PHASE TWO
ENVIRONMENTAL SITE ASSESSMENT

of

Lot 186 Kalar Road, Niagara Falls, ON

For:
M5V Developments Inc.
Lot 186 Kalar Road
Niagara Falls, ON

December 14, 2020
Project: E-20-71-2

4999 Victoria Avenue
Niagara Falls, ON, L2E 4C9
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PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

of:

Lot 186 Kalar Road, Niagara Falls, ON

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Prepared by **Hallex Environmental Ltd**. on behalf of:

M5V Developments Inc.

Author(s): Nicole Metz, ETPD, ERPC., Environmental Technician
Jodie Glasier, B.A. (Hons), PD-EMA, M.MM., EP., Project Manager
Kevin Christian, M.Sc., P.Geo., QP, Principal Geoscientist

Date: December 14, 2020

Project #: E-20-71-2

Dist'n: M5V DEVELOPMENTS INC. (pdf)
Hallex Environmental Ltd. (file)

This document has been prepared for the exclusive reliance and use of CLIENT and any third party they may so designate via letter of transmittal from Hallex Environmental Ltd.

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EXECUTIVE SUMMARY

INTRODUCTION

Hallex Environmental Ltd. was retained by M5V Developments Inc. to conduct a Phase Two Environmental Site Assessment (ESA) at Lot 186 Kalar Road, Niagara Falls, ON following the Phase One ESA completed by Hallex on November 16th, 2020 that identified the following Potentially Contaminating Activity (PCA)/Area of Potential Environmental Concern (APEC):

- ***PCA-1/APEC-1: Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications (#40 as per Regulation)*** – The south adjacent property is a hydro corridor whereupon the application of herbicides for weed control purposes represents a PCA resulting in an onsite APEC within the study site's southern property boundary with respect to target contaminants: Metals (Arsenic).

The objectives of the Phase Two ESA were to determine the presence/absence of potential contaminants of concern within the soil. The presence of contaminants in the soil, if detected, would determine the need for further sampling and analyses of soil to delineate the extent of impact, and to satisfy the requirements of Ontario Regulation (O. Reg.) 153/04, amended by O. Reg. 511/09.

PHASE 2 ESA METHODS

Six (6) test pits, TP-1 to TP-6 were advanced on December 4th, 2020. Soil samples were collected at depth intervals of 0 - 0.2 m (upper samples) and 0.2 - 0.5 m (lower samples). All upper samples were submitted to Paracel Laboratories Ltd. for analyses of Metals (Arsenic) and one (1) for Grain Size Analysis. Lower samples were kept at the laboratory if required for delineation sampling.

FINDINGS & CONCLUSIONS

The Phase Two Environmental Site Assessment at Lot 186 Kalar Road, Niagara Falls, ON revealed soil samples ***met*** applicable Ministry of the Environment, Conservation and Parks Site Condition Standards 2011 Table 3 for Residential Land Use in a Non-Potable Ground Water Situation, fine texture soil for target contaminants. As of December 4th, 2020, no further Environmental Assessment work is required.

LIST OF ACRONYMS

APEC	Area of Potential Environmental Concern
AST	Aboveground Storage Tank
BH	Borehole
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
CO	Carbon Monoxide
CO_2	Carbon Dioxide
COC	Contaminant of Concern
CSM	Conceptual Site Model
CSVC	Combustible Soil Vapour Concentration
EC	Electrical Conductivity
EPA	Environmental Protection Act
ESA	Environmental Site Assessment
GPR	Ground Penetrating Radar
i	Hydraulic Gradient
k_h	Hydraulic Conductivity
LEL	Lower Explosive Limit
masl	Metres above sea level
mbgs	Metres below ground surface
MECP	Ministry of the Environment, Conservation and Parks
MW	Monitoring Well
OC/OCP	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PCA	Potentially Contaminating Activity
PCB	Polychlorinated Biphenyl
PCE	Perchloroethylene (tetrachloroethylene)
pH	Power of Hydrogen
PHC	Petroleum Hydrocarbons
ppm	Parts per million
QA/QC	Quality Assurance/Quality Control
QP	Qualified Person
RA	Risk Assessment
RSC	Record of Site Condition
SAR	Specific Absorption Rate
SCS	Site Condition Standard
SGWSS	Soil Groundwater and Sediment Standards
SVOC	Semi-Volatile Organic Compounds
TCLP	Toxicity Classification Leachate Procedure
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

