



## PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

5580 Manotick Main Street  
Ottawa, ON  
K4M 1E2

Submitted to:  
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**December 9, 2024**

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Phase Two Environmental Site Assessment

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K4M 1E2

Project No. B040048



Report Prepared for:

Ignite Architecture Inc.

December 9, 2024



## TABLE CONTENT

|  |           |
|--|-----------|
| <b>1.0 EXECUTIVE SUMMARY.....</b>                        | <b>1</b>  |
| 1.1 RECOMMENDATIONS .....                                | 2         |
| <b>2.0 INTRODUCTION.....</b>                             | <b>2</b>  |
| 2.1 SITE DESCRIPTION.....                                | 2         |
| 2.2 PROPERTY OWNERSHIP .....                             | 3         |
| 2.3 CURRENT AND PROPOSED FUTURE USES .....               | 3         |
| 2.4 APPLICABLE SITE CONDITION STANDARDS .....            | 3         |
| <b>3.0 BACKGROUND INFORMATION .....</b>                  | <b>5</b>  |
| 3.1 PHYSICAL SETTING.....                                | 5         |
| 3.2 PAST INVESTIGATIONS .....                            | 6         |
| <b>4.0 SCOPE OF INVESTIGATION .....</b>                  | <b>7</b>  |
| 4.1 OVERVIEW OF THE SITE INVESTIGATION .....             | 7         |
| 4.2 MEDIA INVESTIGATED.....                              | 8         |
| 4.3 PHASE ONE CONCEPTUAL SITE MODEL .....                | 8         |
| <b>5.0 INVESTIGATION METHOD .....</b>                    | <b>12</b> |
| 5.1 GENERAL .....  | 12        |
| 5.2 DRILLING AND EXCAVATING.....                         | 12        |
| 5.3 SOIL .....   | 12        |
| 5.3.1 Sampling.....                                      | 12        |
| 5.3.2 Field Screening.....                               | 13        |
| 5.4 GROUNDWATER.....                                     | 13        |
| 5.4.1 Sampling.....                                      | 13        |
| 5.4.2 Field Screening.....                               | 14        |
| 5.5 ANALYTICAL TESTING.....                              | 14        |
| 5.6 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES ..... | 14        |
| <b>6.0 REVIEW AND EVALUATION .....</b>                   | <b>15</b> |
| 6.1 SOIL STRATIGRAPHY.....                               | 15        |
| 6.2 GROUNDWATER ELEVATIONS AND FLOW DIRECTION.....       | 15        |
| 6.3 SOIL FIELD SCREENING RESULTS .....                   | 16        |
| 6.4 SOIL QUALITY.....                                    | 17        |
| 6.5 GROUNDWATER QUALITY .....                            | 18        |

## TABLE CONTENT

|             |   |           |
|-------------|---|-----------|
| 6.6         | QUALITY ASSURANCE AND QUALITY CONTROL RESULTS ..... | 19        |
| <b>7.0</b>  | <b>PHASE TWO CONCEPTUAL SITE MODEL.....</b>         | <b>20</b> |
| 7.1         | PAST INVESTIGATIONS.....                            | 20        |
| 7.2         | PHYSICAL SETTING .....                              | 21        |
| 7.3         | SITE STRATIGRAPHY .....                             | 22        |
| 7.4         | GROUNDWATER ELEVATIONS AND FLOW DIRECTION .....     | 22        |
| 7.5         | PROPOSED BUILDINGS AND OTHER STRUCTURES .....       | 22        |
| 7.6         | APPLICABLE SITE CONDITION STANDARDS.....            | 22        |
| 7.7         | MEDIA INVESTIGATED .....                            | 23        |
| 7.8         | SOIL QUALITY .....                                  | 23        |
| 7.9         | GROUNDWATER QUALITY .....                           | 24        |
| 7.10        | AREAS WHERE CONTAMINANTS ARE PRESENT.....           | 24        |
| <b>8.0</b>  | <b>CONCLUSION.....</b>                              | <b>24</b> |
| 8.1         | RECOMMENDATIONS .....                               | 26        |
| 8.2         | SIGNATURES.....                                     | 27        |
| <b>9.0</b>  | <b>LIMITATION OF INVESTIGATION.....</b>             | <b>28</b> |
| <b>10.0</b> | <b>REFERENCES .....</b>                             | <b>29</b> |

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|            |   |
|------------|---|
| Appendix A | Figure 1 – Site Location Plan                       |
|            | Figure 2 – Potentially Contaminating Activities     |
|            | Figure 3 – Areas of Potential Environmental Concern |
|            | Figure 4 – Groundwater Direction                    |
|            | Figure 5 – Groundwater Exceedances                  |
| Appendix B | Borehole Logs                                       |
| Appendix C | Certificates of Analysis                            |



## LIST OF TABLES

|   |    |
|---|----|
| Table 1: Phase Two Property Contact Information .....                   | 3  |
| Table 2: PCAs identified on, in or under the Phase One Study Area ..... | 9  |
| Table 3: List of Areas of Potential Environmental Concern .....         | 11 |
| Table 4: Groundwater Depths.....  | 16 |
| Table 5: Soil Field Screening Results .....                             | 16 |
| Table 6: Soil Analytical Results .....                                  | 17 |
| Table 7: Groundwater Analytical Results .....                           | 18 |
| Table 8: Groundwater Depths.....  | 22 |



## 1.0 EXECUTIVE SUMMARY

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Blastek Engineering Group (hereafter referred to as "Blastek") was retained by Ignite Architecture Inc. (hereafter referred to as "Ignite" or "Client"), represented by Ms. Nicole Chilton-Jones, to prepare a Phase Two Environmental Site Assessment (ESA) for the parcel of land located at 5580 Manotick Main Street in Ottawa, Ontario (hereafter referred to as the "Property" or "Site").

The Phase Two Property is an approximately 0.1-hectare (0.256 acres) parcel of land situated within a mixed residential and commercial area in the City of Ottawa, Ontario. The Phase Two Property is located approximately 135 m west of the Rideau River.

This Phase Two ESA was completed in accordance with the requirements for Phase Two ESAs as defined in Part VIII and Schedule E of Ontario Regulation 153/04. Blastek understands that the Client is planning to redevelop the Property with a commercial building. Since the planned Site use is less sensitive than the current Site use (residential to commercial), a Record of Site Condition (RSC) is not required.

Site stratigraphy generally consists of sand to silty sand deposits ranging from 1.2 to 2.1 metres depth, underlain by silty clay deposits extending to depths ranging from 2.4 to 6 metres below ground surface. Large boulders were encountered at all borehole locations.

Based on the Phase One and Phase Two ESA, the following Site Condition Standards (SCS) was considered applicable to the soil and groundwater quality of the Site:

- Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Industrial/Commercial/Community Property Use and medium to coarse textured soils (Table 3 SCS)

A total of nine soil samples, 8 bulk samples and 1 duplicate, and four groundwater samples, including 1 duplicate, were collected from the sampling locations and submitted to Eurofins Scientific for analysis of selected parameters. Contaminants of potential environmental concern, as identified in the Phase One ESA included PHCs, BTEX, VOCs, PAHs and metals.

Analytical results indicate that the Site complies with the applicable Property Use standards (MECP Table 3 SCS) for soil. However, one collected groundwater sample showed an exceedance for chloroform.

## 1.1 Recommendations

The Phase Two ESA identified concentrations of chloroform in groundwater exceeding the applicable Table 3 SCS in one of the monitoring wells. However, since this exceedance was observed in only a single well, Blastek does not recommend conducting remediation or a risk assessment for groundwater at the site. The generic standards for chloroform in groundwater were found to be below the threshold for drinking water quality. Exceedances of chloroform are commonly observed in urban groundwater, often as a result of treated water being released through leaking water and sewer lines, hydrant flushing, or other discharges. The elevated concentrations of chloroform at the site are likely attributed to well installation activities rather than to potential contaminants associated with PCAs or APECs. Therefore, the site meets the applicable Property Use Standards, and no further remediation or risk assessment is required.

## 2.0 INTRODUCTION

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Blastek Engineering Group (Blastek) was retained by Ignite Architecture Inc., represented by Ms. Nicole Chilton-Jones to prepare a Phase Two Environmental Site Assessment (ESA) of a residential property located at 5580 Manotick Main Street in the City of Ottawa, Ontario (Site). The Property is owned by Abdulla Real Estate Holdings Co. The Site is rectangular in shape with an indent on the southwest side of the Property, the Site covers an area of approximately 0.1 hectares (approximately 0.217 acre) and is located in a mixed residential and commercial land use area. A Site Location Plan is included in Appendix A - Figure 1.

The Phase Two ESA was conducted following a Phase One ESA completed by Blastek in June 2024. Based on the findings of the Phase One ESA, four (4) areas of potential environmental concern (APEC) were identified on the Site.

This Phase Two Environmental Site Assessment (ESA) was conducted in accordance with the standard outlined in Ontario Regulation 153/04 (O. Reg. 153/04), as amended. Under O. Reg. 153/04, a Record of Site Condition (RSC) may not be required if a development project involves transitioning from a more sensitive land use (e.g., residential or parkland) to a less sensitive one (e.g., industrial or commercial). It is Blastek's understanding that the Phase Two ESA is not required to support the filing of an RSC for this Site.

## 2.1 Site Description

The Site is located west-southwest of Manotick Main Street in the City of Ottawa, Ontario. The Phase Two Property consists of one (1) parcel of irregularly shaped land, with a total area of



approximately 0.1 hectares (approximately 0.217 acre). The Site boundary is shown in Appendix A - Figure 1.

The Phase Two Property is situated 134 m west of Rideau River, occupied by residential property, and is bounded by Manotick Main Street followed by residential properties to the east, residential properties to the south and north and commercial properties to the west.

The Phase Two Property was first developed with building structures prior to the 1930s. It is understood that the Client intends to re-develop the property into a commercial two-storey building with a ground floor parking.

## 2.2 Property Ownership

The information for the Property Owner and the Client is provided in the table below.

**Table 1: Phase Two Property Contact Information**

| Property Address   | Property Owner                      | Client Contact   |
|--|-------------------------------------|--|
| 5580 Manotick Main Street,<br>Ottawa, Ontario K4M 1E2,<br>Canada | Abdulla Real Estate Holdings<br>Co. | Nicole Chilton-Jones<br>Ignite Architecture Inc.<br>533 Landswood Way<br>Stittsville, Ottawa<br>ON K2S 0A6 |

## 2.3 Current and Proposed Future Uses

The Site is currently developed with an abandoned building structure for residential use. The Site currently includes the following structures:

- Two-story house at the eastern portion of the Site adjacent to Manotick Main Street.
- Barn located on the southwest portion of the property.
- Workshop located on the north portion of the property.

It is understood that the Client intends to re-develop the property into a commercial two-storey building with a ground floor parking.

## 2.4 Applicable Site Condition Standards

Ontario Regulation 153/04 - Records of Site Condition, Part XV.1 of the Environmental Protection Act as amended - "O.Reg. 153/04, as amended" - establishes the legislative and regulatory requirements for contaminated sites in Ontario. The Ministry of Environment,

Conservation and Parks (MECP) document “Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act,” dated April 15, 2011 sets out the prescribed contaminants and applicable Site Condition Standards (SCS) for those contaminants for the purposes of O. Reg. 153/04, as amended. The MECP SCS are set out in Tables 1 to 9 criteria applicable for various site conditions.

The selection of the appropriate MECP SCS for a Phase Two ESA is dependent upon several site-specific conditions, such as the existing/proposed property use, the existing/potential ground water use, the depth of clean-up, soil texture, depth to bedrock and proximity to the nearest body of water.

The MECP SCS applicable to the Site have been evaluated on the basis of the following rationale:

- The site does not include, nor is there evidence to suggest it could have an adverse effect on a sensitive environment.
- The borehole drilling program revealed that the bedrock is at depths greater than 6 metres (m) below existing grade across the Site.
- The glacially derived native silty sand and clay materials are of low permeability to depths up to at least 6 m below ground surface.
- The current land use is residential. The land use will be transitioning from residential to commercial land uses.
- The site is and will continue to be serviced by a municipal drinking water supply from the City of Ottawa.
- Overburden was encountered during investigation activities up to a depth of 6 m below ground surface (mbgs) and bedrock was not encountered. The water well records for the area illustrate that the overburden thickness is in excess of 10 m. Therefore, the Site is not considered a shallow soil property.
- Representative soil samples were collected from four (4) boreholes during the Phase Two Investigation and evaluated for pH. These measurements reported typical soil pH levels.
- The Site does not include all or part of a water body, the Site is not adjacent to a water body, and the Site does not include lands that are within 30 m of a water body. There

are no surface water bodies or watercourses located on the Site. The closest surface water body (Rideau River) is located approximately 130 – 150 m east of the Site;

- Soil Texture: Based on the visual observations of boulders and cobbles made during the field program, coarse grained soils are present across the Site. Coarse textured soil is defined by Section 42(2) of O. Reg.153/04 as “soil that contains 50 percent or more by mass of particles that are greater than 75 micrometers in mean diameter”. Therefore, coarse textured soils have been considered applicable for the Site.
- Groundwater Use: According to the City of Ottawa’s Water and Wastewater Infrastructure map, the municipal water system supplies the Site. Accordingly, the Site has been considered to be situated in a non-potable groundwater area.
- Environmentally Sensitive Areas: Section 41 of O. Reg.153/04 states that a property is to be considered environmentally sensitive if any of the following are applicable:
  - (1) The property is,
    - (i) Within an area of natural significance;
    - (ii) Includes or is adjacent to an area of natural significance or part of such an area; or
    - (iii) Includes land that is within 30 metres of an area of natural significance or part of such an area;

The Site is not considered to be environmentally sensitive as the Site is not within 30 m of an area of natural significance and the pH of the soil is within the ranges provided above.

Based on the above Site characteristics, the following SCS was considered applicable to the soil and groundwater quality of the Site:

- Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Industrial/Commercial/Community Property Use and coarse textured soils (Table 3 SCS).

### **3.0 BACKGROUND INFORMATION**

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#### **3.1 Physical Setting**

The Site is located in an area of hilly topography, sloping downwards towards the west. The subject Site is higher in elevation along the west Property limits. There are no natural surface

water bodies or open drainage ditches currently located on the Site. The nearest significant surface water body is the Rideau River located approximately 130-150 meters east-northeast of the Site.

According to the Generalized Bedrock Geology of Ottawa – Hull map from Geological Survey of Canada, the Site is located on the Oxford formation, which consists of dolomite and limestone. According to the Surficial Geology of Kemptville map from Geological Survey of Canada, the Site is located in an area of offshore marine deposits, which is described by massive blue-grey clay, silty clay and silt, calcareous and fossiliferous, locally overlain by thin sands.

### **3.2 Past Investigations**

One previous Phase One ESA was completed on the Site in 2024 by Blastek. A summary of the report is presented below.

Six (6) potentially contaminating activities (PCA) were identified on the Phase One Study Area that are associated with the Phase One Property:

- PCA 28 – Gasoline and associated products storage in fixed tanks: Fuel storage tank vent pipe on Site.
- PCA (Other) – no detailed information provided. May include inorganic chemicals, petroleum hydrocarbons, metals, waste oils: Unknown chemical manufacturing, processing and bulk storage on Site.
- PCA 37 – Operation of Dry-Cleaning Equipment (where chemicals are used): One dry cleaner located off Site (1160 Beaverwood Road, 150 m northwest of the Site).
- PCA 28 – Gasoline and associated products storage in fixed tanks: Oil spill off Site (1160D Beaverwood Road, 150 m west of the Site)
- PCA 28 – Gasoline and associated products storage in fixed tanks: Oil spill off Site (5561 Main Street, 135 m northwest of the Site)
- PCA 37 – Operation of Dry-Cleaning Equipment (where chemicals are used): Elevated concentrations of chlorinated volatile organic compounds in groundwater based on previous environmental studies.

The PCAs are illustrated in Appendix A - Figure 2.

These PCAs were deemed to be contributing to four (4) APECs on the Phase One Property:

- APEC 1 – The south portion of the residential building (Basement footprint): Fuel storage tank vent pipe on Site suggests a fuel oil furnace used for heating and a fuel tank could have been present. Soil and groundwater are expected to be impacted with petroleum hydrocarbons (PHCs), benzene, toluene, ethylene and xylene (BTEX), and metals.
- APEC 2 – Western portion of the Property: A tote on Site could have been used to store chemicals. Soil and groundwater are expected to be impacted with PHCs, BTEX, volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs).
- APEC 3 – Entire property: One dry cleaner located off Site, as well as elevated concentrations of chlorinated volatile organic compounds in groundwater based on previous environmental studies. Soil and groundwater are expected to be impacted with VOCs.
- APEC 4 – Western portion of the Property: Two oil spills off Site. Soil and groundwater are expected to be impacted by PHCs, BTEX and metals.

The APECs are illustrated in Appendix A – Figure 3.

## 4.0 SCOPE OF INVESTIGATION

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### 4.1 Overview of the Site Investigation

Environmental sampling was carried out to characterize the quality of soil and groundwater within the APECs and to provide subsurface information relative to the potential environmental impacts.

The scope of the investigation included the following:

- Preparation of a sampling and analysis plan to document the purpose, rationale, number and location of samples to be collected as part of the Phase Two ESA;
- Advancement of 4 boreholes within the Site, 3 of which were converted to monitoring wells;
- Collection of 2 soil samples from each of the proposed boreholes for chemical analysis and submission of a total of 9 bulk soil samples (8 bulk samples, 1 duplicate sample) for chemical analysis of Contaminants of Potential Concern (COPCs) identified during the Phase One ESA;

- Collection of 4 groundwater samples (3 samples, 1 duplicate) for COPCs identified during the Phase One ESA;
- Comparison of the results to applicable MECP regulatory provincial standards and guidance documents as per O. Reg. 153/04; and
- Preparation of a Phase Two ESA report for the project summarizing the findings and providing conclusions and recommendations.

#### **4.2 Media Investigated**

Boreholes and monitoring wells were advanced on the Site to characterize the quality of the soil and groundwater and compare it to the applicable SCS. COPCs identified in the Phase One ESA conducted by Blastek for soil and groundwater included PHCs, BTEX, VOCs, PAHs and metals.

The soil sampling program included the collection and submission of two (2) representative soil samples from each borehole and one (1) duplicate soil sample for laboratory analysis of the COPCs.

The groundwater sampling program included the measurement of the groundwater table from the three monitoring wells developed, the purging, collection and submission of groundwater samples from each well and one (1) duplicate groundwater sample for laboratory analysis of the COPCs.

#### **4.3 Phase One Conceptual Site Model**

The Phase One ESA conducted by Blastek in June 2024 identified six (6) PCAs on the Phase One Study Area that are associated with the Phase One Property. These PCAs were deemed to be contributing to four (4) APECs on the Phase One Property. The identified PCAs and APECs are presented in the tables below.

**Table 2: PCAs identified on, in or under the Phase One Study Area**

| PCA ID No. | PCA Description (Per. Table 2, Schedule D of O.Reg. 153/04)  | Location              | Description   | Contributing to APEC (Yes/No) |
|------------|--|-----------------------|---|-------------------------------|
| PCA-1      | #28 – Gasoline and associated products storage in fixed tanks  | On Site               | A fuel storage tank vent pipe in the basement suggests a fuel oil furnace used for heating and a fuel tank could have been present on the Property. Based on Site reconnaissance. | Yes                           |
| PCA-2      | (Other) – no detailed information provided. May include inorganic chemicals, petroleum hydrocarbons, metals, waste oils. | On Site               | Unknown chemical manufacturing, processing and bulk storage: The tote on the north side of the barn could have been used to store chemicals. Based on Site reconnaissance.        | Yes                           |
| PCA-3      | #37 – Operation of Dry Cleaning Equipment where chemicals are used)  | 1160 Beaverwood Road  | Quality Cleaners, dry cleaner located to the northwest of the Site at 150 m.  | Yes                           |
| PCA-4      | #28 – Gasoline and Associated Products Storage in Fixed Tanks  | 1160D Beaverwood Road | Listed in the Fuel Oil Spills and Leaks database with a hit to a service/riser distribution pipeline. Located at approximately 150 m west of the Site                             | Yes                           |

| PCA ID No. | PCA Description (Per. Table 2, Schedule D of O.Reg. 153/04)          | Location                          | Description  | Contributing to APEC (Yes/No) |
|------------|--|-----------------------------------|--|-------------------------------|
| PCA-5      | #28 – Gasoline and Associated Products Storage in Fixed Tanks        | 5561 Main Street                  | Listed in the Ontario Spill database with a furnace oil spill in 1996 on earth basement floor. Located at approximately 135 m north-west of the Site                               | Yes                           |
| PCA-6      | #37 – Operation of Dry-Cleaning Equipment (where chemicals are used) | Area to the northwest of the Site | Based on a review of the previous environmental reports for the Phase One Property, elevated concentration of chlorinated volatile organic compounds were detected in groundwater. | Yes                           |

**Table 3: List of Areas of Potential Environmental Concern**

| APEC No. | Location of APEC on Phase One Property                             | PCA  | Location of PCA (on-site or off-site) | Contaminants of Potential Concern | Media Potentially Impacted (Ground water, soil and/or sediment) |
|----------|--|--|---------------------------------------|-----------------------------------|---|
| APEC-1   | The south portion of the residential building (Basement footprint) | 28. Gasoline and Associated Products Storage in Fixed Tanks        | On-Site (PCA-1)                       | PHCs, BTEX, Metals                | Soil and Groundwater  |
| APEC-2   | Western portion of the Property                                    | (Other) Chemical manufacturing, processing and bulk storage        | On-Site (PCA-2)                       | VOCs, PHCs, BTEX, PAHs            | Soil and Groundwater  |
| APEC-3   | Entire property  | 37. Operation of Dry Cleaning Equipment (where chemicals are used) | Off-Site (PCA-3 and PCA-6)            | VOCs                              | Soil and Groundwater  |
| APEC-4   | Western portion of the Property                                    | 28. Gasoline and Associated Products Storage in Fixed Tanks        | Off-Site (PCA-4 and PCA-5)            | PHCs, BTEX, Metals                | Soil and Groundwater  |

## 5.0 INVESTIGATION METHOD

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### 5.1 General

USL-1, a licensed Utility locator, was contracted to identify the location of all underground buried utilities at the Site. Public utilities including communications, gas, hydro, municipal water/sewer and streetlights, as well as private utilities were cleared through these services.

Blastek conducted the Phase Two ESA field investigation between September 19 and October 9, 2024. Four (4) boreholes (BH24-01, BH24-02, BH24-03 and BH24-04) were advanced on the Site, three (3) of which were converted to monitoring wells. Soil samples were collected for the COPCs identified in the Phase One ESA (PHCs, BTEX, VOCs, PAHs and metals). Groundwater was sampled from the developed monitoring wells across the Site and submitted for laboratory analyses of the COPCs.

### 5.2 Drilling and Excavating

The boreholes were advanced within the overburden to depths ranging from approximately 3.7 to 6.0 metres below ground surface (mbgs). The boreholes were advanced using a track mounted CME-45C/300 drill rig with a NW casing advancer coupled with a tricone drill bit supplied and operated by OGS Inc. of Almonte, Ontario. Soil samples were collected using a 50-millimetre diameter split spoon sampler advanced using a 140-pound hammer.

Monitoring wells were installed in boreholes BH24-02, BH24-03 and BH24-04 for measurement of the groundwater level and groundwater sampling. All monitoring wells were sampled as part of the Phase Two ESA investigation.

### 5.3 Soil

#### 5.3.1 Sampling

Soil samples from the boreholes advanced on the Site were collected via a 50 mm diameter split spoon. Samples were transferred immediately into laboratory supplied jars and placed in a cooler. If sufficient soil was recovered, the remaining soil was placed in a Ziplock bag to allow for field screening measurements. Clean gloves were worn and changed between each sample. Soil samples were inspected in the field for visual, tactile and olfactory evidence of impact.



Soil samples were each labeled with their unique identification number and recorded on the laboratory chain of custody.

A total of 10 soil samples (8 bulk samples, 1 duplicate and 1 TCLP) were collected and placed in coolers with ice packs. Samples along with a chain of custody were submitted to Eurofins Scientific in Ottawa, Ontario, which is an accredited laboratory.

Borehole logs are provided in Appendix B.

#### **5.3.2 *Field Screening***

Samples were inspected in the field for visual, tactile and olfactory evidence of impact. Blastek field personnel visually classified and logged the subsurface conditions encountered at each sampling location at the time of the field work.

Soil samples were screened for total VOCs using a RKI GX-6000 Photo Ionizing Detector (PID). The detection limit of the instrument ranges from 0 to 6,000 ppm. The RKI GX-6000 PID was obtained by Blastek from Maxim Environmental and Safety Inc. (Maxim) for this project. Maxim calibrated the instrument to isobutylene before use.

Headspace VOC concentrations were measured after sealing and shaking soil samples in plastic bags. The results ranged from 0.0 to 0.4 ppm.

### **5.4 *Groundwater***

#### **5.4.1 *Sampling***

Each monitoring well was purged a minimum of three well volumes or to dry from each location. Well purging was conducted using a peristaltic pump with dedicated disposable tubing. Groundwater samples were subsequently collected, after allowing for a period of aquifer stabilization, using low-flow sampling techniques to allow for the collection of representative samples. Groundwater samples were collected from the monitoring wells directly into laboratory supplied bottles using a peristaltic pump with dedicated disposable tubing.

Groundwater samples were each labeled with their unique identification number and recorded on the laboratory chain of custody.

A total of 4 groundwater samples, one from each of the 3 monitoring wells and one duplicate were collected and placed in coolers with ice packs. Samples along with a chain of custody were submitted to Eurofins Scientific in Ottawa, Ontario, which is an accredited laboratory.

#### **5.4.2 Field Screening**

Vapours from the monitoring wells were screened for total VOCs and combustible using RKI Eagle 2 Gas Monitor calibrated to hexane and isobutylene, respectively, operated in methane elimination mode. The detection limit of the PID ranges from 0 to 2,000 ppm and that of the catalytic sensor ranges from 0 to 50,000 ppm. The RKI Eagle 2 was obtained by Blastek from Maxim Environmental and Safety Inc. (Maxim) for this project. Combustible headspace well vapour readings were 0 ppm. Total VOC headspace readings were 0 ppm.

#### **5.5 Analytical Testing**

Soil and groundwater samples were collected directly into laboratory-supplied sampling containers, stored in dedicated coolers with ice packs to maintain required sample storage temperatures and shipped to Eurofins Scientific in Ottawa, Ontario. Samples were submitted under standard chain-of-custody procedures. Complete laboratory certificates of analysis for are provided in Appendix C.

#### **5.6 Quality Assurance and Quality Control Measures**

Soil and groundwater samples were collected directly into laboratory-supplied sampling containers. All samples were stored and shipped in dedicated coolers and were submitted to Eurofins Scientific, under standard chain-of-custody procedures.

Equipment cleaning procedures for soil sampling consisted of manual cleaning of split spoons. Following each split spoon sample all loose soils were removed from the spoons by heavy brush.

The soil sampling program included the submission of two representative overburden/fill soil sample from each borehole location for laboratory analysis of the identified COPCs. 1 duplicate sample was collected and submitted to Eurofins Scientific for PHCs, BTEX, VOCs, PAHs, and metals and inorganics.

Prior to groundwater sampling, static groundwater levels were determined using an electronic water level tape. To ensure no cross contamination between wells, the water level meter probe and wetted tape length was rinsed with deionised water between wells.

All required lengths of tubing for the groundwater sampling were rinsed with deionised water before and after usage at each designated well. Dedicated tubing was used for groundwater sampling at each well.

Field quality control measures employed during the Phase Two ESA investigations consisted of the collection of a field duplicate QA/QC sample for metals, mercury and chromium VI in groundwater. The duplicate groundwater sample was submitted to Eurofins Scientific for analysis of selected parameters.

The field duplicate samples were assessed by calculating the relative percent difference (RPD) and comparing the results to the acceptance criteria.

## **6.0 REVIEW AND EVALUATION**

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### **6.1 Soil Stratigraphy**

It is important to note that the brief soil descriptions provided below is for information purposes only and should not be relied upon, as actual soil conditions on-site may vary from the soil descriptions provided.

General subsurface conditions were observed during field investigations carried out by Blastek in September and October 2024. A surficial layer of asphalt with a thickness of 25 millimetres was encountered at borehole BH24-01.

Sand to silty sand deposits were encountered at ground surface or below the asphalt in borehole BH24-01. The sand to silty sand layer ranged from 1.2 to 2.1 metres depth.

Silty clay deposits were encountered below the sand to silty sand deposits and extended to depths ranging from 2.4 to 6 metres below ground surface.

Large boulders were encountered at all borehole locations. Bedrock was not encountered at any of the borehole locations.

### **6.2 Groundwater Elevations and Flow Direction**

Groundwater depths were measured directly from the top of each monitoring well casing using an electronic water level tape measure. The length of riser extending beyond the ground surface was subtracted from the measurements to obtain the depths below ground surface.

Groundwater depths were measured immediately after well installation, before purging on October 7, 2024 and before sampling on October 8, 2024. The measurements are presented in Table 4 below.

**Table 4: Groundwater Depths**

| Monitoring Well | Screened Interval (mbgs) | Installation Date | Groundwater depth after installation (mbgs) | Groundwater depth before purging (mbgs) | Groundwater depth before sampling (mbgs) |
|-----------------|--------------------------|-------------------|---|---|--|
| BH24-02         | 4.29 – 5.81              | October 1, 2024   | 5.35  | 5.67                                    | 5.68                                     |
| BH24-03         | 4.28 – 5.80              | October 2, 2024   | 3.34  | 5.59                                    | 5.60                                     |
| BH24-04         | 4.35 – 5.87              | October 2, 2024   | 0.40  | 3.62                                    | 5.16                                     |

Assumed groundwater direction is illustrated in Appendix A - Figure 4. Groundwater was assumed to flow towards the Rideau River located to the west of the Site. According to the Supplementary Bedrock Hydrogeologic Investigation of PCE Contamination, Village of Manotick, prepared by Raven Beck Environmental Limited, dated 30 July 1996, the groundwater from the upper and lower aquifers of the Site was found to flow towards the Rideau River.

