



REPORT

Phase Two Environmental Site Assessment Update
1086 Burnhamthorpe Road East, Oakville, Ontario

Submitted to:

Coscorp Joshua Inc.

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Submitted by:

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Distribution List

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Record of Issue

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1.0 EXECUTIVE SUMMARY

WSP Canada Inc. (“WSP”) was retained by Coscorp Joshua Inc. (“Coscorp”) to update the Phase Two Environmental Site Assessment (“Phase Two ESA”) of the property located at 1086 Burnhamthorpe Road East, Oakville, Ontario (the “Site” or the “Phase Two Property”). The location of the Phase Two Property is provided in Figure 1. The legal description of the Phase Two Property is: Part of Lot 8, Concession 1, North of Dundas Street, Town of Oakville.

WSP previously completed Phase One ESA and Phase Two ESA report for the Site, the results of which were documented in the report titled “*Phase One Environmental Site Assessment, 1086 Burnhamthorpe Road East, Oakville, Ontario*”, dated March 2017 and “*Phase Two Environmental Site Assessment, 1086 Burnhamthorpe Road East, Oakville, Ontario*”, dated April 2017 (file number 171-01330-00). Based on the findings of the Phase One ESA, one area of potential environmental concern (APEC) related to historically agricultural land use and potential for herbicides and pesticide use. The Phase Two ESA investigation included eight test pits excavated to 0.3 to 0.5 m below ground surface (mbgs) and the collection of four soil samples for analysis of organochloride pesticides (OC). The reported concentrations of all samples met the applicable Table 1 site condition standards¹.

An updated Phase Two was requested by Coscorp for the purpose of satisfying a condition of planning approval from the Region of Halton. WSP understands that an RSC is not required. If a RSC was subsequently to be required, it would be necessary to incorporate the update findings into a single Phase Two ESA report that satisfies the strict requirements of O.Reg. 153/04 for RSC submission. For RSC purposes, a current and signed plan of survey is required.

The objective of the Phase Two ESA update was to determine whether there was any change in environmental conditions in the shallow soil that has occurred since the Phase Two ESA was completed. The objective was achieved by conducting field sampling for the contaminants of concern (“COCs”) associated with the potential environmental concern (“APEC”) identified in the Phase One ESA.

The analytical results from the sampling and analysis program indicates that the reported concentrations of organochlorine pesticides in soil meet the applicable site condition standards.

2.0 INTRODUCTION

2.1 Site Description

WSP was retained by Coscorp to conduct a Phase Two Environmental Site Assessment (“Phase Two ESA”) of the following property:

Municipal Address	1086 Burnhamthorpe Road East
Property Identification Number	24930-0017 (LT)
Legal Description	Part of Lot 10, Concession 1, North of Dundas Street, Town of Oakville
Size of the Phase Two Property	15.4 hectares

Note: legal description obtained from survey completed by J. H. Gelbloom Surveying Limited, dated 2015.

¹ Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011 (PIBS# 7382e01)

The location of the Phase Two Property is provided in Figure 1. A plan of survey is provided in Appendix A. The boundaries of the Phase Two Property are provided in Figure 2.

2.2 Property Ownership

Authorization to proceed with this investigation was received on April 28, 2023. The contact information for the Phase Two Property owner is as follows:

Site Owner / Client	Address	Contact Information
Client: Coscorp Joshua Inc.	Tom Baskerville 6625 Kitimat Road, # 58 Mississauga, Ontario L5N 6J1	telephone: 905-821-3666 tbaskerville@coscorp.ca
Owner: Raman Holdings Inc.	1086 Burnhamthorpe Road East Oakville, Ontario	telephone: 905-821-3666 tbaskerville@coscorp.ca

2.3 Current and Proposed Future Uses

The Phase Two Property is currently vacant agricultural land that comprises a portion of 1086 Burnhamthorpe Road and is proposed for site redevelopment in connection with a residential subdivision. The southeast portion of the Site is a wood lot that is proposed to be conveyed to the Town of Oakville.

3.0 BACKGROUND INFORMATION

3.1 Phase One ESA

WSP previously conducted a Phase One ESA entitled, “*Phase One Environmental Site Assessment, 1086 Burnhamthorpe Road East, Oakville, Ontario*”, dated March 2017, to assess the likelihood of soil and/or groundwater contamination resulting from historical or present activities at the Site and surrounding area. This included a review of available historical information on the Site and surrounding area, interviews with persons familiar with the Site and a Site reconnaissance. The APEC identified in the 2017 Phase One ESA is summarized in the following table:

Area of Potential Environmental Concern	Location of Potential Environmental Concern on Phase One Property	Potentially Contaminated Activity	Location of PCA (on-site or off-site)	Potential Contaminant of Concern	Media Potentially Impacted (Groundwater, soil, and/or sediment)
APEC-1	Entire Phase One Property	PCA No. 40 Pesticides (including herbicides, fungicides, and anti-fouling agents) manufacturing, processing, bulk storage and large-scale application	On-Site	OC Pesticides	Soil

3.2 Phase Two ESA

WSP conducted a Phase Two ESA entitled, “*Phase Two Environmental Site Assessment, 1086 Burnhamthorpe Road East, Oakville, Ontario*”, dated April 2017, to support the filing of an RSC prior to redevelopment of the Site and the proposed land conveyance along the southeast portion of the Site to the Town of Oakville. The Phase Two ESA included excavating four hand dug test pits (GS1-040317 to GS4-040317) to a depth of approximately 0.3 to 0.5 mbgs. Soils were submitted for analysis of OC pesticides. The applicable site condition standards at the Table 1 (all uses) site condition standards presented in the MECP document “*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*”, dated April 15, 2011. The Phase Two did not include the investigation of groundwater or sediment since these media were not of potential concern.

The report concluded that all soil analysis met the applicable site condition standards. As such no further investigation was warranted and a RSC could be filed for the property, if required, based on the findings of the Phase Two ESA.

4.0 SCOPE OF THE INVESTIGATION

4.1 Overview of Site Investigation

The Phase Two ESA investigation activities were completed between May 15, 2023 and July 14, 2023 and included the following tasks:

- **Health and Safety Plan:** Preparation of a Health and Safety Plan for internal and subcontractor use prior to initiating any field work at the Site.
- **Utility Clearances:** Coordination of utility clearances with local utility companies along with retaining the services of a private locator to assess for possible services in the areas of the proposed test locations.
- **Test Pit Excavation:** The test hole program included excavation of drilling of eight shallow test pits. The rationale for the selected location of the test pits is provided in the Sampling and Analysis Plan provided in Appendix B. The locations of the test pits are provided in Figure 4.
- **Soil Sampling:** Soil samples were collected on May 29, 2023 from the test pits. Selected soil samples were submitted for chemical analysis of organochloride pesticides (“OC Pesticides”).
- **Surveying:** The location and elevation of the test pits were determined using GPS methods (Trimble Catalyst, typ. horiz. ± 0.02 m, typ. vert. ± 0.05 m).
- **Reporting:** WSP compiled and assessed the field and laboratory results from the above noted activities into this report.

The Phase Two investigation was carried out in general accordance with WSP’s standard operating procedures, which conform to the requirements of O. Reg. 153/04. There were no impediments or access limitations that in the opinion of the Qualified Person (“QP”) would affect the conclusions of this Phase Two ESA report.

4.2 Uncertainty and Absence of Information

During the records review, WSP relied on information obtained from municipal, provincial, and independent sources as referenced in this report. Although the information was assessed for consistency, verification of the accuracy or the completeness of this third-party information was not completed.

4.3 Impediments

No physical impediments to the investigation were encountered. Access to the Phase Two Property was not denied or restricted.

5.0 INVESTIGATION METHOD

5.1 General

The following sections describe the field investigation methodology employed during the Phase Two ESA. The field work was conducted on May 29, 2023. Prior to initiating the field work, WSP developed and implemented Site-specific protocols to protect the health and safety of its employees and subcontractors through the preparation of a Site-specific Health and Safety Plan. An assessment of potential health and safety hazards at the Phase Two Property and those associated with the proposed work was completed each day of the field program. Prior to any intrusive investigations, including hand excavating, WSP completed public utility clearances.

5.2 Test Pit Excavation

On May 29, 2023, eight test pits (SA23-1 through SA23-8) were excavated with hand tools to maximum depths of 0.45 metres below ground surface (“mbgs”). Test pit locations are provided in Figure 4. A description of the quality assurance/quality control measures taken to minimize the potential for cross-contamination between sampling locations is provided in Section 5.12. Soil samples were collected between 0.0 to 0.3 mbgs and 0.3 to 0.45 mbgs.

5.3 Soil: Sampling

Soil samples were collected from undisturbed locations and split in the field into two components. One component was placed into laboratory-prepared container with minimal headspace and stored in a cooler for potential laboratory analysis. The second component was placed inside a plastic bag for field screening, consisting of the soil description, and noting the presence of any staining, odour and/or debris. A RKI Eagle 2 detector calibrated to 100 parts per million (“ppm”) isobutylene and 15% lower explosive limit (LEL) Hexane was used to measure the total organic vapour and combustible gas concentration in the headspace in the sealed plastic bag.

As per the sampling and analysis plan, provided in Appendix B, at least one soil sample was submitted from each test location. A secondary sample was obtained from a greater depth and placed on hold for laboratory analysis if the initial sample had impacts, to vertically delineate impacts.

One shallow soil sample representing “worst-case” conditions at each sampling location was selected for laboratory analysis based on anticipated shallow impacts of OC pesticides. Soil samples were submitted to the analytical laboratory under chain-of-custody procedures. A summary of the soil samples submitted for analysis is provided in Table 1.