Potentially Contaminating Activities (PCAs)
Schedule D Table 2 of O. Reg 511/09

PCA#	Description
1	Acid and Alkali Manufacturing, Processing and Bulk Storage
2	Adhesives and Resins Manufacturing, Processing and Bulk Storage
3	Airstrips and Hangars Operation
4	Antifreeze and De-icing Manufacturing and Bulk Storage
5	Asphalt and Bitumen Manufacturing
6	Battery Manufacturing, Recycling and Bulk Storage
7	Boat Manufacturing
8	Chemical Manufacturing, Processing and Bulk Storage
9	Coal Gasification
10	Commercial Autobody Shops
11	Commercial Trucking and Container Terminals
12	Concrete, Cement and Lime Manufacturing
13	Cosmetics Manufacturing, Processing and Bulk Storage
14	Crude Oil Refining, Processing and Bulk Storage
15	Discharge of Brine related to oil and gas production
16	Drum and Barrel and Tank Reconditioning and Recycling
17	Dye Manufacturing, Processing and Bulk Storage
18	Electricity Generation, Transformation and Power Stations
19	Electronic and Computer Equipment Manufacturing
20	Explosives and Ammunition Manufacturing, Production and Bulk Storage
21	Explosives and Firing Range
22	Fertilizer Manufacturing, Processing and Bulk Storage
23	Fire Retardant Manufacturing, Processing and Bulk Storage
24	Fire Training
25	Flocculants Manufacturing, Processing and Bulk Storage
26	Foam and Expanded Foam Manufacturing and Processing
27	Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles
28	Gasoline and Associated Products Storage in Fixed Tanks
29	Glass Manufacturing
30	Importation of Fill Material of Unknown Quality

PCA#	Description
31	Ink Manufacturing, Processing and Bulk Storage
32	Iron and Steel Manufacturing and Processing
33	Metal Treatment, Coating, Plating and Finishing
34	Metal Fabrication
35	Mining, Smelting and Refining; Ore Processing; Tailings Storage
36	Oil Production
37	Operation of Dry-Cleaning Equipment (where chemicals are used)
38	Ordnance Use
39	Paints Manufacturing, Processing and Bulk Storage
40	Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
41	Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage
42	Pharmaceutical Manufacturing and Processing
43	Plastics (including Fibreglass) Manufacturing and Processing
44	Port Activities, including Operation and Maintenance of Wharves and Docks
45	Pulp, Paper and Paperboard Manufacturing and Processing
46	Rail Yards, Tracks and Spurs
47	Rubber Manufacturing and Processing
48	Salt Manufacturing, Processing and Bulk Storage
49	Salvage Yard, including automobile wrecking
50	Soap and Detergent Manufacturing, Processing and Bulk Storage
51	Solvent Manufacturing, Processing and Bulk Storage
52	Storage, maintenance, fueling and repair of equipment, vehicles, and material used to maintain transportation systems
53	Tannery
54	Textile Manufacturing and Processing
55	Transformer Manufacturing, Processing and Use
56	Treatment of Sewage equal to or greater than 10,000 litres per day
57	Vehicles and Associated Parts Manufacturing
58	Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
59	Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products

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1.0 INTRODUCTION

1.1 Project Objectives

Hallex Environmental Ltd. was retained by M5V Developments Inc. (hereinafter referred to as the "client") to conduct a Phase Two Environmental Site Assessment (ESA) at Lot 186 Kalar Road, Niagara Falls, ON. (hereinafter referred to as the "study site"). The objectives of the Phase Two ESA were to determine the presence/absence of potential contaminants of concern within the soil associated with possible historic pesticide use at the south adjacent site, a Potentially Contaminating Activity (PCA) listed in Schedule D, Table 2, of O. Reg. 511/09.

The presence of contaminants in the soil, if detected, would determine the need for further sampling and analyses to delineate the extent of the impact, and to satisfy the requirements of Ontario Regulation (O. Reg.) 153/04, as amended. The site location is shown on Figure 1 and the PCA/APEC, identified in the Phase One ESA (Hallex, 2019) is shown on Figure 2.

1.2 Limitations and Exceptions of Assessment

This report was prepared by Hallex Environmental Ltd. (hereinafter referred to as "Hallex") for the client. The material in it reflects Hallex's best judgment based on the information discovered at the time of preparation and within the scope of work. The investigative procedures, and format of this report, generally follow the guidelines established in: O. Reg. 511/09 per Part XV.1 of the Environmental Protection Act. Any information presented concerning materials at the site is based on information gathered at the Test Pit locations only. There may be materials and/or subsurface soil and/or groundwater conditions on-site which are not represented by these investigations. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Hallex Environmental Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

1.3 Site Description

Municipal address:	Lot 186 Kalar Road, Niagara Falls, ON
Property Identifier Number (PIN):	64263-0079 (LT)
Client(s):	M5V Developments Inc.
UTM coordinates:	17T 652128 m E 4769684 m N
Elevation:	178.83 masl
Approx. site area:	45,608.07 m2 (11.27 Acres)

1.4 Current and Proposed Future Uses

As of December 4th, 2020, the study site was agricultural land use (wooded lot). Future plans were not portrayed to Hallex Environmental Ltd.

