PROJECT NO.: SM 230902-E

NOVEMBER 29, 2024

SUPPLEMENTAL PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
111 VICTORIA STREET
WELLAND, ONTARIO

PREPARED FOR:

111 VICTORIA STREET INC.

Soil-Mat

BY

SOIL-MAT ENGINEERS & CONSULTANTS LTD.
401 GRAYS ROAD
HAMILTON, ONTARIO
L8E 2Z3

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PROJECT NO.: SM 230902-E November 29, 2024

111 VICTORIA STREET INC.
18 Leawood Court
St. Catharines, Ontario
L2T 3R6

Attention: Mr. Jordan Plett

SUPPLEMENTAL PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
111 VICTORIA STREET
WELLAND, ONTARIO

Dear Mr. Plett,

1.0 EXECUTIVE SUMMARY

SOIL-MAT ENGINEERS & CONSULTANTS LTD. [SOIL-MAT ENGINEERS] were retained by 111 VICTORIA STREET INC to undertake Phase Two Environmental Site Assessment [ESA] activities on the above captioned property. Of note, our Phase Two activities were conducted in accordance with Ontario Regulation 153/04 [as amended] to support the eventual filing of a Record of Site Condition [RSC] for the property.

Our Phase Two activities included the advancement of six [6] boreholes and nine [9] hand-dug test pits on the subject property to facilitate the collection and submission of select soil samples for laboratory analytical testing. In addition, a groundwater monitoring well was installed at three [3] of the borehole locations, upon completion of drilling activities, to facilitate the collection of groundwater samples for laboratory analytical testing. It is noted that our Phase Two activities were completed in conjunction with a geotechnical investigation by this Office.

In addition, it is noted that our office previously undertook Preliminary Phase Two ESA activities on the Site, including the advancement of five [5] machine-dug test pits [refer to SOIL-MAT ENGINEERS' Report No.: SM 230902, dated December 4, 2023]. The preliminary analytical test results were utilised as rationale for these supplemental Phase Two activities. It is noted that this report should be read in conjunction with our preliminary Phase Two ESA summary.

Based on SOIL-MAT ENGINEERS' field observations and the laboratory analytical test results received in its office, including the initial preliminary analytical test results, SOIL-MAT ENGINEERS is pleased to offer the following:

INITIAL PHASE TWO ESA ACTIVITIES

- The laboratory analytical test results, for the submitted soil samples, revealed the following exceedances of the applicable Table 3 Site Condition Standards [Table 3 SCSs]:
  - Soil sample 'TP1', secured from our Test Pit No.: 'TP1', revealed elevated levels of select metal parameters [specifically Cobalt, Copper, Molybdenum, Nickel and Zinc] in the upper 1.0 metres;
  - Soil sample 'TP5', secured from our Test Pit No.: 'TP5', revealed an elevated level of a select Organochlorine Pesticide [OC] parameter [specifically DDE] in the upper 0.1 metres;

SUPPLEMENTAL PHASE TWO ESA ACTIVITIES

- The laboratory analytical test results, for the submitted soil and groundwater samples, revealed the following exceedances of the applicable Table 3 SCSs:

  - Soil sample 'TP105', secured from our Test Pit No.: TP105, revealed elevated levels of select metal parameters [specifically Lead and Zinc] in the upper 0.05 metres;
  - Soil sample 'TP109', secured from our Test Pit No.: TP109, revealed elevated levels of select metal parameters [specifically Cadmium, Lead and Zinc] in the upper 0.05 metres.
  - Soil sample 'BH2-SS2', secured from our Borehole No.: BH2, revealed an elevated level of a select metal parameter [specifically Lead] at a depth of approximately 0.76 to 1.07 metres below ground surface [m bgs].
  - Soil sample 'TP104', secured from our Test Pit No.: TP104, revealed an elevated level of a select OCs parameter [specifically DDE] in the upper 0.15 metres;
  - Soil sample 'TP107', secured from our Test Pit No.: TP107, revealed an elevated level of a select OCs parameter [specifically DDE] in the upper 0.05 metres;
  - With the exception of the above, all the other soil samples subjected to laboratory analytical testing were found to be within the applicable Table 3 SCSs for the select tested COPC groupings, and;
  - The laboratory analytical test results, for the secured groundwater samples, all reportedly meet the applicable Table 3 SCSs.

A brief discussion of the areas of potential environmental concern [APECs] on the Phase Two Property is provided below:

AREA OF SOIL EXHIBITING ELEVATED LEVELS OF SELECT METAL PARAMETERS

Our preliminary and supplemental Phase Two ESA activities revealed select metal exceedances in the upper approximately 1.1m of soil on the eastern portion of the Phase Two Property, although vertical delineation throughout this area was not established. The lateral delineation in this APEC can be defined by the nearest 'clean' sample locations and/or property boundary, as illustrated on the attached Drawing No.: 3A. However, given the existing distance between 'clean' and 'impacted' sample locations it is likely that additional intrusive sampling may achieve a reduction in the anticipated volume of soil affected in this specific APEC.

AREA OF SOIL EXHIBITING ELEVATED LEVELS OF SELECT OCS PARAMETERS

Our preliminary and supplemental Phase Two ESA activities revealed select OC exceedances in the upper approximately 0.1m of soil in an area of the southern portion of the Phase Two Property. Although vertical delineation throughout this area was not established, it is our experience that this specific contaminant of concern [COC], DDE, is typically limited to the organic matter in the topsoil and not the underlying native soil. The lateral delineation in this APEC can be defined by the nearest 'clean' sample locations and/or property boundary, as illustrated on the attached Drawing No.: 3F. However, given the existing distance between 'clean' and 'impacted' sample locations it is likely that additional intrusive sampling may achieve a reduction in the anticipated volume of soil affected in this specific APEC.

NEXT STEPS

It is our understanding that a Record of Site Condition [RSC] is required to support the proposed residential redevelopment of the Site. As such it will be necessary to undertake either a soil remediation programme, to restore the soil conditions to within the applicable Table 3 SCSs for a residential property, or subject the site to some level of Risk Assessment, such as a Modified Generic Risk Assessment [MGRA], to support the filing of an RSC. Given the nature of the identified contaminants of concern, and the proposed redevelopment of the Site, it is anticipated that a traditional 'dig and dump' soil removal remediation programme would be preferred. However, the pathway to an RSC can be reassessed once the specific areas of concerns and anticipated volumes of impacted soil has been established. This will allow for a cost comparison between a traditional 'dig and dump' and an MGRA.

Notwithstanding the above, based on the available laboratory analytical test results [to date], additional intrusive soil sampling is recommended to further delineate the lateral and vertical extent of the specific COCs in the two [2] APECs on the Phase Two Property, as well as the fill material.

It is noted that subsurface soil conditions may be present on-site that are not typical of those presented in this Report. If future activities reveal such soils, SOIL-MAT ENGINEERS should be contacted to assess the soil conditions with respect to the proposed activity.

The samples secured for analytical testing are believed to be representative of the conditions at the sample locations only. If any significant changes are noted, i.e., odours, staining etc., SOIL-MAT ENGINEERS should be contacted to reassess the environmental characteristics of the Site.

SOIL-MAT ENGINEERS & CONSULTANTS LTD. prepared this Report for the account of 111 VICTORIA STREET INC. The material in it reflects SOIL-MAT ENGINEERS' best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. SOIL-MAT ENGINEERS accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.

2.0 INTRODUCTION

SOIL-MAT ENGINEERS & CONSULTANTS LTD. [SOIL-MAT ENGINEERS] were retained by 111 VICTORIA STREET INC to undertake Supplemental Phase Two ESA activities on the above captioned property. Of note, our Phase Two activities were conducted in accordance with Ontario Regulation 153/04 [as amended] to support the eventual filing of a Record of Site Condition [RSC] for the property.

A Phase One Environmental Site Assessment and a Preliminary Phase Two ESA were previously prepared by SOIL-MAT ENGINEERS and were utilised in determining the rationale for these Phase Two activities [refer to SOIL-MAT ENGINEERS' Report Nos.: SM 230169-E, dated May 25, 2023 as well as SM 230902, dated December 4, 2023].

Our fieldwork, laboratory testing and interpretation in connection with the assessment activities has been finalised and our comments and recommendations, based on our findings, are presented in the following paragraphs.

The subject property is herein referred to as the Phase Two Property and/or the *Site*.

2.0 (i) SITE DESCRIPTION

At the time of this report, the Phase Two Property was comprised of a roughly rectangular shaped parcel of vacant land located on the corner of Victoria Street and Hester Lane in the City of Welland, Ontario. Specifically, the Site was observed to be relatively flat and mainly comprised of grass covered areas. In addition, remnants of a former building foundation were observed on the central portion of the Phase Two Property, and a gravel covered driveway was observed on the southeastern portion of the Phase Two Property.

The Site was bounded to the north by Victoria Street, to the south by 270 Burgar Street, to the east by Hester Lane, and to the west by 97 Victoria Street, 260 and 264 Burgar Street.

The Site is recognised with the municipal address of '111 Victoria Street, Welland, Ontario'. The property identification number [PIN] of the Site is '64110-0038'.

The area of the Site is 0.2 hectares.

2.0 (ii) PROPERTY OWNERSHIP

At the time of this report, the Site was owned by Deham Canada Inc. However, as noted in the preamble of this Report, SOIL-MAT ENGINEERS were retained by 111 VICTORIA STREET INC to undertake the Phase Two activities on the Site in support of the redevelopment of the Site.

The contact information for our client is provided below:

1. Contact Name: Mr. Jordan Plett
2. Mailing Address: 18 Leawood Court, St. Catharines, Ontario, L2T 3R6

3. Contact e-mail: 111.victoria.street@gmail.com
4. Contact Phone: 905-246-1902

2.0 (iii) CURRENT AND PROPOSED FUTURE USE

Current Use: Commercial Use
Proposed Use: Residential Use

Based on the current use and the proposed use of the Site, the proposed development is subject to a mandatory RSC filing to support a residential redevelopment.

2.0 (iv) APPLICABLE SITE CONDITION STANDARDS

The following criteria were utilised to determine the appropriate site classification and applicable soil and groundwater standards.

- Current land use: Commercial;
- Intended land use: Residential Use;
- Drinking Water Supply: Non-Potable Ground Water;
- On-site Soil Texture: Medium to Fine Grained Soils;
- Depth to Bedrock: Greater than 20.0 metres;
- pH of soils on the Site: Within the Applicable Generic Site Condition Standards Range;
- Surface Water Body: Not observed on-Site or within 30 metres of the Site.

Based on the above, the applicable site condition standards are the Table 3 SCSs for a Residential/Parkland/Institutional Use property use in a non-potable groundwater condition from the Ministry of the Environment document “Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environment Protection Act, (2011), hereinafter referred to as the ‘Table 3 RPI Standards’.

3.0 BACKGROUND INFORMATION

3.0 (i) PHYSICAL SETTING

The Site is located in an area of mixed residential, commercial, and industrial use properties.

There are no water bodies in whole or in part on the Phase Two Property. In addition, surface water bodies were not observed within 30 metres of the Phase Two Property.

There are no areas of natural significance located in whole or in part on the Phase Two Property.

The topography of the Site is relatively flat and level with surface water being directed primarily to the northeast towards a drainage ditch along Victoria Street.

Regional groundwater flow is expected to the northeast towards the Welland Canal.

3.0 (ii) PAST INVESTIGATIONS

SOIL-MAT ENGINEERS had access to the following environmental reports, which were utilized as supporting documents during the completion of this Report.

1. SOIL-MAT ENGINEERS' Report Number SM 230169-E, entitled, "Phase One Environmental Site Assessment, 111 Victoria Street, Welland, Ontario", dated May 25, 2023, prepared for Deham Canada Inc.
2. SOIL-MAT ENGINEERS' Report Number SM 230902-E, entitled, "Preliminary Phase Two Environmental Site Assessment, 111 Victoria Street, Welland, Ontario", dated December 4, 2023, prepared for 111 Victoria Street Inc.

Our May 25, 2023 Phase One ESA Report concluded the following:

> The Phase One ESA report revealed three [3] potentially contaminating activities [PCA] that were considered likely to cause an area of potential environmental concern [APEC] on the Site, including the following:
>
> - Information extrapolated from the existing fire insurance plans and available Title [ownership] searches revealed that a seed company [The Vaughan Seed Company] operated on the Phase One Property from circa 1909 to 2008;
> - Our Phase One ESA research revealed a building, located on the central and northeast portion of the Phase One Property, was destroyed during a fire, and;
> - Information extrapolated from aerial photographs, topographic maps and fire insurance plans revealed a building was formerly located on the central and northeast portion of the Phase One Property.
>
> The lands in the general vicinity of the Phase One Property are comprised of a mixture of commercial and residential use lands. The Phase One ESA research revealed two [2] historical PCAs on lands in the Phase One Study Area that are

considered likely to cause an APEC on the Phase One Property, including the following:

- A foundry formerly maintained operations on a nearby property located approximately 40 metres east from the Site. Specifically, the nearby property was occupied by Welland Machine & Foundry Ltd., from circa 1913 to 1931, Welland Steel Castings, from circa 1931 to 1935, and Welland Electric Steel foundry from circa 1935 to 1954, and;
- A metal fabrication facility is located approximately 40 metres east of the Phase One Property. Specifically, the nearby property was occupied by Ward Iron Works, from circa 1971 to 2005, and General Fabrication and Equipment Manufacturing from circa 2010 to time of this Report.

Based on the above, the PCAs, and associated APECs, were limited to the following:

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Locations of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC #1	In the immediate vicinity of the former structure on the Phase One Property.	30. Importation of Fill Material of Unknown Quality [PCA A]	On-Site	Metals, Petroleum Hydrocarbons [PHCs], and Benzene, Toluene, Ethylbenzene and Xylenes [BTEX]	Soil
		Other. Incomplete Combustion of Organic Matter [PCA B]	On-Site	Metals, PHCs, BTEX, Volatile Organic Compounds [VOCs] and Polycyclic Aromatic Hydrocarbons [PAHs]	Soil and Groundwater
APEC #2	The eastern limit of the Phase One Property	32. Iron and Steel Manufacturing and Processing [PCA D]	Off-Site	Metals and Inorganics, PHCs, BTEX, and VOCs	Soil and Groundwater
		34. Metal Fabrication [PCA E]	Off-Site	Metals, PHCs, VOCs, PCBs and PAHs	Soil and groundwater
APEC #3	The entire Phase One Property.	40. Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications [PCA C]	On-Site	Metals and Inorganics and Organochloride Pesticides [OCs]	Soil and groundwater

Our December 4, 2023 Preliminary Phase Two ESA Report concluded the following:

"Based on SOIL-MAT ENGINEERS' field observations and the laboratory analytical test results received in its office, SOIL-MAT ENGINEERS is pleased to offer the following:

- Our Phase Two activities revealed elevated levels of select Metal parameters in a soil sample secured from the northern portion of the Phase Two Property. Specifically, an elevated level of Cobalt, Copper, Molybdenum, Nickel and Zinc in soil sample 'TP1'.
- Our Phase Two activities revealed an elevated level of a select Organochlorine Pesticide parameter in a soil sample secured from the southern portion of the Phase Two Property. Specifically, an elevated level of DDE in soil sample 'TP5'.
- With the exception of the above, the remaining soil samples subjected to laboratory analytical testing, for the contaminant of potential concern groupings, all reporting met the applicable site condition standards.
- Of note, groundwater samples were not secured as part of our preliminary Phase Two activities.

NEXT STEPS

Our Phase Two activities [to date] are considered preliminary as the scope of work was limited to near surface soil sampling in select locations on the Phase Two Property. In addition, the preliminary Phase Two activities were not designed, as requested, to assess all the areas of potential environmental concern on the Phase Two Property and/or all the potential mediums of concern. However, with that being said, the preliminary Phase Two activities revealed isolated 'hot spots' with elevated levels of select Metal and Organochlorine Pesticide parameters. As such, it is recommended that future Phase Two activities include specific intrusive sampling to further assess the lateral and vertical extent of the document 'hot spot' areas.

In all cases, the above noted reports were supervised by a Qualified Person [QP] of SOIL-MAT ENGINEERS.

In addition to the above, SOIL-MAT ENGINEERS contacted the City of Welland to request a copy of previous environmental reports for the Site that may be on file with the Region. However, a response was not received from the Planning and Develop.

In addition, a search of the MOE's *Brownfields Environmental Site Registry* did not reveal a previous Phase One ESA that may have been undertaken on the Site.

4.0 SCOPE OF THE INVESTIGATION

4.0 (i) OVERVIEW OF SITE INVESTIGATION

Our Phase Two activities included the advancement of six [6] boreholes and nine [9] hand-dug test pits on the subject property to facilitate the collection and submission of select soil samples for laboratory analytical testing. In addition, a groundwater monitoring well was installed at three [3] of the borehole locations, upon completion of drilling activities, to facilitate the collection of groundwater samples for laboratory analytical testing. It is noted that our Phase Two activities were completed in conjunction with a geotechnical investigation by this Office.

Representative soil samples were secured following standard industry sampling protocols and were submitted to AGAT laboratories for laboratory analytical testing for the specific Phase Two ESA contaminants of potential concern, in this case being metals including arsenic [As], antimony [Sb], selenium [Se], hot water extractable boron [BHWS], cyanide [CN-], electrical conductivity [EC], hexavalent chromium [Cr (VI)], mercury [Hg] and sodium adsorption ratio [SAR], metals, petroleum hydrocarbons [PHCs] including benzene, toluene, ethylbenzene, and xylene mixture [BTEX], volatile organic compounds [VOCs], polycyclic aromatic hydrocarbons [PAHs] and organochlorine pesticides [OCs].

For reporting purposes, the COPCs listed above [with the exception of PHCs, BTEX, VOCs, PAHs, and OCs] are hereinafter referred to as “Metals”.

4.0 (ii) MEDIA INVESTIGATED

The purpose of the Phase Two activities was to assess the soil and groundwater quality within the limits of the Phase Two Property, as related to the environmental concerns identified in our May 25, 2023 Phase One ESA report.

4.0 (iii) PHASE ONE CONCEPTUAL SITE MODEL

The Phase One Property is comprised of a rectangular shaped parcel of land located on the south side of Victoria Street, west of Hester Lane, and is commonly recognized with the municipal address of 111 Victoria Street in the City of Welland, Ontario.

SOIL-MAT ENGINEERS completed a Phase One ESA for the Site in May of 2023. The information gathered during the completion of the Phase One ESA report revealed that the Site was first developed before 1909 as residential use lands. The first readily available visual aid for the Site is an aerial photograph from 1959 which illustrates the Site as residential lands. Other visual aids, including aerial photographs from 1921, 1934, 1948, 1955, 1968, 1971, 2000, 2010, and 2018 and topographic maps from 1907, 1923, 1929, 1938, 1964, 1973, and 2022, confirm the development timeline above.

The neighbouring and nearby lands to the Site are comprised of a mixture of residential, commercial, and institutional use lands. Information gathered, for the adjoining and nearby properties, during the Phase One ESA revealed two [2]

historical PCAs on lands in the Phase One Study Area that are considered likely to cause an APEC on the Site.

As a result of our Phase One ESA finding, the following PCAs and associated APECs were identified on the Site.

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Locations of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC #1	In the immediate vicinity of the former structure on the Phase One Property.	30. Importation of Fill Material of Unknown Quality [PCA A]	On-Site	Metals, Petroleum Hydrocarbons [PHCs], and Benzene, Toluene, Ethylbenzene and Xylenes [BTEX]	Soil
		Other. Incomplete Combustion of Organic Matter [PCA B]	On-Site	Metals, PHCs, BTEX, Volatile Organic Compounds [VOCs] and Polycyclic Aromatic Hydrocarbons [PAHs]	Soil and Groundwater
APEC #2	The eastern limit of the Phase One Property	32. Iron and Steel Manufacturing and Processing [PCA D]	Off-Site	Metals and Inorganics, PHCs, BTEX and VOCs	Soil and groundwater
		31. Metal Fabrication [PCA E]	Off-Site	Metals and Inorganics, PHCs, BTEX and VOCs	Soil and groundwater
APEC #3	The entire Phase One Property.	40. Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications [PCA C]	On-Site	Metals and Inorganics and Organochloride Pesticides [OCs]	Soil and groundwater

No other PCAs were identified on the Phase Two Property or on the neighbouring lands or lands located within the Phase One Study Area.

SOIL-MAT ENGINEERS' Phase One CSM is included in Appendix 'A' of this Report for reference.

4.0 (iv) DEVIATIONS FROM SAMPLING AND ANALYSIS PLAN

Professional care was exercised during the retrieval of each sample, the placement of each sample in the appropriate sample jar, the labeling of the field samples and associated chain of custody and in the delivery of the samples to the testing laboratory. As our standard operating procedures dictate unusual field observations, such as visual or olfactory evidence of a suspected impact, a deviation from SOIL-MAT ENGINEERS' field

sampling and handling protocols or incident on the testing laboratories' side was documented either on our field borehole logs or in-house copy of the sample certificate of analysis. There were no deviations recorded during the completion of our Phase Two ESA activities.

4.0 (v) IMPEDIMENTS

There were no impediments during the planned Phase Two activities.

5.0 INVESTIGATION METHODS

5.0 (i) GENERAL

There were no deviations in SOIL-MAT ENGINEERS' planned Phase Two activities.

5.0 (ii) DRILLING AND EXCAVATING

All boreholes were advanced using solid stem continuous flight auger equipment on July 16, 2024.

The physical advancement of the boreholes and installation of the groundwater monitoring wells was performed by Elite Drilling under the supervision of a representative of SOIL-MAT ENGINEERS.

Soil samples were generally collected in 0.76m intervals from the ground surface to the termination of each borehole. After each sampling event, the split-spoon sampler was thoroughly washed with non-phosphate detergent then rinsed with water before the collection of each subsequent sample to minimise the potential for cross-contamination between samples.

In addition, all hand dug test pits were advanced by a representative of SOIL-MAT ENGINEERS to a maximum depth of approximately 0.15 metres below ground surface.

5.0 (iii) SOIL SAMPLING

Soil samples were examined in the field for visual and olfactory evidence of potential impacts such as unusual staining and/or odours, etc., and were split into two [2] separate samples, including the following:

- One half of the sample was sealed in sampling jars for submission to AGAT for analytical testing, and;
- One half of the sample was sealed in a plastic sampling bag for further characterisation in SOIL-MAT ENGINEERS' in-house soils laboratory.

The soil samples that were picked up at our office by AGAT were sealed in pre-cleaned wide mouth, amber glass sample jars, no head space, as provided by the laboratory. The samples were stored and transported in a cooler and kept under ice packs to minimise potential volatilisation of select parameters. New disposable sampling gloves were used for the collection of each soil sample with care given not to make contact with the samples and gloves. Dedicated sample retrieval equipment, including a stainless steel split-spoon, was used to retrieve each sample and before depositing it directly it into the AGAT Laboratories sample jar.

The samples were picked up at our office by AGAT in coolers equipped with ice packs to help maintain a temperature range between the applicable 0°C to 10°C. As reported on the chain of custody for the soil samples, the samples were picked up at our office by AGAT with an average temperature of 7°C.

5.0 (iv) FIELD SCREENING MEASUREMENTS

All of the Phase Two ESA soil samples were examined in the field for visual and olfactory evidence of potential PHC impact(s), such as unusual staining and/or odours, etc.

In addition, an RKI Eagle was utilised during the collection of the soil samples. The results of the RKI Eagle readings are summarized in the table below:

Sample	Hexene Reading (ppm)
BH2 SS6	10ppm*
BH3 SS3	5ppm*
BH3 SS6	5ppm*
* = submitted for PHC analytical testing	

It is noted that all remaining samples recovered were tested with the RKI Eagle and recorded values of 0ppm.

5.0 (v) GROUND WATER: MONITORING WELL INSTALLATION

A 50 millimetre groundwater monitoring well was installed at Borehole Nos. BH1, BH3, and BH5 upon the completion of drilling activities. In each case, the monitoring well was installed to a depth of approximately 6.1 metres below ground surface [m bgs], with a screened interval in the lower 3.05 metres. The groundwater monitoring well was installed in accordance with *Ontario Regulation 903 [Water Wells]* under the Ontario Water Resources Act.

A water well record was submitted to the Ministry of the Environment, Conservation and Parks [MOE] upon completion of drilling activities. It is the responsibility of the Site owner to ensure the groundwater monitoring well is maintained in an appropriate, safe and secure condition as per the Regulation and to arrange for the monitoring well to be abandoned in accordance with the Regulation when it is no longer in use.

The monitoring well installation details are summarized in the table below.

Monitoring Well	Bottom of Monitoring Well [m bgs]	Bottom of the Borehole Elevation* [m]	Screen Length [m]	Screen Interval [m bgs]	Filter Pack [m bgs]	Bentonite Plug [m bgs]	Ground Surface Elevation* [m]
BH/MW1	6.1	91.80	1.52	4.58 - 6.1	2.75 - 6.1	0 – 2.75	100.08
BH/MW3	6.1	93.40	1.52	4.58 - 6.1	2.75 - 6.1	0 – 2.75	100.10
BH/MW5	6.1	93.60	1.52	4.58 - 6.1	2.75 - 6.1	0 – 2.75	100.30

* - Elevations are referenced to a temporary benchmark with an assigned elevation.

5.0 (vi) GROUND WATER: FIELD MEASUREMENT OF WATER QUALITY PARAMETERS

An Oil / Water interface probe was utilized during the monitoring and collection of the groundwater samples. Of note, a light non-aqueous phase liquid [LNAPL] layer was not identified in any of the on-site monitoring wells.

The samples were delivered immediately to AGAT upon retrieval from the monitoring well and were subjected to AGAT's QA procedure which included a temperature reading upon their receipt.

The groundwater samples were delivered to the AGAT depot in Stoney Creek, Ontario immediately after sampling on ice to begin cooling the samples between the applicable 0^{o}C to 10^{o}C. As reported on the chain of custody for the groundwater samples, the samples were delivered to AGAT with an average temperature of 19.1^{o}C and arrived at the lab in Mississauga, Ontario with a final average temperature of 8.3^{o}C. It is noted that although the samples were immediately put on ice, not enough time passed from the sampling to the delivery at the AGAT depot in Stoney Creek to allow the samples to get below 10 ^{o}C.

5.0 (vii) GROUND WATER: SAMPLING

Three [3] well volumes were purged from each groundwater monitoring well prior to the collection of the groundwater samples. The monitoring wells were then allowed to recharge back to recorded static groundwater levels prior to the physical sample collection.

The monitoring wells installed on the Site were equipped with dedicated sampling equipment, including a 25 millimetre water bailer for sample collection for the PHC and BTEX parameters.

A low flow bladder pump was utilised for the collection of groundwater samples for the remaining COPC groupings as the samples were subjected to laboratory analytical testing for VOCs.

Professional care was exercised during the retrieval of each sample, the placement of each sample in the appropriate sample jar, the labeling of the field samples and associated chain of custody and in the delivery of the samples to the testing laboratory.

As our standard operating procedures dictate unusual field observations, such as visual or olfactory evidence of a suspected impact, a deviation from SOIL-MAT ENGINEERS' field sampling and handling protocols or incident on the testing laboratories' side was documented either on our field borehole logs or in-house copy of the sample certificate of analysis.

5.0 (viii) SEDIMENT SAMPLING

Sediment sampling was not conducted as part of the Phase Two activities as the planned medium investigated was limited to the soil and groundwater medium.

5.0 (ix) ANALYTICAL TESTING

All laboratory analytical work was performed by AGAT Laboratories [AGAT] in Mississauga, Ontario.

AGAT is a member of the Canadian Association for Laboratory Accreditation [CALA] and meets the requirements of Section 47 of the RSC Regulation.

5.0 (x) RESIDUAL MANAGEMENT PROCEDURES

Soil cuttings produced from the physical drilling activities were left above the ground surface in the immediate vicinity of each borehole.

Purged groundwater was stored on-site until the results of the laboratory analytical testing demonstrated that the groundwater met the applicable SCS at which time the groundwater was discarded across the surface soil in the vicinity of each groundwater sampling point.

5.0 (xi) ELEVATION SURVEYING

All boreholes, and groundwater monitoring wells, were surveyed by a staff member of SOIL-MAT ENGINEERS. A hydro pole, located north of the property was utilised as a temporary benchmark and was assigned an assumed elevation of 100.00m.

The temporary benchmark location is illustrated on Drawing No. 2 in Appendix 'A'.

5.0 (xii) QUALITY ASSURANCE AND QUALITY CONTROL MEASURES

QA/QC was maintained during the field program through equipment decontamination and sampling procedures, as outlined in the "*MOE Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*" (May, 1996).

Standard QA/QC protocols were followed for bottle preparation, sample collection and transportation, as outlined by MOE guidance documents, including the MOE's 2011 "*Protocol for Analytical Methods Used in the Assessment of Properties Under Part XV.1 of the Environmental Protection Act*".

In addition to these field-based measures, extensive QA/QC procedures were carried out by the analytical laboratories, including:

- Lab blanks;
- Spikes;
- Matrix blanks; and
- Instrument blanks and assessments of instrument tuning and performance.

Based on the evaluation of the sampling and analytical procedures used, the following data quality statements can be made:

- The data are adequate for the RSC objectives and approach utilized; and,

- Soil analytical data were of an acceptable quality for comparison to 2011 MOE SCS as defined by *O.Reg.153/04, as amended,* for current investigations.

6.0 REVIEW AND EVALUATION

6.0 (i) GEOLOGY

SOIL-MAT ENGINEERS' Phase Two ESA revealed the following Site stratigraphy:

- TOPSOIL: A surficial veneer of topsoil approximately 150 millimetres in thickness was encountered at all boreholes. It is noted that the depth of topsoil may vary across the site and from the borehole locations. It is also noted that the term 'topsoil' has been used from a geotechnical point of view, and does not necessarily reflect its nutrient content or ability to support plant life.
- CLAYEY SILT/ SILTY CLAY FILL: Clayey silt/silty clay fill was encountered beneath the topsoil or gravel fill in Borehole Nos.: 1, 2, 3, 5 and 6. The cohesive soil was brown in colour. The soils contained traces of, to some, sand, gravel and occasional organics, and was generally found to be firm to very stiff in consistency. The clayey silt/ silty clay fill encountered was proven to depths of approximately 0.76 to 1.07 metres below the existing ground surface.
- CONCRETE SLAB: Concrete was encountered beneath the topsoil in Borehole Nos.: 1, 2 and 5. The concrete slab was found at a depth of approximately 1.3 metres beneath the existing ground surface as a result the former building slab.
- SILTY CLAY/ CLAYEY SILT: Native silty clay/clayey silt was encountered beneath the topsoil, clayey silt/silty clay fill and concrete slab at all borehole locations. The native cohesive soil was brown to grey in colour and contained traces of, to some, gravel, and was generally found to be soft to very stiff in consistency. The silty clay/ clayey silt was proven to termination in all Boreholes.
- GROUNDWATER: The depth to the groundwater table is anticipated to be approximately 1.37 to 2.42 metres below ground surface based on groundwater readings secured from the three [3] monitoring wells installed on the Site. Seasonal fluctuations to this level should be expected. Based on the ground water contours extrapolated from the recorded static ground water levels on the Site the ground water flow direction through the Site is to the northeast. In addition, the horizontal hydraulic gradient was estimated as 0.03057.

