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23 March 2022

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Inuvialuit Water Board
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Inuvik, NT X0E 0T0

Dear Dr. Adhikari,

Camp Farewell Annual Report

Please find attached the annual report for activities completed at Camp Farewell, prepared by Golder Associates Ltd. on behalf of Shell Canada Limited. The report meets the Inuvialuit Water Board License (N7L1-1834) reporting requirement and provides a summary of the Phase II Environmental Site Assessment completed in 2021, in response to an Environmental Impact Screening Committee information request dated June 15, 2021.

Should you have any queries please contact Chris Boyd.

Sincerely,

 **Chris Boyd, Ph.D.**

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REPORT

2021 Annual Report - Inuvialuit Water Board Licence N7L1-1834

Camp Farewell, Inuvialuit Settlement Region, Northwest Territories

Submitted to:

Shell Canada Limited

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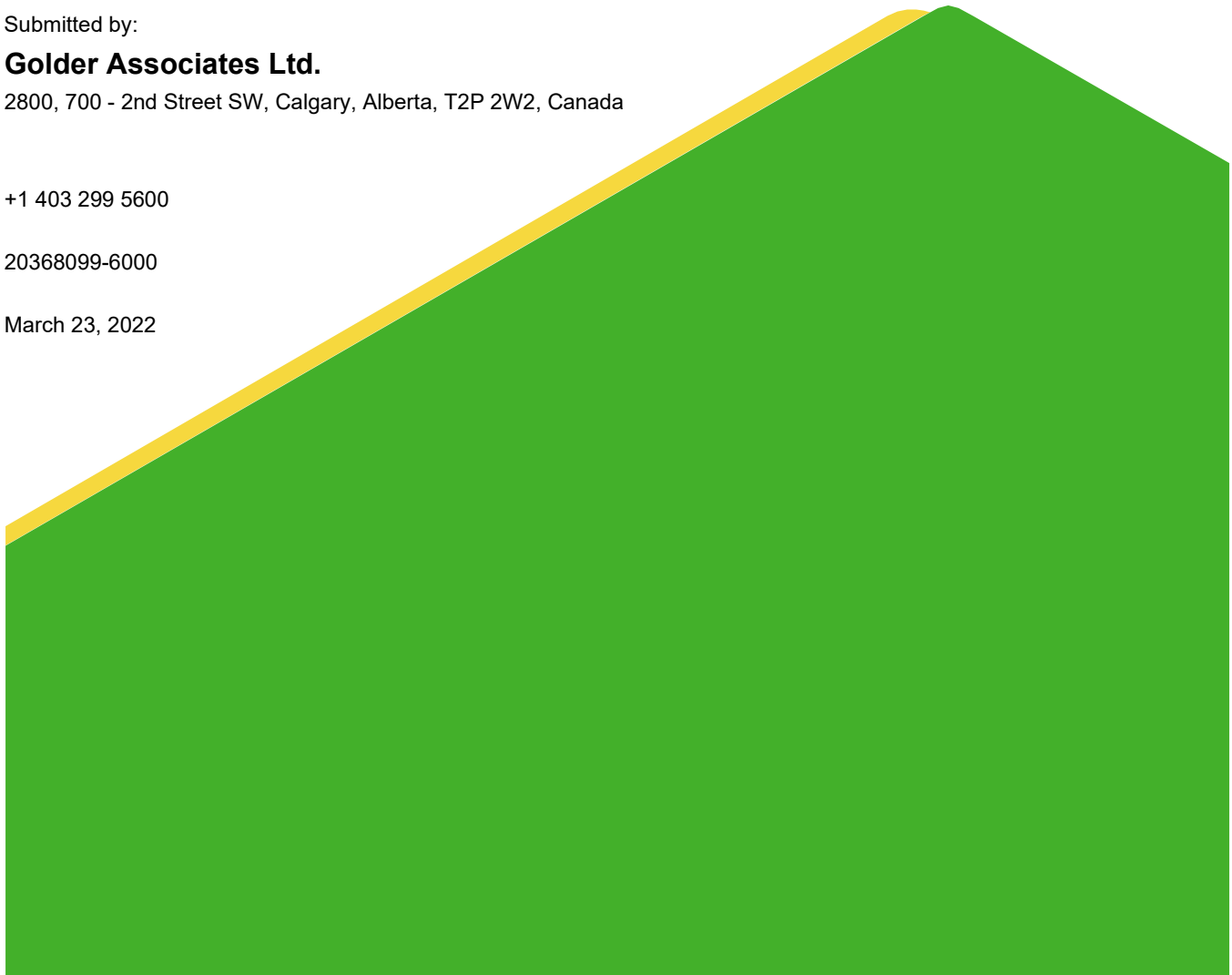
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1.0 INTRODUCTION

The 2021 Annual Report provides the required information in fulfillment of Water Licence N7L1-1834 granted by the Inuvialuit Water Board (IWB) to Shell Canada Energy. The Water Licence is associated with the remediation, reclamation and monitoring activities at Camp Farewell (the Site). The Site is approximately 125 kilometres (km) north of Inuvik, in the Kendall Island Bird Sanctuary of the Mackenzie Delta, Northwest Territories. The Site location is presented in Figure 1 of the appended 2021 Phase II Environmental Site Assessment (ESA) (Appendix A).

The 2021 scope-of-work (SOW) included a Phase II ESA investigation conducted from August 9 to September 8, 2021. This report documents the activities completed in 2021 at the Site as per the requirements outlined in the IWB Water Licence N7L1-1834 Part B: General Conditions Section 1, items A through M. A copy of the IWB licence is provided in Appendix B.

2.0 SUMMARY OF WORK COMPLETED IN 2021

Work was completed between August 9 and September 8, 2021. The SOW for the Site consisted of the following activities:

- mobilizing barge camp and equipment to Site;
- completing daily wildlife sweeps;
- excavating 205 test pits and advancing three hand auger holes on the Site to a depth of 1.5 metres below ground surface (mbgs) (deeper as needed), or to depth of permafrost;
- collecting soil samples from the test pits and hand auger holes and submitting soil samples for select laboratory analysis of benzene, toluene, ethylbenzene, xylenes (BTEX), petroleum hydrocarbon (PHC) fractions F1 to F4, F3a and F3b, polycyclic aromatic hydrocarbon (PAHs), metals, sulphate and/or nitrate;
- collecting two samples from wood piles and analysed for BTEX, PHC Fractions F1 to F4, PAH, polychlorinated biphenyl and select metals;
- collecting two soil samples from above and beneath foam found on-site and analyzed for BTEX, PHC Fractions F1 to F4, VOCs and metals;
- submitting one foam and one fibreglass sample for analysis of asbestos;
- completing one round of groundwater monitoring and sampling from existing monitoring wells and submitting groundwater samples for select laboratory analysis of BTEX, PHC Fractions F1 to F2, PAH, dissolved metals and salinity parameters;
- collecting one surface water sample from a pond off-site and analyzing for BTEX, PHC Fractions F1 and F2, PAH, total metals and salinity parameters;
- collecting GPS locations of grid footprint, test pit and hand auger locations, wood pilings and existing monitoring well locations and elevations;
- conducting quality assurance/quality control sampling;
- demobilizing barge camp and equipment; and
- preparing a Phase II ESA report documenting and detailing the methods and results of the investigation activities.

2.1 Summary of Results of the 2021 Program

Below is a summary of the results for the Phase II ESA:

- Sand and gravel fill were observed at surface on the Site footprint, extending to between 0.2 and 2.7 mbgs, the maximum depth investigated. This layer was underlain by peat, sand or permafrost. Permafrost was encountered between about 1.4 and 2.7 mbgs on the Site footprint. Outside of the Site footprint, sand or peat were observed at surface extending to between 0.3 and 0.7 mbgs, where permafrost was encountered. Coarse-grained soils are predominant at the Site.
- LNAPL was not identified in any of the wells monitored.
- The depth to groundwater for this investigation ranged from 0.42 to 1.91 mbgs.
- Soil samples collected from across the Site exceeded the applied guidelines for one or more PHC parameters. One test pit location, from a burn pit identified during the investigation, exceeded the guideline for naphthalene. Soil samples from eight test pit locations exceeded the applied guidelines for one or more metals. No soil samples exceeded the guidelines for VOCs.
- PHC impacts in soil are not laterally delineated to the north, south, east or west. PHC impacts extend to permafrost. Naphthalene is vertically delineated but has not been laterally delineated in soil to the east.
- BIC and chromatogram analysis indicated that nine soil samples had PHC Fraction F3 concentrations that were biogenic in origin.
- One wood pile sample exceeded the applied soil guideline for PHC Fraction F3 and naphthalene.
- Asbestos was not identified in the fibreglass and foam samples.
- Groundwater samples collected from two locations (former burn pit and south boundary of the Site) exceeded the applied guidelines for naphthalene, various dissolved salinity and/or metal parameters. Locations P19-2 and P19-6 which had exceeded the guidelines for PHC parameters in 2019 were not sampled in 2021 due to insufficient water.
- Naphthalene impacts in groundwater are not delineated.
- Surface water samples exceeded the guidelines for total aluminum, copper and iron.
- There is the possibility that elevated inorganic parameters in soil, groundwater and surface water may be consistent with background conditions however a background assessment was not completed as part of this SOW but will be included in the proposed 2022 SOW.
- Based on the review of the QA/QC results, the data presented in this report are considered to be reliable.
- The 2021 investigation confirmed impacted soil is still present on the Site following the remediation efforts completed between 2013 and 2019. Due to the grid sampling approach used, the extents of the impacts are generally well defined on the Site footprint however have not been delineated off-site in all directions. Further assessment of background conditions may provide further refinement of the contaminants of concern and the extents of contamination.

A copy of the Phase II ESA report outlining the methods and results of the investigation is provided in Appendix A.

2.2 Work to be Completed in 2022

The following tasks are proposed to be completed in the 2022 field season.

- completion of a drilling program to delineate identified impacts in soil; and
- installation of groundwater wells.

3.0 WATER LICENCE REPORTING

3.1 Part B 1a – Freshwater Usage

Water was not obtained from any water body in 2021. A total of 51,289 litres (L) of water was sourced from Inuvik for potable/domestic purposes.

3.2 Part B 1b and 1c – Waste Discharge

The sewage lagoon is no longer on-site; therefore, no discharges of waste occurred in 2021.

3.3 Part B 1d – Summary of Waste

Waste produced during the 2021 program included domestic waste, grey water and sewage. Metal debris was found on-site which was transported off-site for disposal. The soil sampling activities created some waste (nitrile gloves and disposable Terra Core™ soil sampling devices) but did not produce waste soil as the test pits were backfilled with soil stockpiles immediately following the soil sampling.

3.3.1 Stored On-site

Waste was stored on the barge on-site prior to being disposed of off-site. Domestic waste was stored in secured garbage bins and 51,289-L wastewater (sewage, grey water) was stored in 4,000- and 45,000-L holding tanks. Purge water was stored in a 205-L barrel. All waste was removed at the end of the program and disposed of at appropriate facilities.

3.3.2 Transported Off-site

Non-hazardous domestic waste (1,500 kilograms [kg]) and metal debris (1,000 kg) were removed from the Site and disposed of at the Inuvik solid waste facility. Recyclable beverage containers were taken to the Inuvik bottle depot for recycling. Liquid waste (51,289 L of sewage and grey water, and 1 L of purge water [collected from unimpacted groundwater monitoring wells]) was disposed of at the Inuvik sewage lagoon. Documents pertaining to the waste disposal are found in Appendix C.

3.4 Part B 1e – Surveillance Network Sampling Program Results

The surveillance network program applied to the sewage lagoon, which was remediated in 2013. Therefore, there was no sampling conducted under the surveillance network program.