1.5 Applicable Site Condition Standard

The Soil, Ground Water and Sediment Standards (SGWSS) that would be applicable to the subject site as per O. Reg. 153/04, as amended, are based on site sensitivity analyses. Site sensitivity is determined based on conformance or non-conformance with: shallow soil conditions (<2 m to bedrock), soil pH, proximity to an "Area of Natural Significance", the presence of a water body on-site or within 30 meters of the subject property, and the site and adjacent lands groundwater conditions being either potable or non-potable. The 'Full Depth Generic' standards would apply to a 'non-sensitive site', with further distinctions made based on potable or non-potable groundwater conditions, and coarse or fine soil texture. A 'Sensitive Site' would require application of generic standards, other than 'Full Depth', based on the specific sensitivity.

Lot 186 Kalar Road, Niagara Falls, ON – Site Sensitivity Analysis

The rationale for the selection of SGWSS criteria for the subject property included:

- Soil Texture: **Medium/Fine (grain size texture by Paracel laboratories Ltd.)**
- Adjacent to a designated area of natural significance: **No**
- Within 30 m of a water body: **No**
- Groundwater condition: **Non-Potable**
- Depth to bedrock: **Not encountered at maximum test pit depth of 0.5 metres.** Bedrock is at 11.9 mbgs, as per the well record #660184, 10m northwest from the study site.

Applicable Regulatory Criteria

O. Reg. 153/04 Ministry of the Environment, Conservation and Parks (MECP) Site Condition Standards Table 3 for Residential Land Use in a Non-Potable Ground Water Condition, fine textured soil, was applied to the subject site, based on conditions observed at the time of the site assessment.

2.0 INVESTIGATION METHODS

2.1 Test Pit

Jay's Mini Excavating utilized a mini excavator for test pit sampling. Preparation for test pit sampling was initiated via requests for demarcation of underground utilities by Ontario One Call: for Bell, cable, hydro, natural gas, water, sewer and private locates. All services were cleared within the designated work areas.

2.2 Soil Investigation

Six (6) test pits, TP-1 to TP-6 were advanced on December 4th, 2020. Test pit locations are shown in Figure 3 and test pit logs are contained in Appendix A. Soil samples were collected as an upper sample within 0 – 0.2 mbgs and lower sample within 0.3 – 0.5 meters below ground surface (mbgs) per test pit.

2.2.1 Soil: Sampling

Each sample was placed in a 250 ml glass jar with a Teflon lined lid, filled to zero head-space, sealed, and placed in a cooler for transportation. Each sample was logged for colour, texture, structure, moisture, and visual and olfactory evidence of contamination. Additionally, textural identification of soil, through hand soil textural techniques, including the 'squeeze test' and 'ribbon test' was conducted on soil from each stratum identified.

2.3 Quality Assurance and Quality Control Measures

Hallex conducted Quality Assurance/Quality Control (QA/QC) measures throughout all stages of the assessment to verify sampling procedures and results. Decontamination of equipment and sampling tools was carried out during field work, as well as appropriate precautions, including new nitrile gloves, to minimize potential cross-contamination between samples and test pits. Soil sampling was implemented according to *Protocol for Analytical Methods Used in the Assessment of Properties Under Part XV.1 of the Environmental Protection Act* (March 9, 2004 as amended as of July 1, 2011). Chain of Custody reports were completed for all samples submitted for analyses to keep track of samples collected and to ensure that all parties involved were properly informed as to the nature of the samples. Instruments and all their associated components are checked daily prior to field use, and annual equipment servicing and maintenance is conducted by Enviro Measure Inc. to ensure the equipment remains properly calibrated and functioning.

3.0 REVIEW AND EVALUATION

3.1 Soil Conditions

Soil conditions were determined through field investigative measures including the use of analytical equipment, determination of stratigraphy including analysis of moisture, odours, colour, texture, etc. and combustible soil vapor concentration results.