6.0 (ii) GROUND WATER: ELEVATIONS AND FLOW DIRECTIONS

A groundwater monitoring well was installed in Borehole Nos. BH1, BH3 and BH5 for future monitoring of the static groundwater level and to facilitate the collection of groundwater samples for laboratory analytical testing.

The recorded static groundwater details are summarized in the table below.

TABLE A
SUMMARY OF GROUNDWATER LEVELS

Groundwater Monitoring Well	Surface Elevation* (m)	July 26, 2024		August 9, 2024	
		Depth [m]	Elev.* [m]	Depth [m]	Elev.* [m]
BH/MW1	100.08	4.01	96.07	2.42	97.66
BH/MW3	100.10	1.10	99.00	1.37	98.73
BH/MW5	100.30	1.63	98.67	1.69	98.61

* - Elevations referenced to a Temporary Benchmark with an assumed elevation of 100.0 metres.

Based on the water level readings and our observations during the physical drilling activities and installation of groundwater monitoring wells, experience in the area, etc. the static groundwater level is estimated at a depth of approximately 1 to 2.5 metres below the ground surface and would be expected to fluctuate seasonally. Regardless, some shallower perched deposits of water may be encountered and should be anticipated, especially during the 'wet' times of the year.

The monitoring well locations are illustrated on Drawing No. 3 in Appendix 'A'.

6.0 (iii) GROUND WATER: HYDRAULIC GRADIENTS

The horizontal hydraulic gradient was calculated based on the groundwater levels recorded during the Phase Two activities. Based on these recordings, the distance between the groundwater monitoring wells and the depth of well installation the horizontal hydraulic gradient was calculated as 0.03057, as follows:

Horizontal hydraulic gradient = $\Delta h / \Delta L$
= (MW 3 groundwater elevation in metres – MW 1 groundwater elevation in metres)/ (Distance between MW 3 and MW 1 in metres)
= (98.73 metres – 97.66 metres)/ 35 metres
= 1.07 metres/ 35 metres
=-0.03057

6.0 (iv) MEDIUM TO FINE SOIL TEXTURE

SOIL-MAT ENGINEERS' conducted hydrometer testing on two [2] samples. The results of the hydrometer tests indicates that the surface and subsurface soil consists primarily of a brown silt and clay with a trace of sand and gravel as the predominant soil type. Given the above, the soil has more than 50% finer than the 75 um sieve, and so is classified as medium to fine textured.

6.0 (v) SOIL: FIELD SCREENING

SOIL-MAT ENGINEERS did not observe any visual or olfactory evidence that suggested a new COPC grouping should be considered during the assessment activities.

6.0 (vi) SOIL QUALITY

In total, thirty-one [31] soil samples, including four [4] duplicate samples and six [6] soil samples from our preliminary Phase Two activities, were secured from the Site to assess potential adverse impact(s) on the Site as a result of the PCAs identified upon completion of our May 25, 2024 Phase One ESA.

The secured soil samples were submitted to AGAT for laboratory analytical testing as described in the summary table below:

SUMMARY OF TESTED SOIL SAMPLES

Sample ID [APEC / PCA]	Depth [m bgs]	Laboratory Analysis	Soil Description
TP1 [APEC#1/PCA #Other]	1.0	Metals, PHCs, BTEX, VOCs, PAHs	Silty Clay / Clayey Silt Fill
TP2 [APEC#1/PCA #40, Other]	0.3	Metals, PAHs, OCs & Pesticides	Topsoil / Silty Clay / Clayey Silt
TP2B [APEC#1/PCA #Other]	1.5-2.1	Metals, PHCs, BTEX, VOCs, PAHs	Silty Clay / Clayey Silt
TP3 [APEC#1/PCA #Other]	1.0	Metals, PHCs, BTEX, VOCs, PAHs	Silty Clay / Clayey Silt Fill
TP4 [APEC#1/PCA #Other]	1.0	Metals, PHCs, BTEX, VOCs, PAHs	Silty Clay / Clayey Silt Fill
TP5 [APEC #1/PCA #40]	0.1	Metals, OCs & Pesticides	Topsoil / Silty Clay / Clayey Silt
BH1-SS3 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	1.5-2.1	Metals, BTEX, PHCs, VOCs, PAHs	Concrete Slab / Clayey Silt / Silty Clay Fill
BH1-SS6 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	3.8-4.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt
BH2-SS2 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Clayey Silt / Silty Clay Fill
BH2-SS6 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	3.8-4.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt
BH3-SS3 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	1.5-2.1	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt
BH3-SS6 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	3.8-4.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt
BH4-SS1 [APEC 3 / PCA #40]	0-0.6	Metals, BTEX, PHCs, VOCs, PAHs	Topsoil / Silty Clay / Clayey Silt
BH4-SS2 [APEC 3 / PCA #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt
BH5-SS1 [APEC 1a,1b, 3 / PCA #30, Other, #40]	0-0.6	Metals, BTEX, PHCs, VOCs, PAHs	Topsoil / Clayey Silt / Silty Clay Fill
BH5-SS2 [APEC 1a,1b, 3 / PCA #30, Other, #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Clayey Silt / Silty Clay Fill
BH6-SS2 [APEC 3 / PCA #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Clayey Silt / Silty Clay Fill
BH6-SS4 [APEC 3 / PCA #40]	2.3-2.9	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt

Sample ID [APEC / PCA]	Depth [m bgs]	Laboratory Analysis	Soil Description
TP101 [APEC 3 / PCA #40]	0.15	Metals, OCs	Silty Clay / Clayey Silt
TP102 [APEC 3 / PCA #40]	0.15	Metals, OCs	Silty Clay / Clayey Silt
TP103 [APEC 1a,1b, 3 / PCA #30, Other, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt
TP104 [APEC 3 / PCA #40]	0.15	Metals, OCs	Silty Clay / Clayey Silt
TP105 [APEC 3 / PCA #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt
TP106 [APEC 3 / PCA #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt
TP107 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt
TP108 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt
TP109 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt
DUP1 [BH1 SS3] [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	1.5-2.1	PAHs	Concrete Slab / Clayey Silt / Silty Clay Fill
DUP2 [BH3 SS6] [APEC 2a, 2b, 3 / PCA #32, #34, #40]	3.8-4.4	BTEX, VOCs	Silty Clay / Clayey Silt
DUP3 [BH6 SS2] [APEC 3 / PCA #40]	0.8-1.4	PAHs	Clayey Silt / Silty Clay Fill
DUP4 [BH6 SS4] [APEC 3 / PCA #40]	2.3-2.9	Metals	Silty Clay / Clayey Silt
Notes: Metals = Metals, As, Sb, Se, BHWS, CN, EC, Cr (VI), Hg and SAR PHCs = Petroleum Hydrocarbons, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene Mixture, PAHs = Polycyclic Aromatic Hydrocarbons, Volatile Organic Compounds = [VOCs] and Organochlorine Pesticides [OCs]			

The laboratory analytical test results for the submitted soil samples are summarised on the table below:

SUMMARY OF SOIL SAMPLE TEST RESULTS

Sample ID	Depth [m bgs]	Laboratory Analysis	Soil Description	Table 3 SCS Exceedances
TP1 [APEC#1/PCA #Other]	1.0	Metals, PHCs, BTEX, VOCs, PAHs	Silty Clay / Clayey Silt Fill	Exceeds for Cobalt – 34.9 µg/g vs 22 µg/g, Copper – 178 µg/g vs 140 µg/g, Molybdenum – 10.5 µg/g vs 6.9 µg/g, Nickel – 142 µg/g vs 100 µg/g, Zinc – 466 µg/g vs 340 µg/g
TP2 [APEC#1/PCA#40, Other]	0.3	Metals, PAHs, OCs & Pesticides	Topsoil / Silty Clay / Clayey Silt	No exceedances reported
TP2B [APEC#1/PCA#Other]	1.5-2.1	Metals, PHCs, BTEX, VOCs, PAHs	Silty Clay / Clayey Silt	No exceedances reported
TP3 [APEC#1/PCA#Other]	1.0	Metals, PHCs, BTEX, VOCs, PAHs	Silty Clay / Clayey Silt Fill	No exceedances reported
TP4 [APEC#1/PCA#Other]	1.0	Metals, PHCs, BTEX, VOCs,	Silty Clay / Clayey Silt	No exceedances reported

Sample ID	Depth [m bgs]	Laboratory Analysis	Soil Description	Table 3 SCS Exceedances
		PAHs	Fill	
TP5 [APEC #1/PCA #40]	0.1	Metals, OCs & Pesticides	Topsoil / Silty Clay / Clayey Silt	Exceeds for: DDE – 0.321 µg/g vs 0.33 µg/g
BH1-SS3 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	1.5-2.1	Metals, BTEX, PHCs, VOCs, PAHs	Concrete Slab / Clayey Silt / Silty Clay Fill	No exceedances reported
BH1-SS6 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	3.8-4.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt	No exceedances reported
BH2-SS2 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Clayey Silt / Silty Clay Fill	Exceeds for: Lead – 242 µg/g vs 120 µg/g
BH2-SS6 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	3.8-4.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt	No exceedances reported
BH3-SS3 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	1.5-2.1	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt	No exceedances reported
BH3-SS6 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	3.8-4.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt	No exceedances reported
BH4-SS1 [APEC 3 / PCA #40]	0-0.6	Metals, BTEX, PHCs, VOCs, PAHs	Topsoil / Silty Clay / Clayey Silt	No exceedances reported
BH4-SS2 [APEC 3 / PCA #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt Fill	No exceedances reported
BH5-SS1 [APEC 1a,1b, 3 / PCA #30, Other, #40]	0-0.6	Metals, BTEX, PHCs, VOCs, PAHs	Topsoil / Clayey Silt / Silty Clay Fill	No exceedances reported
BH5-SS2 [APEC 1a,1b, 3 / PCA #30, Other, #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Clayey Silt / Silty Clay Fill	No exceedances reported
BH6-SS2 [APEC 3 / PCA #40]	0.8-1.4	Metals, BTEX, PHCs, VOCs, PAHs	Clayey Silt / Silty Clay Fill	No exceedances reported
BH6-SS4 [APEC 3 / PCA #40]	2.3-2.9	Metals, BTEX, PHCs, VOCs, PAHs	Silty Clay / Clayey Silt	No exceedances reported
TP101 [APEC 3 / PCA #40]	0.15	Metals, OCs	Silty Clay / Clayey Silt	No exceedances reported
TP102 [APEC 3 / PCA #40]	0.15	Metals, OCs	Silty Clay / Clayey Silt	No exceedances reported
TP103 [APEC 1a,1b, 3 / PCA #30, Other, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt	No exceedances reported
TP104 [APEC 3 / PCA #40]	0.15	Metals, OCs	Silty Clay / Clayey Silt	Exceeds for: DDE – 0.440 µg/g vs 0.33 µg/g
TP105 [APEC 3 / PCA #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt	Exceeds for: Lead – 422 µg/g vs 120 µg/g, Zinc – 648 vs 340 µg/g
TP106	0.05	Metals, OCs	Silty Clay /	No exceedances reported

Sample ID	Depth [m bgs]	Laboratory Analysis	Soil Description	Table 3 SCS Exceedances
[APEC 3 / PCA #40]			Clayey Silt	
TP107 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt	Exceeds for: DDE – 0.360 µg/g vs 0.33 µg/g
TP108 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt	No exceedances reported
TP109 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	0.05	Metals, OCs	Silty Clay / Clayey Silt	Exceeds for: Cadmium – 1.3 µg/g vs 1.2 µg/g, Lead – 224 vs 120 µg/g, Zinc – 679 vs 340 µg/g
DUP1 [BH1 SS3] [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	1.5-2.1	PAHs	Concrete Slab / Clayey Silt / Silty Clay Fill	No exceedances reported
DUP2 [BH3 SS6] [APEC 2a, 2b, 3 / PCA #32, #34, #40]	3.8-4.4	BTEX, VOCs	Silty Clay / Clayey Silt	No exceedances reported
DUP3 [BH6 SS2] [APEC 3 / PCA #40]	0.8-1.4	PAHs	Clayey Silt / Silty Clay Fill	No exceedances reported
DUP4 [BH6 SS4] [APEC 3 / PCA #40]	2.3-2.9	Metals	Silty Clay / Clayey Silt	No exceedances reported
Notes: Metals = Metals, As, Sb, Se, BHWS, CN, EC, Cr (VI), Hg and SAR PHCs = Petroleum Hydrocarbons, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene Mixture, PAHs = Polycyclic Aromatic Hydrocarbons, Volatile Organic Compounds = [VOCs] and Organochlorine Pesticides [OCs]				

INITIAL PHASE TWO ESA ACTIVITIES

- The laboratory analytical test results, for the submitted soil samples, revealed the following exceedances of the applicable Table 3 Site Condition Standards [Table 3 SCSs]:
  - Soil sample ‘TP1’, secured from our Test Pit No.: ‘TP1’, revealed elevated levels of select metal parameters [specifically Cobalt, Copper, Molybdenum, Nickel and Zinc] in the upper 1.0 metres;
  - Soil sample ‘TP5’, secured from our Test Pit No.: ‘TP5’, revealed an elevated level of a select Organochlorine Pesticide [OC] parameter [specifically DDE] in the upper 0.1 metres;

SUPPLEMENTAL PHASE TWO ESA ACTIVITIES

- The laboratory analytical test results, for the submitted soil and groundwater samples, revealed the following exceedances of the applicable Table 3 SCSs:

  - Soil sample ‘TP105’, secured from our Test Pit No.: TP105, revealed elevated levels of select metal parameters [specifically Lead and Zinc] in the upper 0.05 metres;

- Soil sample 'TP109', secured from our Test Pit No.: TP109, revealed elevated levels of select metal parameters [specifically Cadmium, Lead and Zinc] in the upper 0.05 metres.
- Soil sample 'BH2-SS2', secured from our Borehole No.: BH2, revealed an elevated level of a select metal parameter [specifically Lead] at a depth of approximately 0.76 to 1.07 metres below ground surface [m bgs].
- Soil sample 'TP104', secured from our Test Pit No.: TP104, revealed an elevated level of a select OCs parameter [specifically DDE] in the upper 0.15 metres;
- Soil sample 'TP107', secured from our Test Pit No.: TP107, revealed an elevated level of a select OCs parameter [specifically DDE] in the upper 0.05 metres;

With the exception of the above, all the other soil samples subjected to laboratory analytical testing were found to be within the applicable Table 3 SCSs for the select tested COPC groupings.

The Phase Two Property, borehole locations and soil analytical test results are illustrated on Drawing Nos.: 3, and 3A – 3F in Appendix 'A'. SOIL-MAT ENGINEERS' borehole logs are also included in Appendix 'A' for reference.

The AGAT Certificate of Analysis is included in Appendix 'B' for reference.

6.0 (vii) GROUND WATER QUALITY

In total, four [4] groundwater samples, including one duplicate sample, was secured from the Site to assess potential adverse impact(s) on the Site as a result of the PCAs identified in our Phase One ESA report.

The secured groundwater samples were submitted to AGAT for laboratory analytical testing as described in the summary table below:

Sample ID	Laboratory Analysis
MW1-S1 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.
MW3-S1 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.
MW5-S1 [APEC 1a,1b, 3 / PCA #30, Other, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.
DUP1 [MW3] [APEC 2a, 2b, 3 / PCA #32, #34, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.

The laboratory analytical test results for the submitted groundwater samples are summarised below:

SUMMARY OF ANALYTICAL TESTING – WATER [TABLE 3 NPGW]

Sample ID	Laboratory Analysis	Table 3 NPGW Exceedances
MW1-S1 [APEC 1a,1b, 2a, 2b, 3 / PCA #30, Other, #32, #34, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.	No exceedances reported
MW3-S1 [APEC 2a, 2b, 3 / PCA #32, #34, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.	No exceedances reported
MW5-S1 [APEC 1a,1b, 3 / PCA #30, Other, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.	No exceedances reported
DUP1 [MW3] [APEC 2a, 2b, 3 / PCA #32, #34, #40]	Metals, PHCs, BTEX, VOCs, PAHs & OCs.	No exceedances reported
Notes: Metals = Metals Metals, As, Sb, Se, BHWS, CN, EC, Cr (VI), Hg and SAR, PHCs = Petroleum Hydrocarbons, VOCs = Volatile Organic Compounds, BTEX = Benzene, Toluene, Ethylbenzene, and Xylene Mixture, PAHs = Polycyclic Aromatic Hydrocarbons and Organochloride Pesticides [OCs]		

The laboratory analytical test results indicate the following:

- In all cases, the secured groundwater samples reportedly meet the applicable Table 3 SCSs for the select tested COPCs.

The Phase Two Property, borehole locations and groundwater laboratory analytical test results are illustrated on Drawing Nos. 4A-F in Appendix 'B'.

The AGAT certificate of analysis for the groundwater analytical data is contained in Appendix 'C' for reference.

6.0 (viii) SEDIMENT QUALITY

Sediment sampling was not conducted as part of the planned Phase Two activities.

6.0 (ix) QUALITY ASSURANCE AND QUALITY CONTROL RESULTS

QA/QC was maintained during the field program through equipment decontamination and sampling procedures, as outlined in the "*MOE Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*" (May, 1996).

Standard QA/QC protocols were followed for bottle preparation, sample collection and transportation, as outlined by MOE guidance documents, including the MOE's 2011 "*Protocol for Analytical Methods Used in the Assessment of Properties Under Part XV.1 of the Environmental Protection Act*".

In addition to these field-based measures, extensive QA/QC procedures were carried out by the analytical laboratories, including:

- Lab blanks;
- Spikes;
- Matrix blanks; and
- Instrument blanks and assessments of instrument tuning and performance.

Based on the evaluation of the sampling and analytical procedures used, the following data quality statements can be made:

- The data is adequate for the RSC objectives and approach utilized; and,
- Soil analytical data were of an acceptable quality for comparison to Table 8 SCS as defined by *O.Reg.153/04, as amended,* for current investigations;

No deviations from the QA/QC protocols were noted during the completion of the Phase Two ESA fieldwork.

6.0 (x) PHASE TWO CONCEPTUAL SITE MODEL

SOIL-MAT ENGINEERS' has not prepared a Phase Two CSM as part of this Phase Two ESA as the soil medium does not currently meet the applicable Table 3 RPI SCSs. However, a Phase Two CSM will be prepared to support the filing of an RSC, once remediation/removal of the soil exhibiting elevated levels of the select COPCs has been completed and/or additional intrusive soil sampling and laboratory analytical testing demonstrate these isolated exceedances as anomalous and not representative of the actual soil conditions.

7.0 SUMMARY AND GENERAL COMMENTS

A brief discussion of the areas of potential environmental concern [APECs] on the Phase Two Property is provided below:

AREA OF SOIL EXHIBITING ELEVATED LEVELS OF SELECT METAL PARAMETERS

Our preliminary and supplemental Phase Two ESA activities revealed select metal exceedances in the upper approximately 1.1m of soil on the eastern portion of the Phase Two Property, although vertical delineation throughout this area was not established. The lateral delineation in this APEC can be defined by the nearest 'clean' sample locations and/or property boundary, as illustrated on the attached Drawing No.: 3A. However, given the existing distance between 'clean' and 'impacted' sample locations it is likely that additional intrusive sampling may achieve a reduction in the anticipated volume of soil affected in this specific APEC.

AREA OF SOIL EXHIBITING ELEVATED LEVELS OF SELECT OCS PARAMETERS

Our preliminary and supplemental Phase Two ESA activities revealed select OCs exceedances in the upper approximately 0.1m of soil in an area of the southern portion of the Phase Two Property. Although vertical delineation throughout this area was not established, it is our experience that this specific contaminant of concern [COC], DDE, is typically limited to the organic matter in the topsoil and not the underlying native soil. The lateral delineation in this APEC can be defined by the nearest 'clean' sample locations and/or property boundary, as illustrated on the attached Drawing No.: 3F. However, given the existing distance between 'clean' and 'impacted' sample locations it is likely that additional intrusive sampling may achieve a reduction in the anticipated volume of soil affected in this specific APEC.

AREA OF FILL OF UNKNOWN QUALITY

Our Phase One ESA identified fill of unknown quality as a PCA causing an APEC on the property, specifically within the areas of the former building foundations. Our Supplemental Phase Two ESA activities encountered fill at five [5] of the borehole locations, specifically, Borehole Nos.: 'BH1', 'BH2', 'BH3', 'BH5' and 'BH6'. Of note, two [2] of these locations were outside of the anticipated APEC areas, which suggests that the extent of fill on the Site has not been confirmed. It is our recommendation that additional intrusive soil sampling is required to further identify the extent of fill material on the Site to confirm that the material has been adequately characterised.

The Phase Two Property, borehole locations where fill was present are illustrated on Drawing No.: 5.

NON-POTABLE GROUNDWATER STANDARDS

It is noted that SOIL-MAT ENGINEERS' Phase Two ESA Report utilised the Table 3 Non-Potable Groundwater Standards, as the applicable site condition standard for the Site, as the research undertaken during the Phase One ESA did not indicate the presence of any potable groundwater wells on the Property or within the Study Area. However, for the purposes of filing a Record of Site Condition, written confirmation from the Niagara Region for the use of the non-potable groundwater standards is required. The cost for this application is $750.00.

8.0 CONCLUSIONS

It is our understanding that a Record of Site Condition [RSC] is required to support the proposed residential redevelopment of the Site. As such it will be necessary to undertake either a soil remediation programme, to restore the soil conditions to within the applicable Table 3 SCSs for a residential property, or subject the site to some level of Risk Assessment, such as a Modified Generic Risk Assessment [MGRA], to support the filing of an RSC. Given the nature of the identified contaminants of concern, and the proposed redevelopment of the Site, it is anticipated that a traditional 'dig and dump' soil removal remediation programme would be preferred. However, the pathway to an RSC can be reassessed once the specific areas of concerns and anticipated volumes of impacted soil has been established. This will allow for a cost comparison between a traditional 'dig and dump' and an MGRA.

Notwithstanding the above, based on the available laboratory analytical test results [to date], additional intrusive soil sampling is recommended to further delineate the lateral and vertical extent of the specific COCs in the two [2] APECs on the Phase Two Property.

The samples secured for analytical testing are believed to be representative of the conditions at the sample locations only. If any significant changes are noted, i.e., odours, staining etc., SOIL-MAT ENGINEERS should be contacted to reassess the environmental characteristics of the Site.

It is noted that subsurface soil conditions may be present on-site that are not typical of those presented in this Report. If future activities reveal such soils, SOIL-MAT ENGINEERS should be contacted to assess the soil conditions with respect to the proposed activity.

A description of the staff members associated with the completion of the Supplemental Phase Two ESA activities is contained in Appendix 'E' of this Report. The ESA activities were supervised by Mr. Steve Sears, P. Eng., QP_{ESA}, who is a Qualified Person for the undertaking of ESA activities.

SOIL-MAT ENGINEERS & CONSULTANTS LTD. prepared this Report for the account of 111 VICTORIA STREET INC. The material in it reflects SOIL-MAT ENGINEERS' best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. SOIL-MAT ENGINEERS accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.

We trust this Report is satisfactory for your purposes. Please feel free to contact our Office if you have any questions, or we may be of further service to you.

Yours very truly,
SOIL-MAT ENGINEERS & CONSULTANTS LTD.

Geena Gilmour, B.A.
Environmental Technician

Keith Gleadall, B.A., EA Dipl.
Environmental Manager

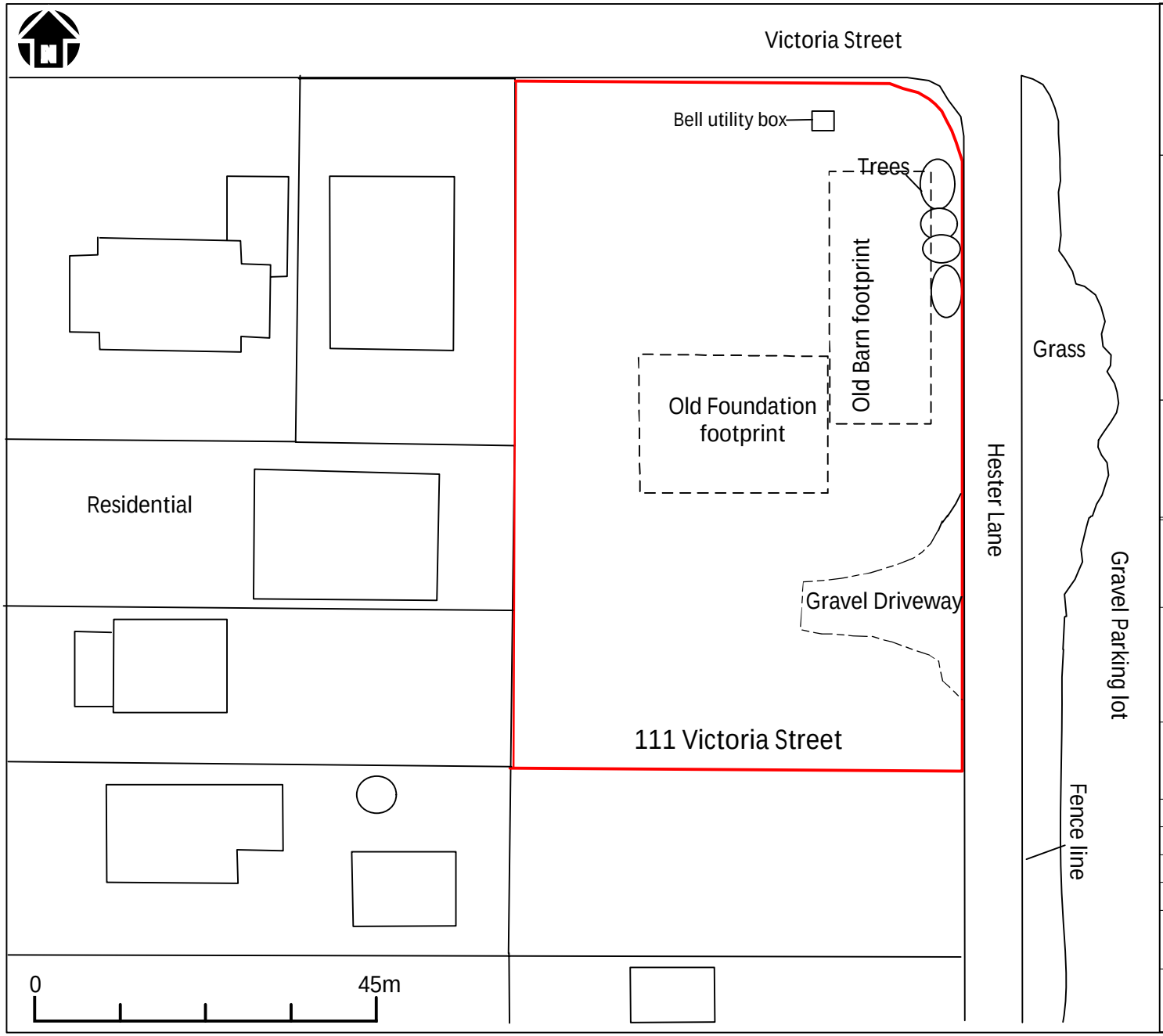
Stephen R. Sears, B. Eng. Mgmt., P. Eng., QP_{ESA}
Review Engineer

Distribution: 111 VICTORIA STREET INC [1]

Enclosures:
Appendix 'A' Site Plan Drawings and Borehole Logs;
Appendix 'B' AGAT Soil Analytical Data;
Appendix 'C' AGAT Groundwater Analytical Data;
Appendix 'D' Qualifications of Assessors;
Appendix 'E' Statement of Limitations

Appendix 'A'

1. Drawing No.: 1: Site Plan;
2. Drawing No.: 1A: APECs;
3. Drawing No.: 2: Groundwater Flow Direction;
4. Drawing No.: 3: Borehole, Monitoring Well and Test Pit Location Plan;
5. Drawing No.: 3A: Analytical Data Summary [Soil] – Metals;
6. Drawing No.: 3B: Analytical Data Summary [Soil] – PHCs;
7. Drawing No.: 3C: Analytical Data Summary [Soil] – BTEX;
8. Drawing No.: 3D: Analytical Data Summary [Soil] – VOCs;
9. Drawing No.: 3E: Analytical Data Summary [Soil] – PAHs;
10. Drawing No.: 3F: Analytical Data Summary [Soil] – OCs;
11. Drawing No.: 4A: Analytical Data Summary [Groundwater] – Metals;
12. Drawing No.: 4B: Analytical Data Summary [Groundwater] – PHCs;
13. Drawing No.: 4C: Analytical Data Summary [Groundwater] – BTEX;
14. Drawing No.: 4D: Analytical Data Summary [Groundwater] – VOCs;
15. Drawing No.: 4E: Analytical Data Summary [Groundwater] – PAHs;
16. Drawing No.: 4F: Analytical Data Summary [Groundwater] – OCs;
17. Drawing No.: 5: Fill of Unknown Quality;
18. Borehole Logs



LEGEND

= Site Boundary

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

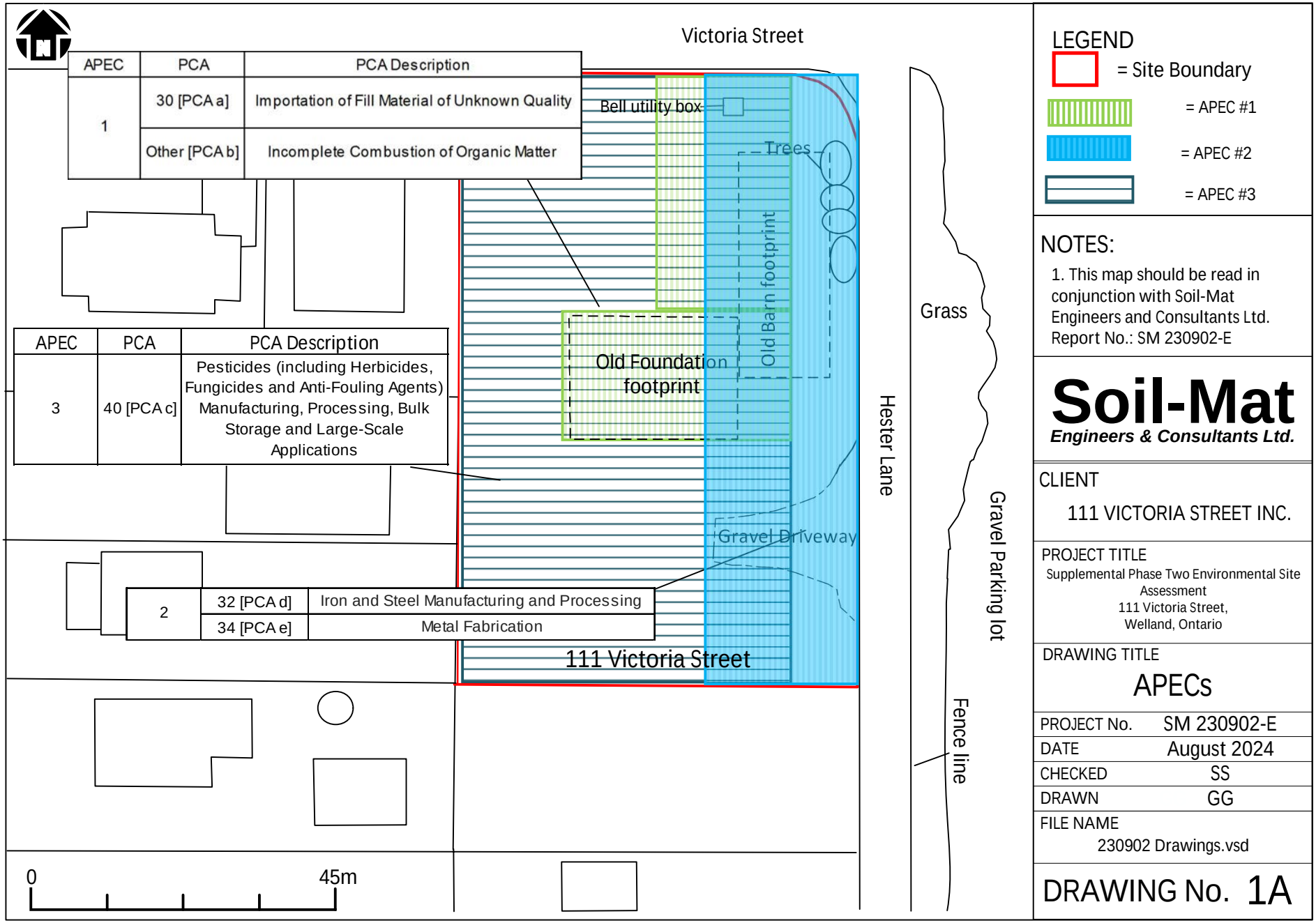
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Site Plan

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 1



LEGEND

= Site Boundary

= APEC #1

= APEC #2

= APEC #3

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat

Engineers & Consultants Ltd.