3.5 Part B 1f – Modifications of Water Supply or Sewage Treatment Facilities

There are no water supply or sewage treatment facilities on-Site.

3.6 Part B 1g – Spills and Discharges

One spill occurred on-site in 2021 (August 30). Approximately 50 millilitres of fuel leaked from the fueling nozzle of the fuel truck. The spill was cleaned up as per the Spill Contingency Plan and corrective actions taken to avoid

further releases. Further details are provided in the spill investigation report found in Appendix D. No other spills or discharges occurred.

3.7 Part B 1h – Sump restorations

No sump restorations were completed in 2021.

3.8 Part B 1i – Abandonment and Restoration Work

No abandonment or restoration work was completed in 2021 and none is planned for 2022.

3.9 Part B 1j – Summary of Studies

No studies were completed in 2021. No studies are planned for 2022.

3.10 Part B 1k – Updates to Plans and Operations

The Waste Management Plan, Spill Contingency Plan and the Emergency Response Plan were submitted to the IWB on July 30, 2021. Updates to these plans were submitted to IWB on August 25, 2021. The Site is not operational; therefore, there are no operations, maintenance or sewage treatment plans.

3.11 Part B 1l – Spill Training and Communications

Daily meetings were conducted prior to work to discuss environmental health and safety issues, including the identification of hazards for both workers and the environment. Inspections of facilities and equipment was completed daily. Weekly meetings were also conducted to address any issues on-site. Orientations were completed for all workers on-site which included the review of the Waste Management Plan, Spill Contingency Plan and the Emergency Response Plan.

A spill response drill was completed mid-August 2021. The drill involved a hypothetical hydraulic fluid spill from the excavator boom. Personnel took the following steps during the drill:

- Equipment was immediately shut down.
- Spill pads were used on the equipment and a spill tray placed under the boom.
- Spill area was determined and documented with GPS coordinates and photos.
- Since the equipment was shut off promptly, the spill was concluded to be under 1 L.
- Soils impacted by the spill were scraped up and stored in 1-cubic metre bags (with poly liner).
- Post-clean up samples were collected for analysis of potential contaminants of concern.
- Incident was reported to Project Manager and Client.

Drills were also conducted for both fire and medical emergency response. Records of the fire and medical drills are provided in Appendix E.

3.12 Part B 1m – Other Details (if any)

No further details have been requested by the IWB.

4.0 LIMITATION OF LIABILITY, SCOPE OF REPORT AND THIRD PARTY RELIANCE

This report was prepared for the exclusive use of Shell Canada Limited. The report, which specifically includes all tables and figures, is based on data and information collected during the Site investigation activities conducted by Golder Associates Ltd. and is based solely on the conditions of the property at the time of the field investigations, supplemented by historical information and data obtained by Golder Associates Ltd. as described in this report. However, it is never possible, even with exhaustive sampling and testing, to dismiss the possibility that part of a site may be contaminated and remain undetected.

The services performed as described in this report were conducted in a manner consistent with that level of care and skill normally exercised by other members of the engineering and science professions currently practicing under similar conditions, subject to the time limits and financial and physical constraints applicable to the services. Any use which a third party makes of this report, or any reliance on, or decisions to be made based on it, are the responsibilities of such third parties. Golder Associates Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The content of this report is based on information collected during our investigation, our present understanding of the Site conditions, and our professional judgment in light of such information at the time of this report. This report provides a professional opinion and therefore no warranty is expressed, implied, or made as to the conclusions, advice and recommendations offered in this report. This report does not provide a legal opinion regarding compliance with applicable laws. With respect to regulatory compliance issues, it should be noted that regulatory statutes and the interpretation of regulatory statutes are subject to change. The findings and conclusions of this report are valid only as of the date of this report. If new information is discovered in future work, including excavations, borings, or other studies, Golder Associates Ltd. should be requested to re-evaluate the conclusions of this report, and to provide amendments as required.

Signature Page

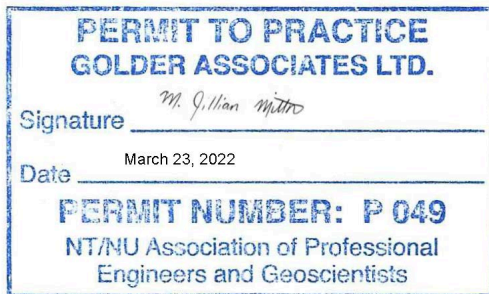
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ABG/LH/lm

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APPENDIX A

**2021 Phase II Environmental Site
Assessment**



REPORT

Phase II Environmental Site Assessment

*Camp Farewell
Inuvialuit Settlement Region, Northwest Territories*

Submitted to:

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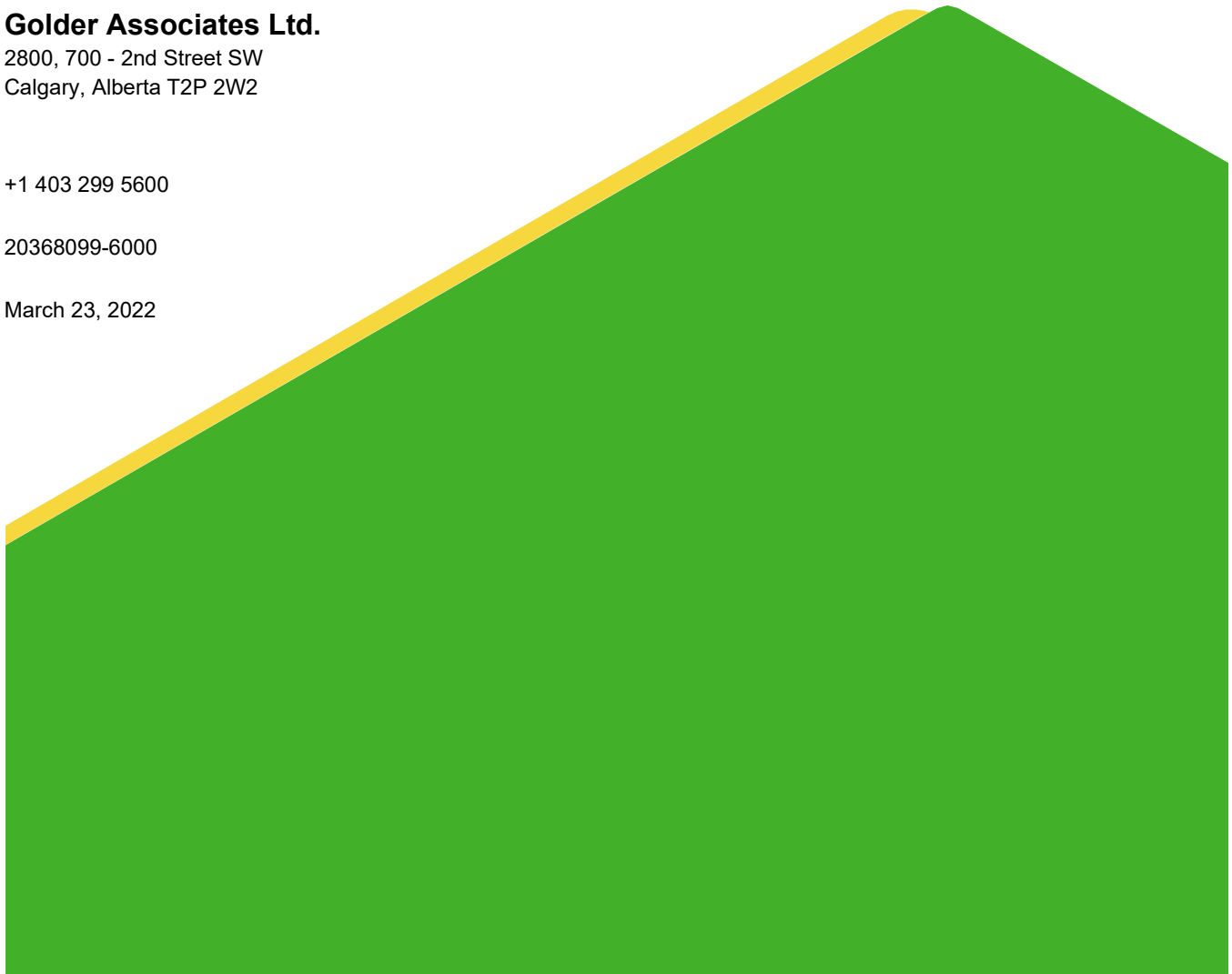
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March 23, 2022



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Executive Summary

Site Background

Site location	125 km north of Inuvik, in the Kendall Island Bird Sanctuary
Type of facility	Former staging and storage site for approved oil and gas research, oil and gas exploration, and development activities
Current land use	Parkland, in the Kendall Island Bird Sanctuary
Adjacent land use	North – Tundra, Kendall Island Bird Sanctuary, former airstrip East – Tundra, Kendall Island Bird Sanctuary South – MacKenzie River and tundra West – MacKenzie River and tundra

Field Work

Dates of field work	August 9 to September 8, 2021
Number of test pits	205 (TP21-01 to TP21-191 and TP21-BH19-37, TP21-BH19-39, TP21-BH19-94, TP21-BH19-110, TP21-BH19-117, TP21-TP19-08, TP21-TP19-09, TP21-TP19-11, TP21-TP19-16, TP21-TP19-17, TP21-TP19-18, TP21-TP19-19, TP21-TP19-21, TP21-TP19-24)
Number of hand auger holes	3 (HA21-192 to HA21-194)
Number of monitoring wells sampled	3
Number of surface water samples	2
Number of wood samples	2
Number of debris samples	2

Site Stratigraphy and Hydrogeology

Predominant soil type	Coarse-grained
Depth to groundwater	From 0.42 to 1.91 mbgs
Light non-aqueous phase liquid	Not detected in any of the wells monitored

Nearby Receptors

Groundwater use within 500 m	None
Surface water body within 500 m	The Site is adjacent to the MacKenzie River.

