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PHASE II
ENVIRONMENTAL SITE ASSESSMENT

AT

123 HIGHWAY 47,
UXBRIDGE, ON.

PREPARED FOR:

123 Highway 47 Inc.
9050 Yonge St.,
Suite 207, Richmond Hill

December 14th, 2023

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EXECUTIVE SUMMARY

King EPCM (the Engineer) was retained by 123 Highway 47 Inc. (the Client) to conduct a Phase II Environmental Site Assessment (ESA) of the property located at 123 Highway 47, Uxbridge (the Site).

It was understood that the Phase II ESA documented herein was being undertaken by the Client for the purpose of an industrial subdivision. Records of Site Condition (RSC) will not be required as per O. Reg 153/04. The date of the last work on all the planning for the scope of work, conducting the Site investigation, and receiving and evaluating the information gathered during the Site inspection for the Phase II ESA (per Section 33.5 (1) (a) of O. Reg. 153/04) was December 11th, 2023, which can be used as the Certification Date of the Phase II ESA (per Section 17 (3) of O. Reg. 153/04).

The site is approximately 24.1ha or 59.5 acres according to the site survey and is located at the southeast corner of the intersection of Highway 47 and York/Durham Line. It is along the western boundary of Durham Region, with agricultural fields to the south, east, and west while there is a relatively recently built industrial complex to the north.

The Phase II ESA was triggered based on the findings from the Phase I ESA completed by King EPCM on September 3rd, 2021. The Phase I ESA identified three (3) onsite Potentially Contaminating Activities (PCAs), and eight (8) offsite PCAs. The determined PCAs may affect the soil and groundwater on the entire site property.

During the Phase II investigation, twenty (20) soil samples were taken from the demolition areas surrounding the historic residential dwelling and the historic barn. Following the demolition and delineation process and second round of testing, no contamination was found in the soil, and all samples passed the criteria.

While eight (8) offsite PCAs were found through the Phase I ESA, none were determined to create an Area of Potential Environmental Concern (APEC) on the site property; however, all three (3) of the on-site PCAs created APECs. The Phase II ESA was undertaken to assess the Contaminates of Concerns (COC's) from the area around the historic wooden barn, and the residential dwelling: Volatile organic compounds (VOCs including BTEX), Metals, and Petroleum hydrocarbons (PHC F1 – F4). Aswell, the agricultural area of the site was assessed for PCBs and OCPs.

The soil standards from the Ministry of Environment, Conservation and Parks (MECP) were applied using Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition) in *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (March 2021)*. The soil investigation of Phase II ESA from the onsite boreholes revealed that all parameters passed the Criteria. It was in the opinion of King EPCM that no further investigation or remediation was required.

1. INTRODUCTION

King EPCM (the Engineer) was retained by 123 Highway 47 Inc. (the Client) to conduct a Phase II Environmental Site Assessment (ESA) of the property located at 123 Highway 47, Uxbridge, Ontario (the Site).

The Phase II ESA was triggered based on the findings from the Phase I ESA investigation completed by King EPCM on September 3rd, 2021. The Phase I ESA identified eight (8) offsite and three (3) onsite Potentially Contaminating Activities (PCAs). The onsite PCAs created APECs throughout the site property.

The objective of the Phase II ESA investigation was to assess the soil quality, in order to determine if the Site has been impacted by the onsite PCAs determined in the Phase I ESA.

1.1. SITE DESCRIPTION

The site is 24.1ha or 59.5 acres according to the site survey and is located at the southeast corner of the intersection of Highway 47 and York/Durham Line. It is along the western boundary of Durham Region, with agricultural fields to the south, east, and west, while there is a relatively recently built industrial complex to the north.

The legal descriptions were as follows according to ON Lands.

Site Address:	123 Highway 47, Uxbridge
PIN:	26830-0118 (LT)
Owner:	123 Highway 47 Inc.
Legal Description:	PT LTS 13 & 14 CON 1 UXBRIDGE PT 1 PL 40R5008 EXCEPT PT 1 PL 40R23365; UXBRIDGE, REGIONAL MUNICIPALITY OF DURHAM

1.2. PROPERTY OWNERSHIP

The current owner of the property is 123 Highway 47 Inc.

1.3. CURRENT AND PROPOSED FUTURE USES

During the time of the investigation, it was identified that the residential dwelling and wooden barn located at the north central section of site were demolished and removed, while the south, east, and western areas consisted of agricultural land. The property was considered a triangular yard, southeast of the intersection of Highway 47 (County Rd 47) and York Durham Line 30. The south, east and west of the site are a mix of agricultural and residential use, while the north is

composed of industrial and commercial buildings. It was understood that the property land use would be changed from the current agricultural use to industrial use in the future.

1.4. APPLICABLE SITE CONDITION STANDARDS

The following Site-specific details were present for determining the soil quality standards:

- Two waterhead stream from West Duffins Creek were located about 50m from the east and west side of the Site.
- The site is not within the natural significance area.
- The use of the Site was within the agricultural land use category.

Based on the above conditions, the following soil standards from MECP was applied, Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition, fine / medium soils, (Residential/Parkland/Institutional) in *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (March 2021)*.

2. BACKGROUND INFORMATION

2.1. PHYSICAL SETTING

2.1.1. WATER BODIES & AREAS OF NATURAL SIGNIFICANCE

There were two bodies of water within 50 m east and west of the Site, both belonging to the water head of West Duffins Creek. The Site was not within the natural significant area.

2.1.2. TOPOGRAPHY & SURFACE WATER DRAINAGE

A review of the topographic information from the Ontario Base Map (OBM), the Ministry of Natural Resources and Forestry (MNRF) indicated that the Site was located on an area with a general elevation between 329.50 m to 340 m. The northeastern two thirds of the site had a general surface drainage towards the southeastern direction towards the eastern headwater stream flowing into West Duffins Creek, while the southwestern one third of the property flowed southwest towards the stream on the west (also flowing into Duffins Creek).

2.2. PAST INVESTIGATIONS

A Phase I ESA was completed by King EPCM:
Phase I Environmental Site Assessment at 123 Highway 47, Uxbridge, ON. September 3rd, 2021.

2.2.1. SUMMARY OF PAST INVESTIGATIONS

A summary of the Phase I ESA Report by King EPCM, September 3rd, 2021, was as below:

- The Site was on agricultural and residential land use.
- There were three (3) PCAs on site, all of which created APECs potentially affecting the soil and groundwater of the entire Site.
- Eight (8) offsite PCAs were determined, none of those created any APECs.

2.2.2. CONFIRMATION OF PREVIOUS INVESTIGATIONS

Confirmation of the Phase I ESA report was conducted through:

- Review of the historical photographs.
- Review of historical environmental records in the Environmental Database and Reports from Environmental Risk Information Services (ERIS)
- Review of Phase I ESA investigation, conclusion, and recommendation.
- Site investigation within the Phase I site property
- It was found that based on Durham Region's Soil and Groundwater Assessment Protocol, the historic uses of the agricultural lands required one additional PCA – Pesticides and organic sewage application as fertilizers, with the following Contaminates of Concern:
    - Organochloride pesticides (OCP)
    - PCB

3. SCOPE OF INVESTIGATION

3.1. OVERVIEW OF SITE INVESTIGATION

The scope of the investigation from King EPCM consisted of the following:

- Preparation of a sampling and analysis plan for the target APEC's locations, laboratory analytical program, appropriate sampling containers and preservation methods supplied by the laboratory. The sample IDs and tested parameters can be found in Appendix I, and the sampling and analysis plan can be found in the Appendix II.
- Obtain twenty (20) soil samples.
- The 200 and 300 series soil samples were located at the brick residential dwelling on the north central area of the Site, while the 400 and 500 series soil samples were taken at the larger wooden barn also located in the same area on Site. SS601 was located at the eastern south corner of site, close to the intersection of Highway 47 and Tenth Line, and SS602 was located at the western north corner of the Site.
- Investigation of soil qualities onsite.
- Submission of soil samples to the laboratory.
- Evaluation of the laboratory analytical results against the appropriate site condition standards.
- Removed more soil where demolition was not fully completed

- Conducted a second fixed set of confirmation sampling

3.2. MEDIA INVESTIGATED

The scope of work for this investigation was to assess the soil qualities from the soil samples, to determine if the Site had been potentially exposed to the COC's including VOCs, PHCs (F1-F4 and BTEX), and metals in the northern central area, and PCBs and OCPs in the east and western agricultural areas.

For the above COC's, the Phase II ESA program was conducted for the investigation of soil onsite from SS201 through SS203, SS301 through SS305, SS401 through SS404, SS501 through SS504, SS601, SS602, BH201, BH301, BH304, and BH404. Soil samples were collected and sent to the laboratory for chemical analyses.

3.3. PHASE I CONCEPTUAL SITE MODEL

Phase I ESA Conceptual Site Model completed by King EPCM was summarized as follows:

- Site Features: The Site is situated at 123 Highway 47, Uxbridge on an agricultural and residential land. The Site is 24.1ha or 59.5 acres and is situated at the southeast corner of the intersection of Highway 47 and York/Durham Line. It is along the western boundary of Durham Region, with agricultural fields to the south, east, and west, while there is a relatively recently built industrial complex to the north.
- Land Uses: It is an agricultural/ residential mix land use.
- Geology / Hydrogeology: The Surficial Geology of Southern Ontario from OBM indicated that the surficial materials on the Site was diamicton, with the geology being bedded, massive sandy silt to clayey silt, and the primary strata contained Halton Till Formation. The general surface drainage is southeast and southwest, towards the West Duffins Creek.
- PCA's and APEC's: Eight (8) offsite PCA's were identified within the Phase I Study Area at the northwest and southwest side of the subject property. Three (3) onsite PCA's were also determined. The entire Site was considered an APEC for the investigation of potential impacts from the onsite PCA's to the soil quality:

Table 1 – APEC caused by offsite PCAs.

Area of potential environmental concern	Location of area of potential environmental concern on phase one property	PCA #	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Ground water, soil and/or sediment)
APEC #1	basement of residential dwelling in north central area	1	PCA#28 Gasoline and Associated Products Storage in Fixed Tanks	onsite	VOCs (including BTEX) Metals PHCs	soil
APEC #2	within large historic wooden barn in north central area	2	PCA#27 Garages and Maintenance and Repaor of Railcars, Marine Vehicles and Aviation Vehicles	onsite	VOCs (including BTEX) Metals PHCs	soil
APEC #3	agricultural areas on site	3	PCA#40 Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	onsite	PCBs OCPs	soil

- Uncertainty: It was not expected that any uncertainty or absence of information would affect the validity of the Phase I Conceptual Site Model (CSM).

3.4. DEVIATION FROM THE SAMPLING AND ANALYSIS PLAN

There were no deviations from the sampling and analysis plan.

3.5. IMPEDIMENTS

There were no existing impediments affecting the Phase II investigation of this site.

4. INVESTIGATION METHOD

4.1. GENERAL

The Site was investigated solely through soil sampling identified in the sampling plan.

A total of twenty (20) soil samples were investigated. SS201 through SS203, and SS301 through SS305 were located at the residential dwelling on the north central part of Site, where two tanks and specifically an active leaking tank was found in the basement. SS401 through SS404, and SS501 through SS504, were located within the large historic wooden barn also in the north central location of the site; this area was used as a garage. SS601 was taken from the east, and SS602 was obtained from the west area of site, due to the long history of agricultural practices on the site.

Following the complete demolition process, a second round of confirmational sampling was conducted at BH201, BH301, and BH304, at the residential dwelling on the north central part of Site, as well as at BH404 where the large historic wooden barn used to exist.

4.2. BOREHOLE DRILLING

All twenty (20) soil samples and the second round of confirmational testing were obtained near surface using hand shovels and disposable singe-use sampling tools provided by the laboratory.

Groundwater was found to be absent during the period of August – October, and thus no appropriate groundwater could be sampled. This is generally a low risk, as soil was found to have low levels of Petroleum Hydrocarbons and VOC's and thus there is a low risk to groundwater contamination.

4.3. SOIL SAMPLING

Eighteen (18) soil samples were collected from SS200/300 and SS400/500. Samples were taken from the floor and sidewalls of each borehole, according to TSSA guidelines. The quantity of floor and sidewall samples are detailed below:

- Three (3) floor samples from the residential dwelling (SS201, SS202, SS203)
- Five (5) side wall samples from the residential dwelling (SS301, SS302, SS303, SS304, SS305)
- Four (4) floor samples from the historical wooden barn (SS401, SS402, SS403, SS404)
- Six (6) side wall samples from the historical wooden barn (SS501, SS502, SS503, SS504, SS505, SS506)

Additionally, one (1) soil sample was obtained from the eastern agricultural area of Site, as well as one (1) soil sample from the western agricultural area.

Following the complete demolition process, a second round of confirmational sampling was conducted at BH201, BH301, and BH304, at the residential dwelling on the north central part of Site, as well as at BH404 where the large historic wooden barn used to exist.

All twenty (20) soil samples were from obtained from topsoil or shallow layer (0-0.5 m) on October 17th and 18th, 2023. The second round of confirmational testing was conducted on November 10th, 2023. Soil samples for analyses were collected into laboratory supplied containers, using laboratory supplied "Terra Core Soil Sampler" disposable sampling tool for small vials, then placed in a cooler with icepacks. The soil samples were delivered to the laboratory for analysis, along with a chain of custody.

4.4. FIELD SCREENING MEASUREMENTS

Soil field screening was conducted using visual assessments and olfactory senses.

4.5. GROUNDWATER

4.5.1. MONITORING WELL INSTALLATION

Monitoring well installation was not completed as groundwater sampling was not required.

4.5.2. MONITORING WELL DEVELOPMENT METHOD

No monitoring wells were developed as groundwater sampling was not required.

4.6. FIELD MEASUREMENTS OF WATER QUALITY PARAMETERS

Groundwater sampling was not required.

4.7. GROUNDWATER SAMPLING

Groundwater sampling was not required.

4.8. SEDIMENT SAMPLING

Sediment sampling was not completed as sediment was not present at the site.