### 6.3 Soil Field Screening Results

Headspace VOC concentrations were measured after sealing and shaking soil samples in plastic bags. The results ranged from 0.0 to 0.4 ppm. The results are summarized in Table 5 below.

**Table 5: Soil Field Screening Results**

| Monitoring Well | Sample | Depth Interval (mbgs) | VOC concentration (isobutylene) (ppm) |
|-----------------|--------|-----------------------|---------------------------------------|
| BH24-02         | SS1    | 0 – 0.61              | 0.0                                   |
| BH24-02         | SS2    | 1.52 – 2.13           | 0.0                                   |
| BH24-02         | SS6    | 4.88 – 5.49           | 0.0                                   |
| BH24-02         | SS7    | 5.49 – 6.10           | 0.0                                   |
| BH24-03         | SS1    | 0 – 0.61              | 0.0                                   |
| BH24-03         | SS2    | 0.76 – 1.37           | 0.0                                   |
| BH24-03         | SS3    | 1.52 – 2.13           | 0.0                                   |
| BH24-03         | SS4    | 2.29 – 2.36           | 0.0                                   |
| BH24-03         | SS5    | 2.74 – 3.35           | 0.0                                   |
| BH24-03         | SS8    | 4.88 – 5.49           | 0.4                                   |

| Monitoring Well | Sample | Depth Interval (mbgs) | VOC concentration (isobutylene) (ppm) |
|-----------------|--------|-----------------------|---------------------------------------|
| BH24-03         | SS9    | 5.49 – 6.10           | 0.3                                   |
| BH24-04         | SS2    | 0.76 – 1.12           | 0.1                                   |
| BH24-04         | SS3    | 2.44 – 2.59           | 0.0                                   |
| BH24-04         | SS6    | 4.27 – 4.88           | 0.0                                   |
| BH24-04         | SS8    | 5.49 – 6.10           | 0.0                                   |

The measurements are considered low and do not suggest the presence of VOCs.

#### 6.4 Soil Quality

A total of 9 soil samples, 8 bulk samples and 1 duplicate, were submitted to Eurofins Scientific, which is an accredited laboratory, for analysis of the COPCs. Exceedances to the selected MECP Table 3 SCS are summarized in Table 6 below. No exceedances to Table 3 SCS were observed.

**Table 6: Soil Analytical Results**

| Monitoring Well | Sample  | Depth Interval (mbgs) | COPCs                                       | Exceedances to Table 3 SCS |
|-----------------|---------|-----------------------|---|----------------------------|
| BH24-01         | SS1 SS2 | 0 – 1.22              | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |
| BH24-01         | SS3 SS4 | 1.22 – 2.43           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |
| BH24-02         | SS3     | 2.29 – 2.90           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |
| BH24-02         | SS4     | 3.05 – 3.66           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |
| BH24-03         | SS6     | 3.51 – 4.12           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |
| BH24-03         | SS7     | 4.27 – 4.88           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |

| Monitoring Well | Sample | Depth Interval (mbgs) | COPCs                                       | Exceedances to Table 3 SCS |
|-----------------|--------|-----------------------|---|----------------------------|
| BH24-03         | SS701  | 4.27 – 4.88           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |
| BH24-04         | SS7    | 4.88 – 5.49           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |
| BH24-04         | SS8    | 5.49 – 6.10           | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | None                       |

One (1) soil sample, BH24-04 SS5 TCLP, was submitted for TCLP analysis of PAHs, VOCs and Metals & Inorganics. The TCLP analytical results were compared to the Leachate Quality Criteria listed in Schedule 4 of O. Reg. 558/00: General – Waste Management. The TCLP analytical results indicated no exceedances to the Leachate Quality Criteria.

## 6.5 Groundwater Quality

Well screens were installed in the overburden in boreholes BH24-02, BH24-03 and BH24-04 for groundwater depth measurements and groundwater sample collections.

Groundwater samples were collected from the monitoring wells directly into laboratory supplied bottles using a peristaltic pump with dedicated disposable tubing. A total of 4 groundwater samples, including 1 duplicate, were submitted to Eurofins Scientific for analysis of the selected parameters. The groundwater samples submitted for analyses and the analytical parameters are summarized in Table 7 below and are presented in Figure 5 of Appendix A.

**Table 7: Groundwater Analytical Results**

| Monitoring Well | Sample | Groundwater Depth before sampling (mbgs) | COPCs                                       | Exceedances to Table 3 SCS |
|-----------------|--------|--|---|----------------------------|
| BH24-02         | GW     | 5.68                                     | VOCs, BTEX, Metals                          | None                       |
| BH24-03         | GW     | 5.60                                     | PHCs, VOCs, BTEX                            | None                       |
| BH24-04         | GW     | 5.16                                     | PHCs, VOCs, BTEX, PAHs, Metals & Inorganics | Chloroform                 |

| Monitoring Well | Sample | Groundwater Depth before sampling (mbgs) | COPCs                        | Exceedances to Table 3 SCS |
|-----------------|--------|--|------------------------------|----------------------------|
| BH24-04         | GW2    | 5.16                                     | Metals, Mercury, Chromium VI | None                       |

Groundwater samples met the applicable MECP Table 3 SCS for all parameters analyzed, with the exception of chloroform in BH24-04 GW. Exceedance of chloroform levels in groundwater can sometimes result from spills of drinking water. In Canada, the drinking water standard for chloroform is 0.1 mg/L as per the Guidelines for Canadian Drinking Water Quality from Health Canada. The groundwater standard for chloroform is 0.0024 mg/L as per Table 3 SCS of O. Reg. 153/04. This means the drinking water standard is over 41 times higher than the groundwater standard. The concentration of chloroform in BH24-04 GW was found to be 0.0117 mg/L.

## 6.6 Quality Assurance and Quality Control Results

A quality assurance/quality control (QA/QC) program was implemented during the Phase Two ESA field investigations. The QA/QC program consisted of the use of standard decontamination protocols, as well as the collection of duplicate samples. The QA/QC program also included internal laboratory QA/QC completed by Eurofins Scientific.

Blastek's QA/QC program consisted of the collection of blind field duplicates for soil and groundwater samples. Field duplicates were collected at a minimum rate of 10% of the total samples. 1 duplicate sample was collected for soil and 1 duplicate sample was collected for groundwater.

Laboratory analyses were completed by Eurofins Scientific, a CALA-certified laboratory. Eurofins completed all analyses in accordance with internal laboratory QC programs that include standardized analytical methods and procedures, in accordance with O.Reg. 153/04. Quality Assurance Summary Reports were provided by Eurofins for all completed analyses. Complete laboratory certificates of analysis are provided in Appendix C.

Blastek's QA/QC program included submission of soil and groundwater duplicates, in order to determine the precision of the analytical methods and field sampling procedures. For soil, BH24-03 SS701 was submitted as the duplicate of sample BH24-03 SS7 for PHCs, VOCs,

BTEXX, PAHs and Metals & Inorganics. For groundwater, BH24-04 GW2 was submitted as the duplicate of sample BH24-04 GW for Metals, Mercury and Chromium VI.

The relative percent difference (RPD) was calculated for all parameters with concentrations greater than five times the reportable detection limit (RDL). The calculated soil RPD values for BH24-03 SS7 and BH24-03 SS701 ranged from 0% to 43.9%.

All calculated RPDs were within the required performance standards according to the *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality*, except for the following:

- Total Chromium had an RPD of 43.9%, exceeding the 30% standard; and
- Nickel had an RPD of 34.1%, exceeding the 30% standard.

These exceedances are likely attributed to the heterogeneity of soil and not representative of the sampling procedures followed during the sampling program.

The only calculated groundwater RPD value for BH24-04 GW and BH24-04 GW2 was 0%.

## **7.0 PHASE TWO CONCEPTUAL SITE MODEL**

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### **7.1 Past Investigations**

One previous Phase One ESA was completed on the Site in 2024 by Blastek. A summary of the report is presented below.

Six (6) potentially contaminating activities (PCA) were identified on the Phase One Study Area that are associated with the Phase One Property:

- PCA 28 – Gasoline and associated products storage in fixed tanks: Fuel storage tank vent pipe on Site.
- PCA (Other) – no detailed information provided. May include inorganic chemicals, petroleum hydrocarbons, metals, waste oils: Unknown chemical manufacturing, processing and bulk storage on Site.
- PCA 37 – Operation of Dry-Cleaning Equipment (where chemicals are used): One dry cleaner located off Site (1160 Beaverwood Road, 150 m northwest of the Site).
- PCA 28 – Gasoline and associated products storage in fixed tanks: Oil spill off Site (1160D Beaverwood Road, 150 m west of the Site)

- PCA 28 – Gasoline and associated products storage in fixed tanks: Oil spill off Site (5561 Main Street, 135 m northwest of the Site)
- PCA 37 – Operation of Dry-Cleaning Equipment (where chemicals are used): Elevated concentrations of chlorinated volatile organic compounds in groundwater based on previous environmental studies.

These PCAs were deemed to be contributing to four (4) APECs on the Phase One Property:

- APEC 1 – The south portion of the residential building (Basement footprint): Fuel storage tank vent pipe on Site suggests a fuel oil furnace used for heating and a fuel tank could have been present. Soil and groundwater are expected to be impacted with petroleum hydrocarbons (PHCs), benzene, toluene, ethylene and xylene (BTEX), and metals.
- APEC 2 – Western portion of the Property: A tote on Site could have been used to store chemicals. Soil and groundwater are expected to be impacted with PHCs, BTEX, volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs).
- APEC 3 – Entire property: One dry cleaner located off Site, as well as elevated concentrations of chlorinated volatile organic compounds in groundwater based on previous environmental studies. Soil and groundwater are expected to be impacted with VOCs.
- APEC 4 – Western portion of the Property: Two oil spills off Site. Soil and groundwater are expected to be impacted by PHCs, BTEX and metals.

## 7.2 Physical Setting

The Site is located in an area of hilly topography, sloping downwards towards the west. The subject Site is higher in elevation along the west Property limits. There are no natural surface water bodies or open drainage ditches currently located on the Site. The nearest significant surface water body is the Rideau River located approximately 130-150 meters east-northeast of the Site.

According to the Generalized Bedrock Geology of Ottawa – Hull map from Geological Survey of Canada, the Site is located on the Oxford formation, which consists of dolomite and limestone. According to the Surficial Geology of Kemptville map from Geological Survey of Canada, the Site is located in an area of offshore marine deposits, which is described by

massive blue-grey clay, silty clay and silt, calcareous and fossiliferous, locally overlain by thin sands.

### 7.3 Site Stratigraphy

Site stratigraphy generally consists of sand to silty sand deposits ranging from 1.2 to 2.1 metres depth, underlain by silty clay deposits extending to depths ranging from 2.4 to 6 metres below ground surface. Large boulders were encountered at all borehole locations.

### 7.4 Groundwater Elevations and Flow Direction

Groundwater depths were measured directly from the top of each monitoring well casing using an electronic water level tape measure. The length of riser extending beyond the ground surface was subtracted from the measurements to obtain the depths below ground surface.

Groundwater depths were measured immediately after well installation, before purging on October 7, 2024 and before sampling on October 8, 2024. The measurements are presented in Table 4 below.

**Table 8: Groundwater Depths**

| Monitoring Well | Screened Interval (mbgs) | Installation Date | Groundwater depth after installation (mbgs) | Groundwater depth before purging (mbgs) | Groundwater depth before sampling (mbgs) |
|-----------------|--------------------------|-------------------|---|---|--|
| BH24-02         | 4.29 – 5.81              | October 1, 2024   | 5.35  | 5.67                                    | 5.68                                     |
| BH24-03         | 4.28 – 5.80              | October 2, 2024   | 3.34  | 5.59                                    | 5.60                                     |
| BH24-04         | 4.35 – 5.87              | October 2, 2024   | 0.40  | 3.62                                    | 5.16                                     |

### 7.5 Proposed Buildings and Other Structures

It is understood that the Client intends to re-develop the property into a commercial two-storey building with a ground floor parking.

### 7.6 Applicable Site Condition Standards

Based on the Phase One and Phase Two ESA, the following SCS was considered applicable to the soil quality of the Site:

- Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Industrial/Commercial/Community Property Use and coarse textured soils (Table 3 SCS)

Based on the Phase One and Phase Two ESA, the following SCS was considered applicable to the groundwater quality of the Site:

- Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for All Types of Property Use and coarse textured soils (Table 3 SCS)

### **7.7 Media Investigated**

Boreholes and monitoring wells were advanced on the Site to characterize the quality of the soil and groundwater and compare it to the applicable SCS. The boreholes were advanced using a track mounted CME-45C/300 drill rig with a NW casing advancer coupled with a tricone drill bit supplied and operated by OGS Inc. of Almonte, Ontario. COPCs identified in the Phase One ESA conducted by Blastek for soil and groundwater included PHCs, BTEX, VOCs, PAHs and metals.

The soil sampling program included the collection and submission of two (2) representative soil samples from each borehole and one (1) duplicate soil sample for laboratory analysis of the COPCs.

The groundwater sampling program included the measurement of the groundwater table from the three monitoring wells developed, the purging, collection and submission of groundwater samples from each well and one (1) duplicate groundwater sample for laboratory analysis of the COPCs.

### **7.8 Soil Quality**

Samples were inspected in the field for visual, tactile and olfactory evidence of impact.

Soil samples were screened for total VOCs using a RKI GX-6000 Photo Ionizing Detector (PID). The detection limit of the instrument ranges from 0 to 6,000 ppm. Headspace VOC concentrations were measured after sealing and shaking soil samples in plastic bags. The results ranged from 0.0 to 0.4 ppm.

A total of 9 soil samples, 8 bulk samples and 1 duplicate, were submitted to Eurofins Scientific, which is an accredited laboratory, for analysis of the COPCs. No exceedances to Table 3 SCS

were observed. Soil samples met the applicable MECP Table 3 SCS for all parameters analyzed.

One (1) soil sample, BH24-04 SS5 TCLP, was submitted for TCLP analysis of PAHs, VOCs and Metals & Inorganics. The TCLP analytical results were compared to the Leachate Quality Criteria listed in Schedule 4 of O. Reg. 558/00: General – Waste Management. The TCLP analytical results indicated no exceedances to the Leachate Quality Criteria.

### **7.9 Groundwater Quality**

Well screens were installed in the overburden in boreholes BH24-02, BH24-03 and BH24-04 for groundwater depth measurements and groundwater sample collections.

Groundwater samples were collected from the monitoring wells directly into laboratory supplied bottles using a peristaltic pump with dedicated disposable tubing. A total of 4 groundwater samples, including 1 duplicate, were submitted to Eurofins Scientific for analysis of the selected parameters.

Groundwater samples met the applicable MECP Table 3 SCS for all parameters analyzed, with the exception of chloroform in BH24-04 GW. The elevated concentration of chloroform is not considered an exceedance.

### **7.10 Areas Where Contaminants Are Present**

The results of the soil and groundwater quality investigation completed as part of the Phase Two ESA identified the presence of chloroform in groundwater with concentrations exceeding the MECP Table 3 SCS. The chloroform exceedance was found in the groundwater at BH24-04.

## **8.0 CONCLUSION**

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The Site consists of the property at 5580 Manotick Main Street, Ottawa, Ontario. The Site was first developed with building structures prior to the 1930s. It is understood that the Client intends to re-develop the property into a commercial two-storey building with a ground floor parking. Four APECs were identified across the Site:

- APEC 1 – The south portion of the residential building (Basement footprint): Fuel storage tank vent pipe on Site suggests a fuel oil furnace used for heating and a fuel tank could have been present. Soil and groundwater are expected to be impacted with

petroleum hydrocarbons (PHCs), benzene, toluene, ethylene and xylene (BTEX), and metals.

- APEC 2 – Western portion of the Property: A tote on Site could have been used to store chemicals. Soil and groundwater are expected to be impacted with PHCs, BTEX, volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs).
- APEC 3 – Entire property: One dry cleaner located off Site, as well as elevated concentrations of chlorinated volatile organic compounds in groundwater based on previous environmental studies. Soil and groundwater are expected to be impacted with VOCs.
- APEC 4 – Western portion of the Property: Two oil spills off Site. Soil and groundwater are expected to be impacted by PHCs, BTEX and metals.

Site stratigraphy generally consists of sand to silty sand deposits ranging from 1.2 to 2.1 metres depth, underlain by silty clay deposits extending to depths ranging from 2.4 to 6 metres below ground surface. Large boulders were encountered at all borehole locations.

Based on the Phase One and Phase Two ESA, the following SCS was considered applicable to the soil quality of the Site:

- Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Industrial/Commercial/Community Property Use and coarse textured soils (Table 3 SCS)

Based on the Phase One and Phase Two ESA, the following SCS was considered applicable to the groundwater quality of the Site:

- Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for All Types of Property Use and coarse textured soils (Table 3 SCS)

A total of nine soil samples, 8 bulk samples and 1 duplicate, and four groundwater samples, including 1 duplicate, were collected from the sampling locations and submitted to Eurofins Scientific for analysis of selected parameters. Contaminants of potential environmental concern, as identified in the Phase One ESA included PHCs, BTEX, VOCs, PAHs and metals.

Analytical results indicated that the Site meets the applicable MECP Table 3 SCS for soil, but not for groundwater. One groundwater sample exceeded the applicable MECP Table 3 SCS for chloroform.

## 8.1 Recommendations

The Phase Two ESA identified chloroform concentrations in groundwater that exceed the applicable Table 3 SCS at monitoring well BH24-04. However, since this exceedance was observed at only one of the three monitoring wells, Blastek does not recommend the remediation of groundwater on the Site. Following the revision of the generic standards for chloroform in groundwater – now set below drinking water standards – chloroform exceedances have commonly been found in urban groundwater, often due to the release of treated water through leaking water and sewer lines, hydrant flushing, or other discharges. As a result, the elevated concentrations of chloroform on the site are considered to be related to well installation activities, rather than to PCAs or APECs. Therefore, the Site meets the applicable Property Use Standards.

**8.2 Signatures**

| Prepared by:  | Review by:  |
|---|---|
|  | <br> |
| Marc Orfali, EIT.<br>Project Coordinator  | Dr. Nizar Zyoud Ph.D., P.Eng.<br>Hydrogeologist   |

## **9.0 LIMITATION OF INVESTIGATION**

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The conclusions are presented based upon the readily available public information within the time frame of this mandate by trained professionals, following a prescribed and recognised assessment procedure.

This report is not intended to address, or provide comment on the presence, or absence of organic growth organisms commonly referred to as mould, through statements, inferences or omissions.

The report is prepared for the use of the Client and his named representatives in making an informed financial and business decision regarding environmental liabilities that may be associated with the Site. The use of this report for any other purpose is at the Client's own risk.

The Client must understand that changing circumstances in the physical or regulatory environment, the administration and use of the Site, as well as changes in any substances stored, used, or disposed of at the Site, could significantly alter the conclusions and information contained in this report. Therefore, it is important that the Client periodically re-evaluates the Site and reviews developments or operations, which may potentially impact the Site.

## 10.0 REFERENCES

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Ministry of the Environment, Conservation and Parks (MECP) Table 3: Ontario Ministry of the Environment, "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, March 2004, amended July 1, 2011. Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for All Types of Property Use with coarse textured soils.

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## STATEMENT OF LIMITATIONS AND CONDITIONS

This Report has been prepared in accordance with generally accepted engineering or environmental consulting practices in the applicable jurisdiction. No other warranty, expressed or implied, is intended or made.

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment are a part of the Report, which is of a summary nature and is not intended to stand alone without reference to the instructions given to Blastek by the Client, communications between BLASTEK and the Client, and any other reports, proposals or documents prepared by BLASTEK for the Client relative to the specific site described herein, all of which together constitute the Report. IN ORDER TO PROPERLY UNDERSTAND THE SUGGESTIONS, RECOMMENDATIONS AND OPINIONS EXPRESSED HEREIN, REFERENCE MUST BE MADE TO THE WHOLE OF THE REPORT. BLASTEK IS NOT RESPONSIBLE FOR USE BY ANY PARTY OF PORTIONS OF THE REPORT WITHOUT REFERENCE TO THE WHOLE REPORT.

The Report has been prepared for the specific site, development, design objectives and purposes that were described to BLASTEK by the Client. The applicability and reliability of any of the findings, recommendations, suggestions, or opinions expressed in the Report, subject to the limitations provided herein, are only valid to the extent that the Report expressly addresses proposed development, design objectives and purposes, and then only to the extent that there has been no material alteration to or variation from any of the said descriptions provided to BLASTEK, unless BLASTEK is specifically requested by the Client to review and revise the Report in light of such alteration or variation.

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**Nature and Exactness of Soil and Contaminant Description:** Classification and identification of soils, rocks, geological units, contaminant materials and quantities have been based on investigations performed in accordance with the standards set out in Paragraph 1. Classification and identification of these factors are judgmental in nature. Comprehensive sampling and testing programs implemented with the appropriate equipment by experienced personnel may fail to locate some conditions. All investigations utilizing the standards of Paragraph 1 will involve an inherent risk that some conditions will not be detected and all documents or records summarizing such investigations will be based on assumptions of what exists between the actual points sampled.

Actual conditions may vary significantly between the points investigated and the Client and all other persons making use of such documents or records with our express written consent should be aware of this risk and the Report is delivered subject to the express condition that such risk is accepted by the Client and such other persons. Some conditions are subject to change over time and those making use of the Report should be aware of this possibility and understand that the Report only presents the conditions at the sampled points at the time of sampling. If special concerns exist, or the Client has special considerations or requirements, the Client should disclose them so that additional or special investigations may be undertaken which would not otherwise be within the scope of investigations made for the purposes of the Report.

**Reliance on Provided Information:** The evaluation and conclusions contained in the Report have been prepared based on conditions in evidence at the time of site inspections and based on information provided to BLASTEK. BLASTEK has relied in good faith upon representations, information and instructions provided by the Client and others concerning the site. Accordingly, BLASTEK does not accept responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of misstatements, omissions, misrepresentations, or fraudulent acts of the Client or other persons providing information relied on by BLASTEK. BLASTEK is entitled to rely on such representations, information and instructions and is not required to carry out investigations to determine the truth or accuracy of such representations, information, and instructions.

**Design Services:** The Report may form part of design and construction documents for information purposes even though it may have been issued prior to final design being completed. BLASTEK should be retained to review final design, project plans and related documents prior to construction to confirm that they are consistent with the intent of the Report. Any differences that may exist between the Report's recommendations and the final design detailed in the contract documents should be reported to BLASTEK immediately so that BLASTEK can address potential conflicts.

**Construction Services:** During construction BLASTEK should be retained to provide field reviews. Field reviews consist of performing sufficient and timely observations of encountered conditions to confirm and document that the site conditions do not materially differ from those interpreted conditions considered in the preparation of the report. Adequate field reviews are necessary for BLASTEK to provide letters of assurance, in accordance with the requirements of many regulatory authorities.

**RELEASE OF POLLUTANTS OR HAZARDOUS SUBSTANCES** Geotechnical engineering designated substance surveys, and environmental consulting projects often have the potential to encounter pollutants or hazardous substances and the potential to cause the escape, release, or dispersal of those substances. BLASTEK shall have no liability to the Client under any circumstances, for the escape, release or dispersal of pollutants or hazardous substances, unless such pollutants or hazardous substances have been specifically and accurately identified to BLASTEK by the Client prior to the commencement of BLASTEK's professional services.

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## Appendix A

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- Figure 1 – Site Location Plan
- Figure 2 – Potentially Contaminating Activities
- Figure 3 – Areas of Potential Environmental Concern
- Figure 4 – Groundwater Direction
- Figure 5 – Groundwater Exceedances



Legend

- Phase Two Property (Dashed Yellow Line)
- Borehole (Red Circle)
- Borehole/monitoring well (Blue Circle)

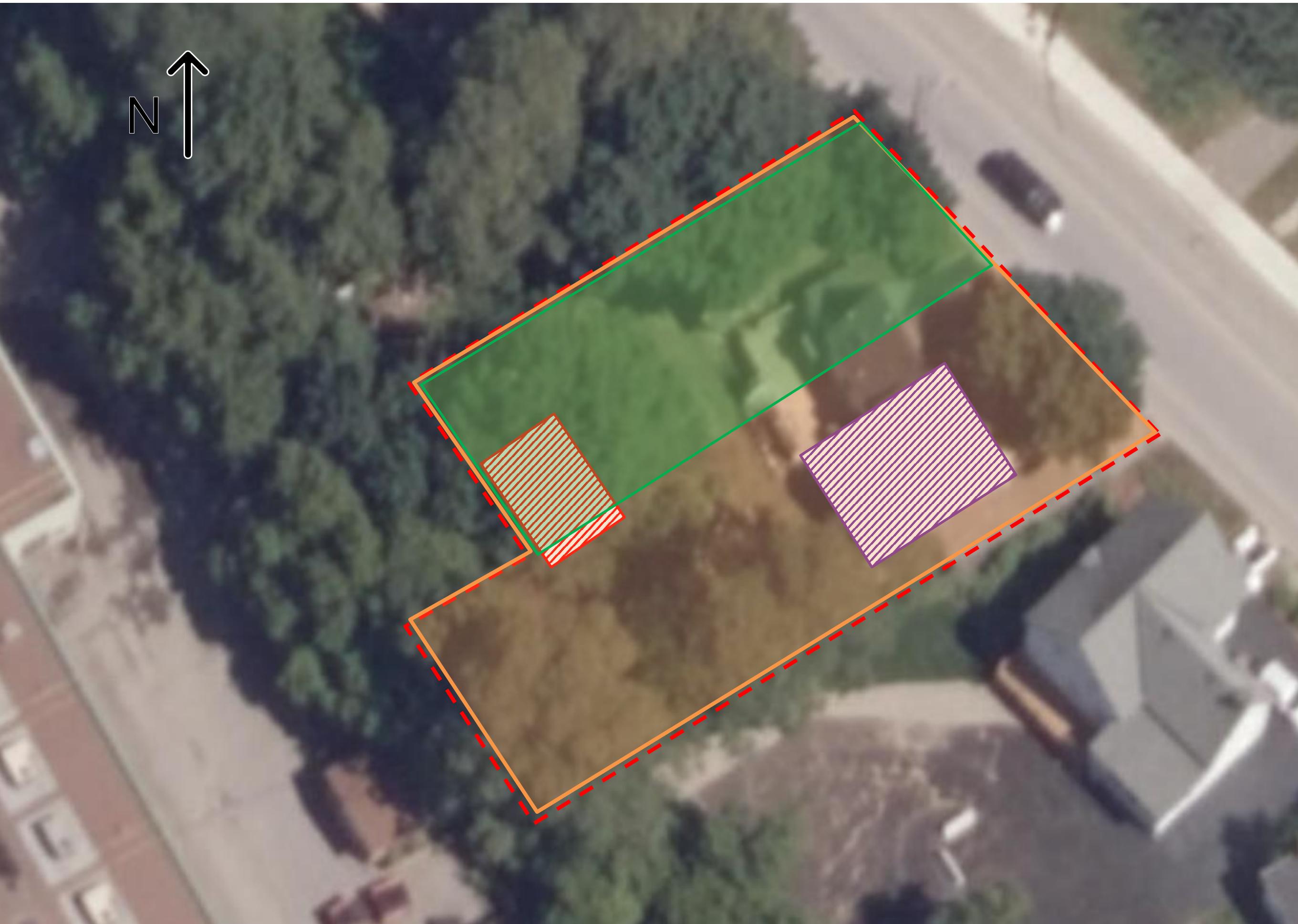
|  |            |             |            |
|--|------------|-------------|------------|
| 0  | 10/06/2024 |             |            |
| Revision                                   | Date       | Issue       | Approval   |
| Client                                     |            |             |            |
| Ignite Architecture Inc.                   |            |             |            |
| Site                                       |            |             |            |
| 5580 Manotick Main Street, Ottawa, Ontario |            |             |            |
| Report Title                               |            |             |            |
| Phase Two Environmental Site Assessment    |            |             |            |
| Drawing Title                              |            |             |            |
| Site Location Pan                          |            |             |            |
| Designed By                                | M.O        | Scale       | N/A        |
| Drawn By                                   | M.O        | Date        | 12/09/2024 |
| Approved By                                | S.A        | Project No. | B040048    |
| Figure No.                                 |            |             |            |



**Legend**

- Phase One Property
- - - Phase One Study Area
- Gasoline and Associated Products Storage in Fixed Tanks
- Unknown chemical manufacturing, processing and bulk storage
- Operation of Dry Cleaning Equipment (where chemicals are used)
- Gasoline and Associated Products Storage in Fixed Tanks

| Revision                                   | Date | Issue       | Approval   |
|--|------|-------------|------------|
| Client                                     |      |             |            |
| Ignite Architecture Inc.                   |      |             |            |
| Site                                       |      |             |            |
| 5580 Manotick Main Street, Ottawa, Ontario |      |             |            |
| ReportTitle                                |      |             |            |
| Phase Two Environmental Site Assessment    |      |             |            |
| DrawingTitle                               |      |             |            |
| Potentially Contaminating Activities       |      |             |            |
| Designed By                                | M.O  | Scale       | N/A        |
| Drawn By                                   | M.O  | Date        | 12/09/2024 |
| Approved By                                | S.A  | Project No. | B040048    |
| Figure No.                                 |      |             |            |



**Legend**

- Phase One Property (Dashed Red Line)
- APEC 1 (Purple Hatched)
- APEC 2 (Red Hatched)
- APEC 3 (Orange)
- APEC 4 (Green)

| Revision | Date | Issue | Approval |
|----------|------|-------|----------|
|----------|------|-------|----------|

Client Ignite Architecture Inc.