CLIENT

111 VICTORIA STREET INC.

PROJECT TITLE

Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE

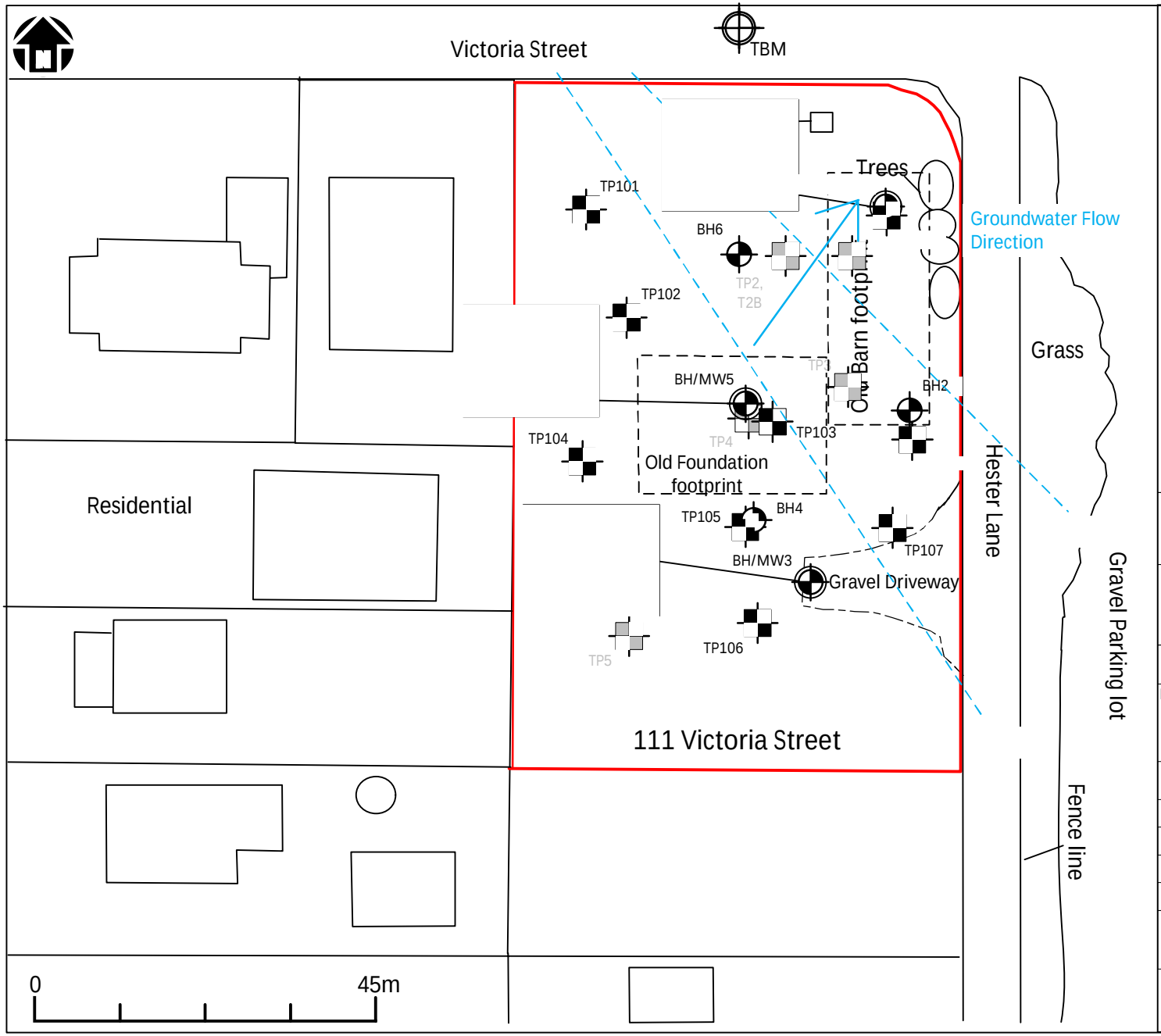
APECs

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME

230902 Drawings.vsd

DRAWING No. 1A



LEGEND

= Site Boundary

= APEC #1

= APEC #2

= APEC #3

BH# = Borehole Location

BH/MW# = BH/MW Location

TP# = Test Pit Location [Nov. 2023]

TP# = Test Pit Location [July 2024]

TBM = Temporary Benchmark

GSE = Monitoring Well Ground Surface Elevation
SWE = Static Water Elevation
MWL = Monitoring Well Length
MWSIE = Monitoring Well Screen Interval Elevation
DS = Depth of Screen

NOTES:
1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT	111 VICTORIA STREET INC.
PROJECT TITLE	Supplemental Phase Two Environmental Site Assessment 111 Victoria Street, Welland, Ontario
DRAWING TITLE	Groundwater Flow
PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG
FILE NAME	230902 Drawings.vsd

DRAWING No. 2

LEGEND

- = Site Boundary
- = APEC #1
- = APEC #2
- = APEC #3
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- TBM = Temporary Benchmark

NOTES:
1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E
2. Borehole locations are approximate.

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

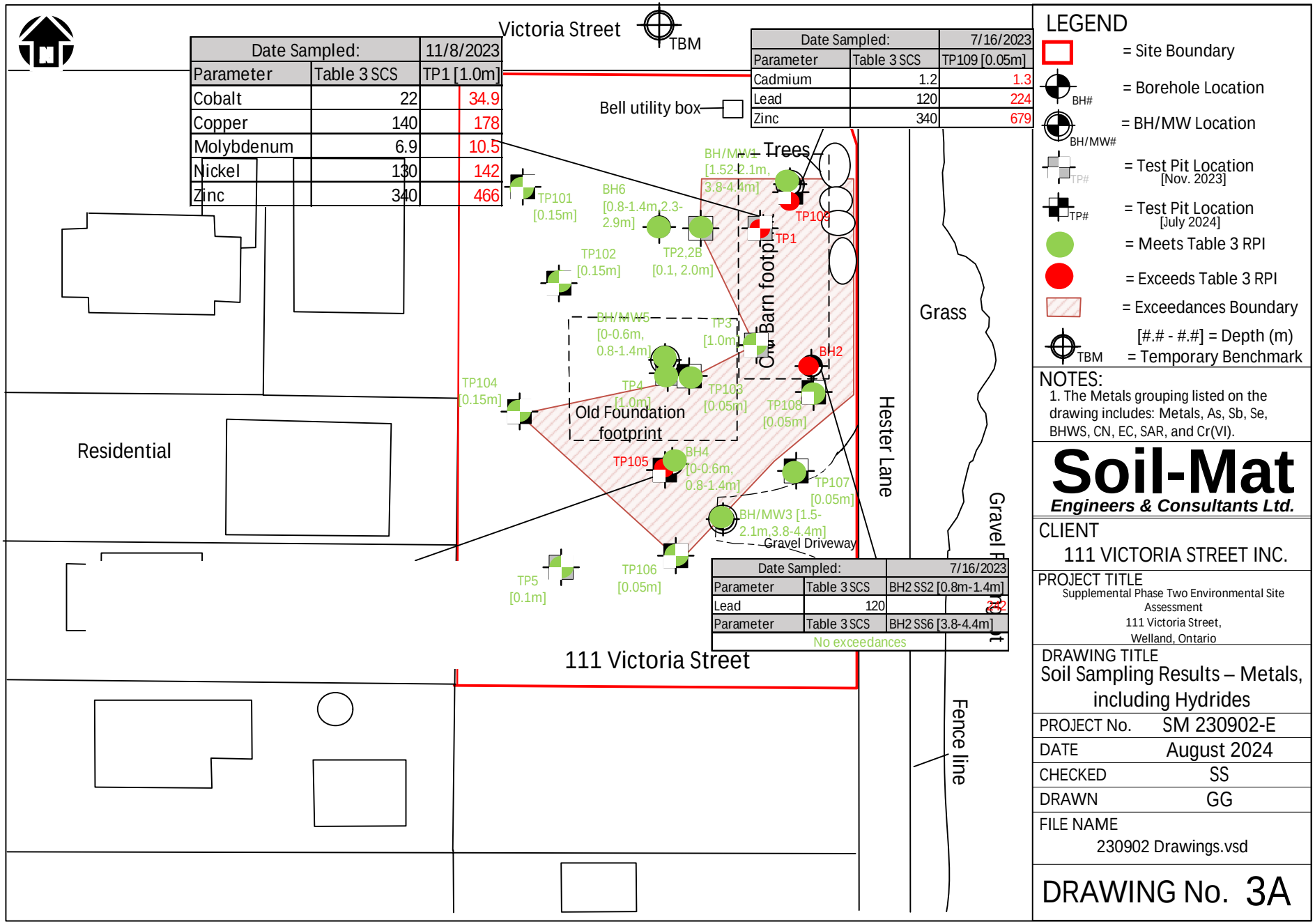
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Borehole, Monitoring Well and Test Pit Locations

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 3



Date Sampled:		11/8/2023
Parameter	Table 3 SCS	TP1 [1.0m]
Cobalt	22	34.9
Copper	140	178
Molybdenum	6.9	10.5
Nickel	130	142
Zinc	340	466

Date Sampled:		7/16/2023
Parameter	Table 3 SCS	TP109 [0.05m]
Cadmium	1.2	1.3
Lead	120	224
Zinc	340	679

Date Sampled:		7/16/2023
Parameter	Table 3 SCS	BH2 SS2 [0.8m-1.4m]
Lead	120	282
Parameter	Table 3 SCS	BH2 SS6 [3.8-4.4m]
No exceedances		

LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- = Exceedances Boundary
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. The Metals grouping listed on the drawing includes: Metals, As, Sb, Se, BHWS, CN, EC, SAR, and Cr(VI).

Soil-Mat
Engineers & Consultants Ltd.

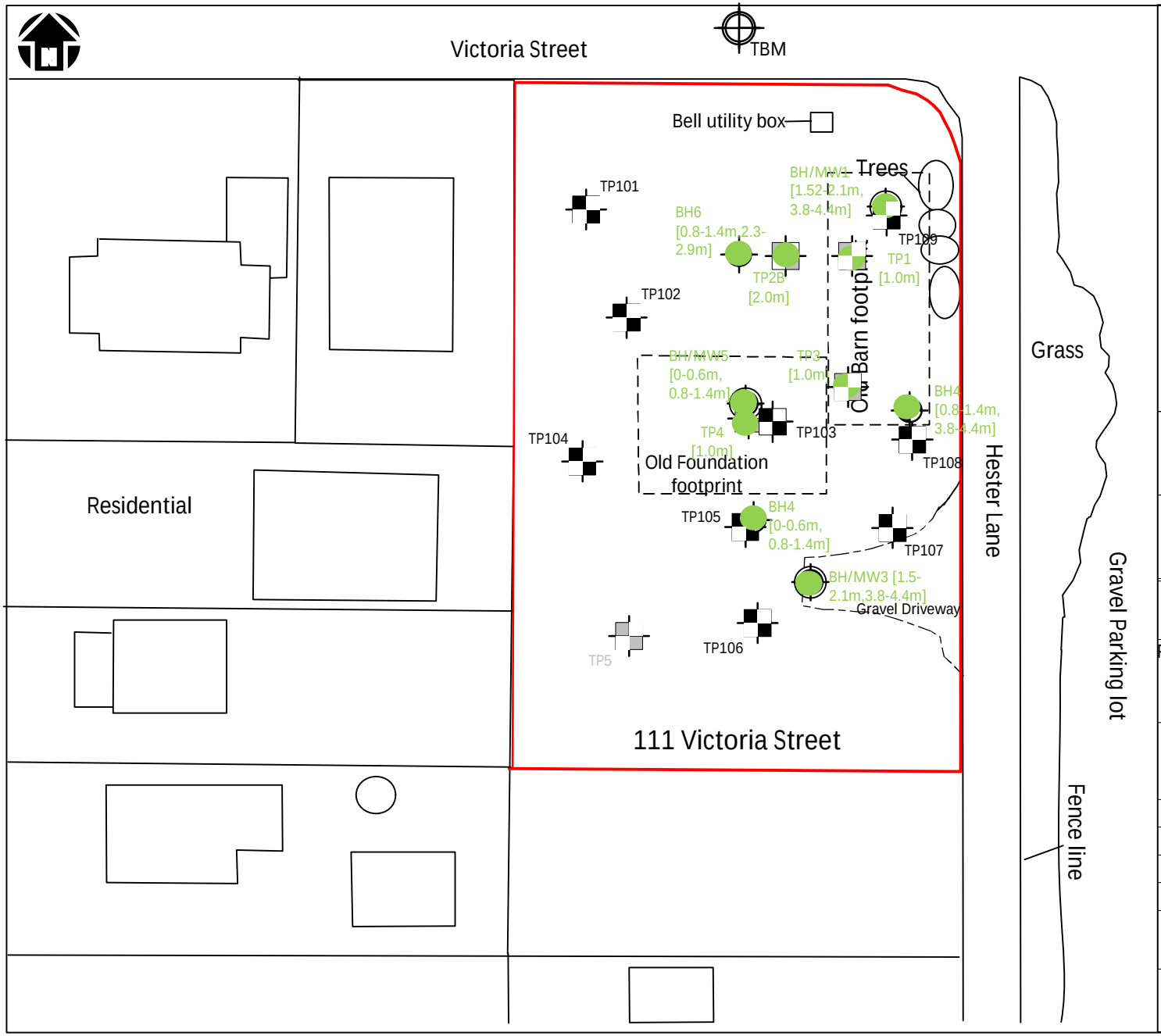
CLIENT
111 VICTORIA STREET INC.

PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Soil Sampling Results – Metals, including Hydrides

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG
FILE NAME	230902 Drawings.vsd

DRAWING No. 3A



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Soil Sampling results - PHCs

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 3B

LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Soil Sampling results - BTEX

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 3C

LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

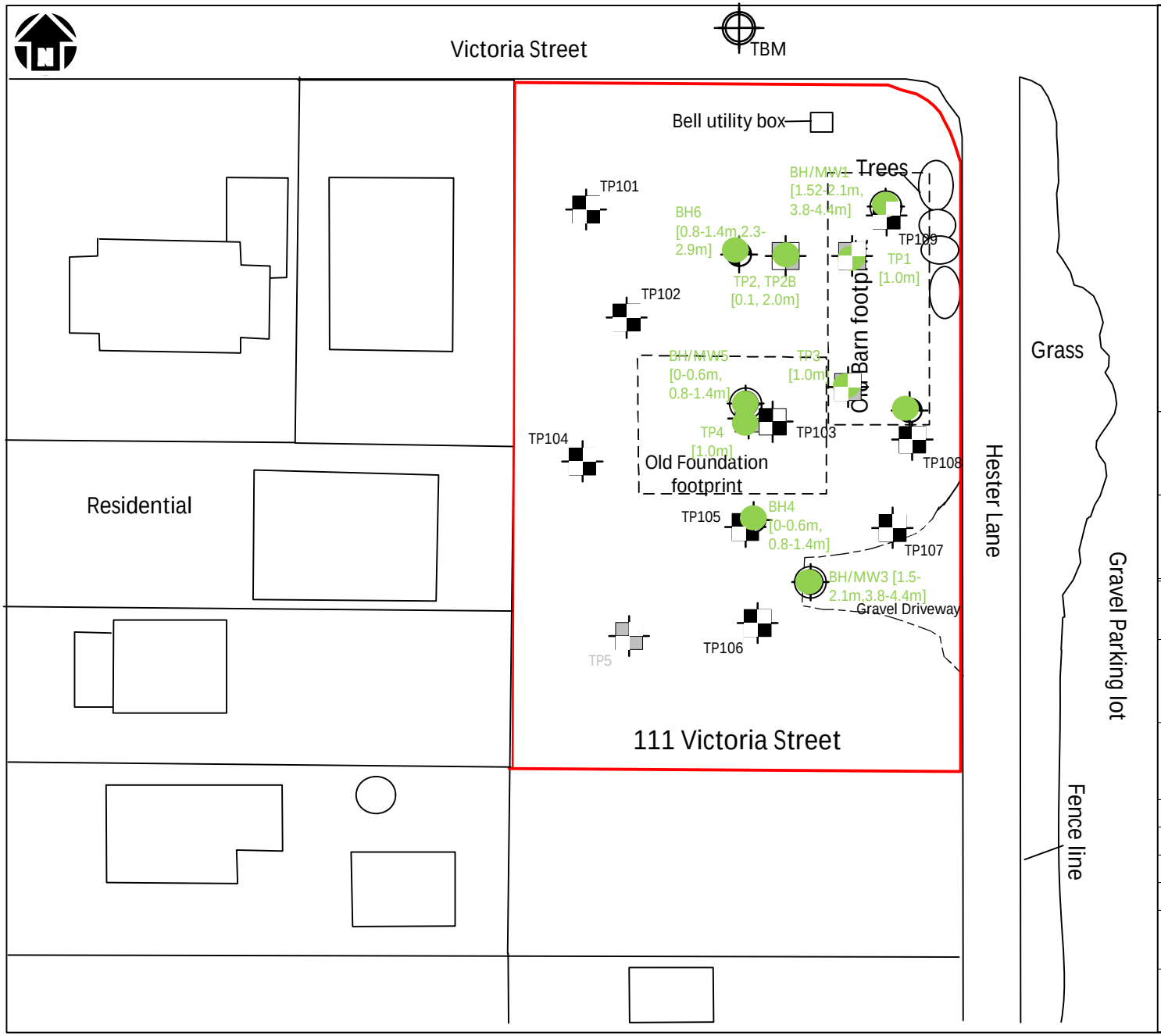
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Soil Sampling results - VOCs

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 3D



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

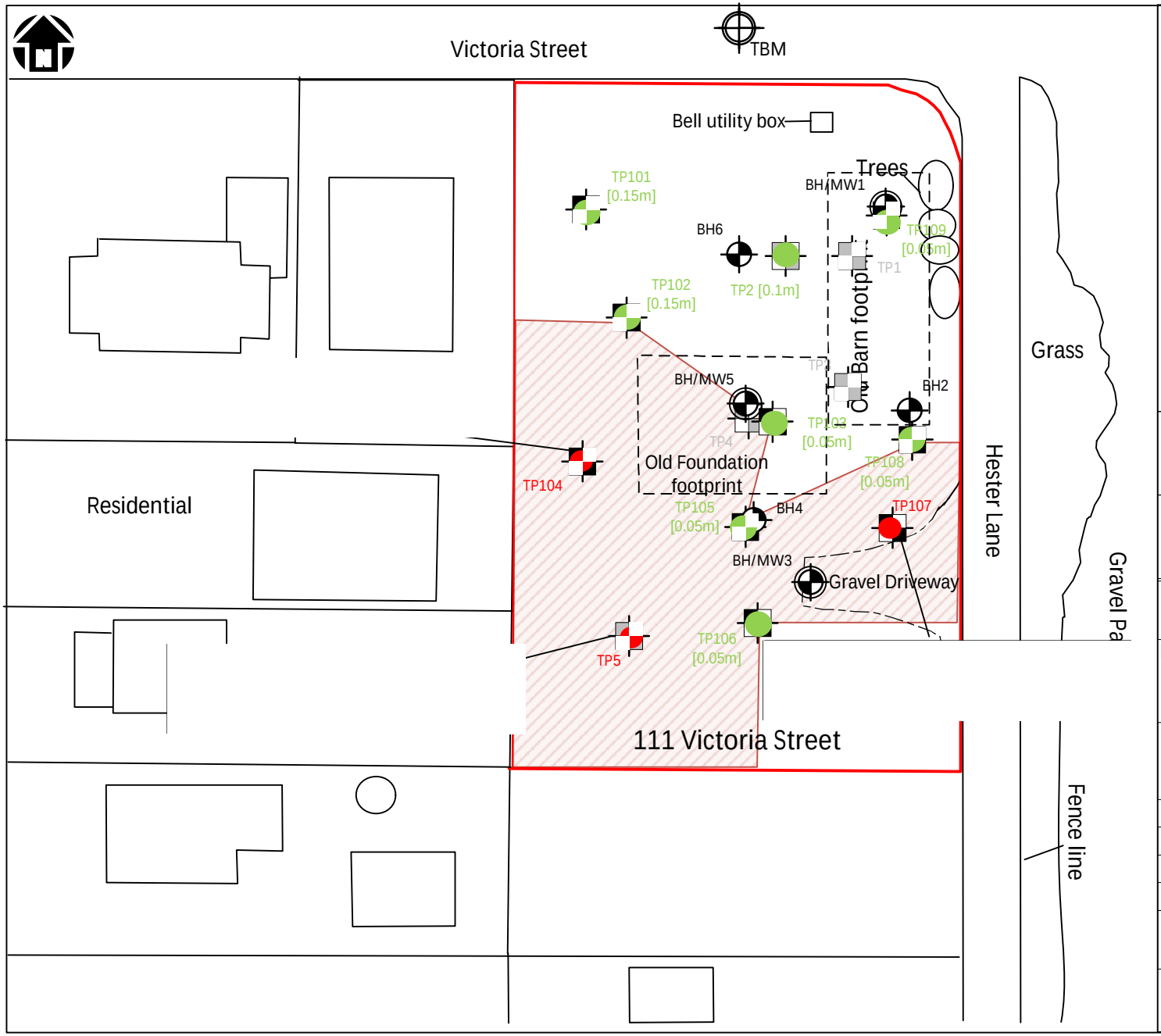
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Soil Sampling results - PAHs

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 3E



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- = Exceedances Boundary
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

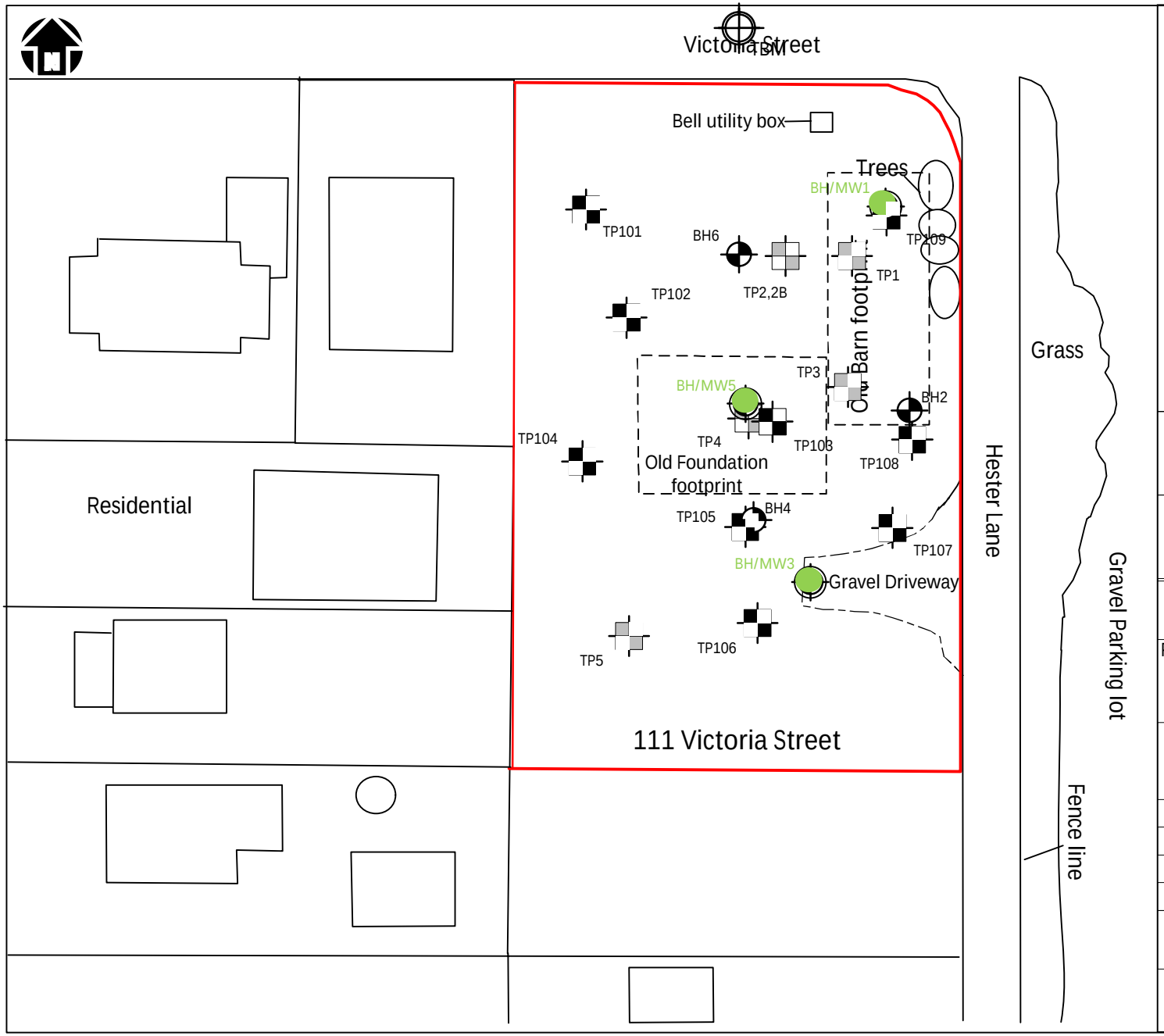
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Soil Sampling results – OCs & Pesticides

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 3F



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

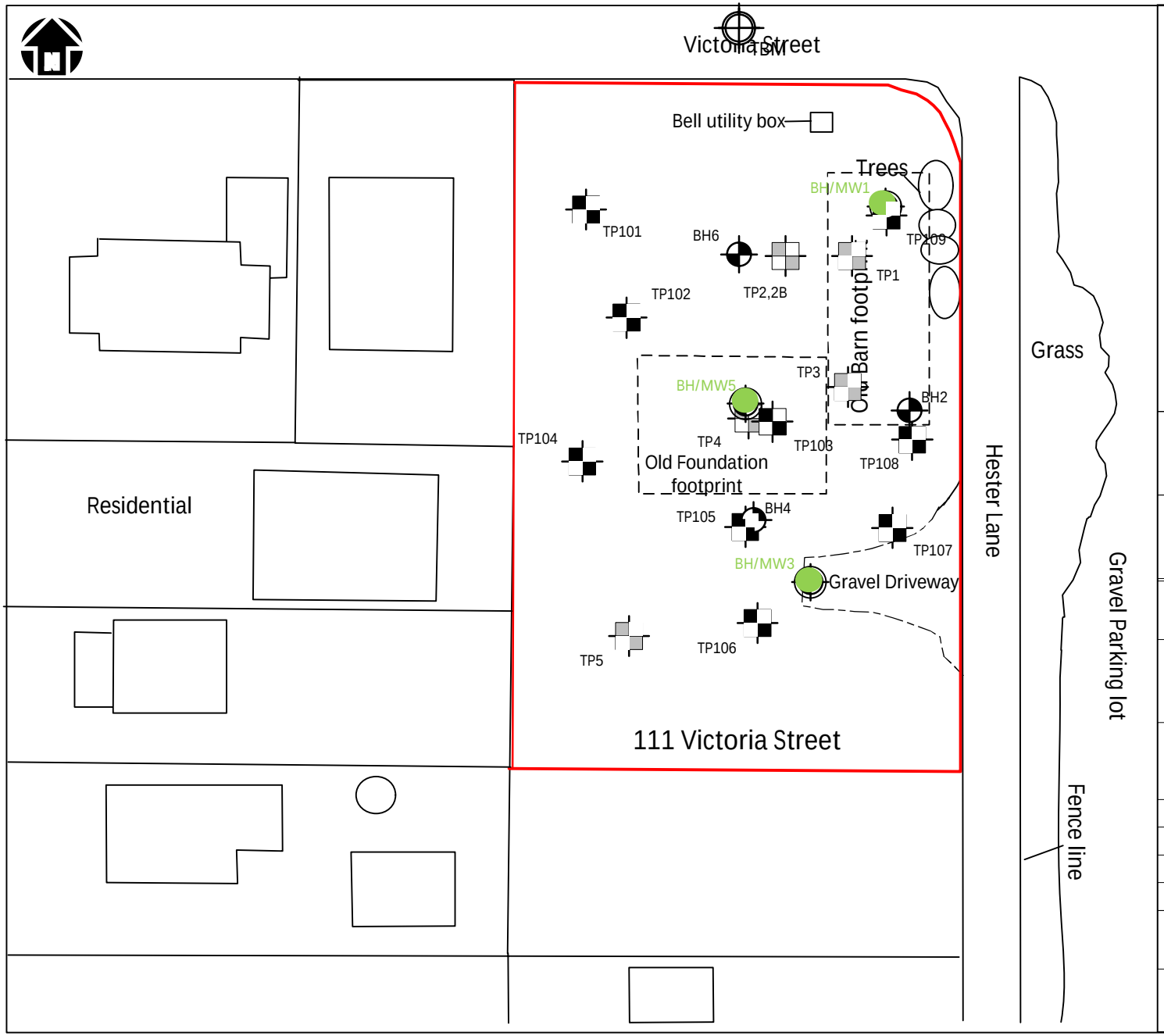
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Groundwater Sampling Results – Metals & Inorganics

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 4A



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

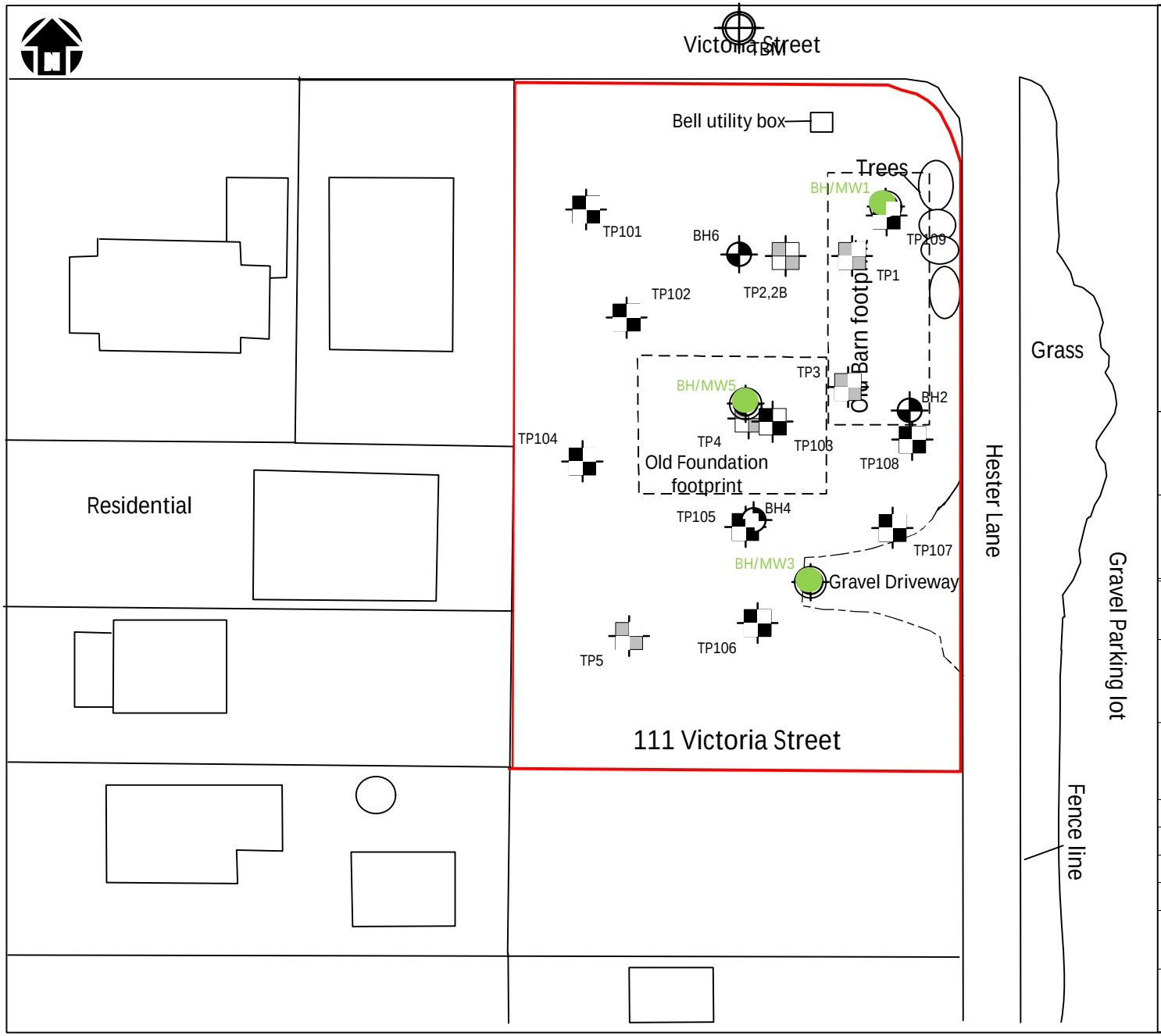
CLIENT
111 VICTORIA STREET INC.

PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Groundwater Sampling results - PHCs

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG
FILE NAME	230902 Drawings.vsd

DRAWING No. 4B



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

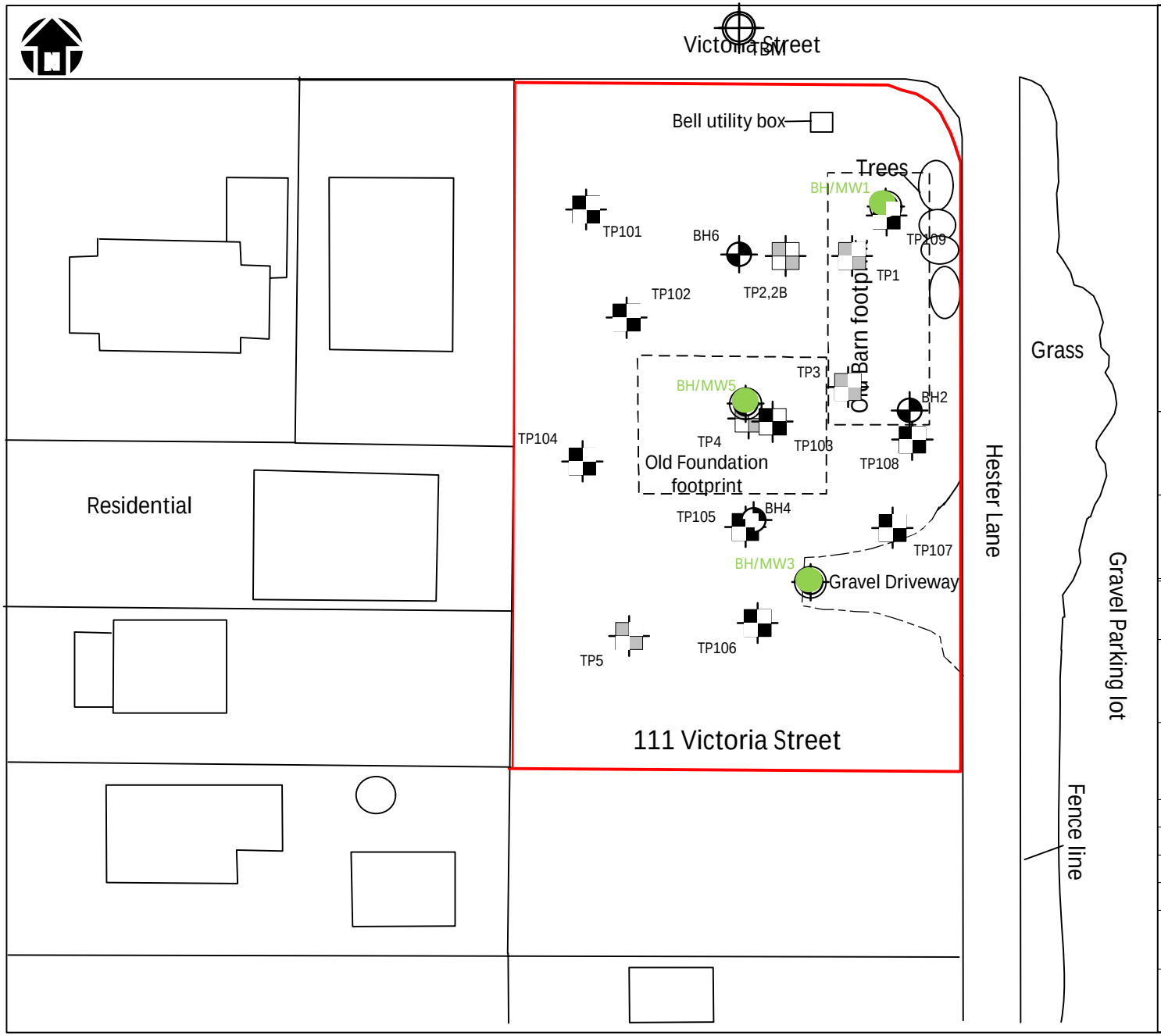
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Groundwater Sampling results - BTEX

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 4C



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

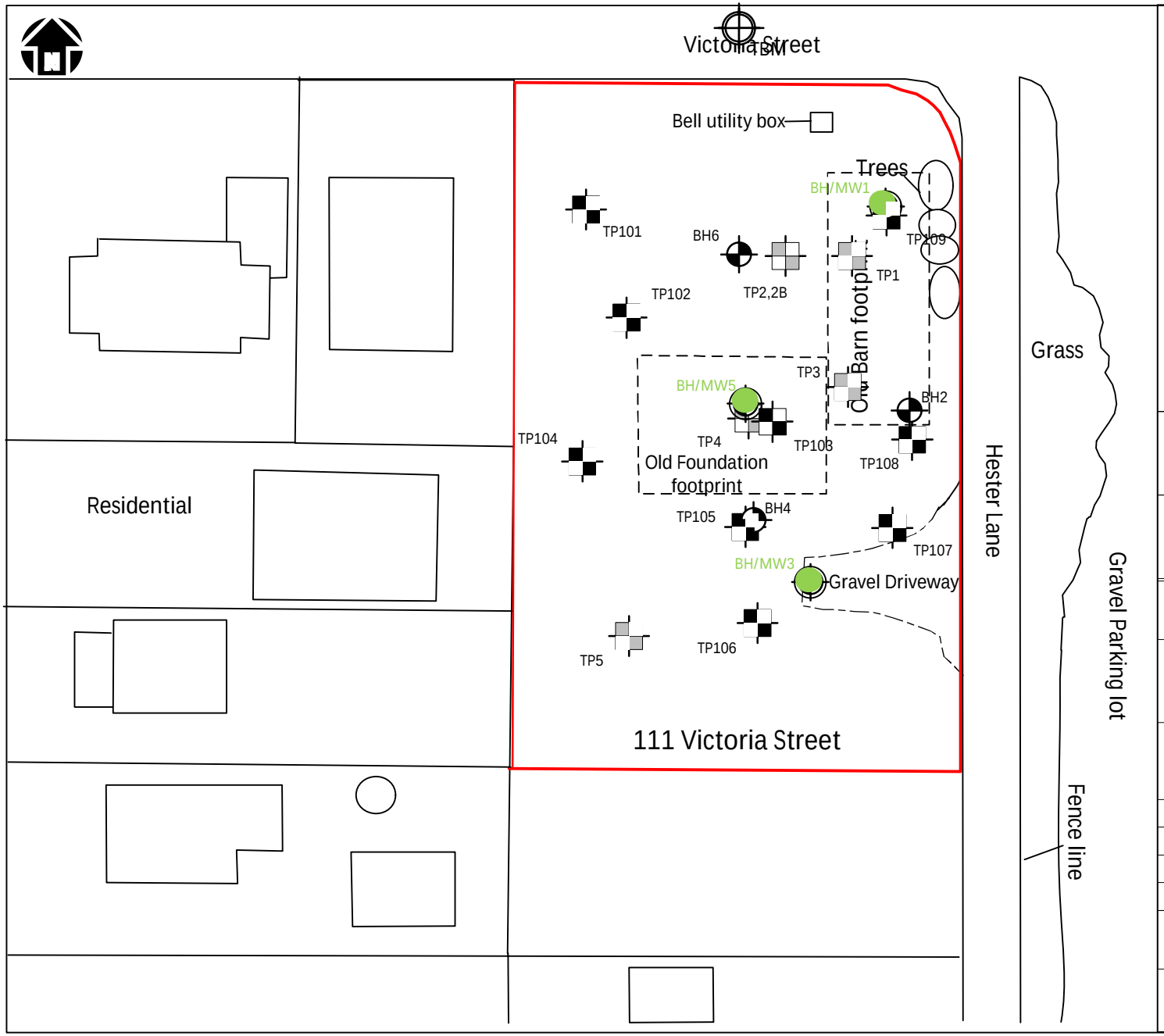
PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Groundwater Sampling results - VOCs

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 4D



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

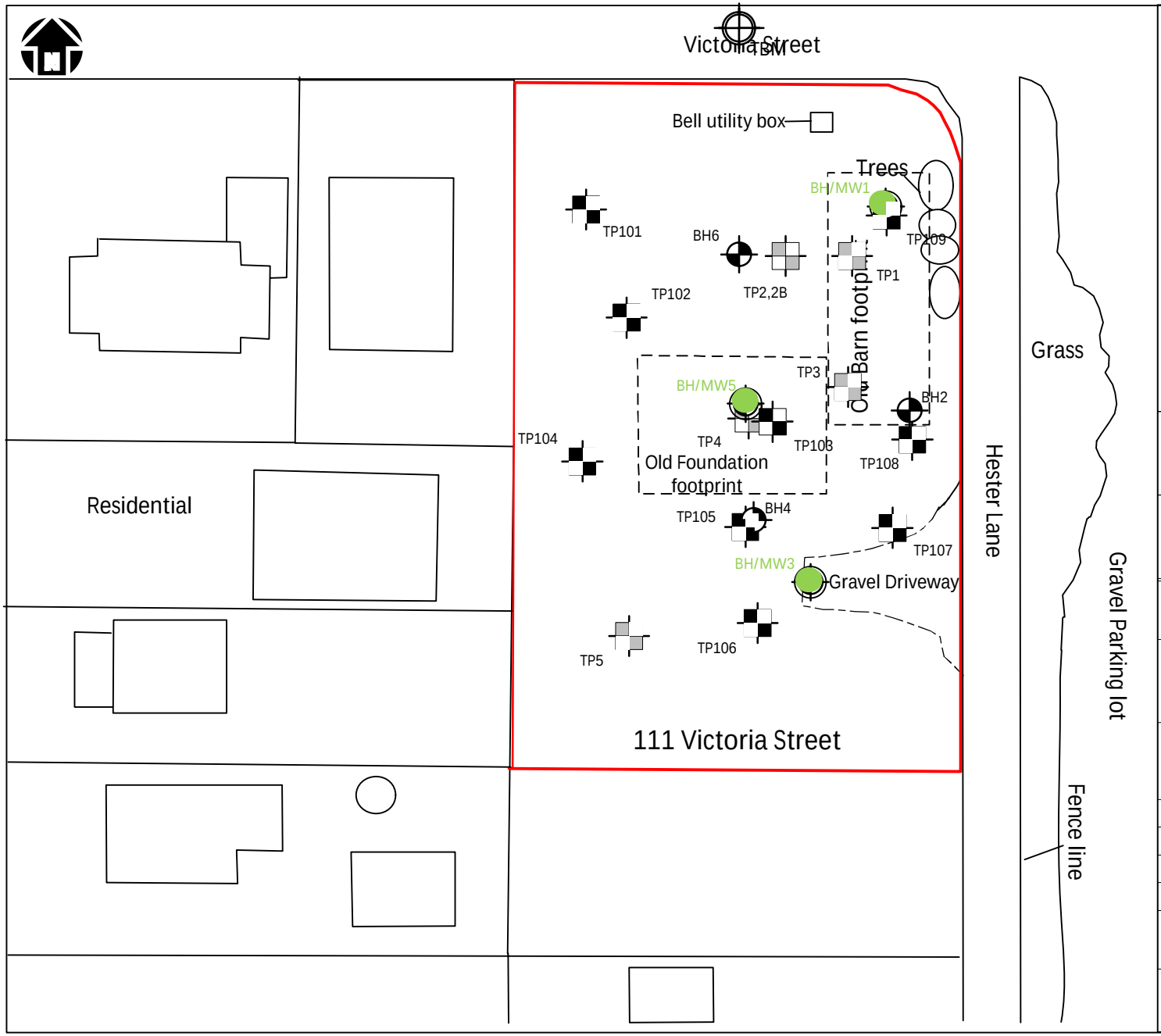
PROJECT TITLE
Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Groundwater Sampling results - PAHs

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 4E



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- = Meets Table 3 RPI
- = Exceeds Table 3 RPI
- [#.# - #.#] = Depth (m)
- TBM = Temporary Benchmark

NOTES:

1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

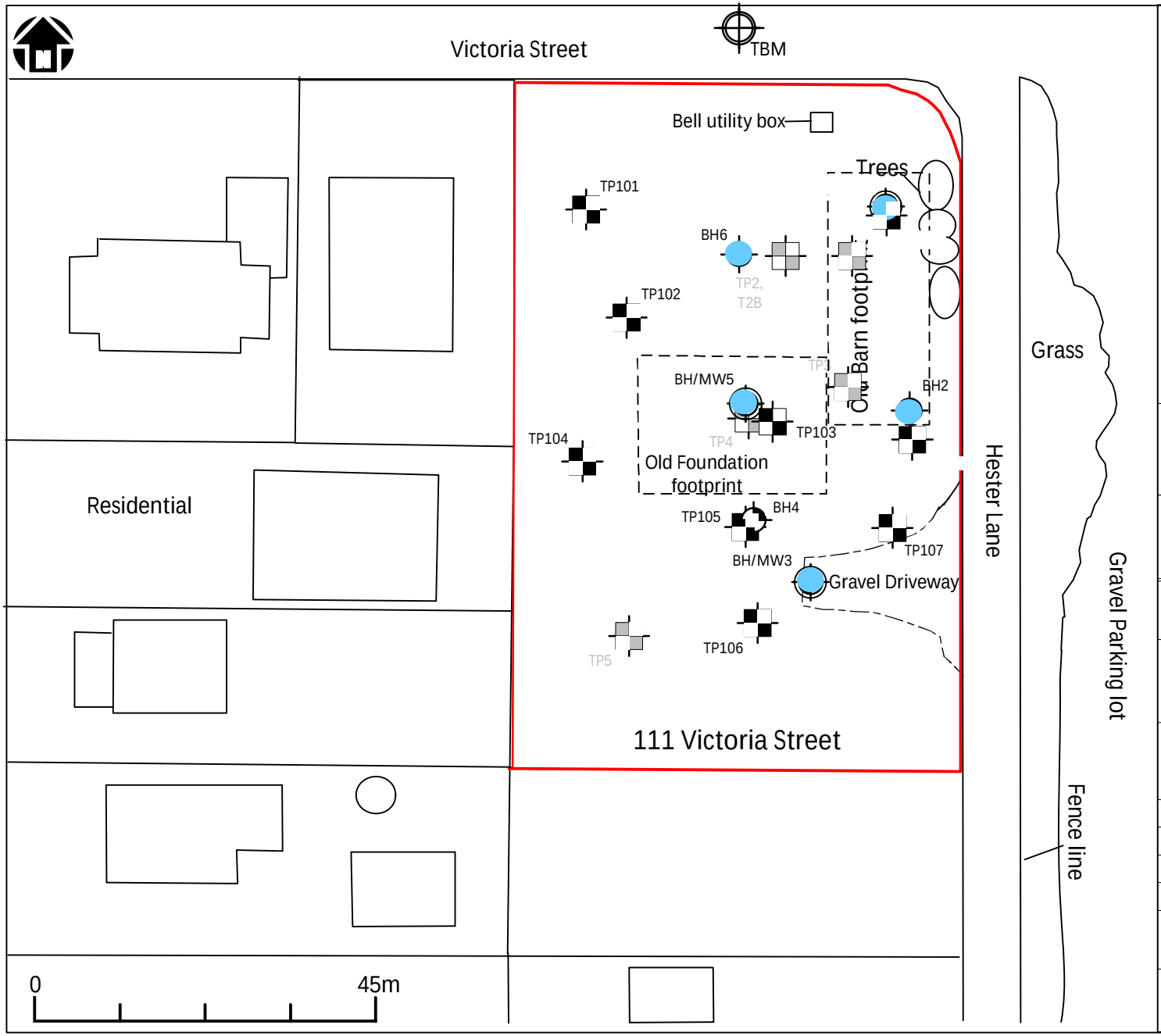
PROJECT TITLE
Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Groundwater Sampling results – OCs & Pesticides

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 4F



LEGEND

- = Site Boundary
- BH# = Borehole Location
- BH/MW# = BH/MW Location
- TP# = Test Pit Location [Nov. 2023]
- TP# = Test Pit Location [July 2024]
- TBM = Temporary Benchmark
- = Fill Present

NOTES:
1. This map should be read in conjunction with Soil-Mat Engineers and Consultants Ltd. Report No.: SM 230902-E
2. Borehole locations are approximate.

Soil-Mat
Engineers & Consultants Ltd.

CLIENT
111 VICTORIA STREET INC.

PROJECT TITLE
Supplemental Phase Two Environmental Site Assessment
111 Victoria Street,
Welland, Ontario

DRAWING TITLE
Borehole Locations with Fill of Unknown Quality

PROJECT No.	SM 230902-E
DATE	August 2024
CHECKED	SS
DRAWN	GG

FILE NAME
230902 Drawings.vsd

DRAWING No. 5

Log of Borehole No. 1

Project No: SM 230902
Project: Phase Two ESA
Location: 111 Victoria Street, Welland
Client: 111 Victoria Street Inc.

Project Manager: Peter Markesic, B.Sc.
Borehole Location: See Drawing No. 1
UTM Coordinates - N: 4760757
E: 643283

Depth (ft / m)	Elevation (m)	Description	Type	Number	Blow Counts	Blows/300mm	Recovery	PP (kgf/cm2)	U.Wt.(kN/m3)
0 / 0	100.08	Ground Surface							
0 / 0	99.90	**Topsoil** Approximately 150 millimetres of topsoil.	SS	1	18,5,5,5	10			
3 / 1	99.10	**Clayey Silt/Silty Clay Fill** Brown, with some sand and gravel, dense.	SS	2	34,9,12,11	21			
		Concrete Slab Previous building floor slab.	SS	3	5,6,9,11	15		4.5	
		Silty Clay/Clayey Silt Brown, trace gravel, stiff to very stiff.	SS	4	6,9,9,13	18		4.5	
10 / 3	97.10	Transition to grey in colour	SS	5	4,10,12,14	22		4.5	
16 / 5			SS	6	3,6,6,7	12		4.0	
21 / 6			SS	7	2,3,4,6	7		2.0	
26 / 8			SS	8	1,3,5,6	8		1.5	
27 / 8	91.80	End of Borehole							

NOTES:

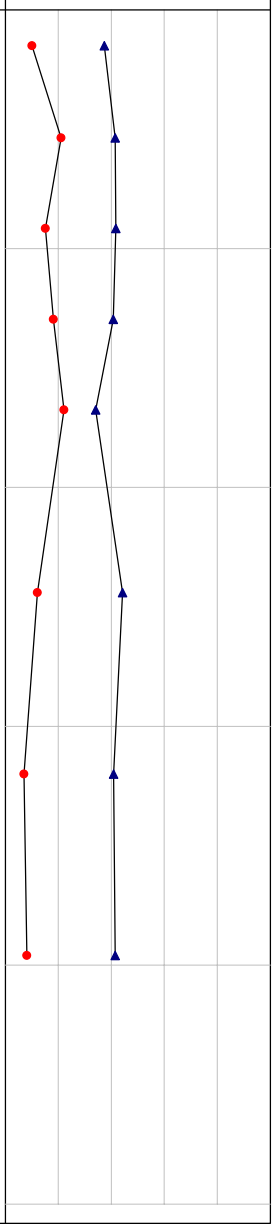
1. Borehole was advanced using solid stem auger equipment on July 16, 2024 to termination at a depth of 8.2 metres.

2. Borehole was recorded as open and 'wet' at a depth of 4.6 metres upon completion and backfilled as per Ontario Regulation 903.

3. Soil samples will be discarded after 3 months unless otherwise directed by our client.

4. A monitoring well was installed. The following free groundwater level readings have been measured:

5. July 26, 2024 - 4.01 metres below the existing ground surface



Drill Method: Solid Stem Augers
Drill Date: July 16, 2024
Hole Size: 150 millimetres
Drilling Contractor: Elite Drilling

Soil-Mat Engineers & Consultants Ltd.
401 Grays Road, Hamilton, Ontario, L8E 2Z3
T: 905.318.7440, TF: 800.243.1922, F: 905.318.7455
www.soil-mat.ca E: info@soil-mat.ca

Datum: Temporary Benchmark
Field Logged by: GG
Checked by: PM
Sheet: 1 of 1

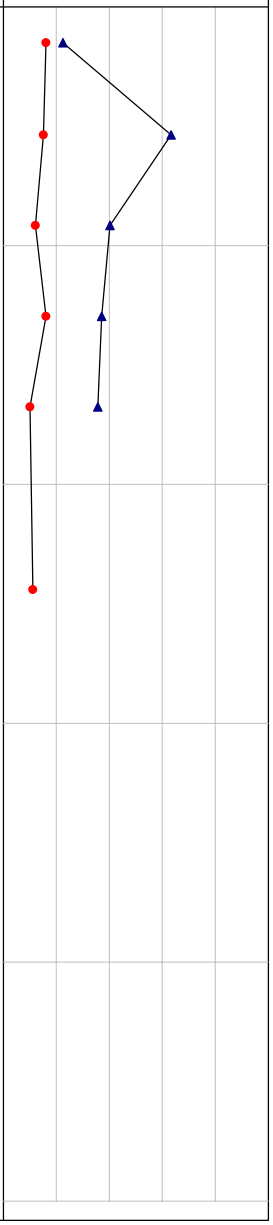
Log of Borehole No. 2

Project No: SM 230902
Project: Phase Two ESA
Location: 111 Victoria Street, Welland
Client: 111 Victoria Street Inc.

Project Manager: Peter Markesic, B.Sc.
Borehole Location: See Drawing No. 1
UTM Coordinates - N: 4760737
E: 643285

Depth (ft / m)	Elevation (m)	Description	Type	Number	Blow Counts	Blows/300mm	Recovery	PP (kgf/cm2)	U.Wt.(kN/m3)
0 / 0	100.25	Ground Surface							
0 / 0		**Topsoil** Approximately 150 millimetres of topsoil.	SS	1	4,7,9,7	16			
3 / 1	99.30	**Clayey Silt/Silty Clay Fill** Brown, trace gravel, occasional organic inclusions, stiff.	SS	2	6,2,13,4	15			
		Concrete Slab Previous building floor slab.	SS	3	7,5,7,10	12		>4.5	
		Silty Clay/Clayey Silt Brown, trace gravel, occasional organic inclusions in the upper levels, stiff to very stiff.	SS	4	5,7,9,11	16		>4.5	
10 / 3	97.20	Transition in colour to grey, stiff.	SS	5	0,3,7,10	10		>4.5	
16 / 5	95.00		SS	6	3,6,5,8	11		3.0	
		End of Borehole							

Moisture Content w% (10 20 30 40)
Standard Penetration Test blows/300mm (20 40 60 80)



NOTES:

1. Borehole was advanced using solid stem auger equipment on July 16, 2024 to termination at a depth of 5.2 metres.

2. Borehole was recorded as open and 'dry' upon completion and backfilled as per Ontario Regulation 903.

3. Soil samples will be discarded after 3 months unless otherwise directed by our client.

Drill Method: Solid Stem Augers
Drill Date: July 16, 2024
Hole Size: 150 millimetres
Drilling Contractor: Elite Drilling

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Datum: Temporary Benchmark
Field Logged by: GG
Checked by: PM
Sheet: 1 of 1

Log of Borehole No. 3

Project No: SM 230902-E
Project: Phase Two ESA
Location: 111 Victoria Street, Welland
Client: 111 Victoria Street Inc.

Project Manager: Peter Markesic, B.Sc.
Borehole Location: See Drawing No. 1
UTM Coordinates - N: 4760722
E: 643284

Depth (ft)	Depth (m)	Elevation (m)	Description	Type	Number	Blow Counts	Blows/300mm	Recovery	PP (kgf/cm2)	U.Wt.(kN/m3)
		100.10	Ground Surface							
0	0	99.90	**Topsoil** Approximately 200 millimetres of topsoil.							
3	1	98.60	**Clayey Silt/Silty Clay Fill** Greyish-brown, reworked in the upper levels, firm.	SS	1	2,3,2,3	5			
4				SS	2	2,3,4,3	7			
5			**Silty Clay/Clayey Silt** Brownish-grey, trace gravel, soft to very stiff.	SS	3	4,6,10,12	16		4.0	
9	3			SS	4	5,8,10,13	18		>4.5	
10				SS	5	4,10,10,8	20		>4.5	
13	4	96.00	Transition in colour to grey in colour							
16	5			SS	6	0,1,2,3	3		<1.0	
20	6									
21		93.40		SS	7	0,2,4,4	6		<1.0	
22	7		End of Borehole							

Moisture Content w% (10 20 30 40)

Standard Penetration Test blows/300mm (20 40 60 80)

NOTES:

1. Borehole was advanced using solid stem auger equipment on July 16, 2024 to termination at a depth of 6.7 metres.

2. Borehole was recorded as open and "dry" upon completion and backfilled as per Ontario Regulation 903.

3. Soil samples will be discarded after 3 months unless otherwise directed by our client.

4. A monitoring well was installed. The following free groundwater level readings have been measured:

July 26, 2024 - 1.10 metres below the existing ground surface

Drill Method: Solid Stem Augers
Drill Date: July 16, 2024
Hole Size: 150 millimetres
Drilling Contractor: Elite Drilling

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401 Grays Road, Hamilton, Ontario, L8E 2Z3
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Datum: Temporary Benchmark
Field Logged by: GG
Checked by: PM
Sheet: 1 of 1

Log of Borehole No. 4

Project No: SM 230902-E
Project: Phase Two ESA
Location: 111 Victoria Street, Welland
Client: 111 Victoria Street Inc.

Project Manager: Peter Markesic, B.Sc.
Borehole Location: See Drawing No. 1
UTM Coordinates - N: 4760728
E: 643277

Depth (ft / m)	Elevation (m)	Description	Well Data	SAMPLE Type	Number	Blow Counts	Blows/300mm	Recovery	PP (kgf/cm2)	U.Wt.(kN/m3)
	99.81	Ground Surface								
0 / 0	99.60	**Topsoil** Approximately 150 millimetres of topsoil.		SS	1	6,4,3,4	7			
3 / 1		**Silty Clay/Clayey Silt** Brown, trace gravel, firm to very stiff.		SS	2	2,2,4,5	6			
7 / 2				SS	3	2,4,6,9	10		>4.5	
10 / 3	96.80	Transition to grey in colour		SS	4	4,9,14,17	23		>4.5	
12 / 4	96.10	End of Borehole		SS	5	4,7,7,8	14		3.0	
33 / 9										

Moisture Content w% (10 20 30 40)
Standard Penetration Test blows/300mm (20 40 60 80)

NOTES:

1. Borehole was advanced using solid stem auger equipment on July 16, 2024 to termination at a depth of 3.7 metres.

2. Borehole was recorded as open and 'dry' upon completion and backfilled as per Ontario Regulation 903.

3. Soil samples will be discarded after 3 months unless otherwise directed by our client.

Drill Method: Solid Stem Augers
Drill Date: July 16, 2024
Hole Size: 150 millimetres
Drilling Contractor: Elite Drilling

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Datum: Temporary Benchmark
Field Logged by: GG
Checked by: PM
Sheet: 1 of 1

Log of Borehole No. 5

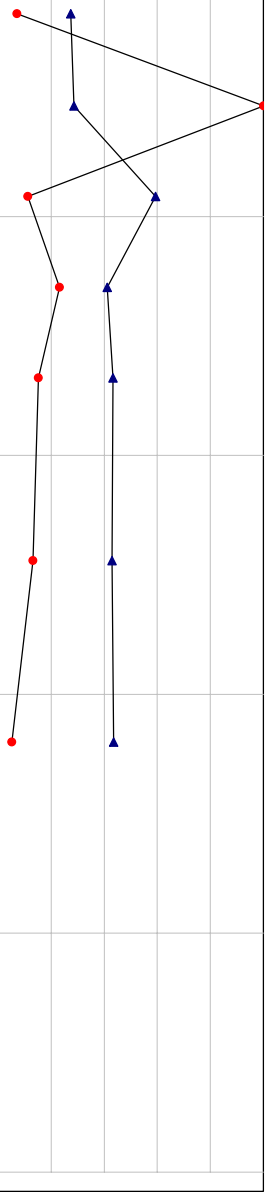
Project No: SM 230902-E
Project: Phase Two ESA
Location: 111 Victoria Street, Welland
Client: 111 Victoria Street Inc.