5.4 Field Screening Measurements

Field measurements of sample headspace concentration were made using the following equipment:

Equipment	Parameters Detected	Detection Limit	Precision	Accuracy	Calibration Standard
RKI Eagle 2	Combustible gas	0-50,000 ppm	NA	±5%	Hexane (100 ppm)
RKI Eagle 2	Total organic vapour	0-2,000 ppm	NA	±5%	Isobutylene (100 ppm)

No elevated headspace vapour concentrations were detected in the soil samples.

5.5 Analytical Testing

The contact information for the analytical laboratory: AGAT Laboratories, 5835 Coopers Avenue, Mississauga, Ontario, L4Z 1Y2 (Nivine Basily and Neli Popnikolova, 905-712-5100). The analytical laboratory is accredited in accordance with the International Standard ISO/IEC 17025 (CALA) (General Requirement for the Competence of Testing and Calibration Laboratories, May 5, 2005, as amended) and the standards for proficiency testing developed by the Standards Council of Canada, the Canadian Association for Laboratory Accreditation or another accreditation body accepted by the MECP.

5.6 Quality Assurance and Quality Control Measures

WSP's quality assurance program for environmental investigations was implemented to ensure that analytical data obtained by the investigation were valid and representative. The quality assurance program included the following measures:

- The use of standard operating procedures for all field investigation activities.
- The collection of field duplicate samples at a minimum frequency of one duplicate for every ten samples.
- Initial calibration of field equipment was performed at the start of each field day, with a daily check of calibration, as needed, using a standard of known concentration.
- Soil samples were handled and stored in accordance with the sample collection and preservation requirement of the MECP "*Protocol for Analytical Methods Used in the Assessment of Properties Under Part XV.I of the Environmental Protection Act*", July 1, 2011. Samples were collected directly into pre-cleaned, laboratory-supplied sample containers with the appropriate preservative for the analyte group. Upon collection, samples were placed in insulated coolers with ice for storage and transport to the analytical laboratory under chain-of-custody.
- Clean disposable Nitrile™ gloves were used at each sampling location to prevent cross-contamination. Sampling equipment in contact with soil was: cleaned by mechanical means; washed with a phosphate-free, laboratory-grade detergent (e.g., LiquiNox) and, if necessary, an appropriate desorbing wash solution; and thoroughly rinsed with analyte-free water.
- Detailed field records documenting the methods and circumstances of collection for each field sample were prepared at the time of sample collection. Each sample was assigned a unique sample identification number recorded in the field notes, along with the date and time of sample collection, the sample matrix, and the requested analyses.
- The submission of samples to the analytical laboratory in accordance with standard chain of custody procedures.

6.0 REVIEW AND EVALUATION

This section of the report presents a review and evaluation of the results of the excavating and sampling activities conducted as part of the Phase Two ESA.

6.1 Geology

Topsoil was encountered in all test pits to a depth of 0.1 mbgs underlain by silt with trace clay to the maximum depth of investigation (0.45 mbgs). The soil types encountered are generally consistent with those described in the Phase Two ESA.

6.2 pH

Soil samples were collected from surface soil and submitted to AGAT Laboratories for pH determination. A summary of the test results is presented below.

Location ID	Sample ID	Sample Depth (mbgs)	Surface/Subsurface Soil	pH
S23-1	S23-1-0-30	0.0-0.30	Surface soil	6.25
S23-4	S23-4-0-30	0.0-0.30	Surface soil	6.70
S23-8	S23-7-0-30	0.0-0.30	Surface soil	7.05

The reported pH of three samples meets the requirement for surface soil of $5 \leq \text{pH} \leq 9$.

6.3 Soil: Field Screening

The results of headspace vapour measurements show that both combustible gas vapour and organic vapour measurements were non-detect to 20 ppm, which is not indicative of significant impacts.

6.4 Soil: Quality

The reported concentrations of all contaminants of potential concern in soil met the applicable site condition standards.

6.5 Data Quality Review

The quality assurance assessment of the field duplicate sample results was conducted according to the MECP document "*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*", March 9, 2004 (amended in July 2009 and effective as of July 1, 2011) ("Analytical Protocol"). Based on a review of the results, the analytical data generated during the investigation are valid and representative and may be used in this Phase Two ESA without further qualification.

All certificates of analysis or analytical reports received pursuant to clause 47(2) (b) of the regulation comply with subsection 47(3). A certificate of analysis or analytical report has been received for each sample submitted for analysis and is provided in Appendix D.

7.0 CONCLUSIONS

An updated Phase Two was requested by Coscorp for the purpose of satisfying a condition of planning approval from the Region of Halton. WSP understands that an RSC is not required. If a RSC was subsequently to be required, it would be necessary to incorporate the update findings into a single Phase Two ESA report that satisfies the strict requirements of O.Reg. 153/04 for RSC submission.

Based on the results of the soil samples submitted as part of this investigation, the reported concentrations of the contaminants of potential concern were below the applicable site condition standards. Neither risk assessment or remediation is required prior to the submission of an RSC, if an RSC was required.

8.0 REFERENCES

Phase One Environmental Site Assessment, 1086 Burnhamthorpe Road East, Oakville, Ontario. March 2017

Phase Two Environmental Site Assessment, 1086 Burnhamthorpe Road East, Oakville, Ontario. April 2017.

9.0 LIMITATIONS

This report was prepared for the exclusive use of Coscorp Joshua Inc. The report, which specifically includes all tables, figures and appendices, is based on data and information, collected during conducting the Phase Two ESA, and is based solely on the conditions of the property at the time of conducting investigations, supplemented by historical information and data obtained by WSP Canada Inc. as described in this report.

The assessment of environmental conditions at this Site has been made using the results of field screening techniques and chemical analysis of soil samples at a limited number of locations. The Site conditions between sampling locations have been inferred based on conditions observed at the sampling locations. Conditions may vary from these sample locations. Additional study, including further investigation, can reduce the inherent uncertainties associated with this type of study. However, it is never possible, even with exhaustive sampling and testing, to dismiss the possibility that part of a Site may be contaminated and remain undetected.

The services performed as described in this report were conducted in a manner consistent with that level of care and skill normally exercised by other members of the engineering and science professions currently practicing under similar conditions, subject to the time limits and financial and physical constraints applicable to the services.

Any use which a third party makes of this report, or any reliance on, or decisions to be made based on it, are the responsibilities of such third parties. WSP accepts no responsibility for damages, if any, suffered by any third party (other than as noted above) as a result of decisions made or actions based on this report.

Our present understanding of the Site conditions, and our professional judgement in light of such information at the time of this report. This report provides a professional opinion and therefore no warranty is expressed, implied, or made as to the conclusions, advice and recommendations offered in this report. This report does not provide a legal opinion regarding compliance with applicable laws. With respect to regulatory compliance issues, it should be noted that regulatory statutes and the interpretation of regulatory statutes are subject to change.

The findings and conclusions of this report are valid only as of the date of this report. If new information is discovered in future work, including excavations, borings or other studies, WSP should be requested to re-evaluate the conclusions of this report, and to provide amendments as required.

10.0 CLOSING

We trust that you will find the contents of this report satisfactory for your current needs. Should you require clarification of the information provided, please do not hesitate to contact the undersigned.

WSP Canada Inc.



Lisa Gardiner, BSc, AScT, PMP
Environmental Scientist, Earth and Environment



Eric Hood, PhD, PEng
Senior Principal, Environmental Engineer

LG/EH/kj/rk

Tables

TABLE 1
SUMMARY OF SOIL SAMPLES SUBMITTED FOR ANALYSIS
1086 Burnhamthorpe Road East, Oakville, Ontario

Location ID	Sample ID	Date	Sample Depth (mbgs)	Headspace Screening Result (ppm)	Soil Description	Analyses Completed
S23-1	S23-1-0-30	11/26/2020 10:15:00 AM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
S23-2	S23-2-0-30	11/27/2020 12:50:00 PM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
S23-3	S23-3-0-30	11/28/2020 8:50:00 AM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
S23-4	S23-4-0-30	11/30/2020 10:00:00 AM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
	DUP	11/30/2020 8:40:00 AM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
S23-5	S23-5-0-30	11/30/2020 10:00:00 AM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
S23-6	S23-6-0-30	11/30/2020 11:00:00 AM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
S23-7	S23-7-0-30		0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides
S23-8	S23-8-0-30	11/30/2020 11:30:00 AM	0.0 - 0.3 m	0	Topsoil underlain by brown silt, trace clay, some organics	OC Pesticides

Notes:

NA not applicable
mbgs meters below ground surface
ppm parts per million

**TABLE 2
ANALYTICAL DATA FOR SOIL (ORGANOCHLORINE PESTICIDES)
1086 Burnhamthorpe Road East, Oakville, Ontario**

	Location ID	S23-1	S23-2	S23-3	S23-4	DUP	S23-5	S23-6	S23-7	S23- 8
	Sample ID	S23-1-0-30	S23-2-0-30	S23-3-0-30	S23-4-0-30	DUP	S23-5-0-30	S23-6-0-30	S23-7-0-30	S23-8-0-30
	Sample Date	29-May-23	29-May-23	29-May-23	29-May-23	29-May-23	29-May-23	29-May-23	29-May-23	29-May-23
	Sample Depth	0.0-0.3 m	0.0-0.3 m	0.0-0.3 m	0.0-0.3 m	0.0-0.3 m	0.0-0.3 m	0.0-0.3 m	0.0-0.3 m	0.0-0.3 m
	Lab Sample ID	5024695	5024693	5024690	5024655	5024689	5024651	5024649	5025644	5024642
Parameter	Table 1 Standard									
Hexachloroethane	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Gamma-Hexachlorocyclof	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aldrin	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor Epoxide	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan I		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan II		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan	0.04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Alpha-Chlordane		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
gamma-Chlordane		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chlordane	0.05	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDE		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDE		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDE	0.05	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDD		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDD		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDD	0.05	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDT		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDT		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDT (Total)	1.40	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Dieldrin	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endrin	0.04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Methoxychlor	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobenzene	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobutadiene	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	-	6.25	-	-	6.7	6.38	-	-	-	7.05

Notes

mbgs metres below ground surface

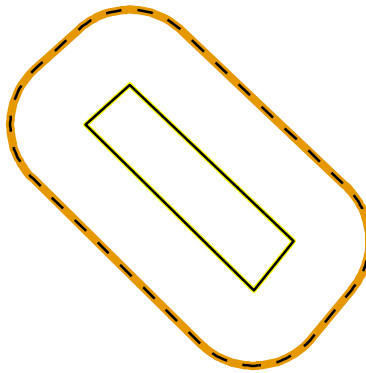
< parameter was not detected at a concentration that was greater than the associated value, which is the reportable detection limit

¹ Table 1 Full Depth Background Site Condition Standards (residential property use, coarse soil texture) presented in the MECP document "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", dated April 15, 2011.