Site 5580 Manotick Main Street, Ottawa, Ontario

ReportTitle Phase Two Environmental Site Assessment

**DrawingTitle**  
**Areas of Potential Environmental Concern**

Designed By M.O Scale N/A

Drawn By M.O Date 12/09/2024

Approved By S.A Project No. B040048

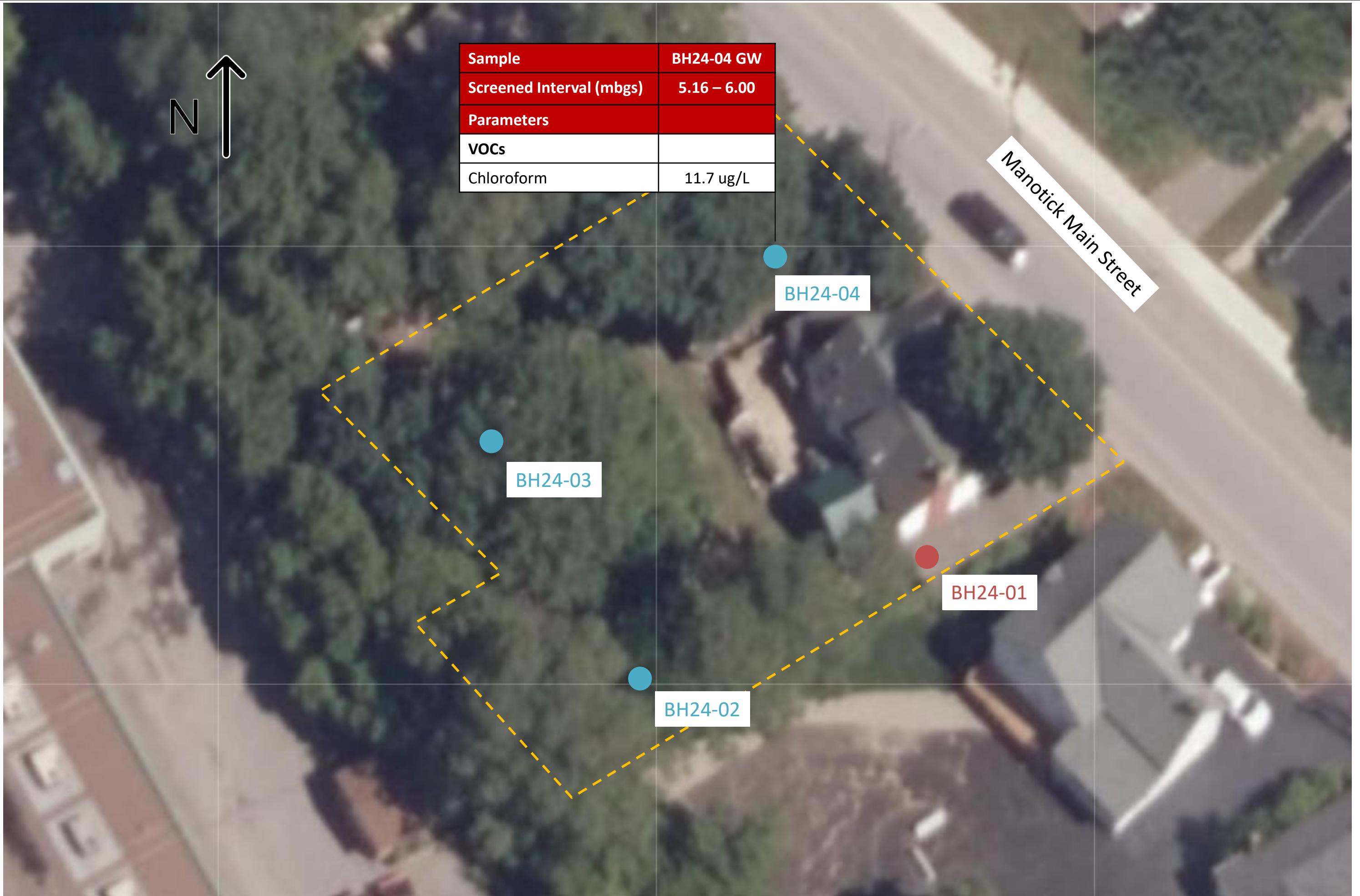
Figure No. 3



Legend



| Revision                                | Date | Issue                                      | Approval   |
|---|------|--|------------|
| Client                                  |      |  |            |
| Ignite Architecture Inc.                |      |  |            |
| Site                                    |      | 5580 Manotick Main Street, Ottawa, Ontario |            |
| ReportTitle                             |      |  |            |
| Phase Two Environmental Site Assessment |      |  |            |
| DrawingTitle                            |      |  |            |
| Assumed Groundwater Direction           |      |  |            |
| Designed By                             | M.O  | Scale                                      | N/A        |
| Drawn By                                | M.O  | Date                                       | 12/09/2024 |
| Approved By                             | S.A  | Project No.                                | B040048    |
| Figure No.                              |      |  |            |



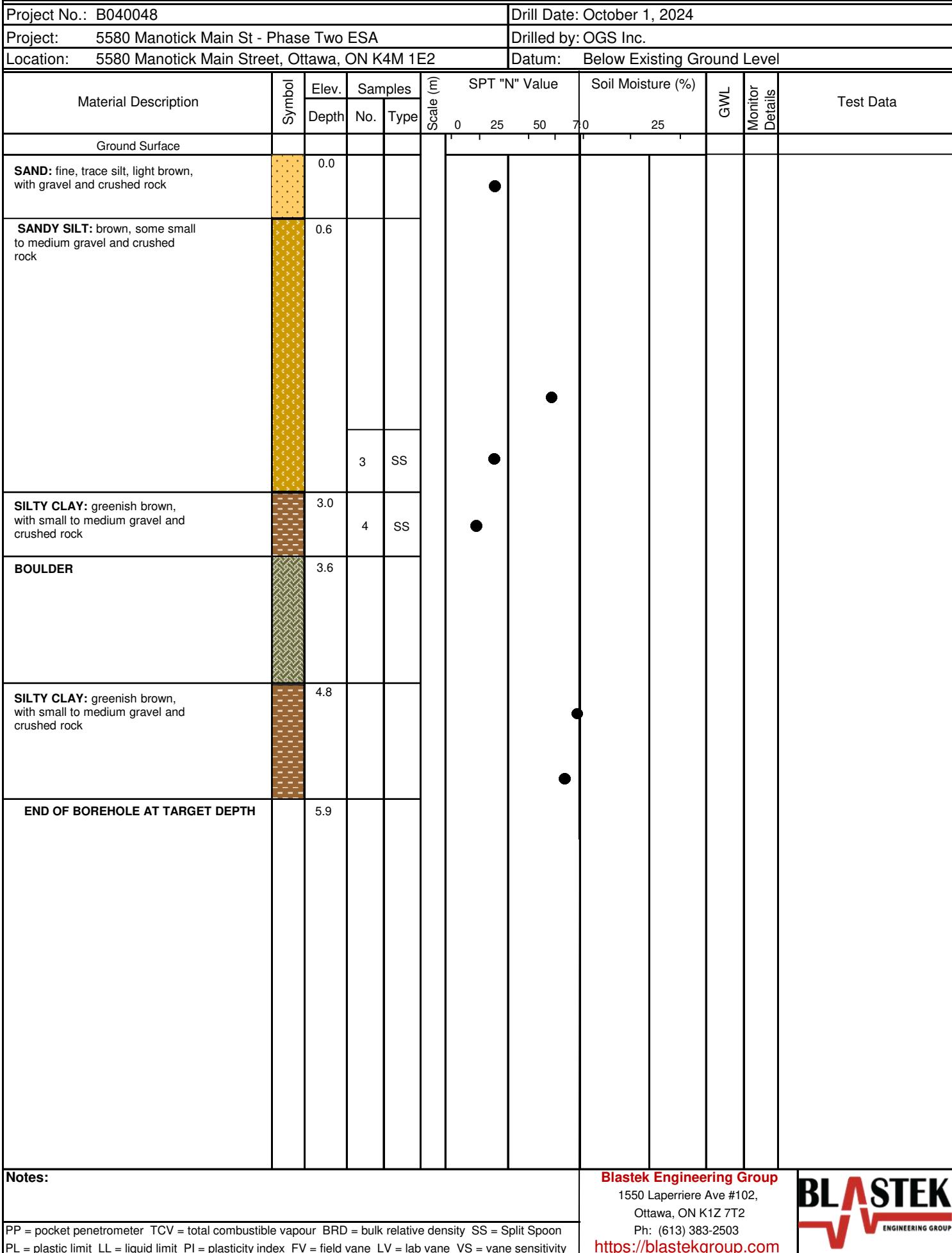


## Appendix B

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Borehole Logs

| Project No.: B040048   |        |       |         |      | Drill Date: October 1, 2024        |               |    |                   |     |   |           |
|--|--------|-------|---------|------|------------------------------------|---------------|----|-------------------|-----|---|-----------|
| Project: 5580 Manotick Main St - Phase Two ESA   |        |       |         |      | Drilled by: OGS Inc.               |               |    |                   |     |   |           |
| Location: 5580 Manotick Main Street, Ottawa, ON K4M 1E2  |        |       |         |      | Datum: Below Existing Ground Level |               |    |                   |     |   |           |
| Material Description   | Symbol | Elev. | Samples |      | Scale (m)                          | SPT "N" Value |    | Soil Moisture (%) | GWL | Monitor Details   | Test Data |
|  |        | Depth | No.     | Type |                                    | 0             | 25 |                   |     |   |           |
| Ground Surface   |        |       |         |      |                                    |               |    |                   |     |   |           |
| ASPHALT  |        | 0.0   |         |      |                                    |               |    |                   |     |   |           |
| SAND: grey brown, with gravel, trace silt  |        | 0.025 |         |      |                                    |               |    |                   |     |   |           |
| SILT: brown, some clay, with organic material, gravel and crushed rock   |        | 0.17  | 1       | SS   |                                    | ●             |    |                   |     |   |           |
| SILTY CLAY: greenish brown, with small to medium gravel and crushed rock                                       |        | 1.2   | 2       | SS   |                                    | ●             |    |                   |     |   |           |
| BOULDER  |        | 2.4   | 3       | SS   |                                    |               | ●  |                   |     |   |           |
| BOULDER  |        | 2.4   | 4       | SS   |                                    |               | ●  |                   |     |   |           |
| END OF BOREHOLE  |        | 3.7   |         |      |                                    |               |    |                   |     |   |           |
| Notes:   |        |       |         |      |                                    |               |    |                   |     | Blastek Engineering Group   |           |
| PP = pocket penetrometer TCV = total combustible vapour BRD = bulk relative density SS = Split Spoon           |        |       |         |      |                                    |               |    |                   |     | 1550 Laperriere Ave #102,<br>Ottawa, ON K1Z 7T2<br>Ph: (613) 383-2503 |           |
| PL = plastic limit LL = liquid limit PI = plasticity index FV = field vane LV = lab vane VS = vane sensitivity |        |       |         |      |                                    |               |    |                   |     | <a href="https://blastekgroup.com">https://blastekgroup.com</a>       |           |



| Project No.: B040048   |        |       |         |      | Drill Date: October 2, 2024        |               |    |                   |     |   |           |
|--|--------|-------|---------|------|------------------------------------|---------------|----|-------------------|-----|---|-----------|
| Project: 5580 Manotick Main St - Phase Two ESA   |        |       |         |      | Drilled by: OGS Inc.               |               |    |                   |     |   |           |
| Location: 5580 Manotick Main Street, Ottawa, ON K4M 1E2  |        |       |         |      | Datum: Below Existing Ground Level |               |    |                   |     |   |           |
| Material Description   | Symbol | Elev. | Samples |      | Scale (m)                          | SPT "N" Value |    | Soil Moisture (%) | GWL | Monitor Details   | Test Data |
|  |        | Depth | No.     | Type |                                    | 0             | 25 |                   |     |   |           |
| Ground Surface   |        |       |         |      |                                    |               |    |                   |     |   |           |
| <b>SAND:</b> fine, some silt, brown, with gravel and crushed rock  |        | 0.0   |         |      |                                    |               |    |                   |     |   |           |
| <b>BOULDER</b>   |        | 2.3   |         |      |                                    |               |    |                   |     |   |           |
| <b>SILTY CLAY:</b> greenish brown, with small to medium gravel and crushed rock                                |        | 3.3   | 6       | SS   |                                    | ●             |    |                   |     |   |           |
|  |        |       | 7       | SS   |                                    | ●             |    |                   |     |   |           |
|  |        |       |         |      |                                    | ●             |    |                   |     |   |           |
| END OF BOREHOLE AT TARGET DEPTH  |        | 5.9   |         |      |                                    |               |    |                   |     |   |           |
| Notes:   |        |       |         |      |                                    |               |    |                   |     | Blastek Engineering Group   |           |
| PP = pocket penetrometer TCV = total combustible vapour BRD = bulk relative density SS = Split Spoon           |        |       |         |      |                                    |               |    |                   |     | 1550 Laperriere Ave #102,<br>Ottawa, ON K1Z 7T2<br>Ph: (613) 383-2503 |           |
| PL = plastic limit LL = liquid limit PI = plasticity index FV = field vane LV = lab vane VS = vane sensitivity |        |       |         |      |                                    |               |    |                   |     | <a href="https://blastekgroup.com">https://blastekgroup.com</a>       |           |

| Project No.: B040048   |  |       |         |      | Drill Date: October 2, 2024        |               |    |                   |     |   |           |
|--|--|-------|---------|------|------------------------------------|---------------|----|-------------------|-----|---|-----------|
| Project: 5580 Manotick Main St - Phase Two ESA   |  |       |         |      | Drilled by: OGS Inc.               |               |    |                   |     |   |           |
| Location: 5580 Manotick Main Street, Ottawa, ON K4M 1E2  |  |       |         |      | Datum: Below Existing Ground Level |               |    |                   |     |   |           |
| Material Description   | Symbol   | Elev. | Samples |      | Scale (m)                          | SPT "N" Value |    | Soil Moisture (%) | GWL | Monitor Details   | Test Data |
|  |  | Depth | No.     | Type |                                    | 0             | 25 |                   |     |   |           |
| Ground Surface   |  |       |         |      |                                    |               |    |                   |     |   |           |
| SILTY SAND: brown, with organic material, gravel and crushed rock  |   | 0.0   |         |      |                                    |               |    |                   |     |   |           |
| BOULDER  |   | 1.1   |         |      |                                    |               |    |                   |     |   |           |
| SILTY CLAY: greenish brown, with small to large gravel and crushed rock  |  | 3.6   | 5       | SS   |                                    | ●             |    |                   |     |   |           |
|  |  |       | 6       | SS   |                                    | ●             |    |                   |     |   |           |
|  |  |       | 7       | SS   |                                    | ●             |    |                   |     |   |           |
|  |  |       | 8       | SS   |                                    | ●             |    |                   |     |   |           |
| END OF BOREHOLE AT TARGET DEPTH  |  | 6.0   |         |      |                                    |               |    |                   |     |   |           |
| Notes:   |  |       |         |      |                                    |               |    |                   |     |   |           |
| PP = pocket penetrometer TCV = total combustible vapour BRD = bulk relative density SS = Split Spoon<br>PL = plastic limit LL = liquid limit PI = plasticity index FV = field vane LV = lab vane VS = vane sensitivity |  |       |         |      |                                    |               |    |                   |     |   |           |
| Blastek Engineering Group<br>1550 Lapierre Ave #102,<br>Ottawa, ON K1Z 7T2<br>Ph: (613) 383-2503<br><a href="https://blastekgroup.com">https://blastekgroup.com</a>  |  |       |         |      |                                    |               |    |                   |     |  |           |



## Appendix C

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Certificates of Analysis

## Environment Testing

Client: Blastek Eng. Group  
1550 Laperriere Avenue  
Ottawa, ON  
K1Z 7T2  
Attention: Mr Marc Orfali  
Invoice to: Blastek Engineering Group  
PO#: B040048

Report Number: 3011336  
Date Submitted: 2024-09-30  
Date Reported: 2024-10-09  
Project: B040048 - 5580  
Manotick Main St Phase 2 ESA  
COC #: 916869  
Temperature (C): 19  
Custody Seal:

Page 1 of 39

**Dear Marc Orfali:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

***Sample Comment Summary***

Sample ID: 1744742 BH24-02 SS3 For all samples in this report, metals spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

**Report Comments:**

---

Emma-Dawn Ferguson, Chemist

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated

Eurofins Environment Testing Canada Inc. is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at <https://directory.cala.ca/>

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

Client: Blastek Eng. Group Report Number: 3011336  
1550 Laperriere Avenue Date Submitted: 2024-09-30  
Ottawa, ON Date Reported: 2024-10-09  
K1Z 7T2 Project: B040048 - 5580  
Attention: Mr Marc Orfali  
PO#: B040048  
Invoice to: Blastek Engineering Group COC #: 916869

***Exceedence Summary***

| Sample I.D. | Analyte | Result | Units | Criteria |
|-------------|---------|--------|-------|----------|
|             |         |        |       |          |

Results relate only to the parameters tested on the samples submitted.  
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

**Environment Testing**

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

**Guideline = O.Reg 153-T3-Ind/Com-Coarse**

**Hydrocarbons**

| Analyte       | Batch No | MRL | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|---------------|----------|-----|-------|-----------|---------------|---------|---------|---------|---------|---------|
|               |          |     |       |           | Sample Matrix | Soil153 | Soil153 | Soil153 | Soil153 | Soil153 |
| PHC's F1      | 466601   | 10  | ug/g  | STD 55    | 2024-09-30    | BH24-02 | BH24-02 | BH24-01 | BH24-01 | BH24-03 |
|               | 466764   | 10  | ug/g  | STD 55    |               | SS3     | SS4     | SS1 SS2 | SS3 SS4 | SS6     |
| PHC's F1-BTEX | 466604   | 10  | ug/g  |           | <10           |         | <10     |         | <10     | <10     |
|               | 466769   | 10  | ug/g  |           |               |         |         | <10     | <10     | <10     |
| PHC's F2      | 466565   | 2   | ug/g  | STD 230   |               |         | <2      |         |         |         |
|               | 466566   | 2   | ug/g  | STD 230   | <2            |         |         |         |         |         |
|               | 466776   | 2   | ug/g  | STD 230   |               |         |         | <2      | <2      | 4       |
| PHC's F2-Naph | 466813   | 2   | ug/g  |           | <2            |         | <2      |         |         |         |
|               | 466816   | 2   | ug/g  |           |               |         |         | <2      | <2      | 4       |
| PHC's F3      | 466565   | 20  | ug/g  | STD 1700  |               | <20     |         |         |         |         |
|               | 466566   | 20  | ug/g  | STD 1700  | <20           |         |         |         |         |         |
|               | 466776   | 20  | ug/g  | STD 1700  |               |         |         | <20     | <20     | <20     |
| PHC's F3-PAH  | 466818   | 20  | ug/g  |           | <20           |         | <20     |         | <20     | <20     |
| PHC's F4      | 466565   | 20  | ug/g  | STD 3300  |               | <20     |         |         |         |         |
|               | 466566   | 20  | ug/g  | STD 3300  | <20           |         |         |         |         |         |
|               | 466776   | 20  | ug/g  | STD 3300  |               |         |         | <20     | <20     | <20     |

Results relate only to the parameters tested on the samples submitted.  
 Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Hydrocarbons

| Analyte       | Batch No | MRL | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sample Date<br>Sampling Time<br>Sample I.D. | 1745063<br>Soil153<br>-<br>2024-10-02 | 1745064<br>Soil153<br>-<br>2024-10-02 | 1745065<br>Soil153<br>-<br>2024-10-02 | 1745066<br>Soil153<br>-<br>2024-10-02 |
|---------------|----------|-----|-------|-----------|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| PHC's F1      | 466764   | 10  | ug/g  | STD 55    | <10   | <10                                   | <10                                   | <10                                   | <10                                   |
| PHC's F1-BTEX | 466769   | 10  | ug/g  |           | <10   | <10                                   | <10                                   | <10                                   | <10                                   |
| PHC's F2      | 466776   | 2   | ug/g  | STD 230   |   |                                       | <2                                    |                                       |                                       |
|               | 466779   | 2   | ug/g  | STD 230   | <2  | <2                                    |                                       |                                       | <2                                    |
| PHC's F2-Naph | 466816   | 2   | ug/g  |           | <2  | <2                                    | <2                                    | <2                                    | <2                                    |
| PHC's F3      | 466776   | 20  | ug/g  | STD 1700  |   |                                       | <20                                   |                                       |                                       |
|               | 466779   | 20  | ug/g  | STD 1700  | <20   | <20                                   |                                       |                                       | <20                                   |
| PHC's F3-PAH  | 466818   | 20  | ug/g  |           | <20   | <20                                   | <20                                   | <20                                   | <20                                   |
| PHC's F4      | 466776   | 20  | ug/g  | STD 3300  |   |                                       | <20                                   |                                       |                                       |
|               | 466779   | 20  | ug/g  | STD 3300  | <20   | <20                                   |                                       |                                       | <20                                   |

#### Metals

| Analyte                   | Batch No | MRL  | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sample Date<br>Sampling Time<br>Sample I.D. | 1744742<br>Soil153<br>-<br>2024-09-30 | 1744743<br>Soil153<br>-<br>2024-09-30 | 1745060<br>Soil153<br>-<br>2024-10-01 | 1745061<br>Soil153<br>-<br>2024-10-01 | 1745062<br>Soil153<br>-<br>2024-10-01 |
|---------------------------|----------|------|-------|-----------|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Antimony                  | 466619   | 1    | ug/g  | STD 40    | <1  | <1                                    |                                       |                                       |                                       |                                       |
|                           | 466722   | 1    | ug/g  | STD 40    |   |                                       | <1                                    | <1                                    | <1                                    | <1                                    |
| Arsenic                   | 466619   | 1    | ug/g  | STD 18    | 3   | 3                                     |                                       |                                       |                                       |                                       |
|                           | 466722   | 1    | ug/g  | STD 18    |   |                                       | 3                                     | 3                                     | 3                                     | 3                                     |
| Barium                    | 466619   | 1    | ug/g  | STD 670   | 42  | 53                                    |                                       |                                       |                                       |                                       |
|                           | 466722   | 1    | ug/g  | STD 670   |   |                                       | 38                                    | 54                                    | 48                                    |                                       |
| Beryllium                 | 466619   | 1    | ug/g  | STD 8     | <1  | <1                                    |                                       |                                       |                                       |                                       |
|                           | 466722   | 1    | ug/g  | STD 8     |   |                                       | <1                                    | <1                                    | <1                                    | <1                                    |
| Boron (Hot Water Soluble) | 466723   | 0.25 | ug/g  | STD 2     | <0.25   | <0.25                                 | <0.25                                 | <0.25                                 | <0.25                                 |                                       |

Results relate only to the parameters tested on the samples submitted.  
 Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Metals

| Analyte                   | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|---------------------------|----------|------|-------|-----------|---------------|---------|---------|---------|---------|---------|
|                           |          |      |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| Boron (Hot Water Soluble) | 466787   | 0.25 | ug/g  | STD 2     |               |         |         |         |         | <0.25   |
| Boron (total)             | 466619   | 5    | ug/g  | STD 120   | <5            | <5      |         |         |         |         |
|                           | 466722   | 5    | ug/g  | STD 120   |               |         |         | <5      | <5      | <5      |
| Cadmium                   | 466619   | 0.4  | ug/g  | STD 1.9   | <0.4          | <0.4    |         |         |         |         |
|                           | 466722   | 0.4  | ug/g  | STD 1.9   |               |         |         | <0.4    | <0.4    | <0.4    |
| Chromium Total            | 466619   | 1    | ug/g  | STD 160   | 44            | 29      |         |         |         |         |
|                           | 466722   | 1    | ug/g  | STD 160   |               |         |         | 26      | 32      | 54      |
| Cobalt                    | 466619   | 1    | ug/g  | STD 80    | 7             | 7       |         |         |         |         |
|                           | 466722   | 1    | ug/g  | STD 80    |               |         |         | 5       | 6       | 7       |
| Copper                    | 466619   | 1    | ug/g  | STD 230   | 22            | 24      |         |         |         |         |
|                           | 466722   | 1    | ug/g  | STD 230   |               |         |         | 20      | 23      | 20      |
| Lead                      | 466619   | 1    | ug/g  | STD 120   | 8             | 8       |         |         |         |         |
|                           | 466722   | 1    | ug/g  | STD 120   |               |         |         | 7       | 7       | 8       |
| Mercury                   | 466619   | 0.1  | ug/g  | STD 3.9   | <0.1          | <0.1    |         |         |         |         |
|                           | 466722   | 0.1  | ug/g  | STD 3.9   |               |         |         | <0.1    | <0.1    | <0.1    |
| Molybdenum                | 466619   | 1    | ug/g  | STD 40    | 2             | 2       |         |         |         |         |
|                           | 466722   | 1    | ug/g  | STD 40    |               |         |         | 1       | 2       | 2       |
| Nickel                    | 466619   | 1    | ug/g  | STD 270   | 24            | 18      |         |         |         |         |
|                           | 466722   | 1    | ug/g  | STD 270   |               |         |         | 13      | 15      | 26      |
| Selenium                  | 466619   | 0.5  | ug/g  | STD 5.5   | <0.5          | <0.5    |         |         |         |         |
|                           | 466722   | 0.5  | ug/g  | STD 5.5   |               |         |         | <0.5    | <0.5    | <0.5    |
| Silver                    | 466619   | 0.2  | ug/g  | STD 40    | <0.2          | <0.2    |         |         |         |         |
|                           | 466722   | 0.2  | ug/g  | STD 40    |               |         |         | <0.2    | <0.2    | <0.2    |

Results relate only to the parameters tested on the samples submitted.  
 Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Metals

| Analyte  | Batch No | MRL | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|----------|----------|-----|-------|-----------|---------------|---------|---------|---------|---------|---------|
|          |          |     |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| Thallium | 466619   | 1   | ug/g  | STD 3.3   | 2024-09-30    | BH24-02 | BH24-02 | BH24-01 | BH24-01 | BH24-03 |
|          | 466722   | 1   | ug/g  | STD 3.3   |               | SS3     | SS4     | SS1 SS2 | SS3 SS4 | SS6     |
| Uranium  | 466619   | 0.5 | ug/g  | STD 33    | 0.6           | 0.6     |         |         | 0.6     | 0.6     |
|          | 466722   | 0.5 | ug/g  | STD 33    |               |         |         | 0.6     | 0.7     | 0.6     |
| Vanadium | 466619   | 2   | ug/g  | STD 86    | 23            | 24      |         |         |         |         |
|          | 466722   | 2   | ug/g  | STD 86    |               |         |         | 22      | 23      | 24      |
| Zinc     | 466619   | 2   | ug/g  | STD 340   | 25            | 23      |         |         |         |         |
|          | 466722   | 2   | ug/g  | STD 340   |               |         |         | 19      | 20      | 23      |

#### Metals

| Analyte                   | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1745063 | 1745064 | 1745065    | 1745066    |
|---------------------------|----------|------|-------|-----------|---------------|---------|---------|------------|------------|
|                           |          |      |       |           | Sample Matrix | Soil153 | Soil153 | -          | Soil153    |
| Antimony                  | 466722   | 1    | ug/g  | STD 40    | 2024-10-02    | BH24-03 | BH24-03 | 2024-10-02 | 2024-10-02 |
| Arsenic                   | 466722   | 1    | ug/g  | STD 18    |               | SS7     | SS701   |            |            |
| Barium                    | 466722   | 1    | ug/g  | STD 670   | 41            | 43      |         | 60         | 66         |
| Beryllium                 | 466722   | 1    | ug/g  | STD 8     | <1            | <1      | <1      | <1         | <1         |
| Boron (Hot Water Soluble) | 466787   | 0.25 | ug/g  | STD 2     | <0.25         |         | <0.25   | <0.25      | <0.25      |
| Boron (total)             | 466722   | 5    | ug/g  | STD 120   | <5            | <5      | <5      | <5         | <5         |
| Cadmium                   | 466722   | 0.4  | ug/g  | STD 1.9   | <0.4          | <0.4    | <0.4    | <0.4       | <0.4       |
| Chromium Total            | 466722   | 1    | ug/g  | STD 160   | 50            | 32      | 41      | 41         |            |
| Chromium VI               | 466809   | 0.20 | ug/g  | STD 8     | <0.20         | <0.20   |         |            |            |
| Cobalt                    | 466722   | 1    | ug/g  | STD 80    | 7             | 6       | 7       | 7          |            |
| Copper                    | 466722   | 1    | ug/g  | STD 230   | 18            | 19      | 18      | 18         |            |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Metals

| Analyte    | Batch No | MRL | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sample Date<br>Sampling Time<br>Sample I.D. | 1745063<br>Soil153<br>-<br>2024-10-02<br>BH24-03<br>SS7 | 1745064<br>Soil153<br>-<br>2024-10-02<br>BH24-03<br>SS701 | 1745065<br>Soil153<br>-<br>2024-10-02<br>BH24-04<br>SS7 | 1745066<br>Soil153<br>-<br>2024-10-02<br>BH24-04<br>SS8 |
|------------|----------|-----|-------|-----------|---|---|---|---|---|
| Lead       | 466722   | 1   | ug/g  | STD 120   | 7   | 7   | 8   | 7   |   |
| Mercury    | 466722   | 0.1 | ug/g  | STD 3.9   | <0.1  | <0.1  | <0.1  | <0.1  |   |
| Molybdenum | 466722   | 1   | ug/g  | STD 40    | 2   | 2   | 2   | 1   |   |
| Nickel     | 466722   | 1   | ug/g  | STD 270   | 24  | 17  | 21  | 22  |   |
| Selenium   | 466722   | 0.5 | ug/g  | STD 5.5   | <0.5  | <0.5  | <0.5  | <0.5  |   |
| Silver     | 466722   | 0.2 | ug/g  | STD 40    | <0.2  | <0.2  | <0.2  | <0.2  |   |
| Thallium   | 466722   | 1   | ug/g  | STD 3.3   | <1  | <1  | <1  | <1  |   |
| Uranium    | 466722   | 0.5 | ug/g  | STD 33    | 0.6   | 0.6   | 0.6   | 0.6   |   |
| Vanadium   | 466722   | 2   | ug/g  | STD 86    | 22  | 22  | 23  | 24  |   |
| Zinc       | 466722   | 2   | ug/g  | STD 340   | 19  | 20  | 21  | 20  |   |