Project Manager: Peter Markesic, B.Sc.
Borehole Location: See Drawing No. 1
UTM Coordinates - N: 4760738
E: 643275

Depth (ft / m)	Elevation (m)	Description	Type	Number	Blow Counts	Blows/300mm	Recovery	PP (kgf/cm2)	U.Wt.(kN/m3)
0 / 0	100.30	Ground Surface							
0 / 0	100.10	**Topsoil** Approximately 150 millimetres of topsoil.	SS	1	2,3,4,5	7			
3 / 1	99.40	**Clayey Silt/Silty Clay Fill** Brown, trace gravel, occasional organic inclusions, firm.	SS	2	9,50/1"	100			
		Concrete Slab Previous building floor slab.	SS	3	1,4,7,9	11		>4.5	
		Silty Clay/Clayey Silt Brown to greyish-brown, trace gravel, stiff to very firm.	SS	4	6,10,13,16	23		>4.5	
			SS	5	4,5,10,13	15		>4.5	
18 / 5	94.70	Transitions to grey in colour	SS	6	4,7,6,7	13		1.75	
22 / 6	93.60	End of Borehole	SS	7	1,2,3,3	5		1.0	

Moisture Content w% (10 20 30 40)

Standard Penetration Test blows/300mm (20 40 60 80)



NOTES:

1. Borehole was advanced using solid stem auger equipment on July 16, 2024 to termination at a depth of 6.7 metres.

2. Borehole was recorded as open and "dry" upon completion and backfilled as per Ontario Regulation 903.

3. Soil samples will be discarded after 3 months unless otherwise directed by our client.

4. A monitoring well was installed. The following free groundwater level readings have been measured:

July 26, 2024 - 1.63 metres below the existing ground surface

Drill Method: Solid Stem Augers
Drill Date: July 16, 2024
Hole Size: 150 millimetres
Drilling Contractor: Elite Drilling

Soil-Mat Engineers & Consultants Ltd.
401 Grays Road, Hamilton, Ontario, L8E 2Z3
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Datum: Temporary Benchmark
Field Logged by: GG
Checked by: PM
Sheet: 1 of 1

Log of Borehole No. 6

Project No: SM 230902-E
Project: Phase Two ESA
Location: 111 Victoria Street, Welland
Client: 111 Victoria Street Inc.

Project Manager: Peter Markesic, B.Sc.
Borehole Location: See Drawing No. 1
UTM Coordinates - N: 4760753
E: 643276

Depth (ft / m)	Elevation (m)	Description	Well Data	SAMPLE Type	Number	Blow Counts	Blows/300mm	Recovery	PP (kgf/cm2)	U.Wt.(kN/m3)
	100.03	Ground Surface								
0 / 0	99.80	**Topsoil** Approximately 150 millimetres of topsoil.		SS	1	1,2,2,2	4			
3 / 1	99.00	**Clayey Silt/Silty Clay Fill** Brown, trace gravel, firm.		SS	2	2,1,4,7	5			
		Silty Clay/Clayey Silt Brown, trace gravel, occasional organic inclusions, soft to very stiff.		SS	3	4,8,11,14	19		>4.5	
				SS	4	6,8,9,10	17		>4.5	
10 / 3	96.90	Transition to grey in colour		SS	5	4,5,6,8	11		4.0	
12 / 4	96.30	End of Borehole								

NOTES:

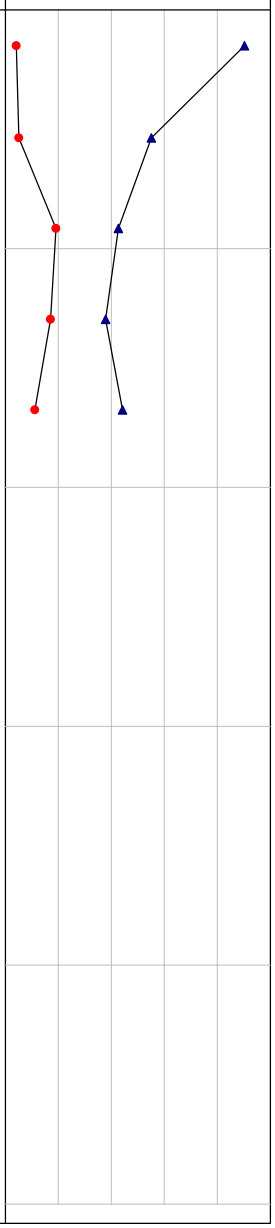
1. Borehole was advanced using solid stem auger equipment on July 16, 2024 to termination at a depth of 3.7 metres.

2. Borehole was recorded as open and 'dry' upon completion and backfilled as per Ontario Regulation 903.

3. Soil samples will be discarded after 3 months unless otherwise directed by our client.

Moisture Content w% (10 20 30 40)

Standard Penetration Test blows/300mm (20 40 60 80)



Drill Method: Solid Stem Augers
Drill Date: July 16, 2024
Hole Size: 150 millimetres
Drilling Contractor: Elite Drilling

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Datum: Temporary Benchmark
Field Logged by: GG
Checked by: PM
Sheet: 1 of 1

Appendix ‘B’

1. AGAT Certificate of Analysis – Soil

AGAT Laboratories

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

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT
401 GRAYS ROAD
HAMILTON, ON L8E 2Z3
(905) 318-7440

ATTENTION TO: Peter Markesic

PROJECT: 230902

AGAT WORK ORDER: 23T090837

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganic Team Lead

TRACE ORGANICS REVIEWED BY: Radhika Chakraberty, Trace Organics Lab Manager

DATE REPORTED: Nov 17, 2023

PAGES (INCLUDING COVER): 27

VERSION*: 2

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

Notes

VERSION 2:Version 2 supersedes work order 23T090837, Version 1, issued November 14, 2023. PHCs added to Sample ID TP4 (5439637). Nov. 17, 2023 - EJ

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2023-11-08

DATE REPORTED: 2023-11-17

		SAMPLE DESCRIPTION:		TP1	TP2B	TP3	TP4
		SAMPLE TYPE:		Soil	Soil	Soil	Soil
		DATE SAMPLED:		2023-11-08	2023-11-08	2023-11-08	2023-11-08
Parameter	Unit	G / S	RDL	5439632	5439635	5439636	5439637
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	12	7	9	8
Barium	µg/g	390	2.0	105	148	104	99.9
Beryllium	µg/g	5	0.5	0.7	1.0	0.8	0.9
Boron	µg/g	120	5	8	15	9	12
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.32	0.20	0.35	0.36
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	63	31	30	32
Cobalt	µg/g	22	0.8	**34.9**	17.6	20.1	15.2
Copper	µg/g	180	1.0	178	27.5	59.5	46.5
Lead	µg/g	120	1	47	10	38	34
Molybdenum	µg/g	6.9	0.5	**10.5**	0.6	2.4	1.8
Nickel	µg/g	130	1	**142**	36	39	34
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	25	0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.58	1.06	0.73	0.68
Vanadium	µg/g	86	2.0	38.3	44.5	36.8	42.9
Zinc	µg/g	340	5	**466**	72	223	168
Chromium, Hexavalent	µg/g	10	0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	1.8	0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.240	0.256	0.255	0.179
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.219	0.718	0.162	0.114
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.31	7.42	7.00	7.36

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2023-11-08 **DATE REPORTED: 2023-11-17**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5439632-5439637 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2023-11-08

DATE REPORTED: 2023-11-17

		SAMPLE DESCRIPTION:		TP2	TP5
		SAMPLE TYPE:		Soil	Soil
		DATE SAMPLED:		2023-11-08	2023-11-08
Parameter	Unit	G / S	RDL	5439634	5439638
Antimony	µg/g	7.5	0.8	<0.8	<0.8
Arsenic	µg/g	18	1	12	12
Barium	µg/g	390	2.0	114	114
Beryllium	µg/g	5	0.5	0.8	0.9
Boron	µg/g	120	5	9	12
Cadmium	µg/g	1.2	0.5	0.9	0.5
Chromium	µg/g	160	5	34	45
Cobalt	µg/g	22	0.8	12.2	13.7
Copper	µg/g	180	1.0	34.8	33.1
Lead	µg/g	120	1	98	68
Molybdenum	µg/g	6.9	0.5	2.1	3.4
Nickel	µg/g	130	1	47	60
Selenium	µg/g	2.4	0.8	<0.8	1.1
Silver	µg/g	25	0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.70	0.88
Vanadium	µg/g	86	2.0	31.7	47.5
Zinc	µg/g	340	5	340	189

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2023-11-08

DATE REPORTED: 2023-11-17

		SAMPLE DESCRIPTION:		TP2	TP5
		SAMPLE TYPE:		Soil	Soil
		DATE SAMPLED:		2023-11-08	2023-11-08
Parameter	Unit	G / S	RDL	5439634	5439638
Hexachloroethane	µg/g	0.07	0.005	<0.005	<0.005
Gamma-Hexachlorocyclohexane	µg/g	0.063	0.005	<0.005	<0.005
Heptachlor	µg/g	0.15	0.005	<0.005	<0.005
Aldrin	µg/g	0.05	0.005	<0.005	<0.005
Heptachlor Epoxide	µg/g	0.05	0.005	<0.005	<0.005
Endosulfan I	µg/g		0.005	<0.005	<0.005
Endosulfan II	µg/g		0.005	<0.005	<0.005
Endosulfan	µg/g	0.04	0.005	<0.005	<0.005
Alpha-Chlordane	µg/g		0.005	<0.005	<0.005
gamma-Chlordane	µg/g		0.005	<0.005	<0.005
Chlordane	µg/g	0.05	0.007	<0.007	<0.007
op'-DDE	ug/g		0.005	<0.005	0.006
pp'-DDE	µg/g		0.005	0.017	0.315
DDE	µg/g	0.33	0.007	0.017	0.321
op'-DDD	µg/g		0.005	<0.005	0.010
pp'-DDD	µg/g		0.005	<0.005	0.025
DDD	µg/g	3.3	0.007	<0.007	0.035
op'-DDT	µg/g		0.005	<0.005	0.030
pp'-DDT	µg/g		0.005	0.012	0.102
DDT (Total)	µg/g	1.4	0.007	0.012	0.132
Dieldrin	µg/g	0.05	0.005	<0.005	<0.005
Endrin	µg/g	0.04	0.005	<0.005	<0.005
Methoxychlor	µg/g	0.13	0.005	<0.005	<0.005
Hexachlorobenzene	µg/g	0.52	0.005	<0.005	<0.005
Hexachlorobutadiene	µg/g	0.014	0.01	<0.01	<0.01
Moisture Content	%		0.1	20.6	13.5
wet weight OC	g		0.005	10.4	10.5
Surrogate	**Unit**	**Acceptable Limits**			
TCMX	%	50-140		105	100
Decachlorobiphenyl	%	50-140		102	112

Certified By: R. Chakraberty

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2023-11-08 **DATE REPORTED: 2023-11-17**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5439634-5439638 Results are based on the dry weight of the soil.
DDT total is a calculated parameter. The calculated value is the sum of op'DDT and pp'DDT.
DDD total is a calculated parameter. The calculated value is the sum of op'DDD and pp'DDD.
DDE total is a calculated parameter. The calculated value is the sum of op'DDE and pp'DDE.
Endosulfan total is a calculated parameter. The calculated value is the sum of Endosulfan I and Endosulfan II.
Chlordane total is a calculated parameter. The calculated value is the sum of Alpha-Chlordane and Gamma-Chlordane.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: R. Chakraberty

AGAT Laboratories

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CANADA L4Z 1Y2
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FAX (905)712-5122
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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2023-11-08

DATE REPORTED: 2023-11-17

		SAMPLE DESCRIPTION:		TP1	TP2	TP2B	TP3	TP4
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2023-11-08	2023-11-08	2023-11-08	2023-11-08	2023-11-08
Parameter	**Unit**	**G / S**	**RDL**	**5439632**	**5439634**	**5439635**	**5439636**	**5439637**
Naphthalene	µg/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.17	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	58	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	7.8	0.05	<0.05	0.06	<0.05	0.10	<0.05
Anthracene	µg/g	0.74	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	0.10	<0.05	0.22	<0.05
Pyrene	µg/g	78	0.05	<0.05	0.10	<0.05	0.16	<0.05
Benz(a)anthracene	µg/g	0.63	0.05	<0.05	0.05	<0.05	0.08	<0.05
Chrysene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	0.08	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	0.05	<0.05	0.07	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.48	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	7.8	0.05	<0.05	0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	3.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	16.3	20.6	16.3	13.9	13.6
Surrogate	**Unit**	**Acceptable Limits**						
Naphthalene-d8	%	50-140		80	70	85	80	75
Acridine-d9	%	50-140		95	100	105	90	105
Terphenyl-d14	%	50-140		105	115	70	110	85

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5439632-5439637 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: R. Chakraberty

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)

DATE RECEIVED: 2023-11-08 **DATE REPORTED: 2023-11-17**

		SAMPLE DESCRIPTION:		TP1	TP2B	TP3	TP4
		SAMPLE TYPE:		Soil	Soil	Soil	Soil
		DATE SAMPLED:		2023-11-08	2023-11-08	2023-11-08	2023-11-08
Parameter	**Unit**	**G / S**	**RDL**	**5439632**	**5439635**	**5439636**	**5439637**
F1 (C6 to C10)	µg/g	65	5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	65	5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	150	10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g		10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1300	50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g		50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	5600	50	<50	<50	90	<50
Gravimetric Heavy Hydrocarbons	µg/g	5600	50	NA	NA	NA	NA
Moisture Content	%		0.1	16.2	16.3	13.9	13.6
Surrogate	**Unit**	**Acceptable Limits**					
Toluene-d8	%	50-140		114	105	104	119
Terphenyl	%	60-140		99	98	110	78

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5439632-5439637 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: R. Chakraberty

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AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2023-11-08

DATE REPORTED: 2023-11-17

		SAMPLE DESCRIPTION:		TP4
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2023-11-08
Parameter	Unit	G / S	RDL	5439637
Dichlorodifluoromethane	µg/g	25	0.05	<0.05
Vinyl Chloride	ug/g	0.022	0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05
Trichlorofluoromethane	ug/g	5.8	0.05	<0.05
Acetone	ug/g	28	0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05
Methylene Chloride	ug/g	0.96	0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.75	0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.4	0.05	<0.05
1,1-Dichloroethane	ug/g	11	0.02	<0.02
Methyl Ethyl Ketone	ug/g	44	0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	30	0.02	<0.02
Chloroform	ug/g	0.18	0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03
1,1,1-Trichloroethane	ug/g	3.4	0.05	<0.05
Carbon Tetrachloride	ug/g	0.12	0.05	<0.05
Benzene	ug/g	0.17	0.02	<0.02
1,2-Dichloropropane	ug/g	0.085	0.03	<0.03
Trichloroethylene	ug/g	0.52	0.03	<0.03
Bromodichloromethane	ug/g	13	0.05	<0.05
Methyl Isobutyl Ketone	ug/g	4.3	0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04
Toluene	ug/g	6	0.05	<0.05
Dibromochloromethane	ug/g	9.4	0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04
Tetrachloroethylene	ug/g	2.3	0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.05	0.04	<0.04
Chlorobenzene	ug/g	2.7	0.05	<0.05
Ethylbenzene	ug/g	15	0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05

Certified By: R. Chakraberty

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2023-11-08 **DATE REPORTED: 2023-11-17**

		SAMPLE DESCRIPTION:		TP4
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2023-11-08
Parameter	**Unit**	**G / S**	**RDL**	**5439637**
Bromoform	ug/g	0.26	0.05	<0.05
Styrene	ug/g	2.2	0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05
o-Xylene	ug/g		0.05	<0.05
1,3-Dichlorobenzene	ug/g	6	0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.097	0.05	<0.05
1,2-Dichlorobenzene	ug/g	4.3	0.05	<0.05
Xylenes (Total)	ug/g	25	0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.083	0.04	<0.04
n-Hexane	µg/g	34	0.05	<0.05
Moisture Content	%		0.1	13.6
Surrogate	**Unit**	**Acceptable Limits**		
Toluene-d8	% Recovery	50-140		119
4-Bromofluorobenzene	% Recovery	50-140		78

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5439637 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: R. Chakraberty

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AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2023-11-08

DATE REPORTED: 2023-11-17

		SAMPLE DESCRIPTION:		TP1	TP2B	TP3
		SAMPLE TYPE:		Soil	Soil	Soil
		DATE SAMPLED:		2023-11-08	2023-11-08	2023-11-08
Parameter	Unit	G / S	RDL	5439632	5439635	5439636
Dichlorodifluoromethane	µg/g	25	0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.022	0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	5.8	0.05	<0.05	<0.05	<0.05
Acetone	ug/g	28	0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.96	0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.75	0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.4	0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	11	0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	44	0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	30	0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.18	0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	3.4	0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.12	0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.17	0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.085	0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.52	0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	13	0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	4.3	0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6	0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	9.4	0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	2.3	0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.7	0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	15	0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05	<0.05	<0.05

Certified By: R. Chakraberty

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Certificate of Analysis

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2023-11-08

DATE REPORTED: 2023-11-17

		SAMPLE DESCRIPTION:		TP1	TP2B	TP3
		SAMPLE TYPE:		Soil	Soil	Soil
		DATE SAMPLED:		2023-11-08	2023-11-08	2023-11-08
Parameter	**Unit**	**G / S**	**RDL**	**5439632**	**5439635**	**5439636**
Bromoform	ug/g	0.26	0.05	<0.05	<0.05	<0.05
Styrene	ug/g	2.2	0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	6	0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.097	0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	4.3	0.05	<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	25	0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.083	0.05	<0.05	<0.05	<0.05
n-Hexane	µg/g	34	0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	16.3	16.3	13.9
Surrogate	**Unit**	**Acceptable Limits**				
Toluene-d8	% Recovery	50-140		114	105	104
4-Bromofluorobenzene	% Recovery	50-140		73	79	81

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5439632-5439636 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: R. Chakraberty

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Exceedance Summary

AGAT WORK ORDER: 23T090837

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
5439632	TP1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Cobalt	µg/g	22	34.9
5439632	TP1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Molybdenum	µg/g	6.9	10.5
5439632	TP1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Nickel	µg/g	130	142
5439632	TP1	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Zinc	µg/g	340	466

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

Soil Analysis

RPT Date: Nov 17, 2023			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	5434969		<0.8	<0.8	NA	< 0.8	122%	70%	130%	81%	80%	120%	77%	70%	130%
Arsenic	5434969		3	3	NA	< 1	126%	70%	130%	105%	80%	120%	110%	70%	130%
Barium	5434969		65.4	65.3	0.0%	< 2.0	112%	70%	130%	103%	80%	120%	122%	70%	130%
Beryllium	5434969		<0.5	<0.5	NA	< 0.5	106%	70%	130%	104%	80%	120%	113%	70%	130%
Boron	5434969		<5	<5	NA	< 5	80%	70%	130%	102%	80%	120%	105%	70%	130%
Boron (Hot Water Soluble)	5435207		0.19	0.19	NA	< 0.10	91%	60%	140%	92%	70%	130%	92%	60%	140%
Cadmium	5434969		<0.5	<0.5	NA	< 0.5	115%	70%	130%	100%	80%	120%	102%	70%	130%
Chromium	5434969		22	22	NA	< 5	110%	70%	130%	109%	80%	120%	107%	70%	130%
Cobalt	5434969		4.4	4.4	0.0%	< 0.8	113%	70%	130%	113%	80%	120%	117%	70%	130%
Copper	5434969		167	166	0.7%	< 1.0	111%	70%	130%	106%	80%	120%	123%	70%	130%
Lead	5434969		67	66	1.3%	< 1	103%	70%	130%	92%	80%	120%	107%	70%	130%
Molybdenum	5434969		0.5	0.5	NA	< 0.5	118%	70%	130%	114%	80%	120%	116%	70%	130%
Nickel	5434969		16	16	2.5%	< 1	119%	70%	130%	112%	80%	120%	108%	70%	130%
Selenium	5434969		<0.8	<0.8	NA	< 0.8	95%	70%	130%	108%	80%	120%	113%	70%	130%
Silver	5434969		<0.5	<0.5	NA	< 0.5	94%	70%	130%	97%	80%	120%	98%	70%	130%
Thallium	5434969		<0.5	<0.5	NA	< 0.5	85%	70%	130%	97%	80%	120%	101%	70%	130%
Uranium	5434969		<0.50	<0.50	NA	< 0.50	94%	70%	130%	91%	80%	120%	94%	70%	130%
Vanadium	5434969		19.1	19.4	1.2%	< 2.0	107%	70%	130%	112%	80%	120%	118%	70%	130%
Zinc	5434969		196	199	1.4%	< 5	124%	70%	130%	106%	80%	120%	118%	70%	130%
Chromium, Hexavalent	5445393		<0.2	<0.2	NA	< 0.2	108%	70%	130%	102%	80%	120%	86%	70%	130%
Cyanide, WAD	5436514		<0.040	<0.040	NA	< 0.040	104%	70%	130%	98%	80%	120%	82%	70%	130%
Mercury	5434969		<0.10	<0.10	NA	< 0.10	118%	70%	130%	101%	80%	120%	105%	70%	130%
Electrical Conductivity (2:1)	5442512		1.00	1.20	18.2%	< 0.005	109%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	5435345		1.23	1.30	5.0%	NA									
pH, 2:1 CaCl2 Extraction	5431643		6.79	6.99	3.0%	NA	100%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	5449184		<0.8	<0.8	NA	< 0.8	122%	70%	130%	97%	80%	120%	72%	70%	130%
Arsenic	5449184		3	3	NA	< 1	137%	70%	130%	101%	80%	120%	105%	70%	130%
Barium	5449184		14.2	15.0	5.8%	< 2.0	106%	70%	130%	101%	80%	120%	102%	70%	130%
Beryllium	5449184		<0.5	<0.5	NA	< 0.5	99%	70%	130%	107%	80%	120%	112%	70%	130%
Boron	5449184		<5	<5	NA	< 5	83%	70%	130%	110%	80%	120%	112%	70%	130%
Boron (Hot Water Soluble)	5435207		0.19	0.19	NA	< 0.10	91%	60%	140%	92%	70%	130%	92%	60%	140%
Cadmium	5449184		<0.5	<0.5	NA	< 0.5	71%	70%	130%	101%	80%	120%	100%	70%	130%
Chromium	5449184		11	11	NA	< 5	106%	70%	130%	106%	80%	120%	105%	70%	130%
Cobalt	5449184		2.8	2.8	NA	< 0.8	113%	70%	130%	109%	80%	120%	111%	70%	130%

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

Soil Analysis (Continued)

RPT Date: Nov 17, 2023			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Copper	5449184		6.8	6.9	0.6%	< 1.0	102%	70%	130%	106%	80%	120%	102%	70%	130%
Lead	5449184		12	12	3.4%	< 1	106%	70%	130%	98%	80%	120%	94%	70%	130%
Molybdenum	5449184		<0.5	<0.5	NA	< 0.5	108%	70%	130%	108%	80%	120%	108%	70%	130%
Nickel	5449184		6	6	1.5%	< 1	111%	70%	130%	105%	80%	120%	106%	70%	130%
Selenium	5449184		<0.8	<0.8	NA	< 0.8	92%	70%	130%	102%	80%	120%	109%	70%	130%
Silver	5449184		<0.5	<0.5	NA	< 0.5	111%	70%	130%	103%	80%	120%	97%	70%	130%
Thallium	5449184		<0.5	<0.5	NA	< 0.5	100%	70%	130%	104%	80%	120%	100%	70%	130%
Uranium	5449184		<0.50	<0.50	NA	< 0.50	103%	70%	130%	100%	80%	120%	100%	70%	130%
Vanadium	5449184		18.4	18.3	0.9%	< 2.0	113%	70%	130%	112%	80%	120%	114%	70%	130%
Zinc	5449184		25	25	1.6%	< 5	115%	70%	130%	105%	80%	120%	126%	70%	130%
Chromium, Hexavalent	5433008		<0.2	<0.2	NA	< 0.2	108%	70%	130%	102%	80%	120%	94%	70%	130%
Cyanide, WAD	5433010		<0.040	<0.040	NA	< 0.040	108%	70%	130%	107%	80%	120%	86%	70%	130%
Mercury	5449184		<0.10	<0.10	NA	< 0.10	109%	70%	130%	105%	80%	120%	102%	70%	130%
Electrical Conductivity (2:1)	5442512		1.00	1.20	18.2%	< 0.005	109%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	5435345		1.23	1.30	5.0%	NA									
pH, 2:1 CaCl2 Extraction	5439636	5439636	7.00	7.23	3.2%	NA	100%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

Antimony	5434969	<0.8	<0.8	NA	< 0.8	122%	70%	130%	81%	80%	120%	77%	70%	130%
Arsenic	5434969	3	3	NA	< 1	126%	70%	130%	105%	80%	120%	110%	70%	130%
Barium	5434969	65.4	65.3	0.0%	< 2.0	112%	70%	130%	103%	80%	120%	122%	70%	130%
Beryllium	5434969	<0.5	<0.5	NA	< 0.5	106%	70%	130%	104%	80%	120%	113%	70%	130%
Boron	5434969	<5	<5	NA	< 5	80%	70%	130%	102%	80%	120%	105%	70%	130%
Cadmium	5434969	<0.5	<0.5	NA	< 0.5	115%	70%	130%	100%	80%	120%	102%	70%	130%
Chromium	5434969	22	22	NA	< 5	110%	70%	130%	109%	80%	120%	107%	70%	130%
Cobalt	5434969	4.4	4.4	0.0%	< 0.8	113%	70%	130%	113%	80%	120%	117%	70%	130%
Copper	5434969	167	166	0.7%	< 1.0	111%	70%	130%	106%	80%	120%	123%	70%	130%
Lead	5434969	67	66	1.3%	< 1	103%	70%	130%	92%	80%	120%	107%	70%	130%
Molybdenum	5434969	0.5	0.5	NA	< 0.5	118%	70%	130%	114%	80%	120%	116%	70%	130%
Nickel	5434969	16	16	2.5%	< 1	119%	70%	130%	112%	80%	120%	108%	70%	130%
Selenium	5434969	<0.8	<0.8	NA	< 0.8	95%	70%	130%	108%	80%	120%	113%	70%	130%
Silver	5434969	<0.5	<0.5	NA	< 0.5	94%	70%	130%	97%	80%	120%	98%	70%	130%
Thallium	5434969	<0.5	<0.5	NA	< 0.5	85%	70%	130%	97%	80%	120%	101%	70%	130%
Uranium	5434969	<0.50	<0.50	NA	< 0.50	94%	70%	130%	91%	80%	120%	94%	70%	130%
Vanadium	5434969	19.1	19.4	1.2%	< 2.0	107%	70%	130%	112%	80%	120%	118%	70%	130%

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

Soil Analysis (Continued)

RPT Date: Nov 17, 2023			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Zinc	5434969		196	199	1.4%	< 5	124%	70%	130%	106%	80%	120%	118%	70%	130%

Comments: NA Signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

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CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Nov 17, 2023			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)															
F1 (C6 to C10)	5436926		<5	<5	NA	< 5	65%	60%	140%	82%	60%	140%	87%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	5436898		<0.05	<0.05	NA	< 0.05	78%	50%	140%	78%	50%	140%	108%	50%	140%
Acenaphthylene	5436898		<0.05	<0.05	NA	< 0.05	98%	50%	140%	83%	50%	140%	75%	50%	140%
Acenaphthene	5436898		<0.05	<0.05	NA	< 0.05	86%	50%	140%	90%	50%	140%	88%	50%	140%
Fluorene	5436898		<0.05	<0.05	NA	< 0.05	75%	50%	140%	90%	50%	140%	80%	50%	140%
Phenanthrene	5436898		<0.05	<0.05	NA	< 0.05	64%	50%	140%	93%	50%	140%	73%	50%	140%
Anthracene	5436898		<0.05	<0.05	NA	< 0.05	68%	50%	140%	88%	50%	140%	88%	50%	140%
Fluoranthene	5436898		<0.05	<0.05	NA	< 0.05	64%	50%	140%	80%	50%	140%	78%	50%	140%
Pyrene	5436898		<0.05	<0.05	NA	< 0.05	62%	50%	140%	80%	50%	140%	83%	50%	140%
Benz(a)anthracene	5436898		<0.05	<0.05	NA	< 0.05	77%	50%	140%	90%	50%	140%	85%	50%	140%
Chrysene	5436898		<0.05	<0.05	NA	< 0.05	102%	50%	140%	73%	50%	140%	85%	50%	140%
Benzo(b)fluoranthene	5436898		<0.05	<0.05	NA	< 0.05	70%	50%	140%	98%	50%	140%	90%	50%	140%
Benzo(k)fluoranthene	5436898		<0.05	<0.05	NA	< 0.05	106%	50%	140%	75%	50%	140%	78%	50%	140%
Benzo(a)pyrene	5436898		<0.05	<0.05	NA	< 0.05	70%	50%	140%	113%	50%	140%	73%	50%	140%
Indeno(1,2,3-cd)pyrene	5436898		<0.05	<0.05	NA	< 0.05	90%	50%	140%	103%	50%	140%	70%	50%	140%
Dibenz(a,h)anthracene	5436898		<0.05	<0.05	NA	< 0.05	99%	50%	140%	78%	50%	140%	103%	50%	140%
Benzo(g,h,i)perylene	5436898		<0.05	<0.05	NA	< 0.05	104%	50%	140%	100%	50%	140%	78%	50%	140%
O. Reg. 153(511) - OC Pesticides (Soil)															
Hexachloroethane	5431368		< 0.005	< 0.005	NA	< 0.005	93%	50%	140%	80%	50%	140%	78%	50%	140%
Gamma-Hexachlorocyclohexane	5431368		< 0.005	< 0.005	NA	< 0.005	103%	50%	140%	86%	50%	140%	79%	50%	140%
Heptachlor	5431368		< 0.005	< 0.005	NA	< 0.005	99%	50%	140%	80%	50%	140%	82%	50%	140%
Aldrin	5431368		< 0.005	< 0.005	NA	< 0.005	105%	50%	140%	94%	50%	140%	92%	50%	140%
Heptachlor Epoxide	5431368		< 0.005	< 0.005	NA	< 0.005	96%	50%	140%	80%	50%	140%	79%	50%	140%
Endosulfan I	5431368		< 0.005	< 0.005	NA	< 0.005	99%	50%	140%	86%	50%	140%	85%	50%	140%
Endosulfan II	5431368		< 0.005	< 0.005	NA	< 0.005	102%	50%	140%	104%	50%	140%	102%	50%	140%
Alpha-Chlordane	5431368		< 0.005	< 0.005	NA	< 0.005	113%	50%	140%	101%	50%	140%	103%	50%	140%
gamma-Chlordane	5431368		< 0.005	< 0.005	NA	< 0.005	105%	50%	140%	98%	50%	140%	97%	50%	140%
op'-DDE	5431368		< 0.005	< 0.005	NA	< 0.005	99%	50%	140%	106%	50%	140%	104%	50%	140%
pp'-DDE	5431368		< 0.005	< 0.005	NA	< 0.005	106%	50%	140%	97%	50%	140%	98%	50%	140%
op'-DDD	5431368		< 0.005	< 0.005	NA	< 0.005	117%	50%	140%	86%	50%	140%	84%	50%	140%
pp'-DDD	5431368		< 0.005	< 0.005	NA	< 0.005	104%	50%	140%	80%	50%	140%	83%	50%	140%
op'-DDT	5431368		< 0.005	< 0.005	NA	< 0.005	101%	50%	140%	82%	50%	140%	81%	50%	140%
pp'-DDT	5431368		< 0.005	< 0.005	NA	< 0.005	89%	50%	140%	80%	50%	140%	82%	50%	140%
Dieldrin	5431368		< 0.005	< 0.005	NA	< 0.005	105%	50%	140%	95%	50%	140%	89%	50%	140%
Endrin	5431368		< 0.005	< 0.005	NA	< 0.005	109%	50%	140%	80%	50%	140%	82%	50%	140%
Methoxychlor	5431368		< 0.005	< 0.005	NA	< 0.005	102%	50%	140%	104%	50%	140%	107%	50%	140%
Hexachlorobenzene	5431368		< 0.005	< 0.005	NA	< 0.005	100%	50%	140%	92%	50%	140%	94%	50%	140%