4.9. ANALYTICAL TESTING

Laboratory analytical services were provided by Testmark Laboratories Ltd. (Lab) in their Mississauga office. Testmark is accredited by CALA to the standards of ISO 17025 – *General Requirements for the Competence of Testing and Calibration Laboratories* and licensed by the Ministry of Environment, Conservation and Parks (MECP).

4.10. ELEVATION SURVEYING

King EPCM only conducted soil sampling via hand. Since groundwater was not sampled, the data required for elevation surveying was not required.

4.11. QA/QC MEASURES

Sampling containers and preservations were supplied by the laboratory prior to the start of the borehole program. All sample containers were labelled to specify the sample identifications. Soil samples were collected into sample jars and vials provided by the Lab (using pre-supplied disposable tools for small sample vials), then immediately placed in a cooler with ice packs.

Equipment cleaning procedures included:

- Don fresh latex / nitrile gloves prior to working
- The laboratory-supplied “Terra Core Soil Sampler” disposable sampling tools

5. REVIEW AND EVALUATION

5.1. GEOLOGY

Based on the borehole drilling program conducted for geotechnical purposes, the native soil contained dry sandy clay near surface with varying layers of moist sandy clay, silt and gravel at depths.

Table 2 – Geology of each borehole drilled for groundwater monitoring wells.

Borehole	Location on Site	Depth (m)	Material Description
BH101	north of the property, east side of existing building	0 - 0.05	top soil, black, moist
		0.05 - 1.1	brown sandy clay, dry
		1.1 - 1.8	brown sandy clay, moist
		1.8 - 6.1	brown silt
BH102	north of the property, north side of existing north warehouse	0 - 0.3	top soil, black, moist
		0.3 - 1.8	brown sandy clay, dry
		1.8 - 2.4	sandy gravely clay, moist
		2.4 - 4	sandy clay, wet
		4 - 4.6	brown silt
BH103	north of the property, south of existing south warehouse	0 - 0.3	top soil, black, moist
		0.3 - 1.5	brown sandy clay, dry
		1.5 - 1.8	sandy gravely clay, moist
		1.8 - 4.6	brown silt
BH104	northwest of the property	0 - 0.4	top soil, black, moist
		0.4 - 3.7	brown sandy clay, dry
		3.7 - 4.3	brown sandy clay, moist
		4.3 - 4.5	brown silt
BH105	southwest of the property	0 - 0.4	top soil, black, moist
		0.4 - 3.7	brown sandy clay, dry
		3.7 - 4.6	brown sandy clay, moist, medium plastic
BH106	middle of the property	0 - 0.4	top soil, black, moist
		0.4 - 0.8	brown sandy clay, wet, medium plastic
		0.8 - 1.5	brown sandy clay, moist, medium plastic
		1.5 - 4.5	brown silt
BH107	southeast of the property	0 - 0.4	top soil, black, moist
		0.5 - 5.8	brown sandy clay, moist, low plastic
		5.8 - 7.6	brown silt
BH108	northeast of the property	0 - 0.3	top soil, dry
		0.3 - 1.8	brown clayey sand, dry
		1.8 - 3.5	brown sand, moist
		3.5 - 4.5	brown sandy clay mixed with gravel, moist

The average elevation of the Site is approximately 335m above mean sea level (amsl). The detailed borehole & elevation information can be found in Appendix III.

5.2. GROUNDWATER ELEVATION AND FLOW DIRECTION

Groundwater sampling was not required.

5.3. GROUNDWATER HYDRAULIC GRADIENTS AND CONDUCTIVITY

Groundwater hydraulic gradients and conductivity were not required.

5.4. SOIL TEXTURE

Based on the hand soil sampling conducted at site, the soil condition is a mix of sand and clay soils. Due to the predominant presence of dense glacial till silts and clays, the Site Condition Standard assumes a fine / medium soils.

5.5. SOIL FIELD SCREENING

Many soil samples were taken at site across the two demolition areas, and soil field screening was purely using visual and olfactory methods.

5.6. SOIL QUALITY

Based on the soil samples obtained on October 17th and November 10th, 2023, after the demolition and delineation process, no parameters were found to exceed the Site Condition Standard

5.7. GROUNDWATER QUALITY

As per Table 1 of this report, media impacted is only soil.

5.8. SEDIMENT QUALITY

Sediments were not evaluated during this investigation, as sediments were not present on Site.

5.9. QA/QC RESULTS

QA/QC measures were conducted internally by the laboratory, where 1 in 20 random duplicates were generated.

5.10. PHASE II CONCEPTUAL SITE MODEL

5.10.1. SITE SITUATION WITH PCA'S, APEC'S, AND COC'S

The Phase I ESA by King EPCM from September 3rd, 2021 was available and reviewed. Based on the King EPCM's report, the Site was historically under agricultural use.

Two (2) APECs were found at site, with one additional APEC additionally added due to Durham Region requirements. Table 2 below shows the Potentially Contaminating Activities and the location of the Areas of Potential Environmental Concern which they contribute to.

Table 3 – Table of Areas of Potential Environmental Concerns

Area of potential environmental concern	Location of area of potential environmental concern on phase one property	PCA #	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Ground water, soil and/or sediment)
APEC #1	basement of residential dwelling in north central area	1	PCA#28 Gasoline and Associated Products Storage in Fixed Tanks	onsite	VOCs (including BTEX) Metals PHCs	soil
APEC #2	within large historic wooden barn in north central area	2	PCA#27 Garages and Maintenance and Repaor of Railcars, Marine Vehicles and Aviation Vehicles	onsite	VOCs (including BTEX) Metals PHCs	soil
APEC #3	agricultural areas on site	3	PCA#40 Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	onsite	PCBs OCPs	soil

5.10.2. PHYSICAL SETTING OF PHASE II PROPERTY

The site is 24.1ha or 59.5 acres according to the site survey and is located at the southeast corner of the intersection of Highway 47 and York/Durham Line. It is along the western boundary of Durham Region, with agricultural fields to the south, east, and west while there is a relatively recently built industrial complex to the north.

5.10.3. CONTAMINATES AND SITE CONDITION STANDARDS

Based on the above physical setting of the site, the applicable Site Condition Standard is Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition, fine/ medium soils, (Residential/Parkland/Institutional) in *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (March 2021)*.

Based on the soil samples obtained on October 17th, 2023 and November 10th, 2023, no exceedances were found were found for Petroleum Hydrocarbons, Metals, BTEX, or VOC's compared to the Site Condition Standard:

5.10.4. DELINEATION OF CONTAMINATES AT SITE

Following the delineation, further removal of soils conducted as part of the demolition process, and the second round of confirmational testing the soil samples showed no exceedances. Therefore, no further delineation was required for this site.

6. CONCLUSIONS

6.1. SUMMARY OF PHASE II ESA

The Phase II ESA was completed to investigate the soil quality onsite for potential impact from the on-site PCAs determined through the Phase I ESA. The analytical results indicated that the soil quality passed the Site Condition Standards outlined in O. Reg. 153/04.

It is in the Engineer's opinion that no additional investigation is required.

6.2. SIGNATURES

The Phase II ESA property is located at 123 Highway 47, Uxbridge, ON (the Site). The Phase II ESA investigation was conducted by Kiana Ghafarizadeh, an Engineer-in-Training, under the supervision of Tony Wang, the Qualified Person (QP) and Principal Engineer of King EPCM in accordance with O. Reg. 153/04 and updated by O. Reg. 511/09. This report was based on the Certificate Date of December 11rd, 2023.

King EPCM accepts no responsibility or liability for any changes or potential changes in the condition of the site after the Certificate Date. The sampling frequency and sampling locations are chosen based on the best practice guidelines, and to the best of our ability, on field conditions during the project. Conditions beyond sampling locations may vary. Furthermore, this assessment was limited to a study of those chemical parameters specifically addressed in this report. This report pertains, only, to the site specifically described in this report and not to any adjacent or other property.

This report has been prepared for the sole use of 123 Highway 47 Inc. King EPCM accepts no liability for claims arising from the use of this report, or from actions taken or decisions made as a result of this report, by parties other than the Client.

Report Prepared by,

Kiana Ghafarizadeh
Environmental Engineer in-Training (EIT)

Reviewed by Q.P.,

Yu Tao (Tony) Wang, P. Eng.
Principal Engineer
Qualified Person, per O. Reg. 153/04

LICENSED PROFESSIONAL ENGINEER
Y. T. WANG
100228476
DEC 17, 2023
PROVINCE OF ONTARIO

7. REFERENCES

Ontario Regulation 153/04, Record of Site Condition – Part XV.1 of the Act.

Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (March 2021).

GeoWarehouse Property Report, GeoWarehouse.

Phase I Environmental Site Assessment at 123 Highway 47, Uxbridge, ON. September 3rd, 2021.

APPENDIX I – SAMPLE ID AND TESTED PARAMETERS

Table 1 – APEC caused by offsite PCAs.

Area of potential environmental concern	Location of area of potential environmental concern on phase one property	PCA #	Potentially contaminating activity	Location of PCA (on-site or off-site)	Contaminants of potential concern	Media potentially impacted (Ground water, soil and/or sediment)
APEC #1	basement of residential dwelling in north central area	1	PCA#28 Gasoline and Associated Products Storage in Fixed Tanks	onsite	VOCs (including BTEX) Metals PHCs	soil
APEC #2	within large historic wooden barn in north central area	2	PCA#27 Garages and Maintenance and Repaor of Railcars, Marine Vehicles and Aviation Vehicles	onsite	VOCs (including BTEX) Metals PHCs	soil
APEC #3	agricultural areas on site	3	PCA#40 Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	onsite	PCBs OCPs	soil

Table 2 – Geology of each borehole drilled for geotechnical and hydrogeology reivew

Borehole	Location on Site	Depth (m)	Material Description
BH101	north of the property, east side of existing building	0 - 0.05	top soil, black, moist
		0.05 - 1.1	brown sandy clay, dry
		1.1 - 1.8	brown sandy clay, moist
		1.8 - 6.1	brown silt
BH102	north of the property, north side of existing north warehouse	0 - 0.3	top soil, black, moist
		0.3 - 1.8	brown sandy clay, dry
		1.8 - 2.4	sandy gravely clay, moist
		2.4 - 4	sandy clay, wet
		4 - 4.6	brown silt
BH103	north of the property, south of existing south warehouse	0 - 0.3	top soil, black, moist
		0.3 - 1.5	brown sandy clay, dry
		1.5 - 1.8	sandy gravely clay, moist
		1.8 - 4.6	brown silt
BH104	northwest of the property	0 - 0.4	top soil, black, moist
		0.4 - 3.7	brown sandy clay, dry
		3.7 - 4.3	brown sandy clay, moist
		4.3 - 4.5	brown silt
BH105	southwest of the property	0 - 0.4	top soil, black, moist
		0.4 - 3.7	brown sandy clay, dry
		3.7 - 4.6	brown sandy clay, moist, medium plastic
BH106	middle of the property	0 - 0.4	top soil, black, moist
		0.4 - 0.8	brown sandy clay, wet, medium plastic
		0.8 - 1.5	brown sandy clay, moist, medium plastic
		1.5 - 4.5	brown silt
BH107	southeast of the property	0 - 0.4	top soil, black, moist
		0.5 - 5.8	brown sandy clay, moist, low plastic
		5.8 - 7.6	brown silt
BH108	northeast of the property	0 - 0.3	top soil, dry
		0.3 - 1.8	brown clayey sand, dry
		1.8 - 3.5	brown sand, moist
		3.5 - 4.5	brown sandy clay mixed with gravel, moist

Table 3 – Soil Maximum Concentration Data

Certification Date: October 27th, 2023 and December 14th, 2023, for soil testing

Tested Parameter	Units	Table 3 Soil	Maximum Sample Concentration	Sample ID
Metals				
Antimony	µg/g	7.5	<0.5	All
Arsenic	µg/g	18	4.1	SS304
Barium	µg/g	390	87	SS504
Beryllium	µg/g	5	0.5	SS303
Boron	µg/g	120	9.2	SS201
Cadmium	µg/g	1.2	0.55	BH404
Chromium (Total)	µg/g	160	16.2	BH304
Cobalt	µg/g	22	5.67	BH304
Copper	µg/g	180	19.6	SS201
Lead	µg/g	120	69	SS304
Mercury	µg/g	1.8	0.12	SS301
Molybdenum	µg/g	6.9	0.8	SS202, and SS503
Nickel	µg/g	130	13.1	SS504
Selenium	µg/g	2.4	1.1	SS501
Silver	µg/g	25	0.6	SS503
Thallium	µg/g	1	<0.3	All
Uranium	µg/g	23	0.6	SS301
Vanadium	µg/g	86	33.7	SS504
Zinc	µg/g	340	163	SS404
Tested Parameter	Units	Table 3 Soil	Maximum Sample Concentration	Sample ID
PHC				
F1 (C6-C10) - Less BTEX	µg/g	65	<2	All
F2 (C16-C34)	µg/g	150	19	SS403
F3 (C16-C34)	µg/g	1300	136	SS403
F4 (C34-C50)	µg/g	5400	236	SS304

Tested Parameter	Units	Table 3 Soil	Maximum Sample Concentration	Sample ID
Volatile Organic Compounds				
Benzene	µg/g	0.17	<0.02	All
Ethylbenzene	µg/g	15	<0.02	All
Toluene	µg/g	6	0.14	SS501
Total Xylenes	µg/g	25	<0.02	All
1,1,1,2-Tetrachloroethane	µg/g	0.05	<0.02	All
1,1,1-Trichloroethane	µg/g	3.4	<0.02	All
1,1,2,2-Tetrachloroethane	µg/g	0.05	<0.02	All
1,1,2-Trichloroethane	µg/g	0.05	<0.02	All
1,1-Dichloroethane	µg/g	11	<0.02	All
1,1-Dichloroethylene	µg/g	0.05	<0.02	All
1,2-Dibromoethane	µg/g	0.05	<0.05	All
1,2-Dichlorobenzene	µg/g	4.3	<0.02	All
1,2-Dichloroethane	µg/g	0.05	<0.02	All
1,2-Dichloropropane	µg/g	0.085	<0.02	All
1,3-Dichlorobenzene	µg/g	6	<0.02	All
1,4-Dichlorobenzene	µg/g	0.097	<0.02	All
Acetone	µg/g	28	<0.05	All
Bromodichloromethane	µg/g	13	<0.02	All
Bromoform	µg/g	0.26	<0.02	All
Bromomethane	µg/g	0.05	<0.02	All
Carbon tetrachloride	µg/g	0.12	<0.02	All
Chlorobenzene	µg/g	2.7	<0.02	All
Chloroform	µg/g	0.18	<0.02	All
cis - + trans-1,3-Dichloropropene	µg/g	0.083	<0.02	All
cis-1,2-Dichloroethylene	µg/g	30	<0.02	All
Dibromochloromethane	µg/g	9.4	<0.05	All
Dichlorodifluoromethane	µg/g	25	<0.02	All
Dichloromethane	µg/g	0.96	<0.03	All
Methyl ethyl ketone	µg/g	44	<0.2	All
Methyl isobutyl ketone (MIBK)	µg/g	4.3	<0.08	All
Methyl tert-butyl ether (MTBE)	µg/g	1.4	<0.05	All
n-Hexane	µg/g	34	<0.03	All
Styrene	µg/g	2.2	<0.02	All