² All results reported in units of microgram per gram (µg/g) unless otherwise noted. Results presented in bold type face are above the corresponding site condition standard



Figures

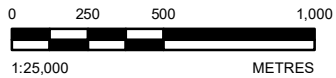
KEY MAP



PATH: S:\Clients\Coscop Joshua Inc\1086 Burnhamthorpe Rd Oakville\99 PROJ\CA0003725 581040 PROJ\CA0003725 581040 PROJ\CA0003725 581040\145-0001.mxd PRINTED ON: 2023-07-17 AT: 11:48:25 AM

LEGEND

-  PHASE TWO PROPERTY BOUNDARY
-  PHASE TWO STUDY AREA



NOTE(S)

1. PHASE ONE PROPERTY CENTROID COORDINATES = 603197.67 E, 4817720.65 N.
2. PHASE ONE PROPERTY AREA = 15.40 HECTARES.

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
COSCORP JOSHUA INC

PROJECT
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1086 BURNHAMTHORPE ROAD EAST, OAKVILLE, ONTARIO

TITLE
KEY PLAN

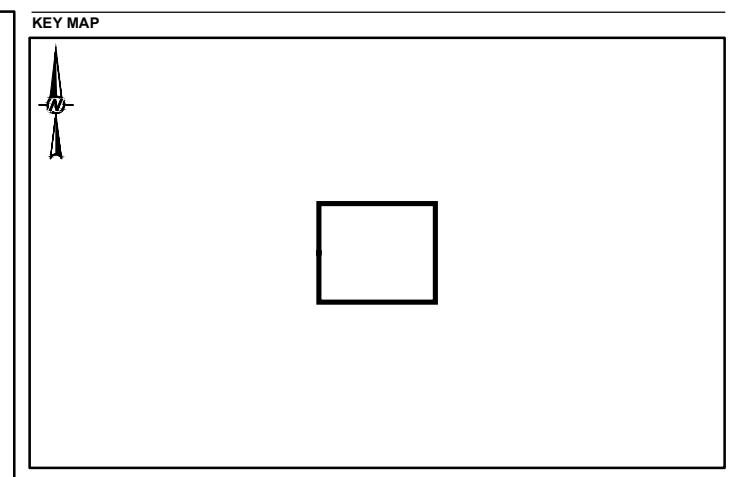
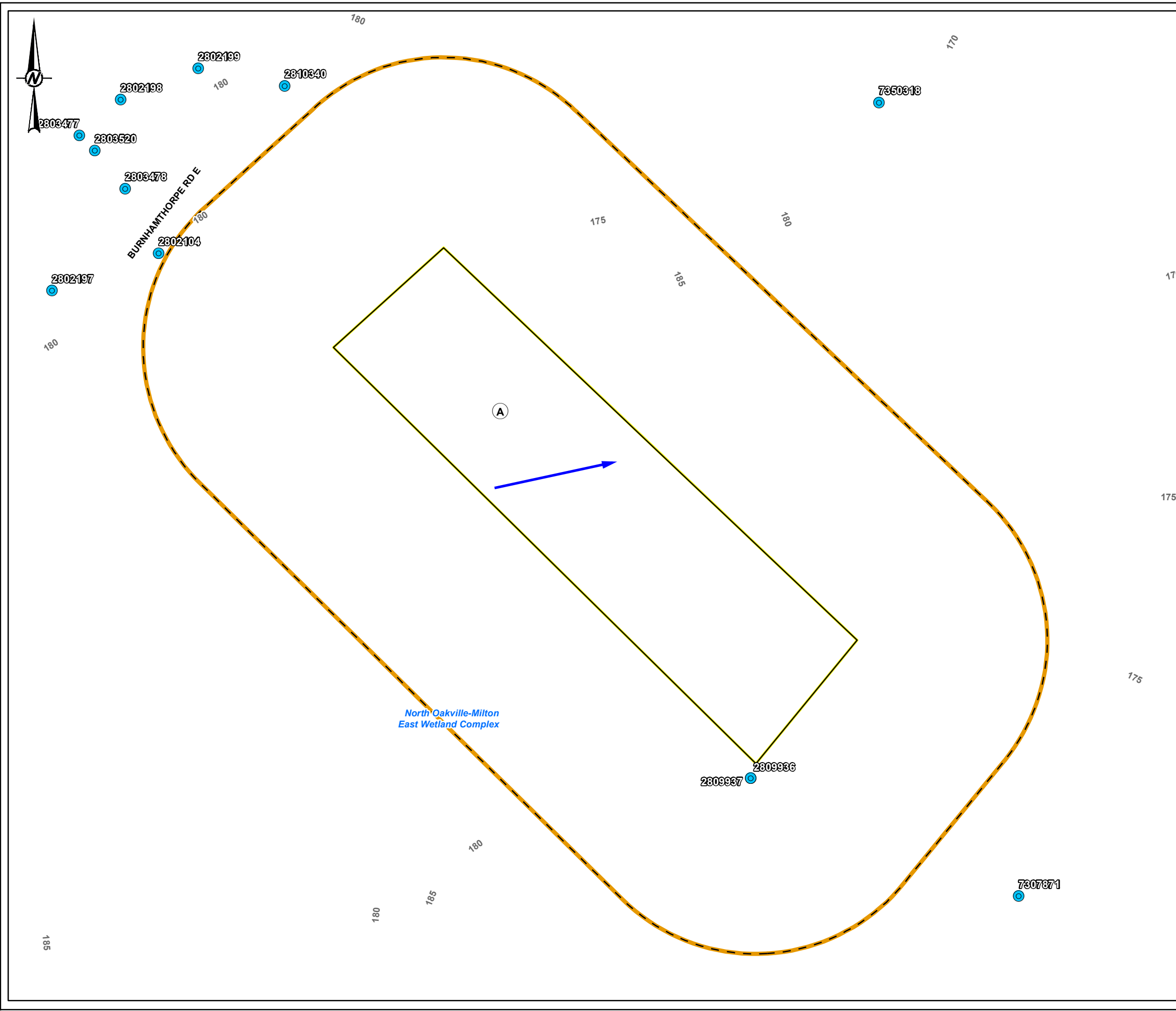
CONSULTANT	YYYY-MM-DD	2023-07-17
DESIGNED	LG	
PREPARED	SA	
REVIEWED	LG	
APPROVED	EH	

PROJECT NO.	CONTROL	REV.	FIGURE
CA0003725.5810	0001	0	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSIA

25mm

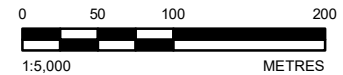
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SCALE 1:100,000

- LEGEND**
- MECP WATERWELL LOCATION
 - POTENTIALLY CONTAMINATING ACTIVITIES
 - ➔ INFERRED GROUNDWATER FLOW DIRECTION
 - TOPOGRAPHIC CONTOUR, 10 METRES
 - WATERCOURSE
 - PHASE TWO PROPERTY BOUNDARY
 - PHASE TWO STUDY AREA
 - PROVINCIALY SIGNIFICANT EARTH SCIENCE, ANSI
 - PROVINCIALY SIGNIFICANT WETLAND (PSW)
 - WATERBODY

LABEL	PCA	DESCRIPTION
A	40. PESTICIDES (INCLUDING HERBICIDES, FUNGICIDES AND ANTI-FOULING AGENTS) MANUFACTURING, PROCESSING, BULK STORAGE AND LARGE-SCALE APPLICATION	THE SITE HAS HISTORICALLY BEEN UTILIZED FOR AGRICULTURAL PURPOSES WITH A PORTION OF THE SITE HAVING BEEN RENTED OUT FOR CORN AND SOYBEAN CULTIVATION. PESTICIDES MAY HAVE POTENTIALLY BEEN USED FOR AGRICULTURAL PURPOSES ACROSS THE PROPERTY



NOTE(S)

- REFERENCE(S)**
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
 2. IMAGERY CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
 3. MECP WATER WELLS OBTAINED MARCH 2023
 4. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
COSCORP JOSHUA INC