3.1.1 Overburden Stratigraphy

The general overburden stratigraphy observed in test pits TP-1 to TP-6 consisted of:

Depth (avg.)	Description
0 - 0.2 mbgs	Brown SANDY SILT TOPSOIL
0.3 – 0.5 mbgs	Brown SANDY SILT
0.5 mbgs	Grey SILTY CLAY

Notes:

- Bedrock was not encountered at test pit maximum depth of 0.5 mbgs. Bedrock is at 11.9 mbgs, as per the well record #660184, 10m northwest from the study site.

3.2 Combustible Soil Vapour Concentrations

Six (6) upper samples were chosen for laboratory submission to Paracel Laboratories Ltd. under chain of custodies #129994 on December 4th, 2020 for analyses of Metals (Arsenic). All lower samples were stored at the laboratory for later analyses, if required, for delineation of contaminants.

Test Pit #/ Sample ID		Date Sampled	Depth (m)	Parameters Analyzed
TP-1	-1	20-October 2020	0 – 0.2	Arsenic
	-2		0.2 – 0.5	
TP-2	-1		0 – 0.2	Arsenic
	-2		0.2 – 0.5	
TP-3	-1		0 – 0.2	Arsenic
	-2		0.2 – 0.5	
TP-4	-1		0 – 0.2	Arsenic
	-2		0.2 – 0.5	
TP-5	-1		0 – 0.2	Arsenic
	-2		0.2 – 0.5	
TP-6	-1		0 – 0.2	Arsenic
	-2		0.2 – 0.5	

Highlighted sample ID's above depict the samples chosen for submission to the lab.

3.3 Soil Laboratory Results

Soil laboratory analytical data was compared to MECP Site Condition Standards (2011) Table 3: Generic Site Condition Standards in a Non-Potable Groundwater Condition, fine textured soil. The results indicated that all samples **met** the criteria for the target contaminants analyzed. The soil laboratory analytical reports are provided in Appendix B.

3.4 Laboratory Quality Assurance and Quality Control

Laboratory QA/QC measures adhering to the Ministry of the Environment's "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 2010" are standard procedure for Paracel Laboratories (accredited to the ISO/IEC 17025 Standard by CALA) in order to ensure that the standards of quality were met within the expected level of confidence.

4.0 PHASE TWO CONCEPTUAL SITE MODEL

The Conceptual Site Model (CSM) qualitatively considers the interaction of identified contaminants of concern, and the pathway(s) and exposure route(s) to receptors. No target contaminants were identified within the soil or groundwater medium with potential migration pathways to human and/or biota receptors.

5.0 CONCLUSIONS

The Phase Two Environmental Site Assessment at 186 Kalar Road, Niagara Falls, ON revealed soil samples ***met*** applicable Ministry of the Environment, Conservation & Parks (MECP) Site Condition Standards 2011 Table 3 for Residential Land Use within a non-potable groundwater condition, for fine textured soil. Hallex therefore concludes no additional environmental work is required as of December 4th, 2020.