Selected Guidelines

PHC, PAH, VOC, PCB and metals	<ul style="list-style-type: none"> ■ Government of Northwest Territories Guideline for Contaminated Site Remediation ■ Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (INAC 2008) for additional context. ■ CCME soil and surface water quality guidelines ■ Alberta Soil Remediation Guidelines for Barite ■ Alberta Environmental Quality Guidelines for Surface Waters ■ FCSAP Groundwater Quality Guidelines for Federal Contaminated Sites <p>Where applicable, Tier 1 remediation guidelines for residential/parkland land use, and coarse-grained soils were applied</p>
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Note: Detected metal concentrations in soil, groundwater and surface water may be within the range of background concentrations

Soil Analytical Results

PHCs	Exceedances were identified across the Site. BIC and chromatogram analysis indicated nine samples had PHC Fraction F3 of biogenic origin. Petrogenic PHCs were identified in one sample.
PAH	Exceedance identified in a burn pit area
VOC	No exceedances identified
Nitrate and sulphate	Nitrate concentrations ranged from not detected to 5.5 mg/kg Sulphate concentrations ranged from not detected to 1,800 mg/kg
Metals	Exceedance identified in eight locations across the Site

Wood Pile Analytical Results

PHCs	Exceedance identified
PAH	Exceedance identified
PCB	No exceedances identified
Metals	No exceedances identified

Debris Analytical Results

Asbestos was not detected

Groundwater Analytical Results

PHCs	No exceedances identified
PAH	Exceedance identified in former burn pit area
Salinity	Exceedances identified in a former burn pit area (identified during investigation)
Dissolved metals	Exceedances identified in two former burn pit areas

Surface Water Analytical Results

PHCs	No exceedances identified
PAH	No exceedances identified
Salinity	No exceedances identified
Total metals	Exceedances identified

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List of Abbreviations

°C	degree Celsius
AENV	Alberta Environment
AEP	Alberta Environment and Parks
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
BOC	biogenic organic compounds
BIC	biogenic interference calculation
BTEX	benzene, toluene, ethylbenzene, xylenes
BVL	Bureau Veritas Laboratories
CCME	Canadian Council of Ministers of the Environment
CWS	Canadian Wildlife Services
EC	electrical conductivity
ESA	environmental site assessment
FCSAP	Federal Contaminated Sites Action Plan
FAL	freshwater aquatic life
GoC	Government of Canada
Golder	Golder Associates Ltd.
GPS	global positioning system
GNWT	Government of Northwest Territories
HDPE	high density polyethylene
IEG	IEG Consultants Ltd.
INAC	Indian and Northern Affairs Canada
km	kilometre
L/min	litre per minute
LEL	lower explosive limit
LNAPL	light non-aqueous phase liquid

m	metre
mbgs	metre below ground surface
mg/kg	milligram per kilogram
NT	Northwest Territories
OVA	organic vapour analyzer
OVM	organic vapour monitor
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PCoC	potential contaminant of concern
PHC	petroleum hydrocarbon
QA	quality assurance
QC	quality control
Shell	Shell Canada Limited
SSRA	site-specific risk assessment
TOC	top of casing
VOC	volatile organic compound

1.0 INTRODUCTION

Golder was retained by Shell to complete a Phase II ESA at Camp Farewell (the Site). The Site is approximately 125 km north of Inuvik, in the Kendall Island Bird Sanctuary of the Mackenzie Delta, NT. The Site location is presented in Figure 1.

This report documents the methods and results of the Phase II ESA investigation conducted from August 9 to September 8, 2021.

1.1 Objective

The objective of the program was to confirm the previous remediations at the Site and to assess the lateral and vertical extent of contamination, if present, on-site. The previous remediation excavation boundaries are presented on Figure 2. The program meets the IWB Water License (N7L1-1834) requirement and is in response to an Environmental Impact Screening Committee information request dated June 15, 2021.

1.2 Scope of Work

The scope of work for this Phase II ESA program consisted of the following activities:

- mobilizing barge camp and equipment to Site;
- completing daily wildlife sweeps;
- excavating 205 test pits and advancing three hand auger holes on the Site to a depth of 1.5 mbgs (deeper as needed), or to depth of permafrost;
- collecting soil samples from the test pits and hand auger holes and submitting soil samples for select laboratory analysis of BTEX, PHC Fractions F1 to F4, F3a and F3b, PAHs, metals, sulphate and/or nitrate;
- collecting two samples from wood piles and analyzing for BTEX, PHC Fractions F1 to F4, PAH, PCB and select metals;
- collecting two soil samples from above and beneath foam found on-site and analyzing for BTEX, PHC Fractions F1 to F4, VOCs and metals;
- submitting one foam and one fibreglass sample for analysis of asbestos;
- completing one round of groundwater monitoring and sampling from existing monitoring wells and submitting groundwater samples for select laboratory analysis of BTEX, PHC Fractions F1 and F2, PAH, dissolved metals and salinity parameters;
- collecting one surface water sample from a pond off-site and analysing for BTEX, PHC Fractions F1 and F2, PAH, total metals and salinity parameters;
- collecting GPS locations of grid footprint, test pit and hand auger locations, wood pilings and existing monitoring well locations and elevations;
- conducting QA/QC sampling;
- demobilizing barge camp and equipment; and
- preparing a Phase II ESA report documenting and detailing the methods and results of the investigation activities.

2.0 SITE BACKGROUND

2.1 Site Description

The Site is approximately 125 km north of Inuvik, in the Kendall Island Bird Sanctuary of the Mackenzie Delta, NT. The Site activities are regulated by CWS permit MM-NR-2021-NT-004, DOL lease number 107C/04-002 and IWB Water Licence N7L1-1834.

Beginning in 1970, Camp Farewell was used as a staging ground and storage site for approved research, oil and gas exploration, and development activities. The Site was constructed on permafrost and layers of polyurethane and compacted gravel were installed as a thermal and contamination barrier. The Site consisted of camp buildings for worker habitation, ASTs, burn pits, sewage lagoon and storage areas for various materials and equipment. Substances stored on-site included aviation fuel, gasoline, diesel and drilling additives (including barite and salt-based additives). An air strip (land lease 107 C/4-1-8) was northeast of the Site. An 800,000 L spill of diesel impacted water occurred in 1981 from a tank farm on-site. Decommissioning of the Site was completed between 2008 and 2019.

Various environmental sampling and remediation programs have occurred at the Site beginning in 2000, as described in Section 2.3 A review of previous investigations indicated that impacted soil was left on-site following remediation efforts.

The general features of the Site are illustrated in Figure 2. Site photographs are presented in Appendix A.

2.2 Land Use

The Site is on tundra, adjacent to a channel of the MacKenzie River in the MacKenzie River Delta within the Kendall Island Bird Sanctuary. Land use is classified as parkland.

2.3 Summary of Previous Work

Previous environmental assessments were reviewed by Golder to assess the Site conditions and as a source of information for reporting (Golder 2021). Camp Farewell was decommissioned between 2008 and 2019. Soils impacted by PHC, PAH and/or metals were identified on-site in the former AST tank farm and spill areas; former burn pit; the sewage lagoon and camp area; and in the storage area near the centre of the Site. Hydrocarbon exceedances in soil were also identified off-site to the north, between the Site and the off-site air strip. Elevated EC, pH and PHC and barium concentrations in soil were identified previously (2001, report not available) in the area where drilling additives had been stored (WorleyParsons 2006).

The sewage lagoon was decommissioned in 2013 and impacted soil was removed and disposed of off-site. Remediation activities for hydrocarbon impacted soils in other areas was completed in 2009, 2016, 2018 and 2019. Remediation activities included in-situ and ex-situ treatment of hydrocarbon impacted soils on-site. The treated soil was backfilled on-site following each remediation program. The majority of the Site footprint has been excavated as illustrated on Figure 2, which provides the excavation boundaries for the remedial excavations completed between 2013 and 2019. The remediation programs included the removal of polyurethane foam and other debris. The most recent remediation report indicated that treated soil, which remained impacted with PHCs, had been backfilled into the 2019 excavations and that PHC impacts in soil were likely present outside of 2019 remediation area (IEG 2020).

Groundwater wells were installed in 2006 and 2019 in the former spill area, burn pit area and on the periphery of the Site. Groundwater has historically exceeded the applicable guidelines for PHCs, salinity and metal

parameters. The wells which have had PHC concentrations above the guidelines were located in the former spill area, burn pit area and off-site to the north and east.

3.0 REGULATORY FRAMEWORK AND APPLIED GUIDELINES

The regulatory framework for GNWT is detailed in the Environmental Guideline for Contaminated Site Remediation (GNWT 2003). For parameters that do not have guidelines under the GNWT, guidelines were provided by other regulatory bodies, including CCME and Alberta Environment. Additional details related to the choice of guidelines are presented in Appendix B.

3.1 Applied Guidelines

3.1.1 Soil

- Soil analytical results for PHCs, PAH and metals were compared to the Tier 1 GNWT Guideline for Contaminated Site Remediation for coarse-grained soil and residential/parkland land use (GNWT 2003).
- Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (INAC 2008) for additional context.
- Soil analytical results for barium were compared to the Alberta Soil Remediation Guidelines for Barite for residential/parkland land use (AENV 2009).
- Soil analytical results for VOCs were compared to Tier 1 GNWT Guideline for Contaminated Site Remediation (GNWT 2003) and CCME Soil quality guidelines (CCME 1999 and updates). The criteria for coarse-grained soil in a residential/parkland land use were selected.
- Soil analytical results for PCBs were compared to CCME Soil quality guidelines for coarse-grained soil in a residential/parkland land use (CCME 1999 and updates).
- There are no applicable guidelines for nitrogen or sulphate in soil.

3.1.2 Groundwater

Groundwater analytical results were compared to the FCSAP Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (GoC 2016a,b). The Tier 1 criteria for coarse-grained soil in a residential/parkland land use were selected.

3.1.3 Surface Water

Surface water analytical results were compared to the CCME Water Quality Guidelines for the protection of aquatic life (freshwater) (CCME 1999 and updates) and the Environmental Quality Guidelines for Alberta Surface Waters (FAL) (AEP 2018).

3.1.4 Wood Samples

Wood samples have been compared to GNWT Guideline for Contaminated Site Remediation (GNWT 2003) soil guidelines. The Tier 1 criteria for coarse-grained soil in a residential/parkland land use were selected.

4.0 FIELD WORK AND METHODS

4.1 Pre-Investigation Activities

Between August 10 and 13, 2021, a base of operation was established, including: a barge with crew quarters and kitchen; an emergency boat; communication infrastructure; and a spacer barge to store equipment and tanks for water and sewage. The barges were anchored to the shoreline.

4.1.1 Site Survey

Prior to the test pit program, the locations of the 2019 boreholes and test pits, and the proposed locations of the 2021 test pits were plotted and staked by Inukshuk Geomatics Inc, from Inuvik. Wooden pilings and an emergency shack were also surveyed. A copy of the Site survey is in Appendix C.

4.2 Test Pitting

Test pitting was completed using a 200-series excavator with scraping bucket. A total of 205 test pits were excavated between August 12 and September 4, 2021 (TP21-01 to TP21-191 and TP21-BH19-37, TP21-BH19-39, TP21-BH19-94, TP21-BH19-110, TP21-BH19-117, TP21-TP19-08, TP21-TP19-09, TP21-TP19-11, TP21-TP19-16, TP21-TP19-17, TP21-TP19-18, TP21-TP19-19, TP21-TP19-21, TP21-TP19-24). The TP21-BH/TP19 series of test pits were advanced at the location of boreholes and test pits advanced in 2019. Soils excavated from discrete intervals were stockpiled near the test pits. Following sampling, the test pits were immediately backfilled with soil stockpiles in the reverse order they were excavated and compacted with the excavator bucket. Background samples were not collected as part of the 2021 SOW but will be included in the proposed 2022 SOW.

4.3 Hand Auger Holes

Three hand auger holes were advanced at the Site on September 4, 2021, to approximately 0.4 mbgs (HA21-192 to HA21-194). Soil samples were collected from 0.2 to 0.4 mbgs.

4.4 Soil Sampling

The soil conditions identified during the subsurface investigations were recorded on Golder's standard field logs. The soil was logged consistently with the Unified Soil Classification System (ASTM 2009). Soil samples were collected at intervals of approximately 0.15 m for the top 0.60 mbgs of soil, and at intervals of 0.3 to 0.6 m to the maximum depth following the methodology described below.

Each soil sample collected was split, with half being placed in laboratory-supplied sample jars for analysis and half placed into re-sealable plastic bags for organic vapour measurements using an RKI Eagle Portable Gas Monitor.

Organic vapour measurements were completed by allowing a quarter-filled soil bag to equilibrate for about 30 minutes at a temperature at or above 15°C. Soil in the bag was broken apart and the probe of the RKI Eagle with methane elimination was inserted into the bag and the peak headspace reading recorded for each sample. As per the manufacturer's instructions, the OVM was bump tested daily to 15% LEL using a hexane standard. If the bump test differed more than 10% from the known concentration, the OVM was adjusted to match the exact concentration of the calibration gas. Calibrations were logged at the start of each day.