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AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:

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Trace Organics Analysis (Continued)

RPT Date: Nov 17, 2023			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Hexachlorobutadiene	5431368		< 0.01	< 0.01	NA	< 0.01	107%	50%	140%	79%	50%	140%	80%	50%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	5436926		<0.05	<0.05	NA	< 0.05	78%	50%	140%	107%	50%	140%	76%	50%	140%
Vinyl Chloride	5436926		<0.02	<0.02	NA	< 0.02	108%	50%	140%	116%	50%	140%	92%	50%	140%
Bromomethane	5436926		<0.05	<0.05	NA	< 0.05	108%	50%	140%	116%	50%	140%	96%	50%	140%
Trichlorofluoromethane	5436926		<0.05	<0.05	NA	< 0.05	116%	50%	140%	110%	50%	140%	115%	50%	140%
Acetone	5436926		<0.50	<0.50	NA	< 0.50	97%	50%	140%	89%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	5436926		<0.05	<0.05	NA	< 0.05	85%	50%	140%	94%	60%	130%	80%	50%	140%
Methylene Chloride	5436926		<0.05	<0.05	NA	< 0.05	89%	50%	140%	96%	60%	130%	96%	50%	140%
Trans- 1,2-Dichloroethylene	5436926		<0.05	<0.05	NA	< 0.05	92%	50%	140%	97%	60%	130%	88%	50%	140%
Methyl tert-butyl Ether	5436926		<0.05	<0.05	NA	< 0.05	83%	50%	140%	87%	60%	130%	80%	50%	140%
1,1-Dichloroethane	5436926		<0.02	<0.02	NA	< 0.02	84%	50%	140%	91%	60%	130%	85%	50%	140%
Methyl Ethyl Ketone	5436926		<0.50	<0.50	NA	< 0.50	106%	50%	140%	93%	50%	140%	96%	50%	140%
Cis- 1,2-Dichloroethylene	5436926		<0.02	<0.02	NA	< 0.02	84%	50%	140%	89%	60%	130%	86%	50%	140%
Chloroform	5436926		<0.04	<0.04	NA	< 0.04	88%	50%	140%	96%	60%	130%	89%	50%	140%
1,2-Dichloroethane	5436926		<0.03	<0.03	NA	< 0.03	82%	50%	140%	86%	60%	130%	103%	50%	140%
1,1,1-Trichloroethane	5436926		<0.05	<0.05	NA	< 0.05	85%	50%	140%	92%	60%	130%	76%	50%	140%
Carbon Tetrachloride	5436926		<0.05	<0.05	NA	< 0.05	92%	50%	140%	99%	60%	130%	81%	50%	140%
Benzene	5436926		<0.02	<0.02	NA	< 0.02	72%	50%	140%	79%	60%	130%	74%	50%	140%
1,2-Dichloropropane	5436926		<0.03	<0.03	NA	< 0.03	91%	50%	140%	99%	60%	130%	103%	50%	140%
Trichloroethylene	5436926		<0.03	<0.03	NA	< 0.03	94%	50%	140%	93%	60%	130%	98%	50%	140%
Bromodichloromethane	5436926		<0.05	<0.05	NA	< 0.05	75%	50%	140%	79%	60%	130%	81%	50%	140%
Methyl Isobutyl Ketone	5436926		<0.50	<0.50	NA	< 0.50	102%	50%	140%	83%	50%	140%	88%	50%	140%
1,1,2-Trichloroethane	5436926		<0.04	<0.04	NA	< 0.04	113%	50%	140%	109%	60%	130%	111%	50%	140%
Toluene	5436926		<0.05	<0.05	NA	< 0.05	112%	50%	140%	110%	60%	130%	100%	50%	140%
Dibromochloromethane	5436926		<0.05	<0.05	NA	< 0.05	115%	50%	140%	119%	60%	130%	110%	50%	140%
Ethylene Dibromide	5436926		<0.04	<0.04	NA	< 0.04	108%	50%	140%	92%	60%	130%	112%	50%	140%
Tetrachloroethylene	5436926		<0.05	<0.05	NA	< 0.05	85%	50%	140%	96%	60%	130%	105%	50%	140%
1,1,1,2-Tetrachloroethane	5436926		<0.04	<0.04	NA	< 0.04	103%	50%	140%	109%	60%	130%	99%	50%	140%
Chlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	92%	50%	140%	105%	60%	130%	99%	50%	140%
Ethylbenzene	5436926		<0.05	<0.05	NA	< 0.05	97%	50%	140%	116%	60%	130%	109%	50%	140%
m & p-Xylene	5436926		<0.05	<0.05	NA	< 0.05	108%	50%	140%	115%	60%	130%	107%	50%	140%
Bromoform	5436926		<0.05	<0.05	NA	< 0.05	108%	50%	140%	119%	60%	130%	109%	50%	140%
Styrene	5436926		<0.05	<0.05	NA	< 0.05	112%	50%	140%	103%	60%	130%	103%	50%	140%
1,1,2,2-Tetrachloroethane	5436926		<0.05	<0.05	NA	< 0.05	106%	50%	140%	111%	60%	130%	100%	50%	140%
o-Xylene	5436926		<0.05	<0.05	NA	< 0.05	117%	50%	140%	109%	60%	130%	100%	50%	140%
1,3-Dichlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	111%	50%	140%	115%	60%	130%	111%	50%	140%
1,4-Dichlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	114%	50%	140%	106%	60%	130%	98%	50%	140%
1,2-Dichlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	110%	50%	140%	104%	60%	130%	108%	50%	140%

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Nov 17, 2023			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	5436926		<0.05	<0.05	NA	< 0.05	102%	50%	140%	118%	60%	130%	84%	50%	140%
O. Reg. 153(511) - VOCs (with PHC) (Soil)															
Dichlorodifluoromethane	5436926		<0.05	<0.05	NA	< 0.05	78%	50%	140%	107%	50%	140%	76%	50%	140%
Vinyl Chloride	5436926		<0.02	<0.02	NA	< 0.02	108%	50%	140%	116%	50%	140%	92%	50%	140%
Bromomethane	5436926		<0.05	<0.05	NA	< 0.05	108%	50%	140%	116%	50%	140%	96%	50%	140%
Trichlorofluoromethane	5436926		<0.05	<0.05	NA	< 0.05	116%	50%	140%	110%	50%	140%	115%	50%	140%
Acetone	5436926		<0.50	<0.50	NA	< 0.50	97%	50%	140%	89%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	5436926		<0.05	<0.05	NA	< 0.05	85%	50%	140%	94%	60%	130%	80%	50%	140%
Methylene Chloride	5436926		<0.05	<0.05	NA	< 0.05	89%	50%	140%	96%	60%	130%	96%	50%	140%
Trans- 1,2-Dichloroethylene	5436926		<0.05	<0.05	NA	< 0.05	92%	50%	140%	97%	60%	130%	88%	50%	140%
Methyl tert-butyl Ether	5436926		<0.05	<0.05	NA	< 0.05	83%	50%	140%	87%	60%	130%	80%	50%	140%
1,1-Dichloroethane	5436926		<0.02	<0.02	NA	< 0.02	84%	50%	140%	91%	60%	130%	85%	50%	140%
Methyl Ethyl Ketone	5436926		<0.50	<0.50	NA	< 0.50	106%	50%	140%	93%	50%	140%	96%	50%	140%
Cis- 1,2-Dichloroethylene	5436926		<0.02	<0.02	NA	< 0.02	84%	50%	140%	89%	60%	130%	86%	50%	140%
Chloroform	5436926		<0.04	<0.04	NA	< 0.04	88%	50%	140%	96%	60%	130%	89%	50%	140%
1,2-Dichloroethane	5436926		<0.03	<0.03	NA	< 0.03	82%	50%	140%	86%	60%	130%	103%	50%	140%
1,1,1-Trichloroethane	5436926		<0.05	<0.05	NA	< 0.05	85%	50%	140%	92%	60%	130%	76%	50%	140%
Carbon Tetrachloride	5436926		<0.05	<0.05	NA	< 0.05	92%	50%	140%	99%	60%	130%	81%	50%	140%
Benzene	5436926		<0.02	<0.02	NA	< 0.02	72%	50%	140%	79%	60%	130%	74%	50%	140%
1,2-Dichloropropane	5436926		<0.03	<0.03	NA	< 0.03	91%	50%	140%	99%	60%	130%	103%	50%	140%
Trichloroethylene	5436926		<0.03	<0.03	NA	< 0.03	94%	50%	140%	93%	60%	130%	98%	50%	140%
Bromodichloromethane	5436926		<0.05	<0.05	NA	< 0.05	75%	50%	140%	79%	60%	130%	81%	50%	140%
Methyl Isobutyl Ketone	5436926		<0.50	<0.50	NA	< 0.50	102%	50%	140%	83%	50%	140%	88%	50%	140%
1,1,2-Trichloroethane	5436926		<0.04	<0.04	NA	< 0.04	113%	50%	140%	109%	60%	130%	111%	50%	140%
Toluene	5436926		<0.05	<0.05	NA	< 0.05	112%	50%	140%	110%	60%	130%	100%	50%	140%
Dibromochloromethane	5436926		<0.05	<0.05	NA	< 0.05	115%	50%	140%	119%	60%	130%	110%	50%	140%
Ethylene Dibromide	5436926		<0.04	<0.04	NA	< 0.04	108%	50%	140%	92%	60%	130%	112%	50%	140%
Tetrachloroethylene	5436926		<0.05	<0.05	NA	< 0.05	85%	50%	140%	96%	60%	130%	105%	50%	140%
1,1,1,2-Tetrachloroethane	5436926		<0.04	<0.04	NA	< 0.04	103%	50%	140%	109%	60%	130%	99%	50%	140%
Chlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	92%	50%	140%	105%	60%	130%	99%	50%	140%
Ethylbenzene	5436926		<0.05	<0.05	NA	< 0.05	97%	50%	140%	116%	60%	130%	109%	50%	140%
m & p-Xylene	5436926		<0.05	<0.05	NA	< 0.05	108%	50%	140%	115%	60%	130%	107%	50%	140%
Bromoform	5436926		<0.05	<0.05	NA	< 0.05	108%	50%	140%	119%	60%	130%	109%	50%	140%
Styrene	5436926		<0.05	<0.05	NA	< 0.05	112%	50%	140%	103%	60%	130%	103%	50%	140%
1,1,2,2-Tetrachloroethane	5436926		<0.05	<0.05	NA	< 0.05	106%	50%	140%	111%	60%	130%	100%	50%	140%
o-Xylene	5436926		<0.05	<0.05	NA	< 0.05	117%	50%	140%	109%	60%	130%	100%	50%	140%
1,3-Dichlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	111%	50%	140%	115%	60%	130%	111%	50%	140%
1,4-Dichlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	114%	50%	140%	106%	60%	130%	98%	50%	140%
1,2-Dichlorobenzene	5436926		<0.05	<0.05	NA	< 0.05	110%	50%	140%	104%	60%	130%	108%	50%	140%

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

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Trace Organics Analysis (Continued)

RPT Date: Nov 17, 2023			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	5436926		<0.05	<0.05	NA	< 0.05	102%	50%	140%	118%	60%	130%	84%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)															
F1 (C6 to C10)	5449158		<5	<5	NA	< 5	111%	60%	140%	113%	60%	140%	87%	60%	140%

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

Certified By: R. Chakraberty

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AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

RPT Date: Nov 17, 2023		REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Sample Id	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
			Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)										
Arsenic		137%	70%	130%	101%	80%	120%	105%	70%	130%

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	SEGMENTED FLOW ANALYSIS
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6075	modified from MSA PART 3, CH 14 and SM 2510 B	PC TITRATE
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE

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Method Summary

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AGAT WORK ORDER: 23T090837

PROJECT: 230902

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

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
wet weight OC	ORG-91-5113		BALANCE
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	P&T GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS

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

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
m & p-Xylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 23T090837

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Carbon Tetrachloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS

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CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT
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ATTENTION TO: Peter Markesic

PROJECT: 230902

AGAT WORK ORDER: 24T174861

SOIL ANALYSIS REVIEWED BY: Sukhwinder Randhawa, Inorganic Team Lead

TRACE ORGANICS REVIEWED BY: Oksana Gushyla, Trace Organics Lab Supervisor

DATE REPORTED: Jul 24, 2024

PAGES (INCLUDING COVER): 33

VERSION*: 1

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

Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
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Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		BH1 SS3	BH1 SS6	BH2 SS2	BH2 SS6	BH3 SS3	BH3 SS6	BH4 SS1	BH4 SS2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16
Parameter	Unit	G / S	RDL	6010536	6010553	6010554	6010555	6010556	6010557	6010558	6010559
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	6	5	7	4	5	4	8	6
Barium	µg/g	390	2.0	111	138	165	153	99.3	247	269	169
Beryllium	µg/g	5	0.5	0.8	0.6	1.1	0.6	0.7	1.1	1.4	0.7
Boron	µg/g	120	5	13	14	17	16	12	22	9	11
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.15	0.37	0.45	0.26	<0.10	0.49	0.23	0.34
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	26	23	31	23	24	39	33	32
Cobalt	µg/g	22	0.8	12.8	10.3	15.9	11.7	12.1	15.9	17.5	8.7
Copper	µg/g	180	1.0	26.2	19.0	27.4	17.7	21.8	26.3	31.5	21.9
Lead	µg/g	120	1	59	9	**242**	11	8	11	12	27
Molybdenum	µg/g	6.9	0.5	0.7	0.7	0.9	0.6	0.9	0.7	0.7	3.7
Nickel	µg/g	130	1	29	25	36	24	28	39	43	41
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	25	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.84	0.74	0.91	0.81	0.66	1.24	0.64	1.12
Vanadium	µg/g	86	2.0	34.9	29.5	43.6	32.3	35.6	48.9	48.9	34.2
Zinc	µg/g	340	5	153	62	77	67	62	79	82	84
Chromium, Hexavalent	µg/g	10	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	1.8	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.185	0.252	0.141	0.218	0.191	0.198	0.238	0.169
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.614	0.711	0.327	0.668	0.310	0.435	0.306	0.184
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	6.64	6.76	6.83	6.86	6.83	6.93	6.84	6.79

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Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

SAMPLE DESCRIPTION:				BH5 SS1	BH5 SS2	BH6 SS2	BH6 SS4	DUP 4
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00
Parameter	Unit	G / S	RDL	6010560	6010561	6010562	6010563	6010576
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	6	6	7	16	6
Barium	µg/g	390	2.0	117	218	240	182	167
Beryllium	µg/g	5	0.5	0.8	1.0	1.1	0.9	0.9
Boron	µg/g	120	5	13	13	13	15	13
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.19	<0.10	<0.10	<0.10	0.11
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	30	30	31	26	27
Cobalt	µg/g	22	0.8	11.8	13.8	17.9	13.5	12.8
Copper	µg/g	180	1.0	36.8	25.7	27.9	23.1	22.3
Lead	µg/g	120	1	28	12	13	10	10
Molybdenum	µg/g	6.9	0.5	1.5	0.7	0.8	1.0	0.7
Nickel	µg/g	130	1	30	33	39	29	28
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	25	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.57	0.62	0.63	0.61	0.64
Vanadium	µg/g	86	2.0	35.1	39.8	39.6	36.7	37.9
Zinc	µg/g	340	5	135	67	65	64	65
Chromium, Hexavalent	µg/g	10	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	1.8	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.141	0.214	0.181	0.164	0.168
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.137	0.382	0.243	0.262	0.243
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	6.85	6.91	6.88	6.88	6.90

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AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2024-07-17 **DATE REPORTED: 2024-07-24**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6010536-6010576 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		TP101	TP102	TP103	TP104	TP105	TP106	TP107	TP108
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00
Parameter	**Unit**	**G / S**	**RDL**	**6010486**	**6010488**	**6010489**	**6010490**	**6010491**	**6010492**	**6010493**	**6010494**
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	2.1	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	18	6	7	8	6	4	7	9
Barium	µg/g	390	2.0	91.4	169	107	127	142	205	110	102
Beryllium	µg/g	5	0.5	0.7	1.3	0.9	0.9	0.5	<0.5	0.8	0.7
Boron	µg/g	120	5	10	6	13	16	15	10	10	9
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	0.7	1.0	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	35	33	29	40	27	15	29	26
Cobalt	µg/g	22	0.8	10.3	9.5	13.1	12.1	7.3	4.1	10.2	11.3
Copper	µg/g	180	1.0	28.9	30.1	96.5	48.4	41.0	16.4	26.9	45.1
Lead	µg/g	120	1	32	30	51	84	**422**	35	46	81
Molybdenum	µg/g	6.9	0.5	1.3	1.1	1.4	3.1	1.9	1.9	1.4	1.9
Nickel	µg/g	130	1	32	30	29	51	23	14	34	30
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	25	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.61	0.97	0.58	1.19	0.84	0.68	0.75	0.60
Vanadium	µg/g	86	2.0	34.3	34.1	34.8	36.2	21.6	12.1	31.4	31.0
Zinc	µg/g	340	5	108	128	194	234	**648**	115	172	224

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		TP109
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-07-16 12:00
Parameter	**Unit**	**G / S**	**RDL**	**6010495**
Antimony	µg/g	7.5	0.8	2.4
Arsenic	µg/g	18	1	10
Barium	µg/g	390	2.0	133
Beryllium	µg/g	5	0.5	0.8
Boron	µg/g	120	5	11
Cadmium	µg/g	1.2	0.5	**1.3**
Chromium	µg/g	160	5	39
Cobalt	µg/g	22	0.8	12.5
Copper	µg/g	180	1.0	54.0
Lead	µg/g	120	1	**224**
Molybdenum	µg/g	6.9	0.5	3.2
Nickel	µg/g	130	1	38
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	25	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	0.64
Vanadium	µg/g	86	2.0	34.1
Zinc	µg/g	340	5	**679**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

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Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

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

DATE RECEIVED: 2024-07-17 **DATE REPORTED: 2024-07-24**

		SAMPLE DESCRIPTION:		TP101	TP102	TP103	TP104	TP105	TP106	TP107	TP108
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00
Parameter	Unit	G / S	RDL	6010486	6010488	6010489	6010490	6010491	6010492	6010493	6010494
Hexachloroethane	µg/g	0.07	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Gamma-Hexachlorocyclohexane	µg/g	0.063	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor	µg/g	0.15	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor Epoxide	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan I	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan II	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Alpha-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	0.006
gamma-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005
Chlordane	µg/g	0.05	0.007	<0.007	<0.007	<0.007	<0.007	0.024	<0.007	<0.007	<0.007
op'-DDE	ug/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDE	µg/g		0.005	<0.005	0.016	<0.005	0.44	0.049	0.038	0.36	0.012
DDE	µg/g	0.33	0.007	<0.007	0.016	<0.007	**0.440**	0.049	0.038	**0.360**	0.012
op'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	0.014	<0.005	<0.005	0.012	<0.005
DDD	µg/g	3.3	0.007	<0.007	<0.007	<0.007	0.014	<0.007	<0.007	0.012	<0.007
op'-DDT	µg/g		0.005	<0.005	<0.005	<0.005	0.027	<0.005	<0.005	0.02	<0.005
pp'-DDT	µg/g		0.005	<0.005	0.007	<0.005	0.11	0.024	0.008	0.11	0.007
DDT (Total)	µg/g	1.4	0.007	<0.007	0.007	<0.007	0.137	0.024	0.008	0.130	0.007
Dieldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endrin	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Methoxychlor	µg/g	0.13	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobenzene	µg/g	0.52	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobutadiene	µg/g	0.014	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Moisture Content	%		0.1	39.2	5.7	37.7	25.1	28.0	38.96	24.9	22.3
wet weight OC	g		0.01	10.15	10.89	10.71	10.55	10.18	10.95	10.66	10.53

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

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

DATE RECEIVED: 2024-07-17 **DATE REPORTED: 2024-07-24**

		SAMPLE DESCRIPTION:	TP101	TP102	TP103	TP104	TP105	TP106	TP107	TP108
		SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00
Surrogate	Unit	Acceptable Limits	6010486	6010488	6010489	6010490	6010491	6010492	6010493	6010494
TCMX	%	50-140	87	92	96	91	86	76	98	95
Decachlorobiphenyl	%	50-140	86	90	86	83	88	77	84	83

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PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

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

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		TP109
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-07-16 12:00
Parameter	Unit	G / S	RDL	6010495
Hexachloroethane	µg/g	0.07	0.005	<0.005
Gamma-Hexachlorocyclohexane	µg/g	0.063	0.005	<0.005
Heptachlor	µg/g	0.15	0.005	<0.005
Aldrin	µg/g	0.05	0.005	<0.005
Heptachlor Epoxide	µg/g	0.05	0.005	<0.005
Endosulfan I	µg/g		0.005	<0.005
Endosulfan II	µg/g		0.005	<0.005
Endosulfan	µg/g	0.04	0.005	<0.005
Alpha-Chlordane	µg/g		0.005	0.007
gamma-Chlordane	µg/g		0.005	<0.005
Chlordane	µg/g	0.05	0.007	0.007
op'-DDE	ug/g		0.005	<0.005
pp'-DDE	µg/g		0.005	0.03
DDE	µg/g	0.33	0.007	0.030
op'-DDD	µg/g		0.005	<0.005
pp'-DDD	µg/g		0.005	<0.005
DDD	µg/g	3.3	0.007	<0.007
op'-DDT	µg/g		0.005	<0.005
pp'-DDT	µg/g		0.005	0.014
DDT (Total)	µg/g	1.4	0.007	0.014
Dieldrin	µg/g	0.05	0.005	<0.005
Endrin	µg/g	0.04	0.005	<0.005
Methoxychlor	µg/g	0.13	0.005	<0.005
Hexachlorobenzene	µg/g	0.52	0.005	<0.005
Hexachlorobutadiene	µg/g	0.014	0.01	<0.01
Moisture Content	%		0.1	29.1
wet weight OC	g		0.01	10.35

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AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

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

DATE RECEIVED: 2024-07-17 **DATE REPORTED: 2024-07-24**

		SAMPLE DESCRIPTION:	TP109
		SAMPLE TYPE:	Soil
		DATE SAMPLED:	2024-07-16 12:00
Surrogate	Unit	Acceptable Limits	6010495
TCMX	%	50-140	92
Decachlorobiphenyl	%	50-140	86

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6010486-6010495 Results are based on the dry weight of the soil.
DDT total is a calculated parameter. The calculated value is the sum of op'DDT and pp'DDT.
DDD total is a calculated parameter. The calculated value is the sum of op'DDD and pp'DDD.
DDE total is a calculated parameter. The calculated value is the sum of op'DDE and pp'DDE.
Endosulfan total is a calculated parameter. The calculated value is the sum of Endosulfan I and Endosulfan II.
Chlordane total is a calculated parameter. The calculated value is the sum of Alpha-Chlordane and Gamma-Chlordane.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

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

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		BH1 SS3	BH1 SS6	BH2 SS2	BH2 SS6	BH3 SS3	BH3 SS6	BH4 SS1	BH4 SS2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16
Parameter	**Unit**	**G / S**	**RDL**	**6010536**	**6010553**	**6010554**	**6010555**	**6010556**	**6010557**	**6010558**	**6010559**
Naphthalene	µg/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.17	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	58	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	7.8	0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.74	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	0.19	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)anthracene	µg/g	0.63	0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7.8	0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.48	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	3.4	0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	16.2	16.1	7.5	24.4	18.8	30.1	22.4	19.4
Surrogate	**Unit**	**Acceptable Limits**									
Naphthalene-d8	%	50-140		70	70	70	70	70	75	80	70
Acridine-d9	%	50-140		90	80	75	85	90	105	75	100
Terphenyl-d14	%	50-140		95	80	110	85	85	80	70	80

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

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

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

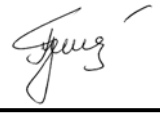
		SAMPLE DESCRIPTION:		BH5 SS1	BH5 SS2	BH6 SS2	BH6 SS4	DUP 1	DUP 3
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16	2024-07-16 12:00
Parameter	**Unit**	**G / S**	**RDL**	**6010560**	**6010561**	**6010562**	**6010563**	**6010568**	**6010575**
Naphthalene	µg/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.17	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	58	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.74	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)anthracene	µg/g	0.63	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.48	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	7.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	3.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	14.9	21.8	17.7	20.6	16.6	23.4
Surrogate	**Unit**	**Acceptable Limits**							
Naphthalene-d8	%	50-140		75	70	70	70	70	80
Acridine-d9	%	50-140		100	90	105	100	80	75
Terphenyl-d14	%	50-140		100	75	80	95	85	70

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6010536-6010575 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		BH1 SS3	BH1 SS6	BH2 SS2	BH2 SS6	BH3 SS3	BH3 SS6	BH4 SS1	BH4 SS2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16
Parameter	**Unit**	**G / S**	**RDL**	**6010536**	**6010553**	**6010554**	**6010555**	**6010556**	**6010557**	**6010558**	**6010559**
F1 (C6 to C10)	µg/g	65	5	<5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	65	5	<5	<5	<5	<5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	150	10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g		10	<10	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1300	50	<50	<50	<50	<50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g		50	<50	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	5600	50	<50	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	5600	50	NA	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%		0.1	16.2	16.1	7.5	24.4	18.8	30.1	22.4	19.4
Surrogate	**Unit**	**Acceptable Limits**									
Toluene-d8	%	50-140		104	104	107	105	102	108	104	108
Terphenyl	%	60-140		82	74	91	93	77	84	92	80

		SAMPLE DESCRIPTION:		BH5 SS1	BH5 SS2	BH6 SS2	BH6 SS4
		SAMPLE TYPE:		Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00
Parameter	**Unit**	**G / S**	**RDL**	**6010560**	**6010561**	**6010562**	**6010563**
F1 (C6 to C10)	µg/g	65	5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	65	5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	150	10	<10	<10	<10	<10
F2 (C10 to C16) minus Naphthalene	µg/g		10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	1300	50	<50	<50	<50	<50
F3 (C16 to C34) minus PAHs	µg/g		50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	5600	50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	5600	50	NA	NA	NA	NA
Moisture Content	%		0.1	14.9	21.8	17.7	20.6
Surrogate	**Unit**	**Acceptable Limits**					
Toluene-d8	%	50-140		104	104	105	105
Terphenyl	%	60-140		89	86	72	93

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AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 24T174861

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)

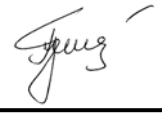
DATE RECEIVED: 2024-07-17 **DATE REPORTED: 2024-07-24**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6010536-6010563 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		DUP 2
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2024-07-16
Parameter	**Unit**	**G / S**	**RDL**	**6010570**
F1 (C6 to C10)	µg/g	65	5	<5
F1 (C6 to C10) minus BTEX	µg/g	65	5	<5
F2 (C10 to C16)	µg/g	150	10	<10
F3 (C16 to C34)	µg/g	1300	50	<50
F4 (C34 to C50)	µg/g	5600	50	<50
Gravimetric Heavy Hydrocarbons	µg/g	5600	50	NA
Moisture Content	%		0.1	26.1
Surrogate	**Unit**	**Acceptable Limits**		
Toluene-d8	%	50-140		104
Terphenyl	%	60-140		74

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6010570 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

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CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

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

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		BH1 SS3	BH1 SS6	BH2 SS2	BH2 SS6	BH3 SS3	BH3 SS6	BH4 SS1	BH4 SS2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16
Parameter	Unit	G / S	RDL	6010536	6010553	6010554	6010555	6010556	6010557	6010558	6010559
Dichlorodifluoromethane	µg/g	25	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.022	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	5.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	28	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	11	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	44	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	30	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.18	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	3.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.17	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.085	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.52	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	13	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	4.3	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	9.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

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

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		BH1 SS3	BH1 SS6	BH2 SS2	BH2 SS6	BH3 SS3	BH3 SS6	BH4 SS1	BH4 SS2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16	2024-07-16
Parameter	**Unit**	**G / S**	**RDL**	**6010536**	**6010553**	**6010554**	**6010555**	**6010556**	**6010557**	**6010558**	**6010559**
Bromoform	ug/g	0.26	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	ug/g	2.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.097	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	4.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	25	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.083	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
n-Hexane	µg/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	16.2	16.1	7.5	24.4	18.8	30.1	22.4	19.4
Surrogate	**Unit**	**Acceptable Limits**									
Toluene-d8	% Recovery	50-140		104	104	107	105	102	108	104	108
4-Bromofluorobenzene	% Recovery	50-140		88	93	94	92	91	97	90	95

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

DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		BH5 SS1	BH5 SS2	BH6 SS2	BH6 SS4	DUP 2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16
Parameter	**Unit**	**G / S**	**RDL**	**6010560**	**6010561**	**6010562**	**6010563**	**6010570**
Dichlorodifluoromethane	µg/g	25	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.022	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	5.8	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	28	0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.96	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	11	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	44	0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	30	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.18	0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	3.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.12	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.17	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.085	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.52	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	13	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	4.3	0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	9.4	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