PROJECT
**PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1086 BURNHAMTHORPE ROAD EAST, OAKVILLE, ONTARIO**

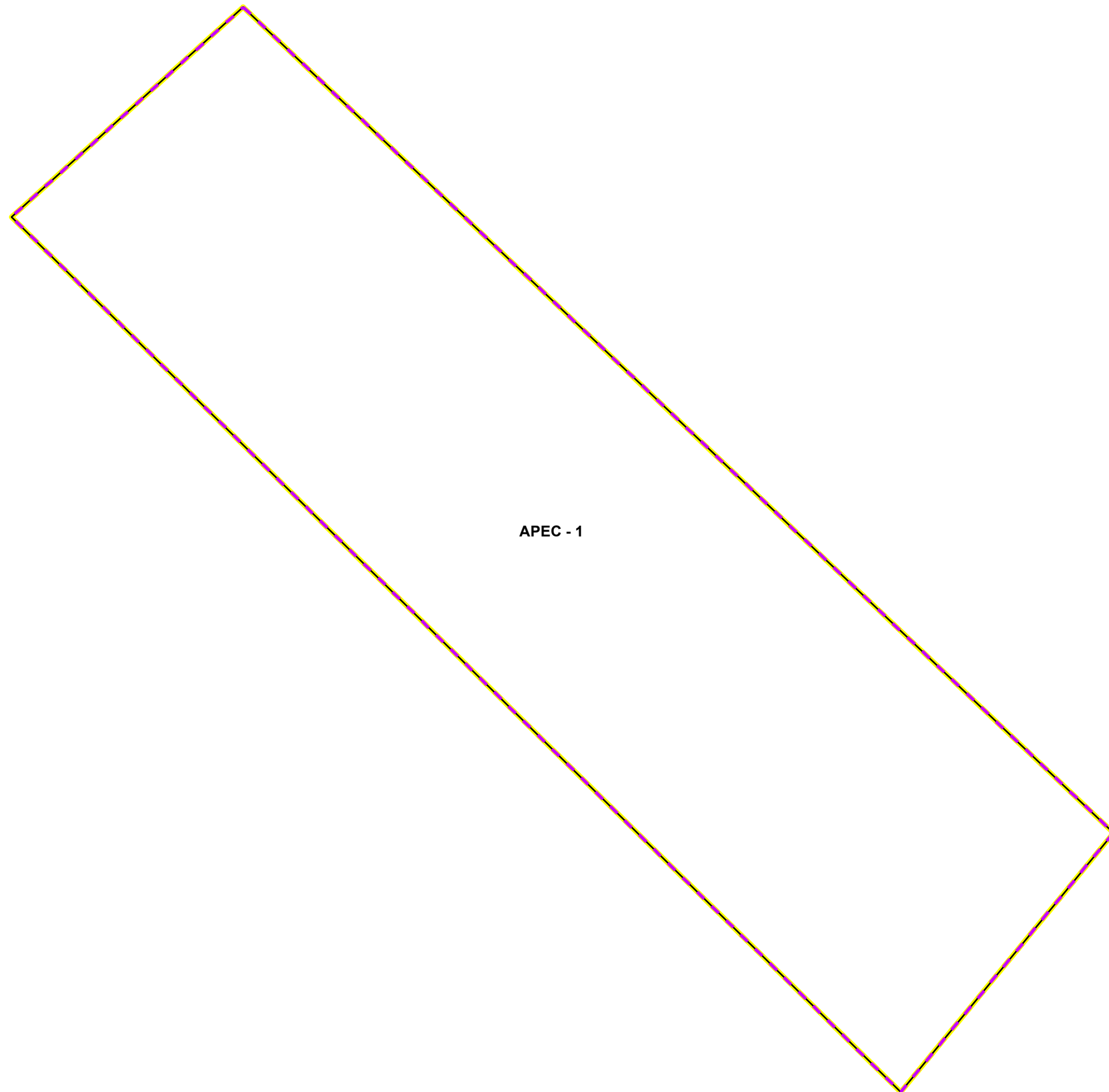
TITLE
PHASE TWO PROPERTY AND PHASE TWO STUDY AREA

CONSULTANT	YYYY-MM-DD	2023-07-17
DESIGNED	LG	
PREPARED	SA	
REVIEWED	LG	
APPROVED	EH	

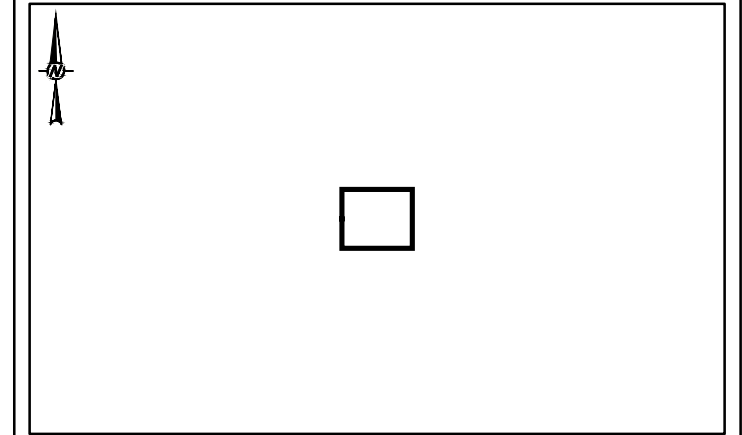
PROJECT NO. CA0003725.5810 CONTROL 0001 REV. 0 FIGURE 2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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KEY MAP

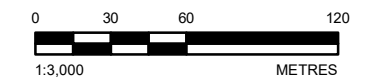


SCALE 1:100,000

LEGEND

- PHASE TWO PROPERTY BOUNDARY
- APEC - 1

APEC	Description
1	A PORTION OF THE SITE WAS RENTED OUT FOR CORN AND SOYABEAN CULTIVATION



NOTE(S)

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. IMAGERY CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT

COSCORP JOSHUA INC

PROJECT

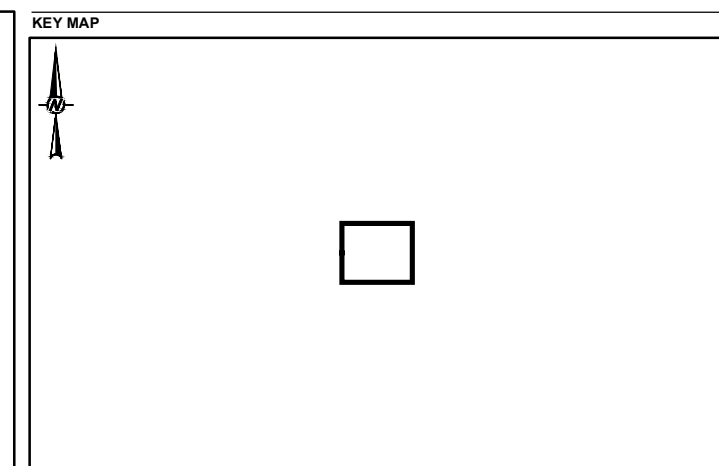
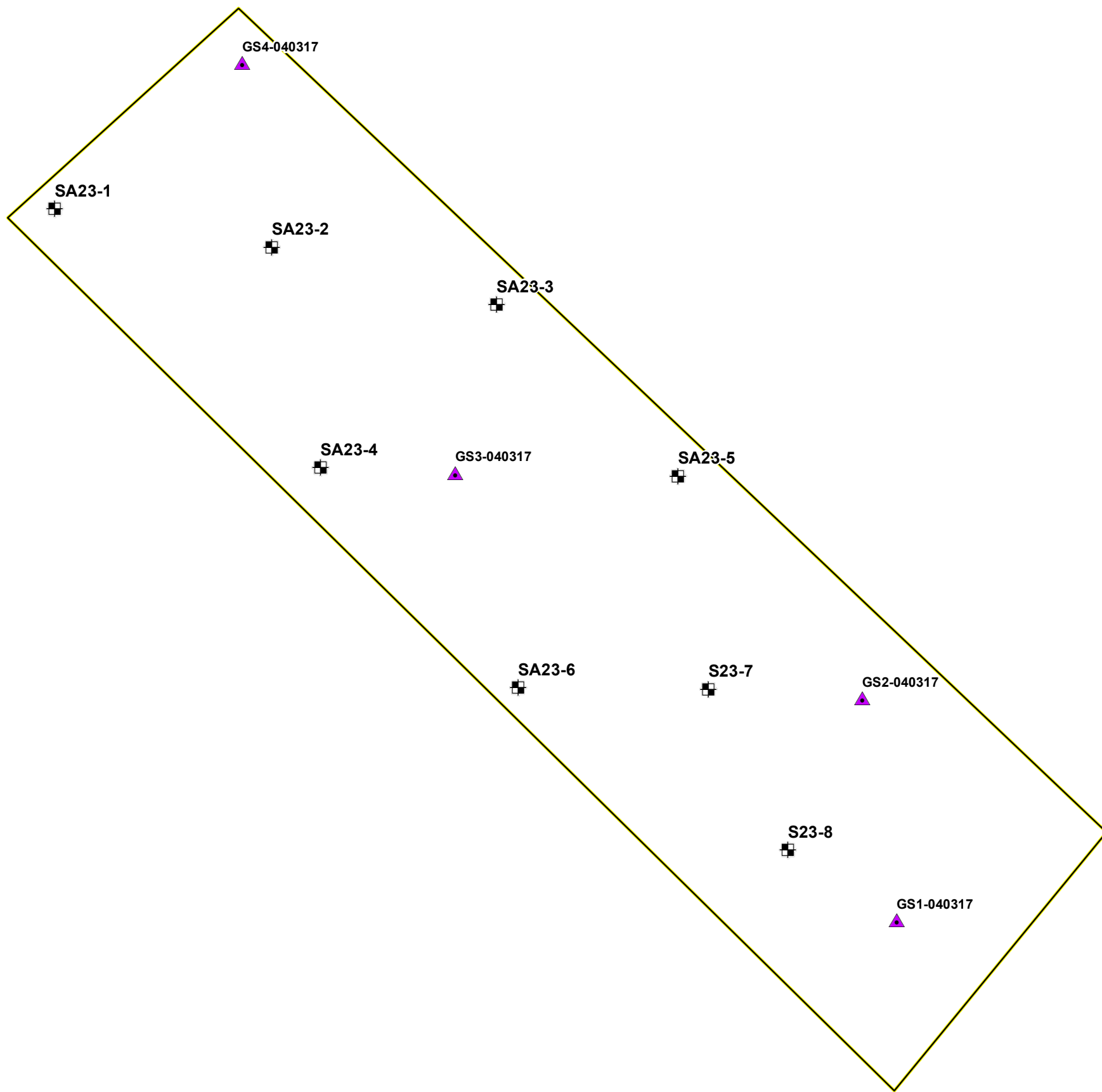
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1086 BURNHAMTHORPE ROAD EAST, OAKVILLE, ONTARIO