6.0 AUTHOR

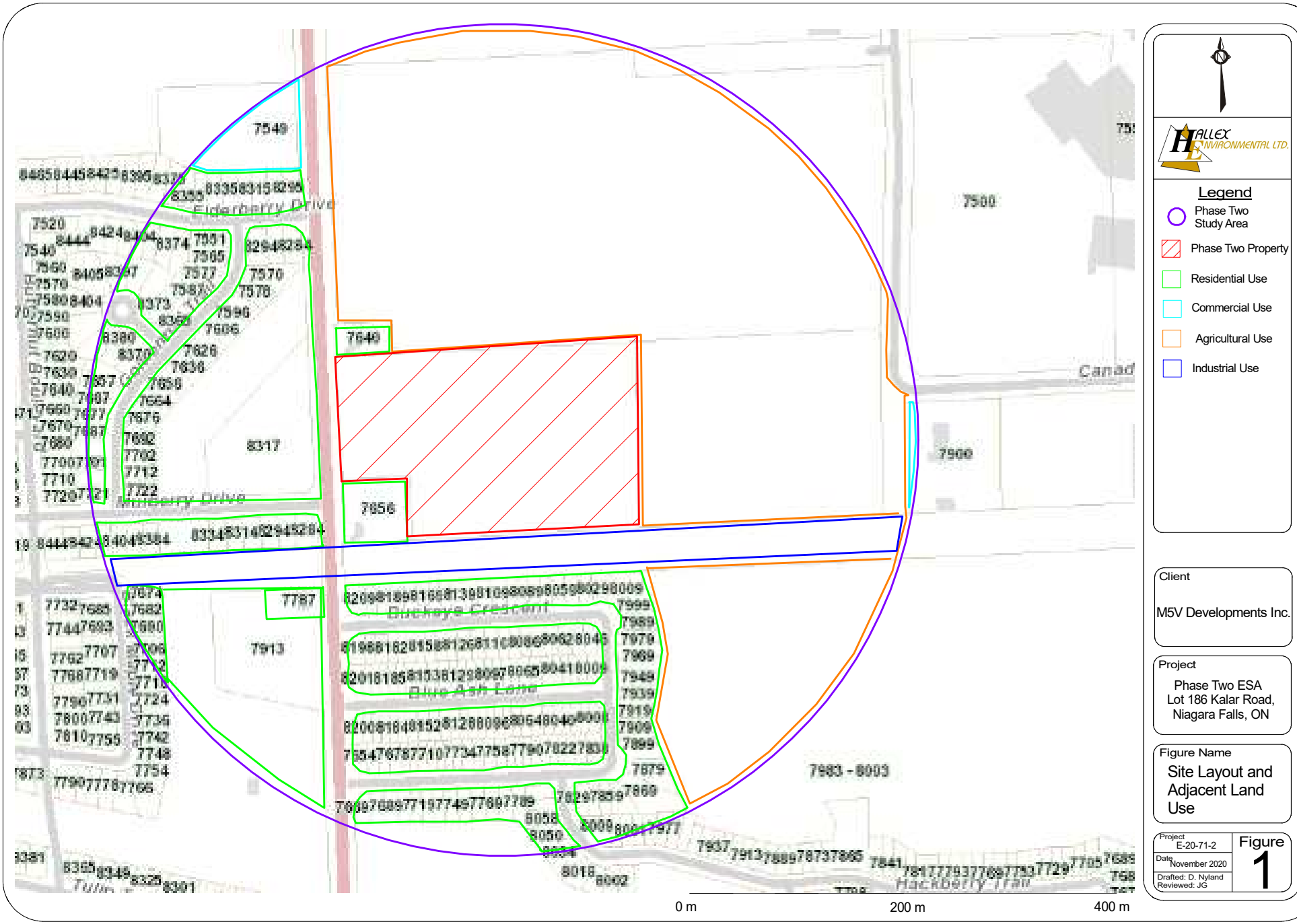
Hallex Environmental Ltd. has conducted this Phase Two Environmental Site Assessment as permitted by Hallex Certificate of Authorization (#90252). The following employees authored the report:

Nicole Metz - Ms. Nicole Metz, ETPD, ERPC, was the Environmental Technician for the project with over six years of experience in the environmental consulting field. Some projects Mrs. Metz have worked on included: Phase One & Two Environmental Site Assessments, Site Remediation, groundwater and surface water sampling, underground or aboveground storage tank decommissioning, Designated Substance Surveys, Records of Site Condition Filing, Environmental Compliance Approvals, National Pollutant Release Inventory, and Hazardous Waste Information Network training.

Jodie Glasier - Mrs. Jodie Glasier, B.A. (Hons), PD-EMA, M.MM, EP, was the Project Manager for the Phase Two ESA. Jodie Glasier has twelve + years of diverse environmental project experience including work on Phase One & Two Environmental Site Assessments, Records of Site Condition Filing, Environmental Compliance Approvals, Designated Substances and Hazardous Materials Surveys, Site Investigations, Remediation Studies, and Environmental Planning.

Kevin Christian - Mr. Kevin Christian, M.Sc., P.Geo., a Professional Geoscientist (#0387) registered with the Association of Professional Geoscientists of Ontario, and a Qualified Person (Environmental Site Assessment & Risk Assessment) as per Ontario Regulations 153/04 and 511/09, has thirty years of experience in the environmental geoscience consulting industry conducting Phase One and Two ESA's, remedial planning, and site remediation supervision.

FIGURES


7549
7500
7640
7656
7900
8317
7787
7913
7983 - 8003
Elderberry Drive
Buckeye Crescent
Blue Ash Lane
Hackberry Trail
0 m
200 m
400 m
Legend
Phase Two Study Area
Phase Two Property
Residential Use
Commercial Use
Agricultural Use
Industrial Use
Client
M5V Developments Inc.
Project
Phase Two ESA
Lot 186 Kalar Road,
Niagara Falls, ON
Figure Name
Site Layout and Adjacent Land Use
Project E-20-71-2
Date November 2020
Drafted: D. Nyland
Reviewed: JG
Figure 1

Inferred Groundwater Flow Direction

0 m — 50 m — 100 m

HALLEX ENVIRONMENTAL LTD.