#### Others

| Analyte     | Batch No | MRL  | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sample Date<br>Sampling Time<br>Sample I.D. | 1744742<br>Soil153<br>-<br>2024-09-30<br>BH24-02<br>SS3 | 1744743<br>Soil153<br>-<br>2024-09-30<br>BH24-02<br>SS4 | 1745060<br>Soil153<br>-<br>2024-10-01<br>BH24-01<br>SS1 SS2 | 1745061<br>Soil153<br>-<br>2024-10-01<br>BH24-01<br>SS3 SS4 | 1745062<br>Soil153<br>-<br>2024-10-01<br>BH24-03<br>SS6 |
|-------------|----------|------|-------|-----------|---|---|---|---|---|---|
| Chromium VI | 466695   | 0.02 | ug/g  | STD 8     | 0.05  | 0.05  |   |   |   |   |
|             | 466784   | 0.2  | ug/g  | STD 8     |   |   | <0.2  | <0.2  | <0.2  |   |

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Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869  
 B040048 - 5580

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Others

|               |            |            |
|---------------|------------|------------|
| Lab I.D.      | 1745065    | 1745066    |
| Sample Matrix | Soil153    | Soil153    |
| Sample Type   | -          | -          |
| Sample Date   | 2024-10-02 | 2024-10-02 |
| Sampling Time |            |            |
| Sample I.D.   |            |            |
|               | BH24-04    | BH24-04    |
|               | SS7        | SS8        |

| Analyte     | Batch No | MRL | Units | Guideline |      |      |
|-------------|----------|-----|-------|-----------|------|------|
| Chromium VI | 466784   | 0.2 | ug/g  | STD 8     | <0.2 | <0.2 |

#### PAH

|               |            |            |            |            |            |
|---------------|------------|------------|------------|------------|------------|
| Lab I.D.      | 1744742    | 1744743    | 1745060    | 1745061    | 1745062    |
| Sample Matrix | Soil153    | Soil153    | Soil153    | Soil153    | Soil153    |
| Sample Type   | -          | -          | -          | -          | -          |
| Sample Date   | 2024-09-30 | 2024-09-30 | 2024-10-01 | 2024-10-01 | 2024-10-01 |
| Sampling Time |            |            |            |            |            |
| Sample I.D.   |            |            |            |            |            |
|               | BH24-02    | BH24-02    | BH24-01    | BH24-01    | BH24-03    |
|               | SS3        | SS4        | SS1 SS2    | SS3 SS4    | SS6        |

|                       |        |      |      |          |       |       |       |       |       |
|-----------------------|--------|------|------|----------|-------|-------|-------|-------|-------|
| 1+2-methylnaphthalene | 466578 | 0.05 | ug/g | STD 76   | <0.05 | <0.05 |       |       |       |
|                       | 466690 | 0.05 | ug/g | STD 76   |       |       | <0.05 |       |       |
|                       | 466741 | 0.05 | ug/g | STD 76   |       |       |       | <0.05 | <0.05 |
| Acenaphthene          | 466529 | 0.05 | ug/g | STD 96   | <0.05 | <0.05 | <0.05 |       |       |
|                       | 466735 | 0.05 | ug/g | STD 96   |       |       |       | <0.05 | <0.05 |
| Acenaphthylene        | 466529 | 0.05 | ug/g | STD 0.15 | <0.05 | <0.05 | <0.05 |       |       |
|                       | 466735 | 0.05 | ug/g | STD 0.15 |       |       |       | <0.05 | <0.05 |
| Anthracene            | 466529 | 0.05 | ug/g | STD 0.67 | <0.05 | <0.05 | <0.05 |       |       |
|                       | 466735 | 0.05 | ug/g | STD 0.67 |       |       |       | <0.05 | <0.05 |
| Benz[a]anthracene     | 466529 | 0.05 | ug/g | STD 0.96 | <0.05 | <0.05 | <0.05 |       |       |
|                       | 466735 | 0.05 | ug/g | STD 0.96 |       |       |       | <0.05 | <0.05 |
| Benzo[a]pyrene        | 466529 | 0.05 | ug/g | STD 0.3  | <0.05 | <0.05 | <0.05 |       |       |
|                       | 466735 | 0.05 | ug/g | STD 0.3  |       |       |       | <0.05 | <0.05 |

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## Environment Testing

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 1550 Laperriere Avenue  
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 Attention: Mr Marc Orfali  
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 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### PAH

| Analyte                | Batch No | MRL   | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|------------------------|----------|-------|-------|-----------|---------------|---------|---------|---------|---------|---------|
|                        |          |       |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| Benzo[b]fluoranthene   | 466529   | 0.05  | ug/g  | STD 0.96  | 2024-09-30    | BH24-02 | BH24-02 | BH24-01 | BH24-01 | BH24-03 |
|                        | 466735   | 0.05  | ug/g  | STD 0.96  |               | SS3     | SS4     | SS1 SS2 | SS3 SS4 | SS6     |
| Benzo[ghi]perylene     | 466529   | 0.05  | ug/g  | STD 9.6   | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 9.6   |               |         |         |         | <0.05   | <0.05   |
| Benzo[k]fluoranthene   | 466529   | 0.05  | ug/g  | STD 0.96  | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 0.96  |               |         |         |         | <0.05   | <0.05   |
| Chrysene               | 466529   | 0.05  | ug/g  | STD 9.6   | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 9.6   |               |         |         |         | <0.05   | <0.05   |
| Dibenz[a h]anthracene  | 466529   | 0.05  | ug/g  | STD 0.1   | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 0.1   |               |         |         |         | <0.05   | <0.05   |
| Fluoranthene           | 466529   | 0.05  | ug/g  | STD 9.6   | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 9.6   |               |         |         |         | <0.05   | <0.05   |
| Fluorene               | 466529   | 0.05  | ug/g  | STD 62    | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 62    |               |         |         |         | <0.05   | <0.05   |
| Indeno[1 2 3-cd]pyrene | 466529   | 0.05  | ug/g  | STD 0.76  | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 0.76  |               |         |         |         | <0.05   | <0.05   |
| Methlynaphthalene, 1-  | 466529   | 0.05  | ug/g  | STD 76    | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 76    |               |         |         |         | <0.05   | <0.05   |
| Methlynaphthalene, 2-  | 466529   | 0.05  | ug/g  | STD 76    | <0.05         |         | <0.05   | <0.05   |         |         |
|                        | 466735   | 0.05  | ug/g  | STD 76    |               |         |         |         | <0.05   | <0.05   |
| Naphthalene            | 466529   | 0.013 | ug/g  | STD 9.6   | <0.013        |         | <0.013  | <0.013  |         |         |
|                        | 466735   | 0.013 | ug/g  | STD 9.6   |               |         |         |         | <0.013  | <0.013  |
| Phenanthrene           | 466529   | 0.05  | ug/g  | STD 12    | <0.05         |         | <0.05   | <0.05   |         |         |

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## Environment Testing

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 1550 Laperriere Avenue  
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 Attention: Mr Marc Orfali  
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 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### PAH

| Analyte      | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|--------------|----------|------|-------|-----------|---------------|---------|---------|---------|---------|---------|
|              |          |      |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| Phenanthrene | 466735   | 0.05 | ug/g  | STD 12    | 2024-09-30    | BH24-02 | BH24-02 | BH24-01 | BH24-01 | BH24-03 |
| Pyrene       | 466529   | 0.05 | ug/g  | STD 96    | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   | <0.05   |
|              | 466735   | 0.05 | ug/g  | STD 96    |               |         |         |         | <0.05   | <0.05   |

#### PAH

| Analyte                | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1745063 | 1745064 | 1745065 | 1745066 |
|------------------------|----------|------|-------|-----------|---------------|---------|---------|---------|---------|
|                        |          |      |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 |
| 1+2-methylnaphthalene  | 466741   | 0.05 | ug/g  | STD 76    | 2024-10-02    | BH24-03 | BH24-03 | BH24-04 | BH24-04 |
| Acenaphthene           | 466735   | 0.05 | ug/g  | STD 96    |               | SS7     | SS701   | SS7     | SS8     |
| Acenaphthylene         | 466735   | 0.05 | ug/g  | STD 0.15  | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Anthracene             | 466735   | 0.05 | ug/g  | STD 0.67  | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Benz[a]anthracene      | 466735   | 0.05 | ug/g  | STD 0.96  | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Benzo[a]pyrene         | 466735   | 0.05 | ug/g  | STD 0.3   | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Benzo[b]fluoranthene   | 466735   | 0.05 | ug/g  | STD 0.96  | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Benzo[ghi]perylene     | 466735   | 0.05 | ug/g  | STD 9.6   | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Benzo[k]fluoranthene   | 466735   | 0.05 | ug/g  | STD 0.96  | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Chrysene               | 466735   | 0.05 | ug/g  | STD 9.6   | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Dibenz[a h]anthracene  | 466735   | 0.05 | ug/g  | STD 0.1   | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Fluoranthene           | 466735   | 0.05 | ug/g  | STD 9.6   | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Fluorene               | 466735   | 0.05 | ug/g  | STD 62    | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Indeno[1 2 3-cd]pyrene | 466735   | 0.05 | ug/g  | STD 0.76  | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Methylnaphthalene, 1-  | 466735   | 0.05 | ug/g  | STD 76    | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |
| Methylnaphthalene, 2-  | 466735   | 0.05 | ug/g  | STD 76    | <0.05         | <0.05   | <0.05   | <0.05   | <0.05   |

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 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### PAH

| Analyte      | Batch No | MRL   | Units | Guideline | Lab I.D.      | 1745063     | 1745064       | 1745065     | 1745066     |
|--------------|----------|-------|-------|-----------|---------------|-------------|---------------|-------------|-------------|
|              |          |       |       |           | Sample Matrix | Soil153     | Soil153       | Soil153     | Soil153     |
| Naphthalene  | 466735   | 0.013 | ug/g  | STD 9.6   | 2024-10-02    | BH24-03 SS7 | BH24-03 SS701 | BH24-04 SS7 | BH24-04 SS8 |
| Phenanthrene | 466735   | 0.05  | ug/g  | STD 12    |               | <0.05       | <0.05         | <0.05       | <0.05       |
| Pyrene       | 466735   | 0.05  | ug/g  | STD 96    |               | <0.05       | <0.05         | <0.05       | <0.05       |

#### Volatiles

| Analyte              | Batch No | MRL    | Units | Guideline | Lab I.D.      | 1744742     | 1744743     | 1745060    | 1745061    |
|----------------------|----------|--------|-------|-----------|---------------|-------------|-------------|------------|------------|
|                      |          |        |       |           | Sample Matrix | Soil153     | Soil153     | Soil153    | Soil153    |
| Acetone              | 466599   | 0.50   | ug/g  | STD 16    | 2024-09-30    | BH24-02 SS3 | BH24-02 SS4 | 2024-10-01 | 2024-10-01 |
|                      | 466754   | 0.50   | ug/g  | STD 16    |               |             |             | <0.50      | <0.50      |
|                      | 466755   | 0.50   | ug/g  | STD 16    |               |             |             |            | <0.50      |
| Benzene              | 466599   | 0.0068 | ug/g  | STD 0.32  | <0.0068       | <0.0068     |             |            |            |
|                      | 466754   | 0.0068 | ug/g  | STD 0.32  |               |             | <0.0068     | <0.0068    |            |
|                      | 466755   | 0.0068 | ug/g  | STD 0.32  |               |             |             |            | <0.0068    |
| Bromodichloromethane | 466599   | 0.05   | ug/g  | STD 18    | <0.05         | <0.05       |             |            |            |
|                      | 466754   | 0.05   | ug/g  | STD 18    |               |             | <0.05       | <0.05      |            |
|                      | 466755   | 0.05   | ug/g  | STD 18    |               |             |             |            | <0.05      |
| Bromoform            | 466599   | 0.05   | ug/g  | STD 0.61  | <0.05         | <0.05       |             |            |            |
|                      | 466754   | 0.05   | ug/g  | STD 0.61  |               |             | <0.05       | <0.05      |            |
|                      | 466755   | 0.05   | ug/g  | STD 0.61  |               |             |             |            | <0.05      |
| Bromomethane         | 466599   | 0.05   | ug/g  | STD 0.05  | <0.05         | <0.05       |             |            |            |
|                      | 466754   | 0.05   | ug/g  | STD 0.05  |               |             | <0.05       | <0.05      |            |
|                      | 466755   | 0.05   | ug/g  | STD 0.05  |               |             |             |            | <0.05      |
| Carbon Tetrachloride | 466599   | 0.05   | ug/g  | STD 0.21  | <0.05         | <0.05       |             |            |            |

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MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Volatiles

| Analyte                 | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1744742     | 1744743     | 1745060         | 1745061         | 1745062     |
|-------------------------|----------|------|-------|-----------|---------------|-------------|-------------|-----------------|-----------------|-------------|
|                         |          |      |       |           | Sample Matrix | Soil153     | Soil153     | -               | Soil153         | Soil153     |
| Carbon Tetrachloride    | 466754   | 0.05 | ug/g  | STD 0.21  | 2024-09-30    | BH24-02 SS3 | BH24-02 SS4 | BH24-01 SS1 SS2 | BH24-01 SS3 SS4 | BH24-03 SS6 |
|                         | 466755   | 0.05 | ug/g  | STD 0.21  |               |             |             |                 |                 |             |
| Chlorobenzene           | 466599   | 0.05 | ug/g  | STD 2.4   | <0.05         | <0.05       | <0.05       | <0.05           | <0.05           | <0.05       |
|                         | 466754   | 0.05 | ug/g  | STD 2.4   |               |             |             | <0.05           | <0.05           |             |
|                         | 466755   | 0.05 | ug/g  | STD 2.4   |               |             |             |                 |                 | <0.05       |
| Chloroform              | 466599   | 0.05 | ug/g  | STD 0.47  | <0.05         | <0.05       | <0.05       |                 |                 |             |
|                         | 466754   | 0.05 | ug/g  | STD 0.47  |               |             |             | <0.05           | <0.05           |             |
|                         | 466755   | 0.05 | ug/g  | STD 0.47  |               |             |             |                 |                 | <0.05       |
| Dibromochloromethane    | 466599   | 0.05 | ug/g  | STD 13    | <0.05         | <0.05       | <0.05       |                 |                 |             |
|                         | 466754   | 0.05 | ug/g  | STD 13    |               |             |             | <0.05           | <0.05           |             |
|                         | 466755   | 0.05 | ug/g  | STD 13    |               |             |             |                 |                 | <0.05       |
| Dichlorobenzene, 1,2-   | 466599   | 0.05 | ug/g  | STD 6.8   | <0.05         | <0.05       | <0.05       |                 |                 |             |
|                         | 466754   | 0.05 | ug/g  | STD 6.8   |               |             |             | <0.05           | <0.05           |             |
|                         | 466755   | 0.05 | ug/g  | STD 6.8   |               |             |             |                 |                 | <0.05       |
| Dichlorobenzene, 1,3-   | 466599   | 0.05 | ug/g  | STD 9.6   | <0.05         | <0.05       | <0.05       |                 |                 |             |
|                         | 466754   | 0.05 | ug/g  | STD 9.6   |               |             |             | <0.05           | <0.05           |             |
|                         | 466755   | 0.05 | ug/g  | STD 9.6   |               |             |             |                 |                 | <0.05       |
| Dichlorobenzene, 1,4-   | 466599   | 0.05 | ug/g  | STD 0.2   | <0.05         | <0.05       | <0.05       |                 |                 |             |
|                         | 466754   | 0.05 | ug/g  | STD 0.2   |               |             |             | <0.05           | <0.05           |             |
|                         | 466755   | 0.05 | ug/g  | STD 0.2   |               |             |             |                 |                 | <0.05       |
| Dichlorodifluoromethane | 466599   | 0.05 | ug/g  | STD 16    | <0.05         | <0.05       | <0.05       |                 |                 |             |
|                         | 466754   | 0.05 | ug/g  | STD 16    |               |             |             | <0.05           | <0.05           |             |
|                         | 466755   | 0.05 | ug/g  | STD 16    |               |             |             |                 |                 | <0.05       |

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 Methods references and/or additional QA/QC information available on request.

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Volatiles

| Analyte                      | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|------------------------------|----------|------|-------|-----------|---------------|---------|---------|---------|---------|---------|
|                              |          |      |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| Dichloroethane, 1,1-         | 466599   | 0.05 | ug/g  | STD 17    | 2024-09-30    | BH24-02 | BH24-02 | BH24-01 | BH24-01 | BH24-03 |
|                              | 466754   | 0.05 | ug/g  | STD 17    |               | SS3     | SS4     | SS1 SS2 | SS3 SS4 | SS6     |
|                              | 466755   | 0.05 | ug/g  | STD 17    |               |         |         |         |         | <0.05   |
| Dichloroethane, 1,2-         | 466599   | 0.05 | ug/g  | STD 0.05  | <0.05         |         | <0.05   |         |         |         |
|                              | 466754   | 0.05 | ug/g  | STD 0.05  |               |         |         | <0.05   | <0.05   |         |
|                              | 466755   | 0.05 | ug/g  | STD 0.05  |               |         |         |         |         | <0.05   |
| Dichloroethylene, 1,1-       | 466599   | 0.05 | ug/g  | STD 0.064 | <0.05         |         | <0.05   |         |         |         |
|                              | 466754   | 0.05 | ug/g  | STD 0.064 |               |         |         | <0.05   | <0.05   |         |
|                              | 466755   | 0.05 | ug/g  | STD 0.064 |               |         |         |         |         | <0.05   |
| Dichloroethylene, 1,2-cis-   | 466599   | 0.05 | ug/g  | STD 55    | <0.05         |         | <0.05   |         |         |         |
|                              | 466754   | 0.05 | ug/g  | STD 55    |               |         |         | <0.05   | <0.05   |         |
|                              | 466755   | 0.05 | ug/g  | STD 55    |               |         |         |         |         | <0.05   |
| Dichloroethylene, 1,2-trans- | 466599   | 0.05 | ug/g  | STD 1.3   | <0.05         |         | <0.05   |         |         |         |
|                              | 466754   | 0.05 | ug/g  | STD 1.3   |               |         |         | <0.05   | <0.05   |         |
|                              | 466755   | 0.05 | ug/g  | STD 1.3   |               |         |         |         |         | <0.05   |
| Dichloropropane, 1,2-        | 466599   | 0.05 | ug/g  | STD 0.16  | <0.05         |         | <0.05   |         |         |         |
|                              | 466754   | 0.05 | ug/g  | STD 0.16  |               |         |         | <0.05   | <0.05   |         |
|                              | 466755   | 0.05 | ug/g  | STD 0.16  |               |         |         |         |         | <0.05   |
| Dichloropropene, 1,3-        | 466603   | 0.05 | ug/g  | STD 0.18  | <0.05         |         | <0.05   |         |         |         |
|                              | 466767   | 0.05 | ug/g  | STD 0.18  |               |         |         | <0.05   | <0.05   | <0.05   |
| Dichloropropene, 1,3-cis-    | 466599   | 0.05 | ug/g  |           | <0.05         |         | <0.05   |         |         |         |
|                              | 466754   | 0.05 | ug/g  |           |               |         |         | <0.05   | <0.05   |         |
|                              | 466755   | 0.05 | ug/g  |           |               |         |         |         |         | <0.05   |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Volatiles

| Analyte                        | Batch No | MRL   | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060    | 1745061    | 1745062    |
|--------------------------------|----------|-------|-------|-----------|---------------|---------|---------|------------|------------|------------|
|                                |          |       |       |           | Sample Matrix | Soil153 | Soil153 | -          | Soil153    | Soil153    |
| Dichloropropene,1,3-trans-     | 466599   | 0.05  | ug/g  |           | 2024-09-30    | BH24-02 | BH24-02 | 2024-10-01 | 2024-10-01 | 2024-10-01 |
|                                | 466754   | 0.05  | ug/g  |           |               | SS3     | SS4     | BH24-01    | BH24-01    | BH24-03    |
|                                | 466755   | 0.05  | ug/g  |           |               |         |         | SS1 SS2    | SS3 SS4    | SS6        |
| Ethylbenzene                   | 466599   | 0.018 | ug/g  | STD 9.5   | <0.018        | <0.018  |         |            |            |            |
|                                | 466754   | 0.018 | ug/g  | STD 9.5   |               |         |         | <0.018     | <0.018     |            |
|                                | 466755   | 0.018 | ug/g  | STD 9.5   |               |         |         |            |            | <0.018     |
| Ethylene dibromide             | 466599   | 0.05  | ug/g  | STD 0.05  | <0.05         | <0.05   |         |            |            |            |
|                                | 466754   | 0.05  | ug/g  | STD 0.05  |               |         |         | <0.05      | <0.05      |            |
|                                | 466755   | 0.05  | ug/g  | STD 0.05  |               |         |         |            |            | <0.05      |
| Hexane (n)                     | 466599   | 0.05  | ug/g  | STD 46    | <0.05         | <0.05   |         |            |            |            |
|                                | 466754   | 0.05  | ug/g  | STD 46    |               |         |         | <0.05      | <0.05      |            |
|                                | 466755   | 0.05  | ug/g  | STD 46    |               |         |         |            |            | <0.05      |
| Methyl Ethyl Ketone            | 466599   | 0.50  | ug/g  | STD 70    | <0.50         | <0.50   |         |            |            |            |
|                                | 466754   | 0.50  | ug/g  | STD 70    |               |         |         | <0.50      | <0.50      |            |
|                                | 466755   | 0.50  | ug/g  | STD 70    |               |         |         |            |            | <0.50      |
| Methyl Isobutyl Ketone         | 466599   | 0.50  | ug/g  | STD 31    | <0.50         | <0.50   |         |            |            |            |
|                                | 466754   | 0.50  | ug/g  | STD 31    |               |         |         | <0.50      | <0.50      |            |
|                                | 466755   | 0.50  | ug/g  | STD 31    |               |         |         |            |            | <0.50      |
| Methyl tert-Butyl Ether (MTBE) | 466599   | 0.05  | ug/g  | STD 11    | <0.05         | <0.05   |         |            |            |            |
|                                | 466754   | 0.05  | ug/g  | STD 11    |               |         |         | <0.05      | <0.05      |            |
|                                | 466755   | 0.05  | ug/g  | STD 11    |               |         |         |            |            | <0.05      |
| Methylene Chloride             | 466599   | 0.05  | ug/g  | STD 1.6   | <0.05         | <0.05   |         |            |            |            |
|                                | 466754   | 0.05  | ug/g  | STD 1.6   |               |         |         | <0.05      | <0.05      |            |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Volatiles

| Analyte                     | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|-----------------------------|----------|------|-------|-----------|---------------|---------|---------|---------|---------|---------|
|                             |          |      |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| Methylene Chloride          | 466755   | 0.05 | ug/g  | STD 1.6   |               |         |         |         |         | <0.05   |
| Styrene                     | 466599   | 0.05 | ug/g  | STD 34    | <0.05         | <0.05   |         |         |         |         |
|                             | 466754   | 0.05 | ug/g  | STD 34    |               |         |         | <0.05   | <0.05   |         |
|                             | 466755   | 0.05 | ug/g  | STD 34    |               |         |         |         |         | <0.05   |
| Tetrachloroethane, 1,1,1,2- | 466599   | 0.05 | ug/g  | STD 0.087 | <0.05         | <0.05   |         |         |         |         |
|                             | 466754   | 0.05 | ug/g  | STD 0.087 |               |         |         | <0.05   | <0.05   |         |
|                             | 466755   | 0.05 | ug/g  | STD 0.087 |               |         |         |         |         | <0.05   |
| Tetrachloroethane, 1,1,2,2- | 466599   | 0.05 | ug/g  | STD 0.05  | <0.05         | <0.05   |         |         |         |         |
|                             | 466754   | 0.05 | ug/g  | STD 0.05  |               |         |         | <0.05   | <0.05   |         |
|                             | 466755   | 0.05 | ug/g  | STD 0.05  |               |         |         |         |         | <0.05   |
| Tetrachloroethylene         | 466599   | 0.05 | ug/g  | STD 4.5   | <0.05         | <0.05   |         |         |         |         |
|                             | 466754   | 0.05 | ug/g  | STD 4.5   |               |         |         | <0.05   | <0.05   |         |
|                             | 466755   | 0.05 | ug/g  | STD 4.5   |               |         |         |         |         | <0.05   |
| Toluene                     | 466599   | 0.08 | ug/g  | STD 68    | <0.08         | <0.08   |         |         |         |         |
|                             | 466754   | 0.08 | ug/g  | STD 68    |               |         |         | <0.08   | <0.08   |         |
|                             | 466755   | 0.08 | ug/g  | STD 68    |               |         |         |         |         | <0.08   |
| Trichloroethane, 1,1,1-     | 466599   | 0.05 | ug/g  | STD 6.1   | <0.05         | <0.05   |         |         |         |         |
|                             | 466754   | 0.05 | ug/g  | STD 6.1   |               |         |         | <0.05   | <0.05   |         |
|                             | 466755   | 0.05 | ug/g  | STD 6.1   |               |         |         |         |         | <0.05   |
| Trichloroethane, 1,1,2-     | 466599   | 0.05 | ug/g  | STD 0.05  | <0.05         | <0.05   |         |         |         |         |
|                             | 466754   | 0.05 | ug/g  | STD 0.05  |               |         |         | <0.05   | <0.05   |         |
|                             | 466755   | 0.05 | ug/g  | STD 0.05  |               |         |         |         |         | <0.05   |
| Trichloroethylene           | 466599   | 0.01 | ug/g  | STD 0.91  | <0.01         | <0.01   |         |         |         |         |

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## Environment Testing

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 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Volatiles

| Analyte                | Batch No | MRL  | Units | Guideline     | Lab I.D.       | 1744742        | 1744743            | 1745060            | 1745061        | 1745062        |
|------------------------|----------|------|-------|---------------|----------------|----------------|--------------------|--------------------|----------------|----------------|
|                        |          |      |       |               | Sample Matrix  | Soil153        | Soil153            | -                  | Soil153        | Soil153        |
|                        |          |      |       | Sample Date   | 2024-09-30     | 2024-09-30     | 2024-10-01         | -                  | 2024-10-01     | -              |
|                        |          |      |       | Sampling Time | BH24-02<br>SS3 | BH24-02<br>SS4 | BH24-01<br>SS1 SS2 | BH24-01<br>SS3 SS4 | BH24-03<br>SS6 | BH24-03<br>SS6 |
|                        |          |      |       | Sample I.D.   |                |                |                    |                    |                |                |
| Trichloroethylene      | 466754   | 0.01 | ug/g  | STD 0.91      |                |                | <0.01              | <0.01              |                |                |
|                        | 466755   | 0.01 | ug/g  | STD 0.91      |                |                |                    |                    |                | <0.01          |
| Trichlorofluoromethane | 466599   | 0.05 | ug/g  | STD 4         | <0.05          | <0.05          |                    |                    |                |                |
|                        | 466754   | 0.05 | ug/g  | STD 4         |                |                | <0.05              | <0.05              |                |                |
|                        | 466755   | 0.05 | ug/g  | STD 4         |                |                |                    |                    |                | <0.05          |
| Vinyl Chloride         | 466599   | 0.02 | ug/g  | STD 0.032     | <0.02          | <0.02          |                    |                    |                |                |
|                        | 466754   | 0.02 | ug/g  | STD 0.032     |                |                | <0.02              | <0.02              |                |                |
|                        | 466755   | 0.02 | ug/g  | STD 0.032     |                |                |                    |                    |                | <0.02          |
| Xylene Mixture         | 466602   | 0.05 | ug/g  | STD 26        | <0.05          | <0.05          |                    |                    |                |                |
|                        | 466766   | 0.05 | ug/g  | STD 26        |                |                | <0.05              | <0.05              |                | <0.05          |
| Xylene, m/p-           | 466599   | 0.05 | ug/g  |               | <0.05          | <0.05          |                    |                    |                |                |
|                        | 466754   | 0.05 | ug/g  |               |                |                | <0.05              | <0.05              |                |                |
|                        | 466755   | 0.05 | ug/g  |               |                |                |                    |                    |                | <0.05          |
| Xylene, o-             | 466599   | 0.05 | ug/g  |               | <0.05          | <0.05          |                    |                    |                |                |
|                        | 466754   | 0.05 | ug/g  |               |                |                | <0.05              | <0.05              |                |                |
|                        | 466755   | 0.05 | ug/g  |               |                |                |                    |                    |                | <0.05          |