TITLE




AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

CONSULTANT	YYYY-MM-DD	2023-07-17
DESIGNED	LG	
PREPARED	SA	
REVIEWED	LG	
APPROVED	EH	

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B



SCALE 1:100,000

- LEGEND**
-  GRAB SAMPLE LOCATIONS (WSP 2017)
 -  SAMPLE LOCATIONS (WSP 2023)
 -  PHASE TWO PROPERTY BOUNDARY



NOTE(S)

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. IMAGERY CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N

CLIENT
COSCORP JOSHUA INC

PROJECT
**PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
 1086 BURNHAMTHORPE ROAD EAST, OAKVILLE, ONTARIO**

TITLE
INVESTIGATION LOCATIONS

CONSULTANT	YYYY-MM-DD	2023-07-17
DESIGNED	LG	
PREPARED	SA	
REVIEWED	LG	
APPROVED	EH	

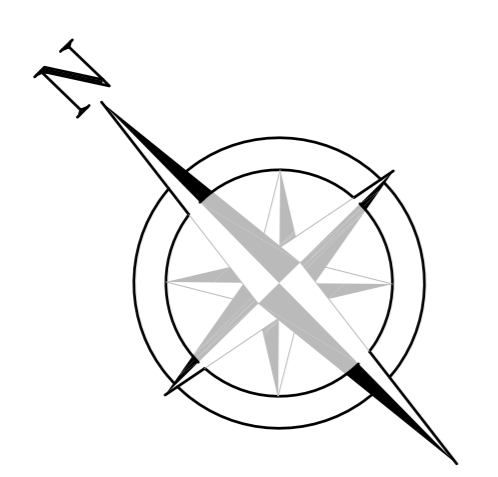
PROJECT NO. CONTROL REV. FIGURE
 CA0003725.5810 0001 0 4

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

APPENDIX A

Plan of Survey



LOT 8, CONCESSION 1,
NORTH OF DUNDAS STREET
PART 1, PLAN 20R-14669

BEARING NOTE
BEARINGS ARE GRID, DERIVED FROM SPECIFIED CONTROL POINTS LISTED IN THE FOLLOWING TABLE, AND ARE REFERENCED TO THE CENTRAL MERIDIAN 6° WEST LONGITUDE, ZONE 17, ONTARIO COORDINATE SYSTEM (6° UTM, NAD83 10RIG).

POINT ID	NORTHING	EASTING
0019633604	4 817 024.832	601 803 436
00819810081	4 820 390.417	602 345.619
04519910009	4 817 193.399	606 198.687

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.
Distances shown on this plan are Ground Distances and can be converted to Grid Distances by Multiplying the Combined Scale Factor of 0.999707.

ROTATE BEARINGS ON THE PLAN OF SURVEY BY MCCONNELL MALSHAW LTD. DATED OCTOBER 27 1989 (P2), PLAN 20R-4361 (P4) AND PLAN 20R-4242 (P3), 00° 47' 50" COUNTERCLOCKWISE TO COMPARE WITH GRID BEARINGS ON THIS PLAN.

LEGEND

- Survey Monument Found
- Survey Monument Set
- Standard Iron Bar
- Steel Standard Iron Bar
- Iron Bar
- 706 McConnell Moughan Ltd., O.L.S.
- 990 F. G. Cunningham, O.L.S.
- 993 J. K. Mackenzie, O.L.S.
- 1042 B. K. Edwards, O.L.S.
- 1205 D. B. Steeles, O.L.S.
- 1808 J. H. Gelbloom, O.L.S.
- 410 J. D. Barnes Ltd., O.L.S.
- 585 Sewell and Street, O.L.S.
- (WIT) Witness
- (O) Origin Unknown
- P1 Plan 20R-17339
- P2 Plan of Survey by McConnell Moughan Ltd., O.L.S. dated October 27 1989
- P3 Plan 20R-15604
- P4 Plan 20R-4361
- P5 Plan 20R-4242
- P6 Plan of Survey by J. H. Gelbloom Surveying Ltd., O.L.S. dated August 11 2015
- PWF Post and Wire Fence
- SCP Specified Control Point
- N North
- E East
- S South
- W West

SCHEDULE		
PART/PART OF LOT/CONCESSION	ALL OF PIN	I, N.D.S.
1	10	24930-0017

PLAN 20R-
Received and Deposited

I require this plan to be deposited under the Land Titles Act.

date _____ date _____

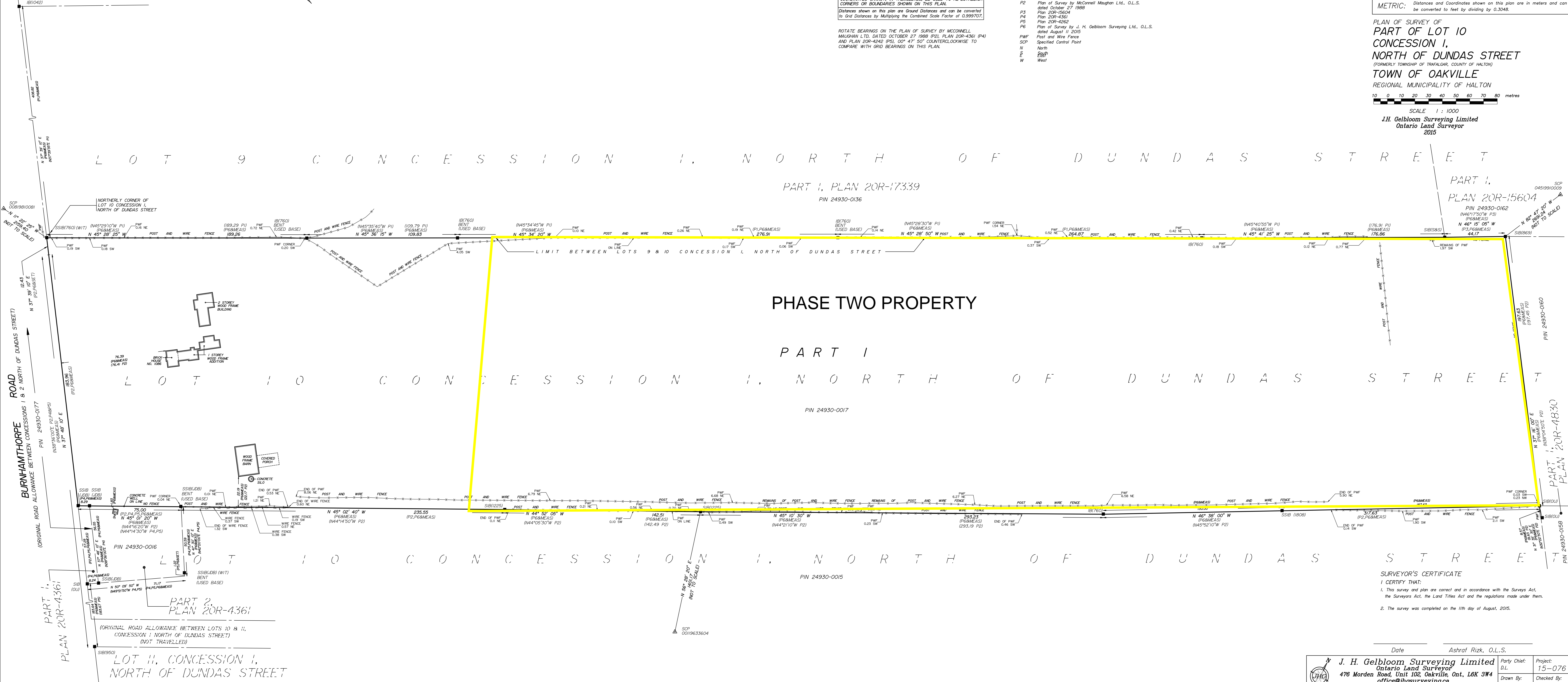
Ashraf Rizk, O.L.S. Representative for Land Registrar for the Land Titles Division of Halton Region (No. 20)

METRIC: Distances and Coordinates shown on this plan are in meters and can be converted to feet by dividing by 0.3048.

PLAN OF SURVEY OF
**PART OF LOT 10
CONCESSION 1,
NORTH OF DUNDAS STREET**
(FORMERLY TOWNSHIP OF HALTON)
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON

SCALE 1 : 1000

J.H. Gelbloom Surveying Limited
Ontario Land Surveyor
2015



SURVEYOR'S CERTIFICATE
I CERTIFY THAT:
1. This survey and plan are correct and in accordance with the Surveyors Act, the Surveyors Act, the Land Titles Act and the regulations made under them.
2. The survey was completed on the 11th day of August, 2015.

Date _____ Ashraf Rizk, O.L.S.

J. H. Gelbloom Surveying Limited
Ontario Land Surveyor
476 Morden Road, Unit 102, Oakville, Ont., L6K 3W4
office@jhgssurveying.ca
Phone:(905) 338-8210 Fax:(905) 338-9446

Party Chief: D.L.
Drawn By: G.S.
Project: 15-076
Checked By: A.R.