Tetrachloroethylene	µg/g	2.3	<0.02	All
Trans-1,2-dichloroethylene	µg/g	0.75	<0.02	All
Trichloroethylene	µg/g	0.52	<0.02	All
Trichlorofluoromethane	µg/g	5.8	<0.02	All
Vinyl chloride	µg/g	0.022	<0.02	All
Tested Parameter	Units	Table 3 Soil	Maximum Sample Concentration	Sample ID
OC Pesticides				
Aldrin		0.05	<0.01	All
DDD (Total)		3.3	<0.01	All
DDE (Total)		0.33	0.02	SS602
DDT (Total)		1.4	<0.01	All
Dieldrin		0.05	<0.01	All
Endosulfan I + II		0.04	<0.01	All
Endrin		0.04	<0.01	All
Heptachlor		0.15	<0.01	All
Heptachlor epoxide		0.05	<0.01	All
Hexachlorobenzene		0.52	<0.01	All
Hexachlorobutadiene		0.014	<0.01	All
Hexachloroethane		0.07	<0.01	All
Methoxychlor		0.13	<0.01	All
α + γ -Chlordane		0.05	<0.01	All
γ-BHC (Lindane)		0.063	<0.01	All
Tested Parameter	Units	Table 3 Soil	Maximum Sample Concentration	Sample ID
PCBs				
Total PCBs		0.35	<0.02	All

APPENDIX II – SAMPLING AND ANALYSIS PLAN

SAMPLING AND ANALYSIS PLAN
ENVIRONMENTAL SITE ASSESSMENT
PHASE II REPORT

OBJECTIVES

The purpose of the sampling and analysis plan is to ensure that all APECs has been considered, and an adequate sampling program to reflect all the possible Contaminates of Concern within the ESA Phase II property.

AREA OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)

After reviewing the relevant information, the APEC was considered as the entire property, with the onsite PCA's as follows:

PCA#28 Gasoline and Associated Products Storage in Fixed Tanks
PCA#27 Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles.
PCA#40 Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents), Manufacturing, Processing, Bulk-Storage and Large-Scale Applications.

CONTAMINATES OF CONCERN (COC)

From the above determined APEC, the following COCs were identified for soil parameters:

1. Petroleum hydrocarbons (PHC F1 – F4)
2. Volatile organic compounds (VOCs including BTEX)
3. Metals (soil metals)
4. OC Pesticides (OCPs)
5. PCBs

STANDARD OPERATING PROCEDURES (SOP)

The following SOP's may be reviewed as part of the Appendix I, Sampling and Analysis Plan:

- SOP – ENV001.2, Trailer Mounted Solid Stem Auger Borehole Drilling
- SOP – ENV002.1, Excavating with Machinery
- SOP – ENV003.1, Soil Sampling
- SOP – ENV004.1, Field Screening Measurements & Calibration Procedures
- SOP – ENV005.1, Monitoring Well Installation
- SOP – ENV006.1, Monitoring Well Development
- SOP – ENV007.1, Field Measurement of Water Quality Indicators & Calibration Procedures

FIELD QUALITY ASSURANCE (QA)

The following field quality assurance program is used to assure that the sampling procedure is appropriately designed and that samples tested are representative of the site conditions:

Equipment Calibration:
All field screening instruments are calibrated prior to usage at site by equipment supplier. Additional calibration was not conducted between field samples. All instruments are cleaned between each use, especially between each borehole.

Sample Preservation:
Soil samples shall be collected into pre-cleaned, appropriately preserved laboratory supplied containers, and placed on ice in insulated coolers for storage and transport. Where laboratory supplied containers are not used, alternative containers must be approved by laboratory prior to use for the intended testing media and tested contaminate. Soil preservation requirements are handled by the laboratory, with preservatives within laboratory-supplied containers. A summary of preservatives used in each project shall be found below in the Laboratory Program section.

Sample Documentation:
All samples will be assigned a unique identification number, which is to be recorded in field sampling notes along with the date, time, project number, company name, location and requested analysis. All samples shall be handled and transported following chain of custody protocols and analyzed within laboratory method holding time requirements.

FIELD QUALITY CONTROL (QC)

A QC measure was conducted internally by the laboratory, where 1 in 20 random duplicates were generated.

SAMPLING PROGRAM

Soil is planned to be sampled at the residential dwelling on the north central part of Site (SS201 through SS203, and SS301 through SS305), at the large historic wooden barn (SS401 through SS404, and SS501 through SS504), and one on each end of site, at the agricultural areas (SS601 and SS602). The second round of confirmational sampling will be conducted at BH201, BH301, BH304 and BH404.

All soil samples should be placed in laboratory supplied containers with appropriate stabilizers. Sample ID, conditions, and other factors shall be recorded under chain of custody.

LABORATORY PROGRAM

Project Laboratory: Testmark Laboratories Ltd., Mississauga Office

Accreditation: CALA to the standards of ISO 17025 – *General Requirements for the Competence of Testing and Calibration Laboratories* and licensed by the Ministry of Environment, Conservation and Parks.
Analytical Methods: The laboratory will use the methods specified in "Analytical Protocol", otherwise known as the *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*, Produced by Laboratory Services Branch, Ministry of the Environment, dated March 9, 2004, amended as of July 1, 2011.

Sample Containers and Preservations: Please see the illustrated Sampling Container guide from Testmark Laboratory.

SUBCONTRACTORS AND OTHER CONTACTORS

- Laboratory analysis: Testmark Laboratories Ltd., Mississauga Office

APPENDIX III – FINALIZED BOREHOLE FIELD LOGS

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GROUNDWATER MONITORING Well BH101

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641617.133 m E, 4875221.249 m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 336.888 m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 07/10/2023	**TOTAL DEPTH** 6.1 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
0		PEAT	Top soil, black, moist			336.888
0.5		USCS: CL	Brown sandy clay, dry	Bearing capacity tested at 1.5m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 1.5m deep		336.5
1						336
1.5		USCS:CL	Brown sandy clay, moist			335.5
2		USCS:ML	Brown silt	Bearing capacity tested at 3.0m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 3.0m deep		335
2.5						334.5
3						334
3.5						333.5
4						333
4.5						332.5
5						332
5.5						331.5
6						331
			Termination Depth at: 6.1 m			330.5

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GROUNDWATER MONITORING Well BH102

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641640.572 m E, 4875247.159 m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 337.559 m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 06/06/2023	**TOTAL DEPTH** 4.6 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
0.2		PEAT	Top soil, black, moist			337.4
0.4		USCS: CL	Brown sandy clay, dry			337.2
0.6						337
0.8				Bearing capacity tested at 1.5m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 1.5m deep		336.8
1						336.6
1.2						336.4
1.4						336.2
1.6						336
1.8		USCS:GC	Till, moist			335.8
2						335.6
2.2						335.4
2.4		USCS:CL	Sandy clay, wet	Bearing capacity tested at 3.0m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 3.0m deep		335.2
2.6						335
2.8						334.8
3						334.6
3.2						334.4
3.4						334.2
3.6						334
3.8						333.8
4		USCS:ML	Brown silt			333.6
4.2						333.4
4.4						333.2
4.6						333
4.8			Termination Depth at: 4.6 m			332.8

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GROUNDWATER MONITORING Well BH103

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641652.062 m E, 4875173.245 m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 334.476 m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 07/07/2023	**TOTAL DEPTH** 4.6 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
0.2		PEAT	Top soil, black, moist			334
0.4		USCS: CL	Brown sandy clay, dry			333.8
0.6						333.6
0.8				Bearing capacity tested at 1.5m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 1.5m deep		333.4
1						333.2
1.2						333
1.4						332.8
1.6		USCS:CL	Till, moist			332.6
1.8		USCS:ML	Brown silt			332.4
2						332.2
2.2						332
2.4				Bearing capacity tested at 3.0m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 3.0m deep		331.8
2.6						331.6
2.8						331.4
3						331.2
3.2						331
3.4						330.8
3.6						330.6
3.8						330.4
4						330.2
4.2						330
4.4						329.8
4.6						329.6
4.8			Termination Depth at: 4.6 m			329.4

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GROUNDWATER MONITORING Well BH104

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641513.50m E, 4875068.359m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 334.670 m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 05/18/2023	**TOTAL DEPTH** 4.5 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
0		PEAT	Top soil, black, moist			334.6
0.2						334.4
0.4		USCS: CL	Brown sandy clay, dry			334.2
0.6						334
0.8						333.8
1						333.6
1.2						333.4
1.4				DCP test performed at 1.5m		333.2
1.6						333
1.8						332.8
2						332.6
2.2						332.4
2.4						332.2
2.6						332
2.8						331.8
3				DCP test performed at 3.0m		331.6
3.2						331.4
3.4						331.2
3.6						331
3.8		USCS:CL	Brown sandy clay, moist			330.8
4						330.6
4.2						330.4
4.4		USCS:ML	Brown silt			330.2
4.6			Termination Depth at: 4.5 m			330

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GROUNDWATER MONITORING Well BH105

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641435.399m E, 4874952.450 m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 329.933m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 05/25/2023	**TOTAL DEPTH** 4.5 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
0.2		PEAT	Top soil, black, moist			329.8
0.4		USCS: CL	Brown sandy clay, dry			329.6
0.6						329.4
0.8						329.2
1						329
1.2						328.8
1.4				DCP test performed at 1.5m		328.6
1.6						328.4
1.8						328.2
2						328
2.2						327.8
2.4				Bearing capacity tested at3.0m deep showing 700kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 3.0m deep		327.6
2.6						327.4
2.8						327.2
3						327
3.2						326.8
3.4						326.6
3.6						326.4
3.8		USCS:CL	Brown sandy clay, moist, medium plastic			326.2
4						326
4.2						325.8
4.4						325.6
4.6			Termination Depth at: 4.5 m			325.4

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GROUNDWATER MONITORING Well BH106

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641754.682m E, 641754.682m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 336.035m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 05/24/2023	**TOTAL DEPTH** 4.5 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
0		PEAT	Top soil, black, moist			336
0.2						335.8
0.4		USCS: CL	Brown sandy clay, moist, medium plastic			335.6
0.6						335.4
0.8		USCS:CL	Brown sandy clay, wet, medium plastic	Bearing capacity tested at 1.5m deep showing 700kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 1.5m deep		335.2
1						335
1.2						334.8
1.4						334.6
1.6		USCS:ML	Brown silt			334.4
1.8						334.2
2						334
2.2						333.8
2.4				Bearing capacity tested at 3.0m deep showing 700kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 130kPa resistance at 3.0m deep		333.6
2.6						333.4
2.8						333.2
3						333
3.2						332.8
3.4						332.6
3.6						332.4
3.8						332.2
4				Note: Started drilling at site in the afternoon due to morning 5mm rain. Soil surface was very moist due to the rain.		332
4.2						331.8
4.4						331.6
4.6			Termination Depth at: 4.5 m			331.4

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GROUNDWATER MONITORING Well BH107

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641944.829m E, 4875218.014m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 332.946m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 05/30/2023	**TOTAL DEPTH** 7.6 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
		PEAT	Top soil, brown, moist			
0.5		USCS: CL	Brown sandy clay, moist, low plastic	Bearing capacity tested at 1.5m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 240kPa resistance at 1.5m deep		332.5
1						332
1.5						331.5
2				Bearing capacity tested at 3.0m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 240kPa resistance at 3.0m deep		331
2.5						330.5
3						330
3.5						329.5
4						329
4.5						328.5
5						328
5.5						327.5
6		USCS:ML	Brown silt			327
6.5						326.5
7						326
7.5						325.5
			Termination Depth at: 7.6 m			325

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GROUNDWATER MONITORING Well BH108

PROJECT NUMBER	**DRILLING COMPANY** King EPCM	**COORDINATES** 641986.471m E, 4875430.069m N
PROJECT NAME 123 Durham Regional Hwy 47	**DRILLER** Chris, Leng	**COORD SYS** UTM-17
CLIENT	**DRILL RIG** Little Beaver	**SURFACE ELEVATION** 339.342m
ADDRESS 123 Hwy 47, Stouffville	**DRILLING METHOD** Solid Auger	**WELL TOC** None
DRILLING DATE 06/05/2023	**TOTAL DEPTH** 4.5 m	**LOGGED BY** Chris Chen
LICENCE NO. C-7691	**DIAMETER** 2.5 in	**CHECKED BY** Tony Wang, P Eng, Principal Engineer

COMPLETION	**CASING** 2 inch	**SCREEN** 2 inch

COMMENTS

Depth (m)	Graphic Log	USCS SAMPLES	Material Description	Additional Observations	Well Installation	Elevation (m)
0.2		PEAT	Top soil, dry			339.2
0.4		USCS: CL	Brown clayey sand, dry			339
0.6						338.8
0.8						338.6
1				Bearing capacity tested at 1.5m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 240kPa resistance at 1.5m deep		338.4
1.2						338.2
1.4						338
1.6						337.8
1.8		USCS:ML	Brown sand, moist			337.6
2						337.4
2.2						337.2
2.4				Bearing capacity tested at 3.0m deep showing 1400kPa resistance with less than 0.5cm displacement Shear vane tested at minimum 240kPa resistance at 3.0m deep		337
2.6						336.8
2.8						336.6
3						336.4
3.2						336.2
3.4						336
3.6		USCS:GC	Brown clayey sand mixed with gravel, moist			335.8
3.8						335.6
4						335.4
4.2						335.2
4.4						335
4.6			Termination Depth at: 4.5m Auger refusal			334.8