PetroFLAG, a reagent-based analysis that screens specifically for heavier hydrocarbons (e.g., diesel, lube oils), was used in select areas (e.g., along the northern, southern and eastern property boundary, and burn pit) to

validate against the OVA readings and provide additional field-based screening to guide the need for test pits to extend deeper, or to add additional test pits within a sampling grid.

Soil samples for laboratory analysis were selected based on physical observations (e.g., evidence of staining, soil colour and/or texture, evidence of odours) and field screening results (e.g., highest OVM readings). Particular attention was given to visually identifying the transition between previously disturbed soil (mixture of gravel and organics with some sand) and native soils (dominantly fine-grained grey sand). A minimum of one soil sample was submitted for analysis from between ground surface and less than 0.6 mbgs (surface soil), a second from greater than 0.6 mbgs (subsurface soil) and a third from the maximum depth of the investigation (targeting undisturbed native soil). Additional samples were submitted from above and below any major changes in physical observations or field screening results that are observed. Proposed additional sampling was communicated to and approved by Shell/Golder office staff on a daily field call. Results from additional samples obtained have been included in the data presented in this report.

Soil samples were placed in laboratory-supplied containers suitable for the analytes: PHC, PAH, VOC, metals, nitrate and sulphate. Laboratory analysis for BIC Scale was completed on approximately 10% of the sample locations. The selected BIC samples were from areas that have not been previously remediated (e.g., samples from the Site perimeter, samples outside the site footprint to the north, samples from below depth of excavations).

Where applicable, the appropriate laboratory-supplied preservative were added to the samples. Samples were kept in ice-filled coolers and submitted under chain-of-custody protocols to BVL in Edmonton, Alberta. BVL is accredited by the Standards Council of Canada.

4.5 Groundwater Monitoring and Sampling

Groundwater monitoring and sampling of the existing wells was completed between August 24 and 30, 2021, on all existing groundwater wells.

Groundwater monitoring activities consisted of measuring depth to groundwater and, if present, the thickness of LNAPL using a Heron oil/water interface probe. An indicator strip or paste was used to confirm the presence or absence of LNAPL. If LNAPL had been detected, the presence would have been visually confirmed using a bailer and a sample would not have been collected. Prior to use in each well, the interface probe was cleaned using a phosphate-free detergent and water solution and rinsed with distilled water to minimize the potential for cross-contamination. Depth measurements were taken from the TOC.

Groundwater samples were collected using the low-flow sampling method. Water was pumped from each well, at a rate of 0.1 to 1 L/min ensuring a stable drawdown of not more than 0.1 m, using HDPE tubing connected to a peristaltic pump with a short section of silicon tubing. Routine water quality indicator parameters were measured during pumping using a Hanna Instruments® EC meter. The parameters measured included EC, pH and temperature. Calibration of the EC meter was completed as per the manufacturer's instructions. Purged water was retained on-site until the end of the program, then it was removed for off-site disposal at an approved facility.

Groundwater wells P06-4 and P19-6 were dry and could not be monitored or sampled. Wells P06-6 and P19-2 did not have sufficient water to sample. A limited sample was collected from P06-7 where the well bottom was noted to be silty. A total of three groundwater samples were collected between August 28 and 30, 2021.

The groundwater samples were placed in laboratory-supplied bottles. Where applicable, the appropriate laboratory-supplied preservative was added to the samples.

Groundwater samples were kept in ice-filled coolers and submitted under chain-of-custody protocols to BVL following the same transportation method as the soil samples.

4.6 Surface Water Sampling

Surface water samples were collected on September 1 and 6, 2021, from a pond southeast of the Site to characterize concentrations of PCoCs in surface water. The sampling location is shown in Figure 2. Analytical parameters included BTEX, PHC Fractions F1 and F2, PAHs, salinity and total metals. A duplicate surface water sample was collected on each day. All samples were placed in laboratory-supplied bottles and submitted in ice-filled coolers under chain-of-custody protocols to BVL.

4.7 Wood Pile Sampling

Two wood samples were collected on August 24, 2021, from a wood pile (consisting of former wood pilings) on-site and submitted for analysis of BTEX, PHC Fractions F1 to F4, PAHs, metals and PCBs.

4.8 Debris Sampling

Two samples were collected on August 24, 2021, from foam and fibreglass debris found on-site and submitted for analysis of the presence of asbestos.

5.0 RESULTS

The following section outlines the results of the Phase II ESA. Figure 3 provides a visual representation of all soil, groundwater and surface water analytical results.

5.1 Site Stratigraphy

A description of the stratigraphy for the 205 test pits and three hand auger holes advanced at the Site are presented on the field logs in Appendix D.

The stratigraphy at the Site generally consists of the following:

- Sand and gravel fill were observed at surface on the Site footprint, extending to between 0.2 and 2.7 mbgs, the maximum depth investigated. This layer was underlain by peat, sand or permafrost. Permafrost was encountered between about 1.4 and 2.7 mbgs on the Site footprint.
- Outside of the Site footprint, sand or peat were observed at surface extending to between 0.3 and 0.7 mbgs, where permafrost was encountered.

Based on field observations, predominantly coarse-grained soils are on-site. This is consistent with historical observations and grain-size analysis.

5.2 Site Hydrogeology

The 2021 groundwater monitoring results are presented in Table 1 and summarized below.

Field Parameters	Minimum	Maximum
LNAPL (mm)	Not detected	Not detected
Depth to groundwater (mbgs)	0.42	1.91

5.3 Soil Analytical Results

The soil analytical results are illustrated in Figures 4 to 7 and summarized in Tables 2 to 6. Copies of the laboratory certificates of analysis are included in Appendix E.

5.3.1 Petroleum Hydrocarbons

Soil samples collected from 101 test pit locations across the Site exceeded the applied guidelines for one or more of the following: BTEX, PHC Fractions F1 to F4, total PHC Fractions F1 to F3. PHC impacts in soil are not delineated to the north, south, east or west. PHC impacts extend to permafrost.

PetroFLAG kits were used for field screening 44 samples in some areas (along the northern property boundary, eastern property boundary, and burn pit) to provide field-based screening in addition to the OVA readings. PetroFLAG results are provided on the test-pit logs in Appendix D (denoted as TPH ppm). Prior to future soil work the value of PetroFLAG effectiveness will be revisited

5.3.1.1 BIC Analysis and Chromatogram Interpretation

BIC was requested for approximately 10% of the PHC samples and select samples were submitted for chromatogram interpretation. The chromatogram review and BIC data indicated that BOCs caused false PHC Fraction F3 exceedances in nine soil samples and is suspected to have caused elevated PHC Fraction F3 in TP21-183. Petrogenic PHC was present in TP21-147. Results are presented in Appendix F.

A full analysis of the BIC and chromatogram results as they relate to further assessment or remediation work at the Site will be included in a Remedial Action Plan to be completed in 2022.

5.3.2 Polycyclic Aromatic Hydrocarbons

Soil samples from one test pit (TP21-189) completed in a burn pit identified during the investigation, exceeded the applied guideline for naphthalene. PAH analytical results are presented on Figure 5 and Table 3. Naphthalene is vertically delineation and has not been laterally delineated to the east.

5.3.3 Volatile Organic Compounds

No exceedances of the applied guidelines were identified for VOC concentrations in soil. VOC analytical results are presented on Figure 6 and Table 4.

5.3.4 Nitrate and Sulphate

Nitrate (as nitrogen) concentrations ranged from not detected to 5.5 mg/kg. Sulphate concentrations ranged from not detected to 1,800 mg/kg (burn pit area). Nitrate (as nitrogen) and sulphate analytical results are presented on Table 5.

5.3.5 Metals

Soil samples from eight test pit locations exceeded the applied guidelines for one or more of the following: arsenic, barium, cadmium, chromium (trivalent), copper, lead, nickel and zinc. Metal analytical results are presented on Figure 7 and Table 6. There is the possibility that elevated metals may be consistent with background conditions however a background assessment was not completed as part of this SOW but will be included in the proposed 2022 SOW. Metal impacts in soil have not been delineated.

5.4 Wood Pile Analytical Results

One wood sample from the wood pile next to the emergency shack exceeded the applied soil guidelines for PHC Fraction F3 and naphthalene. The wood sampling results are presented in Figures 4 to 7 and Tables 7 to 10. Copies of the laboratory certificates of analysis are included in Appendix E.

5.5 Debris Analytical Results

Asbestos was not detected in the two fibreglass and foam debris samples collected. Asbestos results are presented in Table 11. Copies of the laboratory certificates of analysis are included in Appendix E.

5.6 Groundwater Analytical Results

The groundwater analytical results are illustrated in Figures 8 to 11 and summarized in Tables 12 to 15. Copies of the laboratory certificates of analysis are included in Appendix E.

One groundwater sample collected from one monitoring well (P19-5) exceeded the applicable guideline for naphthalene. Concentrations of dissolved nitrate, nitrite and sulphate exceeded the applicable guidelines in one well (P19-4). Concentrations of dissolved metals (arsenic, copper, iron and/or zinc) exceeded the applicable guidelines in two wells (P19-4 and P19-5). Concentrations of PHC parameters did not exceed the guidelines in any sample. There is the possibility that elevated inorganic parameters may be consistent with background conditions however a background assessment was not completed as part of this SOW but will be included in the proposed 2022 SOW.

P19-5 was in the former burn pit area and P19-4 was on the south Site boundary. Locations P19-2 and P19-6 which exceeded the guidelines for PHC parameters in 2019 were not sampled in 2021 due to insufficient water.

5.7 Surface Water Analytical Results

Surface water exceeded the guidelines for total aluminum, copper and iron. The surface water samples did not exceed the applicable guidelines for another parameter. There is the possibility that elevated metals may be consistent with background conditions however a background assessment was not completed as part of this SOW but will be included in the proposed 2022 SOW. The surface water analytical results are illustrated in Figures 8 to 10 and 12 and summarized in Tables 16 to 19. Copies of the laboratory certificates of analysis are included in Appendix E.

6.0 FIELD AND LABORATORY QUALITY ASSURANCE/ QUALITY CONTROL

A QA/QC program was followed to manage and quantify the quality of the investigation results. The program included field procedures, laboratory procedures and the use of QC samples to quantify the results of the program. Sixty-three field duplicate soil samples, one field duplicate surface water sample, one water trip blank and two water field blanks were submitted as part of this program. All soil, groundwater and surface water samples are placed in laboratory-supplied containers suitable for the analytes, and where applicable, the appropriate laboratory-supplied preservative is added to the samples, as outlined Appendix G which provides a discussion of the QA/QC program.

Seventy-five data quality issues were identified. Sample heterogeneity was the cause of numerous data quality issues. Where heterogeneity led to samples and their corresponding field duplicates being significantly different (one above and one below the guideline) the highest, most conservative value was selected for the interpretation

of the results. Those test pit locations were considered to exceed the guideline as a conservative measure. Hold times were exceeded for numerous samples due to the challenges of sample submission from the remote Site. None of the data quality issues had a material effect on the interpretation of the data collected during this investigation.

The analytical results of the soil, wood pile, surface water and groundwater samples collected by Golder field staff between August 9 and September 8, 2021, as part of the Phase II ESA, are considered reliable.