APPENDIX B

Sampling and Analysis Plan



DATE May 24, 2023

Project No. CA0003725.6810

TO Sean Usher, WSP

CC Eric Hood

FROM Mariam Moe

EMAIL mariam.moe@wsp.com

SAMPLING AND ANALYSIS PLAN – 1086 BURNHAMTHORPE ROAD EAST, OAKVILLE, ONTARIO

OBJECTIVE

As required by the Ontario Regulation (O. Reg.) 153/04, this Site-specific sampling and analysis plan (SAP), which includes WSP's Quality Assurance Program (QAP) and standard operating procedures (SOP) is to be developed for each environmental field investigation activity. The SAP is a required component of the Phase Two ESA report that outlines the proposed field work, identifies the number and location of samples to be collected, specifies which SOPs will be used, and the quality assurance measures to be implemented during the field work. All field work will be completed in accordance with the requirements of the SAP, QAP, and SOPs.

The intent is to complete an investigation of soil quality in the agricultural field. Our team for the project will be Sean Usher (field work), Lisa Gardiner (project manager), Mariam Moe (reporting), and Eric Hood (QP_{ESA}).

SITE ACCESS REQUIREMENTS

The site is currently an agricultural field. The area of investigation is across the entire property. No impediments to access were observed. At the time of sampling, a clear access path through the field to the various sampling locations should be prepared if necessary.

Access Concern	Information
Site Contact	N/A
Access	Open
Hours of Work	8 am – 4 pm
Site Check-in Procedure	N/A
Photography	Permitted
On-site Orientation or Training	None required

GENERAL REQUIREMENTS

- Follow standard operating procedures.

- Complete tailgate meeting before commencing any field work.
- Complete a Daily Log for every day of field work. Use standard field forms (forms attached).
- Initial calibration of field equipment should be performed at the start of each field day, with a daily check of calibration using a standard of known concentration (record on field form).
- Clean disposable Nitrile™ gloves will be used at each sampling location to prevent cross-contamination.
- All non-dedicated sampling equipment (e.g., hand auger, shovel) will be decontaminated between sampling locations. Sampling equipment in contact with soil will be cleaned with a brush; washed with a laboratory-grade detergent solution (e.g., phosphate-free LiquiNox or AlcoNox) and thoroughly rinsed with analyte-free water.

SOIL SAMPLING

- The program includes eight test pits excavated to a depth of **at least** 0.6 mbgs. Planned locations are posted on the GPS web application and are accessible in Field Maps.
- Obtain the coordinates and ground surface elevations of each test pit using GPS (Trimble Catalyst, precision subscription). Make sure the accuracy is acceptable before leaving the Site.
- At each sample location, collect soil samples every 0.3 mbgs and screen using an RKI Eagle (both photoionization and combustible gas detectors) following SOP4 Headspace Screening. Complete test pit log.
- Return the remaining soil samples to the Etobicoke depot at 252 Galaxy Boulevard for further review and submission of grain size analysis.

Table 1: Soil Sampling Plan

Sample ID	Test Pit Depth (mbgs)	Location Purpose	Sample Summary
S23-1 to S23-8	0.6 mbgs	Investigate potential pesticide impacts in surficial soil.	1 st sample: topsoil (0.0-0.3 mbgs) - submit one sample from each location for analysis of organochlorine pesticides (1 x 120 ml jar at each location). Collect a duplicate at one location. 2 nd sample (>0.3 mbgs, ideally native soil below topsoil) - submit one sample from each location on HOLD for potential analysis of organochlorine pesticides (1 x 120 ml jar at each location).
S23-1, S23-4, and S23-8	0.6 mbgs	Investigate potential pH impacts in surficial soil.	1 st sample: topsoil (0.0-0.3 mbgs) - submit one sample from each location for analysis of pH (1 x 120 ml jar at each location). Collect a duplicate at one location. 2 nd sample (>0.3 mbgs, ideally native soil below topsoil) - submit one sample from each location on HOLD for potential analysis of pH (1 x 120 ml jar at each location).

CHAIN-OF-CUSTODY

Chain-of-Custody Item	Information
Analytical Laboratory	AGAT
Generic Site Condition Standards	Table 1
Use Record of Site Condition analytical procedure	Yes
Turn-around Time	Soil samples: Regular TAT
WSP Reporting Contact	Mariam Moe (mariam.moe@wsp.com)
Project-specific quote number (if applicable)	NA
Billing Contact	Lisa Gardiner (lisa.gardiner@wsp.com)
Is an EQUiS EDD Required	Yes

SPECIAL INSTRUCTIONS

- Save all field notes (including daily logs, field forms, field logs, calibration records, and chain of custody documents) as a single .pdf document with the following file name “PROJECT_NUMBER Field Notes COMPLETION_DATE” (for example, “221-13074-00 Field Notes – Feb 15, 2023.pdf”, where COMPLETION_DATE represents the last date of field work associated with the sampling event);
- Sort pages in the .pdf document by form type and in chronological order with daily logs at the front to simplify review; and
- Submit field notes (calibration records, field forms and chain-of-custody forms) to Mariam for review.
- The use of ink for recording field notes is recommended to ensure the legibility of scanned field forms. Scan field notes at resolution and contrast settings that ensure the scanned documents are easily legible;
- Use standard field forms (not field books); and,
- Include a daily log for every day of field work.

[https://golderassociates.sharepoint.com/sites/10403g/team information/phase two esa/rev \(report\)/appendix b - sampling and analysis plan/21456909-sap-rev0-example sampling and analysis plan-march 6, 2021.docx](https://golderassociates.sharepoint.com/sites/10403g/team%20information/phase%20two%20esa/rev%20(report)/appendix%20b%20-%20sampling%20and%20analysis%20plan/21456909-sap-rev0-example%20sampling%20and%20analysis%20plan-march%206,%202021.docx)

APPENDIX C

Field Logs

**TABLE C1
TEST PIT LOGS
1086 Burnhamthorpe Road East, Oakville, Ontario**

SAMPLE ID	SAMPLE NO.	HEADSPACE (ppm)		DEPTH (mbgs)		Remarks
		HEX	IBL	from	to	
S23-1	0-30	0	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-40	0	0	0.30	0.40	Brown silt, trace clay, some organics
S23-2	0-30	0	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-40	0	0	0.30	0.40	Brown silt, trace clay, some organics
S23-3	0-30	0	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-40	0	0	0.30	0.40	Brown silt, trace clay, some organics
S23-4	0-30	10	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-40	0	1	0.30	0.40	Brown silt, trace clay, some organics
S23-5	0-30	0	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-40	0	0	0.30	0.40	Brown silt, trace clay, some organics
S23-6	0-30	0	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-40	0	0	0.30	0.40	Brown silt, trace clay, some organics
S23-7	0-30	0	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-41	0	0	0.30	0.41	Brown silt, trace clay, some organics
S23-8	0-30	20	0	0.00	0.30	0.1 m of Topsoil underlain by brown silt, trace clay, some organics
	30-45	0	0	0.30	0.45	Brown silt, trace clay, some organics

APPENDIX D

Laboratory Certificates of Analysis

**CLIENT NAME: WSP CANADA INC.
100 SCOTIA COURT
WHITBY, ON L1N8Y6
(905) 723-2727**

**ATTENTION TO: Eric Hood
PROJECT: CA0003725.686**

AGAT WORK ORDER: 23T029606

**SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer
TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist**

DATE REPORTED: Jun 06, 2023

PAGES (INCLUDING COVER): 13

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.
- For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.



Certificate of Analysis

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

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

CLIENT NAME: WSP CANADA INC.

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

pH in Soil

DATE RECEIVED: 2023-05-29

DATE REPORTED: 2023-06-06

		SAMPLE DESCRIPTION:		S23-8-0-30	S23-4-0-30	DUP	S23-1-0-30
		SAMPLE TYPE:		Soil	Soil	Soil	Soil
		DATE SAMPLED:		2023-05-29 10:30	2023-05-29 12:50	2023-05-29 12:57	2023-05-29 14:00
Parameter	Unit	G / S	RDL	5024642	5024655	5024689	5024695
pH, 2:1 CaCl ₂ Extraction	pH Units		NA	7.05	6.70	6.38	6.25

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5024642-5024695 pH was determined on the 0.01M CaCl₂ extract prepared at 2:1 ratio (2 parts extraction fluid : 1 part soil).

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



M. V. Basile



Certificate of Analysis

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

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

CLIENT NAME: WSP CANADA INC.

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

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

DATE RECEIVED: 2023-05-29

DATE REPORTED: 2023-06-06

Parameter	Unit	SAMPLE DESCRIPTION:		S23-8-0-30	S23-7-0-30	S23-6-0-30	S23-5-0-30	S23-4-0-30	DUP	S23-3-0-30	S23-2-0-30
		G / S	RDL	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:		2023-05-29	2023-05-29	2023-05-29	2023-05-29	2023-05-29	2023-05-29	2023-05-29	2023-05-29	2023-05-29	2023-05-29
		10:30	11:30	11:50	12:10	12:50	12:57	13:20	13:40		
		5024642	5024644	5024649	5024651	5024655	5024689	5024690	5024693		
Hexachloroethane	µg/g	0.01	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Gamma-Hexachlorocyclohexane	µg/g	0.01	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Heptachlor Epoxide	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan I	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan II	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Alpha-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
gamma-Chlordane	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chlordane	µg/g	0.05	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDE	ug/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDE	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDE	µg/g	0.05	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDD	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDD	µg/g	0.05	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
op'-DDT	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
pp'-DDT	µg/g		0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
DDT (Total)	µg/g	1.4	0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Dieldrin	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endrin	µg/g	0.04	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Methoxychlor	µg/g	0.05	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobenzene	µg/g	0.01	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexachlorobutadiene	µg/g	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Moisture Content	%		0.1	17.5	18.0	17.4	18.4	18.9	20.2	16.7	18.2
wet weight OC	g		0.005	10.2	10.6	10.4	10.2	10.9	10.5	10.5	10.6

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

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

CLIENT NAME: WSP CANADA INC.