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APPENDIX IV – CERTIFICATES OF ANALYSIS

TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Client:	Tony Wang	Work Order Number:	516397
Company:	KING EPCM	PO #:	
Address:	3780 14th Avenue	Regulation:	O.Reg 153 Table 3 Soil Residential/Parkland/Inst. (Fine/Medium)
	Markham, ON, L3R 4B7	Project #:	123 Durham HWY 47 Uxbridge
Phone:	(647) 459-5647	DWS #:	
Email:	twang@kingepcm.com	Sampled By:	Leng
Date Order Received:	10/19/2023	Analysis Started:	10/20/2023
Arrival Temperature:	22.3 C	Analysis Completed:	10/27/2023

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
SS201	1942853	Soil	None	SAMPLE CONTAINED RESULT EXCEEDENCES.	10/17/2023	10:30 AM
SS202	1942854	Soil	None		10/17/2023	10:45 AM
SS203	1942855	Soil	None		10/17/2023	11:00 AM
SS301	1942856	Soil	None	SAMPLE CONTAINED RESULT EXCEEDENCES.	10/17/2023	11:15 AM
SS302	1942857	Soil	None		10/17/2023	11:30 AM
SS303	1942858	Soil	None		10/17/2023	11:45 AM
SS304	1942859	Soil	None	SAMPLE CONTAINED RESULT EXCEEDENCES.	10/17/2023	12:00 PM
SS305	1942860	Soil	None		10/17/2023	12:15 PM
SS401	1942861	Soil	None		10/17/2023	12:30 PM
SS402	1942862	Soil	None		10/17/2023	12:45 PM
SS403	1942870	Soil	None		10/18/2023	10:15 AM
SS404	1942871	Soil	None	SAMPLE CONTAINED RESULT EXCEEDENCES.	10/18/2023	10:30 AM
SS501	1942872	Soil	None		10/18/2023	10:45 AM
SS502	1942873	Soil	None		10/18/2023	11:00 AM
SS503	1942874	Soil	None		10/18/2023	11:15 AM
SS504	1942875	Soil	None		10/18/2023	11:30 AM

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
SS505	1942876	Soil	None		10/18/2023	11:45 AM
SS506	1942877	Soil	None		10/18/2023	12:00 PM
SS601	1942878	Soil	None		10/18/2023	12:15 PM
SS602	1942879	Soil	None		10/18/2023	12:30 PM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
BTEX/F1 Soil (A127)	Mississauga	Determination of PHC BTEX/F1 in Soil - Tier 1 CCME	Modified from CWS PHC Tier I CCME
ICPMS Soil (A13)	Mississauga	Determination of Metals in Soil by ICP/MS and BCSALM Method	Modified from SW846-6020A
Moisture (A99)	Mississauga	Determination of Percent Moisture	In-House
OCPs Soil (A19)	Garson	Determination of Organochlorine Pesticides in Soil by GC/ECD	Modified from SW846-8081B
PCBs Soil (T19)	Mississauga	Determination of Polychlorinated Biphenyls in Soil by GC/ECD	Modified from SW846-8082B
PHC F2-F4 Soil (A59)	Mississauga	Determination of PHC (F2-F4) in Soil - Tier 1 CCME by GC/FID	Modified from CWS PHC Tier I CCME
VOC Soil (Methanol) (A14)	Mississauga	Determination of Volatile Organic Compounds in Soil P&T/GC/MS	Modified from SW846-8260B

REPORT COMMENTS

SAMPLE-SPECIFIC NOTES:
Sample 1942870: For the F1/BTEX analysis, surrogate recovery below acceptable limits due to sample chemistry.

This report has been approved by:

Marc Creighton
Laboratory Director

WORK ORDER RESULTS

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS201		SS202		SS203		SS301			
Sample Date	10/17/2023 10:30 AM		10/17/2023 10:45 AM		10/17/2023 11:00 AM		10/17/2023 11:15 AM			
Lab ID	1942853		1942854		1942855		1942856			
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
% Moisture	12.1	0.1	8.8	0.1	9.6	0.1	18.1	0.1	%	~

Sample Description	SS302		SS303		SS304		SS305			
Sample Date	10/17/2023 11:30 AM		10/17/2023 11:45 AM		10/17/2023 12:00 PM		10/17/2023 12:15 PM			
Lab ID	1942857		1942858		1942859		1942860			
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
% Moisture	11.7	0.1	14.3	0.1	7.5	0.1	8.7	0.1	%	~

Sample Description	SS401		SS402		SS403		SS404			
Sample Date	10/17/2023 12:30 PM		10/17/2023 12:45 PM		10/18/2023 10:15 AM		10/18/2023 10:30 AM			
Lab ID	1942861		1942862		1942870		1942871			
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
% Moisture	3.3	0.1	8.5	0.1	5.2	0.1	6.3	0.1	%	~

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Work Order Number: 516397

Sample Description	SS501		SS502		SS503		SS504			
Sample Date	10/18/2023 10:45 AM		10/18/2023 11:00 AM		10/18/2023 11:15 AM		10/18/2023 11:30 AM			
Lab ID	1942872		1942873		1942874		1942875			
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
% Moisture	4.6	0.1	3.1	0.1	2.0	0.1	6.7	0.1	%	~

Sample Description	SS505		SS506		SS601		SS602			
Sample Date	10/18/2023 11:45 AM		10/18/2023 12:00 PM		10/18/2023 12:15 PM		10/18/2023 12:30 PM			
Lab ID	1942876		1942877		1942878		1942879			
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
% Moisture	13.6	0.1	4.2	0.1	17.4	0.1	17.0	0.1	%	~

Sample Description	SS201		SS202		SS203		SS301			
Sample Date	10/17/2023 10:30 AM		10/17/2023 10:45 AM		10/17/2023 11:00 AM		10/17/2023 11:15 AM			
Lab ID	1942853		1942854		1942855		1942856			
Metals	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Antimony	<0.5 [<0.5]	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	7.5
Arsenic	3.5 [3.6]	0.5	3.6	0.5	2.8	0.5	3.4	0.5	µg/g	18
Barium	80 [80]	5	65	5	55.2	0.5	87	5	µg/g	390

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KING EPCM

Work Order Number: 516397

Sample Description	SS201		SS202		SS203		SS301			
Sample Date	10/17/2023 10:30 AM		10/17/2023 10:45 AM		10/17/2023 11:00 AM		10/17/2023 11:15 AM			
Lab ID	1942853		1942854		1942855		1942856			
Metals	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Beryllium	<0.5 [0.5]	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	5
Boron	9.2 [9.7]	0.5	7.4	0.5	4.5	0.5	7.1	0.5	µg/g	~
Cadmium	<0.05 [<0.05]	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.2
Chromium	14.9 [14.9]	0.5	13.3	0.5	12.3	0.5	13.1	0.5	µg/g	160
Cobalt	4.06 [4.25]	0.05	4.90	0.05	5.42	0.05	4.62	0.05	µg/g	22
Copper	19.6 [19.7]	0.5	9.9	0.5	10.6	0.5	18.3	0.5	µg/g	180
Lead	123 [121]	5	103	5	45.9	0.5	136	5	µg/g	120
Mercury	0.07 [0.10]	0.05	0.05	0.05	0.08	0.05	0.12	0.05	µg/g	1.8
Molybdenum	0.6 [0.6]	0.5	0.8	0.5	0.5	0.5	0.6	0.5	µg/g	6.9
Nickel	11.4 [11.8]	0.5	9.5	0.5	11.7	0.5	9.1	0.5	µg/g	130
Selenium	<0.5 [1.2]	0.5	0.9	0.5	<0.5	0.5	<0.5	0.5	µg/g	2.4
Silver	<0.5 [<0.5]	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	25
Thallium	<0.3 [<0.3]	0.3	<0.3	0.3	<0.3	0.3	<0.3	0.3	µg/g	1
Uranium	<0.5 [<0.5]	0.5	<0.5	0.5	<0.5	0.5	0.6	0.5	µg/g	23
Vanadium	18.6 [18.5]	0.5	25.8	0.5	24.9	0.5	21.7	0.5	µg/g	86
Zinc	236.0 [230.0]	0.5	149.0	0.5	51.1	0.5	266.0	0.5	µg/g	340

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Work Order Number: 516397

Sample Description	SS302		SS303		SS304		SS305			
Sample Date	10/17/2023 11:30 AM		10/17/2023 11:45 AM		10/17/2023 12:00 PM		10/17/2023 12:15 PM			
Lab ID	1942857		1942858		1942859		1942860			
Metals	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Antimony	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	7.5
Arsenic	3.0	0.5	3.1	0.5	4.1	0.5	2.9	0.5	µg/g	18
Barium	47.9	0.5	73	5	76	5	59.4	0.5	µg/g	390
Beryllium	<0.5	0.5	0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	5
Boron	3.5	0.5	5.2	0.5	4.9	0.5	4.0	0.5	µg/g	~
Cadmium	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.2
Chromium	11.5	0.5	13.8	0.5	14.4	0.5	12.0	0.5	µg/g	160
Cobalt	3.62	0.05	4.66	0.05	4.81	0.05	5.27	0.05	µg/g	22
Copper	8.0	0.5	13.0	0.5	12.4	0.5	10.3	0.5	µg/g	180
Lead	47.1	0.5	84	5	292	5	56.2	0.5	µg/g	120
Mercury	0.07	0.05	0.08	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.8
Molybdenum	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	6.9
Nickel	6.9	0.5	9.8	0.5	11.0	0.5	12.3	0.5	µg/g	130
Selenium	<0.5	0.5	<0.5	0.5	0.5	0.5	<0.5	0.5	µg/g	2.4
Silver	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	25
Thallium	<0.3	0.3	<0.3	0.3	<0.3	0.3	<0.3	0.3	µg/g	1
Uranium	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	23
Vanadium	22.1	0.5	26.0	0.5	25.1	0.5	23.6	0.5	µg/g	86
Zinc	69.2	0.5	122.0	0.5	1320	5	73.9	0.5	µg/g	340

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Work Order Number: 516397

Sample Description	SS401		SS402		SS403		SS404			
Sample Date	10/17/2023 12:30 PM		10/17/2023 12:45 PM		10/18/2023 10:15 AM		10/18/2023 10:30 AM			
Lab ID	1942861		1942862		1942870		1942871			
Metals	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Antimony	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	7.5
Arsenic	1.0	0.5	1.4	0.5	2.8	0.5	2.9	0.5	µg/g	18
Barium	11.9	0.5	29.2	0.5	56.9	0.5	57.2	0.5	µg/g	390
Beryllium	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	5
Boron	1.9	0.5	4.1	0.5	5.2	0.5	4.4	0.5	µg/g	~
Cadmium	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.31	0.05	µg/g	1.2
Chromium	4.4	0.5	7.1	0.5	13.3	0.5	11.8	0.5	µg/g	160
Cobalt	1.69	0.05	2.54	0.05	4.73	0.05	4.21	0.05	µg/g	22
Copper	3.1	0.5	7.0	0.5	13.0	0.5	14.2	0.5	µg/g	180
Lead	1.9	0.5	14.1	0.5	24.6	0.5	49.8	0.5	µg/g	120
Mercury	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.8
Molybdenum	<0.5	0.5	<0.5	0.5	0.6	0.5	0.5	0.5	µg/g	6.9
Nickel	4.9	0.5	6.8	0.5	10.5	0.5	9.6	0.5	µg/g	130
Selenium	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	2.4
Silver	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	25
Thallium	<0.3	0.3	<0.3	0.3	<0.3	0.3	<0.3	0.3	µg/g	1
Uranium	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	23
Vanadium	12.8	0.5	15.8	0.5	24.1	0.5	21.1	0.5	µg/g	86
Zinc	11.9	0.5	60.3	0.5	147.0	0.5	570	5	µg/g	340

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CERTIFICATE OF ANALYSIS

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Work Order Number: 516397

Sample Description	SS501		SS502		SS503		SS504			
Sample Date	10/18/2023 10:45 AM		10/18/2023 11:00 AM		10/18/2023 11:15 AM		10/18/2023 11:30 AM			
Lab ID	1942872		1942873		1942874		1942875			
Metals	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Antimony	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	7.5
Arsenic	3.3	0.5	2.1	0.5	2.7	0.5	3.3	0.5	µg/g	18
Barium	57.9	0.5	39.4	0.5	37.5	0.5	43.8	0.5	µg/g	390
Beryllium	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	5
Boron	3.7	0.5	3.1	0.5	5.9	0.5	3.7	0.5	µg/g	~
Cadmium	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.2
Chromium	12.7	0.5	8.8	0.5	10.4	0.5	12.7	0.5	µg/g	160
Cobalt	4.37	0.05	3.29	0.05	3.17	0.05	4.08	0.05	µg/g	22
Copper	18.0	0.5	8.3	0.5	17.0	0.5	16.7	0.5	µg/g	180
Lead	20.9	0.5	6.1	0.5	24.4	0.5	21.6	0.5	µg/g	120
Mercury	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.07	0.05	µg/g	1.8
Molybdenum	<0.5	0.5	<0.5	0.5	0.8	0.5	0.6	0.5	µg/g	6.9
Nickel	9.8	0.5	8.1	0.5	8.3	0.5	13.1	0.5	µg/g	130
Selenium	1.1	0.5	<0.5	0.5	0.6	0.5	0.8	0.5	µg/g	2.4
Silver	<0.5	0.5	<0.5	0.5	0.6	0.5	<0.5	0.5	µg/g	25
Thallium	<0.3	0.3	<0.3	0.3	<0.3	0.3	<0.3	0.3	µg/g	1
Uranium	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	23
Vanadium	21.4	0.5	16.8	0.5	18.8	0.5	33.7	0.5	µg/g	86
Zinc	81.6	0.5	27.5	0.5	91.0	0.5	79.2	0.5	µg/g	340