Legend

- Phase Two Property
- PCA-#
  - PCA-1: Pesticides
- APEC-#
  - APEC-1: Pesticides

Client
M5V Developments Inc.

Project
Phase Two ESA
Lot 186 Kalar Road,
Niagara Falls, ON

Figure Name
Areas of Potential Environmnetal Concern

Project E-20-71-2
Date November 2020
Drafted: N. Metz
Reviewed: KC

Figure 2

Inferred Groundwater Flow Direction

0 m — 50 m — 100 m

HALLEX ENVIRONMENTAL LTD.

Legend

- Phase Two Property
- Test Pit Locations

Client
M5V Developments Inc.

Project
Phase Two ESA
Lot 186 Kalar Road,
Niagara Falls, ON

Figure Name
Areas of Potential Environmnetal Concern

Project E-20-71-2
Date November 2020
Drafted: N. Metz
Reviewed: KC

Figure 3

Inferred Groundwater Flow Direction

0 m 50 m 100 m

HALLEX ENVIRONMENTAL LTD.

Legend

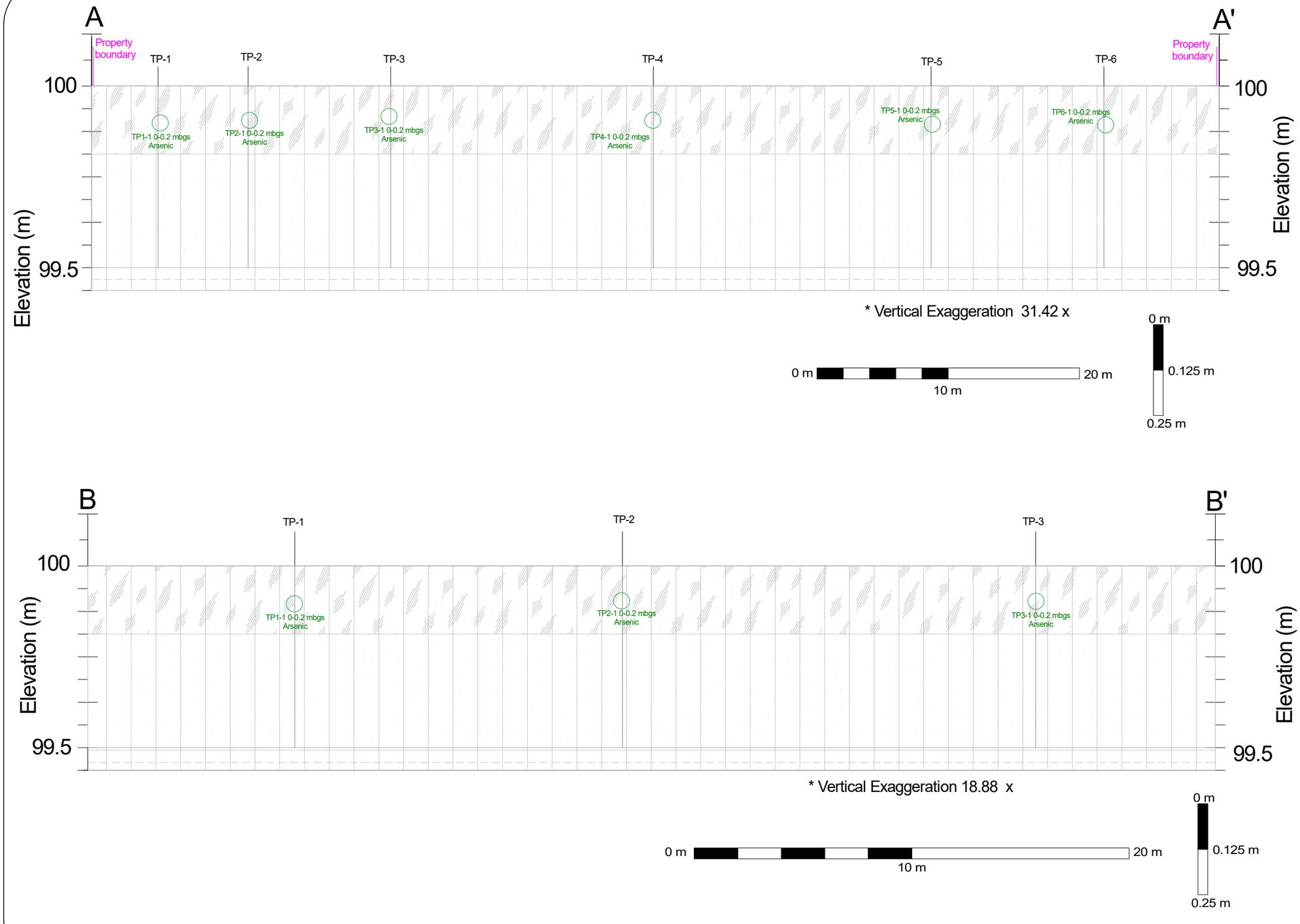
- Study Site
- Test Pit Locations
- A - A'
- B - B'

Client
M5V Developments Inc.