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## Environment Testing

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 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### **Volatiles**

| Analyte                      | Batch No | MRL    | Units | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sample Date<br>Sampling Time<br>Sample I.D. | 1745063<br>Soil153<br>-<br>2024-10-02 | 1745064<br>Soil153<br>-<br>2024-10-02 | 1745065<br>Soil153<br>-<br>2024-10-02 | 1745066<br>Soil153<br>-<br>2024-10-02 |
|------------------------------|----------|--------|-------|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
|                              |          |        |       |   | BH24-03<br>SS7                        | BH24-03<br>SS701                      | BH24-04<br>SS7                        | BH24-04<br>SS8                        |
| Acetone                      | 466754   | 0.50   | ug/g  | STD 16  | <0.50                                 | <0.50                                 | <0.50                                 | <0.50                                 |
| Benzene                      | 466754   | 0.0068 | ug/g  | STD 0.32  | <0.0068                               | <0.0068                               | <0.0068                               | <0.0068                               |
| Bromodichloromethane         | 466754   | 0.05   | ug/g  | STD 18  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Bromoform                    | 466754   | 0.05   | ug/g  | STD 0.61  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Bromomethane                 | 466754   | 0.05   | ug/g  | STD 0.05  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Carbon Tetrachloride         | 466754   | 0.05   | ug/g  | STD 0.21  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Chlorobenzene                | 466754   | 0.05   | ug/g  | STD 2.4   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Chloroform                   | 466754   | 0.05   | ug/g  | STD 0.47  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dibromochloromethane         | 466754   | 0.05   | ug/g  | STD 13  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichlorobenzene, 1,2-        | 466754   | 0.05   | ug/g  | STD 6.8   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichlorobenzene, 1,3-        | 466754   | 0.05   | ug/g  | STD 9.6   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichlorobenzene, 1,4-        | 466754   | 0.05   | ug/g  | STD 0.2   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichlorodifluoromethane      | 466754   | 0.05   | ug/g  | STD 16  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloroethane, 1,1-         | 466754   | 0.05   | ug/g  | STD 17  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloroethane, 1,2-         | 466754   | 0.05   | ug/g  | STD 0.05  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloroethylene, 1,1-       | 466754   | 0.05   | ug/g  | STD 0.064   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloroethylene, 1,2-cis-   | 466754   | 0.05   | ug/g  | STD 55  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloroethylene, 1,2-trans- | 466754   | 0.05   | ug/g  | STD 1.3   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloropropane, 1,2-        | 466754   | 0.05   | ug/g  | STD 0.16  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloropropene, 1,3-        | 466767   | 0.05   | ug/g  | STD 0.18  | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloropropene, 1,3-cis-    | 466754   | 0.05   | ug/g  |   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Dichloropropene, 1,3-trans-  | 466754   | 0.05   | ug/g  |   | <0.05                                 | <0.05                                 | <0.05                                 | <0.05                                 |
| Ethylbenzene                 | 466754   | 0.018  | ug/g  | STD 9.5   | <0.018                                | <0.018                                | <0.018                                | <0.018                                |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Volatiles

| Analyte                        | Batch No | MRL  | Units | Guideline | Lab I.D.      | 1745063 | 1745064 | 1745065 | 1745066 |
|--------------------------------|----------|------|-------|-----------|---------------|---------|---------|---------|---------|
|                                |          |      |       |           | Sample Matrix | Soil153 | Soil153 | Soil153 | Soil153 |
| Ethylene dibromide             | 466754   | 0.05 | ug/g  | STD 0.05  | 2024-10-02    | BH24-03 | BH24-03 | BH24-04 | BH24-04 |
| Hexane (n)                     | 466754   | 0.05 | ug/g  | STD 46    |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Methyl Ethyl Ketone            | 466754   | 0.50 | ug/g  | STD 70    |               | <0.50   | <0.50   | <0.50   | <0.50   |
| Methyl Isobutyl Ketone         | 466754   | 0.50 | ug/g  | STD 31    |               | <0.50   | <0.50   | <0.50   | <0.50   |
| Methyl tert-Butyl Ether (MTBE) | 466754   | 0.05 | ug/g  | STD 11    |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Methylene Chloride             | 466754   | 0.05 | ug/g  | STD 1.6   |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Styrene                        | 466754   | 0.05 | ug/g  | STD 34    |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Tetrachloroethane, 1,1,1,2-    | 466754   | 0.05 | ug/g  | STD 0.087 |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Tetrachloroethane, 1,1,2,2-    | 466754   | 0.05 | ug/g  | STD 0.05  |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Tetrachloroethylene            | 466754   | 0.05 | ug/g  | STD 4.5   |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Toluene                        | 466754   | 0.08 | ug/g  | STD 68    |               | <0.08   | <0.08   | <0.08   | <0.08   |
| Trichloroethane, 1,1,1-        | 466754   | 0.05 | ug/g  | STD 6.1   |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Trichloroethane, 1,1,2-        | 466754   | 0.05 | ug/g  | STD 0.05  |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Trichloroethylene              | 466754   | 0.01 | ug/g  | STD 0.91  |               | <0.01   | <0.01   | <0.01   | <0.01   |
| Trichlorofluoromethane         | 466754   | 0.05 | ug/g  | STD 4     |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Vinyl Chloride                 | 466754   | 0.02 | ug/g  | STD 0.032 |               | <0.02   | <0.02   | <0.02   | <0.02   |
| Xylene Mixture                 | 466766   | 0.05 | ug/g  | STD 26    |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Xylene, m/p-                   | 466754   | 0.05 | ug/g  |           |               | <0.05   | <0.05   | <0.05   | <0.05   |
| Xylene, o-                     | 466754   | 0.05 | ug/g  |           |               | <0.05   | <0.05   | <0.05   | <0.05   |

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Report Number: 3011336  
 Date Submitted: 2024-09-30  
 Date Reported: 2024-10-09  
 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### **Inorganics**

| Analyte                 | Batch No | MRL   | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|-------------------------|----------|-------|-------|-----------|---------------|---------|---------|---------|---------|---------|
|                         |          |       |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| Cyanide (CN-)           | 466775   | 0.005 | ug/g  | STD 0.051 | 2024-09-30    | BH24-02 | BH24-02 | BH24-01 | BH24-01 | BH24-03 |
| Electrical Conductivity | 466774   | 0.05  | mS/cm | STD 1.4   |               | SS3     | SS4     | SS1 SS2 | SS3 SS4 | SS6     |
| pH - CaCl2              | 466550   | 2.00  |       |           | 7.80          |         | 7.81    |         |         |         |
|                         | 466721   | 2.00  |       |           |               |         |         | 7.68    | 7.76    | 7.78    |
| Sodium Adsorption Ratio | 466780   | 0.01  |       | STD 12    | 0.74          |         | 0.64    | 0.80    | 0.74    | 1.02    |

#### **Inorganics**

| Analyte                 | Batch No | MRL   | Units | Guideline | Lab I.D.      | 1745063 | 1745064 | 1745065    | 1745066    |
|-------------------------|----------|-------|-------|-----------|---------------|---------|---------|------------|------------|
|                         |          |       |       |           | Sample Matrix | Soil153 | Soil153 | -          | Soil153    |
| Cyanide (CN-)           | 466775   | 0.005 | ug/g  | STD 0.051 | 2024-10-02    | BH24-03 | BH24-03 | 2024-10-02 | 2024-10-02 |
| Electrical Conductivity | 466774   | 0.05  | mS/cm | STD 1.4   |               | SS7     | SS701   | 2024-10-02 | 2024-10-02 |
| pH - CaCl2              | 466721   | 2.00  |       |           | 7.86          |         | 7.87    | 7.88       | 7.88       |
| Sodium Adsorption Ratio | 466780   | 0.01  |       | STD 12    | 0.77          |         | 0.79    | 2.58       | 2.57       |

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 Project: B040048 - 5580  
 Manotick Main St Phase 2 ESA  
 COC #: 916869

### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### Moisture

| Analyte           | Batch No | MRL | Units | Lab I.D.  | 1744742<br>Soil153 | 1744743<br>Soil153 | 1745060<br>Soil153 | 1745061<br>Soil153 | 1745062<br>Soil153 |  |
|-------------------|----------|-----|-------|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--|
|                   |          |     |       | Guideline |                    |                    |                    |                    |                    |  |
| Moisture-Humidite | 466565   | 0.1 | %     |           |                    | 6.6                |                    |                    |                    |  |
|                   | 466566   | 0.1 | %     |           | 7.5                |                    |                    |                    |                    |  |
|                   | 466776   | 0.1 | %     |           |                    |                    | 13.0               | 7.9                | 8.8                |  |

#### Moisture

| Analyte           | Batch No | MRL | Units | Lab I.D.  | 1745063<br>Soil153 | 1745064<br>Soil153 | 1745065<br>Soil153 | 1745066<br>Soil153 |     |  |
|-------------------|----------|-----|-------|-----------|--------------------|--------------------|--------------------|--------------------|-----|--|
|                   |          |     |       | Guideline |                    |                    |                    |                    |     |  |
| Moisture-Humidite | 466776   | 0.1 | %     |           |                    |                    | 3.4                |                    |     |  |
|                   | 466779   | 0.1 | %     |           | 9.4                | 8.8                |                    |                    | 8.3 |  |

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### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### **PHC Surrogate**

| Analyte           | Batch No | MRL | Units | Lab I.D.  | 1744742<br>Soil153 | 1744743<br>Soil153 | 1745060<br>Soil153 | 1745061<br>Soil153 | 1745062<br>Soil153 |
|-------------------|----------|-----|-------|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                   |          |     |       | Guideline |                    |                    |                    |                    |                    |
| Alpha-androstrane | 466565   | 0   | %     |           |                    | 96                 |                    |                    |                    |
|                   | 466566   | 0   | %     |           | 96                 |                    |                    |                    |                    |
|                   | 466776   | 0   | %     |           |                    |                    | 76                 | 82                 | 93                 |

#### **PHC Surrogate**

| Analyte           | Batch No | MRL | Units | Lab I.D.  | 1745063<br>Soil153 | 1745064<br>Soil153 | 1745065<br>Soil153 | 1745066<br>Soil153 |  |
|-------------------|----------|-----|-------|-----------|--------------------|--------------------|--------------------|--------------------|--|
|                   |          |     |       | Guideline |                    |                    |                    |                    |  |
| Alpha-androstrane | 466776   | 0   | %     |           |                    |                    | 73                 |                    |  |
|                   | 466779   | 0   | %     |           | 72                 | 71                 |                    | 65                 |  |

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### Guideline = O.Reg 153-T3-Ind/Com-Coarse

#### **VOCs Surrogates**

| Analyte               | Batch No | MRL | Units | Guideline | Lab I.D.      | 1744742 | 1744743 | 1745060 | 1745061 | 1745062 |
|-----------------------|----------|-----|-------|-----------|---------------|---------|---------|---------|---------|---------|
|                       |          |     |       |           | Sample Matrix | Soil153 | Soil153 | -       | Soil153 | Soil153 |
| 1,2-dichloroethane-d4 | 466599   | 0   | %     |           | 2024-09-30    | BH24-02 | BH24-02 | BH24-01 | BH24-01 | BH24-03 |
|                       | 466754   | 0   | %     |           |               | SS3     | SS4     | SS1 SS2 | SS3 SS4 | SS6     |
|                       | 466755   | 0   | %     |           |               |         |         |         |         | 127     |
| 4-bromofluorobenzene  | 466599   | 0   | %     |           | 86            | 82      |         |         |         |         |
|                       | 466754   | 0   | %     |           |               |         |         | 80      | 84      |         |
|                       | 466755   | 0   | %     |           |               |         |         |         |         | 91      |
| Toluene-d8            | 466599   | 0   | %     |           | 93            | 95      |         |         |         |         |
|                       | 466754   | 0   | %     |           |               |         |         | 90      | 90      |         |
|                       | 466755   | 0   | %     |           |               |         |         |         |         | 116     |

#### **VOCs Surrogates**

| Analyte               | Batch No | MRL | Units | Guideline | Lab I.D.      | 1745063 | 1745064 | 1745065 | 1745066 |
|-----------------------|----------|-----|-------|-----------|---------------|---------|---------|---------|---------|
|                       |          |     |       |           | Sample Matrix | Soil153 | -       | Soil153 | -       |
| 1,2-dichloroethane-d4 | 466754   | 0   | %     |           | 2024-10-02    | BH24-03 | BH24-03 | BH24-04 | BH24-04 |
|                       |          |     |       |           |               | SS7     | SS701   | SS7     | SS8     |
|                       |          |     |       |           |               |         |         |         |         |
| 4-bromofluorobenzene  | 466754   | 0   | %     |           | 92            | 80      | 84      | 86      |         |
| Toluene-d8            | 466754   | 0   | %     |           | 118           | 90      | 84      | 88      |         |

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 COC #: 916869

**Quality Assurance Summary**

| Batch No | Analyte                     | Blank       | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|-----------------------------|-------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466529   | Methlynaphthalene, 1-       | <0.05 ug/g  | 84       | 50-140    | 82          | 50-140       | 0         | 0-40             |
| 466529   | Methlynaphthalene, 2-       | <0.05 ug/g  | 51       | 50-140    | 60          | 50-140       | 0         | 0-40             |
| 466529   | Acenaphthene                | <0.05 ug/g  | 58       | 50-140    | 53          | 50-140       | 0         | 0-40             |
| 466529   | Acenaphthylene              | <0.05 ug/g  | 53       | 50-140    | 50          | 50-140       | 0         | 0-40             |
| 466529   | Anthracene                  | <0.05 ug/g  | 56       | 50-140    | 55          | 50-140       | 0         | 0-40             |
| 466529   | Benz[a]anthracene           | <0.05 ug/g  | 70       | 50-140    | 55          | 50-140       | 0         | 0-40             |
| 466529   | Benzo[a]pyrene              | <0.05 ug/g  | 67       | 50-140    | 57          | 50-140       | 0         | 0-40             |
| 466529   | Benzo[b]fluoranthene        | <0.05 ug/g  | 65       | 50-140    | 63          | 50-140       | 0         | 0-40             |
| 466529   | Benzo[ghi]perylene          | <0.05 ug/g  | 50       | 50-140    | 50          | 50-140       | 0         | 0-40             |
| 466529   | Benzo[k]fluoranthene        | <0.05 ug/g  | 61       | 50-140    | 74          |              | 0         | 0-40             |
| 466529   | Chrysene                    | <0.05 ug/g  | 78       | 50-140    | 68          | 50-140       | 0         | 0-40             |
| 466529   | Dibenz[a h]anthracene       | <0.05 ug/g  | 81       | 50-140    | 57          | 50-140       | 0         | 0-40             |
| 466529   | Fluoranthene                | <0.05 ug/g  | 67       | 50-140    | 57          | 50-140       | 0         | 0-40             |
| 466529   | Fluorene                    | <0.05 ug/g  | 55       | 50-140    | 53          | 50-140       | 0         | 0-40             |
| 466529   | Indeno[1 2 3-cd]pyrene      | <0.05 ug/g  | 93       | 50-140    | 67          | 50-140       | 0         | 0-40             |
| 466529   | Naphthalene                 | <0.013 ug/g | 62       | 50-140    | 60          | 50-140       | 0         | 0-40             |
| 466529   | Phenanthrene                | <0.05 ug/g  | 55       | 50-140    | 55          | 50-140       | 0         | 0-40             |
| 466529   | Pyrene                      | <0.05 ug/g  | 67       | 50-140    | 52          | 50-140       | 0         | 0-40             |
| 466550   | pH - CaCl2                  | 5.25        | 99       | 90-110    |             |              | 0         |                  |
| 466565   | PHC's F2                    | <2 ug/g     | 108      | 80-120    | 91          | 60-140       | 0         | 0-30             |
| 466565   | PHC's F3                    | <20 ug/g    | 108      | 80-120    | 91          | 60-140       | 0         | 0-30             |
| 466565   | PHC's F4                    | <20 ug/g    | 108      | 80-120    | 91          | 60-140       | 0         | 0-30             |
| 466565   | Moisture-Humidite           | <0.1 %      | 100      | 80-120    |             |              | 6         |                  |
| 466566   | PHC's F2                    | <2 ug/g     | 84       | 80-120    | 81          | 60-140       |           | 0-30             |
| 466566   | PHC's F3                    | <20 ug/g    | 84       | 80-120    | 81          | 60-140       |           | 0-30             |
| 466566   | PHC's F4                    | <20 ug/g    | 84       | 80-120    | 81          | 60-140       |           | 0-30             |
| 466566   | Moisture-Humidite           | <0.1 %      | 100      | 80-120    |             |              |           |                  |
| 466578   | 1+2-methylnaphthalene       |             |          |           |             |              |           |                  |
| 466599   | Tetrachloroethane, 1,1,1,2- | <0.05 ug/g  | 103      | 60-130    | 107         | 50-140       | 0         | 0-50             |
| 466599   | Trichloroethane, 1,1,1-     | <0.05 ug/g  | 100      | 60-130    | 111         | 50-140       | 0         | 0-50             |
| 466599   | Tetrachloroethane, 1,1,2,2- | <0.05 ug/g  | 91       | 60-130    | 91          | 50-140       | 0         | 0-30             |
| 466599   | Trichloroethane, 1,1,2-     | <0.05 ug/g  | 89       | 60-130    | 115         | 50-140       | 0         | 0-50             |

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| Batch No | Analyte                        | Blank       | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|--------------------------------|-------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466599   | Dichloroethane, 1,1-           | <0.05 ug/g  | 108      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466599   | Dichloroethylene, 1,1-         | <0.05 ug/g  | 114      | 60-130    | 87          | 50-140       | 0         | 0-50             |
| 466599   | Dichlorobenzene, 1,2-          | <0.05 ug/g  | 105      | 60-130    | 111         | 50-140       | 0         | 0-50             |
| 466599   | Dichloroethane, 1,2-           | <0.05 ug/g  | 114      | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466599   | Dichloropropane, 1,2-          | <0.05 ug/g  | 96       | 60-130    | 119         | 50-140       | 0         | 0-50             |
| 466599   | Dichlorobenzene, 1,3-          | <0.05 ug/g  | 96       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466599   | Dichlorobenzene, 1,4-          | <0.05 ug/g  | 99       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466599   | Acetone                        | <0.50 ug/g  | 124      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466599   | Benzene                        | <0.0068     | 92       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466599   | Bromodichloromethane           | <0.05 ug/g  | 94       | 60-130    | 110         | 50-140       | 0         | 0-50             |
| 466599   | Bromoform                      | <0.05 ug/g  | 83       | 60-130    | 109         | 50-140       | 0         | 0-50             |
| 466599   | Bromomethane                   | <0.05 ug/g  | 118      | 60-130    | 105         | 50-140       | 0         | 0-50             |
| 466599   | Dichloroethylene, 1,2-cis-     | <0.05 ug/g  | 92       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466599   | Dichloropropene, 1,3-cis-      | <0.05 ug/g  | 85       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466599   | Carbon Tetrachloride           | <0.05 ug/g  | 102      | 60-130    | 107         | 50-140       | 0         | 0-50             |
| 466599   | Chloroform                     | <0.05 ug/g  | 99       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466599   | Dibromochloromethane           | <0.05 ug/g  | 97       | 60-130    | 101         | 50-140       | 0         | 0-50             |
| 466599   | Dichlorodifluoromethane        | <0.05 ug/g  | 118      | 60-130    | 106         | 50-140       | 0         | 0-50             |
| 466599   | Methylene Chloride             | <0.05 ug/g  | 117      | 60-130    | 95          | 50-140       | 0         | 0-50             |
| 466599   | Ethylbenzene                   | <0.018 ug/g | 104      | 60-130    | 121         | 50-140       | 0         | 0-50             |
| 466599   | Ethylene dibromide             | <0.05 ug/g  | 86       | 60-130    | 113         | 50-140       | 0         | 0-50             |
| 466599   | Hexane (n)                     | <0.05 ug/g  | 94       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466599   | Xylene, m/p-                   | <0.05 ug/g  | 114      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466599   | Methyl Ethyl Ketone            | <0.50 ug/g  | 105      | 60-130    | 116         | 50-140       | 0         | 0-50             |
| 466599   | Methyl Isobutyl Ketone         | <0.50 ug/g  | 90       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466599   | Methyl tert-Butyl Ether (MTBE) | <0.05 ug/g  | 94       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466599   | Chlorobenzene                  | <0.05 ug/g  | 95       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466599   | Xylene, o-                     | <0.05 ug/g  | 103      | 60-130    | 118         | 50-140       | 0         | 0-50             |
| 466599   | Styrene                        | <0.05 ug/g  | 100      | 60-130    | 117         | 50-140       | 0         | 0-50             |
| 466599   | Dichloroethylene, 1,2-trans-   | <0.05 ug/g  | 94       | 60-130    | 110         | 50-140       | 0         | 0-50             |
| 466599   | Dichloropropene, 1,3-trans-    | <0.05 ug/g  | 92       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466599   | Tetrachloroethylene            | <0.05 ug/g  | 87       | 60-130    | 119         | 50-140       | 0         | 0-50             |
| 466599   | Toluene                        | <0.08 ug/g  | 93       | 60-130    | 114         | 50-140       | 0         | 0-50             |

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**Environment Testing**

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

**Quality Assurance Summary**

| Batch No | Analyte                | Blank      | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|------------------------|------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466599   | Trichloroethylene      | <0.01 ug/g | 88       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466599   | Trichlorofluoromethane | <0.05 ug/g | 120      | 60-130    | 98          | 50-140       | 0         | 0-50             |
| 466599   | Vinyl Chloride         | <0.02 ug/g | 110      | 60-130    | 92          | 50-140       | 0         | 0-50             |
| 466601   | PHC's F1               | <10 ug/g   | 104      | 80-120    | 96          | 60-140       | 0         | 0-30             |
| 466602   | Xylene Mixture         |            |          |           |             |              |           |                  |
| 466603   | Dichloropropene,1,3-   |            |          |           |             |              |           |                  |
| 466604   | PHC's F1-BTEX          |            |          |           |             |              |           |                  |
| 466619   | Silver                 | <0.2 ug/g  | 72       | 70-130    | 98          | 70-130       | 0         | 0-20             |
| 466619   | Arsenic                | <1 ug/g    | 98       | 70-130    | 99          | 70-130       | 0         | 0-20             |
| 466619   | Boron (total)          | <5 ug/g    | 96       | 70-130    | 126         | 70-130       | 0         | 0-20             |
| 466619   | Barium                 | <1 ug/g    | 102      | 70-130    | 172         | 70-130       | 5         | 0-20             |
| 466619   | Beryllium              | <1 ug/g    | 101      | 70-130    | 97          | 70-130       | 0         | 0-20             |
| 466619   | Cadmium                | <0.4 ug/g  | 105      | 70-130    | 107         | 70-130       | 0         | 0-20             |
| 466619   | Cobalt                 | <1 ug/g    | 112      | 70-130    | 113         | 70-130       | 7         | 0-20             |
| 466619   | Chromium Total         | <1 ug/g    | 114      | 70-130    | 155         | 70-130       | 8         | 0-20             |
| 466619   | Copper                 | <1 ug/g    | 110      | 70-130    | 111         | 70-130       | 13        | 0-20             |
| 466619   | Mercury                | <0.1 ug/g  | 90       | 70-130    | 93          | 70-130       | 0         | 0-20             |
| 466619   | Molybdenum             | <1 ug/g    | 99       | 70-130    | 106         | 70-130       | 0         | 0-20             |
| 466619   | Nickel                 | <1 ug/g    | 109      | 70-130    | 118         | 70-130       | 7         | 0-20             |
| 466619   | Lead                   | <1 ug/g    | 97       | 70-130    | 93          | 70-130       | 0         | 0-20             |
| 466619   | Antimony               | <1 ug/g    | 80       | 70-130    | 101         | 70-130       | 0         | 0-20             |
| 466619   | Selenium               | <0.5 ug/g  | 104      | 70-130    | 99          | 70-130       | 0         | 0-20             |
| 466619   | Thallium               | <1 ug/g    | 97       | 70-130    | 91          | 70-130       | 0         | 0-20             |
| 466619   | Uranium                | <0.5 ug/g  | 87       | 70-130    | 93          | 70-130       | 0         | 0-20             |
| 466619   | Vanadium               | <2 ug/g    | 111      | 70-130    | 154         | 70-130       | 4         | 0-20             |
| 466619   | Zinc                   | <2 ug/g    | 106      | 70-130    | 121         | 70-130       | 4         | 0-20             |
| 466690   | 1+2-methylnaphthalene  |            |          |           |             |              |           |                  |
| 466695   | Chromium VI            | <0.02 ug/g | 98       | 70-130    | 76          | 70-130       | 0         | 0-35             |
| 466721   | pH - CaCl2             |            | 96       | 90-110    |             |              | 0         |                  |
| 466722   | Silver                 | <0.2 ug/g  | 81       | 70-130    | 99          | 70-130       | 0         | 0-20             |
| 466722   | Arsenic                | <1 ug/g    | 102      | 70-130    | 89          | 70-130       | 18        | 0-20             |
| 466722   | Boron (total)          | <5 ug/g    | 102      | 70-130    | 110         | 70-130       | 0         | 0-20             |
| 466722   | Barium                 | <1 ug/g    | 93       | 70-130    |             | 70-130       | 17        | 0-20             |

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**Environment Testing**

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 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869  
 B040048 - 5580

**Quality Assurance Summary**

| Batch No | Analyte                   | Blank       | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|---------------------------|-------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466722   | Beryllium                 | <1 ug/g     | 103      | 70-130    | 96          | 70-130       | 0         | 0-20             |
| 466722   | Cadmium                   | <0.4 ug/g   | 110      | 70-130    | 96          | 70-130       | 15        | 0-20             |
| 466722   | Cobalt                    | <1 ug/g     | 113      | 70-130    | 96          | 70-130       | 14        | 0-20             |
| 466722   | Chromium Total            | <1 ug/g     | 112      | 70-130    | 75          | 70-130       | 5         | 0-20             |
| 466722   | Copper                    | <1 ug/g     | 113      | 70-130    | 570         | 70-130       | 23        | 0-20             |
| 466722   | Mercury                   | <0.1 ug/g   | 90       | 70-130    | 97          | 70-130       | 0         | 0-20             |
| 466722   | Molybdenum                | <1 ug/g     | 112      | 70-130    | 87          | 70-130       | 15        | 0-20             |
| 466722   | Nickel                    | <1 ug/g     | 110      | 70-130    | 27          | 70-130       | 12        | 0-20             |
| 466722   | Lead                      | <1 ug/g     | 106      | 70-130    |             | 70-130       | 14        | 0-20             |
| 466722   | Antimony                  | <1 ug/g     | 102      | 70-130    | 90          | 70-130       | 12        | 0-20             |
| 466722   | Selenium                  | <0.5 ug/g   | 108      | 70-130    | 98          | 70-130       | 0         | 0-20             |
| 466722   | Thallium                  | <1 ug/g     | 106      | 70-130    | 97          | 70-130       | 0         | 0-20             |
| 466722   | Uranium                   | <0.5 ug/g   | 95       | 70-130    | 96          | 70-130       | 0         | 0-20             |
| 466722   | Vanadium                  | <2 ug/g     | 110      | 70-130    | 108         | 70-130       | 13        | 0-20             |
| 466722   | Zinc                      | <2 ug/g     | 111      | 70-130    |             | 70-130       | 11        | 0-20             |
| 466723   | Boron (Hot Water Soluble) | <0.25 ug/g  | 104      | 70-130    | 114         | 60-140       | 0         | 0-30             |
| 466735   | Methlynaphthalene, 1-     | <0.05 ug/g  | 89       | 50-140    | 74          | 50-140       | 0         | 0-40             |
| 466735   | Methlynaphthalene, 2-     | <0.05 ug/g  | 67       | 50-140    | 52          | 50-140       | 0         | 0-40             |
| 466735   | Acenaphthene              | <0.05 ug/g  | 80       | 50-140    | 70          | 50-140       | 0         | 0-40             |
| 466735   | Acenaphthylene            | <0.05 ug/g  | 77       | 50-140    | 69          | 50-140       | 0         | 0-40             |
| 466735   | Anthracene                | <0.05 ug/g  | 81       | 50-140    | 71          | 50-140       | 0         | 0-40             |
| 466735   | Benz[a]anthracene         | <0.05 ug/g  | 80       | 50-140    | 82          | 50-140       | 0         | 0-40             |
| 466735   | Benzo[a]pyrene            | <0.05 ug/g  | 70       | 50-140    | 75          | 50-140       | 0         | 0-40             |
| 466735   | Benzo[b]fluoranthene      | <0.05 ug/g  | 77       | 50-140    | 76          | 50-140       | 0         | 0-40             |
| 466735   | Benzo[ghi]perylene        | <0.05 ug/g  | 50       | 50-140    | 59          | 50-140       | 0         | 0-40             |
| 466735   | Benzo[k]fluoranthene      | <0.05 ug/g  | 97       | 50-140    | 80          |              | 0         | 0-40             |
| 466735   | Chrysene                  | <0.05 ug/g  | 81       | 50-140    | 76          | 50-140       | 0         | 0-40             |
| 466735   | Dibenz[a h]anthracene     | <0.05 ug/g  | 51       | 50-140    | 55          | 50-140       | 0         | 0-40             |
| 466735   | Fluoranthene              | <0.05 ug/g  | 82       | 50-140    | 66          | 50-140       | 0         | 0-40             |
| 466735   | Fluorene                  | <0.05 ug/g  | 79       | 50-140    | 67          | 50-140       | 0         | 0-40             |
| 466735   | Indeno[1 2 3-cd]pyrene    | <0.05 ug/g  | 53       | 50-140    | 56          | 50-140       | 0         | 0-40             |
| 466735   | Naphthalene               | <0.013 ug/g | 73       | 50-140    | 68          | 50-140       | 0         | 0-40             |
| 466735   | Phenanthrene              | <0.05 ug/g  | 79       | 50-140    | 74          | 50-140       | 0         | 0-40             |

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**Environment Testing**

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 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869  
 B040048 - 5580

**Quality Assurance Summary**

| Batch No | Analyte                        | Blank       | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|--------------------------------|-------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466735   | Pyrene                         | <0.05 ug/g  | 85       | 50-140    | 88          | 50-140       | 0         | 0-40             |
| 466741   | 1+2-methylnaphthalene          |             |          |           |             |              |           |                  |
| 466754   | Tetrachloroethane, 1,1,1,2-    | <0.05 ug/g  | 103      | 60-130    | 107         | 50-140       | 0         | 0-50             |
| 466754   | Trichloroethane, 1,1,1-        | <0.05 ug/g  | 100      | 60-130    | 111         | 50-140       | 0         | 0-50             |
| 466754   | Tetrachloroethane, 1,1,2,2-    | <0.05 ug/g  | 91       | 60-130    | 91          | 50-140       | 0         | 0-30             |
| 466754   | Trichloroethane, 1,1,2-        | <0.05 ug/g  | 89       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466754   | Dichloroethane, 1,1-           | <0.05 ug/g  | 108      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466754   | Dichloroethylene, 1,1-         | <0.05 ug/g  | 114      | 60-130    | 87          | 50-140       | 0         | 0-50             |
| 466754   | Dichlorobenzene, 1,2-          | <0.05 ug/g  | 105      | 60-130    | 111         | 50-140       | 0         | 0-50             |
| 466754   | Dichloroethane, 1,2-           | <0.05 ug/g  | 114      | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466754   | Dichloropropane, 1,2-          | <0.05 ug/g  | 96       | 60-130    | 119         | 50-140       | 0         | 0-50             |
| 466754   | Dichlorobenzene, 1,3-          | <0.05 ug/g  | 96       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466754   | Dichlorobenzene, 1,4-          | <0.05 ug/g  | 99       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466754   | Acetone                        | <0.50 ug/g  | 124      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466754   | Benzene                        | <0.0068     | 92       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466754   | Bromodichloromethane           | <0.05 ug/g  | 94       | 60-130    | 110         | 50-140       | 0         | 0-50             |
| 466754   | Bromoform                      | <0.05 ug/g  | 83       | 60-130    | 109         | 50-140       | 0         | 0-50             |
| 466754   | Bromomethane                   | <0.05 ug/g  | 118      | 60-130    | 105         | 50-140       | 0         | 0-50             |
| 466754   | Dichloroethylene, 1,2-cis-     | <0.05 ug/g  | 92       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466754   | Dichloropropene, 1,3-cis-      | <0.05 ug/g  | 85       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466754   | Carbon Tetrachloride           | <0.05 ug/g  | 102      | 60-130    | 107         | 50-140       | 0         | 0-50             |
| 466754   | Chloroform                     | <0.05 ug/g  | 99       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466754   | Dibromochloromethane           | <0.05 ug/g  | 97       | 60-130    | 101         | 50-140       | 0         | 0-50             |
| 466754   | Dichlorodifluoromethane        | <0.05 ug/g  | 118      | 60-130    | 106         | 50-140       | 0         | 0-50             |
| 466754   | Methylene Chloride             | <0.05 ug/g  | 117      | 60-130    | 95          | 50-140       | 0         | 0-50             |
| 466754   | Ethylbenzene                   | <0.018 ug/g | 104      | 60-130    | 121         | 50-140       | 0         | 0-50             |
| 466754   | Ethylene dibromide             | <0.05 ug/g  | 86       | 60-130    | 113         | 50-140       | 0         | 0-50             |
| 466754   | Hexane (n)                     | <0.05 ug/g  | 94       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466754   | Xylene, m/p-                   | <0.05 ug/g  | 114      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466754   | Methyl Ethyl Ketone            | <0.50 ug/g  | 105      | 60-130    | 116         | 50-140       | 0         | 0-50             |
| 466754   | Methyl Isobutyl Ketone         | <0.50 ug/g  | 90       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466754   | Methyl tert-Butyl Ether (MTBE) | <0.05 ug/g  | 94       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466754   | Chlorobenzene                  | <0.05 ug/g  | 95       | 60-130    | 115         | 50-140       | 0         | 0-50             |