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Work Order Number: 516397

Sample Description	SS505		SS506			
Sample Date	10/18/2023 11:45 AM		10/18/2023 12:00 PM			
Lab ID	1942876		1942877			
Metals	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Antimony	<0.5	0.5	<0.5	0.5	µg/g	7.5
Arsenic	2.4	0.5	2.9	0.5	µg/g	18
Barium	36.2	0.5	44.9	0.5	µg/g	390
Beryllium	<0.5	0.5	<0.5	0.5	µg/g	5
Boron	4.4	0.5	3.7	0.5	µg/g	~
Cadmium	<0.05	0.05	<0.05	0.05	µg/g	1.2
Chromium	9.2	0.5	11.3	0.5	µg/g	160
Cobalt	3.20	0.05	3.88	0.05	µg/g	22
Copper	9.5	0.5	12.8	0.5	µg/g	180
Lead	15.2	0.5	12.7	0.5	µg/g	120
Mercury	<0.05	0.05	0.05	0.05	µg/g	1.8
Molybdenum	<0.5	0.5	<0.5	0.5	µg/g	6.9
Nickel	8.5	0.5	10.9	0.5	µg/g	130
Selenium	<0.5	0.5	<0.5	0.5	µg/g	2.4
Silver	<0.5	0.5	<0.5	0.5	µg/g	25
Thallium	<0.3	0.3	<0.3	0.3	µg/g	1
Uranium	<0.5	0.5	<0.5	0.5	µg/g	23
Vanadium	22.8	0.5	32.8	0.5	µg/g	86
Zinc	164.0	0.5	70.4	0.5	µg/g	340

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Work Order Number: 516397

Sample Description	SS601		SS602			
Sample Date	10/18/2023 12:15 PM		10/18/2023 12:30 PM			
Lab ID	1942878		1942879			
OC Pesticides	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
2,4'-DDD	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
2,4'-DDE	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
2,4'-DDT	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
4,4'-DDD	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
4,4'-DDE	<0.01 [<0.009]	0.01	0.02	0.01	µg/g	~
4,4'-DDT	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
Aldrin	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.05
DDD (Total) (Calc.)	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	3.3
DDE (Total) (Calc.)	<0.01 [<0.009]	0.01	0.02	0.01	µg/g	0.33
DDT (Total) (Calc.)	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	1.4
Decachlorobiphenyl (Surr.)	137 [136]	N/A	139	N/A	% Rec	~
Dieldrin	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.05
Endosulfan I	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
Endosulfan I + II (Calc.)	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.04
Endosulfan II	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
Endosulfan sulfate	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~

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KING EPCM

Work Order Number: 516397

Sample Description	SS601		SS602			
Sample Date	10/18/2023 12:15 PM		10/18/2023 12:30 PM			
Lab ID	1942878		1942879			
OC Pesticides	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Endrin	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.04
Endrin aldehyde	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
Heptachlor	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.15
Heptachlor epoxide	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.05
Hexachlorobenzene	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.52
Hexachlorobutadiene	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.014
Hexachloroethane	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.071
Methoxychlor	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.13
Mirex	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
Oxychlordane	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
ß-BHC	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
α - Chlordane	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
α + γ -Chlordane (Calc.)	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.05
α-BHC	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
γ - Chlordane	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~
γ-BHC (Lindane)	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	0.063

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS601		SS602			
Sample Date	10/18/2023 12:15 PM		10/18/2023 12:30 PM			
Lab ID	1942878		1942879			
OC Pesticides	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
δ-BHC	<0.01 [<0.009]	0.01	<0.01	0.01	µg/g	~

Sample Description	SS601		SS602			
Sample Date	10/18/2023 12:15 PM		10/18/2023 12:30 PM			
Lab ID	1942878		1942879			
PCBs	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Aroclor 1242	<0.02	0.02	<0.02	0.02	µg/g	~
Aroclor 1248	<0.02	0.02	<0.02	0.02	µg/g	~
Aroclor 1254	<0.02	0.02	<0.02	0.02	µg/g	~
Aroclor 1260	<0.02	0.02	<0.02	0.02	µg/g	~
Decachlorobiphenyl (Surr.)	103	N/A	107	N/A	% Rec	~
Total PCBs	<0.02	0.02	<0.02	0.02	µg/g	0.35

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KING EPCM

Work Order Number: 516397

Sample Description	SS201		SS202		SS203		SS301			
Sample Date	10/17/2023 10:30 AM		10/17/2023 10:45 AM		10/17/2023 11:00 AM		10/17/2023 11:15 AM			
Lab ID	1942853		1942854		1942855		1942856			
Petroleum Hydrocarbons (Soil)	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
F1 (C6-C10) - Less BTEX (Calc.)	<2	2	<1	1	<1	1	<2	2	µg/g	65
F1 (C6-C10) Incl. BTEX	<2	2	<1	1	<1	1	<2	2	µg/g	~
F2 (C10-C16)	<10	10	<10	10	<10	10	<10	10	µg/g	150
F3 (C16-C34)	88	10	12	10	<10	10	48	10	µg/g	1300
F4 (C34-C50)	58	10	<10	10	<10	10	25	10	µg/g	5600
Baseline @ C50	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	NA	~
1,4-dichlorobenzene-d4 (Surr.)	100	N/A	102	N/A	101	N/A	103	N/A	% Rec	~
o-Terphenyl (Surr.)	78.6	N/A	70.8	N/A	68.7	N/A	77.9	N/A	% Rec	~
undecane (Surr.)	101	N/A	97.8	N/A	98.3	N/A	97.8	N/A	% Rec	~
1,2-dichlorobenzene-d4 (Surr.)	93.3	N/A	101	N/A	101	N/A	118	N/A	% Rec	~

Sample Description	SS302		SS303		SS304		SS305			
Sample Date	10/17/2023 11:30 AM		10/17/2023 11:45 AM		10/17/2023 12:00 PM		10/17/2023 12:15 PM			
Lab ID	1942857		1942858		1942859		1942860			
Petroleum Hydrocarbons (Soil)	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
F1 (C6-C10) - Less BTEX (Calc.)	<1	1	<2	2	<2	2	<1	1	µg/g	65
F1 (C6-C10) Incl. BTEX	<1	1	<2	2	<2	2	<1	1	µg/g	~
F2 (C10-C16)	<10	10	<10	10	<10	10	<10	10	µg/g	150
F3 (C16-C34)	13	10	32	10	19	10	<10	10	µg/g	1300

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS302		SS303		SS304		SS305			
Sample Date	10/17/2023 11:30 AM		10/17/2023 11:45 AM		10/17/2023 12:00 PM		10/17/2023 12:15 PM			
Lab ID	1942857		1942858		1942859		1942860			
Petroleum Hydrocarbons (Soil)	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
F4 (C34-C50)	<10	10	13	10	<10	10	<10	10	µg/g	5600
Baseline @ C50	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	NA	~
1,4-dichlorobenzene-d4 (Surr.)	104	N/A	103	N/A	102	N/A	102	N/A	% Rec	~
o-Terphenyl (Surr.)	75	N/A	78.5	N/A	62.7	N/A	61.1	N/A	% Rec	~
undecane (Surr.)	97	N/A	95.7	N/A	98.1	N/A	96.4	N/A	% Rec	~
1,2-dichlorobenzene-d4 (Surr.)	108	N/A	95.7	N/A	105	N/A	97.6	N/A	% Rec	~

Sample Description	SS401		SS402		SS403		SS404			
Sample Date	10/17/2023 12:30 PM		10/17/2023 12:45 PM		10/18/2023 10:15 AM		10/18/2023 10:30 AM			
Lab ID	1942861		1942862		1942870		1942871			
Petroleum Hydrocarbons (Soil)	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
F1 (C6-C10) - Less BTEX (Calc.)	<0.9	0.9	<1	1	<1	1	<1	1	µg/g	65
F1 (C6-C10) Incl. BTEX	<0.9	0.9	<1	1	<1	1	<1	1	µg/g	~
F2 (C10-C16)	<10	10	<10	10	<10	10	<10	10	µg/g	150
F3 (C16-C34)	13	10	100	10	130	10	87	10	µg/g	1300
F4 (C34-C50)	<10	10	51	10	236	10	152	10	µg/g	5600
Baseline @ C50	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	NA	~
1,4-dichlorobenzene-d4 (Surr.)	102	N/A	104	N/A	107	N/A	102	N/A	% Rec	~
o-Terphenyl (Surr.)	74.8	N/A	96.5	N/A	64.9	N/A	67.6	N/A	% Rec	~

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Work Order Number: 516397

Sample Description	SS401		SS402		SS403		SS404			
Sample Date	10/17/2023 12:30 PM		10/17/2023 12:45 PM		10/18/2023 10:15 AM		10/18/2023 10:30 AM			
Lab ID	1942861		1942862		1942870		1942871			
Petroleum Hydrocarbons (Soil)	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
undecane (Surr.)	99.7	N/A	79.9	N/A	93.6	N/A	94.9	N/A	% Rec	~
1,2-dichlorobenzene-d4 (Surr.)	107	N/A	108	N/A	31.1	N/A	94	N/A	% Rec	~

Sample Description	SS501		SS502		SS503		SS504			
Sample Date	10/18/2023 10:45 AM		10/18/2023 11:00 AM		10/18/2023 11:15 AM		10/18/2023 11:30 AM			
Lab ID	1942872		1942873		1942874		1942875			
Petroleum Hydrocarbons (Soil)	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
F1 (C6-C10) - Less BTEX (Calc.)	<1	1	<1	1	<0.9	0.9	<1	1	µg/g	65
F1 (C6-C10) Incl. BTEX	<1	1	<1	1	<0.9	0.9	<1	1	µg/g	~
F2 (C10-C16)	<10	10	<10	10	19	10	<10	10	µg/g	150
F3 (C16-C34)	28	10	35	10	136	10	63	10	µg/g	1300
F4 (C34-C50)	23	10	28	10	101	10	52	10	µg/g	5600
Baseline @ C50	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	NA	~
1,4-dichlorobenzene-d4 (Surr.)	103	N/A	101	N/A	101	N/A	105	N/A	% Rec	~
o-Terphenyl (Surr.)	63.2	N/A	70.6	N/A	135	N/A	66.9	N/A	% Rec	~
undecane (Surr.)	98.8	N/A	96.4	N/A	90.8	N/A	96.1	N/A	% Rec	~
1,2-dichlorobenzene-d4 (Surr.)	97.6	N/A	100	N/A	95.8	N/A	110	N/A	% Rec	~

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Work Order Number: 516397

Sample Description	SS505		SS506			
Sample Date	10/18/2023 11:45 AM		10/18/2023 12:00 PM			
Lab ID	1942876		1942877			
Petroleum Hydrocarbons (Soil)	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
F1 (C6-C10) - Less BTEX (Calc.)	<1	1	<1 [<1]	1	µg/g	65
F1 (C6-C10) Incl. BTEX	<1	1	<1 [<1]	1	µg/g	~
F2 (C10-C16)	<10	10	<10	10	µg/g	150
F3 (C16-C34)	116	10	16	10	µg/g	1300
F4 (C34-C50)	58	10	12	10	µg/g	5600
Baseline @ C50	Yes	N/A	Yes	N/A	NA	~
1,4-dichlorobenzene-d4 (Surr.)	104	N/A	102 [103]	N/A	% Rec	~
o-Terphenyl (Surr.)	72.7	N/A	73.5	N/A	% Rec	~
undecane (Surr.)	91.7	N/A	92.8 [94.5]	N/A	% Rec	~
1,2-dichlorobenzene-d4 (Surr.)	105	N/A	103 [110]	N/A	% Rec	~

Sample Description	SS201		SS202		SS203		SS301			
Sample Date	10/17/2023 10:30 AM		10/17/2023 10:45 AM		10/17/2023 11:00 AM		10/17/2023 11:15 AM			
Lab ID	1942853		1942854		1942855		1942856			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Benzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.17
Ethylbenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	15

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Work Order Number: 516397

Sample Description	SS201		SS202		SS203		SS301			
Sample Date	10/17/2023 10:30 AM		10/17/2023 10:45 AM		10/17/2023 11:00 AM		10/17/2023 11:15 AM			
Lab ID	1942853		1942854		1942855		1942856			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Toluene	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.03	0.03	µg/g	6
m+p-Xylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
o-Xylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Total Xylenes (Calc.)	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	25
1,1,1,2-Tetrachloroethane	<0.02	0.02	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,1,1-Trichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	3.4
1,1,2,2-Tetrachloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,1,2-Trichloroethane	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	0.05
1,1-Dichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	11
1,1-Dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,2-Dibromoethane	<0.01	0.01	<0.01	0.01	0.03	0.01	<0.01	0.01	µg/g	0.05
1,2-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	4.3
1,2-Dichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,2-Dichloroethane-d4 (Surr)	94.3	N/A	91.3	N/A	89.9	N/A	84.5	N/A	% Rec	~
1,2-Dichloropropane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.085
1,3-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	6
1,4-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.097
1-Bromo-4-fluorobenzene (Surr.)	125	N/A	130	N/A	132	N/A	127	N/A	% Rec	~
Acetone	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	28
Bromodichloromethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	13
Bromoform	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.26
Bromomethane	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	0.05

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS201		SS202		SS203		SS301			
Sample Date	10/17/2023 10:30 AM		10/17/2023 10:45 AM		10/17/2023 11:00 AM		10/17/2023 11:15 AM			
Lab ID	1942853		1942854		1942855		1942856			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Carbon tetrachloride	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.12
Chlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	2.7
Chloroform	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.18
cis - + trans-1,3-Dichloropropene (Calc.)	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.083
cis-1,2-Dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	30
cis-1,3-Dichloropropene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Dibromochloromethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	9.4
Dichlorodifluoromethane	<0.02	0.02	<0.02	0.02	<0.01	0.01	<0.02	0.02	µg/g	25
Dichloromethane	<0.03	0.03	<0.03	0.03	<0.02	0.02	<0.03	0.03	µg/g	0.96
Methyl ethyl ketone	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	µg/g	44
Methyl isobutyl ketone (MIBK)	<0.06	0.06	<0.07	0.07	<0.06	0.06	<0.07	0.07	µg/g	4.3
Methyl tert-butyl ether (MTBE)	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.4
n-Hexane	<0.02	0.02	<0.03	0.03	<0.02	0.02	<0.03	0.03	µg/g	34
Styrene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	2.2
Tetrachloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	2.3
Toluene-d8 (Surr.)	125	N/A	128	N/A	127	N/A	124	N/A	% Rec	~
Trans-1,2-dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.75
Trans-1,3-dichloropropene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Trichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.52
Trichlorofluoromethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	5.8
Vinyl chloride	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.022