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

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

DATE RECEIVED: 2023-05-29

DATE REPORTED: 2023-06-06

			S23-8-0-30	S23-7-0-30	S23-6-0-30	S23-5-0-30	S23-4-0-30	DUP	S23-3-0-30	S23-2-0-30
	SAMPLE DESCRIPTION:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
	DATE SAMPLED:		2023-05-29 10:30	2023-05-29 11:30	2023-05-29 11:50	2023-05-29 12:10	2023-05-29 12:50	2023-05-29 12:57	2023-05-29 13:20	2023-05-29 13:40
Surrogate	Unit	Acceptable Limits	5024642	5024644	5024649	5024651	5024655	5024689	5024690	5024693
TCMX	%	50-140	77	84	81	95	67	86	95	88
Decachlorobiphenyl	%	50-140	106	106	86	102	79	113	116	112

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

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

CLIENT NAME: WSP CANADA INC.

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

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

DATE RECEIVED: 2023-05-29

DATE REPORTED: 2023-06-06

SAMPLE DESCRIPTION: S23-1-0-30

SAMPLE TYPE: Soil

DATE SAMPLED: 2023-05-29
14:00

5024695

Parameter	Unit	G / S	RDL	5024695
Hexachloroethane	µg/g	0.01	0.005	<0.005
Gamma-Hexachlorocyclohexane	µg/g	0.01	0.005	<0.005
Heptachlor	µg/g	0.05	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	<0.005
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	<0.005
DDE	µg/g	0.05	0.007	<0.007
op'-DDD	µg/g		0.005	<0.005
pp'-DDD	µg/g		0.005	<0.005
DDD	µg/g	0.05	0.007	<0.007
op'-DDT	µg/g		0.005	<0.005
pp'-DDT	µg/g		0.005	<0.005
DDT (Total)	µg/g	1.4	0.007	<0.007
Dieldrin	µg/g	0.05	0.005	<0.005
Endrin	µg/g	0.04	0.005	<0.005
Methoxychlor	µg/g	0.05	0.005	<0.005
Hexachlorobenzene	µg/g	0.01	0.005	<0.005
Hexachlorobutadiene	µg/g	0.01	0.01	<0.01
Moisture Content	%		0.1	15.1
wet weight OC	g		0.005	10.4

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

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

CLIENT NAME: WSP CANADA INC.

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

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

DATE RECEIVED: 2023-05-29

DATE REPORTED: 2023-06-06

SAMPLE DESCRIPTION: S23-1-0-30

SAMPLE TYPE: Soil

DATE SAMPLED: 2023-05-29
 14:00

Surrogate	Unit	Acceptable Limits	5024695
TCMX	%	50-140	90
Decachlorobiphenyl	%	50-140	100

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 1: Full Depth Background Site Condition Standards - Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use
 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.

5024642-5024695 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:

Quality Assurance

CLIENT NAME: WSP CANADA INC.
PROJECT: CA0003725.686
SAMPLING SITE:

AGAT WORK ORDER: 23T029606
ATTENTION TO: Eric Hood
SAMPLED BY: Sean Usher

Soil Analysis															
RPT Date: Jun 06, 2023			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE		MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

pH in Soil

pH, 2:1 CaCl ₂ Extraction	5027224		6.46	6.67	3.2%	NA	102%	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.

pH in Soil

pH, 2:1 CaCl ₂ Extraction	5024695	5024695	6.25	6.28	0.6%	NA	102%	80%	120%
--------------------------------------	---------	---------	------	------	------	----	------	-----	------

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

Certified By:



Nivine Basily

Quality Assurance

CLIENT NAME: WSP CANADA INC.
 PROJECT: CA0003725.686
 SAMPLING SITE:

AGAT WORK ORDER: 23T029606
 ATTENTION TO: Eric Hood
 SAMPLED BY: Sean Usher

Trace Organics Analysis

RPT Date: Jun 06, 2023			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE		MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - OC Pesticides (Soil)															
Hexachloroethane	5020797		< 0.005	< 0.005	NA	< 0.005	84%	50%	140%	85%	50%	140%	82%	50%	140%
Gamma-Hexachlorocyclohexane	5020797		< 0.005	< 0.005	NA	< 0.005	92%	50%	140%	90%	50%	140%	82%	50%	140%
Heptachlor	5020797		< 0.005	< 0.005	NA	< 0.005	85%	50%	140%	90%	50%	140%	99%	50%	140%
Aldrin	5020797		< 0.005	< 0.005	NA	< 0.005	89%	50%	140%	102%	50%	140%	95%	50%	140%
Heptachlor Epoxide	5020797		< 0.005	< 0.005	NA	< 0.005	99%	50%	140%	90%	50%	140%	94%	50%	140%
Endosulfan I	5020797		< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	88%	50%	140%	85%	50%	140%
Endosulfan II	5020797		< 0.005	< 0.005	NA	< 0.005	83%	50%	140%	82%	50%	140%	95%	50%	140%
Alpha-Chlordane	5020797		< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	83%	50%	140%	92%	50%	140%
gamma-Chlordane	5020797		< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	82%	50%	140%	90%	50%	140%
op'-DDE	5020797		< 0.005	< 0.005	NA	< 0.005	95%	50%	140%	92%	50%	140%	86%	50%	140%
pp'-DDE	5020797		< 0.005	< 0.005	NA	< 0.005	87%	50%	140%	85%	50%	140%	92%	50%	140%
op'-DDD	5020797		< 0.005	< 0.005	NA	< 0.005	111%	50%	140%	102%	50%	140%	106%	50%	140%
pp'-DDD	5020797		< 0.005	< 0.005	NA	< 0.005	99%	50%	140%	104%	50%	140%	85%	50%	140%
op'-DDT	5020797		< 0.005	< 0.005	NA	< 0.005	83%	50%	140%	86%	50%	140%	105%	50%	140%
pp'-DDT	5020797		< 0.005	< 0.005	NA	< 0.005	85%	50%	140%	87%	50%	140%	92%	50%	140%
Dieldrin	5020797		< 0.005	< 0.005	NA	< 0.005	80%	50%	140%	84%	50%	140%	82%	50%	140%
Endrin	5020797		< 0.005	< 0.005	NA	< 0.005	88%	50%	140%	98%	50%	140%	102%	50%	140%
Methoxychlor	5020797		< 0.005	< 0.005	NA	< 0.005	82%	50%	140%	85%	50%	140%	82%	50%	140%
Hexachlorobenzene	5020797		< 0.005	< 0.005	NA	< 0.005	101%	50%	140%	104%	50%	140%	95%	50%	140%
Hexachlorobutadiene	5020797		< 0.01	< 0.01	NA	< 0.01	95%	50%	140%	92%	50%	140%	90%	50%	140%
Moisture Content	5024689	5024689	20.15	20.54	1.9%	< 0.1									

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

Certified By: _____



Method Summary

CLIENT NAME: WSP CANADA INC.

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

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

Method Summary

CLIENT NAME: WSP CANADA INC.

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

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

Method Summary

CLIENT NAME: WSP CANADA INC.

AGAT WORK ORDER: 23T029606

PROJECT: CA0003725.686

ATTENTION TO: Eric Hood

SAMPLING SITE:

SAMPLED BY: Sean Usher

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
wet weight OC	ORG-91-5113		BALANCE

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

Laboratory Use Only

Work Order #: 23T029606
Cooler Quantity: 1 med
Arrival Temperatures: 8-4 18-2 18-9
Custody Seal Intact: Yes No N/A
Notes: loose rc

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: WSP Canada
Contact: _____
Address: _____
Phone: _____ Fax: _____
Reports to be sent to:
1. Email: Mariam.nor@wsp.com; Sean.Usher@wsp.com
2. Email: Eric.Hood@wsp.com; Lisa.Gardner@wsp.com

Regulatory Requirements:

(Please check all applicable boxes)

Regulation 153/04 Regulation 406 Sewer Use
 Sanitary Storm
 Table 1 Indicate One Ind/Com Table _____ Indicate One _____ Region _____
 Res/Park Agriculture Regulation 558 Prov. Water Quality Objectives (PWQO)
 CCME Other _____ Indicate One _____
 Soil Texture (Check One) Coarse Fine

Turnaround Time (TAT) Required:

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

Project Information:

Project: CAD000 3725.6810
Site Location: _____
Sampled By: Sean Usher
AGAT Quote #: 735000 PO: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

Is this submission for a Record of Site Condition?