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**Environment Testing**

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**Quality Assurance Summary**

| Batch No | Analyte                      | Blank       | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|------------------------------|-------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466754   | Xylene, o-                   | <0.05 ug/g  | 103      | 60-130    | 118         | 50-140       | 0         | 0-50             |
| 466754   | Styrene                      | <0.05 ug/g  | 100      | 60-130    | 117         | 50-140       | 0         | 0-50             |
| 466754   | Dichloroethylene, 1,2-trans- | <0.05 ug/g  | 94       | 60-130    | 110         | 50-140       | 0         | 0-50             |
| 466754   | Dichloropropene, 1,3-trans-  | <0.05 ug/g  | 92       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466754   | Tetrachloroethylene          | <0.05 ug/g  | 87       | 60-130    | 119         | 50-140       | 0         | 0-50             |
| 466754   | Toluene                      | <0.08 ug/g  | 93       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466754   | Trichloroethylene            | <0.01 ug/g  | 88       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466754   | Trichlorofluoromethane       | <0.05 ug/g  | 120      | 60-130    | 98          | 50-140       | 0         | 0-50             |
| 466754   | Vinyl Chloride               | <0.02 ug/g  | 110      | 60-130    | 92          | 50-140       | 0         | 0-50             |
| 466755   | Tetrachloroethane, 1,1,1,2-  | <0.05 ug/g  | 103      | 60-130    | 107         | 50-140       | 0         | 0-50             |
| 466755   | Trichloroethane, 1,1,1-      | <0.05 ug/g  | 100      | 60-130    | 111         | 50-140       | 0         | 0-50             |
| 466755   | Tetrachloroethane, 1,1,2,2-  | <0.05 ug/g  | 91       | 60-130    | 91          | 50-140       | 0         | 0-30             |
| 466755   | Trichloroethane, 1,1,2-      | <0.05 ug/g  | 89       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466755   | Dichloroethane, 1,1-         | <0.05 ug/g  | 108      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466755   | Dichloroethylene, 1,1-       | <0.05 ug/g  | 114      | 60-130    | 87          | 50-140       | 0         | 0-50             |
| 466755   | Dichlorobenzene, 1,2-        | <0.05 ug/g  | 105      | 60-130    | 111         | 50-140       | 0         | 0-50             |
| 466755   | Dichloroethane, 1,2-         | <0.05 ug/g  | 114      | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466755   | Dichloropropane, 1,2-        | <0.05 ug/g  | 96       | 60-130    | 119         | 50-140       | 0         | 0-50             |
| 466755   | Dichlorobenzene, 1,3-        | <0.05 ug/g  | 96       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466755   | Dichlorobenzene, 1,4-        | <0.05 ug/g  | 99       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466755   | Acetone                      | <0.50 ug/g  | 124      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466755   | Benzene                      | <0.0068     | 92       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466755   | Bromodichloromethane         | <0.05 ug/g  | 94       | 60-130    | 110         | 50-140       | 0         | 0-50             |
| 466755   | Bromoform                    | <0.05 ug/g  | 83       | 60-130    | 109         | 50-140       | 0         | 0-50             |
| 466755   | Bromomethane                 | <0.05 ug/g  | 118      | 60-130    | 105         | 50-140       | 0         | 0-50             |
| 466755   | Dichloroethylene, 1,2-cis-   | <0.05 ug/g  | 92       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466755   | Dichloropropene, 1,3-cis-    | <0.05 ug/g  | 85       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466755   | Carbon Tetrachloride         | <0.05 ug/g  | 102      | 60-130    | 107         | 50-140       | 0         | 0-50             |
| 466755   | Chloroform                   | <0.05 ug/g  | 99       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466755   | Dibromochloromethane         | <0.05 ug/g  | 97       | 60-130    | 101         | 50-140       | 0         | 0-50             |
| 466755   | Dichlorodifluoromethane      | <0.05 ug/g  | 118      | 60-130    | 106         | 50-140       | 0         | 0-50             |
| 466755   | Methylene Chloride           | <0.05 ug/g  | 117      | 60-130    | 95          | 50-140       | 0         | 0-50             |
| 466755   | Ethylbenzene                 | <0.018 ug/g | 104      | 60-130    | 121         | 50-140       | 0         | 0-50             |

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**Environment Testing**

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869  
 B040048 - 5580

**Quality Assurance Summary**

| Batch No | Analyte                        | Blank       | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|--------------------------------|-------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466755   | Ethylene dibromide             | <0.05 ug/g  | 86       | 60-130    | 113         | 50-140       | 0         | 0-50             |
| 466755   | Hexane (n)                     | <0.05 ug/g  | 94       | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466755   | Xylene, m/p-                   | <0.05 ug/g  | 114      | 60-130    | 112         | 50-140       | 0         | 0-50             |
| 466755   | Methyl Ethyl Ketone            | <0.50 ug/g  | 105      | 60-130    | 116         | 50-140       | 0         | 0-50             |
| 466755   | Methyl Isobutyl Ketone         | <0.50 ug/g  | 90       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466755   | Methyl tert-Butyl Ether (MTBE) | <0.05 ug/g  | 94       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466755   | Chlorobenzene                  | <0.05 ug/g  | 95       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466755   | Xylene, o-                     | <0.05 ug/g  | 103      | 60-130    | 118         | 50-140       | 0         | 0-50             |
| 466755   | Styrene                        | <0.05 ug/g  | 100      | 60-130    | 117         | 50-140       | 0         | 0-50             |
| 466755   | Dichloroethylene, 1,2-trans-   | <0.05 ug/g  | 94       | 60-130    | 110         | 50-140       | 0         | 0-50             |
| 466755   | Dichloropropene,1,3-trans-     | <0.05 ug/g  | 92       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466755   | Tetrachloroethylene            | <0.05 ug/g  | 87       | 60-130    | 119         | 50-140       | 0         | 0-50             |
| 466755   | Toluene                        | <0.08 ug/g  | 93       | 60-130    | 114         | 50-140       | 0         | 0-50             |
| 466755   | Trichloroethylene              | <0.01 ug/g  | 88       | 60-130    | 115         | 50-140       | 0         | 0-50             |
| 466755   | Trichlorofluoromethane         | <0.05 ug/g  | 120      | 60-130    | 98          | 50-140       | 0         | 0-50             |
| 466755   | Vinyl Chloride                 | <0.02 ug/g  | 110      | 60-130    | 92          | 50-140       | 0         | 0-50             |
| 466764   | PHC's F1                       | <10 ug/g    | 104      | 80-120    | 96          | 60-140       | 0         | 0-30             |
| 466766   | Xylene Mixture                 |             |          |           |             |              |           |                  |
| 466767   | Dichloropropene,1,3-           |             |          |           |             |              |           |                  |
| 466769   | PHC's F1-BTEX                  |             |          |           |             |              |           |                  |
| 466774   | Electrical Conductivity        | <0.05       | 99       | 90-110    |             |              | 1         | 0-10             |
| 466775   | Cyanide (CN-)                  | <0.005 ug/g | 93       | 75-125    | 96          | 70-130       | 0         | 0-20             |
| 466776   | PHC's F2                       | <2 ug/g     | 85       | 80-120    | 86          | 60-140       | 0         | 0-30             |
| 466776   | PHC's F3                       | <20 ug/g    | 85       | 80-120    | 86          | 60-140       | 0         | 0-30             |
| 466776   | PHC's F4                       | <20 ug/g    | 85       | 80-120    | 86          | 60-140       | 0         | 0-30             |
| 466776   | Moisture-Humidite              | <0.1 %      | 100      | 80-120    |             |              | 16        |                  |
| 466779   | PHC's F2                       | <2 ug/g     | 84       | 80-120    | 82          | 60-140       | 0         | 0-30             |
| 466779   | PHC's F3                       | <20 ug/g    | 84       | 80-120    | 82          | 60-140       | 0         | 0-30             |
| 466779   | PHC's F4                       | <20 ug/g    | 84       | 80-120    | 82          | 60-140       | 0         | 0-30             |
| 466779   | Moisture-Humidite              | <0.1 %      | 100      | 80-120    |             |              | 4         |                  |
| 466780   | Sodium Adsorption Ratio        | <0.01       |          |           |             |              | 4         |                  |
| 466784   | Chromium VI                    | <0.2 ug/g   | 71       | 70-130    | 98          | 70-130       | 0         | 0-35             |
| 466787   | Boron (Hot Water Soluble)      | <0.25 ug/g  | 103      | 70-130    | 106         | 60-140       | 0         | 0-30             |

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Client: Blastek Eng. Group

1550 Laperriere Avenue  
Ottawa, ON

K1Z 7T2

Attention: Mr Marc Orfali  
PO#:

B040048

Invoice to: Blastek Engineering Group

Report Number: 3011336  
Date Submitted: 2024-10-02  
Date Reported: 2024-10-09  
Project: Manotick Main St.  
COC #: 916869  
B040048 - 5580**Quality Assurance Summary**

| Batch No | Analyte       | Blank      | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|---------------|------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466809   | Chromium VI   | <0.20 ug/g | 100      | 70-130    | 89          | 70-130       | 0         | 0-35             |
| 466813   | PHC's F2-Naph |            |          |           |             |              |           |                  |
| 466816   | PHC's F2-Naph |            |          |           |             |              |           |                  |
| 466818   | PHC's F3-PAH  |            |          |           |             |              |           |                  |

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**Environment Testing**

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
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 Attention: Mr Marc Orfali  
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 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

**Test Summary**

| Batch No | Analyte                     | Instrument | Preparation Date | Analysis Date | Analyst | Method    |
|----------|-----------------------------|------------|------------------|---------------|---------|-----------|
| 466529   | Methlynaphthalene, 1-       | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Methlynaphthalene, 2-       | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Acenaphthene                | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Acenaphthylene              | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Anthracene                  | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Benz[a]anthracene           | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Benzo[a]pyrene              | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Benzo[b]fluoranthene        | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Benzo[ghi]perylene          | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Benzo[k]fluoranthene        | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Chrysene                    | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Dibenz[a h]anthracene       | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Fluoranthene                | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Fluorene                    | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Indeno[1 2 3-cd]pyrene      | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Naphthalene                 | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Phenanthrene                | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466529   | Pyrene                      | GC-MS      | 2024-10-02       | 2024-10-02    | C_M     | P 8270    |
| 466550   | pH - CaCl2                  | pH Meter   | 2024-10-02       | 2024-10-02    | M_B     | AG Soil   |
| 466565   | PHC's F2                    | GC/FID     | 2024-10-02       | 2024-10-02    | H_S     | CCME      |
| 466565   | PHC's F3                    | GC/FID     | 2024-10-02       | 2024-10-02    | H_S     | CCME      |
| 466565   | PHC's F4                    | GC/FID     | 2024-10-02       | 2024-10-02    | H_S     | CCME      |
| 466565   | Moisture-Humidite           | Oven       | 2024-10-02       | 2024-10-02    | H_S     | ASTM 2216 |
| 466566   | PHC's F2                    | GC/FID     | 2024-10-02       | 2024-10-02    | H_S     | CCME      |
| 466566   | PHC's F3                    | GC/FID     | 2024-10-02       | 2024-10-02    | H_S     | CCME      |
| 466566   | PHC's F4                    | GC/FID     | 2024-10-02       | 2024-10-02    | H_S     | CCME      |
| 466566   | Moisture-Humidite           | Oven       | 2024-10-02       | 2024-10-02    | H_S     | ASTM 2216 |
| 466578   | 1+2-methylnaphthalene       | GC-MS      | 2024-10-03       | 2024-10-03    | C_M     | P 8270    |
| 466599   | Tetrachloroethane, 1,1,1,2- | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B   |
| 466599   | Trichloroethane, 1,1,1-     | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B   |
| 466599   | Tetrachloroethane, 1,1,2,2- | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B   |
| 466599   | Trichloroethane, 1,1,2-     | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B   |

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**Environment Testing**

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

***Test Summary***

| Batch No | Analyte                        | Instrument | Preparation Date | Analysis Date | Analyst | Method  |
|----------|--------------------------------|------------|------------------|---------------|---------|---------|
| 466599   | Dichloroethane, 1,1-           | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichloroethylene, 1,1-         | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichlorobenzene, 1,2-          | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichloroethane, 1,2-           | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichloropropane, 1,2-          | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichlorobenzene, 1,3-          | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichlorobenzene, 1,4-          | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Acetone                        | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Benzene                        | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Bromodichloromethane           | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Bromoform                      | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Bromomethane                   | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichloroethylene, 1,2-cis-     | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichloropropene, 1,3-cis-      | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Carbon Tetrachloride           | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Chloroform                     | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dibromochloromethane           | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichlorodifluoromethane        | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Methylene Chloride             | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Ethylbenzene                   | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Ethylene dibromide             | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Hexane (n)                     | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Xylene, m/p-                   | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Methyl Ethyl Ketone            | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Methyl Isobutyl Ketone         | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Methyl tert-Butyl Ether (MTBE) | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Chlorobenzene                  | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Xylene, o-                     | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Styrene                        | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichloroethylene, 1,2-trans-   | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Dichloropropene, 1,3-trans-    | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Tetrachloroethylene            | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |
| 466599   | Toluene                        | GC-MS      | 2024-10-01       | 2024-10-03    | SS      | V 8260B |

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## Environment Testing

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 1550 Laperriere Avenue  
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Report Number: 3011336  
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 Project: Manotick Main St.  
 COC #: 916869

### **Test Summary**

| Batch No | Analyte                | Instrument         | Preparation Date | Analysis Date | Analyst | Method               |
|----------|------------------------|--------------------|------------------|---------------|---------|----------------------|
| 466599   | Trichloroethylene      | GC-MS              | 2024-10-01       | 2024-10-03    | SS      | V 8260B              |
| 466599   | Trichlorofluoromethane | GC-MS              | 2024-10-01       | 2024-10-03    | SS      | V 8260B              |
| 466599   | Vinyl Chloride         | GC-MS              | 2024-10-01       | 2024-10-03    | SS      | V 8260B              |
| 466601   | PHC's F1               | GC/FID             | 2024-10-01       | 2024-10-03    | SS      | CCME                 |
| 466602   | Xylene Mixture         | GC-MS              | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466603   | Dichloropropene,1,3-   | GC-MS              | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466604   | PHC's F1-BTEX          | GC/FID             | 2024-10-03       | 2024-10-03    | SS      | CCME                 |
| 466619   | Silver                 | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Arsenic                | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Boron (total)          | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Barium                 | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Beryllium              | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Cadmium                | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Cobalt                 | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Chromium Total         | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Copper                 | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Mercury                | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Molybdenum             | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Nickel                 | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Lead                   | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Antimony               | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Selenium               | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Thallium               | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Uranium                | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Vanadium               | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466619   | Zinc                   | ICAPQ-MS           | 2024-10-03       | 2024-10-03    | AaN     | EPA 200.8/6020       |
| 466690   | 1+2-methylnaphthalene  | GC-MS              | 2024-10-07       | 2024-10-07    | C_M     | P 8270               |
| 466695   | Chromium VI            | Ion Chromatography | 2024-10-04       | 2024-10-04    | AET     | SM3500-CR C,EPA 3060 |
| 466721   | pH - CaCl2             | pH Meter           | 2024-10-07       | 2024-10-07    | M_B     | AG Soil              |
| 466722   | Silver                 | ICAPQ-MS           | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020       |
| 466722   | Arsenic                | ICAPQ-MS           | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020       |
| 466722   | Boron (total)          | ICAPQ-MS           | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020       |
| 466722   | Barium                 | ICAPQ-MS           | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020       |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### ***Test Summary***

| Batch No | Analyte                   | Instrument | Preparation Date | Analysis Date | Analyst | Method         |
|----------|---------------------------|------------|------------------|---------------|---------|----------------|
| 466722   | Beryllium                 | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Cadmium                   | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Cobalt                    | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Chromium Total            | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Copper                    | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Mercury                   | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Molybdenum                | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Nickel                    | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Lead                      | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Antimony                  | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Selenium                  | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Thallium                  | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Uranium                   | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Vanadium                  | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466722   | Zinc                      | ICAPQ-MS   | 2024-10-07       | 2024-10-07    | AaN     | EPA 200.8/6020 |
| 466723   | Boron (Hot Water Soluble) | iCAP OES   | 2024-10-07       | 2024-10-07    | Z_S     | MOECC E3470    |
| 466735   | Methlynaphthalene, 1-     | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Methlynaphthalene, 2-     | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Acenaphthene              | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Acenaphthylene            | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Anthracene                | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Benz[a]anthracene         | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Benzo[a]pyrene            | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Benzo[b]fluoranthene      | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Benzo[ghi]perylene        | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Benzo[k]fluoranthene      | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Chrysene                  | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Dibenz[a h]anthracene     | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Fluoranthene              | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Fluorene                  | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Indeno[1 2 3-cd]pyrene    | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Naphthalene               | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |
| 466735   | Phenanthrene              | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270         |

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**Environment Testing**

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

***Test Summary***

| Batch No | Analyte                        | Instrument | Preparation Date | Analysis Date | Analyst | Method  |
|----------|--------------------------------|------------|------------------|---------------|---------|---------|
| 466735   | Pyrene                         | GC-MS      | 2024-10-07       | 2024-10-07    | C_M     | P 8270  |
| 466741   | 1+2-methylnaphthalene          | GC-MS      | 2024-10-08       | 2024-10-08    | C_M     | P 8270  |
| 466754   | Tetrachloroethane, 1,1,1,2-    | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Trichloroethane, 1,1,1-        | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Tetrachloroethane, 1,1,2,2-    | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Trichloroethane, 1,1,2-        | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloroethane, 1,1-           | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloroethylene, 1,1-         | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichlorobenzene, 1,2-          | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloroethane, 1,2-           | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloropropane, 1,2-          | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichlorobenzene, 1,3-          | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichlorobenzene, 1,4-          | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Acetone                        | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Benzene                        | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Bromodichloromethane           | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Bromoform                      | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Bromomethane                   | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloroethylene, 1,2-cis-     | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloropropene, 1,3-cis-      | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Carbon Tetrachloride           | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Chloroform                     | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dibromochloromethane           | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichlorodifluoromethane        | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Methylene Chloride             | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Ethylbenzene                   | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Ethylene dibromide             | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Hexane (n)                     | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Xylene, m/p-                   | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Methyl Ethyl Ketone            | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Methyl Isobutyl Ketone         | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Methyl tert-Butyl Ether (MTBE) | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Chlorobenzene                  | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### **Test Summary**

| Batch No | Analyte                      | Instrument | Preparation Date | Analysis Date | Analyst | Method  |
|----------|------------------------------|------------|------------------|---------------|---------|---------|
| 466754   | Xylene, o-                   | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Styrene                      | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloroethylene, 1,2-trans- | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Dichloropropene, 1,3-trans-  | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Tetrachloroethylene          | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Toluene                      | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Trichloroethylene            | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Trichlorofluoromethane       | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466754   | Vinyl Chloride               | GC-MS      | 2024-10-04       | 2024-10-04    | SS      | V 8260B |
| 466755   | Tetrachloroethane, 1,1,1,2-  | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Trichloroethane, 1,1,1-      | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Tetrachloroethane, 1,1,2,2-  | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Trichloroethane, 1,1,2-      | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichloroethane, 1,1-         | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichloroethylene, 1,1-       | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichlorobenzene, 1,2-        | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichloroethane, 1,2-         | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichloropropane, 1,2-        | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichlorobenzene, 1,3-        | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichlorobenzene, 1,4-        | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Acetone                      | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Benzene                      | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Bromodichloromethane         | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Bromoform                    | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Bromomethane                 | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichloroethylene, 1,2-cis-   | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichloropropene, 1,3-cis-    | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Carbon Tetrachloride         | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Chloroform                   | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dibromochloromethane         | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Dichlorodifluoromethane      | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Methylene Chloride           | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |
| 466755   | Ethylbenzene                 | GC-MS      | 2024-10-03       | 2024-10-03    | SS      | V 8260B |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
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Report Number: 3011336  
 Date Submitted: 2024-10-02  
 Date Reported: 2024-10-09  
 Project: Manotick Main St.  
 COC #: 916869

### **Test Summary**

| Batch No | Analyte                        | Instrument                    | Preparation Date | Analysis Date | Analyst | Method               |
|----------|--------------------------------|-------------------------------|------------------|---------------|---------|----------------------|
| 466755   | Ethylene dibromide             | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Hexane (n)                     | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Xylene, m/p-                   | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Methyl Ethyl Ketone            | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Methyl Isobutyl Ketone         | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Methyl tert-Butyl Ether (MTBE) | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Chlorobenzene                  | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Xylene, o-                     | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Styrene                        | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Dichloroethylene, 1,2-trans-   | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Dichloropropene, 1,3-trans-    | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Tetrachloroethylene            | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Toluene                        | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Trichloroethylene              | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Trichlorofluoromethane         | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466755   | Vinyl Chloride                 | GC-MS                         | 2024-10-03       | 2024-10-03    | SS      | V 8260B              |
| 466764   | PHC's F1                       | GC/FID                        | 2024-10-04       | 2024-10-08    | SS      | CCME                 |
| 466766   | Xylene Mixture                 | GC-MS                         | 2024-10-08       | 2024-10-08    | SS      | V 8260B              |
| 466767   | Dichloropropene, 1,3-          | GC-MS                         | 2024-10-08       | 2024-10-08    | SS      | V 8260B              |
| 466769   | PHC's F1-BTEX                  | GC/FID                        | 2024-10-08       | 2024-10-08    | SS      | CCME                 |
| 466774   | Electrical Conductivity        | Electrical Conductivity Meter | 2024-10-08       | 2024-10-08    | Z_S     | Cond-Soil            |
| 466775   | Cyanide (CN-)                  | Skalar CN Analyzer            | 2024-10-08       | 2024-10-08    | Z_S     | MOECC E3015          |
| 466776   | PHC's F2                       | GC/FID                        | 2024-10-08       | 2024-10-08    | ACN     | CCME                 |
| 466776   | PHC's F3                       | GC/FID                        | 2024-10-08       | 2024-10-08    | ACN     | CCME                 |
| 466776   | PHC's F4                       | GC/FID                        | 2024-10-08       | 2024-10-08    | ACN     | CCME                 |
| 466776   | Moisture-Humidite              | Oven                          | 2024-10-08       | 2024-10-08    | ACN     | ASTM 2216            |
| 466779   | PHC's F2                       | GC/FID                        | 2024-10-08       | 2024-10-08    | ACN     | CCME                 |
| 466779   | PHC's F3                       | GC/FID                        | 2024-10-08       | 2024-10-08    | ACN     | CCME                 |
| 466779   | PHC's F4                       | GC/FID                        | 2024-10-08       | 2024-10-08    | ACN     | CCME                 |
| 466779   | Moisture-Humidite              | Oven                          | 2024-10-08       | 2024-10-08    | ACN     | ASTM 2216            |
| 466780   | Sodium Adsorption Ratio        | iCAP OES                      | 2024-10-08       | 2024-10-08    | Z_S     | Ag Soil              |
| 466784   | Chromium VI                    | Ion Chromatography            | 2024-10-08       | 2024-10-08    | AnK     | SM3500-CR C,EPA 3060 |
| 466787   | Boron (Hot Water Soluble)      | iCAP OES                      | 2024-10-08       | 2024-10-08    | Z_S     | MOECC E3470          |

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## Environment Testing

Client: Blastek Eng. Group Report Number: 3011336  
 1550 Laperriere Avenue Date Submitted: 2024-10-02  
 Ottawa, ON Date Reported: 2024-10-09  
 K1Z 7T2 Project: B040048 - 5580  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group COC #: 916869

***Test Summary***

| Batch No | Analyte       | Instrument | Preparation Date | Analysis Date | Analyst | Method         |
|----------|---------------|------------|------------------|---------------|---------|----------------|
| 466809   | Chromium VI   | FAA        | 2024-10-09       | 2024-10-09    | MW      | M US EPA 3060A |
| 466813   | PHC's F2-Naph | GC/FID     | 2024-10-09       | 2024-10-09    | PJ      | CCME           |
| 466816   | PHC's F2-Naph | GC/FID     | 2024-10-09       | 2024-10-09    | PJ      | CCME           |
| 466818   | PHC's F3-PAH  | GC/FID     | 2024-10-09       | 2024-10-09    | PJ      | CCME           |

Results relate only to the parameters tested on the samples submitted.  
 Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

## Environment Testing

Client: Blastek Eng. Group  
1550 Laperriere Avenue  
Ottawa, ON  
K1Z 7T2  
Attention: Mr Marc Orfali  
PO#: B040048  
Invoice to: Blastek Engineering Group

Report Number: 3011336  
Date Submitted: 2024-10-02  
Date Reported: 2024-10-09  
Project: Manotick Main St.  
COC #: 916869  
B040048 - 5580

**CWS for Petroleum Hydrocarbons in Soil - Tier 1****Notes:**

1. The laboratory method complies with CCME Tier 1 reference method for PHC in soil. It is validated for laboratory use.
2. Where the F1 fraction (C6 to C10) and BTEX are both measured, F1-BTEX is reported.
3. Where the F2 fraction (C10 to C16) and naphthalene are both measured, F2-naphthalene is reported.
4. Where the F3 fraction (C16 to C34) and PAHs\* are both measured, F3-PAH is reported.
5. F4G is analyzed if the chromatogram does not descend to baseline before C50. Where F4 (C34 to C50) and F4G are both reported, the higher result is compared to the standard.
6. Unless otherwise stated in the sample comments, the following criteria have been met where applicable:
  - nC6 and nC10 response factors within 30% of response factor for toluene;
  - nC10, nC16, and nC34 response factors within 10% of each other;
  - C50 response factors within 70% of nC10 + nC16 + nC34 average; and,
  - Linearity is within 15%.
7. Unless otherwise stated in the sample comments, sampling requirements and analytical holding times have been met.
8. Gravimetric heavy hydrocarbons (F4G) cannot be added to the C6 and C50 hydrocarbons.
9. \*PAHs = phenanthrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene and pyrene.

Results relate only to the parameters tested on the samples submitted.  
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

146 Colpoyside Road, Unit 23, Ottawa, ON, K2B 2Y1 - Phone: 613-222-5692, Fax: 613-227-3222

3011334

| CLIENT INFORMATION   |  |   |   | INVOICE INFORMATION (SAME AS CLIENT INFORMATION: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> ) |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
|--|--|---|---|--|--|---|---|-------------------------------------|-------------------------------------|-----------------------|--|------------|--|-----------------------|---------------|-----------------|--------------------|--|------------------------|--|--|--|--|--|--|--|--|--|---------|------|------|------|------|---------------------|-------------|--|--|--|---------|---------|--------|---|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|--|------------|---------|---------|--|---|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|--|----|---------|-----|--|---|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|--|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|--|------|--|-----------|--|-----------|-----------|--|-------------------------|--|--|--|------------|--|--|--|--|----------------------|--|--|--|------------|--|--|--------------------|--|--|--|------------|--|----|--|--|--|--|--|--|--|---|--|
| Company: Blaster   | Contact: Marc Orfali                   | Address: SAME AS PROJECT                | Telephone: 5580 Manotick Main St                        | Company:   | Fax:   | Contact:  | Email: #1:  |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Address:   | Telephone:                             | Address:                                | Telephone:  | Address:   | Telephone:   | Address:  | Email: #2:  |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Telephone:   | Cell:                                  | Telephone:                              | PO #: BO40048   | Telephone:   | PO #: BO40048  | Telephone:  | PO #:   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Email: #1:   |  |   |   | REGULATION/GUIDELINE REQUIRED  |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Email: #2:   |  |   |   | <input type="checkbox"/> Sanitary Sewer, City: _____   | <input checked="" type="checkbox"/> O. Reg 153                         | <p>The sample results from this submission will form part of a formal Record of Site Condition (RSC) under O. Reg. 153/04. Analysis of full parameter list only<br/>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Project: BO40048 - 5580 Manotick Main St Quote #: 142334/142080  |  |   |   | <input type="checkbox"/> Storm Sewer, City: _____  | <input type="checkbox"/> O. Reg 406 Excess Soils                       |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| TURN-AROUND TIME (Business Days)   |  |   |   | <input type="checkbox"/> ODWSOG (Use DW CoC if analyzing drinking water)   | <input type="checkbox"/> Table # 3 Coarse / Fine, Surface / Subsurface |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| <input type="checkbox"/> 1 Day* (100%)   | <input type="checkbox"/> 2 Day** (50%) | <input type="checkbox"/> 3-5 Days (25%) | <input checked="" type="checkbox"/> 5-7 Days (Standard) | <input type="checkbox"/> PWQO  | Type: Com-Ind / Res-Park / Agri / GW                                   |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Please contact Lab in advance to determine rush availability.<br>*For results reported after rush due date, surcharges will apply: before 12:00 - 100%, after 12:00 - 50%.   |  |   |   | <input type="checkbox"/> O. Reg 347  | All Other / Sediment   |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| **For results reported after rush due date, surcharges will apply: before 12:00 - 50%, after 12:00 - 25%.  |  |   |   | <input type="checkbox"/> Other: _____  |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| <p>The optimal temperature conditions during transport should be less than 10°C. Sample(s) cannot be frozen, unless otherwise indicated or agreed upon with the Laboratory. Note that this COC is not to be used for drinking water samples. The COC must be complete upon submission of the samples, there will be a \$25 surcharge if required information is missing (required fields are shaded in grey).</p> <table border="1"> <thead> <tr> <th colspan="2">Sample ID</th> <th colspan="2">Date/Time Collected</th> <th colspan="6">Sample Details</th> <th rowspan="2">RN#<br/>(Lab Use Only)</th> </tr> <tr> <th>Sample Matrix</th> <th># of Containers</th> <th colspan="2">Field Filtered --&gt;</th> <th colspan="4">O. Reg. 153 parameters</th> <th colspan="2"></th> <th colspan="2"></th> </tr> <tr> <th></th> <th></th> <th>PFH1-F4</th> <th>BTEX</th> <th>VOCs</th> <th>PAHs</th> <th>PCBs</th> <th>Metals + Inorganics</th> <th>Metals only</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>BH24-01</td> <td>SS1 SS2</td> <td>Oct. 1</td> <td>5</td> <td>4</td> <td><input checked="" type="checkbox"/></td> <td></td> <td></td> <td>17450 (00)</td> </tr> <tr> <td>BH24-01</td> <td>SS3 SS4</td> <td></td> <td>5</td> <td>4</td> <td><input checked="" type="checkbox"/></td> <td></td> <td></td> <td>01</td> </tr> <tr> <td>BL24-03</td> <td>SS6</td> <td></td> <td>5</td> <td>4</td> <td><input checked="" type="checkbox"/></td> <td></td> <td></td> <td>02</td> </tr> <tr> <td></td> </tr> <tr> <td></td> </tr> <tr> <td></td> </tr> <tr> <td></td> </tr> <tr> <td></td> </tr> <tr> <td></td> </tr> <tr> <td></td> </tr> <tr> <td colspan="2">PRINT</td> <td colspan="2">SIGN</td> <td colspan="2">DATE/TIME</td> <td>TEMP (°C)</td> <td colspan="2">COMMENTS:</td> </tr> <tr> <td>Sampled By: Marc Orfali</td> <td></td> <td colspan="2"></td> <td colspan="2">Oct. 1 8am</td> <td></td> <td colspan="2" rowspan="3"></td> </tr> <tr> <td>Relinquished By: " "</td> <td></td> <td colspan="2"></td> <td colspan="2">Oct. 1 5pm</td> <td></td> </tr> <tr> <td>Received By: SSM S</td> <td></td> <td colspan="2"></td> <td colspan="2">Oct. 1 5pm</td> <td>19</td> </tr> <tr> <td colspan="4"></td> <td colspan="2"></td> <td></td> <td colspan="2">CUSTODY SEAL: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> 4 packs submit <input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> </tbody> </table> |  |   |   | Sample ID  |  | Date/Time Collected   |   | Sample Details                      |                                     |                       |  |            |  | RN#<br>(Lab Use Only) | Sample Matrix | # of Containers | Field Filtered --> |  | O. Reg. 153 parameters |  |  |  |  |  |  |  |  |  | PFH1-F4 | BTEX | VOCs | PAHs | PCBs | Metals + Inorganics | Metals only |  |  |  | BH24-01 | SS1 SS2 | Oct. 1 | 5 | 4 | <input checked="" type="checkbox"/> |  |  | 17450 (00) | BH24-01 | SS3 SS4 |  | 5 | 4 | <input checked="" type="checkbox"/> |  |  | 01 | BL24-03 | SS6 |  | 5 | 4 | <input checked="" type="checkbox"/> |  |  | 02 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | PRINT |  | SIGN |  | DATE/TIME |  | TEMP (°C) | COMMENTS: |  | Sampled By: Marc Orfali |  |  |  | Oct. 1 8am |  |  |  |  | Relinquished By: " " |  |  |  | Oct. 1 5pm |  |  | Received By: SSM S |  |  |  | Oct. 1 5pm |  | 19 |  |  |  |  |  |  |  | CUSTODY SEAL: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> 4 packs submit <input type="checkbox"/> Yes <input type="checkbox"/> No |  |
| Sample ID  |  | Date/Time Collected                     |   | Sample Details   |  |   |   |                                     |                                     | RN#<br>(Lab Use Only) |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Sample Matrix  | # of Containers                        | Field Filtered -->                      |   | O. Reg. 153 parameters   |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
|  |  | PFH1-F4                                 | BTEX  | VOCs   | PAHs   | PCBs  | Metals + Inorganics   | Metals only                         |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| BH24-01  | SS1 SS2                                | Oct. 1                                  | 5   | 4  | <input checked="" type="checkbox"/>                                    | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  | 17450 (00) |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| BH24-01  | SS3 SS4                                |   | 5   | 4  | <input checked="" type="checkbox"/>                                    | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  | 01         |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| BL24-03  | SS6                                    |   | 5   | 4  | <input checked="" type="checkbox"/>                                    | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  | 02         |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
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|  |  |   |   |  |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
|  |  |   |   |  |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| PRINT  |  | SIGN                                    |   | DATE/TIME  |  | TEMP (°C)   | COMMENTS:   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Sampled By: Marc Orfali  |  |   |   | Oct. 1 8am   |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Relinquished By: " "   |  |   |   | Oct. 1 5pm   |  |   |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
| Received By: SSM S   |  |   |   | Oct. 1 5pm   |  | 19  |   |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |
|  |  |   |   |  |  |   | CUSTODY SEAL: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> 4 packs submit <input type="checkbox"/> Yes <input type="checkbox"/> No |                                     |                                     |                       |  |            |  |                       |               |                 |                    |  |                        |  |  |  |  |  |  |  |  |  |         |      |      |      |      |                     |             |  |  |  |         |         |        |   |   |                                     |                                     |                                     |                                     |                                     |  |  |            |         |         |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |         |     |  |   |   |                                     |                                     |                                     |                                     |                                     |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |  |      |  |           |  |           |           |  |                         |  |  |  |            |  |  |  |  |                      |  |  |  |            |  |  |                    |  |  |  |            |  |    |  |  |  |  |  |  |  |   |  |

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Client: Blastek Eng. Group  
1550 Laperriere Avenue  
Ottawa, ON  
K1Z 7T2  
Attention: Mr Marc Orfali  
PO#: B040048  
Invoice to: Blastek Engineering Group

Report Number: 3011429  
Date Submitted: 2024-10-03  
Date Reported: 2024-10-10  
Project: B040048 - 5580 Manotick Main St  
COC #: 916918

Page 1 of 7

**Dear Marc Orfali:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

Report Comments:

APPROVAL:

\_\_\_\_\_  
Emma-Dawn Ferguson, Chemist

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise indicated.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at: <https://directory.cala.ca/>.

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Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is accredited by the Ontario Ministry of Agriculture, Food, and Rural Affairs for specific tests in agricultural soils.

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline values listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official provincial or federal guideline as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

Eurofins\_multisample(L)44.rpt

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|                   |                           |       |       |           |        | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. | 1745198<br>R347<br><br>2024-10-02<br>BH24-04 SS5 TCLP |
|-------------------|---------------------------|-------|-------|-----------|--------|--|---|
| Group             | Analyte                   | MRL   | Units | Guideline |        |  |   |
| Anions            | F                         | 0.10  | mg/L  | LQC 150.0 | 0.17   |  |   |
| General Chemistry | Cyanide (free)            | 0.05  | mg/L  | LQC 20.0  | <0.05  |  |   |
| Leachate          | REG 558 Leach             |       |       |           | y      |  |   |
|                   | Zero Headspace Extraction |       |       |           | y      |  |   |
| Mercury           | Hg                        | 0.001 | mg/L  | LQC 0.1   | <0.001 |  |   |
| Metals            | Ag                        | 0.01  | mg/L  | LQC 5     | <0.01  |  |   |
|                   | As                        | 0.02  | mg/L  | LQC 2.5   | <0.02  |  |   |
|                   | B                         | 0.1   | mg/L  | LQC 500.0 | <0.1   |  |   |
|                   | Ba                        | 0.01  | mg/L  | LQC 100.0 | 0.91   |  |   |
|                   | Cd                        | 0.008 | mg/L  | LQC 0.5   | <0.008 |  |   |
|                   | Cr                        | 0.05  | mg/L  | LQC 5.0   | <0.05  |  |   |
|                   | Pb                        | 0.01  | mg/L  | LQC 5.0   | <0.01  |  |   |
|                   | Se                        | 0.02  | mg/L  | LQC 1.0   | <0.02  |  |   |
|                   | U                         | 0.01  | mg/L  | LQC 10.0  | <0.01  |  |   |
| Moisture          | Moisture-Humidite         | 0.1   | %     |           | 8.6    |  |   |
| Others            | NO2 + NO3 as N            | 1.0   | mg/L  | LQC 1000  | <1.0   |  |   |
| PAH               | 1-methylnaphthalene       | 0.1   | ug/L  |           | 0.8    |  |   |
|                   | 2-methylnaphthalene       | 0.1   | ug/L  |           | 1.0    |  |   |
|                   | Acenaphthene              | 0.1   | ug/L  |           | 0.7    |  |   |
|                   | Acenaphthylene            | 0.1   | ug/L  |           | 0.2    |  |   |
|                   | Anthracene                | 0.1   | ug/L  |           | 0.3    |  |   |
|                   | Benzo(a)anthracene        | 0.1   | ug/L  |           | <0.1   |  |   |
|                   | Benzo(a)pyrene            | 0.01  | ug/L  | LQC 1.0   | <0.01  |  |   |
|                   | Benzo(b)fluoranthene      | 0.05  | ug/L  |           | <0.05  |  |   |
|                   | Benzo(g,h,i)perylene      | 0.1   | ug/L  |           | <0.1   |  |   |

**Guideline = REG 558**

**\* = Guideline Exceedence**

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MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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| Group           | Analyte                   | MRL  | Units | Guideline  | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sampling Date<br>Sample I.D. | 1745198<br>R347<br><br>2024-10-02<br>BH24-04 SS5 TCLP |
|-----------------|---------------------------|------|-------|------------|--|---|
| PAH             | Benzo(k)fluoranthene      | 0.05 | ug/L  | <0.05      |  |   |
|                 | Chrysene                  | 0.05 | ug/L  | <0.05      |  |   |
|                 | Dibenzo(a,h)anthracene    | 0.1  | ug/L  | <0.1       |  |   |
|                 | Fluoranthene              | 0.1  | ug/L  | 0.3        |  |   |
|                 | Fluorene                  | 0.1  | ug/L  | 1.0        |  |   |
|                 | Indeno(1,2,3-c,d)pyrene   | 0.1  | ug/L  | <0.1       |  |   |
|                 | Naphthalene               | 0.1  | ug/L  | 2.9        |  |   |
|                 | Phenanthrene              | 0.1  | ug/L  | 1.9        |  |   |
|                 | Pyrene                    | 0.1  | ug/L  | 0.2        |  |   |
| VOCs Surrogates | 1,2-dichloroethane-d4     | 0    | %     | 101        |  |   |
|                 | 4-bromofluorobenzene      | 0    | %     | 87         |  |   |
|                 | Toluene-d8                | 0    | %     | 116        |  |   |
| Volatile        | 1,1-dichloroethylene      | 0.5  | ug/L  | LQC 1400   | <0.5   |   |
|                 | 1,2-dichlorobenzene       | 0.4  | ug/L  | LQC 20000  | <0.4   |   |
|                 | 1,2-dichloroethane        | 0.5  | ug/L  | LQC 500    | <0.5   |   |
|                 | 1,4-dichlorobenzene       | 0.4  | ug/L  | LQC 500    | <0.4   |   |
|                 | Benzene                   | 0.5  | ug/L  | LQC 500    | <0.5   |   |
|                 | Carbon Tetrachloride      | 0.2  | ug/L  | LQC 500    | <0.2   |   |
|                 | Chloroform                | 0.5  | ug/L  | LQC 10000  | <0.5   |   |
|                 | Dichloromethane           | 4.0  | ug/L  | LQC 5000   | <4.0   |   |
|                 | Methyl Ethyl Ketone (MEK) | 2    | ug/L  | LQC 200000 | <2   |   |
|                 | Monochlorobenzene         | 0.5  | ug/L  | LQC 8000   | <0.5   |   |
|                 | Tetrachloroethylene       | 0.3  | ug/L  | LQC 3000   | <0.3   |   |
|                 | Trichloroethylene         | 0.3  | ug/L  | LQC 5000   | <0.3   |   |
|                 | Vinyl Chloride            | 0.2  | ug/L  | LQC 200    | <0.2   |   |

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### QC Summary

| Analyte                | Blank                               | QC % Rec    | QC Limits |
|------------------------|-------------------------------------|-------------|-----------|
| Run No 465534          | Analysis/Extraction Date 2024-10-09 | Analyst C M |           |
| Method P 8270          |                                     |             |           |
| Methlynaphthalene, 1-  | <0.1 ug/L                           | 76          | 50-140    |
| Methlynaphthalene, 2-  | <0.1 ug/L                           | 72          | 50-140    |
| Acenaphthene           | <0.1 ug/L                           | 76          | 50-140    |
| Acenaphthylene         | <0.1 ug/L                           | 77          | 50-140    |
| Anthracene             | <0.1 ug/L                           | 79          | 50-140    |
| Benz[a]anthracene      | <0.1 ug/L                           | 74          | 50-140    |
| Benzo[a]pyrene         | <0.01 ug/L                          | 92          | 50-140    |
| Benzo[b]fluoranthene   | <0.05 ug/L                          | 61          | 50-140    |
| Benzo[ghi]perylene     | <0.1 ug/L                           | 85          | 50-140    |
| Benzo[k]fluoranthene   | <0.05 ug/L                          | 75          | 50-140    |
| Chrysene               | <0.05 ug/L                          | 81          | 50-140    |
| Dibenz[a h]anthracene  | <0.1 ug/L                           | 86          | 50-140    |
| Fluoranthene           | <0.1 ug/L                           | 85          | 50-140    |
| Fluorene               | <0.1 ug/L                           | 71          | 50-140    |
| Indeno[1 2 3-cd]pyrene | <0.1 ug/L                           | 85          | 50-140    |
| Naphthalene            | <0.1 ug/L                           | 72          | 50-140    |

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**QC Summary**

| Analyte  | Blank      | QC % Rec | QC Limits |
|--|------------|----------|-----------|
| Phenanthrene   | <0.1 ug/L  | 77       | 50-140    |
| Pyrene   | <0.1 ug/L  | 86       | 50-140    |
| <b>Run No</b> 466751 <b>Analysis/Extraction Date</b> 2024-10-08 <b>Analyst</b> M_B |            |          |           |
| <b>Method</b> ASTM 2216  |            |          |           |
| Moisture-Humidite  |            |          | 80-120    |
| <b>Run No</b> 466752 <b>Analysis/Extraction Date</b> 2024-10-08 <b>Analyst</b> M_B |            |          |           |
| <b>Method</b> EPA 1311/O. Reg 347  |            |          |           |
| REG 558 Leach  |            |          |           |
| Zero Headspace Extraction  |            |          |           |
| <b>Run No</b> 466802 <b>Analysis/Extraction Date</b> 2024-10-08 <b>Analyst</b> AsA |            |          |           |
| <b>Method</b> SM2320,2510,4500H/F  |            |          |           |
| F  | <0.10 mg/L | 98       | 90-110    |
| <b>Run No</b> 466823 <b>Analysis/Extraction Date</b> 2024-10-09 <b>Analyst</b> ZhL |            |          |           |
| <b>Method</b> EPA 8260   |            |          |           |
| Dichloroethylene, 1,1-   | <0.5 ug/L  | 100      | 60-130    |
| Dichlorobenzene, 1,2-  | <0.4 ug/L  | 95       | 60-130    |
| Dichloroethane, 1,2-   | <0.5 ug/L  | 105      | 60-130    |
| Dichlorobenzene, 1,4-  | <0.4 ug/L  | 93       | 60-130    |
| Benzene  | <0.5 ug/L  | 96       | 60-130    |

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**QC Summary**

| Analyte              | Blank                               | QC % Rec | QC Limits |
|----------------------|-------------------------------------|----------|-----------|
| Carbon Tetrachloride | <0.2 ug/L                           | 100      | 60-130    |
| Chloroform           | <0.5 ug/L                           | 102      | 60-130    |
| Methylene Chloride   | <4.0 ug/L                           | 106      | 60-130    |
| Methyl Ethyl Ketone  | <2 ug/L                             | 97       | 60-130    |
| Chlorobenzene        | <0.5 ug/L                           | 94       | 60-130    |
| Tetrachloroethylene  | <0.3 ug/L                           | 97       | 60-130    |
| Trichloroethylene    | <0.3 ug/L                           | 91       | 60-130    |
| Vinyl Chloride       | <0.2 ug/L                           | 97       | 60-130    |
| Run No 466836        | Analysis/Extraction Date 2024-10-09 | Analyst  | SD        |
| Method EPA 200.8     |                                     |          |           |
| Silver               | <0.01 mg/L                          | 100      | 70-130    |
| Arsenic              | <0.02 mg/L                          | 85       | 70-130    |
| Boron (total)        | <0.1 mg/L                           | 91       | 70-130    |
| Barium               | <0.01 mg/L                          | 83       | 70-130    |
| Cadmium              | <0.008 mg/L                         | 89       | 70-130    |
| Chromium Total       | <0.05 mg/L                          | 97       | 70-130    |
| Lead                 | <0.01 mg/L                          | 88       | 70-130    |
| Selenium             | <0.02 mg/L                          | 91       | 70-130    |

Guideline = REG 558

\* = Guideline Exceedence

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 Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011429  
 Date Submitted: 2024-10-03  
 Date Reported: 2024-10-10  
 Project: B040048 - 5580 Manotick Main St  
 COC #: 916918

**QC Summary**

| Analyte  | Blank       | QC % Rec | QC Limits |
|--|-------------|----------|-----------|
| Uranium  | <0.01 mg/L  | 77       | 70-130    |
| <b>Run No</b> 466839 <b>Analysis/Extraction Date</b> 2024-10-09 <b>Analyst</b> SuM |             |          |           |
| <b>Method</b> M SM3112B-3500B  |             |          |           |
| Mercury  | <0.001 mg/L | 105      | 76-123    |
| <b>Run No</b> 466851 <b>Analysis/Extraction Date</b> 2024-10-09 <b>Analyst</b> SKH |             |          |           |
| <b>Method</b> C SM4500-NO3-F   |             |          |           |
| NO <sub>2</sub> + NO <sub>3</sub> as N   | <1.0 mg/L   | 99       | 80-120    |
| <b>Run No</b> 466916 <b>Analysis/Extraction Date</b> 2024-10-10 <b>Analyst</b> Z S |             |          |           |
| <b>Method</b> SM4500-CNC/MOE E3015   |             |          |           |
| Cyanide (CN-)  | <0.05 mg/L  | 90       | 75-125    |

**Guideline = REG 558**

**\* = Guideline Exceedence**

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## Environment Testing

|             |   |                  |                   |
|-------------|---|------------------|-------------------|
| Client:     | Blastek Eng. Group<br>1550 Laperriere Avenue<br>Ottawa, ON<br>K1Z 7T2 | Report Number:   | 3011577           |
| Attention:  | Mr Marc Orfali  | Date Submitted:  | 2024-10-09        |
| Invoice to: | Blastek Engineering Group   | Date Reported:   | 2024-10-17        |
| PO#:        | B040048   | Project:         | Manotick Main St. |
|             |   | COC #:           | 917002            |
|             |   | Temperature (C): | 8                 |
|             |   | Custody Seal:    |                   |

Page 1 of 18

**Dear Marc Orfali:**

**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

***Sample Comment Summary***

Sample ID: 1745894 BH24-02 GW For all samples in this report, the metals spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

**Report Comments:**

Emma-Dawn Ferguson, Chemist

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated

Eurofins Environment Testing Canada Inc. is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at <https://directory.cala.ca/>

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

EETC Reg 153 Version 19.rpt

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

## O.Reg 153-T3-Non-Pot GW-Coarse

### Exceedence Summary

| Sample I.D.             | Analyte    | Result | Units | Criteria |
|-------------------------|------------|--------|-------|----------|
| Volatiles<br>BH24-04 GW | Chloroform | 11.7   | ug/L  | STD 2.4  |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: B040048 - 5580  
 917002

### Guideline = O.Reg 153-T3-Non-Pot GW-Coarse

#### Hydrocarbons

| Analyte       | Batch No | MRL | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sample Date<br>Sampling Time<br>Sample I.D. | 1745895<br>GW153 | 1745896<br>GW153 |
|---------------|----------|-----|-------|-----------|---|------------------|------------------|
| PHC's F1      | 467178   | 20  | ug/L  | STD 750   | 2024-10-08  | BH24-03<br>GW    | 2024-10-08       |
| PHC's F1-BTEX | 467181   | 20  | ug/L  |           |   | <20              | <20              |
| PHC's F2      | 467153   | 20  | ug/L  | STD 150   | <20   |                  |                  |
|               | 467195   | 20  | ug/L  | STD 150   |   | <20              |                  |
| PHC's F2-Naph | 467196   | 20  | ug/L  |           |   |                  | <20              |
| PHC's F3      | 467153   | 50  | ug/L  | STD 500   | <50   |                  |                  |
|               | 467195   | 50  | ug/L  | STD 500   |   | <50              |                  |
| PHC's F3-PAH  | 467197   | 50  | ug/L  |           |   |                  | <50              |
| PHC's F4      | 467153   | 50  | ug/L  | STD 500   | <50   |                  |                  |
|               | 467195   | 50  | ug/L  | STD 500   |   | <50              |                  |

#### Metals

| Analyte        | Batch No | MRL | Units | Guideline | Lab I.D.<br>Sample Matrix<br>Sample Type<br>Sample Date<br>Sampling Time<br>Sample I.D. | 1745894<br>GW153 | 1745896<br>GW153 | 1746192<br>GW153<br>-<br>2024-10-09 |
|----------------|----------|-----|-------|-----------|---|------------------|------------------|-------------------------------------|
| Antimony       | 466960   | 0.5 | ug/L  | STD 20000 | 2024-10-08  | BH24-02<br>GW    | 2024-10-08       |                                     |
| Arsenic        | 466960   | 1   | ug/L  | STD 1900  |   | <1               | <1               | <1                                  |
| Barium         | 466960   | 10  | ug/L  | STD 29000 |   | 30               | 20               | 20                                  |
| Beryllium      | 466960   | 0.5 | ug/L  | STD 67    |   | <0.5             | <0.5             | <0.5                                |
| Boron (total)  | 466960   | 10  | ug/L  | STD 45000 |   | 60               | 40               | 30                                  |
| Cadmium        | 466960   | 0.1 | ug/L  | STD 2.7   |   | <0.1             | <0.1             | <0.1                                |
| Chromium Total | 466960   | 1   | ug/L  | STD 810   |   | <1               | <1               | <1                                  |
| Cobalt         | 466960   | 0.2 | ug/L  | STD 66    |   | 1.9              | 0.6              | 0.5                                 |
| Copper         | 466960   | 1   | ug/L  | STD 87    |   | 3                | 3                | 2                                   |

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## Environment Testing

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 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: B040048 - 5580  
 917002

### Guideline = O.Reg 153-T3-Non-Pot GW-Coarse

#### Metals

| Analyte    | Batch No | MRL  | Units | Guideline   | Lab I.D.      | 1745894<br>GW153 | 1745896<br>GW153 | 1746192<br>GW153 |
|------------|----------|------|-------|-------------|---------------|------------------|------------------|------------------|
|            |          |      |       |             | Sample Matrix | 2024-10-08       | 2024-10-08       | -                |
| Lead       | 466960   | 1    | ug/L  | STD 25      | BH24-02<br>GW | <1               | <1               | <1               |
| Mercury    | 467022   | 0.1  | ug/L  | STD 0.29    |               |                  | <0.1             | <0.1             |
| Molybdenum | 466960   | 5    | ug/L  | STD 9200    | 28            | 22               | 23               |                  |
| Nickel     | 466960   | 5    | ug/L  | STD 490     | <5            | <5               | <5               |                  |
| Selenium   | 466960   | 1    | ug/L  | STD 63      | <1            | <1               | <1               |                  |
| Silver     | 466960   | 0.1  | ug/L  | STD 1.5     | <0.1          | <0.1             | <0.1             |                  |
| Sodium     | 467010   | 1000 | ug/L  | STD 2300000 | 64000         | 36000            | 36000            |                  |
| Thallium   | 466960   | 0.1  | ug/L  | STD 510     | <0.1          | <0.1             | <0.1             |                  |
| Uranium    | 466960   | 1    | ug/L  | STD 420     | 1             | 3                | 3                |                  |
| Vanadium   | 466960   | 1    | ug/L  | STD 250     | <1            | <1               | <1               |                  |
| Zinc       | 466960   | 10   | ug/L  | STD 1100    | <10           | <10              | <10              |                  |

#### Others

| Analyte     | Batch No | MRL | Units | Guideline | Lab I.D.      | 1745896<br>GW153 | 1746192<br>GW153 |
|-------------|----------|-----|-------|-----------|---------------|------------------|------------------|
|             |          |     |       |           | Sample Matrix | 2024-10-08       | -                |
| Chromium VI | 467006   | 1   | ug/L  | STD 140   | BH24-04<br>GW | 1                | 7                |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002  
 B040048 - 5580

### Guideline = O.Reg 153-T3-Non-Pot GW-Coarse

#### PAH

Lab I.D. 1745896  
 Sample Matrix GW153  
 Sample Type  
 Sample Date 2024-10-08  
 Sampling Time  
 Sample I.D. BH24-04  
 GW

| Analyte                | Batch No | MRL  | Units | Guideline |       |
|------------------------|----------|------|-------|-----------|-------|
| 1+2-methylnaphthalene  | 467168   | 0.1  | ug/L  | STD 1800  | <0.1  |
| Acenaphthene           | 465534   | 0.1  | ug/L  | STD 600   | <0.1  |
| Acenaphthylene         | 465534   | 0.1  | ug/L  | STD 1.8   | <0.1  |
| Anthracene             | 465534   | 0.1  | ug/L  | STD 2.4   | <0.1  |
| Benz[a]anthracene      | 465534   | 0.1  | ug/L  | STD 4.7   | <0.1  |
| Benzo[a]pyrene         | 465534   | 0.01 | ug/L  | STD 0.81  | <0.01 |
| Benzo[b]fluoranthene   | 465534   | 0.05 | ug/L  | STD 0.75  | <0.05 |
| Benzo[ghi]perylene     | 465534   | 0.1  | ug/L  | STD 0.2   | <0.1  |
| Benzo[k]fluoranthene   | 465534   | 0.05 | ug/L  | STD 0.4   | <0.05 |
| Chrysene               | 465534   | 0.05 | ug/L  | STD 1     | <0.05 |
| Dibenz[a h]anthracene  | 465534   | 0.1  | ug/L  | STD 0.52  | <0.1  |
| Fluoranthene           | 465534   | 0.1  | ug/L  | STD 130   | <0.1  |
| Fluorene               | 465534   | 0.1  | ug/L  | STD 400   | <0.1  |
| Indeno[1 2 3-cd]pyrene | 465534   | 0.1  | ug/L  | STD 0.2   | <0.1  |
| Methylnaphthalene, 1-  | 465534   | 0.1  | ug/L  | STD 1800  | <0.1  |
| Methylnaphthalene, 2-  | 465534   | 0.1  | ug/L  | STD 1800  | <0.1  |
| Naphthalene            | 465534   | 0.1  | ug/L  | STD 1400  | <0.1  |
| Phenanthrene           | 465534   | 0.1  | ug/L  | STD 580   | <0.1  |
| Pyrene                 | 465534   | 0.1  | ug/L  | STD 68    | <0.1  |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

### Guideline = O.Reg 153-T3-Non-Pot GW-Coarse

#### Volatiles

| Analyte                      | Batch No | MRL | Units | Lab I.D.      | 1745894<br>GW153 | 1745895<br>GW153 | 1745896<br>GW153 |
|------------------------------|----------|-----|-------|---------------|------------------|------------------|------------------|
|                              |          |     |       | Sample Matrix | Sample Type      | Sample Date      | Sampling Time    |
|                              |          |     |       |               | 2024-10-08       | 2024-10-08       | 2024-10-08       |
|                              |          |     |       |               | BH24-02<br>GW    | BH24-03<br>GW    | BH24-04<br>GW    |
| 1,3,5-trimethylbenzene       | 467183   | 0.3 | ug/L  |               | <0.3             |                  |                  |
| Acetone                      | 467183   | 5   | ug/L  | STD 130000    | <5               | <5               | <5               |
| Benzene                      | 467183   | 0.5 | ug/L  | STD 44        | <0.5             | <0.5             | <0.5             |
| Bromodichloromethane         | 467183   | 0.3 | ug/L  | STD 85000     | <0.3             | <0.3             | 0.7              |
| Bromoform                    | 467183   | 0.4 | ug/L  | STD 380       | <0.4             | <0.4             | <0.4             |
| Bromomethane                 | 467183   | 0.5 | ug/L  | STD 5.6       | <0.5             | <0.5             | <0.5             |
| Carbon Tetrachloride         | 467183   | 0.2 | ug/L  | STD 0.79      | <0.2             | <0.2             | <0.2             |
| Chlorobenzene                | 467183   | 0.5 | ug/L  | STD 630       | <0.5             | <0.5             | <0.5             |
| Chloroethane                 | 467183   | 0.5 | ug/L  |               | <0.5             |                  |                  |
| Chloroform                   | 467183   | 0.5 | ug/L  | STD 2.4       | <0.5             | <0.5             | 11.7*            |
| Dibromochloromethane         | 467183   | 0.3 | ug/L  | STD 82000     | <0.3             | <0.3             | <0.3             |
| Dichlorobenzene, 1,2-        | 467183   | 0.4 | ug/L  | STD 4600      | <0.4             | <0.4             | <0.4             |
| Dichlorobenzene, 1,3-        | 467183   | 0.4 | ug/L  | STD 9600      | <0.4             | <0.4             | <0.4             |
| Dichlorobenzene, 1,4-        | 467183   | 0.4 | ug/L  | STD 8         | <0.4             | <0.4             | <0.4             |
| Dichlorodifluoromethane      | 467183   | 0.5 | ug/L  | STD 4400      | <0.5             | <0.5             | <0.5             |
| Dichloroethane, 1,1-         | 467183   | 0.4 | ug/L  | STD 320       | <0.4             | <0.4             | <0.4             |
| Dichloroethane, 1,2-         | 467183   | 0.5 | ug/L  | STD 1.6       | <0.5             | <0.5             | <0.5             |
| Dichloroethylene, 1,1-       | 467183   | 0.5 | ug/L  | STD 1.6       | <0.5             | <0.5             | <0.5             |
| Dichloroethylene, 1,2-cis-   | 467183   | 0.4 | ug/L  | STD 1.6       | <0.4             | <0.4             | <0.4             |
| Dichloroethylene, 1,2-trans- | 467183   | 0.4 | ug/L  | STD 1.6       | <0.4             | <0.4             | <0.4             |
| Dichloropropane, 1,2-        | 467183   | 0.5 | ug/L  | STD 16        | <0.5             | <0.5             | <0.5             |
| Dichloropropene, 1,3-        | 467188   | 0.5 | ug/L  | STD 5.2       | <0.5             | <0.5             | <0.5             |
| Dichloropropene, 1,3-cis-    | 467183   | 0.5 | ug/L  |               | <0.5             | <0.5             | <0.5             |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

### Guideline = O.Reg 153-T3-Non-Pot GW-Coarse

#### Volatiles

| Analyte                        | Batch No | MRL | Units | Lab I.D.      | 1745894<br>GW153 | 1745895<br>GW153 | 1745896<br>GW153 |
|--------------------------------|----------|-----|-------|---------------|------------------|------------------|------------------|
|                                |          |     |       | Sample Matrix |                  |                  |                  |
|                                |          |     |       | Sample Type   | Sample Date      | Sampling Time    | Sample I.D.      |
|                                |          |     |       |               |                  |                  |                  |
| Dichloropropene,1,3-trans-     | 467183   | 0.5 | ug/L  |               | <0.5             | <0.5             | <0.5             |
| Ethylbenzene                   | 467183   | 0.5 | ug/L  | STD 2300      | <0.5             | <0.5             | <0.5             |
| Ethylene dibromide             | 467183   | 0.2 | ug/L  | STD 0.25      | <0.2             | <0.2             | <0.2             |
| Hexane (n)                     | 467183   | 5   | ug/L  | STD 51        | <5               | <5               | <5               |
| Methyl Ethyl Ketone            | 467183   | 2   | ug/L  | STD 470000    | <2               | <2               | <2               |
| Methyl Isobutyl Ketone         | 467183   | 5   | ug/L  | STD 140000    | <5               | <5               | <5               |
| Methyl tert-Butyl Ether (MTBE) | 467183   | 2   | ug/L  | STD 190       | <2               | <2               | <2               |
| Methylene Chloride             | 467183   | 4.0 | ug/L  | STD 610       | <4.0             | <4.0             | <4.0             |
| Styrene                        | 467183   | 0.5 | ug/L  | STD 1300      | <0.5             | <0.5             | <0.5             |
| Tetrachloroethane, 1,1,1,2-    | 467183   | 0.5 | ug/L  | STD 3.3       | <0.5             | <0.5             | <0.5             |
| Tetrachloroethane, 1,1,2,2-    | 467183   | 0.5 | ug/L  | STD 3.2       | <0.5             | <0.5             | <0.5             |
| Tetrachloroethylene            | 467183   | 0.3 | ug/L  | STD 1.6       | <0.3             | <0.3             | <0.3             |
| Toluene                        | 467183   | 0.4 | ug/L  | STD 18000     | <0.4             | <0.4             | <0.4             |
| Trichloroethane, 1,1,1-        | 467183   | 0.4 | ug/L  | STD 640       | <0.4             | <0.4             | <0.4             |
| Trichloroethane, 1,1,2-        | 467183   | 0.4 | ug/L  | STD 4.7       | <0.4             | <0.4             | <0.4             |
| Trichloroethylene              | 467183   | 0.3 | ug/L  | STD 1.6       | <0.3             | <0.3             | <0.3             |
| Trichlorofluoromethane         | 467183   | 0.5 | ug/L  | STD 2500      | <0.5             | <0.5             | <0.5             |
| Vinyl Chloride                 | 467183   | 0.2 | ug/L  | STD 0.5       | <0.2             | <0.2             | <0.2             |
| Xylene Mixture                 | 467187   | 0.5 | ug/L  | STD 4200      | <0.5             | <0.5             | <0.5             |
| Xylene, m/p-                   | 467183   | 0.4 | ug/L  |               | <0.4             | <0.4             | <0.4             |
| Xylene, o-                     | 467183   | 0.4 | ug/L  |               | <0.4             | <0.4             | <0.4             |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

### Guideline = O.Reg 153-T3-Non-Pot GW-Coarse

#### **Inorganics**

|               |            |
|---------------|------------|
| Lab I.D.      | 1745896    |
| Sample Matrix | GW153      |
| Sample Type   |            |
| Sample Date   | 2024-10-08 |
| Sampling Time |            |
| Sample I.D.   |            |

|         |
|---------|
| BH24-04 |
| GW      |

| Analyte       | Batch No | MRL  | Units | Guideline   |       |
|---------------|----------|------|-------|-------------|-------|
| Chloride      | 46700    | 1000 | ug/L  | STD 2300000 | 15000 |
| Conductivity  | 467057   | 5    | uS/cm |             | 316   |
| Cyanide (CN-) | 467058   | 5    | ug/L  | STD 66      | <5    |
| pH            | 467057   | 1.00 |       |             | 8.04  |

#### **PHC Surrogate**

|               |            |            |
|---------------|------------|------------|
| Lab I.D.      | 1745895    | 1745896    |
| Sample Matrix | GW153      | GW153      |
| Sample Type   |            |            |
| Sample Date   | 2024-10-08 | 2024-10-08 |
| Sampling Time |            |            |
| Sample I.D.   |            |            |

|         |
|---------|
| BH24-03 |
| GW      |

| Analyte           | Batch No | MRL | Units | Guideline |    |     |
|-------------------|----------|-----|-------|-----------|----|-----|
| Alpha-androstrane | 467153   | 0   | %     |           | 94 |     |
|                   | 467195   | 0   | %     |           |    | 102 |

Results relate only to the parameters tested on the samples submitted.  
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MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: B040048 - 5580  
 917002

**Guideline = O.Reg 153-T3-Non-Pot GW-Coarse****VOCs Surrogates**

| Lab I.D.      | 1745894<br>GW153 | 1745895<br>GW153 | 1745896<br>GW153 |
|---------------|------------------|------------------|------------------|
| Sample Matrix |                  |                  |                  |
| Sample Type   |                  |                  |                  |
| Sample Date   | 2024-10-08       | 2024-10-08       | 2024-10-08       |
| Sampling Time |                  |                  |                  |
| Sample I.D.   |                  |                  |                  |

| Analyte               | Batch No | MRL | Units | Guideline | 1745894<br>GW153 | 1745895<br>GW153 | 1745896<br>GW153 |
|-----------------------|----------|-----|-------|-----------|------------------|------------------|------------------|
| 1,2-dichloroethane-d4 | 467183   | 0   | %     |           | 94               | 98               | 102              |
| 4-bromofluorobenzene  | 467183   | 0   | %     |           | 74               | 79               | 73               |
| Toluene-d8            | 467183   | 0   | %     |           | 94               | 109              | 104              |

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**Environment Testing**

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 1550 Laperriere Avenue  
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 K1Z 7T2  
 Attention: Mr Marc Orfali  
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 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

**Quality Assurance Summary**

| Batch No | Analyte                | Blank      | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|------------------------|------------|----------|-----------|-------------|--------------|-----------|------------------|
| 465534   | Methlynaphthalene, 1-  | <0.1 ug/L  | 76       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Methlynaphthalene, 2-  | <0.1 ug/L  | 72       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Acenaphthene           | <0.1 ug/L  | 76       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Acenaphthylene         | <0.1 ug/L  | 77       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Anthracene             | <0.1 ug/L  | 79       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Benz[a]anthracene      | <0.1 ug/L  | 74       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Benzo[a]pyrene         | <0.01 ug/L | 92       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Benzo[b]fluoranthene   | <0.05 ug/L | 61       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Benzo[ghi]perylene     | <0.1 ug/L  | 85       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Benzo[k]fluoranthene   | <0.05 ug/L | 75       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Chrysene               | <0.05 ug/L | 81       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Dibenz[a h]anthracene  | <0.1 ug/L  | 86       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Fluoranthene           | <0.1 ug/L  | 85       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Fluorene               | <0.1 ug/L  | 71       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Indeno[1 2 3-cd]pyrene | <0.1 ug/L  | 85       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Naphthalene            | <0.1 ug/L  | 72       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Phenanthrene           | <0.1 ug/L  | 77       | 50-140    |             | 50-140       |           | 0-30             |
| 465534   | Pyrene                 | <0.1 ug/L  | 86       | 50-140    |             | 50-140       |           | 0-30             |
| 466960   | Silver                 | <0.1 ug/L  | 92       | 80-120    | 31          | 70-130       | 0         | 0-20             |
| 466960   | Arsenic                | <1 ug/L    | 100      | 80-120    | 100         | 70-130       | 0         | 0-20             |
| 466960   | Boron (total)          | <10 ug/L   | 101      | 80-120    | 94          | 80-120       | 1         | 0-20             |
| 466960   | Barium                 | <10 ug/L   | 92       | 80-120    | 91          | 70-130       | 0         | 0-20             |
| 466960   | Beryllium              | <0.5 ug/L  | 106      | 80-120    | 99          | 70-130       | 0         | 0-20             |
| 466960   | Cadmium                | <0.1 ug/L  | 97       | 80-120    | 92          | 70-130       | 0         | 0-20             |
| 466960   | Cobalt                 | <0.2 ug/L  | 95       | 80-120    | 87          | 70-130       | 0         | 0-20             |
| 466960   | Chromium Total         | <1 ug/L    | 98       | 80-120    | 91          | 70-130       | 0         | 0-20             |
| 466960   | Copper                 | <1 ug/L    | 98       | 80-120    | 82          | 70-130       | 0         | 0-20             |
| 466960   | Molybdenum             | <5 ug/L    | 85       | 80-120    | 86          | 70-130       | 0         | 0-20             |
| 466960   | Nickel                 | <5 ug/L    | 96       | 80-120    | 84          | 70-130       | 0         | 0-20             |
| 466960   | Lead                   | <1 ug/L    | 97       | 80-120    | 78          | 70-130       | 0         | 0-20             |
| 466960   | Antimony               | <0.5 ug/L  | 82       | 80-120    | 83          | 70-130       | 0         | 0-20             |
| 466960   | Selenium               | <1 ug/L    | 99       | 80-120    | 96          | 70-130       | 0         | 0-20             |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

### **Quality Assurance Summary**

| Batch No | Analyte                     | Blank      | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|-----------------------------|------------|----------|-----------|-------------|--------------|-----------|------------------|
| 466960   | Thallium                    | <0.1 ug/L  | 95       | 80-120    | 78          | 70-130       | 0         | 0-20             |
| 466960   | Uranium                     | <1 ug/L    | 93       | 80-120    | 78          | 70-130       | 0         | 0-20             |
| 466960   | Vanadium                    | <1 ug/L    | 93       | 80-120    | 92          | 70-130       | 0         | 0-20             |
| 466960   | Zinc                        | <10 ug/L   | 99       | 80-120    | 82          | 70-130       | 0         | 0-20             |
| 46700    | Chloride                    | <1000 ug/L | 99       | 90-110    | 109         | 80-120       | 0         | 0-20             |
| 467006   | Chromium VI                 | <1 ug/L    | 108      | 80-120    | 111         | 70-130       | 0         | 0-20             |
| 467010   | Sodium                      | <1000 ug/L | 106      | 82-118    |             | 80-120       | 1         | 0-20             |
| 467022   | Mercury                     | <0.1 ug/L  | 96       | 76-123    | 102         | 70-130       | 0         | 0-20             |
| 467057   | Conductivity                | <5 uS/cm   | 99       | 90-110    |             |              | 0         | 0-5              |
| 467057   | pH                          |            | 99       | 90-110    |             |              | 0         | 0-5              |
| 467058   | Cyanide (CN-)               | <5 ug/L    | 91       | 75-125    | 103         | 80-120       | 0         | 0-20             |
| 467153   | PHC's F2                    | <20 ug/L   | 86       | 60-140    |             | 60-140       |           | 0-30             |
| 467153   | PHC's F3                    | <50 ug/L   | 86       | 60-140    |             | 60-140       |           | 0-30             |
| 467153   | PHC's F4                    | <50 ug/L   | 86       | 60-140    |             | 60-140       |           | 0-30             |
| 467168   | 1+2-methylnaphthalene       |            |          |           |             |              |           |                  |
| 467178   | PHC's F1                    | <20 ug/L   | 82       | 60-140    | 99          | 60-140       | 0         | 0-30             |
| 467181   | PHC's F1-BTEX               |            |          |           |             |              |           |                  |
| 467183   | Tetrachloroethane, 1,1,1,2- | <0.5 ug/L  | 91       | 60-130    | 109         | 50-140       | 0         | 0-30             |
| 467183   | Trichloroethane, 1,1,1-     | <0.4 ug/L  | 101      | 60-130    | 113         | 50-140       | 0         | 0-30             |
| 467183   | Tetrachloroethane, 1,1,2,2- | <0.5 ug/L  | 92       | 60-130    | 110         | 50-140       | 0         | 0-30             |
| 467183   | Trichloroethane, 1,1,2-     | <0.4 ug/L  | 94       | 60-130    | 107         | 50-140       | 0         | 0-30             |
| 467183   | Dichloroethane, 1,1-        | <0.4 ug/L  | 99       | 60-130    | 119         | 50-140       | 0         | 0-30             |
| 467183   | Dichloroethylene, 1,1-      | <0.5 ug/L  | 100      | 60-130    | 112         | 50-140       | 0         | 0-30             |
| 467183   | Dichlorobenzene, 1,2-       | <0.4 ug/L  | 95       | 60-130    | 102         | 50-140       | 0         | 0-30             |
| 467183   | Dichloroethane, 1,2-        | <0.5 ug/L  | 105      | 60-130    | 124         | 50-140       | 0         | 0-30             |
| 467183   | Dichloroproppane, 1,2-      | <0.5 ug/L  | 91       | 60-130    | 120         | 50-140       | 0         | 0-30             |
| 467183   | 1,3,5-trimethylbenzene      | <0.3 ug/L  | 92       | 60-130    | 104         | 50-140       | 0         | 0-30             |
| 467183   | Dichlorobenzene, 1,3-       | <0.4 ug/L  | 93       | 60-130    | 101         | 50-140       | 0         | 0-30             |
| 467183   | Dichlorobenzene, 1,4-       | <0.4 ug/L  | 93       | 60-130    | 101         | 50-140       | 0         | 0-30             |
| 467183   | Acetone                     | <5 ug/L    | 99       | 60-130    | 92          | 50-140       | 0         | 0-30             |
| 467183   | Benzene                     | <0.5 ug/L  | 96       | 60-130    | 120         | 50-140       | 0         | 0-30             |
| 467183   | Bromodichloromethane        | <0.3 ug/L  | 94       | 60-130    | 121         | 50-140       | 0         | 0-30             |
| 467183   | Bromoform                   | <0.4 ug/L  | 86       | 60-130    | 101         | 50-140       | 0         | 0-30             |

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**Environment Testing**

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2  
 Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002  
 B040048 - 5580

**Quality Assurance Summary**

| Batch No | Analyte                        | Blank     | QC % Rec | QC Limits | Spike % Rec | Spike Limits | Dup % RPD | Duplicate Limits |
|----------|--------------------------------|-----------|----------|-----------|-------------|--------------|-----------|------------------|
| 467183   | Bromomethane                   | <0.5 ug/L | 107      | 60-130    | 112         | 50-140       | 0         | 0-30             |
| 467183   | Dichloroethylene, 1,2-cis-     | <0.4 ug/L | 92       | 60-130    | 120         | 50-140       | 0         | 0-30             |
| 467183   | Dichloropropene,1,3-cis-       | <0.5 ug/L | 92       | 60-130    | 112         | 50-140       | 0         | 0-30             |
| 467183   | Carbon Tetrachloride           | <0.2 ug/L | 100      | 60-130    | 113         | 50-140       | 0         | 0-30             |
| 467183   | Chloroethane                   | <0.5 ug/L | 104      | 60-130    | 113         | 50-140       | 0         | 0-30             |
| 467183   | Chloroform                     | <0.5 ug/L | 102      | 60-130    | 119         | 50-140       | 0         | 0-30             |
| 467183   | Dibromochloromethane           | <0.3 ug/L | 93       | 60-130    | 103         | 50-140       | 0         | 0-30             |
| 467183   | Dichlorodifluoromethane        | <0.5 ug/L | 91       | 60-130    | 101         | 50-140       | 0         | 0-30             |
| 467183   | Methylene Chloride             | <4.0 ug/L | 106      | 60-130    | 122         | 50-140       | 0         | 0-30             |
| 467183   | Ethylbenzene                   | <0.5 ug/L | 92       | 60-130    | 112         | 50-140       | 0         | 0-30             |
| 467183   | Ethylene dibromide             | <0.2 ug/L | 92       | 60-130    | 100         | 50-140       | 0         | 0-30             |
| 467183   | Hexane (n)                     | <5 ug/L   | 91       | 60-130    | 109         | 50-140       | 0         | 0-30             |
| 467183   | Xylene, m/p-                   | <0.4 ug/L | 98       | 60-130    | 112         | 50-140       | 0         | 0-30             |
| 467183   | Methyl Ethyl Ketone            | <2 ug/L   | 97       | 60-130    | 121         | 50-140       | 0         | 0-30             |
| 467183   | Methyl Isobutyl Ketone         | <5 ug/L   | 97       | 60-130    | 107         | 50-140       | 0         | 0-30             |
| 467183   | Methyl tert-Butyl Ether (MTBE) | <2 ug/L   | 93       | 60-130    | 119         | 50-140       | 0         | 0-30             |
| 467183   | Chlorobenzene                  | <0.5 ug/L | 94       | 60-130    | 109         | 50-140       | 0         | 0-30             |
| 467183   | Xylene, o-                     | <0.4 ug/L | 92       | 60-130    | 113         | 50-140       | 0         | 0-30             |
| 467183   | Styrene                        | <0.5 ug/L | 95       | 60-130    | 111         | 50-140       | 0         | 0-30             |
| 467183   | Dichloroethylene, 1,2-trans-   | <0.4 ug/L | 95       | 60-130    | 118         | 50-140       | 0         | 0-30             |
| 467183   | Dichloropropene,1,3-trans-     | <0.5 ug/L | 93       | 60-130    | 111         | 50-140       | 0         | 0-30             |
| 467183   | Tetrachloroethylene            | <0.3 ug/L | 97       | 60-130    | 112         | 50-140       | 0         | 0-30             |
| 467183   | Toluene                        | <0.4 ug/L | 94       | 60-130    | 126         | 50-140       | 0         | 0-30             |
| 467183   | Trichloroethylene              | <0.3 ug/L | 91       | 60-130    | 112         | 50-140       | 0         | 0-30             |
| 467183   | Trichlorofluoromethane         | <0.5 ug/L | 92       | 60-130    | 105         | 50-140       | 0         | 0-30             |
| 467183   | Vinyl Chloride                 | <0.2 ug/L | 97       | 60-130    | 111         | 50-140       | 0         | 0-30             |
| 467187   | Xylene Mixture                 |           |          |           |             |              |           |                  |
| 467188   | Dichloropropene,1,3-           |           |          |           |             |              |           |                  |
| 467195   | PHC's F2                       | <20 ug/L  | 115      | 60-140    |             | 60-140       |           | 0-30             |
| 467195   | PHC's F3                       | <50 ug/L  | 115      | 60-140    |             | 60-140       |           | 0-30             |
| 467195   | PHC's F4                       | <50 ug/L  | 115      | 60-140    |             | 60-140       |           | 0-30             |
| 467196   | PHC's F2-Naph                  |           |          |           |             |              |           |                  |
| 467197   | PHC's F3-PAH                   |           |          |           |             |              |           |                  |

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## Environment Testing

|             |   |                 |                |
|-------------|---|-----------------|----------------|
| Client:     | Blastek Eng. Group<br>1550 Laperriere Avenue<br>Ottawa, ON<br>K1Z 7T2 | Report Number:  | 3011577        |
| Attention:  | Mr Marc Orfali  | Date Submitted: | 2024-10-09     |
| PO#:        | B040048   | Date Reported:  | 2024-10-17     |
| Invoice to: | Blastek Engineering Group   | Project:        | B040048 - 5580 |
|             |   | COC #:          | 917002         |

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## Environment Testing

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 1550 Laperriere Avenue  
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Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

### **Test Summary**

| Batch No | Analyte                | Instrument | Preparation Date | Analysis Date | Analyst | Method    |
|----------|------------------------|------------|------------------|---------------|---------|-----------|
| 465534   | Methlynaphthalene, 1-  | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Methlynaphthalene, 2-  | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Acenaphthene           | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Acenaphthylene         | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Anthracene             | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Benz[a]anthracene      | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Benzo[a]pyrene         | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Benzo[b]fluoranthene   | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Benzo[ghi]perylene     | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Benzo[k]fluoranthene   | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Chrysene               | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Dibenz[a h]anthracene  | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Fluoranthene           | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Fluorene               | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Indeno[1 2 3-cd]pyrene | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Naphthalene            | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Phenanthrene           | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 465534   | Pyrene                 | GC-MS      | 2024-10-16       | 2024-10-16    | C_M     | P 8270    |
| 466960   | Silver                 | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Arsenic                | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Boron (total)          | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Barium                 | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Beryllium              | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Cadmium                | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Cobalt                 | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Chromium Total         | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Copper                 | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Molybdenum             | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Nickel                 | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Lead                   | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Antimony               | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |
| 466960   | Selenium               | ICAPQ-MS   | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8 |

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## Environment Testing

Client: Blastek Eng. Group  
 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

Attention: Mr Marc Orfali  
 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

### ***Test Summary***

| Batch No | Analyte                     | Instrument         | Preparation Date | Analysis Date | Analyst | Method               |
|----------|-----------------------------|--------------------|------------------|---------------|---------|----------------------|
| 466960   | Thallium                    | ICAPQ-MS           | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8            |
| 466960   | Uranium                     | ICAPQ-MS           | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8            |
| 466960   | Vanadium                    | ICAPQ-MS           | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8            |
| 466960   | Zinc                        | ICAPQ-MS           | 2024-10-11       | 2024-10-11    | AaN     | EPA 200.8            |
| 46700    | Chloride                    | IC                 | 2024-10-11       | 2024-10-15    | IP      | SM 4110              |
| 467006   | Chromium VI                 | Ion Chromatography | 2024-10-11       | 2024-10-15    | IP      | SM3500-CR C          |
| 467010   | Sodium                      | ICP-OES            | 2024-10-15       | 2024-10-15    | Z_S     | M SM3120B-3500C      |
| 467022   | Mercury                     | CV AA              | 2024-10-15       | 2024-10-15    | SuM     | M SM3112B-3500B      |
| 467057   | Conductivity                | Auto Titrator      | 2024-10-15       | 2024-10-15    | AsA     | SM2320,2510,4500H/F  |
| 467057   | pH                          | Auto Titrator      | 2024-10-15       | 2024-10-15    | AsA     | SM2320,2510,4500H/F  |
| 467058   | Cyanide (CN-)               | Skalar CN Analyzer | 2024-10-16       | 2024-10-16    | Z_S     | SM4500-CNC/MOE E3015 |
| 467153   | PHC's F2                    | GC/FID             | 2024-10-16       | 2024-10-17    | D_T     | CCME O.Reg 153/04    |
| 467153   | PHC's F3                    | GC/FID             | 2024-10-16       | 2024-10-17    | D_T     | CCME O.Reg 153/04    |
| 467153   | PHC's F4                    | GC/FID             | 2024-10-16       | 2024-10-17    | D_T     | CCME O.Reg 153/04    |
| 467168   | 1+2-methylnaphthalene       | GC-MS              | 2024-10-17       | 2024-10-17    | C_M     | P 8270               |
| 467178   | PHC's F1                    | GC/FID             | 2024-10-15       | 2024-10-17    | ZhL     | CCME O.Reg 153/04    |
| 467181   | PHC's F1-BTEX               | GC/FID             | 2024-10-17       | 2024-10-17    | ZhL     | CCME O.Reg 153/04    |
| 467183   | Tetrachloroethane, 1,1,1,2- | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Trichloroethane, 1,1,1-     | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Tetrachloroethane, 1,1,2,2- | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Trichloroethane, 1,1,2-     | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Dichloroethane, 1,1-        | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Dichloroethylene, 1,1-      | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Dichlorobenzene, 1,2-       | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Dichloroethane, 1,2-        | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Dichloropropane, 1,2-       | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | 1,3,5-trimethylbenzene      | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Dichlorobenzene, 1,3-       | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Dichlorobenzene, 1,4-       | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Acetone                     | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Benzene                     | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Bromodichloromethane        | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |
| 467183   | Bromoform                   | GC-MS              | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260             |

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## Environment Testing

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 1550 Laperriere Avenue  
 Ottawa, ON  
 K1Z 7T2

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 PO#: B040048  
 Invoice to: Blastek Engineering Group

Report Number: 3011577  
 Date Submitted: 2024-10-09  
 Date Reported: 2024-10-17  
 Project: Manotick Main St.  
 COC #: 917002

### **Test Summary**

| Batch No | Analyte                        | Instrument | Preparation Date | Analysis Date | Analyst | Method            |
|----------|--------------------------------|------------|------------------|---------------|---------|-------------------|
| 467183   | Bromomethane                   | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Dichloroethylene, 1,2-cis-     | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Dichloropropene,1,3-cis-       | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Carbon Tetrachloride           | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Chloroethane                   | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Chloroform                     | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Dibromochloromethane           | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Dichlorodifluoromethane        | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Methylene Chloride             | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Ethylbenzene                   | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Ethylene dibromide             | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Hexane (n)                     | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Xylene, m/p-                   | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Methyl Ethyl Ketone            | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Methyl Isobutyl Ketone         | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Methyl tert-Butyl Ether (MTBE) | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Chlorobenzene                  | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Xylene, o-                     | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Styrene                        | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Dichloroethylene, 1,2-trans-   | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Dichloropropene,1,3-trans-     | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Tetrachloroethylene            | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Toluene                        | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Trichloroethylene              | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Trichlorofluoromethane         | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467183   | Vinyl Chloride                 | GC-MS      | 2024-10-11       | 2024-10-16    | ZhL     | EPA 8260          |
| 467187   | Xylene Mixture                 | GC-MS      | 2024-10-17       | 2024-10-17    | ZhL     | EPA 8260          |
| 467188   | Dichloropropene,1,3-           | GC-MS      | 2024-10-17       | 2024-10-17    | ZhL     | EPA 8260          |
| 467195   | PHC's F2                       | GC/FID     | 2024-10-16       | 2024-10-17    | D_T     | CCME O.Reg 153/04 |
| 467195   | PHC's F3                       | GC/FID     | 2024-10-16       | 2024-10-17    | D_T     | CCME O.Reg 153/04 |
| 467195   | PHC's F4                       | GC/FID     | 2024-10-16       | 2024-10-17    | D_T     | CCME O.Reg 153/04 |
| 467196   | PHC's F2-Naph                  | GC/FID     | 2024-10-17       | 2024-10-17    | D_T     | CCME O.Reg 153/04 |
| 467197   | PHC's F3-PAH                   | GC/FID     | 2024-10-17       | 2024-10-17    | D_T     | CCME O.Reg 153/04 |

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## Environment Testing

|             |   |                 |                |
|-------------|---|-----------------|----------------|
| Client:     | Blastek Eng. Group<br>1550 Laperriere Avenue<br>Ottawa, ON<br>K1Z 7T2 | Report Number:  | 3011577        |
| Attention:  | Mr Marc Orfali  | Date Submitted: | 2024-10-09     |
| PO#:        | B040048   | Date Reported:  | 2024-10-17     |
| Invoice to: | Blastek Engineering Group   | Project:        | B040048 - 5580 |
|             |   | COC #:          | 917002         |

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Project: Manotick Main St.  
COC #: 917002  
B040048 - 5580

### CWS for Petroleum Hydrocarbons in Soil - Tier 1

#### Notes:

1. The laboratory method complies with CCME Tier 1 reference method for PHC in soil. It is validated for laboratory use.
2. Where the F1 fraction (C6 to C10) and BTEX are both measured, F1-BTEX is reported.
3. Where the F2 fraction (C10 to C16) and naphthalene are both measured, F2-naphthalene is reported.
4. Where the F3 fraction (C16 to C34) and PAHs\* are both measured, F3-PAH is reported.
5. F4G is analyzed if the chromatogram does not descend to baseline before C50. Where F4 (C34 to C50) and F4G are both reported, the higher result is compared to the standard.
6. Unless otherwise stated in the sample comments, the following criteria have been met where applicable:
  - nC6 and nC10 response factors within 30% of response factor for toluene;
  - nC10, nC16, and nC34 response factors within 10% of each other;
  - C50 response factors within 70% of nC10 + nC16 + nC34 average; and,
  - Linearity is within 15%.
7. Unless otherwise stated in the sample comments, sampling requirements and analytical holding times have been met.
8. Gravimetric heavy hydrocarbons (F4G) cannot be added to the C6 and C50 hydrocarbons.
9. \*PAHs = phenanthrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene and pyrene.

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eurofins 917002

## STANDARD CHAIN-OF-CUSTODY

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3011577