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS302		SS303		SS304		SS305			
Sample Date	10/17/2023 11:30 AM		10/17/2023 11:45 AM		10/17/2023 12:00 PM		10/17/2023 12:15 PM			
Lab ID	1942857		1942858		1942859		1942860			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Benzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.17
Ethylbenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	15
Toluene	<0.03	0.03	<0.02	0.02	<0.02	0.02	<0.01	0.01	µg/g	6
m+p-Xylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
o-Xylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Total Xylenes (Calc.)	<0.02	0.02	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	25
1,1,1,2-Tetrachloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,1,1-Trichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	3.4
1,1,2,2-Tetrachloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,1,2-Trichloroethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	0.05
1,1-Dichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	11
1,1-Dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,2-Dibromoethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.02	0.02	µg/g	0.05
1,2-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	4.3
1,2-Dichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,2-Dichloroethane-d4 (Surr)	90.7	N/A	81.2	N/A	94.8	N/A	84.9	N/A	% Rec	~
1,2-Dichloropropane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.085
1,3-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	6
1,4-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.097
1-Bromo-4-fluorobenzene (Surr.)	117	N/A	121	N/A	126	N/A	126	N/A	% Rec	~
Acetone	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	28
Bromodichloromethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	13

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS302		SS303		SS304		SS305			
Sample Date	10/17/2023 11:30 AM		10/17/2023 11:45 AM		10/17/2023 12:00 PM		10/17/2023 12:15 PM			
Lab ID	1942857		1942858		1942859		1942860			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Bromoform	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.26
Bromomethane	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	0.05
Carbon tetrachloride	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.12
Chlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	2.7
Chloroform	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.18
cis - + trans-1,3-Dichloropropene (Calc.)	0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.083
cis-1,2-Dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	30
cis-1,3-Dichloropropene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Dibromochloromethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	9.4
Dichlorodifluoromethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	25
Dichloromethane	<0.02	0.02	<0.02	0.02	<0.03	0.03	<0.02	0.02	µg/g	0.96
Methyl ethyl ketone	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	µg/g	44
Methyl isobutyl ketone (MIBK)	<0.06	0.06	<0.05	0.05	<0.07	0.07	<0.05	0.05	µg/g	4.3
Methyl tert-butyl ether (MTBE)	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.4
n-Hexane	<0.02	0.02	<0.02	0.02	<0.03	0.03	<0.02	0.02	µg/g	34
Styrene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	2.2
Tetrachloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	2.3
Toluene-d8 (Surr.)	115	N/A	110	N/A	122	N/A	118	N/A	% Rec	~
Trans-1,2-dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.75
Trans-1,3-dichloropropene	<0.02	0.02	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Trichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.52

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS302		SS303		SS304		SS305			
Sample Date	10/17/2023 11:30 AM		10/17/2023 11:45 AM		10/17/2023 12:00 PM		10/17/2023 12:15 PM			
Lab ID	1942857		1942858		1942859		1942860			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Trichlorofluoromethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	5.8
Vinyl chloride	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.022

Sample Description	SS401		SS402		SS403		SS404			
Sample Date	10/17/2023 12:30 PM		10/17/2023 12:45 PM		10/18/2023 10:15 AM		10/18/2023 10:30 AM			
Lab ID	1942861		1942862		1942870		1942871			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Benzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.17
Ethylbenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	15
Toluene	<0.02	0.02	<0.02	0.02	<0.03	0.03	<0.01	0.01	µg/g	6
m+p-Xylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
o-Xylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Total Xylenes (Calc.)	<0.02	0.02	<0.01	0.01	<0.02	0.02	<0.02	0.02	µg/g	25
1,1,1,2-Tetrachloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,1,1-Trichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	3.4
1,1,2,2-Tetrachloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,1,2-Trichloroethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	0.05
1,1-Dichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	11
1,1-Dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS401		SS402		SS403		SS404			
Sample Date	10/17/2023 12:30 PM		10/17/2023 12:45 PM		10/18/2023 10:15 AM		10/18/2023 10:30 AM			
Lab ID	1942861		1942862		1942870		1942871			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
1,2-Dibromoethane	<0.01	0.01	<0.01	0.01	<0.05	0.05	<0.01	0.01	µg/g	0.05
1,2-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	4.3
1,2-Dichloroethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.05
1,2-Dichloroethane-d4 (Surr)	88.5	N/A	91.9	N/A	82.8	N/A	82.8	N/A	% Rec	~
1,2-Dichloropropane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.085
1,3-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	6
1,4-Dichlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.097
1-Bromo-4-fluorobenzene (Surr.)	129	N/A	124	N/A	117	N/A	129	N/A	% Rec	~
Acetone	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	28
Bromodichloromethane	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	13
Bromoform	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.26
Bromomethane	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	0.05
Carbon tetrachloride	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.12
Chlorobenzene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	2.7
Chloroform	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.18
cis - + trans-1,3-Dichloropropene (Calc.)	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.083
cis-1,2-Dichloroethylene	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	30
cis-1,3-Dichloropropene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Dibromochloromethane	<0.01	0.01	<0.01	0.01	<0.05	0.05	<0.01	0.01	µg/g	9.4
Dichlorodifluoromethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	25
Dichloromethane	<0.02	0.02	<0.02	0.02	<0.03	0.03	<0.02	0.02	µg/g	0.96

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS401		SS402		SS403		SS404			
Sample Date	10/17/2023 12:30 PM		10/17/2023 12:45 PM		10/18/2023 10:15 AM		10/18/2023 10:30 AM			
Lab ID	1942861		1942862		1942870		1942871			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Methyl ethyl ketone	<0.1	0.1	<0.09	0.09	<0.1	0.1	<0.1	0.1	µg/g	44
Methyl isobutyl ketone (MIBK)	<0.05	0.05	<0.05	0.05	<0.07	0.07	<0.06	0.06	µg/g	4.3
Methyl tert-butyl ether (MTBE)	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.4
n-Hexane	<0.02	0.02	<0.02	0.02	<0.03	0.03	<0.02	0.02	µg/g	34
Styrene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	µg/g	2.2
Tetrachloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	2.3
Toluene-d8 (Surr.)	126	N/A	117	N/A	114	N/A	129	N/A	% Rec	~
Trans-1,2-dichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.75
Trans-1,3-dichloropropene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	~
Trichloroethylene	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.52
Trichlorofluoromethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	5.8
Vinyl chloride	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	µg/g	0.022

Sample Description	SS501		SS502		SS503		SS504			
Sample Date	10/18/2023 10:45 AM		10/18/2023 11:00 AM		10/18/2023 11:15 AM		10/18/2023 11:30 AM			
Lab ID	1942872		1942873		1942874		1942875			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Benzene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.17
Ethylbenzene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	15

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS501		SS502		SS503		SS504			
Sample Date	10/18/2023 10:45 AM		10/18/2023 11:00 AM		10/18/2023 11:15 AM		10/18/2023 11:30 AM			
Lab ID	1942872		1942873		1942874		1942875			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Toluene	0.14	0.05	<0.009	0.009	<0.05	0.05	<0.009	0.009	µg/g	6
m+p-Xylene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	~
o-Xylene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	~
Total Xylenes (Calc.)	<0.02	0.02	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	25
1,1,1,2-Tetrachloroethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.05
1,1,1-Trichloroethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	3.4
1,1,2,2-Tetrachloroethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.05
1,1,2-Trichloroethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	0.05
1,1-Dichloroethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	11
1,1-Dichloroethylene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.05
1,2-Dibromoethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.05
1,2-Dichlorobenzene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	4.3
1,2-Dichloroethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.05
1,2-Dichloroethane-d4 (Surr)	81.7	N/A	84	N/A	84.1	N/A	70.1	N/A	% Rec	~
1,2-Dichloropropane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.085
1,3-Dichlorobenzene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	6
1,4-Dichlorobenzene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.097
1-Bromo-4-fluorobenzene (Surr.)	125	N/A	128	N/A	119	N/A	124	N/A	% Rec	~
Acetone	<0.5	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	28
Bromodichloromethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	13
Bromoform	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.26
Bromomethane	<0.02	0.02	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	0.05

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS501		SS502		SS503		SS504			
Sample Date	10/18/2023 10:45 AM		10/18/2023 11:00 AM		10/18/2023 11:15 AM		10/18/2023 11:30 AM			
Lab ID	1942872		1942873		1942874		1942875			
Volatile Organic Compounds	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Carbon tetrachloride	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.12
Chlorobenzene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	2.7
Chloroform	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.18
cis - + trans-1,3-Dichloropropene (Calc.)	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.083
cis-1,2-Dichloroethylene	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	30
cis-1,3-Dichloropropene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	~
Dibromochloromethane	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	9.4
Dichlorodifluoromethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	25
Dichloromethane	<0.02	0.02	<0.02	0.02	<0.03	0.03	<0.02	0.02	µg/g	0.96
Methyl ethyl ketone	<0.1	0.1	<0.09	0.09	<0.2	0.2	<0.08	0.08	µg/g	44
Methyl isobutyl ketone (MIBK)	<0.06	0.06	<0.05	0.05	<0.08	0.08	<0.05	0.05	µg/g	4.3
Methyl tert-butyl ether (MTBE)	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.4
n-Hexane	<0.02	0.02	<0.02	0.02	<0.03	0.03	<0.02	0.02	µg/g	34
Styrene	<0.02	0.02	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	2.2
Tetrachloroethylene	<0.01	0.01	0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	2.3
Toluene-d8 (Surr.)	131	N/A	128	N/A	133	N/A	121	N/A	% Rec	~
Trans-1,2-dichloroethylene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.75
Trans-1,3-dichloropropene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	~
Trichloroethylene	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.52
Trichlorofluoromethane	<0.01	0.01	<0.01	0.01	<0.02	0.02	<0.01	0.01	µg/g	5.8
Vinyl chloride	<0.01	0.01	<0.009	0.009	<0.02	0.02	<0.009	0.009	µg/g	0.022

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Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS505		SS506			
Sample Date	10/18/2023 11:45 AM		10/18/2023 12:00 PM			
Lab ID	1942876		1942877			
Volatile Organic Compounds	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Benzene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.17
Ethylbenzene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	15
Toluene	<0.02	0.02	<0.007 [<0.007]	0.007	µg/g	6
m+p-Xylene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	~
o-Xylene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	~
Total Xylenes (Calc.)	<0.01	0.01	<0.01 [<0.01]	0.01	µg/g	25
1,1,1,2-Tetrachloroethane	<0.008	0.008	<0.007 [<0.01]	0.007	µg/g	0.05
1,1,1-Trichloroethane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	3.4
1,1,2,2-Tetrachloroethane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.05
1,1,2-Trichloroethane	<0.01	0.01	<0.008 [<0.008]	0.008	µg/g	0.05
1,1-Dichloroethane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	11
1,1-Dichloroethylene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.05
1,2-Dibromoethane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.05
1,2-Dichlorobenzene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	4.3
1,2-Dichloroethane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.05
1,2-Dichloroethane-d4 (Surr)	86.9	N/A	76.2 [90.1]	N/A	% Rec	~

6820 Kitimat Road Unit 4, Mississauga, ON, L5N 5M3
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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS505		SS506			
Sample Date	10/18/2023 11:45 AM		10/18/2023 12:00 PM			
Lab ID	1942876		1942877			
Volatile Organic Compounds	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
1,2-Dichloropropane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.085
1,3-Dichlorobenzene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	6
1,4-Dichlorobenzene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.097
1-Bromo-4-fluorobenzene (Surr.)	125	N/A	111 [96]	N/A	% Rec	~
Acetone	<0.4	0.4	<0.4 [<0.4]	0.4	µg/g	28
Bromodichloromethane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	13
Bromoform	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.26
Bromomethane	<0.01	0.01	<0.01 [<0.01]	0.01	µg/g	0.05
Carbon tetrachloride	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.12
Chlorobenzene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	2.7
Chloroform	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.18
cis - + trans-1,3-Dichloropropene (Calc.)	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.083
cis-1,2-Dichloroethylene	<0.009	0.009	<0.007 [<0.007]	0.007	µg/g	30
cis-1,3-Dichloropropene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	~
Dibromochloromethane	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	9.4
Dichlorodifluoromethane	<0.01	0.01	<0.008 [<0.008]	0.008	µg/g	25

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CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

Sample Description	SS505		SS506			
Sample Date	10/18/2023 11:45 AM		10/18/2023 12:00 PM			
Lab ID	1942876		1942877			
Volatile Organic Compounds	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Dichloromethane	<0.02	0.02	<0.01 [<0.01]	0.01	µg/g	0.96
Methyl ethyl ketone	<0.07	0.07	<0.06 [<0.06]	0.06	µg/g	44
Methyl isobutyl ketone (MIBK)	<0.04	0.04	<0.03 [<0.03]	0.03	µg/g	4.3
Methyl tert-butyl ether (MTBE)	<0.04	0.04	<0.03 [<0.03]	0.03	µg/g	1.4
n-Hexane	<0.02	0.02	<0.01 [<0.01]	0.01	µg/g	34
Styrene	<0.01	0.01	<0.01 [<0.01]	0.01	µg/g	2.2
Tetrachloroethylene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	2.3
Toluene-d8 (Surr.)	127	N/A	119 [128]	N/A	% Rec	~
Trans-1,2-dichloroethylene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.75
Trans-1,3-dichloropropene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	~
Trichloroethylene	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.52
Trichlorofluoromethane	<0.009	0.009	<0.007 [<0.007]	0.007	µg/g	5.8
Vinyl chloride	<0.008	0.008	<0.007 [<0.007]	0.007	µg/g	0.022

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Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

CERTIFICATE OF ANALYSIS

KING EPCM

Work Order Number: 516397

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

[ ]: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison.

% Rec: Surrogate compounds are added to the sample in some cases and the recovery is reported as a % recovered.