Project
Phase Two ESA
Lot 186 Kalar Road,
Niagara Falls, ON

Figure Name
Study Site Cross Section Locations (A-A', B-B')

Project E-20-71-2	Figure 4a
Date November 2020	
Drafted: N. Metz Reviewed: KC	



A-A'

B-B'

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LEGEND

- Interpreted Groundwater Level
- Topsoil
- Sand
- Silt
- Clay
- Soil Sample Location

* Green indicates sample meets Table 2, Res criteria

* Red indicates sample exceeds Table 2, Res criteria

CLIENT:

M5V Developments Inc.

PROJECT:

Phase Two ESA
Lot 186 Kalar Road,
Niagara Falls, ON

FIGURE NAME:

Cross Sections:
A - A' and B - B'

PROJECT: E-20-71-2	FIGURE 4b
DATE: November 2020	
Drafted: N. Metz Reviewed: KC	

Appendix A:

Field Logs

TEST PIT LOG HALLEX ENVIRONMENTAL LTD

Project #: E-20-71-2	Client: M5V Developments Inc.	Location: Lot 186, Kalar Road, Niagara Falls, ON	Date: December 4, 2020

Test Pit #	Depth (m)	Description	Sample #	Lab
TP#: 1	0 - 0.2	Brown Sandy Silt Topsoil	1	Arsenic
	0.2 - 0.5	Brown Sandy Silt	2	
	0.5	Grey Silty Clay		
TP#: 2	0 - 0.2	Brown Sandy Silt Topsoil	1	Arsenic
	0.2 - 0.5	Brown Sandy Silt	2	
	0.5	Grey Silty Clay		
TP#: 3	0 - 0.2	Brown Sandy Silt Topsoil	1	Arsenic
	0.2 - 0.5	Orange Sandy Silt	2	
	0.5	Grey Silty Clay		
TP#: 4	0 - 0.2	Brown Sandy Silt Topsoil	1	Arsenic
	0.2 - 0.5	Brown Sandy Silt	2	
	0.5	Grey Silty Clay		
TP#: 5	0 - 0.2	Brown Sandy Silt Topsoil	1	Arsenic
	0.2 - 0.5	Brown Sandy Silt	2	
	0.5	Grey Silty Clay		
TP#: 6	0 - 0.2	Brown Sandy Silt Topsoil	1	Arsenic
	0.2 - 0.5	Brown Sandy Silt	2	
	0.5	Grey Silty Clay		

Appendix B:

Laboratory Analytical Reports

PARACEL LABORATORIES LTD.

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Hamilton, ON L8H 7P4
1-800-749-1947
www.paracellabs.com

Certificate of Analysis

Hallex Environmental Ltd.

4999 Victoria Ave
Niagara Falls, ON L2E 4C9
Attn: Kevin Christian

Client PO:
Project: E-20-71-2
Custody: 129994

Report Date: 10-Dec-2020
Order Date: 4-Dec-2020

Order #: 2049503

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID	Paracel ID	Client ID
2049503-01	TP1-1		
2049503-02	TP2-1		
2049503-03	TP3-1		
2049503-04	TP4-1		
2049503-05	TP5-1		
2049503-06	TP6-1		

Approved By: Mark Foto

Mark Foto, M.Sc.
Lab Supervisor

Certificate of Analysis

Client: Hallex Environmental Ltd.

Client PO:

Report Date: 10-Dec-2020

Order Date: 4-Dec-2020

Project Description: E-20-71-2

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	9-Dec-20	9-Dec-20
Solids, %	Gravimetric, calculation	8-Dec-20	9-Dec-20
Texture - Coarse Med/Fine	Based on ASTM D2487	8-Dec-20	10-Dec-20

Certificate of Analysis
Client: Hallex Environmental Ltd.
Client PO:

Report Date: 10-Dec-2020
Order Date: 4-Dec-2020
Project Description: E-20-71-2

Summary of Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances. Regulatory limts displayed in brackets, (), applies to medium and fine textured soils.

