTION TO: Jodie Glasier
SAMPLING SITE: 6009-6017 Valley Way
SAMPLED BY: J Toldi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

Method Summary

CLIENT NAME: NIAGARA SOIL SOLUTIONS LTD
AGAT WORK ORDER: 25H343227
PROJECT: NS2560-02
ATTENTION TO: Jodie Glasier
SAMPLING SITE: 6009-6017 Valley Way
SAMPLED BY: J Toldi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Chlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

Have feedback?
Scan here for a quick survey!



5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Tel: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Laboratory Use Only

Work Order #: 254343227
Cooler Quantity: MD
Arrival Temperatures: 6.3 15.5 5.8
Depot Temperatures: 22.1 22.0 20.9
Custody Seal Intact: Yes No N/A
Notes: WOSE ILE

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information: NSL
Company: _____
Contact: Jade Glasw
Address: 3300 Merrittville Highway, Unit 4
Thornhill, ON L2V 4Y6
Phone: 289-407-6341 Fax: _____
Reports to be sent to: J.glasw@nsll.ca
1. Email: _____
2. Email: J.toldi@nsll.ca

Regulatory Requirements:

(Please check all applicable boxes)

Regulation 153/04 Regulation 406
Table 2 Ind/Com Sewer Use
 Res/Park Res/Park Sanitary Storm
 Agriculture Agriculture Prov. Water Quality Objectives (PWQO)
Soil Texture (Check One) Regulation 558 Other
 Coarse CCME
 Fine Indicate One

Project Information:
Project: NS2560-02
Site Location: 6009-6017 Valley Way
J.Toldi
Sampled By: _____
AGAT Quote #: 29557615 266 EB PO: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

Is this submission for a Record of Site Condition (RSC)?

Yes No

Report Guideline on Certificate of Analysis

Yes No

Invoice Information: Bill To Same: Yes No
Company: _____
Contact: _____
Address: _____
Email: _____

Legal Sample

Sample Matrix Legend

GW Ground Water **SD** Sediment
O Oil **SW** Surface Water
P Paint **R** Rock/Shale
S Soil

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y / N	Field Filtered - Metals, Hg, CrVI, DOC	0. Reg 153	0. Reg 406	0. Reg 558	Potentially Hazardous or High Concentration (Y/N)							
							Metals & Inorganics	Metals - CrVI, Hg, HWSB	BTEX, F1-F4 PHCS	VOC	PAHs	PCBs: Aroclors	Regulation 406 Characterization Package pH, Metals, BTEX, F1-F4	EC, SAR	Regulation 406 SPLP Rainwater Leach mSPLP: Metals, VOCs, SVOCs, OOC	Landfill Disposal Characterization TCLP: TCLP: M&I, VOCs, ABNS, BAP, PCBs	Corrosivity: Moisture Sulphide	
1. BH/mw 1	09/10/25	AM	3	GW						X								
2. BH/mw 2	↓	PM	↓	↓						X								
3. BH/mw 3	↓	PM	↓	↓						X								
4. BH/mw 4	↓	PM	↓	↓						X								
5. BH/mw 5	↓	PM	↓	↓						X								
6.		PM																
7.		PM																
8.		PM																
9.		PM																
10.		PM																
11.		PM																

Samples Relinquished By (Print Name and Sign): Jade Glasw Date: 09/10/25 Time: 10:45am
Samples Received By (Print Name and Sign): J.Toldi Date: Sept 10/25 Time: 10:45am
Samples Relinquished By (Print Name and Sign): J.Toldi Date: Sept 10/25 Time: 3pm
Samples Received By (Print Name and Sign): Jade Glasw Date: Sept 10/25 Time: 4:40pm

Pink Copy - Client | Yellow Copy - AGAT | White Copy - AGAT

APPENDIX D

GRAIN SIZE ANALYSIS

Project No.: NT25001.16

August 27, 2025

Niagara Soils Solutions Ltd.
 3300 Merrittville Highway, Unit 4
 Thorold, Ontario
 L2V 4Y6

Attention: Ms. Jodie Glasier, President

**RE: Laboratory Analysis for Soil Texture Classification
 Niagara Soils Solutions Ltd. Project No. NS2560-02
 6009-6017 Valley Way, Niagara Falls, Ontario**

Dear Ms. Glasier:

As requested, Niagara Testing and Inspection Ltd. [NTIL] was retained to perform laboratory analysis on soil samples for soil texture classification [i.e., fine/medium or coarse grain soil determination] as defined in Ontario Regulation 153/04 [as amended].

On Thursday August 21st, 2025, four [4] soil samples were delivered by Niagara Soils Solutions Ltd. to NTIL soils laboratory for 75-micron [μm] [#200] single-sieve grain size analysis. Results for the analysis are summarized in the table below.


<i>Sample I.D.</i>	<i>Percent Passing 75 μm [#200] Sieve</i>	<i>Percent Retained on 75 μm [#200] Sieve</i>	<i>Soil Texture</i>
BH/MW 2-7	40.7 %	59.3 %	Coarse Grained
BH/MW 3-1	78.1 %	21.9 %	Fine/Medium Grained
HA 5-1	80.6 %	19.4 %	Fine/Medium Grained
HA 10-1	76.6 %	23.4 %	Fine/Medium Grained

We trust that this information is satisfactory for your purposes. Should you have any queries please do not hesitate to contact the undersigned.

Regards:

Niagara Testing and Inspection Ltd.

Prepared by:


 Dwayne Neill, P.Eng.
 Project Engineer



Distribution:
 Jodie Glasier – jglasier@nssl.ca