~: In a criteria column indicates the criteria is not applicable for the parameter row.

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Exceedences: HIGHLIGHTED CELLS INDICATE THAT THE RESULT EXCEEDS A REGULATORY LIMIT. CALCULATED UNCERTAINTY ESTIMATIONS ARE NOT APPLIED FOR DETERMINING SAMPLE EXCEEDANCES.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

PHC (Method A59): Method A59 complies with CCME reference method for the CWS PHC and is validated for laboratory use.

PHC (Method A59): Gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

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TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS - REVISED

Supersedes report printed: 12/14/2023 10:43

Client:	Tony Wang	Work Order Number:	518912
Company:	KING EPCM	PO #:	
Address:	3780 14th Avenue Markham, ON, L3R 4B7	Regulation:	O.Reg 153 Table 3 Soil Residential/Parkland/Inst. (Fine/Medium)
		Project #:	123 Highway 47, Uxbridge
Phone:	(647) 459-5647	DWS #:	
Email:	twang@kingepcm.com	Sampled By:	Kiana Ghafari
Date Order Received:	11/13/2023	Analysis Started:	11/15/2023
Arrival Temperature:	11.4 C	Analysis Completed:	12/13/2023

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
BH 201	1951718	Soil	None		11/10/2023	10:10 AM
BH 301	1951719	Soil	None		11/10/2023	10:30 AM
BH 304	1951720	Soil	None		11/10/2023	10:00 AM
BH 404	1951721	Soil	None		11/10/2023	10:40 AM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
ICPMS Soil (A13)	Mississauga	Determination of Metals in Soil by ICP/MS and BCSALM Method	Modified from SW846-6020A
Moisture (A99)	Mississauga	Determination of Percent Moisture	In-House

REPORT COMMENTS

Report revised to include criteria for boron 12/14/23 YH

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CERTIFICATE OF ANALYSIS - REVISED

Supersedes report printed: 12/14/2023 10:43

KING EPCM

Work Order Number: 518912

This report has been approved by:

Marc Creighton
Laboratory Director

WORK ORDER RESULTS

Sample Description	BH 201		BH 301		BH 304		BH 404			
Sample Date	11/10/2023 10:10 AM		11/10/2023 10:30 AM		11/10/2023 10:00 AM		11/10/2023 10:40 AM			
Lab ID	1951718		1951719		1951720		1951721			
General Chemistry	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
% Moisture	17.5	0.1	17.3	0.1	20.0	0.1	23.3	0.1	%	~

Sample Description	BH 201		BH 301		BH 304		BH 404			
Sample Date	11/10/2023 10:10 AM		11/10/2023 10:30 AM		11/10/2023 10:00 AM		11/10/2023 10:40 AM			
Lab ID	1951718		1951719		1951720		1951721			
Metals	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Antimony	<0.5 [<0.5]	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	7.5
Arsenic	1.7 [1.5]	0.5	1.7	0.5	1.8	0.5	2.0	0.5	µg/g	18
Barium	53.6 [53.8]	0.5	64.6	0.5	47.9	0.5	49.3	0.5	µg/g	390

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Supersedes report printed: 12/14/2023 10:43

KING EPCM

Work Order Number: 518912

Sample Description	BH 201		BH 301		BH 304		BH 404			
Sample Date	11/10/2023 10:10 AM		11/10/2023 10:30 AM		11/10/2023 10:00 AM		11/10/2023 10:40 AM			
Lab ID	1951718		1951719		1951720		1951721			
Metals	Result	MDL	Result	MDL	Result	MDL	Result	MDL	Units	Criteria: O.Reg 153 Table 3 Soil Residential/Parkl and/Inst. (Fine/Medium)
Beryllium	<0.5 [<0.5]	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	5
Boron	5.6 [5.0]	0.5	5.5	0.5	4.6	0.5	5.9	0.5	µg/g	120
Cadmium	0.30 [0.29]	0.05	0.32	0.05	0.30	0.05	0.55	0.05	µg/g	1.2
Chromium	15.0 [15.0]	0.5	14.5	0.5	16.2	0.5	12.0	0.5	µg/g	160
Cobalt	5.34 [5.43]	0.05	4.71	0.05	5.67	0.05	4.67	0.05	µg/g	22
Copper	7.8 [7.8]	0.5	8.6	0.5	8.6	0.5	13.1	0.5	µg/g	180
Lead	23.9 [24.9]	0.5	69	5	18.6	0.5	34.5	0.5	µg/g	120
Mercury	<0.05 [<0.05]	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	µg/g	1.8
Molybdenum	<0.5 [<0.5]	0.5	0.7	0.5	<0.5	0.5	0.5	0.5	µg/g	6.9
Nickel	10.1 [10.2]	0.5	8.6	0.5	10.9	0.5	9.8	0.5	µg/g	130
Selenium	0.8 [0.6]	0.5	<0.5	0.5	<0.5	0.5	0.5	0.5	µg/g	2.4
Silver	<0.5 [<0.5]	0.5	<0.5	0.5	<0.5	0.5	<0.5	0.5	µg/g	25
Thallium	<0.3 [<0.3]	0.3	<0.3	0.3	<0.3	0.3	<0.3	0.3	µg/g	1
Uranium	<0.5 [<0.5]	0.5	<0.5	0.5	0.5	0.5	0.5	0.5	µg/g	23
Vanadium	29.0 [29.3]	0.5	27.8	0.5	31.8	0.5	21.7	0.5	µg/g	86
Zinc	53.7 [53.9]	0.5	84.9	0.5	56.0	0.5	163.0	0.5	µg/g	340

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CERTIFICATE OF ANALYSIS - REVISED

Supersedes report printed: 12/14/2023 10:43

KING EPCM

Work Order Number: 518912

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.

MDL: Method detection limit or minimum reporting limit.

[ ]: Results for laboratory replicates are shown in square brackets immediately below the associated sample result for ease of comparison.

~: In a criteria column indicates the criteria is not applicable for the parameter row.

Organic Soil Analysis: Data reported for organic analysis in soils samples are corrected for moisture content.

Quality Control: All associated Quality Control data is available on request.

Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.

Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.

ICPMS Dustfall Insoluble: The ICPMS Dustfall Insoluble Portion method analyzes only the particulate matter from the Dustfall Sampler which is retained on the analysis filter during the Dustfall method.

Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

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Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

APPENDIX V – SURVEY OF PHASE II PROPERTY

METRIC
MEASUREMENTS ON THIS PLAN
ARE IN METRES AND MAY BE
CONVERTED TO FEET BY
DIVIDING BY 0·3048

PLAN OF SURVEY OF
PART OF LOTS 13 and 14 CONCESSION 1
TOWNSHIP UXBRIDGE, REGIONAL MUNICIPALITY OF DURHAM

formerly The County of Ontario

Scale. 1:1500

M.C. PHILLIPS O.L.S. 1979

60 40 30 20 10 0 60 100 metres

I REQUIRE THIS PLAN TO BE DEPOSITED UNDER PART II OF THE REGISTRY ACT

Date 17th January 1979

M.C.Phillips O.L.S

CAUTION: This plan is not a plan of subdivision within the meaning of section 29, 32 or 33 of the Planning Act

RECEIVED AND DEPOSITED AS
PLAN 40R- 5008
DATE 23 MAR 1979

LAND REGISTRAR
FOR THE REGISTRY DIVISION OF
DURHAM (No. 40)

NOTE.

The N 54°14' 30" E astronomic of the south-east limit of King's Highway No. 47 in Lots 13 and 14, as widened by PART 9 PLAN RD-356, governs all bearings hereon.

ALL HANGING LINES HAVE BEEN VERIFIED

- C.M. denotes Concrete Monument.
- S.I.B. denotes a Standard Iron Bar (2·54 cm x 2·54 cm x 122 cm)
- I.B. denotes an Iron Bar (1·59cm x 1·59cm x 61cm)
- Fd. denotes Found.
- m. denotes measured
- p. denotes Plan 166 Highways

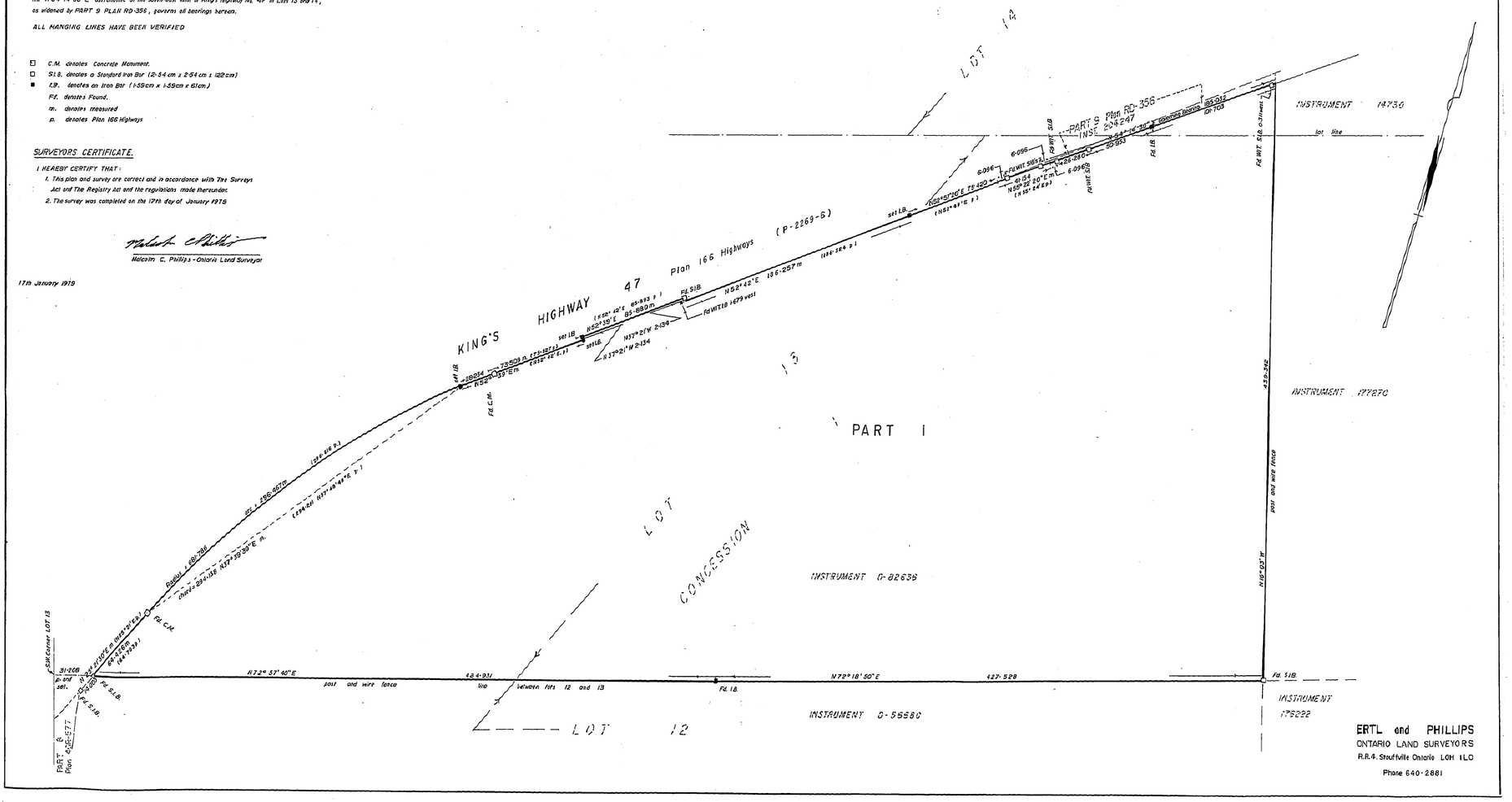
SURVEYORS CERTIFICATE.

I HEREBY CERTIFY THAT:

1. This plan and survey are correct and in accordance with The Surveys Act and The Registry Act and the regulations made thereunder.
2. The survey was completed on the 17th day of January 1979

Malcolm C. Phillips - Ontario Land Surveyor

17th January 1979



ERTL and PHILLIPS
ONTARIO LAND SURVEYORS
R.R.4. Stouffville Ontario L4A 1L0
Phone 640-2881

44-38

18 12 10 8 6 10 12 16

PLAN OF SURVEY OF

PART OF LOTS 13 and 14, CONCESSION 1 TOWNSHIP OF UXBRIDGE

REGIONAL MUNICIPALITY OF DURHAM

SCALE RATIO = 1 to 1000

IVAN B. WALLACE O.L.S. LTD.

I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT.

DATE MARCH 11, 2005

C. Cranch
CRYSTAL CRANCH
ONTARIO LAND SURVEYOR

PLAN 40R 23365

RECEIVED AND DEPOSITED

DATE Mar. 14, 2005

L. Bryant - Asst. Dep.
LAND REGISTRAR FOR THE LAND TITLES DIVISION OF DURHAM (No 40)

SCHEDULE

PART	LOT	CONCESSION	AREA	PIN
1	Part of Lots 13 & 14	Concession 1	3756.4 Sq. M.	Part of 26830-0049

NOTES

Bearings are astronomic in origin and are referred to that portion of the southerly limit of Highway No. 47, as widened, shown as N 52°39'00"E on Plan 40R-5008.

DISTANCES SHOWN HEREON ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

LEGEND

- SSIB denotes short standard iron bar
- SIB denotes standard iron bar
- IB denotes iron bar
- CM denotes concrete monument
- ø denotes round
- —□— denotes survey monument planted
- —■— denotes survey monument found
- WIT denotes witness
- M denotes measured
- P1 denotes Plan 40R-5008
- OU denotes origin unknown
- MTO denotes Ministry of Transportation of Ontario
- 1215 denotes Ertl and Phillips, OLS

SURVEYOR'S CERTIFICATE

I CERTIFY THAT :

1. This survey and plan are correct and in accordance with the Surveys Act, the Surveyors Act, the Land Titles Act and the regulations made under them.
2. The survey was completed on March 7, 2005

March 11, 2005 — C. Cranch
Date — Crystal Cranch, Ontario Land Surveyor

IVAN B. WALLACE
ONTARIO LAND SURVEYOR LTD.
68 KING STREET EAST
BOWMANVILLE , ONTARIO
L1C 3X2
Telephone 905-623-2205
Facsimile 905-623-0612
Whitby Direct Line 905-668-8893
Toll Free 1-800-667-0696

Project No 5-6154R

Drawn by : LC — Checked by : GW

APPENDIX VI – PHASE II CONCEPTUAL SITE MODEL AND SOIL SAMPLING LOCATIONS

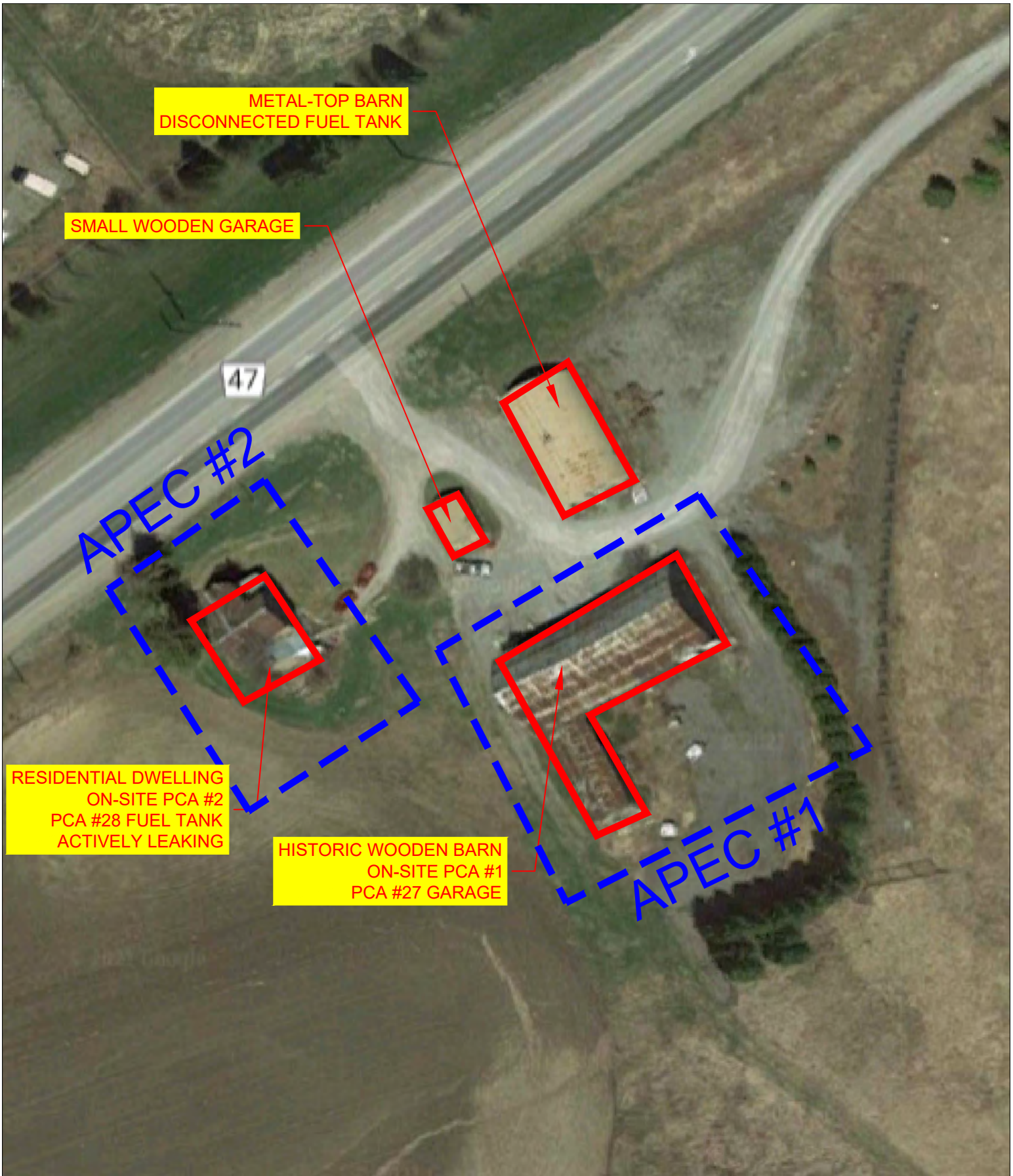
NOTES

KING EPCM

King EPCM
204-304 Toronto Street South
Uxbridge, ON L9P 1Y2
www.KingEPCM.com
647-459-5647
General@KingEPCM.com

PRINT TITLE	PHASE I STUDY AREA
PROJECT TITLE	PHASE I ENVIRONMENTAL SITE ASSESSMENT
SITE ADDRESS	123 REGIONAL HIGHWAY 47, UXBRIDGE, ON

SCALE:	NTS	DATE: SEP 02, 2020	BY: TONY WANG	Ver. 01



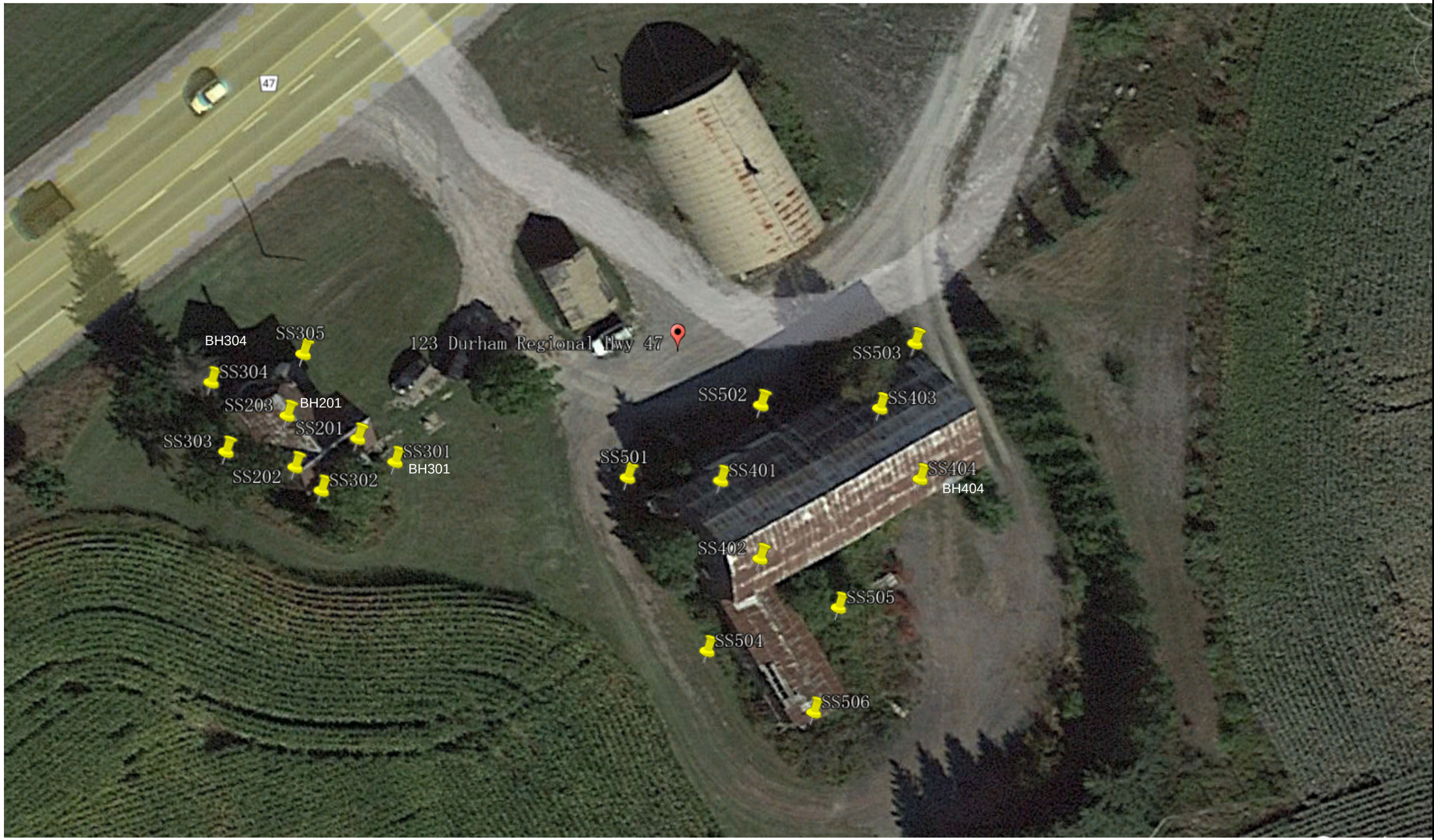
NOTES

KING EPCM

King EPCM
204-304 Toronto Street South
Uxbridge, ON L9P 1Y2
www.KingEPCM.com
647-459-5647
General@KingEPCM.com

PRINT TITLE	CONCEPTUAL SITE MODEL
PROJECT TITLE	PHASE I ENVIRONMENTAL SITE ASSESSMENT
SITE ADDRESS	123 REGIONAL HIGHWAY 47, UXBRIDGE, ON

SCALE:	DATE:	BY:	
NTS	SEP 02, 2020	TONY WANG	Ver. 01



Municipality Notes

DRAWN	STAMP
KG	
DATE	
Dec 15, 2023	

Notes:

SS201 through SS506 were sampled on October 17th, 2023.

BH201, BH301, BH304, and BH 404 were sampled during the second round of confirmation testing on November 10th, 2023.

KING EPCM
3780 14th Ave, Unit 211
Markham, ON, L3R 9Y5
www.KingEPCM.com
647-459-5647

CLIENT

123 Hwy 47 Inc.

PROJECT NAME

123 Hwy 47

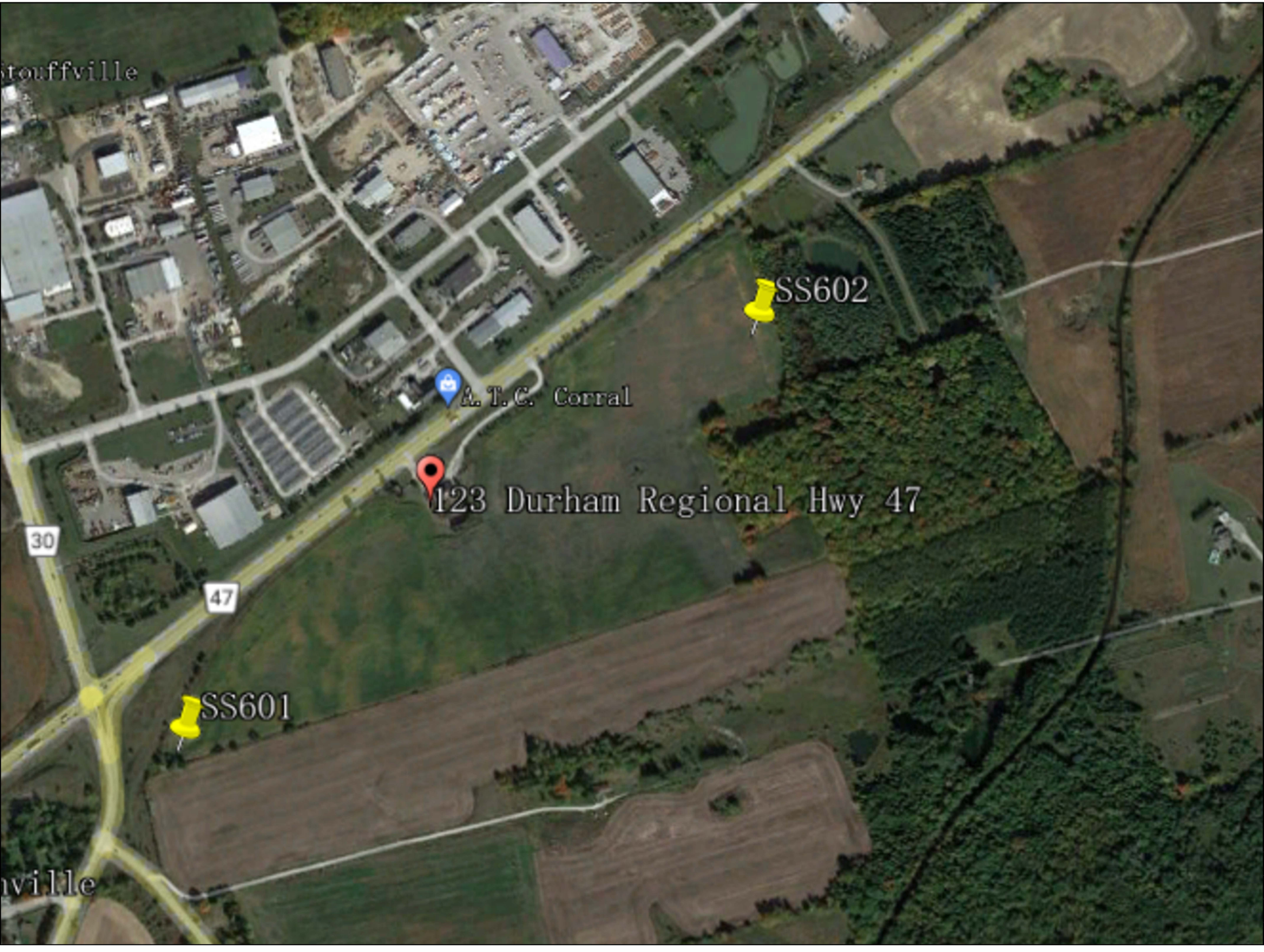
PROJECT LOCATION

123 Hwy 47, Ajax

PRINT TITLE

FILE No.

No.	ISSUED FOR:	DATE	DRAW BY	CHECK



Municipality Notes

DRAWN	STAMP
KG	
DATE	
Dec 15, 2023	

NOTES:

SS601 and SS602 were sampled on October 17th, 2023

KING EPCM
3780 14th Ave, Unit 211
Markham, ON, L3R 9Y5
www.KingEPCM.com
647-459-5647

CLIENT

123 Hwy 47 Inc.

PROJECT NAME

123 Hwy 47

PROJECT LOCATION

123 Hwy 47, Ajax

PRINT TITLE

FILE No.

No.	ISSUED FOR:	DATE	DRAW BY	CHECK