Criteria:

Client ID	Analyte	MDL / Units	Result	Reg 153/04 (2011)-Table 2 Residential

Certificate of Analysis

Client: Hallex Environmental Ltd.

Client PO:

Report Date: 10-Dec-2020

Order Date: 4-Dec-2020

Project Description: E-20-71-2

	Client ID:	TP1-1	TP2-1	TP3-1	TP4-1	Criteria:
	Sample Date:	04-Dec-2020	04-Dec-2020	04-Dec-2020	04-Dec-2020	
	Sample ID:	2049503-01	2049503-02	2049503-03	2049503-04	Reg 153/04 (2011)-Table 2 Residential
	Matrix:	Soil	Soil	Soil	Soil	
	MDL/Units					
Physical Characteristics						
% Solids	0.1 % by Wt.	74.0	75.2	72.9	70.1	
>75 um	0.1 %	-	-	-	6.6	
<75 um	0.1 %	-	-	-	93.4	
Texture	0.1 %	-	-	-	Med/Fine	
Metals						
Arsenic	1 ug/g	5	4	5	4	(18) 18 ug/g

Certificate of Analysis

Client: Hallex Environmental Ltd.

Client PO:

Report Date: 10-Dec-2020

Order Date: 4-Dec-2020

Project Description: E-20-71-2

	Client ID:	TP5-1	TP6-1	-	-	Criteria:
	Sample Date:	04-Dec-2020	04-Dec-2020	-	-	
	Sample ID:	2049503-05	2049503-06	-	-	Reg 153/04 (2011)-Table 2 Residential
	Matrix:	Soil	Soil	-	-	
	MDL/Units					
Physical Characteristics						
% Solids	0.1 % by Wt.	74.4	73.2	-	-	
Metals						
Arsenic	1 ug/g	7	3	-	-	(18) 18 ug/g

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Metals									
Arsenic	ND	1	ug/g						

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Metals									
Arsenic	2.3	1	ug/g	2.3			3.1	30	
Physical Characteristics									
% Solids	73.6	0.1	% by Wt.	74.4			1.2	25	

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Metals									
Arsenic	49.0	1	ug/g	ND	96.2	70-130			

PARACEL LABORATORIES LTD.

Order #: 2049503

Certificate of Analysis

Client: Hallex Environmental Ltd.

Client PO:

Report Date: 10-Dec-2020

Order Date: 4-Dec-2020

Project Description: E-20-71-2

Qualifier Notes:

Sample Qualifiers :

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
NC: Not Calculated

Soil/Solid results are reported on a dry weight basis unless otherwise indicated
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

PARACEL LABORATORIES LTD.

Paracel ID: 2049503

Paracel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)
2049503	№ 129994

Client Name: Hallex
Contact Name: Kevin Christian
Address: 4999 Victoria Ave N50.
Telephone: 905 988 8030

Project Ref: E-20-71-2
Quote #:
PO #:
E-mail: kchristian@hallex.ca, jglasier@hallex.ca

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Turnaround Time
☐ 1 day ☐ 3 day
☐ 2 day ☒ Regular
Date Required:

Regulation 153/04	Other Regulation
☐ Table 1 ☒ Res/Park ☐ Med/Fine	☐ REG 558 ☐ PWQO
☒ Table 2 ☐ Ind/Comm ☐ Coarse	☐ CCME ☐ MISA
☐ Table 3 ☐ Agri/Other	☐ SU - Sani ☐ SU - Storm
☐ Table	Mun:
For RSC: ☐ Yes ☐ No	☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken: Date	Sample Taken: Time	PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	Arsenic	Grain Size Text (Fine/Coarse)					
1	TP1-1	S		1	Dec 4	10am								X						
2	TP 2-1	↓		1	↓	↓								X						
3	TP 3-1			1										X						
4	TP 4-1			2										X	X					
5	TP 5-1			1										X						
6	TP 6-1			1										X						
7																				
8																				
9																				
10																				

Comments: Rest of the samples, please put on hold - HOLD SAMPLES NOT LISTED ON COC
120ml Jars submitted

Method of Delivery: Drop off

Relinquished By (Sign):	Received By Driver/Depot:	Received at Lab:	Verified By:
Relinquished By (Print): Nicole Metz	Date/Time: Dec 4, 2020 11:15am	Date/Time: Dec 5th, 20 11:15	Date/Time: Dec 5th, 2020 13:02
Date/Time: Dec 4 @ 11:15pm	Temperature: 10°C °C	Temperature: 4.1 °C	pH Verified: ☐ By: