August 8, 2025

Township of Puslinch
7404 Wellington Road 34
Puslinch, ON N0B 2N0

Attention: Olive Zhang
Municipal Building Official I

Dear Olive,

Re: Response to 4th Site Alteration Permit Application Submission
4670 Sideroad 10 North
Township of Puslinch

This letter is in response to the Comment Summary dated June 26, 2025. We offer the following responses:

1. *Trace Comment:*

   Item 1. Wind Conditions:

   Trace recommends adding evidence of visible dust discharging from the Site and onto the adjacent properties, particularly those located to the north, east and south of the Site that include residential dwellings, as another trigger for adjusting or halting on-site activities that are the source of dust discharging from the Site.

   Item 3. Traffic Management:

   The maximum speed should be based on the evidence of visible dust discharging from the Site onto the adjacent properties. As such, Trace recommends amending the wording regarding the maximum speed to include the wind conditions (i.e., the speed and the direction) and the evidence of visible dust discharging from the Site onto the adjacent properties.

   For both comments, below are revisions to the Dust Control Measures and Traffic Management with additions underlined:

Meritech Engineering 1315 Bishop St. North Suite 202 Cambridge ON N1R 6Z2 t 519.623.1140
f 519.623.7334

Dust Control Measures are to include the following:

1. Wind Conditions - all activities must be terminated if the wind speed is greater than 30km/h. A windsock will be erected and located near the work area to provide indication of wind intensity and direction.
2. Dust Discharge from Site – Dust discharge from site to adjacent residential areas is to be monitored as a trigger for halting or modifying work activities, truck traffic speeds or implementing dust suppression measures.
3. Water for Dust Suppression – A water truck will be present and applied consistently for dust control. At the end of each workday, water trucks may treat all exposed areas to create a stabilizing crust on the soil.

Traffic Management - During construction, vehicle and equipment travel speeds within the site should be kept to a minimum. The maximum speed of vehicles at a construction site/roadway should be limited to 30 km/h. Should wind conditions dictate, traffic speeds must be reduced, or halted if required. The hard surfaces on the site must be cleaned either at the end of the workday or within a day of the construction activity. If possible, restrict vehicle access to the site to essential vehicles only.

Yours very truly,

MERITECH ENGINEERING

[redacted]

Brian Enter, P.Eng.
Project Manager

BE/mf
Enclosures (0)

cc Jeremy Nichols, Client

FORTIS ENVIRONMENTAL

Soil Characterization Report

ESA

4670 Sideroad 10 North

Puslinch, Ontario

Job No.
F199412006

Client:
Nicholls Ventures Inc.

Report Date:
August 7, 2025

Fortis Environmental Inc.
942 Yonge Street Suite 324
Toronto / ON
M4W 3S8
T: 416-452-6965
F: 647-417-7192
E: info@fortisenv.ca
www.fortisenv.ca

FORTIS ENVIRONMENTAL

Soil Characterization Report – Environmental Site Assessment (ESA)
4670 Sideroad 10 North
Puslinch / ON

To Whom It May Concern,

Please find enclosed the results for the above-mentioned investigation conducted on your behalf. Please feel free to contact us at info@fortisenv.ca if you require any further information.

[redacted]

Andrew Topp, President
P.Geo. Q.P.ESA.
Master of Environmental Science
Bachelor of Science – Biology, Geology

Contents

List of Figures, Tables and Appendices

1 Introduction & Objective

1.1 General

Fortis Environmental Inc. (Fortis) was retained by Nicholls Ventures Inc. (the Client) to conduct a - Soil Characterization Report – Environmental Site Assessment (ESA) for the property located at 4670 Sideroad 10 North in Puslinch, Ontario (hereby referred to as “The Subject Property”).

1.2 Objective

The objective of the current investigation was to provide a summary of the environmental (chemical) quality of the soils imported to The Site as part of the construction of a Pole Barn.

The ESA was carried out in accordance with the Canadian Standards Association (CSA) Z769-00 (R2013), under general guidelines of Ontario Regulation 153/04 (including amendments of O. Reg. 406/19).

1.3 Site Description

At the time of the investigation, the site was developed with a newly constructed single-family residential dwelling, and a large surface area of farmland. The Investigation was completed as a supplementary investigation designed to address a Review Letter completed by Trace Associates (on behalf of the municipality), dated June 5, 2025.

As part of the proposed construction of a pole barn on the eastern portion of the Site, excess soil was imported by The Client in order to develop a foundation pad. Based on discussions with The Client; it is anticipated that 60 m^3 of excess soil was imported to The Site as part of the works conducted.

The area of fill placement was measured on-site as follows:

Surface Area: 240 m^2
Thickness: 0.25 m
Estimated Volume: ~60 m^3

Please refer to Figure 1 for an outline of the Subject Property.

1.4 Report Review

As part of the current investigation, the following reports were reviewed as part of the current investigation:

1) Review of Soil Characterization Report for 210 Mohawk Road, East, Hamilton, Ontario – Site Alteration Permit Application. The conclusions of the report are referenced below:

    - The number of confirmatory samples collected from the excess soil generated at the source site (five) does not meet the minimum number (10) of in-situ confirmatory samples prescribed in the Soil rules. As such, the SCR does not meet the requirements of the Site Alteration.

    - The quality of the imported fill to be used beneath the pole barn meets the applicable Table 2.1 ESQS.

    - Recommendations: The fill brought to the site for use under the pole barn should be resampled to properly document its suitability for the intended on-site use. The analytical parameters and the minimum number of confirmatory samples should be determined in accordance with the Soil Rules and the quantity of the fill brought to the site.

Based on such, Fortis implemented a sampling approach where parameters were analyzed to characterize the imported soils on-site by including the following general parameters: VOCs, BTEX, PHCs, PAHs, Metals, Inorganics.

2 Scope of Work

Fortis staff conducted the SCR-ESA field investigations in July of 2025. In order to obtain representative samples as per the requirements under O.Reg 406/19.

The Investigation consisted of the following:

- Inspection of the Subject Property.
- Obtaining three (3) soil samples in order to provide the overall chemical quality of the on-site soils in the location of the deposited excess soil.
- Preparation of an engineering report summarizing the findings of the investigation.

3 Site Investigation

3.1 General

Fortis Conducted the Subsurface investigation on July 23, 2025. The weather was sunny, and the average ambient temperature was recorded to be 35 degrees Celsius. Fortis personnel were on-site between the hours of 7:30 am – 9:00 am.

3.2 Impediments

No significant impediments were encountered during field investigations on the Subject Property, and full access to the Subject Property was permitted by the Client to allow for proper site investigation.

3.3 Methodology – Soil Sampling

On July 23, 2025; three (3) soil samples were machine-excavated from test pits within the area for fill placement. The sampling program is outlined in the table below:

Soil Sampling Plan & Rationale

Soil Sample ID	Analyses	Excavation Method	Depth	Horizontal Rationale	Vertical Rationale	Vapour Reading LNAPL/DNAPL
TP1-0723	VOCs BTEX PHCs PAHs Metals Inorganics	Machine Excavation – mini excavator bucket	0.20 mbgl	Test pits located in the vicinity of the area of excess soil placement taken approximately at surficial depth. The material was identified as mottled silty till with mixed gravel		0 ppm / 0.0
TP2-0723	VOCs BTEX PHCs PAHs Metals Inorganics	Machine Excavation – mini excavator bucket	0.20 mbgl			0 ppm / 0.0
TP3-0723	VOCs BTEX PHCs PAHs Metals Inorganics	Machine Excavation – mini excavator bucket	0.20 mbgl			0 ppm / 0.0

Please refer to Figure 1 for an outline of the Soil Sampling Location on-site.

4 Results of the Investigation

4.1 Vapour Investigation

Regulations 153/04 (as amended) do not require soil or headspace vapour concentrations as part of the PHC or solvent-derived soil analysis, the Regulations require the Headspace Vapour as field screening tool to identify the PHC or VOC impacted soils or headspace vapours. Elevated soil vapour concentrations, typically in the LEL range, are generally indicative of the presence of volatile combustible products i.e. gasoline, methane, solvents, and to a lesser extent diesel and fuel oil. It should be noted that elevated vapour concentrations may also be associated with the presence of moisture, microbial activity, or decaying organic matter, especially in the absence of visual or olfactory evidence of impact.

Headspace vapour concentrations (HSVCs) measured in the soil samples obtained during the investigation did not exceed 0 parts per million (ppm) in hexane and 0.0 ppm in Isobutylene.

4.2 Soil Chemical Analyses

Bulk Soil Chemical Analyses:

A review of the bulk soil chemical analyses; indicates that the measured concentrations in the submitted soil samples met/exceeded the following MECP Regulatory Standards:

Sample ID	Regulatory Standard						
	T1-Agri	T1 - RPIICC	T2.1 - Agri	T2.1- RPI	T2.1 - ICC	T3.1-RPI	T3.1-ICC
TP1-0723	Meets	Meets	Meets	Meets	Meets	Meets	Meets
TP2-0723	Meets SAR	Meets	Meets	Meets	Meets	Meets	Meets
TP3-0723	Meets	Meets	Meets	Meets	Meets	Meets	Meets

Note: For all bulk analyses EC and SAR were not considered exceedances assuming the material is managed in accordance with Section D, 1, (3) of the Soil Rules.

Leachate Soil Chemical Analyses:

Leachate analyses was not required at this time as all materials met the applicable Table 1 SCS.

Sampling frequency:

Based on the minimum sampling frequency requirements as outlined in O.Reg 406/19 for an excess soil volume of 60 m^3 ; Three (3) bulk samples are required in order to fulfill the objective of sufficient characterization.

Based on the total sampling program implemented by Fortis, it has been concluded that the investigation met the applicable minimum sampling frequency requirements.

5 Conclusions & Recommendations

Fortis Environmental Inc. was retained by Nicholls Ventures Inc. to conduct a Soil Characterization Report – Environmental Site Assessment for the property located at 4670 Sideroad 10 North in Puslinch, Ontario.

At the time of the investigation, the site was developed with a newly constructed single-family residential dwelling, and a large surface area of farmland. The Investigation was completed as a supplementary investigation designed to address a Review Letter completed by Trace Associates (on behalf of the municipality), dated June 5, 2025.

As part of the proposed construction of a pole barn on the eastern portion of the Site, excess soil was imported by The Client in order to develop a foundation pad. Based on discussions with The Client; it is anticipated that 60 m^3 of excess soil was imported to The Site as part of the works conducted on-site.

The ESA was carried out in accordance with the Canadian Standards Association (CSA) Z769-00 (R2013), under general guidelines of Ontario Regulation 153/04 (including amendments of O. Reg. 406/19).

Based on a review of chemical analyses – The imported excess soil met the following SCS / ESQS.

- Table 1: Background Site Condition Standards for Agri, RPIICC Property Use
- Table 2.1: Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Agri, RPI, ICC Property Use.

Based on the analyses completed, the excess soil imported to the site is suitable to remain in its location as part of the construction of the proposed pole barn.

Respectfully Submitted

Fortis Environmental Inc.

[redacted]

Andrew Topp, President, P.Geo. Q.P.ESA.
Master of Environmental Science
Bachelor of Science – Biology, Geology
atopp@fortisenv.ca

[redacted]

6 Limitations

1. This assessment was conducted in accordance with generally accepted engineering standards. It is possible that materials other than those described in this report are present at the site. The client acknowledges that no assessment can necessarily identify the existence of all contaminants, potential contaminants or environmental conditions;

2. This report was prepared for the sole and exclusive use of Nicholls Ventures Inc. (the Client). Fortis Environmental Inc. accepts no responsibility or liability for any loss, damage, expense, fine or any other claim of any nature or type, including any liability or potential liability arising from its own negligence, for any use of this report or reliance on it, in whole or in part, by anyone other than The Client;

3. There is no representation, warranty or condition, express or implied, by Fortis Environmental Inc. or its officers, directors, employees, or agents that this assessment has identified all contaminants, potential contaminants or environmental conditions at the site or that the site is free from contamination, potential contaminants or environmental conditions other than those noted in this report;

4. This assessment has been completed from information and documentation described in this report as well as the results of limited chemical analysis of soil samples collected from accessible locations on the date(s) specified. We have assumed that any such information and documentation is accurate and complete. We can accept no responsibility or liability for any errors, deficiencies or inaccuracies in this report arising from errors or omissions in the information and documentation provided by others;

5. This assessment was based on information and the results of investigation(s) obtained on the date(s) specified. Fortis Environmental Inc. accepts no responsibility or liability for any changes or potential changes in the condition of the site subsequent to the date of our investigation(s);

6. The conditions between sampling locations have been inferred, to the best of our ability, based on the conditions observed at sampling locations. Conditions between and beyond sampling locations may vary. This assessment pertains, only, to the site specifically described in this report and not to any adjacent or other property;

7. This assessment does not include, nor is it intended to include any opinion regarding the suitability of any structure on the site for any particular function, the integrity of the on-site buildings or the geotechnical conditions on the site, with the exception of how they may identify with environmental concerns. Inspections of buildings do not include compliance with building, gas, electrical or boiler codes, or any other federal, provincial, or municipal codes not associated with environmental concerns. Should concerns regarding any parameters other than environmental concerns arise because of our investigation(s), they should be addressed by appropriately qualified professionals; and,

8. This report is not to be reproduced or released to any other party, in whole or in part, without the express written consent of Fortis Environmental Inc.

7 Qualifications of the Assessor

Andrew Topp, H.B.Sc., M.Env.Sc, P.Geo, Q.P$_{ESA}$
President and Principal Geoscientist

Professional Geoscientist Membership #3185

Practicing Member as of January 2020

EDUCATION

Bachelor of Science - Geology *University of Toronto Scarborough, ON, Canada*

Masters Degree in Environmental Science, *University of Toronto Scarborough, ON,*

Bachelor of Science – Biology, Weste*rn University, London, ON, Canada*

PROJECT EXPERIENCE

Record of Site condition

Have conducted planning, pricing, field work, reporting and correspondence with the MECP for 30+ RSC projects.

UST/AST Removal

Have completed 150+ UST/AST removal projects for gas stations, residential and commercial sites including correspondence with the applicable regulatory bodies (TSSA, MECP).

Phase I ESA

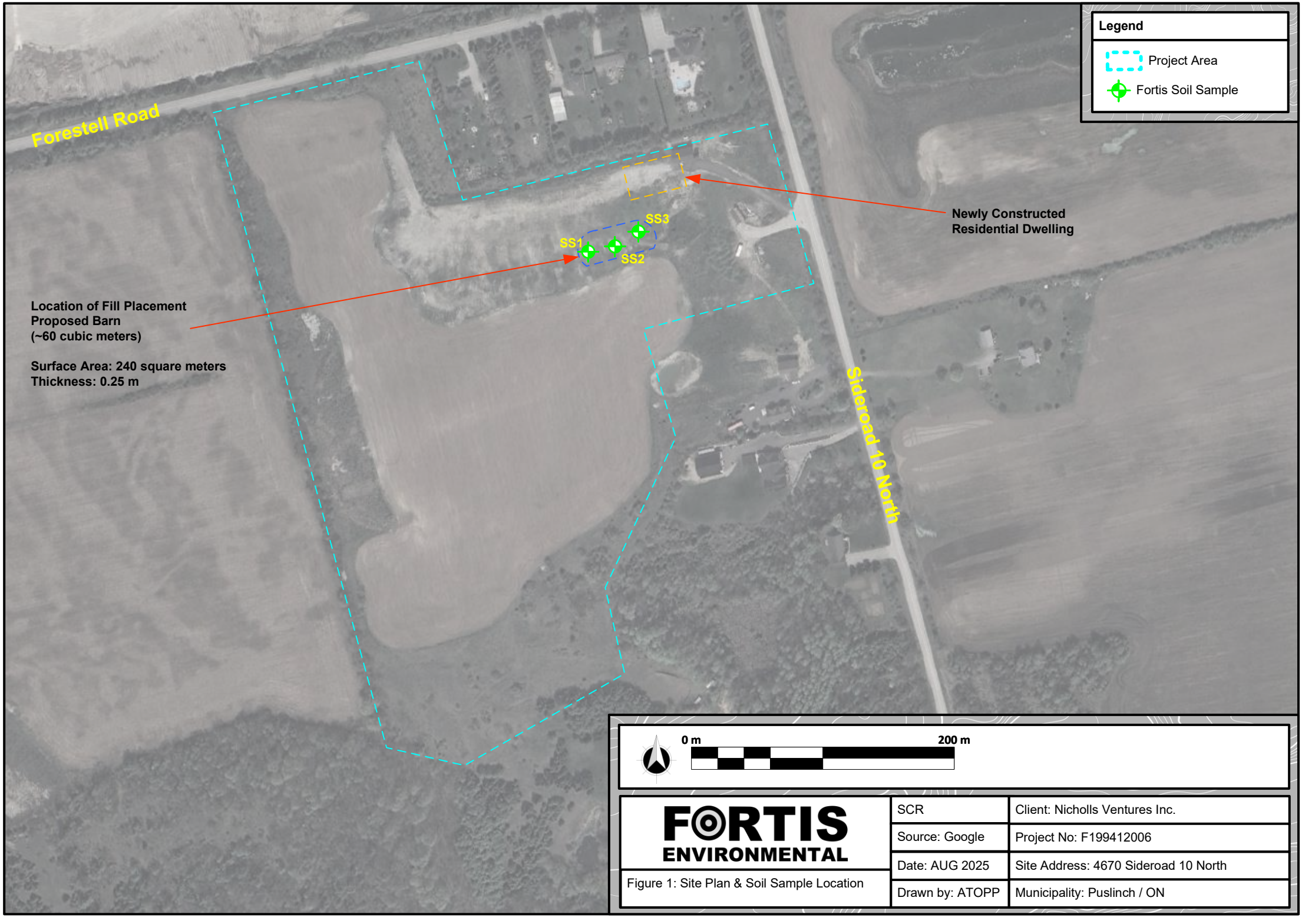
Have conducted over 350+ Phase I ESAs over the entirety of southern and northern Ontario in commercial, industrial and residential properties for the purposes of financing, real-estate due-diligence and Record of Site Condition.

Phase II ESA

Have conducted over 250+ Phase II ESAs over almost the entirety of southern and northern Ontario on various commercial, industrial and residential properties for the purposes of financing, real-estate due diligence and Record of Site Condition.

- References may be made available upon request.

Figures


Legend
Project Area
Fortis Soil Sample
Forestell Road
Sideroad 10 North
SS1
SS2
SS3
Newly Constructed
Residential Dwelling
Location of Fill Placement
Proposed Barn
(~60 cubic meters)
Surface Area: 240 square meters
Thickness: 0.25 m
0 m
200 m
FORTIS ENVIRONMENTAL
Figure 1: Site Plan & Soil Sample Location
SCR
Client: Nicholls Ventures Inc.
Source: Google
Project No: F199412006
Date: AUG 2025
Site Address: 4670 Sideroad 10 North
Drawn by: ATOPP
Municipality: Puslinch / ON

Appendix A
Laboratory Certificates of Analyses

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	:	**WT2520068**		
Client	:	**Fortis Environmental**	Laboratory	: ALS Environmental - Waterloo
Contact	:	Andrew Topp	Account Manager	: Gayle Braun
Address	:	942 Yonge St Suite 324 Toronto Ontario Canada M4W 3S8	Address	: 60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	Telephone	: +1 519 886 6910
Project	:	F199412006	Date Samples Received	: 24-Jul-2025 13:55
PO	:	----	Date Analysis Commenced	: 25-Jul-2025
C-O-C number	:	23-1124892	Issue Date	: 31-Jul-2025 17:40
Sampler	:	AT		
Site	:	----		
Quote number	:	Excess Soil		
No. of samples received	:	3		
No. of samples analysed	:	3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
David Tremblett		VOC, Waterloo, Ontario
Greg Pokocky		Inorganics, Waterloo, Ontario
Greg Pokocky		Metals, Waterloo, Ontario
Jeremy Gingras		Organics, Waterloo, Ontario
Josphin Masihi		Centralized Prep, Waterloo, Ontario

Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
TP2- 0723 ----	Soil/Solid	Sodium adsorption ratio [SAR]		ON406	T1-S-AG	1.27 -	1 -

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key: LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
mS/cm	millisiemens per centimetre
pH units	pH units

>: greater than.
<: less than.

Red shading is applied where the result or the LOR is greater than the Guideline Upper Limit (or lower than the Guideline Lower Limit, if applicable).
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.

Analytical Results Evaluation

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	TP1- 0723 ----	TP2- 0723 ----	TP3- 0723 ----	----	----	----	----
Client sampling date / time				23-Jul-2025 09:00	23-Jul-2025 09:00	23-Jul-2025 09:00	----	----	----	----
Sub-Matrix				Soil	Soil	Soil	----	----	----	----
				WT2520068-001	**WT2520068-002**	**WT2520068-003**	**----**	**----**	**----**	**----**
				Result	Result	Result	----	----	----	----
Physical Tests										
Conductivity (1:2 leachate)	----	E100-L/WT	mS/cm	0.182	0.221	0.161	----	----	----	----
Moisture	----	E144/WT	%	<0.25	<0.25	<0.25	----	----	----	----
pH (1:2 soil:CaCl2-aq)	----	E108A/WT	pH units	7.55	7.48	7.58	----	----	----	----
Cyanides										
Cyanide, weak acid dissociable	----	E336A/WT	mg/kg	<0.050	<0.050	<0.050	----	----	----	----
Fixed-Ratio Extractables										
Calcium, soluble ion content	7440-70-2	E484/WT	mg/L	3.74	4.97	3.67	----	----	----	----
Magnesium, soluble ion content	7439-95-4	E484/WT	mg/L	1.74	6.10	3.49	----	----	----	----
Sodium, soluble ion content	17341-25-2	E484/WT	mg/L	9.32	17.9	8.87	----	----	----	----
Sodium adsorption ratio [SAR]	----	E484/WT	-	1.00	1.27	0.80	----	----	----	----
Metals										
Antimony	7440-36-0	E440C/WT	mg/kg	<0.10	0.10	<0.10	----	----	----	----
Arsenic	7440-38-2	E440C/WT	mg/kg	2.99	3.42	3.21	----	----	----	----
Barium	7440-39-3	E440C/WT	mg/kg	23.1	30.3	24.8	----	----	----	----
Beryllium	7440-41-7	E440C/WT	mg/kg	0.25	0.31	0.24	----	----	----	----
Boron	7440-42-8	E440C/WT	mg/kg	<5.0	5.3	<5.0	----	----	----	----
Boron, hot water soluble	7440-42-8	E487/WT	mg/kg	0.23	0.23	0.15	----	----	----	----
Cadmium	7440-43-9	E440C/WT	mg/kg	<0.350	<0.350	<0.350	----	----	----	----
Chromium	7440-47-3	E440C/WT	mg/kg	10.2	12.5	10.2	----	----	----	----
Cobalt	7440-48-4	E440C/WT	mg/kg	3.31	4.23	3.45	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	TP1- 0723 ----	TP2- 0723 ----	TP3- 0723 ----	----	----	----	----
				Client sampling date / time	23-Jul-2025 09:00	23-Jul-2025 09:00	23-Jul-2025 09:00	----	----	----	----
				Sub-Matrix	Soil	Soil	Soil	----	----	----	----
					WT2520068-001	WT2520068-002	WT2520068-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Metals											
Copper	7440-50-8	E440C/WT	mg/kg		9.04	11.1	10.3	----	----	----	----
Lead	7439-92-1	E440C/WT	mg/kg		9.65	9.92	9.58	----	----	----	----
Mercury	7439-97-6	E510C/WT	mg/kg		0.0104	0.0117	0.0136	----	----	----	----
Molybdenum	7439-98-7	E440C/WT	mg/kg		0.20	0.30	0.22	----	----	----	----
Nickel	7440-02-0	E440C/WT	mg/kg		6.57	8.41	6.94	----	----	----	----
Selenium	7782-49-2	E440C/WT	mg/kg		<0.20	<0.20	<0.20	----	----	----	----
Silver	7440-22-4	E440C/WT	mg/kg		<0.10	<0.10	<0.10	----	----	----	----
Thallium	7440-28-0	E440C/WT	mg/kg		<0.050	0.059	0.051	----	----	----	----
Uranium	7440-61-1	E440C/WT	mg/kg		0.466	0.516	0.462	----	----	----	----
Vanadium	7440-62-2	E440C/WT	mg/kg		22.5	25.5	21.7	----	----	----	----
Zinc	7440-66-6	E440C/WT	mg/kg		27.2	35.2	28.7	----	----	----	----
Speciated Metals											
Chromium, hexavalent [Cr VI]	18540-29-9	E532/WT	mg/kg		0.16	<0.10	0.16	----	----	----	----
Volatile Organic Compounds											
Acetone	67-64-1	E611D/WT	mg/kg		<0.50	<0.50	<0.50	----	----	----	----
Benzene	71-43-2	E611D/WT	mg/kg		<0.0050	<0.0050	<0.0050	----	----	----	----
Bromodichloromethane	75-27-4	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Bromoform	75-25-2	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Bromomethane	74-83-9	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Carbon tetrachloride	56-23-5	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	TP1- 0723 ----	TP2- 0723 ----	TP3- 0723 ----	----	----	----	----
				Client sampling date / time	23-Jul-2025 09:00	23-Jul-2025 09:00	23-Jul-2025 09:00	----	----	----	----
				Sub-Matrix	Soil	Soil	Soil	----	----	----	----
					WT2520068-001	WT2520068-002	WT2520068-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Volatile Organic Compounds											
Chlorobenzene	108-90-7	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Chloroform	67-66-3	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dibromochloromethane	124-48-1	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dibromoethane, 1,2-	106-93-4	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichlorobenzene, 1,2-	95-50-1	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichlorobenzene, 1,3-	541-73-1	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichlorobenzene, 1,4-	106-46-7	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichlorodifluoromethane	75-71-8	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloroethane, 1,1-	75-34-3	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloroethane, 1,2-	107-06-2	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloroethylene, 1,1-	75-35-4	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloroethylene, cis-1,2-	156-59-2	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloroethylene, trans-1,2-	156-60-5	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloromethane	75-09-2	E611D/WT	mg/kg		<0.045	<0.045	<0.045	----	----	----	----
Dichloropropane, 1,2-	78-87-5	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloropropylene, cis-1,3-	10061-01-5	E611D/WT	mg/kg		<0.030	<0.030	<0.030	----	----	----	----
Dichloropropylene, cis+trans-1,3-	542-75-6	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dichloropropylene, trans-1,3-	10061-02-6	E611D/WT	mg/kg		<0.030	<0.030	<0.030	----	----	----	----
Ethylbenzene	100-41-4	E611D/WT	mg/kg		<0.015	<0.015	<0.015	----	----	----	----
Hexane, n-	110-54-3	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	TP1- 0723 ----	TP2- 0723 ----	TP3- 0723 ----	----	----	----	----
				Client sampling date / time	23-Jul-2025 09:00	23-Jul-2025 09:00	23-Jul-2025 09:00	----	----	----	----
				Sub-Matrix	Soil	Soil	Soil	----	----	----	----
					WT2520068-001	WT2520068-002	WT2520068-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Volatile Organic Compounds											
Methyl ethyl ketone [MEK]	78-93-3	E611D/WT	mg/kg		<0.50	<0.50	<0.50	----	----	----	----
Methyl isobutyl ketone [MIBK]	108-10-1	E611D/WT	mg/kg		<0.50	<0.50	<0.50	----	----	----	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D/WT	mg/kg		<0.040	<0.040	<0.040	----	----	----	----
Styrene	100-42-5	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Tetrachloroethylene	127-18-4	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Toluene	108-88-3	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Trichloroethane, 1,1,1-	71-55-6	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Trichloroethane, 1,1,2-	79-00-5	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Trichloroethylene	79-01-6	E611D/WT	mg/kg		<0.010	<0.010	<0.010	----	----	----	----
Trichlorofluoromethane	75-69-4	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Vinyl chloride	75-01-4	E611D/WT	mg/kg		<0.020	<0.020	<0.020	----	----	----	----
Xylene, m+p-	179601-23-1	E611D/WT	mg/kg		<0.030	<0.030	<0.030	----	----	----	----
Xylene, o-	95-47-6	E611D/WT	mg/kg		<0.030	<0.030	<0.030	----	----	----	----
Xylenes, total	1330-20-7	E611D/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
BTEX, total	----	E611D/WT	mg/kg		<0.10	<0.10	<0.10	----	----	----	----
Hydrocarbons											
F1 (C6-C10)	----	E581.F1/WT	mg/kg		<5.0	<5.0	<5.0	----	----	----	----
F2 (C10-C16)	----	E601.SG-L/WT	mg/kg		<10	<10	<10	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	TP1- 0723 ----	TP2- 0723 ----	TP3- 0723 ----	----	----	----	----
				Client sampling date / time	23-Jul-2025 09:00	23-Jul-2025 09:00	23-Jul-2025 09:00	----	----	----	----
				Sub-Matrix	Soil	Soil	Soil	----	----	----	----
					WT2520068-001	WT2520068-002	WT2520068-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Hydrocarbons											
F2-Naphthalene	----	EC600/WT	mg/kg		<25	<25	<25	----	----	----	----
F3 (C16-C34)	----	E601.SG-L/WT	mg/kg		<50	<50	<50	----	----	----	----
F3-PAH	n/a	EC600/WT	mg/kg		<50	<50	<50	----	----	----	----
F4 (C34-C50)	----	E601.SG-L/WT	mg/kg		<50	<50	<50	----	----	----	----
F1-BTEX	----	EC580/WT	mg/kg		<5.0	<5.0	<5.0	----	----	----	----
Hydrocarbons, total (C6-C50)	n/a	EC581/WT	mg/kg		<80	<80	<80	----	----	----	----
Chromatogram to baseline at nC50	n/a	E601.SG-L/WT	-		YES	YES	YES	----	----	----	----
Hydrocarbons Surrogates											
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601.SG-L/WT	%		86.4	89.5	94.2	----	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WT	%		74.2	83.3	78.8	----	----	----	----
Volatile Organic Compounds Surrogates											
Bromofluorobenzene, 4-	460-00-4	E611D/WT	%		120	98.0	118	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611D/WT	%		129	106	127	----	----	----	----
Polycyclic Aromatic Hydrocarbons											
Acenaphthene	83-32-9	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Acenaphthylene	208-96-8	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Anthracene	120-12-7	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Benz(a)anthracene	56-55-3	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Benzo(a)pyrene	50-32-8	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Benzo(b+j)fluoranthene	n/a	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	TP1- 0723 ----	TP2- 0723 ----	TP3- 0723 ----	----	----	----	----
				Client sampling date / time	23-Jul-2025 09:00	23-Jul-2025 09:00	23-Jul-2025 09:00	----	----	----	----
				Sub-Matrix	Soil	Soil	Soil	----	----	----	----
					WT2520068-001	WT2520068-002	WT2520068-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Polycyclic Aromatic Hydrocarbons											
Benzo(g,h,i)perylene	191-24-2	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Benzo(k)fluoranthene	207-08-9	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Chrysene	218-01-9	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Fluoranthene	206-44-0	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Fluorene	86-73-7	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Methylnaphthalene, 1-	90-12-0	E641A/WT	mg/kg		<0.030	<0.030	<0.030	----	----	----	----
Methylnaphthalene, 1+2-	----	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Methylnaphthalene, 2-	91-57-6	E641A/WT	mg/kg		<0.030	<0.030	<0.030	----	----	----	----
Naphthalene	91-20-3	E641A/WT	mg/kg		<0.010	<0.010	<0.010	----	----	----	----
Phenanthrene	85-01-8	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Pyrene	129-00-0	E641A/WT	mg/kg		<0.050	<0.050	<0.050	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates											
Acridine-d9	34749-75-2	E641A/WT	%		83.2	85.2	86.5	----	----	----	----
Chrysene-d12	1719-03-5	E641A/WT	%		79.6	81.9	82.2	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/WT	%		85.7	87.6	87.3	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/WT	%		87.5	89.3	89.4	----	----	----	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Summary of Guideline Limits

Analyte	CAS Number	Unit	ON406 T1-S-AG	ON406 T1-RPIICC	ON406 T2.1-S-AG				
Physical Tests									
Conductivity (1:2 leachate)		mS/cm	**0.47 mS/cm**	**0.57 mS/cm**	**0.7 mS/cm**	----	----	----	----
Moisture	----	%	----	----	----	----	----	----	----
pH (1:2 soil:CaCl2-aq)		pH units	----	----	----	----	----	----	----
Cyanides									
Cyanide, weak acid dissociable		mg/kg	**0.051 mg/kg**	**0.051 mg/kg**	**0.051 mg/kg**	----	----	----	----
Fixed-Ratio Extractables									
Calcium, soluble ion content	7440-70-2	mg/L	----	----	----	----	----	----	----
Magnesium, soluble ion content	7439-95-4	mg/L	----	----	----	----	----	----	----
Sodium, soluble ion content	17341-25-2	mg/L	----	----	----	----	----	----	----
Sodium adsorption ratio [SAR]		-	**1 -**	**2.4 -**	**5 -**	----	----	----	----
Metals									
Antimony	7440-36-0	mg/kg	**1 mg/kg**	**1.3 mg/kg**	**7.5 mg/kg**	----	----	----	----
Arsenic	7440-38-2	mg/kg	**11 mg/kg**	**18 mg/kg**	**11 mg/kg**	----	----	----	----
Barium	7440-39-3	mg/kg	**210 mg/kg**	**220 mg/kg**	**390 mg/kg**	----	----	----	----
Beryllium	7440-41-7	mg/kg	**2.5 mg/kg**	**2.5 mg/kg**	**4 mg/kg**	----	----	----	----
Boron	7440-42-8	mg/kg	**36 mg/kg**	**36 mg/kg**	**120 mg/kg**	----	----	----	----
Boron, hot water soluble	7440-42-8	mg/kg	----	----	**1.5 mg/kg**	----	----	----	----
Cadmium	7440-43-9	mg/kg	**1 mg/kg**	**1.2 mg/kg**	**1 mg/kg**	----	----	----	----
Chromium	7440-47-3	mg/kg	**67 mg/kg**	**70 mg/kg**	**160 mg/kg**	----	----	----	----
Cobalt	7440-48-4	mg/kg	**19 mg/kg**	**21 mg/kg**	**22 mg/kg**	----	----	----	----
Copper	7440-50-8	mg/kg	**62 mg/kg**	**92 mg/kg**	**140 mg/kg**	----	----	----	----
Lead	7439-92-1	mg/kg	**45 mg/kg**	**120 mg/kg**	**45 mg/kg**	----	----	----	----
Mercury	7439-97-6	mg/kg	**0.16 mg/kg**	**0.27 mg/kg**	**0.24 mg/kg**	----	----	----	----

Molybdenum	7439-98-7	mg/kg	2 mg/kg	2 mg/kg	6.9 mg/kg	----	----	----	----
Nickel	7440-02-0	mg/kg	37 mg/kg	82 mg/kg	100 mg/kg	----	----	----	----
Selenium	7782-49-2	mg/kg	1.2 mg/kg	1.5 mg/kg	2.4 mg/kg	----	----	----	----
Silver	7440-22-4	mg/kg	0.5 mg/kg	0.5 mg/kg	20 mg/kg	----	----	----	----
Thallium	7440-28-0	mg/kg	1 mg/kg	1 mg/kg	1 mg/kg	----	----	----	----
Uranium	7440-61-1	mg/kg	1.9 mg/kg	2.5 mg/kg	23 mg/kg	----	----	----	----
Vanadium	7440-62-2	mg/kg	86 mg/kg	86 mg/kg	86 mg/kg	----	----	----	----
Zinc	7440-66-6	mg/kg	290 mg/kg	290 mg/kg	340 mg/kg	----	----	----	----
Speciated Metals									
Chromium, hexavalent [Cr VI]	18540-29-9	mg/kg	0.66 mg/kg	0.66 mg/kg	8 mg/kg	----	----	----	----
Volatile Organic Compounds									
Acetone	67-64-1	mg/kg	0.5 mg/kg	0.5 mg/kg	0.5 mg/kg	----	----	----	----
Benzene	71-43-2	mg/kg	0.02 mg/kg	0.02 mg/kg	0.02 mg/kg	----	----	----	----
Bromodichloromethane	75-27-4	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Bromoform	75-25-2	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Bromomethane	74-83-9	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Carbon tetrachloride	56-23-5	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Chlorobenzene	108-90-7	mg/kg	0.05 mg/kg	0.05 mg/kg	0.083 mg/kg	----	----	----	----
Chloroform	67-66-3	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Dibromochloromethane	124-48-1	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Dibromoethane, 1,2-	106-93-4	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Dichlorobenzene, 1,2-	95-50-1	mg/kg	0.05 mg/kg	0.05 mg/kg	3.4 mg/kg	----	----	----	----
Dichlorobenzene, 1,3-	541-73-1	mg/kg	0.05 mg/kg	0.05 mg/kg	0.26 mg/kg	----	----	----	----
Dichlorobenzene, 1,4-	106-46-7	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Dichlorodifluoromethane	75-71-8	mg/kg	0.05 mg/kg	0.05 mg/kg	1.5 mg/kg	----	----	----	----
Dichloroethane, 1,1-	75-34-3	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----
Dichloroethane, 1,2-	107-06-2	mg/kg	0.05 mg/kg	0.05 mg/kg	0.05 mg/kg	----	----	----	----

Dichloroethylene, 1,1-	75-35-4	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Dichloroethylene, cis-1,2-	156-59-2	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Dichloroethylene, trans-1,2-	156-60-5	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Dichloromethane	75-09-2	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Dichloropropane, 1,2-	78-87-5	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Dichloropropylene, cis-1,3-	10061-01-5	mg/kg	----	----	----	----	----	----	----
Dichloropropylene, cis+trans-1,3-	542-75-6	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Dichloropropylene, trans-1,3-	10061-02-6	mg/kg	----	----	----	----	----	----	----
Ethylbenzene	100-41-4	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Hexane, n-	110-54-3	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**2.5 mg/kg**	----	----	----	----
Methyl ethyl ketone [MEK]	78-93-3	mg/kg	**0.5 mg/kg**	**0.5 mg/kg**	**0.5 mg/kg**	----	----	----	----
Methyl isobutyl ketone [MIBK]	108-10-1	mg/kg	**0.5 mg/kg**	**0.5 mg/kg**	**0.5 mg/kg**	----	----	----	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Styrene	100-42-5	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Tetrachloroethane, 1,1,1,2-	630-20-6	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Tetrachloroethane, 1,1,2,2-	79-34-5	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Tetrachloroethylene	127-18-4	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Toluene	108-88-3	mg/kg	**0.2 mg/kg**	**0.2 mg/kg**	**0.2 mg/kg**	----	----	----	----
Trichloroethane, 1,1,1-	71-55-6	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.11 mg/kg**	----	----	----	----
Trichloroethane, 1,1,2-	79-00-5	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Trichloroethylene	79-01-6	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.05 mg/kg**	----	----	----	----
Trichlorofluoromethane	75-69-4	mg/kg	**0.05 mg/kg**	**0.25 mg/kg**	**0.17 mg/kg**	----	----	----	----
Vinyl chloride	75-01-4	mg/kg	**0.02 mg/kg**	**0.02 mg/kg**	**0.02 mg/kg**	----	----	----	----
Xylene, m+p-	179601-23-1	mg/kg	----	----	----	----	----	----	----
Xylene, o-	95-47-6	mg/kg	----	----	----	----	----	----	----
Xylenes, total	1330-20-7	mg/kg	**0.05 mg/kg**	**0.05 mg/kg**	**0.091 mg/kg**	----	----	----	----
BTEX, total		mg/kg	----	----	----	----	----	----	----

Hydrocarbons									
F1 (C6-C10)		mg/kg	**17 mg/kg**	**25 mg/kg**	**17 mg/kg**	----	----	----	----
F2 (C10-C16)	----	mg/kg	**10 mg/kg**	**10 mg/kg**	**10 mg/kg**	----	----	----	----
F2-Naphthalene		mg/kg	----	----	----	----	----	----	----
F3 (C16-C34)	----	mg/kg	**240 mg/kg**	**240 mg/kg**	**240 mg/kg**	----	----	----	----
F3-PAH	n/a	mg/kg	----	----	----	----	----	----	----
F4 (C34-C50)	----	mg/kg	**120 mg/kg**	**120 mg/kg**	**2800 mg/kg**	----	----	----	----
F1-BTEX		mg/kg	**17 mg/kg**	**25 mg/kg**	**17 mg/kg**	----	----	----	----
Hydrocarbons, total (C6-C50)	n/a	mg/kg	----	----	----	----	----	----	----
Chromatogram to baseline at nC50	n/a	-	----	----	----	----	----	----	----
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	%	----	----	----	----	----	----	----
Bromofluorobenzene, 4-	460-00-4	%	----	----	----	----	----	----	----
Dichlorotoluene, 3,4-	95-75-0	%	----	----	----	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	%	----	----	----	----	----	----	----
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	83-32-9	mg/kg	**0.05 mg/kg**	**0.072 mg/kg**	**2.5 mg/kg**	----	----	----	----
Acenaphthylene	208-96-8	mg/kg	**0.093 mg/kg**	**0.093 mg/kg**	**0.093 mg/kg**	----	----	----	----
Anthracene	120-12-7	mg/kg	**0.05 mg/kg**	**0.16 mg/kg**	**0.058 mg/kg**	----	----	----	----
Benz(a)anthracene	56-55-3	mg/kg	**0.095 mg/kg**	**0.36 mg/kg**	**0.5 mg/kg**	----	----	----	----
Benzo(a)pyrene	50-32-8	mg/kg	**0.05 mg/kg**	**0.3 mg/kg**	**0.31 mg/kg**	----	----	----	----
Benzo(b+j)fluoranthene	n/a	mg/kg	**0.3 mg/kg**	**0.47 mg/kg**	**3.2 mg/kg**	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	mg/kg	**0.2 mg/kg**	**0.68 mg/kg**	**6.6 mg/kg**	----	----	----	----
Benzo(k)fluoranthene	207-08-9	mg/kg	**0.05 mg/kg**	**0.48 mg/kg**	**3.1 mg/kg**	----	----	----	----
Chrysene	218-01-9	mg/kg	**0.18 mg/kg**	**2.8 mg/kg**	**7 mg/kg**	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	mg/kg	**0.1 mg/kg**	**0.1 mg/kg**	**0.57 mg/kg**	----	----	----	----
Fluoranthene	206-44-0	mg/kg	**0.24 mg/kg**	**0.56 mg/kg**	**0.69 mg/kg**	----	----	----	----
Fluorene	86-73-7	mg/kg	**0.05 mg/kg**	**0.12 mg/kg**	**6.8 mg/kg**	----	----	----	----

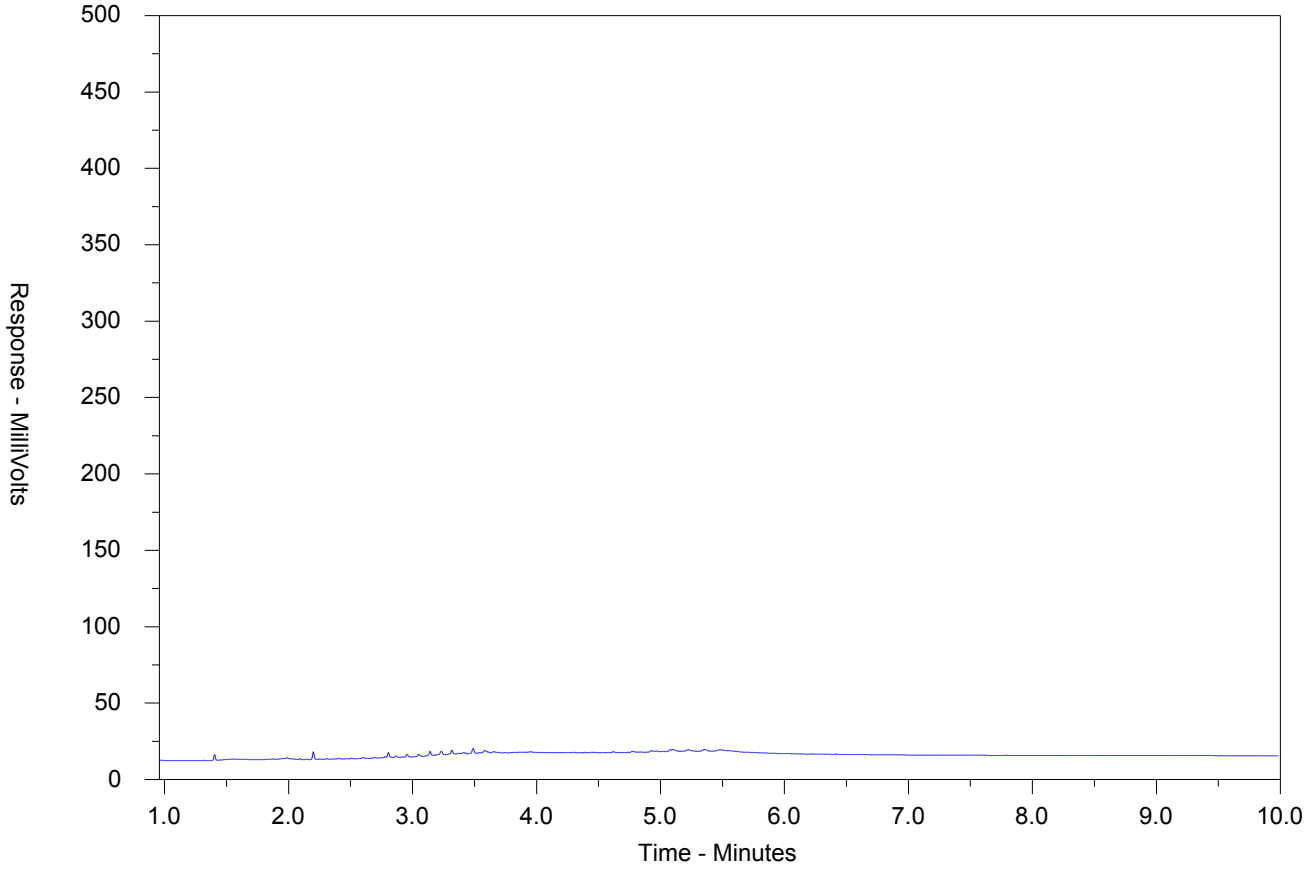
Indeno(1,2,3-c,d)pyrene	193-39-5	mg/kg	**0.11 mg/kg**	**0.23 mg/kg**	**0.38 mg/kg**	----	----	----	----
Methylnaphthalene, 1-	90-12-0	mg/kg	**0.05 mg/kg**	**0.59 mg/kg**	**0.096 mg/kg**	----	----	----	----
Methylnaphthalene, 1+2-	----	mg/kg	**0.05 mg/kg**	**0.59 mg/kg**	**0.096 mg/kg**	----	----	----	----
Methylnaphthalene, 2-	91-57-6	mg/kg	**0.05 mg/kg**	**0.59 mg/kg**	**0.096 mg/kg**	----	----	----	----
Naphthalene	91-20-3	mg/kg	**0.05 mg/kg**	**0.09 mg/kg**	**0.2 mg/kg**	----	----	----	----
Phenanthrene	85-01-8	mg/kg	**0.19 mg/kg**	**0.69 mg/kg**	**6.2 mg/kg**	----	----	----	----
Pyrene	129-00-0	mg/kg	**0.19 mg/kg**	**1 mg/kg**	**28 mg/kg**	----	----	----	----
Acridine-d9	34749-75-2	%	----	----	----	----	----	----	----
Chrysene-d12	1719-03-5	%	----	----	----	----	----	----	----
Naphthalene-d8	1146-65-2	%	----	----	----	----	----	----	----
Phenanthrene-d10	1517-22-2	%	----	----	----	----	----	----	----

Key:

ON406	Ontario Regulation 406/19 - Excess Soils (Bulk) (12-April -2022)
T1-RPIICC	406 T1 - Soil - Res/Park/Inst/Ind/Com/Commu Property Use
T1-S-AG	406 T1 - Soil - Agricultural and Other Property Use
T2.1-S-AG	406 T2.1 - Volume Independent Soil - Agricultural or Other Property Use

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2520068-001-E601.SG-L
Client Sample ID: TP1- 0723



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

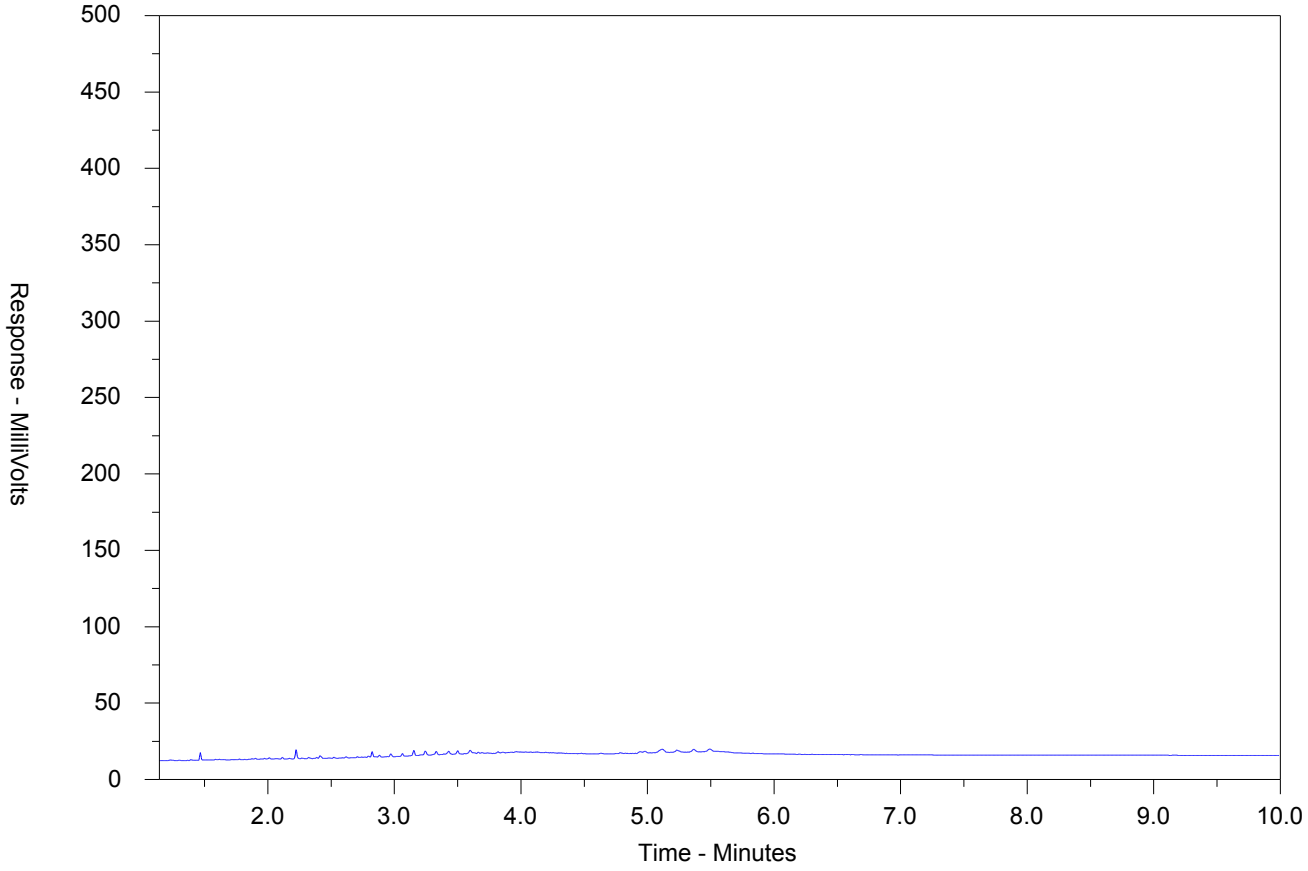
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2520068-002-E601.SG-L
Client Sample ID: TP2- 0723



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

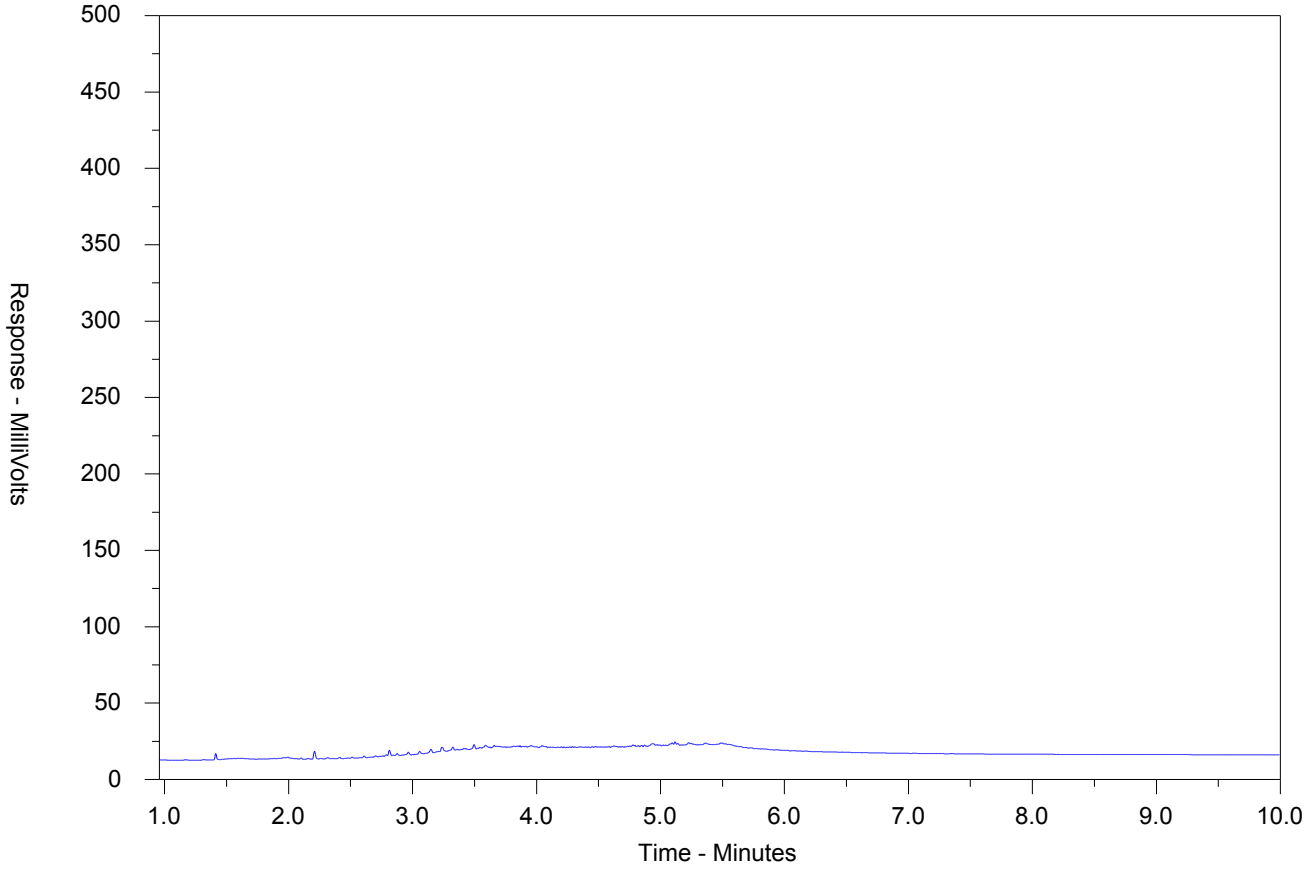
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT

ALS Sample ID: WT2520068-003-E601.SG-L
Client Sample ID: TP3- 0723



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
174°C	287°C	481°C	575°C
346°F	549°F	898°F	1067°F
Gasoline →		← Motor Oils/Lube Oils/Grease →	
←Diesel/Jet Fuels→			

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

ALS Canada Ltd.

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2520068**	Page	: 1 of 12
Client	: **Fortis Environmental**	Laboratory	: ALS Environmental - Waterloo
Contact	: Andrew Topp	Account Manager	: Gayle Braun
Address	: 942 Yonge St Suite 324 Toronto ON Canada M4W 3S8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: F199412006	Date Samples Received	: 24-Jul-2025 13:55
PO	: ----	Issue Date	: 31-Jul-2025 17:42
C-O-C number	: 23-1124892		
Sampler	: AT		
Site	: ----		
Quote number	: Excess Soil		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Cyanides : WAD Cyanide (0.01M NaOH Extraction)										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E336A	23-Jul-2025	29-Jul-2025	14 days	6 days	✓	30-Jul-2025	14 days	1 days	✓
Cyanides : WAD Cyanide (0.01M NaOH Extraction)										
Glass soil jar/Teflon lined cap [ON MECP] TP2- 0723	E336A	23-Jul-2025	29-Jul-2025	14 days	6 days	✓	30-Jul-2025	14 days	1 days	✓
Cyanides : WAD Cyanide (0.01M NaOH Extraction)										
Glass soil jar/Teflon lined cap [ON MECP] TP3- 0723	E336A	23-Jul-2025	29-Jul-2025	14 days	6 days	✓	30-Jul-2025	14 days	1 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] TP1- 0723	E581.F1	23-Jul-2025	25-Jul-2025	14 days	2 days	✓	25-Jul-2025	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] TP2- 0723	E581.F1	23-Jul-2025	25-Jul-2025	14 days	2 days	✓	25-Jul-2025	40 days	0 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID										
Glass soil methanol vial [ON MECP] TP3- 0723	E581.F1	23-Jul-2025	25-Jul-2025	14 days	2 days	✓	25-Jul-2025	40 days	0 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E601.SG-L	23-Jul-2025	30-Jul-2025	14 days	7 days	✓	31-Jul-2025	40 days	1 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP]										
TP2- 0723	E601.SG-L	23-Jul-2025	30-Jul-2025	14 days	7 days	✓	31-Jul-2025	40 days	1 days	✓
Hydrocarbons : CCME PHCs - F2-F4 by GC-FID (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP]										
TP3- 0723	E601.SG-L	23-Jul-2025	30-Jul-2025	14 days	7 days	✓	31-Jul-2025	40 days	1 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap [ON MECP]										
TP1- 0723	E487	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	30-Jul-2025	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap [ON MECP]										
TP2- 0723	E487	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	30-Jul-2025	180 days	0 days	✓
Metals : Boron-Hot Water Extractable by ICPOES										
Glass soil jar/Teflon lined cap [ON MECP]										
TP3- 0723	E487	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	30-Jul-2025	180 days	0 days	✓
Metals : Mercury in Soil/Solid by CVAAS (<355 µm)										
Glass soil jar/Teflon lined cap [ON MECP]										
TP1- 0723	E510C	23-Jul-2025	30-Jul-2025	28 days	7 days	✓	31-Jul-2025	28 days	1 days	✓
Metals : Mercury in Soil/Solid by CVAAS (<355 µm)										
Glass soil jar/Teflon lined cap [ON MECP]										
TP2- 0723	E510C	23-Jul-2025	30-Jul-2025	28 days	7 days	✓	31-Jul-2025	28 days	1 days	✓
Metals : Mercury in Soil/Solid by CVAAS (<355 µm)										
Glass soil jar/Teflon lined cap [ON MECP]										
TP3- 0723	E510C	23-Jul-2025	30-Jul-2025	28 days	7 days	✓	31-Jul-2025	28 days	1 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS (<355 µm)										
Glass soil jar/Teflon lined cap [ON MECP]										
TP1- 0723	E440C	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	31-Jul-2025	180 days	7 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Metals in Soil/Solid by CRC ICPMS (<355 µm)										
Glass soil jar/Teflon lined cap [ON MECP] TP2- 0723	E440C	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	31-Jul-2025	180 days	7 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS (<355 µm)										
Glass soil jar/Teflon lined cap [ON MECP] TP3- 0723	E440C	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	31-Jul-2025	180 days	7 days	✓
Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E484	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	30-Jul-2025	180 days	0 days	✓
Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)										
Glass soil jar/Teflon lined cap [ON MECP] TP2- 0723	E484	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	30-Jul-2025	180 days	0 days	✓
Metals : Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)										
Glass soil jar/Teflon lined cap [ON MECP] TP3- 0723	E484	23-Jul-2025	30-Jul-2025	180 days	7 days	✓	30-Jul-2025	180 days	0 days	✓
Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E100-L	23-Jul-2025	30-Jul-2025	30 days	7 days	✓	31-Jul-2025	30 days	7 days	✓
Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] TP2- 0723	E100-L	23-Jul-2025	30-Jul-2025	30 days	7 days	✓	31-Jul-2025	30 days	7 days	✓
Physical Tests : Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)										
Glass soil jar/Teflon lined cap [ON MECP] TP3- 0723	E100-L	23-Jul-2025	30-Jul-2025	30 days	7 days	✓	31-Jul-2025	30 days	7 days	✓
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E144	23-Jul-2025	----	----	----		29-Jul-2025	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap [ON MECP] TP2- 0723	E144	23-Jul-2025	----	----	----		29-Jul-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
Glass soil jar/Teflon lined cap [ON MECP] TP3- 0723	E144	23-Jul-2025	----	----	----		29-Jul-2025	----	----	
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E108A	23-Jul-2025	30-Jul-2025	30 days	7 days	✓	30-Jul-2025	30 days	7 days	✓
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap [ON MECP] TP2- 0723	E108A	23-Jul-2025	30-Jul-2025	30 days	7 days	✓	30-Jul-2025	30 days	7 days	✓
Physical Tests : pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received										
Glass soil jar/Teflon lined cap [ON MECP] TP3- 0723	E108A	23-Jul-2025	30-Jul-2025	30 days	7 days	✓	30-Jul-2025	30 days	7 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Soil/solid by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E641A	23-Jul-2025	30-Jul-2025	60 days	7 days	✓	31-Jul-2025	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Soil/solid by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap [ON MECP] TP2- 0723	E641A	23-Jul-2025	30-Jul-2025	60 days	7 days	✓	31-Jul-2025	40 days	1 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Soil/solid by Hex:Ace GC-MS										
Glass soil jar/Teflon lined cap [ON MECP] TP3- 0723	E641A	23-Jul-2025	30-Jul-2025	60 days	7 days	✓	31-Jul-2025	40 days	1 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap [ON MECP] TP1- 0723	E532	23-Jul-2025	29-Jul-2025	30 days	6 days	✓	30-Jul-2025	7 days	1 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap [ON MECP]										
TP2- 0723	E532	23-Jul-2025	29-Jul-2025	30 days	6 days	✓	30-Jul-2025	7 days	1 days	✓
Speciated Metals : Hexavalent Chromium (Cr VI) by IC										
Glass soil jar/Teflon lined cap [ON MECP]										
TP3- 0723	E532	23-Jul-2025	29-Jul-2025	30 days	6 days	✓	30-Jul-2025	7 days	1 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
TP1- 0723	E611D	23-Jul-2025	25-Jul-2025	14 days	2 days	✓	25-Jul-2025	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
TP2- 0723	E611D	23-Jul-2025	25-Jul-2025	14 days	2 days	✓	25-Jul-2025	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass soil methanol vial [ON MECP]										
TP3- 0723	E611D	23-Jul-2025	25-Jul-2025	14 days	2 days	✓	25-Jul-2025	40 days	0 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2134131	1	20	5.0	5.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	2134130	1	20	5.0	5.0	✓
Moisture Content by Gravimetry	E144	2132512	1	20	5.0	5.0	✓
WAD Cyanide (0.01M NaOH Extraction)	E336A	2132540	1	11	9.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C	2134136	1	4	25.0	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	2134132	1	4	25.0	5.0	✓
Boron-Hot Water Extractable by ICPOES	E487	2134134	1	4	25.0	5.0	✓
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C	2134135	1	4	25.0	5.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	2132541	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	2126837	1	13	7.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2133899	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2126836	1	20	5.0	5.0	✓
PAHs in Soil/solid by Hex:Ace GC-MS	E641A	2133900	1	18	5.5	5.0	✓
Laboratory Control Samples (LCS)							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2134131	2	20	10.0	10.0	✓
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A	2134130	1	20	5.0	5.0	✓
Moisture Content by Gravimetry	E144	2132512	1	20	5.0	5.0	✓
WAD Cyanide (0.01M NaOH Extraction)	E336A	2132540	1	11	9.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C	2134136	2	4	50.0	10.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	2134132	2	4	50.0	10.0	✓
Boron-Hot Water Extractable by ICPOES	E487	2134134	2	4	50.0	10.0	✓
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C	2134135	2	4	50.0	10.0	✓
Hexavalent Chromium (Cr VI) by IC	E532	2132541	2	20	10.0	10.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	2126837	1	13	7.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2133899	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2126836	1	20	5.0	5.0	✓
PAHs in Soil/solid by Hex:Ace GC-MS	E641A	2133900	1	18	5.5	5.0	✓
Method Blanks (MB)							
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L	2134131	1	20	5.0	5.0	✓
Moisture Content by Gravimetry	E144	2132512	1	20	5.0	5.0	✓
WAD Cyanide (0.01M NaOH Extraction)	E336A	2132540	1	11	9.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C	2134136	1	4	25.0	5.0	✓
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484	2134132	1	4	25.0	5.0	✓
Boron-Hot Water Extractable by ICPOES	E487	2134134	1	4	25.0	5.0	✓
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C	2134135	1	4	25.0	5.0	✓

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Method Blanks (MB) - Continued							
Hexavalent Chromium (Cr VI) by IC	E532	2132541	1	20	5.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	2126837	1	13	7.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2133899	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2126836	1	20	5.0	5.0	✓
PAHs in Soil/solid by Hex:Ace GC-MS	E641A	2133900	1	18	5.5	5.0	✓
Matrix Spikes (MS)							
WAD Cyanide (0.01M NaOH Extraction)	E336A	2132540	1	11	9.0	5.0	✓
CCME PHC - F1 by Headspace GC-FID	E581.F1	2126837	1	13	7.6	5.0	✓
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L	2133899	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2126836	1	20	5.0	5.0	✓
PAHs in Soil/solid by Hex:Ace GC-MS	E641A	2133900	1	18	5.5	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Conductivity in Soil (1:2 Soil:Water Extraction) (Low Level)	E100-L ALS Environmental - Waterloo	Soil/Solid	CSSS Ch. 15 (mod)/APHA 2510 (mod)	Conductivity, also known as Electrical Conductivity (EC) or Specific Conductance, is measured by immersion of a conductivity cell with platinum electrodes into a soil sample that has been added in a defined ratio of soil to deionized water, then shaken well and allowed to settle. Conductance is measured in the fluid that is observed in the upper layer.
pH by Meter (1:2 Soil:0.01M CaCl2 Extraction) - As Received	E108A ALS Environmental - Waterloo	Soil/Solid	MECP E3530	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C) and is carried out in accordance with procedures described in the Analytical Protocol (prescriptive method). A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling, or decanting and then analyzed using a pH meter and electrode. This method is equivalent to ASTM D4972 and is acceptable for topsoil analysis.
Moisture Content by Gravimetry	E144 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
WAD Cyanide (0.01M NaOH Extraction)	E336A ALS Environmental - Waterloo	Soil/Solid	APHA 4500-CN I (mod)	Weak Acid Dissociable (WAD) cyanide is determined after extraction by Continuous Flow Analyzer (CFA) with in-line distillation followed by colourmetric analysis.
Metals in Soil/Solid by CRC ICPMS (<355 µm)	E440C ALS Environmental - Waterloo	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 355 µm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Sodium Adsorption Ratio (SAR) - 1:2 Soil:Water (Dry)	E484 ALS Environmental - Waterloo	Soil/Solid	SW846 6010C	A dried, disaggregated solid sample is extracted with deionized water, the aqueous extract is separated from the solid, acidified and then analyzed using a ICP/OES. The concentrations of Na, Ca and Mg are reported as per CALA requirements for calculated parameters. These individual parameters are not for comparison to any guideline.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Boron-Hot Water Extractable by ICPOES	E487 ALS Environmental - Waterloo	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).
Mercury in Soil/Solid by CVAAS (<355 µm)	E510C ALS Environmental - Waterloo	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are sieved through a 355 µm sieve, and digested with HNO_3 and HCl, followed by CVAAS analysis.
Hexavalent Chromium (Cr VI) by IC	E532 ALS Environmental - Waterloo	Soil/Solid	APHA 3500-CR C	Instrumental analysis is performed by ion chromatography with UV detection.
CCME PHC - F1 by Headspace GC-FID	E581.F1 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law. Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Test results are expressed on a dry weight basis. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
CCME PHCs - F2-F4 by GC-FID (Low Level)	E601.SG-L ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4). Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Test results are expressed on a dry weight basis. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D ALS Environmental - Waterloo	Soil/Solid	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PAHs in Soil/solid by Hex:Ace GC-MS	E641A ALS Environmental - Waterloo	Soil/Solid	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are extracted with hexane/acetone and analyzed by GC-MS. If reported, IACR (index of additive cancer risk, unitless) and B(a)P toxic potency equivalent (in soil concentration units) are calculated as per CCME PAH Soil Quality Guidelines fact sheet (2010) or ABT1.
F1-BTEX	EC580 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Sum F1 to F4 (C6-C50)	EC581 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fractions F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50). F4G-sg is not used within this calculation due to overlap with other fractions.
F2 to F3 minus PAH	EC600 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1	F2-Naphthalene = CCME Fraction 2 (C10-C16) minus Naphthalene F3-PAH = CCME Fraction 3 (C16-C34) minus sPhenanthrene, Fluoranthene, Pyrene, Benz(a)anthracene, benzo(b+j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-c,d)pyrene, and Dibenz(a,h)anthracene.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil:Water for pH/EC	EP108 ALS Environmental - Waterloo	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.
Leach 1:2 Soil : 0.01CaCl2 - As Received for pH	EP108A ALS Environmental - Waterloo	Soil/Solid	MOEE E3137A	A minimum 10g portion of the sample, as received, is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil by centrifuging, settling or decanting and then analyzed using a pH meter and electrode.
Cyanide Extraction for CFA (0.01M NaOH)	EP333A ALS Environmental - Waterloo	Soil/Solid	ON MECP E3015 (mod)	Extraction for various cyanide analysis is by rotary extraction of the soil with 0.01M Sodium Hydroxide.
Digestion for Metals and Mercury (355 µm Sieve)	EP440C ALS Environmental - Waterloo	Soil/Solid	EPA 200.2 (mod)	Samples are sieved through a 355 µm sieve, and digested with HNO3 and HCl. This method is intended to liberate metals that may be environmentally available.
Boron-Hot Water Extractable	EP487 ALS Environmental - Waterloo	Soil/Solid	HW EXTR, EPA 6010B	A dried solid sample is extracted with weak calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES. Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011)
Preparation of Hexavalent Chromium (Cr VI) for IC	EP532 ALS Environmental - Waterloo	Soil/Solid	EPA 3060A	Field moist samples are digested with a sodium hydroxide/sodium carbonate solution as described in EPA 3060A.
VOCs Methanol Extraction for Headspace Analysis	EP581 ALS Environmental - Waterloo	Soil/Solid	EPA 5035A (mod)	VOCs in samples are extracted with methanol. Extracts are then prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
PHCs and PAHs Hexane-Acetone Tumbler Extraction	EP601 ALS Environmental - Waterloo	Soil/Solid	CCME PHC in Soil - Tier 1 (mod)	Samples are subsampled and Petroleum Hydrocarbons (PHC) and PAHs are extracted with 1:1 hexane:acetone using a rotary extractor.

QUALITY CONTROL REPORT

Work Order	: **WT2520068**	Page	: 1 of 18
Client	: Fortis Environmental	Laboratory	: ALS Environmental - Waterloo
Contact	: Andrew Topp	Account Manager	: Gayle Braun
Address	: 942 Yonge St Suite 324 Toronto ON Canada M4W 3S8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: F199412006	Date Samples Received	: 24-Jul-2025 13:55
PO	: ----	Date Analysis Commenced	: 25-Jul-2025
C-O-C number	: 23-1124892	Issue Date	: 31-Jul-2025 17:42
Sampler	: AT		
Site	: ----		
Quote number	: Excess Soil		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
David Tremblett	VOC Section Supervisor	Waterloo VOC, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Jeremy Gingras	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Josphin Masihi	Supervisor I	Waterloo Centralized Prep, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 2132512)											
WT2519183-003	Anonymous	Moisture	----	E144	0.25	%	8.30	8.04	3.09%	20%	----
Physical Tests (QC Lot: 2134130)											
EO2505976-001	Anonymous	pH (1:2 soil:CaCl2-aq)	----	E108A	0.10	pH units	7.57	7.57	0.00%	5%	----
Physical Tests (QC Lot: 2134131)											
WT2520067-002	Anonymous	Conductivity (1:2 leachate)	----	E100-L	5.00	µS/cm	0.219 mS/cm	223	1.81%	20%	----
Cyanides (QC Lot: 2132540)											
WT2519919-002	Anonymous	Cyanide, weak acid dissociable	----	E336A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
Metals (QC Lot: 2134132)											
WT2520067-002	Anonymous	Calcium, soluble ion content	7440-70-2	E484	0.50	mg/L	5.59	6.55	15.8%	30%	----
		Magnesium, soluble ion content	7439-95-4	E484	0.50	mg/L	6.40	8.51	28.3%	30%	----
		Sodium, soluble ion content	17341-25-2	E484	0.50	mg/L	16.9	17.7	4.62%	30%	----
Metals (QC Lot: 2134134)											
WT2520068-003	TP3- 0723	Boron, hot water soluble	7440-42-8	E487	0.10	mg/kg	0.15	0.17	0.02	Diff <2x LOR	----
Metals (QC Lot: 2134135)											
WT2520067-002	Anonymous	Mercury	7439-97-6	E510C	0.0050	mg/kg	0.0126	0.0125	0.0001	Diff <2x LOR	----
Metals (QC Lot: 2134136)											
WT2520067-002	Anonymous	Antimony	7440-36-0	E440C	0.10	mg/kg	<0.10	0.10	0.002	Diff <2x LOR	----
		Arsenic	7440-38-2	E440C	0.10	mg/kg	2.90	3.27	11.8%	30%	----
		Barium	7440-39-3	E440C	0.50	mg/kg	26.5	30.3	13.3%	40%	----
		Beryllium	7440-41-7	E440C	0.10	mg/kg	0.25	0.28	0.03	Diff <2x LOR	----
		Boron	7440-42-8	E440C	5.0	mg/kg	<5.0	5.3	0.3	Diff <2x LOR	----
		Cadmium	7440-43-9	E440C	0.350	mg/kg	<0.350	<0.350	0	Diff <2x LOR	----
		Chromium	7440-47-3	E440C	0.50	mg/kg	10.4	12.0	14.4%	30%	----
		Cobalt	7440-48-4	E440C	0.10	mg/kg	3.53	3.92	10.5%	30%	----
		Copper	7440-50-8	E440C	0.50	mg/kg	9.71	10.4	7.31%	30%	----
		Lead	7439-92-1	E440C	0.50	mg/kg	8.83	9.83	10.7%	40%	----
		Molybdenum	7439-98-7	E440C	0.10	mg/kg	0.25	0.24	0.009	Diff <2x LOR	----
		Nickel	7440-02-0	E440C	0.50	mg/kg	7.31	7.95	8.37%	30%	----
		Selenium	7782-49-2	E440C	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	----
		Silver	7440-22-4	E440C	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Metals (QC Lot: 2134136) - continued											
WT2520067-002	Anonymous	Thallium	7440-28-0	E440C	0.050	mg/kg	0.052	0.061	0.009	Diff <2x LOR	----
		Uranium	7440-61-1	E440C	0.050	mg/kg	0.416	0.498	17.8%	30%	----
		Vanadium	7440-62-2	E440C	0.20	mg/kg	20.8	24.7	17.2%	30%	----
		Zinc	7440-66-6	E440C	2.0	mg/kg	30.3	34.5	13.0%	30%	----
Speciated Metals (QC Lot: 2132541)											
WP2511636-029	Anonymous	Chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 2126836)											
WT2519960-001	Anonymous	Acetone	67-64-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		Benzene	71-43-2	E611D	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	----
		Bromodichloromethane	75-27-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Bromoform	75-25-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Bromomethane	74-83-9	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Carbon tetrachloride	56-23-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Chlorobenzene	108-90-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Chloroform	67-66-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dibromochloromethane	124-48-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dibromoethane, 1,2-	106-93-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorobenzene, 1,2-	95-50-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorobenzene, 1,3-	541-73-1	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorobenzene, 1,4-	106-46-7	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichlorodifluoromethane	75-71-8	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethane, 1,1-	75-34-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethane, 1,2-	107-06-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethylene, 1,1-	75-35-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethylene, cis-1,2-	156-59-2	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloroethylene, trans-1,2-	156-60-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	<0.045	0	Diff <2x LOR	----
		Dichloropropane, 1,2-	78-87-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	<0.015	0	Diff <2x LOR	----
		Hexane, n-	110-54-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Methyl ethyl ketone [MEK]	78-93-3	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		Methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 2126836) - continued											
WT2519960-001	Anonymous	Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.040	mg/kg	<0.040	<0.040	0	Diff <2x LOR	----
		Styrene	100-42-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tetrachloroethylene	127-18-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Toluene	108-88-3	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Trichloroethane, 1,1,1-	71-55-6	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Trichloroethane, 1,1,2-	79-00-5	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Trichloroethylene	79-01-6	E611D	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Trichlorofluoromethane	75-69-4	E611D	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Vinyl chloride	75-01-4	E611D	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	----
		Xylene, m+p-	179601-23-1	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Xylene, o-	95-47-6	E611D	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 2126837)											
WT2519960-001	Anonymous	F1 (C6-C10)	----	E581.F1	5.0	mg/kg	<5.0	<5.0	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 2133899)											
WT2520068-002	TP2- 0723	F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	<10	0	Diff <2x LOR	----
		F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	<50	0	Diff <2x LOR	----
		F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	<50	0	Diff <2x LOR	----
Polycyclic Aromatic Hydrocarbons (QC Lot: 2133900)											
WT2520068-002	TP2- 0723	Acenaphthene	83-32-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Acenaphthylene	208-96-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Anthracene	120-12-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benz(a)anthracene	56-55-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(a)pyrene	50-32-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(b+j)fluoranthene	n/a	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(g,h,i)perylene	191-24-2	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Benzo(k)fluoranthene	207-08-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Chrysene	218-01-9	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Dibenz(a,h)anthracene	53-70-3	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Fluoranthene	206-44-0	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Fluorene	86-73-7	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Methylnaphthalene, 1-	90-12-0	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Polycyclic Aromatic Hydrocarbons (QC Lot: 2133900) - continued											
WT2520068-002	TP2- 0723	Methylnaphthalene, 2-	91-57-6	E641A	0.030	mg/kg	<0.030	<0.030	0	Diff <2x LOR	----
		Naphthalene	91-20-3	E641A	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	----
		Phenanthrene	85-01-8	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Pyrene	129-00-0	E641A	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 2132512)						
Moisture	----	E144	0.25	%	<0.25	----
Physical Tests (QCLot: 2134131)						
Conductivity (1:2 leachate)	----	E100-L	5	µS/cm	<5.00	----
Cyanides (QCLot: 2132540)						
Cyanide, weak acid dissociable	----	E336A	0.05	mg/kg	<0.050	----
Metals (QCLot: 2134132)						
Calcium, soluble ion content	7440-70-2	E484	0.5	mg/L	<0.50	----
Magnesium, soluble ion content	7439-95-4	E484	0.5	mg/L	<0.50	----
Sodium, soluble ion content	17341-25-2	E484	0.5	mg/L	<0.50	----
Metals (QCLot: 2134134)						
Boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	<0.10	----
Metals (QCLot: 2134135)						
Mercury	7439-97-6	E510C	0.005	mg/kg	<0.0050	----
Metals (QCLot: 2134136)						
Antimony	7440-36-0	E440C	0.1	mg/kg	<0.10	----
Arsenic	7440-38-2	E440C	0.1	mg/kg	<0.10	----
Barium	7440-39-3	E440C	0.5	mg/kg	<0.50	----
Beryllium	7440-41-7	E440C	0.1	mg/kg	<0.10	----
Boron	7440-42-8	E440C	5	mg/kg	<5.0	----
Cadmium	7440-43-9	E440C	0.02	mg/kg	<0.020	----
Chromium	7440-47-3	E440C	0.5	mg/kg	<0.50	----
Cobalt	7440-48-4	E440C	0.1	mg/kg	<0.10	----
Copper	7440-50-8	E440C	0.5	mg/kg	<0.50	----
Lead	7439-92-1	E440C	0.5	mg/kg	<0.50	----
Molybdenum	7439-98-7	E440C	0.1	mg/kg	<0.10	----
Nickel	7440-02-0	E440C	0.5	mg/kg	<0.50	----
Selenium	7782-49-2	E440C	0.2	mg/kg	<0.20	----
Silver	7440-22-4	E440C	0.1	mg/kg	<0.10	----
Thallium	7440-28-0	E440C	0.05	mg/kg	<0.050	----
Uranium	7440-61-1	E440C	0.05	mg/kg	<0.050	----
Vanadium	7440-62-2	E440C	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440C	2	mg/kg	<2.0	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Speciated Metals (QCLot: 2132541)						
Chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	<0.10	----
Volatile Organic Compounds (QCLot: 2130482)						
Acetone	67-64-1	E611D	0.5	mg/kg	<0.50	----
Benzene	71-43-2	E611D	0.005	mg/kg	<0.0050	----
Bromodichloromethane	75-27-4	E611D	0.05	mg/kg	<0.050	----
Bromoform	75-25-2	E611D	0.05	mg/kg	<0.050	----
Bromomethane	74-83-9	E611D	0.05	mg/kg	<0.050	----
Carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	<0.050	----
Chlorobenzene	108-90-7	E611D	0.05	mg/kg	<0.050	----
Chloroform	67-66-3	E611D	0.05	mg/kg	<0.050	----
Dibromochloromethane	124-48-1	E611D	0.05	mg/kg	<0.050	----
Dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	<0.050	----
Dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	<0.050	----
Dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	<0.050	----
Dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	<0.050	----
Dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	<0.050	----
Dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	<0.050	----
Dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	<0.050	----
Dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	<0.050	----
Dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	<0.050	----
Dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	<0.050	----
Dichloromethane	75-09-2	E611D	0.045	mg/kg	<0.045	----
Dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	<0.050	----
Dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	<0.030	----
Dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	<0.030	----
Ethylbenzene	100-41-4	E611D	0.015	mg/kg	<0.015	----
Hexane, n-	110-54-3	E611D	0.05	mg/kg	<0.050	----
Methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	<0.50	----
Methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	<0.50	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	<0.040	----
Styrene	100-42-5	E611D	0.05	mg/kg	<0.050	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	<0.050	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	<0.050	----
Tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	<0.050	----
Toluene	108-88-3	E611D	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 2130482) - continued						
Trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	<0.050	----
Trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	<0.050	----
Trichloroethylene	79-01-6	E611D	0.01	mg/kg	<0.010	----
Trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	<0.050	----
Vinyl chloride	75-01-4	E611D	0.02	mg/kg	<0.020	----
Xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	<0.030	----
Xylene, o-	95-47-6	E611D	0.03	mg/kg	<0.030	----
Hydrocarbons (QCLot: 2126837)						
F1 (C6-C10)	----	E581.F1	5	mg/kg	<5.0	----
Hydrocarbons (QCLot: 2133899)						
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	<10	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	<50	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	<50	----
Polycyclic Aromatic Hydrocarbons (QCLot: 2133900)						
Acenaphthene	83-32-9	E641A	0.05	mg/kg	<0.050	----
Acenaphthylene	208-96-8	E641A	0.05	mg/kg	<0.050	----
Anthracene	120-12-7	E641A	0.05	mg/kg	<0.050	----
Benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	<0.050	----
Benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	<0.050	----
Benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	<0.050	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	<0.050	----
Benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	<0.050	----
Chrysene	218-01-9	E641A	0.05	mg/kg	<0.050	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	<0.050	----
Fluoranthene	206-44-0	E641A	0.05	mg/kg	<0.050	----
Fluorene	86-73-7	E641A	0.05	mg/kg	<0.050	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	<0.050	----
Methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	<0.030	----
Methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	<0.030	----
Naphthalene	91-20-3	E641A	0.01	mg/kg	<0.010	----
Phenanthrene	85-01-8	E641A	0.05	mg/kg	<0.050	----
Pyrene	129-00-0	E641A	0.05	mg/kg	<0.050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 2132512)									
Moisture	----	E144	0.25	%	50 %	98.5	90.0	110	----
Physical Tests (QCLot: 2134130)									
pH (1:2 soil:CaCl2-aq)	----	E108A	----	pH units	7 pH units	100	98.0	102	----
Physical Tests (QCLot: 2134131)									
Conductivity (1:2 leachate)	----	E100-L	5	µS/cm	1410 µS/cm	97.9	90.0	110	----
Cyanides (QCLot: 2132540)									
Cyanide, weak acid dissociable	----	E336A	0.05	mg/kg	1.25 mg/kg	93.0	80.0	120	----
Metals (QCLot: 2134132)									
Calcium, soluble ion content	7440-70-2	E484	0.5	mg/L	300 mg/L	95.3	80.0	120	----
Magnesium, soluble ion content	7439-95-4	E484	0.5	mg/L	50 mg/L	93.0	80.0	120	----
Sodium, soluble ion content	17341-25-2	E484	0.5	mg/L	50 mg/L	94.4	80.0	120	----
Metals (QCLot: 2134134)									
Boron, hot water soluble	7440-42-8	E487	0.1	mg/kg	2 mg/kg	99.9	70.0	130	----
Metals (QCLot: 2134135)									
Mercury	7439-97-6	E510C	0.005	mg/kg	0.1 mg/kg	97.0	80.0	120	----
Metals (QCLot: 2134136)									
Antimony	7440-36-0	E440C	0.1	mg/kg	100 mg/kg	111	80.0	120	----
Arsenic	7440-38-2	E440C	0.1	mg/kg	100 mg/kg	112	80.0	120	----
Barium	7440-39-3	E440C	0.5	mg/kg	25 mg/kg	110	80.0	120	----
Beryllium	7440-41-7	E440C	0.1	mg/kg	10 mg/kg	100	80.0	120	----
Boron	7440-42-8	E440C	5	mg/kg	100 mg/kg	99.9	80.0	120	----
Cadmium	7440-43-9	E440C	0.02	mg/kg	10 mg/kg	104	80.0	120	----
Chromium	7440-47-3	E440C	0.5	mg/kg	25 mg/kg	109	80.0	120	----
Cobalt	7440-48-4	E440C	0.1	mg/kg	25 mg/kg	108	80.0	120	----
Copper	7440-50-8	E440C	0.5	mg/kg	25 mg/kg	106	80.0	120	----
Lead	7439-92-1	E440C	0.5	mg/kg	50 mg/kg	113	80.0	120	----
Molybdenum	7439-98-7	E440C	0.1	mg/kg	25 mg/kg	107	80.0	120	----
Nickel	7440-02-0	E440C	0.5	mg/kg	50 mg/kg	107	80.0	120	----
Selenium	7782-49-2	E440C	0.2	mg/kg	100 mg/kg	111	80.0	120	----
Silver	7440-22-4	E440C	0.1	mg/kg	10 mg/kg	98.0	80.0	120	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 2134136) - continued									
Thallium	7440-28-0	E440C	0.05	mg/kg	100 mg/kg	112	80.0	120	----
Uranium	7440-61-1	E440C	0.05	mg/kg	0.5 mg/kg	110	80.0	120	----
Vanadium	7440-62-2	E440C	0.2	mg/kg	50 mg/kg	110	80.0	120	----
Zinc	7440-66-6	E440C	2	mg/kg	50 mg/kg	103	80.0	120	----
Speciated Metals (QCLot: 2132541)									
Chromium, hexavalent [Cr VI]	18540-29-9	E532	0.1	mg/kg	0.8 mg/kg	98.3	80.0	120	----
Volatile Organic Compounds (QCLot: 2130482)									
Acetone	67-64-1	E611D	0.5	mg/kg	3.48 mg/kg	105	60.0	140	----
Benzene	71-43-2	E611D	0.005	mg/kg	3.48 mg/kg	93.9	70.0	130	----
Bromodichloromethane	75-27-4	E611D	0.05	mg/kg	3.48 mg/kg	88.8	50.0	140	----
Bromoform	75-25-2	E611D	0.05	mg/kg	3.48 mg/kg	105	70.0	130	----
Bromomethane	74-83-9	E611D	0.05	mg/kg	3.48 mg/kg	69.0	50.0	140	----
Carbon tetrachloride	56-23-5	E611D	0.05	mg/kg	3.48 mg/kg	98.1	70.0	130	----
Chlorobenzene	108-90-7	E611D	0.05	mg/kg	3.48 mg/kg	91.1	70.0	130	----
Chloroform	67-66-3	E611D	0.05	mg/kg	3.48 mg/kg	92.0	70.0	130	----
Dibromochloromethane	124-48-1	E611D	0.05	mg/kg	3.48 mg/kg	99.7	60.0	130	----
Dibromoethane, 1,2-	106-93-4	E611D	0.05	mg/kg	3.48 mg/kg	91.9	70.0	130	----
Dichlorobenzene, 1,2-	95-50-1	E611D	0.05	mg/kg	3.48 mg/kg	94.9	70.0	130	----
Dichlorobenzene, 1,3-	541-73-1	E611D	0.05	mg/kg	3.48 mg/kg	94.1	70.0	130	----
Dichlorobenzene, 1,4-	106-46-7	E611D	0.05	mg/kg	3.48 mg/kg	94.2	70.0	130	----
Dichlorodifluoromethane	75-71-8	E611D	0.05	mg/kg	3.48 mg/kg	93.1	50.0	140	----
Dichloroethane, 1,1-	75-34-3	E611D	0.05	mg/kg	3.48 mg/kg	95.8	60.0	130	----
Dichloroethane, 1,2-	107-06-2	E611D	0.05	mg/kg	3.48 mg/kg	102	60.0	130	----
Dichloroethylene, 1,1-	75-35-4	E611D	0.05	mg/kg	3.48 mg/kg	93.4	60.0	130	----
Dichloroethylene, cis-1,2-	156-59-2	E611D	0.05	mg/kg	3.48 mg/kg	94.1	70.0	130	----
Dichloroethylene, trans-1,2-	156-60-5	E611D	0.05	mg/kg	3.48 mg/kg	96.1	60.0	130	----
Dichloromethane	75-09-2	E611D	0.045	mg/kg	3.48 mg/kg	90.9	70.0	130	----
Dichloropropane, 1,2-	78-87-5	E611D	0.05	mg/kg	3.48 mg/kg	92.5	70.0	130	----
Dichloropropylene, cis-1,3-	10061-01-5	E611D	0.03	mg/kg	3.48 mg/kg	92.9	70.0	130	----
Dichloropropylene, trans-1,3-	10061-02-6	E611D	0.03	mg/kg	3.48 mg/kg	94.0	70.0	130	----
Ethylbenzene	100-41-4	E611D	0.015	mg/kg	3.48 mg/kg	91.7	70.0	130	----
Hexane, n-	110-54-3	E611D	0.05	mg/kg	3.48 mg/kg	103	70.0	130	----
Methyl ethyl ketone [MEK]	78-93-3	E611D	0.5	mg/kg	3.48 mg/kg	91.5	60.0	140	----
Methyl isobutyl ketone [MIBK]	108-10-1	E611D	0.5	mg/kg	3.48 mg/kg	99.6	60.0	140	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 2130482) - continued									
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.04	mg/kg	3.48 mg/kg	94.8	70.0	130	----
Styrene	100-42-5	E611D	0.05	mg/kg	3.48 mg/kg	91.6	70.0	130	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.05	mg/kg	3.48 mg/kg	92.8	60.0	130	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.05	mg/kg	3.48 mg/kg	100	60.0	130	----
Tetrachloroethylene	127-18-4	E611D	0.05	mg/kg	3.48 mg/kg	88.4	60.0	130	----
Toluene	108-88-3	E611D	0.05	mg/kg	3.48 mg/kg	91.9	70.0	130	----
Trichloroethane, 1,1,1-	71-55-6	E611D	0.05	mg/kg	3.48 mg/kg	93.4	60.0	130	----
Trichloroethane, 1,1,2-	79-00-5	E611D	0.05	mg/kg	3.48 mg/kg	90.7	60.0	130	----
Trichloroethylene	79-01-6	E611D	0.01	mg/kg	3.48 mg/kg	88.1	60.0	130	----
Trichlorofluoromethane	75-69-4	E611D	0.05	mg/kg	3.48 mg/kg	96.9	50.0	140	----
Vinyl chloride	75-01-4	E611D	0.02	mg/kg	3.48 mg/kg	86.9	60.0	140	----
Xylene, m+p-	179601-23-1	E611D	0.03	mg/kg	6.95 mg/kg	94.3	70.0	130	----
Xylene, o-	95-47-6	E611D	0.03	mg/kg	3.48 mg/kg	94.1	70.0	130	----
Hydrocarbons (QCLot: 2126837)									
F1 (C6-C10)	----	E581.F1	5	mg/kg	69.2 mg/kg	93.8	80.0	120	----
Hydrocarbons (QCLot: 2133899)									
F2 (C10-C16)	----	E601.SG-L	10	mg/kg	671 mg/kg	93.7	70.0	130	----
F3 (C16-C34)	----	E601.SG-L	50	mg/kg	1380 mg/kg	98.2	70.0	130	----
F4 (C34-C50)	----	E601.SG-L	50	mg/kg	748 mg/kg	103	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 2133900)									
Acenaphthene	83-32-9	E641A	0.05	mg/kg	0.5 mg/kg	92.7	60.0	130	----
Acenaphthylene	208-96-8	E641A	0.05	mg/kg	0.5 mg/kg	92.6	60.0	130	----
Anthracene	120-12-7	E641A	0.05	mg/kg	0.5 mg/kg	92.8	60.0	130	----
Benz(a)anthracene	56-55-3	E641A	0.05	mg/kg	0.5 mg/kg	91.2	60.0	130	----
Benzo(a)pyrene	50-32-8	E641A	0.05	mg/kg	0.5 mg/kg	90.9	60.0	130	----
Benzo(b+j)fluoranthene	n/a	E641A	0.05	mg/kg	0.5 mg/kg	95.1	60.0	130	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.05	mg/kg	0.5 mg/kg	118	60.0	130	----
Benzo(k)fluoranthene	207-08-9	E641A	0.05	mg/kg	0.5 mg/kg	91.2	60.0	130	----
Chrysene	218-01-9	E641A	0.05	mg/kg	0.5 mg/kg	97.8	60.0	130	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.05	mg/kg	0.5 mg/kg	92.3	60.0	130	----
Fluoranthene	206-44-0	E641A	0.05	mg/kg	0.5 mg/kg	94.6	60.0	130	----
Fluorene	86-73-7	E641A	0.05	mg/kg	0.5 mg/kg	92.8	60.0	130	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.05	mg/kg	0.5 mg/kg	104	60.0	130	----
Methylnaphthalene, 1-	90-12-0	E641A	0.03	mg/kg	0.5 mg/kg	90.2	60.0	130	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 2133900) - continued									
Methylnaphthalene, 2-	91-57-6	E641A	0.03	mg/kg	0.5 mg/kg	98.9	60.0	130	----
Naphthalene	91-20-3	E641A	0.01	mg/kg	0.5 mg/kg	89.2	60.0	130	----
Phenanthrene	85-01-8	E641A	0.05	mg/kg	0.5 mg/kg	93.1	60.0	130	----
Pyrene	129-00-0	E641A	0.05	mg/kg	0.5 mg/kg	94.4	60.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Cyanides (QCLot: 2132540)										
WT2519919-002	Anonymous	Cyanide, weak acid dissociable	----	E336A	1.21 mg/kg	1.26 mg/kg	95.6	70.0	130	----
Volatile Organic Compounds (QCLot: 2126836)										
WT2519960-001	Anonymous	Acetone	67-64-1	E611D	2.20 mg/kg	2.3 mg/kg	95.8	50.0	140	----
		Benzene	71-43-2	E611D	2.11 mg/kg	2.3 mg/kg	91.6	50.0	140	----
		Bromodichloromethane	75-27-4	E611D	2.00 mg/kg	2.3 mg/kg	86.7	50.0	140	----
		Bromoform	75-25-2	E611D	2.50 mg/kg	2.3 mg/kg	109	50.0	140	----
		Bromomethane	74-83-9	E611D	1.54 mg/kg	2.3 mg/kg	67.0	50.0	140	----
		Carbon tetrachloride	56-23-5	E611D	2.24 mg/kg	2.3 mg/kg	97.4	50.0	140	----
		Chlorobenzene	108-90-7	E611D	2.07 mg/kg	2.3 mg/kg	90.0	50.0	140	----
		Chloroform	67-66-3	E611D	2.10 mg/kg	2.3 mg/kg	91.4	50.0	140	----
		Dibromochloromethane	124-48-1	E611D	2.22 mg/kg	2.3 mg/kg	96.5	50.0	140	----
		Dibromoethane, 1,2-	106-93-4	E611D	2.03 mg/kg	2.3 mg/kg	88.4	50.0	140	----
		Dichlorobenzene, 1,2-	95-50-1	E611D	2.16 mg/kg	2.3 mg/kg	93.9	50.0	140	----
		Dichlorobenzene, 1,3-	541-73-1	E611D	2.19 mg/kg	2.3 mg/kg	95.0	50.0	140	----
		Dichlorobenzene, 1,4-	106-46-7	E611D	2.17 mg/kg	2.3 mg/kg	94.4	50.0	140	----
		Dichlorodifluoromethane	75-71-8	E611D	2.61 mg/kg	2.3 mg/kg	114	50.0	140	----
		Dichloroethane, 1,1-	75-34-3	E611D	2.16 mg/kg	2.3 mg/kg	94.1	50.0	140	----
		Dichloroethane, 1,2-	107-06-2	E611D	2.20 mg/kg	2.3 mg/kg	95.8	50.0	140	----
		Dichloroethylene, 1,1-	75-35-4	E611D	2.14 mg/kg	2.3 mg/kg	93.2	50.0	140	----
		Dichloroethylene, cis-1,2-	156-59-2	E611D	2.10 mg/kg	2.3 mg/kg	91.2	50.0	140	----
		Dichloroethylene, trans-1,2-	156-60-5	E611D	2.17 mg/kg	2.3 mg/kg	94.3	50.0	140	----
		Dichloromethane	75-09-2	E611D	2.01 mg/kg	2.3 mg/kg	87.5	50.0	140	----
		Dichloropropane, 1,2-	78-87-5	E611D	2.05 mg/kg	2.3 mg/kg	89.0	50.0	140	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611D	1.98 mg/kg	2.3 mg/kg	86.0	50.0	140	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611D	2.08 mg/kg	2.3 mg/kg	90.4	50.0	140	----
		Ethylbenzene	100-41-4	E611D	2.12 mg/kg	2.3 mg/kg	92.2	50.0	140	----
		Hexane, n-	110-54-3	E611D	2.27 mg/kg	2.3 mg/kg	98.5	50.0	140	----
		Methyl ethyl ketone [MEK]	78-93-3	E611D	1.91 mg/kg	2.3 mg/kg	83.1	50.0	140	----
		Methyl isobutyl ketone [MIBK]	108-10-1	E611D	1.99 mg/kg	2.3 mg/kg	86.3	50.0	140	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	2.15 mg/kg	2.3 mg/kg	93.4	50.0	140	----
		Styrene	100-42-5	E611D	2.06 mg/kg	2.3 mg/kg	89.3	50.0	140	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611D	2.11 mg/kg	2.3 mg/kg	91.7	50.0	140	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611D	2.38 mg/kg	2.3 mg/kg	103	50.0	140	----
		Tetrachloroethylene	127-18-4	E611D	2.06 mg/kg	2.3 mg/kg	89.6	50.0	140	----
		Toluene	108-88-3	E611D	2.15 mg/kg	2.3 mg/kg	93.6	50.0	140	----
		Trichloroethane, 1,1,1-	71-55-6	E611D	2.13 mg/kg	2.3 mg/kg	92.7	50.0	140	----
		Trichloroethane, 1,1,2-	79-00-5	E611D	2.03 mg/kg	2.3 mg/kg	88.3	50.0	140	----
		Trichloroethylene	79-01-6	E611D	1.99 mg/kg	2.3 mg/kg	86.3	50.0	140	----
		Trichlorofluoromethane	75-69-4	E611D	2.22 mg/kg	2.3 mg/kg	96.5	50.0	140	----

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 2126836) - continued										
WT2519960-001	Anonymous	Vinyl chloride	75-01-4	E611D	2.04 mg/kg	2.3 mg/kg	88.7	50.0	140	----
		Xylene, m+p-	179601-23-1	E611D	4.34 mg/kg	4.6 mg/kg	94.2	50.0	140	----
		Xylene, o-	95-47-6	E611D	2.13 mg/kg	2.3 mg/kg	92.5	50.0	140	----
Hydrocarbons (QCLot: 2126837)										
WT2519960-001	Anonymous	F1 (C6-C10)	----	E581.F1	39.1 mg/kg	46.3 mg/kg	84.6	60.0	140	----
Hydrocarbons (QCLot: 2133899)										
WT2520068-002	TP2- 0723	F2 (C10-C16)	----	E601.SG-L	719 mg/kg	575 mg/kg	125	60.0	140	----
		F3 (C16-C34)	----	E601.SG-L	1600 mg/kg	1180 mg/kg	136	60.0	140	----
		F4 (C34-C50)	----	E601.SG-L	857 mg/kg	641 mg/kg	134	60.0	140	----
Polycyclic Aromatic Hydrocarbons (QCLot: 2133900)										
WT2520068-002	TP2- 0723	Acenaphthene	83-32-9	E641A	0.376 mg/kg	0.43 mg/kg	87.6	50.0	140	----
		Acenaphthylene	208-96-8	E641A	0.378 mg/kg	0.43 mg/kg	87.9	50.0	140	----
		Anthracene	120-12-7	E641A	0.385 mg/kg	0.43 mg/kg	89.6	50.0	140	----
		Benz(a)anthracene	56-55-3	E641A	0.362 mg/kg	0.43 mg/kg	84.4	50.0	140	----
		Benzo(a)pyrene	50-32-8	E641A	0.380 mg/kg	0.43 mg/kg	88.6	50.0	140	----
		Benzo(b+j)fluoranthene	n/a	E641A	0.378 mg/kg	0.43 mg/kg	88.0	50.0	140	----
		Benzo(g,h,i)perylene	191-24-2	E641A	0.411 mg/kg	0.43 mg/kg	95.6	50.0	140	----
		Benzo(k)fluoranthene	207-08-9	E641A	0.378 mg/kg	0.43 mg/kg	88.0	50.0	140	----
		Chrysene	218-01-9	E641A	0.382 mg/kg	0.43 mg/kg	88.8	50.0	140	----
		Dibenz(a,h)anthracene	53-70-3	E641A	0.384 mg/kg	0.43 mg/kg	89.3	50.0	140	----
		Fluoranthene	206-44-0	E641A	0.384 mg/kg	0.43 mg/kg	89.3	50.0	140	----
		Fluorene	86-73-7	E641A	0.380 mg/kg	0.43 mg/kg	88.5	50.0	140	----
		Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.395 mg/kg	0.43 mg/kg	92.0	50.0	140	----
		Methylnaphthalene, 1-	90-12-0	E641A	0.365 mg/kg	0.43 mg/kg	85.0	50.0	140	----
		Methylnaphthalene, 2-	91-57-6	E641A	0.405 mg/kg	0.43 mg/kg	94.3	50.0	140	----
		Naphthalene	91-20-3	E641A	0.368 mg/kg	0.43 mg/kg	85.6	50.0	140	----
		Phenanthrene	85-01-8	E641A	0.377 mg/kg	0.43 mg/kg	87.8	50.0	140	----
		Pyrene	129-00-0	E641A	0.382 mg/kg	0.43 mg/kg	88.9	50.0	140	----

Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Physical Tests (QCLot: 2134131)									
QC-2134131-003	RM	Conductivity (1:2 leachate)	----	E100-L	599 µS/cm	108	70.0	130	----
Metals (QCLot: 2134132)									
QC-2134132-003	RM	Calcium, soluble ion content	7440-70-2	E484	43.5 mg/L	103	70.0	130	----
QC-2134132-003	RM	Magnesium, soluble ion content	7439-95-4	E484	5.56 mg/L	101	70.0	130	----
QC-2134132-003	RM	Sodium, soluble ion content	17341-25-2	E484	37.8 mg/L	101	70.0	130	----
Metals (QCLot: 2134134)									
QC-2134134-003	RM	Boron, hot water soluble	7440-42-8	E487	0.374 mg/kg	110	60.0	140	----
Metals (QCLot: 2134135)									
QC-2134135-003	RM	Mercury	7439-97-6	E510C	0.068 mg/kg	98.1	70.0	130	----
Metals (QCLot: 2134136)									
QC-2134136-003	RM	Antimony	7440-36-0	E440C	24.8 mg/kg	85.8	70.0	130	----
QC-2134136-003	RM	Arsenic	7440-38-2	E440C	21.2 mg/kg	93.0	70.0	130	----
QC-2134136-003	RM	Barium	7440-39-3	E440C	788 mg/kg	96.2	70.0	130	----
QC-2134136-003	RM	Beryllium	7440-41-7	E440C	1.82 mg/kg	96.0	70.0	130	----
QC-2134136-003	RM	Cadmium	7440-43-9	E440C	2.15 mg/kg	88.5	70.0	130	----
QC-2134136-003	RM	Chromium	7440-47-3	E440C	56.9 mg/kg	94.7	70.0	130	----
QC-2134136-003	RM	Cobalt	7440-48-4	E440C	32 mg/kg	94.2	70.0	130	----
QC-2134136-003	RM	Copper	7440-50-8	E440C	969 mg/kg	99.6	70.0	130	----
QC-2134136-003	RM	Lead	7439-92-1	E440C	919 mg/kg	93.6	70.0	130	----
QC-2134136-003	RM	Molybdenum	7439-98-7	E440C	25.1 mg/kg	91.4	70.0	130	----
QC-2134136-003	RM	Nickel	7440-02-0	E440C	1000 mg/kg	101	70.0	130	----
QC-2134136-003	RM	Selenium	7782-49-2	E440C	1.04 mg/kg	102	60.0	140	----
QC-2134136-003	RM	Silver	7440-22-4	E440C	8.98 mg/kg	89.0	70.0	130	----
QC-2134136-003	RM	Thallium	7440-28-0	E440C	0.907 mg/kg	92.4	70.0	130	----
QC-2134136-003	RM	Uranium	7440-61-1	E440C	3.97 mg/kg	96.7	70.0	130	----
QC-2134136-003	RM	Vanadium	7440-62-2	E440C	66.2 mg/kg	95.2	70.0	130	----
QC-2134136-003	RM	Zinc	7440-66-6	E440C	828 mg/kg	90.7	70.0	130	----
Speciated Metals (QCLot: 2132541)									
QC-2132541-003	RM	Chromium, hexavalent [Cr VI]	18540-29-9	E532	135 mg/kg	89.4	70.0	130	----

VS-010

302-84/82

BM

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Chain of Custody (COC) / Analytical Request Form

COC Number: 23 - 1124892

Page 1 of 1

Canada Toll Free: 1 800 668 9878

Environmental Division
Waterloo
Work Order Reference
WT2520068

Telephone : + 1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	FORTIS ENVIRONMENTAL INC
Contact:	
Phone:	
	Company address below will appear on the final report
Street:	
City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☑ PDF ☐ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

☑ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: [illegible]

Email 2

Email 3

Invoice Recipients

Select Invoice Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Turnaround Time (TAT) Requested

- ☑ Routine [R] if received by 3pm M-F - no surcharges apply
- ☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
- ☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
- ☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
- ☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
- ☐ Same day [E2] if received by 10am M-S - 200% rush surcharge.

Additional fees may apply to rush requests on weekend

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please c

Project Information

ALS Client Code / QUOTE #: FOEV-100-EXCESS SOIL Quote

Job / Project #: F1994/2006

PO / AFE:

LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: | PO#

Major/Minor Code: | Routing Code:

Requisitioner:

Location:

ALS Lab Work Order # (ALS use only):

ALS Contact:

Sampler: A.T

Analysis Re[quest]

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	VOCs	BTEX	PHCs	PAHs	Metals + Inorganic	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	TN1-0723	July 23/25	9:00	Soil		X	X	X	X	X			
	TP2-0723	↓	↓	↓		X	X	X	X	X			
	TP3-0723					X	X	X	X	X			

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

T1-Agri T2-Agri

T1-Res/Park

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☑ COOLING INITIATED

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C: 3.4, 8

FINAL COOLER TEMPERATURES °C: 12.5

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Re[redacted]	Date: July 24/25	Time: 9:00	Received by: Fahad M	Date: 24 July 25	Time: 13:55	Received by: AG	Date: 7/24/25	Time: 17:50

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

JAN 2023 FRONT

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.