Yes No

Report Guideline on Certificate of Analysis

Yes No

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

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

Invoice Information:

Bill To Same: Yes No

Company: _____
Contact: _____
Address: _____
Email: feagat@wsp.com

Sample Matrix Legend

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

Y/N	0. Reg 153		VOC	PAHS	PCBS	PCBS; Aroclors	Landfill Disposal Characterization TCLP: <input type="checkbox"/> M&I <input type="checkbox"/> VOCs <input type="checkbox"/> ABNs <input type="checkbox"/> Biap <input type="checkbox"/> PCBs	0. Reg 406		Corrosivity: <input type="checkbox"/> Moisture <input type="checkbox"/> Sulphide	Potentially Hazardous or High Concentration (Y/N)
	Metals & Inorganics	Metals - <input type="checkbox"/> CrVI, <input type="checkbox"/> Hg, <input type="checkbox"/> HWSB						Regulation 406 SPLP Rainwater Leach	Regulation 406 Characterization Package pH, ICPMS Metals, BTEX, F1-F4		

Samples Relinquished By (Print Name and Sign): <u>Sean Usher</u>	Date: <u>29/05/23</u>	Time: <u>5:30</u>	Samples Received By (Print Name and Sign): <u>J. P...</u>	Date: <u>May 29</u>	Time: <u>5:40 p.m.</u>
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 2
No: T-144344

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

Invoice Report Information Same as Page 1

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

Laboratory Use Only

Work Order #: 23T029606
Cooler Quantity: 1 med.
Arrival Temperatures: 8-4, 8-2, 8-7
Custody Seal Intact: Yes No N/A
Notes: large ice

Chain of Custody Record

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

Report Information:

Company: WSP Canada
Contact: _____
Address: _____
Phone: _____ Fax: _____
Reports to be sent to:
1. Email: _____
2. Email: _____

Regulatory Requirements:

(Please check all applicable boxes)

Regulation 153/04 Regulation 406 Sewer Use
 Sanitary Storm
Table 1 Indicate One Ind./Corn
 Res./Park Agriculture
Soil Texture (Check One) Coarse Fine
Table _____ Indicate One
Region _____
 Regulation 558 Prov. Water Quality Objectives (PWQO)
 CCME Other
Indicate One

Turnaround Time (TAT) Required:

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

Project Information:

Project: LA0003725.0210
Site Location: _____
Sampled By: _____
AGAT Quote #: 735000 PO: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

Is this submission for a Record of Site Condition?

Yes No

Report Guideline on Certificate of Analysis

Yes No

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

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

Invoice Information:

Bill To Same: Yes No

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

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	Y / N	Field Filtered - Metals, Hg, CrVI, DOC	0. Reg 153	0. Reg 558	0. Reg 406	Potentially Hazardous or High Concentration (Y/N)
								Metals & Inorganics	Landfill Disposal Characterization TCLP: <input type="checkbox"/> M&I <input type="checkbox"/> VOCs <input type="checkbox"/> ABNs <input type="checkbox"/> B(a)P <input type="checkbox"/> PCBs	Regulation 406 SPLP Rainwater Leach <input type="checkbox"/> Metals <input type="checkbox"/> VOCs <input type="checkbox"/> SVOCs	
1. <u>S23-3-0-30</u>	<u>29/05/23</u>	<u>1:20</u>	<u>1</u>	<u>S</u>							X
2. <u>S23-3-30</u>	<u>29/05/23</u>	<u>1:30</u>	<u>1</u>	<u>S</u>	<u>Hold</u>						X
3. <u>S23-2-0-30</u>	<u>29/05/23</u>	<u>1:40</u>	<u>1</u>	<u>S</u>	<u>Hold</u>						X
4. <u>S23-2-30</u>	<u>29/05/23</u>	<u>1:50</u>	<u>1</u>	<u>S</u>	<u>Hold</u>						X
5. <u>S23-1-0-30</u>	<u>29/05/23</u>	<u>2:00</u>	<u>2</u>	<u>S</u>							X
6. <u>S23-1-30</u>	<u>29/05/23</u>	<u>2:10</u>	<u>2</u>	<u>S</u>	<u>Hold</u>						X
7.											
8.											
9.											
10.											
11.											

Samples Relinquished By (Print Name and Sign): <u>Sean Usher</u>	Date: <u>29/05/23</u>	Time: <u>5:30</u>	Samples Received By (Print Name and Sign): <u>T. P.</u>	Date: <u>May 29</u>	Time: <u>5:40 AM</u>
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: _____



CLIENT NAME: WSP CANADA INC.
2 INTERNATIONAL BLVD SUITE 201
ETOBICOKE, ON M9W1A2
(416) 798-0065

ATTENTION TO: Mariam Moe

PROJECT: CA3725.6810 Task 100.2

AGAT WORK ORDER: 23T032370

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Jun 14, 2023

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

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



Certificate of Analysis

AGAT WORK ORDER: 23T032370
PROJECT: CA3725.6810 Task 100.2

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

CLIENT NAME: WSP CANADA INC.

ATTENTION TO: Mariam Moe

SAMPLING SITE: 1076 Burnhamthorpe Rd. E, Oakville

SAMPLED BY: Sean Usher

Particle Size by Sieve (Wet)

DATE RECEIVED: 2023-06-05

DATE REPORTED: 2023-06-14

		SAMPLE DESCRIPTION:		SS23-1 0-30	SS23-1 30-40	SS23-5 0-30	SS23-5 30-40
		SAMPLE TYPE:		Soil	Soil	Soil	Soil
		DATE SAMPLED:		2023-05-30	2023-05-30	2023-05-30	2023-05-30
Parameter	Unit	G / S	RDL	5041039	5041054	5041055	5041056
Sieve Analysis - 75 µm (retained)	%		NA	16.80	14.00	22.30	25.80
Sieve Analysis - 75 µm (passing)	%		NA	83.20	86.00	77.70	74.20
Soil Texture (Toronto)				Fine	Fine	Fine	Fine

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5041039-5041056 Value reported is the amount of sample passing through or retained on sieve after wash with water and represents proportion by weight particles smaller or larger than indicated sieve size.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Nvine Basly

Quality Assurance

CLIENT NAME: WSP CANADA INC.

AGAT WORK ORDER: 23T032370

PROJECT: CA3725.6810 Task 100.2

ATTENTION TO: Mariam Moe

SAMPLING SITE: 1076 Burnhamthorpe Rd. E, Oakville

SAMPLED BY: Sean Usher

Soil Analysis

RPT Date: Jun 14, 2023			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE	
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Particle Size by Sieve (Wet)

Sieve Analysis - 75 µm (retained)	5041039	5041039	16.80	16.22	3.5%	NA	102%	75%	125%
Sieve Analysis - 75 µm (passing)	5041039	5041039	83.20	83.78	0.7%	NA			

Comments: NA Signifies Not Applicable

Certified By:






Method Summary

CLIENT NAME: WSP CANADA INC.

AGAT WORK ORDER: 23T032370

PROJECT: CA3725.6810 Task 100.2

ATTENTION TO: Mariam Moe

SAMPLING SITE: 1076 Burnhamthorpe Rd. E, Oakville

SAMPLED BY: Sean Usher

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Sieve Analysis - 75 µm (retained)	INOR-93-6065	Modified from ASTM D1140-17	SIEVE
Sieve Analysis - 75 µm (passing)	INOR-93-6065	Modified from ASTM D1140-17	SIEVE



Laboratory Use Only

Work Order #: 23T032370

Cooler Quantity: 1 bag
Arrival Temperatures: 28.1 | 28.5 | 28.7

Custody Seal Intact: Yes No N/A
Notes: loose ice

Chain of Custody Record

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

Report Information:
Company: WSP Canada Inc.
Contact: Mariam Moe
Address: 2-International Blvd, Etobicoke
Phone: _____ Fax: _____
Reports to be sent to:
1. Email: mariam.moe@wsp.com
2. Email: _____

Regulatory Requirements:
(Please check all applicable boxes)

Regulation 153/04 Regulation 406 Sewer Use
 Ind/Com Sanitary Storm
 Res/Park Agriculture Region
 CCME Other
 Soil Texture (Check One): Coarse Fine
 Agriculture

Turnaround Time (TAT) Required:

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

Project Information:
Project: CA3725-6810 Task 100.2
Site Location: 1076 Burnhamthorpe Rd E, Oakville
Sampled By: Sean Usher
AGAT Quote #: 735000 PO: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

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

Report Guideline on Certificate of Analysis
 Yes No

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

Invoice Information: Bill To Same: Yes No

Company: WSP Canada Inc.
Contact: _____
Address: _____
Email: payables.Ontario@wsp.com

Sample Matrix Legend				Field Filtered - Metals, Hg, CrVI, DOC	Y / N	Metals & Inorganics	Metals - <input type="checkbox"/> CrVI, <input type="checkbox"/> Hg, <input type="checkbox"/> HWSB BTEX, F1-F4 PHCs	VOC	PAHs	PCBs	PCBs: Aroclors <input type="checkbox"/>	O. Reg 406				Potentially Hazardous or High Concentration (Y/N)					
GW	O	P	SD									SW	Landfill Disposal Characterization TOLP: <input type="checkbox"/> MBI <input type="checkbox"/> VOCs <input type="checkbox"/> APNS <input type="checkbox"/> B(e)P <input type="checkbox"/> PCBs	Regulation 406 SPLP Rainwater Leach	SPLP: <input type="checkbox"/> Metals <input type="checkbox"/> VOCs <input type="checkbox"/> SVOCs		Regulation 406 Characterization Package	pH, ICPMS Metals, BTEX, F1-F4	Corrosivity: <input type="checkbox"/> Moisture <input type="checkbox"/> Sulphide	Grain Size (75µm)	
Ground Water	Oil	Paint	Sediment									Surface Water									
1.	SS23-1 0-30	30 May 23	AM PM	1	S																
2.	SS23-1 30-40	30 May 23	AM PM	1	S																
3.	SS23-5 0-30	30 May 23	AM PM	1	S																
4.	SS23-5 30-40	30 May 23	AM PM	1	S																
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): <u>Mariam Moe</u>	Date: <u>05 JUN 23</u>	Time: <u></u>	Samples Received By (Print Name and Sign): <u>T. Penn</u>	Date: <u>June 5</u>	Time: <u>3:32pm</u>
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:

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

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