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DATE RECEIVED: 2024-07-17

DATE REPORTED: 2024-07-24

		SAMPLE DESCRIPTION:		BH5 SS1	BH5 SS2	BH6 SS2	BH6 SS4	DUP 2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16 12:00	2024-07-16
Parameter	**Unit**	**G / S**	**RDL**	**6010560**	**6010561**	**6010562**	**6010563**	**6010570**
m & p-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.26	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	ug/g	2.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.097	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	4.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	25	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.083	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
n-Hexane	µg/g	34	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	14.9	21.8	17.7	20.6	26.1
Surrogate	**Unit**	**Acceptable Limits**						
Toluene-d8	% Recovery	50-140		104	104	105	105	104
4-Bromofluorobenzene	% Recovery	50-140		92	94	90	88	90

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 S RPI MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6010536-6010570 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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Exceedance Summary

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CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
6010490	TP104	ON T3 S RPI MFT	O. Reg. 153(511) - OC Pesticides (Soil)	DDE	µg/g	0.33	0.440
6010491	TP105	ON T3 S RPI MFT	O. Reg. 153(511) - Metals (Including Hydrides) (Soil)	Lead	µg/g	120	422
6010491	TP105	ON T3 S RPI MFT	O. Reg. 153(511) - Metals (Including Hydrides) (Soil)	Zinc	µg/g	340	648
6010493	TP107	ON T3 S RPI MFT	O. Reg. 153(511) - OC Pesticides (Soil)	DDE	µg/g	0.33	0.360
6010495	TP109	ON T3 S RPI MFT	O. Reg. 153(511) - Metals (Including Hydrides) (Soil)	Cadmium	µg/g	1.2	1.3
6010495	TP109	ON T3 S RPI MFT	O. Reg. 153(511) - Metals (Including Hydrides) (Soil)	Lead	µg/g	120	224
6010495	TP109	ON T3 S RPI MFT	O. Reg. 153(511) - Metals (Including Hydrides) (Soil)	Zinc	µg/g	340	679
6010554	BH2 SS2	ON T3 S RPI MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Lead	µg/g	120	242

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 24T174861

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

Soil Analysis

RPT Date: Jul 24, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	6009297		<0.8	<0.8	NA	< 0.8	113%	70%	130%	96%	80%	120%	83%	70%	130%
Arsenic	6009297		<1	<1	NA	< 1	130%	70%	130%	98%	80%	120%	96%	70%	130%
Barium	6009297		41.9	43.9	4.7%	< 2.0	105%	70%	130%	101%	80%	120%	100%	70%	130%
Beryllium	6009297		<0.5	<0.5	NA	< 0.5	104%	70%	130%	111%	80%	120%	126%	70%	130%
Boron	6009297		<5	<5	NA	< 5	85%	70%	130%	98%	80%	120%	106%	70%	130%
Cadmium	6009297		<0.5	<0.5	NA	< 0.5	104%	70%	130%	100%	80%	120%	98%	70%	130%
Chromium	6009297		9	10	NA	< 5	100%	70%	130%	105%	80%	120%	102%	70%	130%
Cobalt	6009297		3.3	3.5	NA	< 0.8	104%	70%	130%	100%	80%	120%	103%	70%	130%
Copper	6009297		5.7	5.9	3.4%	< 1.0	97%	70%	130%	98%	80%	120%	96%	70%	130%
Lead	6009297		2	2	NA	< 1	102%	70%	130%	98%	80%	120%	92%	70%	130%
Molybdenum	6009297		<0.5	<0.5	NA	< 0.5	104%	70%	130%	101%	80%	120%	102%	70%	130%
Nickel	6009297		4	4	NA	< 1	102%	70%	130%	97%	80%	120%	95%	70%	130%
Selenium	6009297		<0.8	<0.8	NA	< 0.8	101%	70%	130%	103%	80%	120%	101%	70%	130%
Silver	6009297		<0.5	<0.5	NA	< 0.5	111%	70%	130%	103%	80%	120%	101%	70%	130%
Thallium	6009297		<0.5	<0.5	NA	< 0.5	95%	70%	130%	98%	80%	120%	91%	70%	130%
Uranium	6009297		<0.50	<0.50	NA	< 0.50	103%	70%	130%	95%	80%	120%	95%	70%	130%
Vanadium	6009297		19.0	20.7	8.6%	< 2.0	120%	70%	130%	98%	80%	120%	104%	70%	130%
Zinc	6009297		16	16	NA	< 5	105%	70%	130%	103%	80%	120%	96%	70%	130%

Comments: NA Signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

O. Reg. 153(511) - Metals & Inorganics (Soil)															
Chromium, Hexavalent	6010576	6010576	<0.2	<0.2	NA	< 0.2	103%	70%	130%	87%	80%	120%	88%	70%	130%
Cyanide, WAD	6014262		<0.040	<0.040	NA	< 0.040	95%	70%	130%	107%	80%	120%	112%	70%	130%
Electrical Conductivity (2:1)	6009276		0.102	0.104	1.9%	< 0.005	98%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	6010563	6010563	0.262	0.264	0.8%	NA									
pH, 2:1 CaCl2 Extraction	6010536	6010536	6.64	6.62	0.3%	NA	100%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

O. Reg. 153(511) - Metals & Inorganics (Soil)															
Electrical Conductivity (2:1)	6010563	6010563	0.164	0.178	8.2%	< 0.005	99%	80%	120%						

O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	6010563	6010563	<0.8	<0.8	NA	< 0.8	117%	70%	130%	102%	80%	120%	113%	70%	130%
Arsenic	6010563	6010563	16	18	11.8%	< 1	105%	70%	130%	100%	80%	120%	100%	70%	130%
Barium	6010563	6010563	182	189	3.8%	< 2.0	100%	70%	130%	106%	80%	120%	94%	70%	130%
Beryllium	6010563	6010563	0.9	1.0	NA	< 0.5	93%	70%	130%	107%	80%	120%	93%	70%	130%
Boron	6010563	6010563	15	16	NA	< 5	110%	70%	130%	88%	80%	120%	76%	70%	130%
Cadmium	6010563	6010563	<0.5	<0.5	NA	< 0.5	105%	70%	130%	98%	80%	120%	103%	70%	130%

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Quality Assurance

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AGAT WORK ORDER: 24T174861

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

Soil Analysis (Continued)

RPT Date: Jul 24, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Chromium	6010563	6010563	26	28	7.4%	< 5	104%	70%	130%	101%	80%	120%	NA	70%	130%
Cobalt	6010563	6010563	13.5	14.9	9.9%	< 0.8	96%	70%	130%	98%	80%	120%	94%	70%	130%
Copper	6010563	6010563	23.1	24.8	7.1%	< 1.0	90%	70%	130%	101%	80%	120%	87%	70%	130%
Lead	6010563	6010563	10	10	0.0%	< 1	107%	70%	130%	96%	80%	120%	87%	70%	130%
Molybdenum	6010563	6010563	1.0	1.1	NA	< 0.5	99%	70%	130%	101%	80%	120%	99%	70%	130%
Nickel	6010563	6010563	29	30	3.4%	< 1	103%	70%	130%	100%	80%	120%	92%	70%	130%
Selenium	6010563	6010563	<0.8	<0.8	NA	< 0.8	95%	70%	130%	101%	80%	120%	93%	70%	130%
Silver	6010563	6010563	<0.5	<0.5	NA	< 0.5	94%	70%	130%	100%	80%	120%	105%	70%	130%
Thallium	6010563	6010563	<0.5	<0.5	NA	< 0.5	109%	70%	130%	96%	80%	120%	91%	70%	130%
Uranium	6010563	6010563	0.61	0.75	NA	< 0.50	103%	70%	130%	96%	80%	120%	92%	70%	130%
Vanadium	6010563	6010563	36.7	41.2	11.6%	< 2.0	103%	70%	130%	100%	80%	120%	105%	70%	130%
Zinc	6010563	6010563	64	69	7.5%	< 5	99%	70%	130%	101%	80%	120%	NA	70%	130%
Mercury	6010563	6010563	<0.10	<0.10	NA	< 0.10	100%	70%	130%	97%	80%	120%	97%	70%	130%

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 24T174861

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

Trace Organics Analysis

RPT Date: Jul 24, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - OC Pesticides (Soil)															
Hexachloroethane	6001011		< 0.005	< 0.005	NA	< 0.005	88%	50%	140%	81%	50%	140%	79%	50%	140%
Gamma-Hexachlorocyclohexane	6001011		< 0.005	< 0.005	NA	< 0.005	85%	50%	140%	76%	50%	140%	77%	50%	140%
Heptachlor	6001011		< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	103%	50%	140%	102%	50%	140%
Aldrin	6001011		< 0.005	< 0.005	NA	< 0.005	88%	50%	140%	88%	50%	140%	90%	50%	140%
Heptachlor Epoxide	6001011		< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	86%	50%	140%	87%	50%	140%
Endosulfan I	6001011		< 0.005	< 0.005	NA	< 0.005	88%	50%	140%	84%	50%	140%	80%	50%	140%
Endosulfan II	6001011		< 0.005	< 0.005	NA	< 0.005	85%	50%	140%	85%	50%	140%	92%	50%	140%
Alpha-Chlordane	6001011		< 0.005	< 0.005	NA	< 0.005	86%	50%	140%	92%	50%	140%	102%	50%	140%
gamma-Chlordane	6001011		< 0.005	< 0.005	NA	< 0.005	85%	50%	140%	89%	50%	140%	87%	50%	140%
op'-DDE	6001011		< 0.005	< 0.005	NA	< 0.005	102%	50%	140%	103%	50%	140%	96%	50%	140%
pp'-DDE	6001011		< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	106%	50%	140%	88%	50%	140%
op'-DDD	6001011		< 0.005	< 0.005	NA	< 0.005	109%	50%	140%	104%	50%	140%	92%	50%	140%
pp'-DDD	6001011		< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	106%	50%	140%	93%	50%	140%
op'-DDT	6001011		< 0.005	< 0.005	NA	< 0.005	107%	50%	140%	108%	50%	140%	82%	50%	140%
pp'-DDT	6001011		< 0.005	< 0.005	NA	< 0.005	86%	50%	140%	102%	50%	140%	84%	50%	140%
Dieldrin	6001011		< 0.005	< 0.005	NA	< 0.005	83%	50%	140%	86%	50%	140%	88%	50%	140%
Endrin	6001011		< 0.005	< 0.005	NA	< 0.005	82%	50%	140%	112%	50%	140%	94%	50%	140%
Methoxychlor	6001011		< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	115%	50%	140%	105%	50%	140%
Hexachlorobenzene	6001011		< 0.005	< 0.005	NA	< 0.005	112%	50%	140%	107%	50%	140%	97%	50%	140%
Hexachlorobutadiene	6001011		< 0.01	< 0.01	NA	< 0.01	98%	50%	140%	109%	50%	140%	103%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Soil)															
F1 (C6 to C10)	6010922		<5	<5	NA	< 5	123%	60%	140%	107%	60%	140%	83%	60%	140%
F2 (C10 to C16)	6010559	6010559	<10	<10	NA	< 10	107%	60%	140%	122%	60%	140%	92%	60%	140%
F3 (C16 to C34)	6010559	6010559	<50	<50	NA	< 50	106%	60%	140%	96%	60%	140%	65%	60%	140%
F4 (C34 to C50)	6010559	6010559	<50	<50	NA	< 50	95%	60%	140%	88%	60%	140%	80%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	6010559	6010559	<0.05	<0.05	NA	< 0.05	109%	50%	140%	95%	50%	140%	110%	50%	140%
Acenaphthylene	6010559	6010559	<0.05	<0.05	NA	< 0.05	101%	50%	140%	73%	50%	140%	83%	50%	140%
Acenaphthene	6010559	6010559	<0.05	<0.05	NA	< 0.05	90%	50%	140%	103%	50%	140%	88%	50%	140%
Fluorene	6010559	6010559	<0.05	<0.05	NA	< 0.05	94%	50%	140%	103%	50%	140%	85%	50%	140%
Phenanthrene	6010559	6010559	<0.05	<0.05	NA	< 0.05	98%	50%	140%	110%	50%	140%	73%	50%	140%
Anthracene	6010559	6010559	<0.05	<0.05	NA	< 0.05	76%	50%	140%	95%	50%	140%	68%	50%	140%
Fluoranthene	6010559	6010559	<0.05	<0.05	NA	< 0.05	110%	50%	140%	113%	50%	140%	75%	50%	140%
Pyrene	6010559	6010559	<0.05	<0.05	NA	< 0.05	109%	50%	140%	113%	50%	140%	75%	50%	140%
Benzo(a)anthracene	6010559	6010559	<0.05	<0.05	NA	< 0.05	91%	50%	140%	78%	50%	140%	75%	50%	140%
Chrysene	6010559	6010559	<0.05	<0.05	NA	< 0.05	104%	50%	140%	93%	50%	140%	75%	50%	140%
Benzo(b)fluoranthene	6010559	6010559	<0.05	<0.05	NA	< 0.05	105%	50%	140%	78%	50%	140%	98%	50%	140%
Benzo(k)fluoranthene	6010559	6010559	<0.05	<0.05	NA	< 0.05	126%	50%	140%	108%	50%	140%	110%	50%	140%
Benzo(a)pyrene	6010559	6010559	<0.05	<0.05	NA	< 0.05	90%	50%	140%	73%	50%	140%	83%	50%	140%

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SAMPLED BY:GG & AS

Trace Organics Analysis (Continued)

RPT Date: Jul 24, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Indeno(1,2,3-cd)pyrene	6010559	6010559	<0.05	<0.05	NA	< 0.05	73%	50%	140%	90%	50%	140%	80%	50%	140%
Dibenz(a,h)anthracene	6010559	6010559	<0.05	<0.05	NA	< 0.05	78%	50%	140%	75%	50%	140%	85%	50%	140%
Benzo(g,h,i)perylene	6010559	6010559	<0.05	<0.05	NA	< 0.05	77%	50%	140%	73%	50%	140%	78%	50%	140%
O. Reg. 153(511) - VOCs (with PHC) (Soil)															
Dichlorodifluoromethane	6010922		<0.05	<0.05	NA	< 0.05	125%	50%	140%	95%	50%	140%	83%	50%	140%
Vinyl Chloride	6010922		<0.02	<0.02	NA	< 0.02	78%	50%	140%	115%	50%	140%	119%	50%	140%
Bromomethane	6010922		<0.05	<0.05	NA	< 0.05	89%	50%	140%	115%	50%	140%	102%	50%	140%
Trichlorofluoromethane	6010922		<0.05	<0.05	NA	< 0.05	71%	50%	140%	104%	50%	140%	85%	50%	140%
Acetone	6010922		<0.50	<0.50	NA	< 0.50	86%	50%	140%	101%	50%	140%	90%	50%	140%
1,1-Dichloroethylene	6010922		<0.05	<0.05	NA	< 0.05	82%	50%	140%	91%	60%	130%	102%	50%	140%
Methylene Chloride	6010922		<0.05	<0.05	NA	< 0.05	87%	50%	140%	106%	60%	130%	87%	50%	140%
Trans- 1,2-Dichloroethylene	6010922		<0.05	<0.05	NA	< 0.05	77%	50%	140%	97%	60%	130%	89%	50%	140%
Methyl tert-butyl Ether	6010922		<0.05	<0.05	NA	< 0.05	108%	50%	140%	92%	60%	130%	84%	50%	140%
1,1-Dichloroethane	6010922		<0.02	<0.02	NA	< 0.02	96%	50%	140%	93%	60%	130%	101%	50%	140%
Methyl Ethyl Ketone	6010922		<0.50	<0.50	NA	< 0.50	88%	50%	140%	109%	50%	140%	97%	50%	140%
Cis- 1,2-Dichloroethylene	6010922		<0.02	<0.02	NA	< 0.02	75%	50%	140%	93%	60%	130%	92%	50%	140%
Chloroform	6010922		<0.04	<0.04	NA	< 0.04	75%	50%	140%	95%	60%	130%	91%	50%	140%
1,2-Dichloroethane	6010922		<0.03	<0.03	NA	< 0.03	77%	50%	140%	96%	60%	130%	96%	50%	140%
1,1,1-Trichloroethane	6010922		<0.05	<0.05	NA	< 0.05	61%	50%	140%	76%	60%	130%	68%	50%	140%
Carbon Tetrachloride	6010922		<0.05	<0.05	NA	< 0.05	64%	50%	140%	76%	60%	130%	70%	50%	140%
Benzene	6010922		<0.02	<0.02	NA	< 0.02	81%	50%	140%	97%	60%	130%	99%	50%	140%
1,2-Dichloropropane	6010922		<0.03	<0.03	NA	< 0.03	69%	50%	140%	90%	60%	130%	93%	50%	140%
Trichloroethylene	6010922		<0.03	<0.03	NA	< 0.03	77%	50%	140%	94%	60%	130%	88%	50%	140%
Bromodichloromethane	6010922		<0.05	<0.05	NA	< 0.05	70%	50%	140%	70%	60%	130%	69%	50%	140%
Methyl Isobutyl Ketone	6010922		<0.50	<0.50	NA	< 0.50	73%	50%	140%	93%	50%	140%	109%	50%	140%
1,1,2-Trichloroethane	6010922		<0.04	<0.04	NA	< 0.04	74%	50%	140%	93%	60%	130%	105%	50%	140%
Toluene	6010922		<0.05	<0.05	NA	< 0.05	88%	50%	140%	95%	60%	130%	93%	50%	140%
Dibromochloromethane	6010922		<0.05	<0.05	NA	< 0.05	73%	50%	140%	73%	60%	130%	76%	50%	140%
Ethylene Dibromide	6010922		<0.04	<0.04	NA	< 0.04	62%	50%	140%	80%	60%	130%	86%	50%	140%
Tetrachloroethylene	6010922		<0.05	<0.05	NA	< 0.05	79%	50%	140%	100%	60%	130%	103%	50%	140%
1,1,1,2-Tetrachloroethane	6010922		<0.04	<0.04	NA	< 0.04	66%	50%	140%	75%	60%	130%	79%	50%	140%
Chlorobenzene	6010922		<0.05	<0.05	NA	< 0.05	84%	50%	140%	100%	60%	130%	87%	50%	140%
Ethylbenzene	6010922		<0.05	<0.05	NA	< 0.05	77%	50%	140%	95%	60%	130%	95%	50%	140%
m & p-Xylene	6010922		<0.05	<0.05	NA	< 0.05	87%	50%	140%	96%	60%	130%	111%	50%	140%
Bromoform	6010922		<0.05	<0.05	NA	< 0.05	63%	50%	140%	76%	60%	130%	76%	50%	140%
Styrene	6010922		<0.05	<0.05	NA	< 0.05	65%	50%	140%	85%	60%	130%	95%	50%	140%
1,1,2,2-Tetrachloroethane	6010922		<0.05	<0.05	NA	< 0.05	73%	50%	140%	87%	60%	130%	92%	50%	140%
o-Xylene	6010922		<0.05	<0.05	NA	< 0.05	79%	50%	140%	95%	60%	130%	96%	50%	140%

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 24T174861

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

Trace Organics Analysis (Continued)

RPT Date: Jul 24, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,3-Dichlorobenzene	6010922		<0.05	<0.05	NA	< 0.05	81%	50%	140%	97%	60%	130%	96%	50%	140%
1,4-Dichlorobenzene	6010922		<0.05	<0.05	NA	< 0.05	82%	50%	140%	100%	60%	130%	96%	50%	140%
1,2-Dichlorobenzene	6010922		<0.05	<0.05	NA	< 0.05	82%	50%	140%	97%	60%	130%	94%	50%	140%
n-Hexane	6010922		<0.05	<0.05	NA	< 0.05	61%	50%	140%	94%	60%	130%	107%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)															
F1 (C6 to C10)	6010922		<5	<5	NA	< 5	123%	60%	140%	107%	60%	140%	83%	60%	140%
F2 (C10 to C16)	6010559	6010559	<10	<10	NA	< 10	107%	60%	140%	122%	60%	140%	92%	60%	140%
F3 (C16 to C34)	6010559	6010559	<50	<50	NA	< 50	106%	60%	140%	96%	60%	140%	65%	60%	140%
F4 (C34 to C50)	6010559	6010559	<50	<50	NA	< 50	95%	60%	140%	88%	60%	140%	80%	60%	140%

Certified By:

AGAT Laboratories

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Method Summary

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 24T174861

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	SEGMENTED FLOW ANALYSIS
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6075	modified from MSA PART 3, CH 14 and SM 2510 B	PC TITRATE
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE

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Method Summary

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 24T174861

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St, Welland

SAMPLED BY:GG & AS

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

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Method Summary

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT | **AGAT WORK ORDER: 24T174861**

PROJECT: 230902 | **ATTENTION TO: Peter Markesic**

SAMPLING SITE:111 Victoria St, Welland | **SAMPLED BY:GG & AS**

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
wet weight OC	ORG-91-5113		BALANCE
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	P&T GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID

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Method Summary

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PROJECT: 230902

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

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

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webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: Soil-Mat
Contact: Peter Markesic
Address: 401 Grays Road
Phone: Fax:
Reports to be sent to:
1. Email: pmarkesic@soilmat.ca
2. Email: ggilmour@soilmat.ca

Project Information:

Project: 230902
Site Location: 111 Victoria st; welland
Sampled By: GG & AS
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐
Company:
Contact:
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table 1 *Indicate One*
☐ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture *(Check One)* ☐ Coarse ☐ Fine

☐ Regulation 406
Table *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Sample Matrix Legend

GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 24T174861
Cooler Quantity: 2 large
Arrival Temperatures: 7.0 | 7.3 | 6.7 / 6.2 | 6.6 | 7.1
Custody Seal Intact: ☐ Yes ☐ No ☒ N/A
Notes: loose ice

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day
OR Date Required (Rush Surcharges May Apply):
Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*
For 'Same Day' analysis, please contact your AGAT CPM

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	O. Reg 153: VOC	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: PCBs: Aroclors ☐	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Regulation 406 SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Regulation 406 Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Corrosivity: ☐ Moisture ☐ Sulphide	OC's	Reg. 153 Metals, including Hydrides				Potentially Hazardous or High Concentration (Y/N)
1. TP101	7/16/24	AM PM	2	S														X	X				
2. TP102		AM PM																X	X				
3. TP103		AM PM																X	X				
4. TP104		AM PM																X	X				
5. TP105		AM PM																X	X				
6. TP106		AM PM																X	X				
7. TP107		AM PM																X	X				
8. TP108		AM PM																X	X				
9. TP109		AM PM																X	X				
10. BH1 553		AM PM	4				X		X	X	X												
11. BH1 556		AM PM					X		X	X	X												

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
[signature]	7/16/24	4:45pm	[signature]	07/17/24	4pm
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 1 of 3
N°: T - 149431

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

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Chain of Custody Record

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

Report Information:

Company: Soil-Mat
Contact: Peter Markesic
Address: 401 Grays Road.
Phone: Fax:
Reports to be sent to:
1. Email: pmarkesic@soilmat.ca.
2. Email: ggilmour@soilmat.ca

Project Information:

Project: 230902.
Site Location: 111 Victoria St, Welland.
Sampled By: GG & AS.
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐
Company:
Contact:
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table _____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Regulation 406
Table _____ *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
_____ *Region*
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
_____ *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Sample Matrix Legend

GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 24T774861
Cooler Quantity: See 1st page
Arrival Temperatures:
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	VOC	PAHs	PCBs	PCBs: Aroclors ☐	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Regulation 406 SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Regulation 406 Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Corrosivity: ☐ Moisture ☐ Sulphide	Potentially Hazardous or High Concentration (Y/N)
1. BH2 SS2	7/16/24	AM PM	4	S			X		X	X	X							
2. BH2 SS6		AM PM					X		X	X	X							
3. BH3 SS3		AM PM					X		X	X	X							
4. BH3 SS6		AM PM					X		X	X	X							
5. BH4 SS1		AM PM					X		X	X	X							
6. BH4 SS2		AM PM					X		X	X	X							
7. BH5 SS1		AM PM					X		X	X	X							
8. BH5 SS2		AM PM					X		X	X	X							
9. BH6 SS2		AM PM					X		X	X	X							
10. BH6 SS4		AM PM					X		X	X	X							
11.		AM PM																

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
[signature]	7/16/24	4:45pm	[signature]	07/17/24	4 PM
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 2 of 2

N°: T - 149433

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AGAT Laboratories

Have feedback? Scan here for a quick survey!

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

Chain of Custody Record

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

Laboratory Use Only

Work Order #: 24T174861

Cooler Quantity: See 1st page

Arrival Temperatures:

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes:

Report Information:

Company: Soil-Mat
Contact: Peter Markesic
Address: 401 Grays Road.

Phone: Fax:

Reports to be sent to:

1. Email: pmarkesic@soilmat.ca
2. Email: ggilmour@soilmat.ca

Project Information:

Project: 230902
Site Location: 111 Victoria St, Welland
Sampled By: GG & AS.
AGAT Quote #: PO:

Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐

Company:
Contact:
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table (Indicate One): ☐ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One): ☐ Coarse ☐ Fine

☐ Regulation 406
Table (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
Indicate One

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	O. Reg 153: VOC	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: PCBs: Aroclors ☐	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Regulation 406 SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Regulation 406 Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Corrosivity: ☐ Moisture ☐ Sulphide	Potentially Hazardous or High Concentration (Y/N)
1. DUP 1	7/16/24	AM PM	1	S							X							
2. DUP 2	↓	AM PM	2	↓					X	X								
3. DUP 3		AM PM	1								X							
4. DUP 4		AM PM	1				X											
5.		AM PM																
6.		AM PM																
7.		AM PM																
8.		AM PM																
9.		AM PM																
10.		AM PM																
11.		AM PM																

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
[signature]	7/16/24	4:45pm	[signature]	07/17/24	4 PM
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 3 of 3

N°: T-149435

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Appendix ‘C’

1. AGAT Certificate of Analysis – Groundwater

AGAT Laboratories

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

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT
401 GRAYS ROAD
HAMILTON, ON L8E 2Z3
(905) 318-7440

ATTENTION TO: Peter Markesic

PROJECT: 230902

AGAT WORK ORDER: 24H183645

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

WATER ANALYSIS REVIEWED BY: Yris Verastegui, Inorganic Team Lead

DATE REPORTED: Aug 15, 2024

PAGES (INCLUDING COVER): 19

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

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

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

		SAMPLE DESCRIPTION:		MW1-S1	MW3-S1	MW5-S1	DUP1
		SAMPLE TYPE:		Water	Water	Water	Water
		DATE SAMPLED:		2024-08-09	2024-08-09	2024-08-09	2024-08-09
Parameter	Unit	G / S	RDL	6065539	6065543	6065544	6065545
Gamma-Hexachlorocyclohexane	µg/L	1.2	0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor	µg/L	2.5	0.01	<0.01	<0.01	<0.01	<0.01
Aldrin	µg/L	8.5	0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor Epoxide	µg/L	0.048	0.01	<0.01	<0.01	<0.01	<0.01
Endosulfan I	µg/L		0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan II	µg/L		0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan	µg/L	1.5	0.05	<0.05	<0.05	<0.05	<0.05
alpha - chlordane	µg/L		0.04	<0.04	<0.04	<0.04	<0.04
gamma-Chlordane	µg/L		0.04	<0.04	<0.04	<0.04	<0.04
Chlordane	µg/L	28	0.04	<0.04	<0.04	<0.04	<0.04
op'-DDE	µg/L		0.01	<0.01	<0.01	<0.01	<0.01
pp'-DDE	µg/L		0.01	<0.01	<0.01	<0.01	<0.01
DDE	µg/L	20	0.01	<0.01	<0.01	<0.01	<0.01
op'-DDD	µg/L		0.05	<0.05	<0.05	<0.05	<0.05
pp'-DDD	µg/L		0.05	<0.05	<0.05	<0.05	<0.05
DDD	µg/L	45	0.05	<0.05	<0.05	<0.05	<0.05
op'-DDT	µg/L		0.04	<0.04	<0.04	<0.04	<0.04
pp'-DDT	µg/L		0.05	<0.05	<0.05	<0.05	<0.05
DDT	µg/L	2.8	0.04	<0.04	<0.04	<0.04	<0.04
Dieldrin	µg/L	0.75	0.02	<0.02	<0.02	<0.02	<0.02
Endrin	µg/L	0.48	0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	µg/L	6.5	0.04	<0.04	<0.04	<0.04	<0.04
Hexachlorobenzene	ug/L	3.1	0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene	ug/L	4.5	0.01	<0.01	<0.01	<0.01	<0.01
Hexachloroethane	ug/L	200	0.01	<0.01	<0.01	<0.01	<0.01
Surrogate	Unit	Acceptable Limits					
TCMX	%	50-140		102	100	104	103
Decachlorobiphenyl	%	60-140		97	103	117	109

Certified By:

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

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

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 NPGW MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6065539-6065545 DDT total is a calculated parameter. The calculated value is the sum of op'DDT and pp'DDT.
DDD total is a calculated parameter. The calculated value is the sum of op'DDD and pp'DDD.
DDE total is a calculated parameter. The calculated value is the sum of op'DDE and pp'DDE.
Endosulfan total is a calculated parameter. The calculated value is the sum of Endosulfan I and Endosulfan II.
Chlordane total is a calculated parameter. The calculated value is the sum of Alpha-Chlordane and Gamma-Chlordane.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

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

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

		SAMPLE DESCRIPTION:		MW1-S1	MW3-S1	MW5-S1	DUP1
		SAMPLE TYPE:		Water	Water	Water	Water
		DATE SAMPLED:		2024-08-09	2024-08-09	2024-08-09	2024-08-09
Parameter	Unit	G / S	RDL	6065539	6065543	6065544	6065545
Naphthalene	µg/L	6400	0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthylene	µg/L	1.8	0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthene	µg/L	1700	0.20	<0.20	<0.20	<0.20	<0.20
Fluorene	µg/L	400	0.20	<0.20	<0.20	<0.20	<0.20
Phenanthrene	µg/L	580	0.10	<0.10	<0.10	<0.10	<0.10
Anthracene	µg/L	2.4	0.10	<0.10	<0.10	<0.10	<0.10
Fluoranthene	µg/L	130	0.20	<0.20	<0.20	<0.20	<0.20
Pyrene	µg/L	68	0.20	<0.20	<0.20	<0.20	<0.20
Benzo(a)anthracene	µg/L	4.7	0.20	<0.20	<0.20	<0.20	<0.20
Chrysene	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	µg/L	0.75	0.10	<0.10	<0.10	<0.10	<0.10
Benzo(k)fluoranthene	µg/L	0.4	0.10	<0.10	<0.10	<0.10	<0.10
Benzo(a)pyrene	µg/L	0.81	0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20
Dibenz(a,h)anthracene	µg/L	0.52	0.20	<0.20	<0.20	<0.20	<0.20
Benzo(g,h,i)perylene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20
2-and 1-methyl Napthalene	µg/L	1800	0.20	<0.20	<0.20	<0.20	<0.20
Sediment				1	1	1	1
Surrogate	Unit	Acceptable Limits					
Naphthalene-d8	%	50-140		87	97	110	87
Acridine-d9	%	50-140		78	86	78	74
Terphenyl-d14	%	50-140		73	72	78	72

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 NPGW MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6065539-6065545 Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.
Legend: 1 = no sediment present; 2 = sediment present; 3 = sediment present in trace amount
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popnikolof

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

		SAMPLE DESCRIPTION:		MW1-S1	MW3-S1	MW5-S1	DUP1
		SAMPLE TYPE:		Water	Water	Water	Water
		DATE SAMPLED:		2024-08-09	2024-08-09	2024-08-09	2024-08-09
Parameter	Unit	G / S	RDL	6065539	6065543	6065544	6065545
F1 (C6 to C10)	µg/L	750	25	<25	<25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25	<25	<25	<25
F2 (C10 to C16)	µg/L	150	100	<100	<100	<100	<100
F2 (C10 to C16) minus Naphthalene	µg/L		100	<100	<100	<100	<100
F3 (C16 to C34)	µg/L	500	100	<100	<100	<100	<100
F3 (C16 to C34) minus PAHs	µg/L		100	<100	<100	<100	<100
F4 (C34 to C50)	µg/L	500	100	<100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500	NA	NA	NA	NA
Sediment				1	1	1	1
Surrogate	Unit	Acceptable Limits					
Toluene-d8	%	50-140		102	100	103	101
Terphenyl	% Recovery	60-140		94	94	101	88

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 NPGW MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6065539-6065545 The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.
Legend: 1 = no sediment present; 2 = sediment present; 3 = sediment present in trace amounts

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

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

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

		SAMPLE DESCRIPTION:		MW1-S1	MW3-S1	MW5-S1	DUP1
		SAMPLE TYPE:		Water	Water	Water	Water
		DATE SAMPLED:		2024-08-09	2024-08-09	2024-08-09	2024-08-09
Parameter	Unit	G / S	RDL	6065539	6065543	6065544	6065545
Dichlorodifluoromethane	µg/L	4400	0.40	<0.40	<0.40	<0.40	<0.40
Vinyl Chloride	µg/L	1.7	0.17	<0.17	<0.17	<0.17	<0.17
Bromomethane	µg/L	56	0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	2500	0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L	130000	1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	17	0.30	<0.30	<0.30	<0.30	<0.30
Methylene Chloride	µg/L	5500	0.30	<0.30	<0.30	<0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	17	0.20	<0.20	<0.20	<0.20	<0.20
Methyl tert-butyl ether	µg/L	1400	0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	3100	0.30	<0.30	<0.30	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	1500000	1.0	<1.0	<1.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	17	0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	22	0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	12	0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	6700	0.30	<0.30	<0.30	<0.30	<0.30
Carbon Tetrachloride	µg/L	8.4	0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	430	0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	140	0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	µg/L	17	0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	85000	0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	580000	1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	30	0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	18000	0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	µg/L	82000	0.10	<0.10	<0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.83	0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	17	0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	28	0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	µg/L	630	0.10	<0.10	<0.10	<0.10	<0.10
Ethylbenzene	µg/L	2300	0.10	<0.10	<0.10	<0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20

Certified By: NPopowich

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Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

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

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

		SAMPLE DESCRIPTION:		MW1-S1	MW3-S1	MW5-S1	DUP1
		SAMPLE TYPE:		Water	Water	Water	Water
		DATE SAMPLED:		2024-08-09	2024-08-09	2024-08-09	2024-08-09
Parameter	Unit	G / S	RDL	6065539	6065543	6065544	6065545
Bromoform	µg/L	770	0.10	<0.10	<0.10	<0.10	<0.10
Styrene	µg/L	9100	0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	15	0.10	<0.10	<0.10	<0.10	<0.10
o-Xylene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	9600	0.10	<0.10	<0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	67	0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	9600	0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichloropropene	µg/L	45	0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	4200	0.20	<0.20	<0.20	<0.20	<0.20
n-Hexane	µg/L	520	0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	Unit	Acceptable Limits					
Toluene-d8	% Recovery	50-140		102	100	103	101
4-Bromofluorobenzene	% Recovery	50-140		98	100	97	102

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 NPGW MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6065539-6065545 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popnikolof

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Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

O. Reg. 153(511) - Metals & Inorganics (Water)

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

		SAMPLE DESCRIPTION:		MW1-S1		MW3-S1		MW5-S1		DUP1
		SAMPLE TYPE:		Water		Water		Water		Water
		DATE SAMPLED:		2024-08-09		2024-08-09		2024-08-09		2024-08-09
Parameter	Unit	G / S	RDL	6065539	RDL	6065543	RDL	6065544	RDL	6065545
Dissolved Antimony	µg/L	20000	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0
Dissolved Arsenic	µg/L	1900	1.0	2.9	1.0	<1.0	1.0	3.6	1.0	1.1
Dissolved Barium	µg/L	29000	2.0	66.2	2.0	29.3	2.0	50.6	2.0	30.8
Dissolved Beryllium	µg/L	67	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50
Dissolved Boron	µg/L	45000	10.0	502	10.0	229	10.0	179	10.0	252
Dissolved Cadmium	µg/L	2.7	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20
Dissolved Chromium	µg/L	810	2.0	<2.0	2.0	<2.0	2.0	<2.0	2.0	<2.0
Dissolved Cobalt	µg/L	66	0.50	6.87	0.50	1.27	0.50	0.83	0.50	1.23
Dissolved Copper	µg/L	87	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	1.6
Dissolved Lead	µg/L	25	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50
Dissolved Molybdenum	µg/L	9200	0.50	7.58	0.50	2.94	0.50	2.19	0.50	3.73
Dissolved Nickel	µg/L	490	1.0	4.8	1.0	3.4	1.0	2.6	1.0	3.9
Dissolved Selenium	µg/L	63	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0
Dissolved Silver	µg/L	1.5	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20
Dissolved Thallium	µg/L	510	0.30	<0.30	0.30	<0.30	0.30	<0.30	0.30	<0.30
Dissolved Uranium	µg/L	420	0.50	23.3	0.50	29.0	0.50	9.46	0.50	29.9
Dissolved Vanadium	µg/L	250	0.40	0.52	0.40	1.84	0.40	<0.40	0.40	2.71
Dissolved Zinc	µg/L	1100	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0
Mercury	µg/L	2.8	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02
Chromium VI	µg/L	140	2.000	<2.000	2.000	<2.000	2.000	<2.000	2.000	<2.000
Cyanide, WAD	µg/L	66	2	<2	2	3	2	2	2	2
Dissolved Sodium	µg/L	2300000	50	155000	50	86200	50	30400	50	86900
Chloride	µg/L	2300000	100	21400	122	77700	100	12500	122	77700
Electrical Conductivity	uS/cm	NA	2	3580	2	3880	2	1150	2	3780
pH	pH Units		NA	7.32	NA	7.52	NA	7.61	NA	7.59

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 24H183645

PROJECT: 230902

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

O. Reg. 153(511) - Metals & Inorganics (Water)

DATE RECEIVED: 2024-08-09

DATE REPORTED: 2024-08-15

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to ON T3 NPGW MFT
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

6065539-6065545 Metals analysis completed on a filtered sample.
pH is a recommended field analysis taken within 15 minutes of sample collection. Due to the potential for rapid change in sample equilibrium chemistry laboratory results may differ from field measured results
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Iris Verástegui

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT
AGAT WORK ORDER: 24H183645
PROJECT: 230902
ATTENTION TO: Peter Markesic
SAMPLING SITE:111 Victoria St., Welland
SAMPLED BY:GG

Trace Organics Analysis

RPT Date: Aug 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)															
F1 (C6 to C10)	6065545	6065545	<25	<25	NA	< 25	91%	60%	140%	71%	60%	140%	82%	60%	140%
F2 (C10 to C16)	6058223		< 100	< 100	NA	< 100	114%	60%	140%	72%	60%	140%	74%	60%	140%
F3 (C16 to C34)	6058223		< 100	< 100	NA	< 100	108%	60%	140%	92%	60%	140%	84%	60%	140%
F4 (C34 to C50)	6058223		< 100	< 100	NA	< 100	71%	60%	140%	75%	60%	140%	88%	60%	140%
O. Reg. 153(511) - PAHs (Water)															
Naphthalene	6059549		<0.20	<0.20	NA	< 0.20	104%	50%	140%	89%	50%	140%	102%	50%	140%
Acenaphthylene	6059549		<0.20	<0.20	NA	< 0.20	99%	50%	140%	90%	50%	140%	90%	50%	140%
Acenaphthene	6059549		<0.20	<0.20	NA	< 0.20	89%	50%	140%	81%	50%	140%	91%	50%	140%
Fluorene	6059549		<0.20	<0.20	NA	< 0.20	91%	50%	140%	80%	50%	140%	91%	50%	140%
Phenanthrene	6059549		1.11	0.97	13.5%	< 0.10	83%	50%	140%	72%	50%	140%	80%	50%	140%
Anthracene	6059549		0.56	0.48	NA	< 0.10	72%	50%	140%	87%	50%	140%	94%	50%	140%
Fluoranthene	6059549		1.56	1.29	18.9%	< 0.20	90%	50%	140%	83%	50%	140%	85%	50%	140%
Pyrene	6059549		1.22	1.11	9.4%	< 0.20	86%	50%	140%	80%	50%	140%	85%	50%	140%
Benzo(a)anthracene	6059549		0.22	0.26	NA	< 0.20	101%	50%	140%	93%	50%	140%	86%	50%	140%
Chrysene	6059549		0.33	0.27	NA	< 0.10	129%	50%	140%	100%	50%	140%	108%	50%	140%
Benzo(b)fluoranthene	6059549		0.11	0.09	NA	< 0.10	94%	50%	140%	84%	50%	140%	100%	50%	140%
Benzo(k)fluoranthene	6059549		0.11	0.07	NA	< 0.10	124%	50%	140%	107%	50%	140%	103%	50%	140%
Benzo(a)pyrene	6059549		<0.01	<0.01	NA	< 0.01	95%	50%	140%	80%	50%	140%	83%	50%	140%
Indeno(1,2,3-cd)pyrene	6059549		<0.20	<0.20	NA	< 0.20	76%	50%	140%	76%	50%	140%	82%	50%	140%
Dibenz(a,h)anthracene	6059549		<0.20	<0.20	NA	< 0.20	91%	50%	140%	90%	50%	140%	82%	50%	140%
Benzo(g,h,i)perylene	6059549		<0.20	<0.20	NA	< 0.20	98%	50%	140%	86%	50%	140%	85%	50%	140%
O. Reg. 153(511) - VOCs (with PHC) (Water)															
Dichlorodifluoromethane	6065545	6065545	<0.40	<0.40	NA	< 0.40	62%	50%	140%	71%	50%	140%	76%	50%	140%
Vinyl Chloride	6065545	6065545	<0.17	<0.17	NA	< 0.17	86%	50%	140%	108%	50%	140%	111%	50%	140%
Bromomethane	6065545	6065545	<0.20	<0.20	NA	< 0.20	69%	50%	140%	83%	50%	140%	107%	50%	140%
Trichlorofluoromethane	6065545	6065545	<0.40	<0.40	NA	< 0.40	71%	50%	140%	86%	50%	140%	109%	50%	140%
Acetone	6065545	6065545	<1.0	<1.0	NA	< 1.0	109%	50%	140%	105%	50%	140%	98%	50%	140%
1,1-Dichloroethylene	6065545	6065545	<0.30	<0.30	NA	< 0.30	107%	50%	140%	94%	60%	130%	102%	50%	140%
Methylene Chloride	6065545	6065545	<0.30	<0.30	NA	< 0.30	104%	50%	140%	109%	60%	130%	85%	50%	140%
trans- 1,2-Dichloroethylene	6065545	6065545	<0.20	<0.20	NA	< 0.20	103%	50%	140%	107%	60%	130%	76%	50%	140%
Methyl tert-butyl ether	6065545	6065545	<0.20	<0.20	NA	< 0.20	88%	50%	140%	113%	60%	130%	93%	50%	140%
1,1-Dichloroethane	6065545	6065545	<0.30	<0.30	NA	< 0.30	101%	50%	140%	107%	60%	130%	107%	50%	140%
Methyl Ethyl Ketone	6065545	6065545	<1.0	<1.0	NA	< 1.0	88%	50%	140%	108%	50%	140%	84%	50%	140%
cis- 1,2-Dichloroethylene	6065545	6065545	<0.20	<0.20	NA	< 0.20	102%	50%	140%	108%	60%	130%	105%	50%	140%
Chloroform	6065545	6065545	<0.20	<0.20	NA	< 0.20	108%	50%	140%	112%	60%	130%	101%	50%	140%
1,2-Dichloroethane	6065545	6065545	<0.20	<0.20	NA	< 0.20	96%	50%	140%	104%	60%	130%	116%	50%	140%
1,1,1-Trichloroethane	6065545	6065545	<0.30	<0.30	NA	< 0.30	102%	50%	140%	109%	60%	130%	111%	50%	140%
Carbon Tetrachloride	6065545	6065545	<0.20	<0.20	NA	< 0.20	85%	50%	140%	90%	60%	130%	92%	50%	140%

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT
AGAT WORK ORDER: 24H183645
PROJECT: 230902
ATTENTION TO: Peter Markesic
SAMPLING SITE:111 Victoria St., Welland
SAMPLED BY:GG

Trace Organics Analysis (Continued)

RPT Date: Aug 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Benzene	6065545	6065545	<0.20	<0.20	NA	< 0.20	104%	50%	140%	109%	60%	130%	108%	50%	140%
1,2-Dichloropropane	6065545	6065545	<0.20	<0.20	NA	< 0.20	97%	50%	140%	106%	60%	130%	100%	50%	140%
Trichloroethylene	6065545	6065545	<0.20	<0.20	NA	< 0.20	98%	50%	140%	108%	60%	130%	107%	50%	140%
Bromodichloromethane	6065545	6065545	<0.20	<0.20	NA	< 0.20	94%	50%	140%	106%	60%	130%	104%	50%	140%
Methyl Isobutyl Ketone	6065545	6065545	<1.0	<1.0	NA	< 1.0	80%	50%	140%	117%	50%	140%	98%	50%	140%
1,1,2-Trichloroethane	6065545	6065545	<0.20	<0.20	NA	< 0.20	105%	50%	140%	118%	60%	130%	106%	50%	140%
Toluene	6065545	6065545	<0.20	<0.20	NA	< 0.20	104%	50%	140%	102%	60%	130%	113%	50%	140%
Dibromochloromethane	6065545	6065545	<0.10	<0.10	NA	< 0.10	97%	50%	140%	108%	60%	130%	86%	50%	140%
Ethylene Dibromide	6065545	6065545	<0.10	<0.10	NA	< 0.10	105%	50%	140%	117%	60%	130%	94%	50%	140%
Tetrachloroethylene	6065545	6065545	<0.20	<0.20	NA	< 0.20	98%	50%	140%	111%	60%	130%	95%	50%	140%
1,1,1,2-Tetrachloroethane	6065545	6065545	<0.10	<0.10	NA	< 0.10	105%	50%	140%	118%	60%	130%	110%	50%	140%
Chlorobenzene	6065545	6065545	<0.10	<0.10	NA	< 0.10	105%	50%	140%	116%	60%	130%	99%	50%	140%
Ethylbenzene	6065545	6065545	<0.10	<0.10	NA	< 0.10	102%	50%	140%	114%	60%	130%	102%	50%	140%
m & p-Xylene	6065545	6065545	<0.20	<0.20	NA	< 0.20	103%	50%	140%	118%	60%	130%	104%	50%	140%
Bromoform	6065545	6065545	<0.10	<0.10	NA	< 0.10	93%	50%	140%	99%	60%	130%	95%	50%	140%
Styrene	6065545	6065545	<0.10	<0.10	NA	< 0.10	93%	50%	140%	109%	60%	130%	93%	50%	140%
1,1,2,2-Tetrachloroethane	6065545	6065545	<0.10	<0.10	NA	< 0.10	100%	50%	140%	119%	60%	130%	96%	50%	140%
o-Xylene	6065545	6065545	<0.10	<0.10	NA	< 0.10	104%	50%	140%	118%	60%	130%	101%	50%	140%
1,3-Dichlorobenzene	6065545	6065545	<0.10	<0.10	NA	< 0.10	94%	50%	140%	109%	60%	130%	89%	50%	140%
1,4-Dichlorobenzene	6065545	6065545	<0.10	<0.10	NA	< 0.10	94%	50%	140%	111%	60%	130%	87%	50%	140%
1,2-Dichlorobenzene	6065545	6065545	<0.10	<0.10	NA	< 0.10	98%	50%	140%	113%	60%	130%	86%	50%	140%
n-Hexane	6065545	6065545	<0.20	<0.20	NA	< 0.20	101%	50%	140%	83%	60%	130%	91%	50%	140%

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

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

Gamma-Hexachlorocyclohexane	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	88%	50%	140%	85%	50%	140%	94%	50%	140%
Heptachlor	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	82%	50%	140%	104%	50%	140%	109%	50%	140%
Aldrin	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	89%	50%	140%	92%	50%	140%	104%	50%	140%
Heptachlor Epoxide	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	82%	50%	140%	84%	50%	140%	94%	50%	140%
Endosulfan I	6065544	6065544	< 0.05	< 0.05	NA	< 0.05	84%	50%	140%	90%	50%	140%	100%	50%	140%
Endosulfan II	6065544	6065544	< 0.05	< 0.05	NA	< 0.05	81%	50%	140%	91%	50%	140%	102%	50%	140%
alpha - chlordane	6065544	6065544	< 0.04	< 0.04	NA	< 0.04	82%	50%	140%	89%	50%	140%	89%	50%	140%
gamma-Chlordane	6065544	6065544	< 0.04	< 0.04	NA	< 0.04	83%	50%	140%	86%	50%	140%	96%	50%	140%
op'-DDE	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	115%	50%	140%	105%	50%	140%	94%	50%	140%
pp'-DDE	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	82%	50%	140%	95%	50%	140%	100%	50%	140%
op'-DDD	6065544	6065544	< 0.05	< 0.05	NA	< 0.05	104%	50%	140%	108%	50%	140%	109%	50%	140%
pp'-DDD	6065544	6065544	< 0.05	< 0.05	NA	< 0.05	82%	50%	140%	98%	50%	140%	104%	50%	140%
op'-DDT	6065544	6065544	< 0.04	< 0.04	NA	< 0.04	95%	50%	140%	109%	50%	140%	115%	50%	140%
pp'-DDT	6065544	6065544	< 0.05	< 0.05	NA	< 0.05	82%	50%	140%	92%	50%	140%	98%	50%	140%
Dieldrin	6065544	6065544	< 0.02	< 0.02	NA	< 0.02	88%	50%	140%	89%	50%	140%	99%	50%	140%

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Quality Assurance

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT
AGAT WORK ORDER: 24H183645
PROJECT: 230902
ATTENTION TO: Peter Markesic
SAMPLING SITE:111 Victoria St., Welland
SAMPLED BY:GG

Trace Organics Analysis (Continued)

RPT Date: Aug 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Endrin	6065544	6065544	< 0.05	< 0.05	NA	< 0.05	84%	50%	140%	86%	50%	140%	106%	50%	140%
Methoxychlor	6065544	6065544	< 0.04	< 0.04	NA	< 0.04	82%	50%	140%	88%	50%	140%	106%	50%	140%
Hexachlorobenzene	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	103%	50%	140%	97%	50%	140%	103%	50%	140%
Hexachlorobutadiene	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	91%	50%	140%	115%	50%	140%	104%	50%	140%
Hexachloroethane	6065544	6065544	< 0.01	< 0.01	NA	< 0.01	89%	50%	140%	103%	50%	140%	115%	50%	140%

Certified By: N Popnikolof

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Water Analysis

RPT Date: Aug 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Water)															
Dissolved Antimony	6066399		<1.0	<1.0	NA	< 1.0	104%	70%	130%	105%	80%	120%	104%	70%	130%
Dissolved Arsenic	6066399		1.1	<1.0	NA	< 1.0	99%	70%	130%	102%	80%	120%	108%	70%	130%
Dissolved Barium	6066399		14.0	13.8	1.4%	< 2.0	101%	70%	130%	100%	80%	120%	96%	70%	130%
Dissolved Beryllium	6066399		<0.50	<0.50	NA	< 0.50	95%	70%	130%	118%	80%	120%	113%	70%	130%
Dissolved Boron	6066399		1060	1030	2.9%	< 10.0	106%	70%	130%	116%	80%	120%	NA	70%	130%
Dissolved Cadmium	6066399		<0.20	<0.20	NA	< 0.20	100%	70%	130%	100%	80%	120%	101%	70%	130%
Dissolved Chromium	6066399		<2.0	<2.0	NA	< 2.0	96%	70%	130%	104%	80%	120%	109%	70%	130%
Dissolved Cobalt	6066399		2.06	2.00	NA	< 0.50	94%	70%	130%	107%	80%	120%	108%	70%	130%
Dissolved Copper	6066399		<1.0	<1.0	NA	< 1.0	100%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Lead	6066399		<0.50	<0.50	NA	< 0.50	99%	70%	130%	101%	80%	120%	96%	70%	130%
Dissolved Molybdenum	6066399		18.3	19.7	7.4%	< 0.50	103%	70%	130%	107%	80%	120%	102%	70%	130%
Dissolved Nickel	6066399		2.0	4.3	NA	< 1.0	89%	70%	130%	107%	80%	120%	106%	70%	130%
Dissolved Selenium	6066399		4.5	4.2	NA	< 1.0	100%	70%	130%	108%	80%	120%	108%	70%	130%
Dissolved Silver	6066399		<0.20	<0.20	NA	< 0.20	95%	70%	130%	98%	80%	120%	83%	70%	130%
Dissolved Thallium	6066399		<0.30	<0.30	NA	< 0.30	100%	70%	130%	104%	80%	120%	97%	70%	130%
Dissolved Uranium	6066399		21.3	20.3	4.8%	< 0.50	99%	70%	130%	102%	80%	120%	104%	70%	130%
Dissolved Vanadium	6066399		<0.40	<0.40	NA	< 0.40	91%	70%	130%	110%	80%	120%	113%	70%	130%
Dissolved Zinc	6066399		<5.0	5.1	NA	< 5.0	100%	70%	130%	102%	80%	120%	84%	70%	130%
Mercury	6063473		<0.02	<0.02	NA	< 0.02	102%	70%	130%	104%	80%	120%	102%	70%	130%
Chromium VI	6065539	6065539	<2.000	<2.000	NA	< 2	105%	70%	130%	102%	80%	120%	101%	70%	130%
Cyanide, WAD	6065539	6065539	<2	2	NA	< 2	95%	70%	130%	97%	80%	120%	109%	70%	130%
Dissolved Sodium	6066399		443000	461000	4.0%	< 50	102%	70%	130%	99%	80%	120%	NA	70%	130%
Chloride	6060205		540	522	3.4%	< 100	94%	70%	130%	101%	80%	120%	100%	70%	130%
Electrical Conductivity	6065539	6065539	3580	3620	1.1%	< 2	92%	90%	110%						
pH	6065539	6065539	7.32	7.43	1.5%	NA	100%	90%	110%						

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.
Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

Certified By: Iris Verástegui

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Method Summary

CLIENT NAME: SOIL MAT ENGINEERS & CONSULTANTS LT

AGAT WORK ORDER: 24H183645

PROJECT: 230902

ATTENTION TO: Peter Markesic

SAMPLING SITE:111 Victoria St., Welland

SAMPLED BY:GG

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Gamma-Hexachlorocyclohexane	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Heptachlor	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Aldrin	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Heptachlor Epoxide	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Endosulfan I	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Endosulfan II	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Endosulfan	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	CALCULATION
alpha - chlordane	ORG-91-5112	modified from EPA SW846 3510C & 8081B	GC/ECD
gamma-Chlordane	ORG-91-5112	modified from EPA SW846 3510C & 8081B	GC/ECD
Chlordane	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	CALCULATION
op'-DDE	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
pp'-DDE	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
DDE	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	CALCULATION
op'-DDD	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
pp'-DDD	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
DDD	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	CALCULATION
op'-DDT	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
pp'-DDT	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
DDT	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	CALCULATION
Dieldrin	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Endrin	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Methoxychlor	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Hexachlorobenzene	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Hexachlorobutadiene	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Hexachloroethane	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
TCMX	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD
Decachlorobiphenyl	ORG-91-5112	modified from EPA SW-846 3510C & 8081B	GC/ECD

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluorene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Chrysene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
2-and 1-methyl Napthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Sediment			N/A
F1 (C6 to C10)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	P&T GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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

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

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Dissolved Antimony	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Beryllium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cobalt	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Copper	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Molybdenum	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Selenium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Silver	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Thallium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Uranium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Vanadium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Chromium VI	INOR-93-6073	modified from SM 3500-CR B	LACHAT FIA
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	SEGMENTED FLOW ANALYSIS
Dissolved Sodium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP/MS
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Electrical Conductivity	INOR-93-6000	SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE

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Have feedback? Scan here for a quick survey!

5835 Coopers Avenue
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Chain of Custody Record

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

Report Information:

Company: Soil-Mat
Contact: 401 Grays Road
Address: Peter Markesic

Phone: Fax:

Reports to be sent to:

1. Email: pmarkesic@soilmat.ca
2. Email: ggilmour@soilmat.ca

Project Information:

Project: 230902
Site Location: 111 Victoria St, Welland
Sampled By: GG
AGAT Quote #: PO:

Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐

Company:
Contact:
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table 1 *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture

Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Regulation 406
Table *Indicate One*

☐ Regulation 558

☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
Indicate One

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Laboratory Use Only

Work Order #: 24H183645

Cooler Quantity: 4 COOLERS
Arrival Temperatures: 19.4 | 19.0 | 18.9 | 18.0 | 18.2 | 18.9
Custody Seal Intact: ☐ Yes ☐ No ☒ N/A
Notes: ICE PKS

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	O. Reg 153: VOC	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: PCBs: Aroclors ☐	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Regulation 406 SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Regulation 406 Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Corrosivity: ☐ Moisture ☐ Sulphide	OC Pesticides						Potentially Hazardous or High Concentration (Y/N)
1. MW1-S1	08/9/24	AM/PM	21	GW			X		X	X	X							X						
2. MW3-S1	↓	AM/PM	↓	↓			X		X	X	X							X						
3. MW5-S1		AM/PM					X		X	X	X							X						
4. DUP1		AM/PM					X		X	X	X							X						
5.		AM/PM																						
6.		AM/PM																						
7.		AM/PM																						
8.		AM/PM																						
9.		AM/PM																						
10.		AM/PM																						
11.		AM/PM																						

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
[signature]	08/9/24	1:05pm	[signature]	Aug 9/24	1:05pm
[signature]	Aug 9/24	3pm	[signature]	Aug 9	4:20

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N°: T-143488

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

Appendix ‘D’

1. Qualifications of Assessors

COMPANY BACKGROUND

SOIL-MAT ENGINEERS & CONSULTANTS LTD. [SOIL-MAT ENGINEERS] is a Canadian Consulting Engineering firm owned by its senior staff. Over the past thirty years the principals of SOIL-MAT ENGINEERS have undertaken geotechnical investigations in all areas of Hamilton and surrounding area and are familiar with the distinct geology of the area and therefore well-versed with the various soil, bedrock and groundwater conditions. SOIL-MAT ENGINEERS has a staff of over twenty-five engineers and technical staff who specialize in geotechnical assignments, environmental assessments, hydrogeological investigations and construction quality control/assurance projects. The company commenced operation on June 15, 1992 and has undertaken over 5,000 projects since its inception. The firm and all professional staff are in good standing with Professional Engineers Ontario. The company has maintained a current Certificate of Authorisation since it was granted on April 28, 1992. The firm's office and laboratory facilities are located at 401 Grays Road in Hamilton, Ontario.

REPORT AUTHORS

Geena Gilmour, B.A.
Environmental Technician

Ms. Gilmour has 1+ years of experience in conducting Phase I ESA research and Phase II ESA fieldwork, including soil and groundwater sampling. Ms. Gilmour has also been a key project member on a number of site remediation projects.

Keith Gleadall, B.A., EA Dipl.

Vice-President [Senior Professional]

Mr. Gleadall has over fourteen years of experience in conducting Phase I, II and III Environmental Site Assessments and has successfully completed the requirements of the Associated Environmental Site Assessors of Canada and a Post Graduate Diploma in Environmental Site Assessment from Niagara College. Mr. Gleadall is responsible for undertaking numerous hydrogeological investigations, primarily within the City of Hamilton, associated with the development of residential and commercial subdivision projects, together with Phase I, II and III Environmental Site Assessments. Projects have included the decommissioning of underground and above ground fuel oil storage tanks, the implementation of in-situ and ex-situ remediation programmes, the decommissioning of a former dry-cleaning facility and numerous 'dig and dump' remediation projects.

Stephen R. Sears, B. Eng. Mgmt., P. Eng.
[Director/ Senior Professional]

Mr. Sears has over twenty-two years of experience in the geotechnical and geo-environmental fields. Mr. Sears holds current Consulting Engineer designations with the Professional Engineers Ontario and the Association of Professional Engineers and Geoscientists of Saskatchewan and has supervised the geotechnical investigations for numerous industrial, commercial and residential development projects in Southern Ontario, slope stability assignments associated with Hamilton Conservation Authority, Conservation Halton and Niagara Peninsula Conservation Authority requirements, and several high rise developments throughout Ontario. Mr. Sears has also been involved in geotechnical and hydrogeological investigations for industrial park developments in the Greater Toronto Area and Niagara Peninsula. Some of Mr. Sears' projects have included the decommissioning and reconstruction of underground and above ground fuel oil storage tanks in Ontario and Saskatchewan, the study of the containment structures at a number of Petroleum Storage Facilities in Ontario and and numerous 'dig and dump' remediation projects.

Appendix ‘E’

1. Statement of Limitations

REPORT LIMITATIONS

Achieving the objectives that are stated in this report has required SOIL-MAT ENGINEERS to derive conclusions based upon the best and most recent information currently available to SOIL-MAT ENGINEERS. No investigative method can completely eliminate the possibility of obtaining partially imprecise information. SOIL-MAT ENGINEERS has expressed professional judgement in gathering and analysing the information obtained and in the formulation of its conclusions.

Information in this report was obtained from sources deemed to be reliable, however, no representation or warranty is made as to the accuracy of this information. To the best of SOIL-MAT ENGINEERS' knowledge, the information gathered from outside sources contained in this report on which SOIL-MAT ENGINEERS has formulated its opinions and conclusions, are both true and correct. SOIL-MAT ENGINEERS assumes no responsibility for any misrepresentation of facts gathered from outside sources.

This report was prepared to assess and document evidence of potential environmental contamination, and not to judge the acceptability of the risks associated with such environmental contamination. Much of the information gathered for this report is only accurate at the time of collection and a change in the Site conditions may alter the interpretation of SOIL-MAT ENGINEERS' findings. Furthermore, the reader should note that the Site reconnaissance described in this report was an environmental assessment of the Site, not a regulatory compliance or an environmental audit of the Site.

SOIL-MAT ENGINEERS & CONSULTANTS LTD. prepared this Report for the account of 111 VICTORIA STREET INC. The material in it reflects SOIL-MAT ENGINEERS best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. SOIL-MAT ENGINEERS accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.