7.0 CONCLUSIONS

Below is a summary of the results for the Phase II ESA:

- Sand and gravel fill were observed at surface on the Site footprint, extending to between 0.2 and 2.7 mbgs, the maximum depth investigated. This layer was underlain by peat, sand or permafrost. Permafrost was encountered between about 1.4 and 2.7 mbgs on the Site footprint. Outside of the Site footprint, sand or peat were observed at surface extending to between 0.3 and 0.7 mbgs, where permafrost was encountered. Coarse-grained soils are predominant at the Site.
- LNAPL was not identified in any of the wells monitored.
- The depth to groundwater for this investigation ranged from 0.42 to 1.91 mbgs.
- Soil samples collected from across the Site exceeded the applied guidelines for one or more PHC parameters. One test pit location, from a burn pit identified during the investigation, exceeded the guideline for naphthalene. Soil samples from eight test pit locations exceeded the applied guidelines for one or more metals. No soil samples exceeded the guidelines for VOCs.
- PHC impacts in soil are not laterally delineated to the north, south, east or west. PHC impacts extend to permafrost. Naphthalene is vertically delineated but has not been laterally delineated in soil to the east.
- BIC and chromatogram analysis indicated that nine soil samples had PHC Fraction F3 concentrations that were biogenic in origin.
- One wood pile sample exceeded the applied soil guideline for PHC Fraction F3 and naphthalene.
- Asbestos was not identified in the fibreglass and foam samples.
- Groundwater samples collected from two locations (former burn pit and south Site boundary) exceeded the applied guidelines for naphthalene, various dissolved salinity and/or metal parameters. Locations P19-2 and P19-6 which had exceeded the guidelines for PHC parameters in 2019 were not sampled in 2021 due to insufficient water.
- Naphthalene impacts in groundwater are not delineated.
- Surface water samples exceeded the guidelines for total aluminum, copper and iron.
- There is the possibility that elevated inorganic parameters in soil, groundwater and surface water may be consistent with background conditions however a background assessment was not completed as part of this SOW but will be included in the proposed 2022 SOW.
- Based on the review of the QA/QC results, the data presented in this report are considered to be reliable.

- The 2021 investigation confirmed impacted soil is still present on the Site following the remediation efforts completed between 2013 and 2019. Due to the grid sampling approach used, the extents of the impacts are generally well defined on the Site footprint however have not been delineated off-site in all directions. Further assessment of background conditions may provide further refinement of the contaminants of concern and the extents of contamination.

8.0 RECOMMENDATIONS

Based on the findings of the Phase II ESA, it is recommended that:

- Additional soil sampling be completed to delineate the impacts identified in the 2021 investigation and collect background data in support of a risk assessment.
- Groundwater monitoring wells be installed to provide further characterization of groundwater near impacted and background areas.
- Background surface water sampling be completed to assess whether elevated concentrations of inorganic parameters in the pond to the southeast are consistent with background conditions.
- A Remedial Action Plan be completed to provide: a conceptual site model; a discussion of the BIC and chromatogram analysis; further interpretation of the 2021 results; and recommendations for steps to move toward Site closure, including but not limited, to remediation options and risk assessment. The RAP will be completed following the completion of the 2022 SOW.

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10.0 LIMITATION OF LIABILITY, SCOPE OF REPORT AND THIRD PARTY RELIANCE

This report was prepared for the exclusive use of Shell Canada Limited. The report, which specifically includes all tables and figures, is based on data and information collected during the Site investigation activities conducted by Golder Associates Ltd. and is based solely on the conditions of the property at the time of the field investigations, supplemented by historical information and data obtained by Golder Associates Ltd. as described in this report. However, it is never possible, even with exhaustive sampling and testing, to dismiss the possibility that part of a site may be contaminated and remain undetected.

The services performed as described in this report were conducted in a manner consistent with that level of care and skill normally exercised by other members of the engineering and science professions currently practicing under similar conditions, subject to the time limits and financial and physical constraints applicable to the services. Any use which a third party makes of this report, or any reliance on, or decisions to be made based on it, are the responsibilities of such third parties. Golder Associates Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The content of this report is based on information collected during our investigation, our present understanding of the Site conditions, and our professional judgment in light of such information at the time of this report. This report provides a professional opinion and therefore no warranty is expressed, implied, or made as to the conclusions, advice and recommendations offered in this report. This report does not provide a legal opinion regarding compliance with applicable laws. With respect to regulatory compliance issues, it should be noted that regulatory statutes and the interpretation of regulatory statutes are subject to change. The findings and conclusions of this report are valid only as of the date of this report. If new information is discovered in future work, including excavations, borings, or other studies, Golder Associates Ltd. should be requested to re-evaluate the conclusions of this report, and to provide amendments as required.

Signature Page

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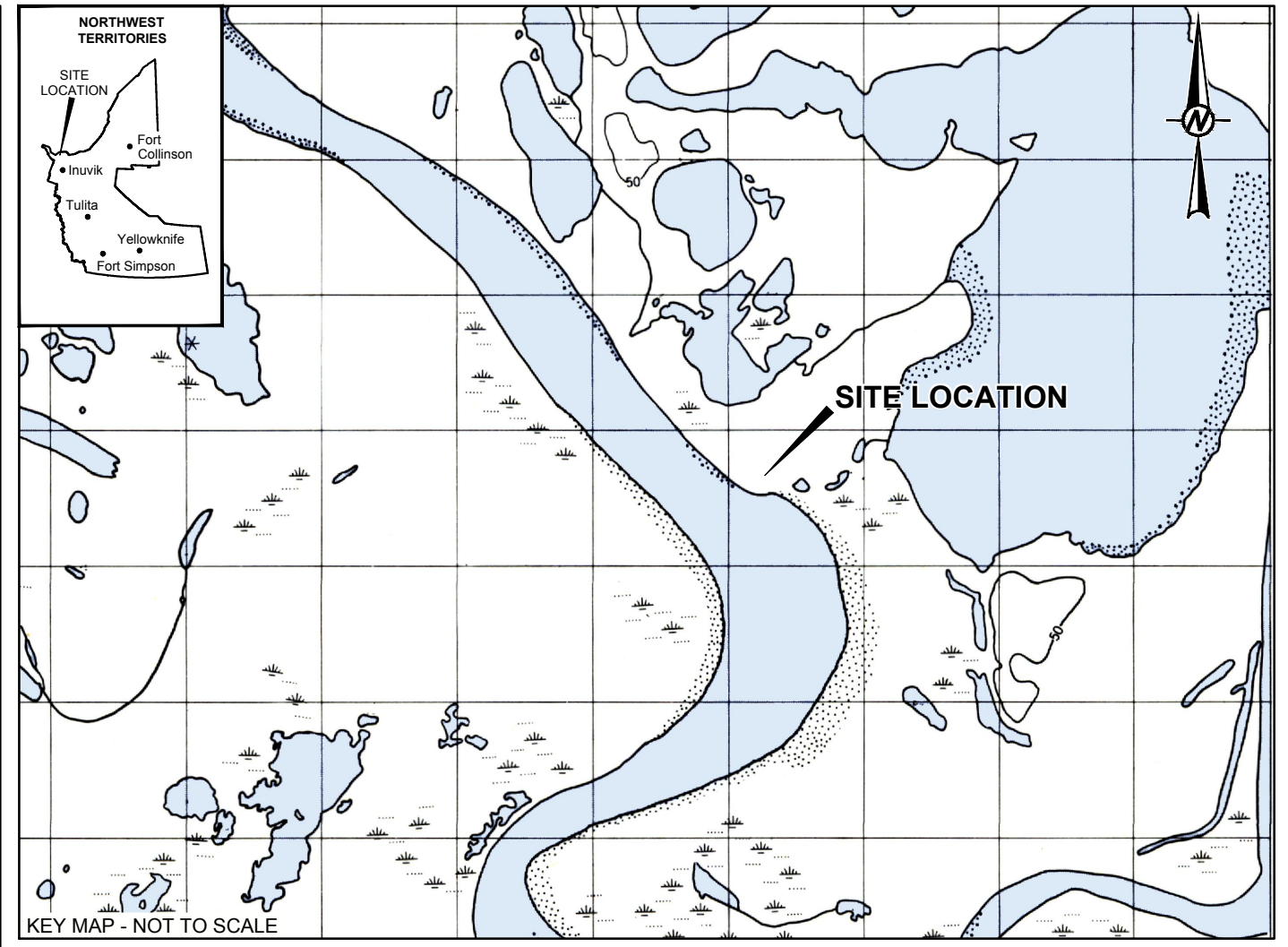
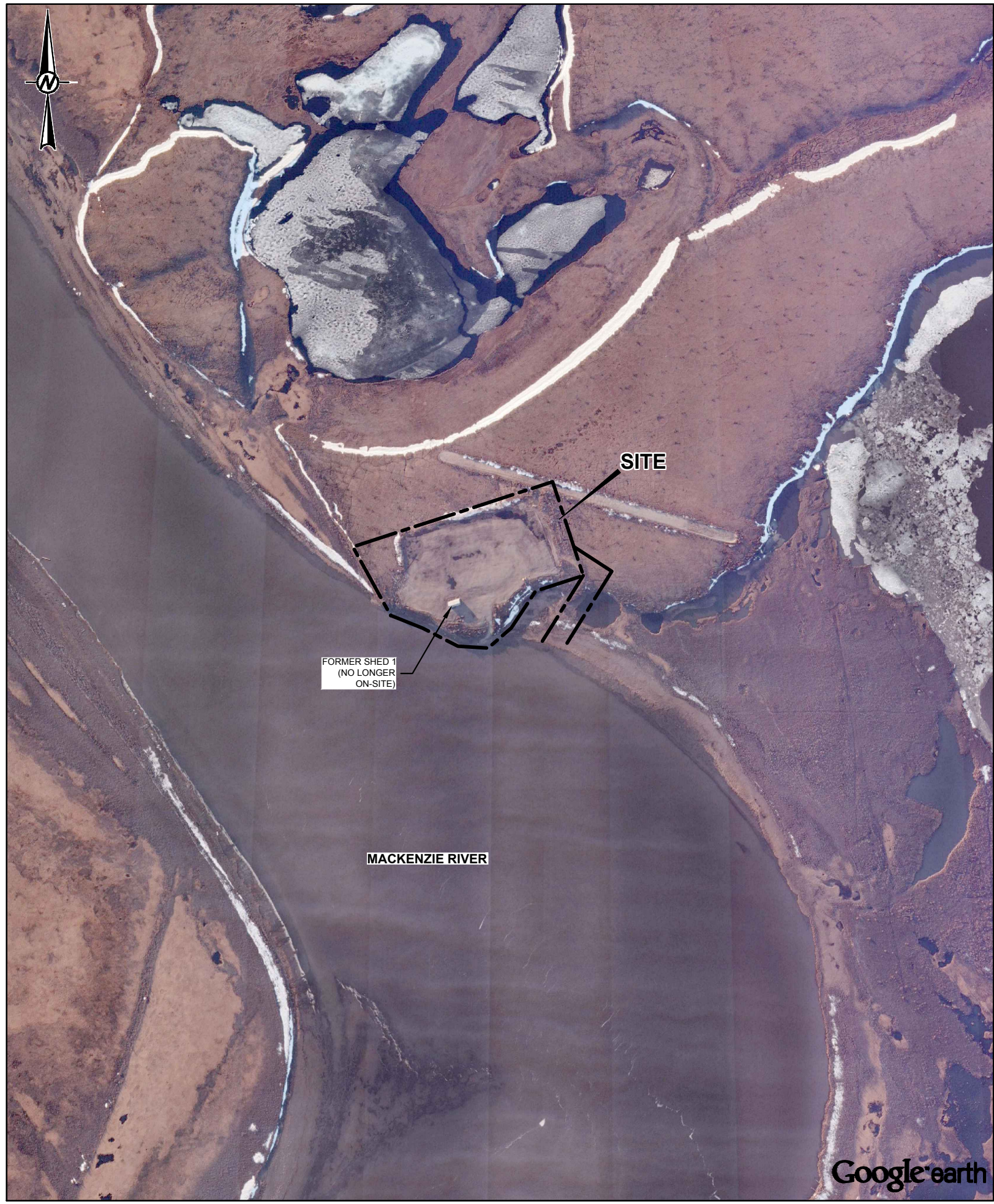


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LEGEND

--- PROPERTY BOUNDARY

REFERENCE

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CLIENT
SHELL CANADA LIMITED

PROJECT
CAMP FAREWELL
INUVALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

CONSULTANT	YYYY-MM-DD	2022-03-18
	DESIGNED	CMacLean
	PREPARED	LMoraes
	REVIEWED	ABellavance
	APPROVED	LHaderlein

TITLE	PROJECT NO.	PHASE-TASK	REV.	FIGURE
SITE LOCATION PLAN	20368099	6000-1004	0	1

25 mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANS1/B



LEGEND	
	PROPERTY BOUNDARY
	EXCAVATION LIMITS (FORMER)
	BOREHOLE LOCATION COMPLETED AS A MONITORING WELL
	HAND AUGER LOCATION
	SURFACE WATER SAMPLE LOCATION
	SOIL SAMPLE TAKEN
	TEST PIT LOCATION
	WOOD PILE LOCATION
	WOOD PILE SAMPLE LOCATION

REFERENCE
 ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC.; DWG No.: 35136_Shellfarewell_Golder-130901; SCALE: 1:750; DATE: SEPTEMBER 1, 2021.
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CLIENT		PROJECT	
SHELL CANADA LIMITED		CAMP FAREWELL INUVIUIT SETTLEMENT REGION, NORTHWEST TERRITORIES	
CONSULTANT		TITLE	
wsp GOLDER		SITE PLAN WITH TEST PIT, HAND AUGER, WOOD PILE, SURFACE WATER SAMPLE AND GROUNDWATER MONITORING WELL LOCATIONS	
DESIGNED	CMacLean	PROJECT NO.	20368099
PREPARED	LMorales	PHASE/TASK	6000-1004
REVIEWED	ABellavance	REV.	0
APPROVED	LHaderlein	FIGURE	2

25 mm IF THIS REQUIREMENT DOES NOT FACTOR WHAT IS SHOWN, THE SHEET SIZE HAS BEEN ADJUSTED FROM A3 TO A2



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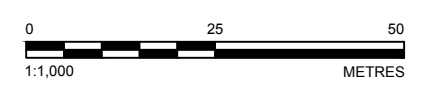
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	PROPERTY BOUNDARY		SOIL SAMPLE TAKEN
	EXCAVATION LIMITS (FORMER)		TEST PIT LOCATION
	BOREHOLE LOCATION COMPLETED AS A MONITORING WELL		WOOD PILE LOCATION
	HAND AUGER LOCATION		WOOD PILE SAMPLE LOCATION
	SURFACE WATER SAMPLE LOCATION		

REFERENCE
 ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC.; DWG No.: 35136_Shellfarewell_Golder-130901; SCALE: 1:750; DATE: SEPTEMBER 1, 2021.
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NOTES

- LOCATIONS WHERE ALL SOIL SAMPLES MEET APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
- LOCATIONS WHERE AT LEAST ONE SOIL SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.



CLIENT
 SHELL CANADA LIMITED

CONSULTANT

DESIGNED	CMacLean
PREPARED	LMoraes
REVIEWED	ABellavance
APPROVED	LHaderlein

PROJECT
 CAMP FAREWELL
 INUVIULUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
 SOIL, GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS

PROJECT NO. 20368099	PHASE/TASK 6000-1004	REV. 0	FIGURE 3
-------------------------	-------------------------	-----------	-------------

25 mm IF THIS DIMENSIONED DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN ADJUSTED FROM A3 TO C



LEGEND	
	PROPERTY BOUNDARY
	EXCAVATION LIMITS (FORMER)
	BOREHOLE LOCATION COMPLETED AS A MONITORING WELL
	HAND AUGER LOCATION
	SURFACE WATER SAMPLE LOCATION
	SOIL SAMPLE TAKEN
	TEST PIT LOCATION
	WOOD PILE LOCATION
	WOOD PILE SAMPLE LOCATION

REFERENCE
 ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC.; DWG No.: 35136_Shellfarewell_Golder-130901; SCALE: 1:750; DATE: SEPTEMBER 1, 2021.
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NOTES
 1. LOCATIONS WHERE ALL SOIL SAMPLES MEET APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
 2. LOCATIONS WHERE AT LEAST ONE SOIL SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.



CLIENT	SHELL CANADA LIMITED		
CONSULTANT	wsp GOLDER		
DESIGNED	CMacLean	2022-03-18	
PREPARED	LMoraes		
REVIEWED	ABellavance		
APPROVED	LHaderlein		

PROJECT	CAMP FAREWELL INUVIULUIT SETTLEMENT REGION, NORTHWEST TERRITORIES		
TITLE	SOIL AND WOOD PILE ANALYTICAL RESULTS - BTEX AND PHC FRACTIONS F1 - F4		
PROJECT NO.	20368099	PHASE/TASK	6000-1004
REV.	0	REV.	0
FIGURE	4A		

File: \\golder\sp\camps\Camp_Farewell\Camp_Farewell_P19\PROJECTS\20200909\02_PROD\CD\DWG\0000_0000_0000.dwg | File Name: 20200909_0000_0000_0000.dwg | Printed By: LHMoraes | Date: 2022-03-18 | Time: 1:58 PM

25 mm | IF THIS DIMENSIONED DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN ADJUSTED FROM A3 TO A4

HA21-194																			Date Sampled - September 04/21																		
Depth (mbs)	ANPth	ANPthL	ACR	ATRC	B(a)A	B(a)P	B(a)P	B(b)F	B(b)F	B(k)F	B(k)F	CHRY	D(a)A	FLATH	FLR	I(1,2,3-c)P	1-MNPT	2-MNPT	NPT	PYLH	PHNTR	PYR	QN	B(a)P TPE													
0.20	<0.0050	<0.0050	<0.010	<0.0040	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0054	0.012	0.070	0.022	0.018	0.060	<0.010	0.083													
0.40	<0.0050	0.011	<0.010	0.0075	0.012	0.065	0.047	0.047	0.080	<0.0050	<0.0050	0.012	<0.0050	0.013	<0.0050	0.0070	0.029	0.11	0.070	0.022	0.018	0.060	<0.010	0.083													

WP21-CF01																								Date Sampled - August 24/21																		
Depth (mbs)	ANPth	ANPthL	ACR	ATRC	B(a)A	B(a)P	B(a)P	B(b)F	B(b)F	B(k)F	B(k)F	CHRY	D(a)A	FLATH	FLR	I(1,2,3-c)P	1-MNPT	2-MNPT	NPT	PYLH	PHNTR	PYR	QN	B(a)P TPE																		
0.20	<0.020	<0.020	0.058	<0.016	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.021	<0.020	0.18	0.28	0.15	<0.020	0.29	<0.020	<0.040	<0.029																		

APPLICABLE GUIDELINES																								
PARAMETERS	ANPth	ANPthL	ACR	ATRC	B(a)A	B(a)P	B(a)P	B(b)F	B(b)F	B(k)F	B(k)F	CHRY	D(a)A	FLATH	FLR	I(1,2,3-c)P	1-MNPT	2-MNPT	NPT	PYLH	PHNTR	PYR	QN	B(a)P TPE
CRITERIA*	mg	mg	mg	mg	1	0.7	mg	mg	mg	1	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
RDL	0.0050	0.010	0.0040	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0071
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg



LEGEND

- PROPERTY BOUNDARY
- EXCAVATION LIMITS (FORMER)
- BOREHOLE LOCATION COMPLETED AS A MONITORING WELL
- HAND AUGER LOCATION
- SURFACE WATER SAMPLE LOCATION
- SOIL SAMPLE TAKEN
- TEST PIT LOCATION
- WOOD PILE LOCATION
- WOOD PILE SAMPLE LOCATION

LIST OF APPLICABLE ABBREVIATIONS

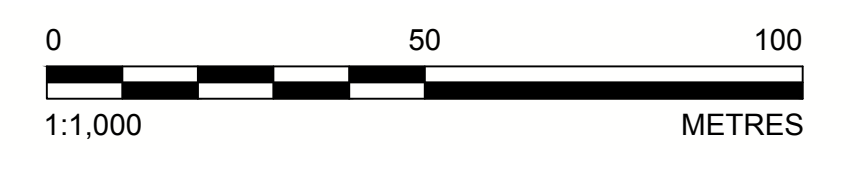
- < LESS THAN
- 1-MNPT 1-METHYLNAPHTHALENE
- 2-MNPT 2-METHYLNAPHTHALENE
- ACR ACRIDINE
- ANPth ACENAPHTHENE
- ANPthL ACENAPHTHYLENE
- ATRC ANTHRACENE
- B(a)A BENZO(a)ANTHRACENE
- B(a)P BENZO(a)PYRENE
- B(a)P TPE BENZO(a)PYRENE TOTAL POTENCY EQUIVALENT
- B(b)F BENZO(b)FLUORANTHENE
- B(k)F BENZO(k)FLUORANTHENE
- CHRY CHRYSENE
- D(a)A DIBENZO(a,h)ANTHRACENE
- FLATH FLUORANTHENE
- FLR FLUORENE
- I(1,2,3-c)P INDENO(1,2,3-c)PYRENE
- mbs METRES BELOW GROUND SURFACE
- mgkg MILLIGRAMS PER KILOGRAM
- ng NO GUIDELINE
- NPT NAPHTHALENE
- PHNTR PHENANTHRENE
- PYLH PERYLENE
- PYR PYRENE
- QN QUINOLINE
- RDL REPORTABLE DETECTION LIMIT

NOTES

- LOCATIONS WHERE ALL SOIL SAMPLES MEET APPLICABLE GUIDELINES STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
- LOCATIONS WHERE AT LEAST ONE SOIL SAMPLE EXCEEDS APPLICABLE GUIDELINES STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.
- EXCEEDANCES OF APPLICABLE GUIDELINES STANDARDS IN TEXT ARE SHOWN IN RED.

REFERENCE

ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC.; DWG No: 35136_SoilSample_CampFarewell-130901; SCALE: 1:750; DATE: SEPTEMBER 1, 2021.
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CLIENT
SHELL CANADA LIMITED

PROJECT
CAMP FAREWELL
INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
SOIL AND WOOD PILE ANALYTICAL RESULTS - POLYCYCLIC AROMATIC HYDROCARBONS

CONSULTANT	DATE
YYYY-MM-DD	2022-03-18
DESIGNED	CMacLean
PREPARED	LMoraes
REVIEWED	ABellavance
APPROVED	LHaderlein

FM21-01		BDCMA	BF	BMA	CT	MCB	CA	TCM	CMA	DBC	1,2-DBA	1,2-DCB	1,3-DCB	1,4-DCB	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	DCM	1,2-DCPA	c-1,3-DCPE	t-1,3-DCPE	MMA	MTBE	ST	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,2,3-TCB	1,2,4-TCB	1,3,5-TCB	1,1,1-TCA	1,1,2-TCA	YCE	TCFMA	1,2,4-TMB	1,3,5-TMB	VC	
Depth (mbs)	0.40	<0.030	<0.050	<0.020	<0.00050	<0.0050	<0.020	<0.010	<0.030	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.030	<0.020	<0.020	<0.020	<0.040	<0.030	<0.020	<0.050	<0.050	<0.010	<0.040	<0.040	<0.040	<0.020	<0.020	<0.010	<0.020	<0.020	<0.050	<0.050	<0.00030

FM21-02		BDCMA	BF	BMA	CT	MCB	CA	TCM	CMA	DBC	1,2-DBA	1,2-DCB	1,3-DCB	1,4-DCB	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	DCM	1,2-DCPA	c-1,3-DCPE	t-1,3-DCPE	MMA	MTBE	ST	1,1,1,2-PCA	1,1,2,2-PCA	PCE	1,2,3-TCB	1,2,4-TCB	1,3,5-TCB	1,1,1-TCA	1,1,2-TCA	YCE	TCFMA	1,2,4-TMB	1,3,5-TMB	VC	
Depth (mbs)	0.45	<0.030	<0.050	<0.020	<0.00050	<0.0050	<0.020	<0.010	<0.030	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.030	<0.020	<0.020	<0.020	<0.040	<0.030	<0.020	<0.050	<0.050	<0.010	<0.040	<0.040	<0.040	<0.020	<0.020	<0.010	<0.020	<0.020	<0.050	<0.050	<0.00030

(1) GOVERNMENT OF NORTHWEST TERRITORIES (GNWT), 2003, ENVIRONMENTAL GUIDELINE FOR CONTAMINATED SITE REMEDIATION, NOVEMBER 2003.
 (2) CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT SOIL QUALITY GUIDELINES FOR RESIDENTIAL/PARKLAND LAND USE, (OCT 1999 AND UPDATES).

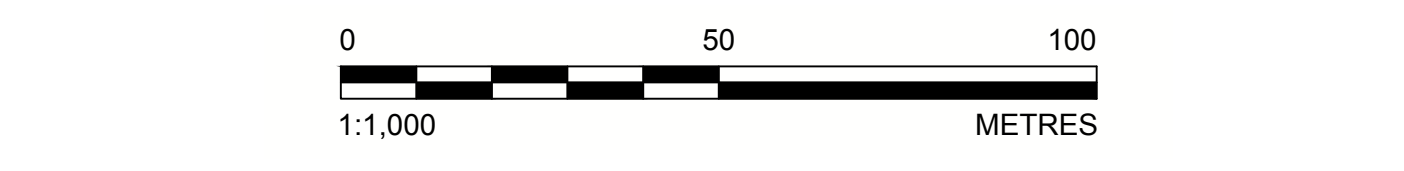


LEGEND	
—	PROPERTY BOUNDARY
- - -	EXCAVATION LIMITS (FORMER)
⊙	BOREHOLE LOCATION COMPLETED AS A MONITORING WELL
⊙	HAND AUGER LOCATION
⊙	SURFACE WATER SAMPLE LOCATION
●	SOIL SAMPLE TAKEN
⊙	TEST PIT LOCATION
⊙	WOOD PILE LOCATION
⊙	WOOD PILE SAMPLE LOCATION

LIST OF APPLICABLE ABBREVIATIONS			
<	LESS THAN	CA	CHLOROETHANE
NOT AVAILABLE OR NO DATA		CMA	CHLOROMETHANE
1,1,2-PCA	1,1,1,2-TETRACHLOROETHANE	CT	CARBON TETRACHLORIDE
1,1,1-TCA	1,1,1-TRICHLOROETHANE	DCM	DIBROMOCHLOROMETHANE
1,1,2,2-PCA	1,1,2,2-TETRACHLOROETHANE	DCM	DICHLOROMETHANE
1,1,2-TCA	1,1,2-TRICHLOROETHANE	mg/kg	METRES BELOW GROUND SURFACE
1,1,1-DCA	1,1,1-DICHLOROETHANE	MCB	CHLOROBENZENE
1,1-DCE	1,1-DICHLOROETHENE	mg/kg	MILLIGRAMS PER KILOGRAM
1,2-DBA	1,2-DIBROMOETHANE OR ETHYLENE DIBROMIDE	MMA	METHYL METHACRYLATE
1,2-DCB	1,2-DICHLOROBENZENE	MTBE	METHYL TERTIARY BUTYL ETHER
1,2-DCPA	1,2-DICHLOROPROPANE	NO	NO GUIDELINE
1,2,3-TCB	1,2,3-TRICHLOROETHANE	PCE	TETRACHLOROETHENE
1,2,4-TCB	1,2,4-TRICHLOROETHANE	RDL	REPORTABLE DETECTION LIMIT
1,1,1-TCA	1,1,1-TRICHLOROETHANE	ST	STYRENE
1,1,2-TCA	1,1,2-TRICHLOROETHANE	1,1,2-DCE	TRANS-1,2-DICHLOROETHENE
1,1,1-DCA	1,1,1-DICHLOROETHANE	1,1,3-DCE	TRANS-1,3-DICHLOROPROPENE
1,2-DBA	1,2-DIBROMOETHANE OR ETHYLENE DIBROMIDE	BDMA	BROMODICHLOROMETHANE
1,2-DCB	1,2-DICHLOROBENZENE	BF	BROMOFORM
1,2-DCPA	1,2-DICHLOROPROPANE	BMA	BROMOMETHANE
1,2,3-TCB	1,2,3-TRICHLOROETHANE	TCFMA	TRICHLOROFUOROMETHANE
1,2,4-TCB	1,2,4-TRICHLOROETHANE	TCM	CHLOROFORM
1,1,1-TCA	1,1,1-TRICHLOROETHANE	VC	VINYL CHLORIDE

- NOTES
- LOCATIONS WHERE ALL SOIL SAMPLES MEET APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
 - LOCATIONS WHERE AT LEAST ONE SOIL SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.
 - EXCEEDANCES OF APPLICABLE GUIDELINES/STANDARDS IN TEXT ARE SHOWN IN RED.

REFERENCE
 ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC., DWG No.: 35136_ShellCamp_0409-130901, SCALE: 1:750, DATE: SEPTEMBER 1, 2021.
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CLIENT
SHELL CANADA LIMITED

PROJECT
**CAMP FAREWELL
 INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES**

TITLE
SOIL AND WOOD PILE ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS

CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-03-18
DESIGNED	CMacLean
PREPARED	LMoraes
REVIEWED	ABellavance
APPROVED	LHaderlein

PROJECT NO. 20368099 PHASE-TASK 6000-1004 REV. 0 FIGURE 6

Path: \\golder\gis\calgary\CAL\CAD\SHIELD_Canada_Limited\Camp_Farewell\09_PROJECTS\20368099\02_PROD\CT\ON\600-1004\DWG\... File Name: 20368099-6000-1004.dwg | Laid Edited By: yweng Date: 2022-03-09 Time: 11:40:41 AM | Printed By: Moraes Date: 2022-03-18 Time: 3:17:08 PM

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D 25 mm

Path: Y:\golder\gpc\calgary\CAL\INCAD\ISHELL_SHELL_Canada_Limited\Camp_Farewell\IS_007.dwg | File Name: 20230309_6000-1004(DWG) | Printed By: Lmoraes Date: 2022-03-18 Time: 5:17:59 PM

Table with 19 columns: Depth (mbs), Sb, As, Ba, Ba-TT, Be, B, Cd, Cr, Cr(6+), Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Ti, Sn, U, V, Zn. Includes data for samples FM21-01 to WP21-CF02.

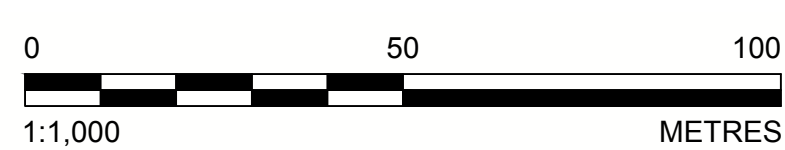
Table with 19 columns: PARAMETERS, Sb, As, Ba, Ba-TT, Be, B, Cd, Cr, Cr(6+), Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Ti, Sn, U, V, Zn. Includes CRITERIA, RDL, and UNITS.

LEGEND table with 2 columns: Symbol and Description. Includes PROPERTY BOUNDARY, EXCAVATION LIMITS (FORMER), BOREHOLE LOCATION, etc.

LIST OF APPLICABLE ABBREVIATIONS table with 2 columns: Abbreviation and Full Name. Includes mbgs, mg/kg, Ag, As, B, Ba, Ba-TT, Be, Cd, Cr, Cr(6+), Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Ti, Sn, U, V, Zn.

NOTES
1. LOCATIONS WHERE ALL SOIL SAMPLES MEET APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
2. LOCATIONS WHERE AT LEAST ONE SOIL SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.

REFERENCE
ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC. - DWG No.: 35136_Shellfarewell_Golder-130901. SCALE: 1:750. DATE: SEPTEMBER 1, 2021.



CLIENT: SHELL CANADA LIMITED
PROJECT: CAMP FAREWELL INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES
CONSULTANT: wsp GOLDER
DESIGNED: CMacLean
PREPARED: LMoraes
REVIEWED: ABellavance
APPROVED: LHaderlein
DATE: 2022-03-18
TITLE: SOIL AND WOOD PILE ANALYTICAL RESULTS - METALS
PROJECT NO.: 20368099
PHASE-TASK: 6000-1004
REV: 0
FIGURE: 7

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D 25 mm

Path: \\golder\gis\calgary\CAD\SHIELD_Canada_Limited\Camp_Farewell\99_PROJECTS\20368099\1004\DWG | File Name: 20368099-6000-HS-0008.dwg | Last Edited By: ywong Date: 2022-03-09 Time: 11:37:43 AM | Printed By: LMorae Date: 2022-03-18 Time: 9:16:47 PM

GROUNDWATER

Screen Interval: 0.2 - 0.93 mbgs						
Date	B	T	E	X	F1	F2
10-Aug-21	<0.00040	0.0082	<0.00040	<0.00089	<0.10	<0.21

Screen Interval: 0.7 - 1.9 mbgs						
Date	B	T	E	X	F1	F2
28-Aug-21	<0.00040	<0.00040	<0.00040	<0.00089	<0.10	<0.10

Screen Interval: 0.3 - 1.2 mbgs						
Date	B	T	E	X	F1	F2
28-Aug-21	0.0010	<0.00040	0.0025	0.0017	<0.10	0.43

SURFACE WATER

Screen Interval: NA						
Date	B	T	E	X	F1	F2
01-Sep-21	<0.00040	<0.00040	<0.00040	<0.00089	<0.10	<0.10
01-Sep-21 (DUP)	<0.00040	<0.00040	<0.00040	<0.00089	<0.10	<0.10

APPLICABLE GUIDELINES

PARAMETERS	B	T	E	X	F1	F2
CRITERIA*	0.14	0.083	11	3.9	0.81	1.3
CRITERIA**	0.37	0.002	0.09	mg	mg	mg
CRITERIA**	0.37	0.002	0.09	0.03	0.15*	0.11**
RDL	0.00040	0.00040	0.00040	0.00089	0.10	0.10
UNITS	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L

- (a) FEDERAL CONTAMINATED SITES ACTION PLAN (FCSAP), GUIDANCE DOCUMENT ON FEDERAL INTERIM GROUNDWATER QUALITY GUIDELINES FOR FEDERAL CONTAMINATED SITES, UPDATED JUNE 2016 (VERSION 4), (GC2-2016A)
- (b) CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT WATER QUALITY GUIDELINES FOR THE PROTECTION OF AQUATIC LIFE (FRESHWATER) (CCME 1999 AND UPDATES)
- (c) ENVIRONMENTAL QUALITY GUIDELINES FOR ALBERTA SURFACE WATERS (AEP 2018)
- (d) INTERIM GUIDELINE, SHORT-TERM (ACUTE) EXPOSURE VALUE (AEP 2018)

- LEGEND**
- PROPERTY BOUNDARY
 - EXCAVATION LIMITS (FORMER)
 - BOREHOLE LOCATION COMPLETED AS A MONITORING WELL
 - SURFACE WATER SAMPLE LOCATION

LIST OF APPLICABLE ABBREVIATIONS

- < LESS THAN
- NOT AVAILABLE OR NO DATA
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X XYLENES
- F1 PETROLEUM HYDROCARBON FRACTION 1 (C₆-C₁₀) LESS BTEX
- F2 PETROLEUM HYDROCARBON FRACTION 2 (C₆-C₁₀)
- F3 PETROLEUM HYDROCARBON FRACTION 3 (C₆-C₁₀)
- F4 PETROLEUM HYDROCARBON FRACTION 4 (C₆-C₁₀)
- mbgs METRES BELOW GROUND SURFACE
- mg/L MILLIGRAMS PER LITRE
- ng NO GUIDELINE
- NA NOT AVAILABLE
- RDL REPORTABLE DETECTION LIMIT

NOTES

1. LOCATIONS WHERE CURRENT GROUNDWATER AND SURFACE WATER SAMPLE MEETS APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
2. LOCATIONS WHERE CURRENT GROUNDWATER AND SURFACE WATER SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.
3. EXCEEDANCES OF APPLICABLE GUIDELINES/STANDARDS IN TEXT ARE SHOWN IN RED.
4. LOCATION WHERE NO SAMPLES WERE TAKEN IN THE CURRENT SAMPLING EVENT SHOWN IN BLACK.

REFERENCE

ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC. : DWG No: 35136_Shellfarewell_Golder-130991; SCALE: 1:750; DATE: SEPTEMBER 1, 2021
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CLIENT
SHELL CANADA LIMITED

PROJECT
CAMP FAREWELL
INUVALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

CONSULTANT



YYYY-MM-DD 2022-03-18
 DESIGNED CMacLean
 PREPARED LMorae
 REVIEWED ABellavance
 APPROVED LHaderlein

TITLE
GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - BTEX AND PHC FRACTIONS F1 - F2

PROJECT NO. 20368099 PHASE-TASK 6000-1004 REV. 0 FIGURE 8

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

GROUNDWATER										
Screen Interval: 0.7 - 1.9 mbgs										
P19-4	pH	Ca	Cl	Mg	NO ₃ (N)	NO ₂ (N)	K	Na	SO ₄	SD
12-Aug-21	7.54	160	55	65	18	9.22	5.9	48	318	

Screen Interval: 0.3 - 1.2 mbgs										
P19-5	pH	Ca	Cl	Mg	NO ₃ (N)	NO ₂ (N)	K	Na	SO ₄	SD
29-Aug-21	7.15	110	50	34	<0.010	<0.010	34	28	50	

SURFACE WATER										
Screen Interval: NA										
SW21-01	pH	Ca	Cl	Mg	NO ₃ (N)	NO ₂ (N)	K	Na	SO ₄	SD
06-Sep-21	8.12	36	33	15	<0.010	<0.010	0.99	20	45	
06-Sep-21 (DUP)	8.01	34	31	14	<0.010	<0.010	0.94	19	45	

APPLICABLE GUIDELINES										
PARAMETERS	pH	Ca	Cl	Mg	NO ₃ (N)	NO ₂ (N)	K	Na	SO ₄	SD
CRITERIA*	7 - 9	ng	120	ng	13	0.06	ng	ng	ng	100
CRITERIA**	6.5 - 9.0	ng	120	ng	13	0.06	ng	ng	ng	ng
CRITERIA**	6.5 - 9.0	ng	120	ng	3	0.06*	ng	ng	ng	300*
RDL	na	0.30	1.0	0.20	0.010	0.010	0.30	0.50	1.0	
UNITS	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L

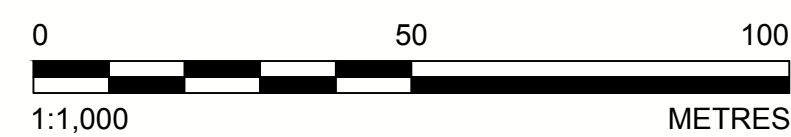
- (*) FEDERAL CONTAMINATED SITES ACTION PLAN (FCSAP), GUIDANCE DOCUMENT ON FEDERAL INTERIM GROUNDWATER QUALITY GUIDELINES FOR FEDERAL CONTAMINATED SITES (RESIDENTIAL/PARKLAND LAND USE AND COARSE GRAINED SOILS), UPDATED JUNE 2016 (VERSION 4), (GOC 2016A).
- (**) CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT WATER QUALITY GUIDELINES FOR THE PROTECTION OF AQUATIC LIFE (FRESHWATER), (CCME 1999 AND UPDATES).
- (***) ENVIRONMENTAL QUALITY GUIDELINES FOR ALBERTA SURFACE WATERS (AEP 2016).
- (****) GUIDELINE VALUE FOR THE PROTECTION OF AQUATIC LIFE VARIES WITH CHLORIDE CONCENTRATION (AEP 2016). THE SELECTED VALUE IS BASED ON A HARDNESS OF 32 mg/L (AVERAGE OF SURFACE WATER SAMPLES).
- (*****) GUIDELINE VALUE FOR THE PROTECTION OF AQUATIC LIFE VARIES WITH WATER HARDNESS (AEP 2016). THE SELECTED VALUE IS BASED ON A HARDNESS OF 145 mg/L (AVERAGE OF SURFACE WATER SAMPLES).

LEGEND	
	PROPERTY BOUNDARY
	EXCAVATION LIMITS (FORMER)
	BOREHOLE LOCATION COMPLETED AS A MONITORING WELL
	SURFACE WATER SAMPLE LOCATION

LIST OF APPLICABLE ABBREVIATIONS	
<	LESS THAN
NA	NOT AVAILABLE OR NO DATA
AEP	ALBERTA ENVIRONMENT AND PARKS
Ca	CALCIUM
Cl	CHLORIDE
K	POTASSIUM
mbgs	METRES BELOW GROUND SURFACE
Mg	MAGNESIUM
mg/L	MILLIGRAMS PER LITRE
ng	NO GUIDELINE
Na	NOT AVAILABLE
Na	SODIUM
NO ₂ (N)	NITRITE AS NITROGEN
NO ₃ (N)	NITRATE AS NITROGEN
pH	CA2-12.11 NET PH
RDL	REPORTABLE DETECTION LIMIT
SO ₄	SULPHATE

- NOTES**
- LOCATIONS WHERE CURRENT GROUNDWATER AND SURFACE WATER SAMPLE MEETS APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
 - LOCATIONS WHERE CURRENT GROUNDWATER AND SURFACE WATER SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.
 - EXCEEDANCES OF APPLICABLE GUIDELINES/STANDARDS IN TEXT ARE SHOWN IN RED.
 - LOCATION WHERE NO SAMPLES WERE TAKEN IN THE CURRENT SAMPLING EVENT SHOWN IN BLACK.

REFERENCE
 ORIGINAL DRAWING OBTAINED FROM INUKSHUK GEOMATICS INC. - DWG No.: 31136_Shellfarewell_0809-13091; SCALE: 1:750; DATE: SEPTEMBER 1, 2021
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CLIENT
 SHELL CANADA LIMITED

PROJECT
 CAMP FAREWELL
 INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

CONSULTANT



YYYY-MM-DD	2022-03-18
DESIGNED	CMacLean
PREPARED	LMoraes
REVIEWED	ABellavance
APPROVED	LHaderlein

TITLE
GROUNDWATER AND SURFACE WATER ANALYTICAL RESULTS - SALINITY

PROJECT NO.	PHASE-TASK	REV.	FIGURE
20368099	6000-1004	0	10

Path: \\golder\gis\calgary\CALCAD\SHELL\CAD\SHELL_Canada_Limited\Camp_Farewell\99_PROJECTS\20368099\02_PRODUCT\ON600-1004(DWG) | File Name: 20368099-0000-HS-001.dwg | Last Edited By: wvwg Date: 2022-03-09 Time: 11:44:47 AM | Printed By: L Moraes Date: 2022-03-18 Time: 2:21:17 PM

P19-4													Screen Interval: 0.7 - 1.9 mbgs			
Date	Al	Sb	As	Ba	B	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Se	Ag	U	Zn
28-Aug-21	0.010	<0.00050	0.00074	0.074	0.061	0.000034	0.0012	0.0080	<0.050	<0.0020	0.011	0.0068	0.0010	<0.0010	0.014	0.017

P19-5													Screen Interval: 0.3 - 1.2 mbgs			
Date	Al	Sb	As	Ba	B	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Se	Ag	U	Zn
28-Aug-21	0.031	<0.00050	0.011	0.16	0.034	0.000055	0.0022	0.0010	18	<0.0020	1.9	0.016	0.00033	<0.0010	0.00067	0.025

APPLICABLE GUIDELINES

PARAMETERS	Al	Sb	As	Ba	B	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Se	Ag	U	Zn
CRITERIA**	0.1	2	0.005	0.5	1.5*	0.00050	0.0089	0.004	0.3	0.007	0.01	0.15	0.001	0.00025**	ng	0.01
RDL	0.0030	0.00060	0.0020	0.010	0.020	0.00020	0.0010	0.0020	0.00	0.0020	0.0040	0.0050	0.00020	0.00010	0.0010	0.0030
UNITS	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L

(a) FEDERAL CONTAMINATED SITES ACTION PLAN (FCSAP), GUIDANCE DOCUMENT ON FEDERAL INTERMEDIATE GROUNDWATER QUALITY GUIDELINES FOR FEDERAL CONTAMINATED SITES, UPDATED JUNE 2016 (VERSION 4), (GOC 2016A)
(b) FCSAP FEDERAL INTERMEDIATE GROUNDWATER QUALITY GUIDELINES MEMO (GOC 2016B)



LEGEND

- PROPERTY BOUNDARY
- EXCAVATION LIMITS (FORMER)
- BOREHOLE LOCATION COMPLETED AS A MONITORING WELL

LIST OF APPLICABLE ABBREVIATIONS

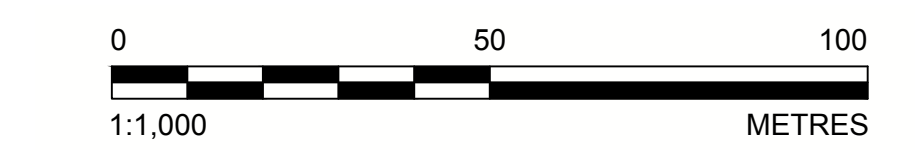
<	LESS THAN
-	NOT AVAILABLE OR NO DATA
Ag	SILVER
Al	ALUMINIUM
As	ARSENIC
B	BORON
Ba	BARIUM
Cd	CADMIUM
Co	COBALT
Cr	CHROMIUM
Cu	COPPER
Fe	IRON
mbgs	METRES BELOW GROUND SURFACE
mg/L	MILLOGRAMS PER LITRE
Mn	MANGANESE
ng	NO GUIDELINE
Ni	NICKEL
Pb	DISSOLVED LEAD
RDL	REPORTABLE DETECTION LIMIT
Sb	ANTIMONY
Se	SELENIUM
U	URANIUM
Zn	ZINC

NOTES

- LOCATIONS WHERE CURRENT GROUNDWATER SAMPLE MEETS APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
- LOCATIONS WHERE CURRENT GROUNDWATER SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.
- EXCEEDANCES OF APPLICABLE GUIDELINES/STANDARDS IN TEXT ARE SHOWN IN RED.
- LOCATION WHERE NO SAMPLES WERE TAKEN IN THE CURRENT SAMPLING EVENT SHOWN IN BLACK.

REFERENCE

ORIGINAL DRAWING OBTAINED FROM INUSKUK GEOMATICS INC.; DWG No: 35136_ShellFarewell_Goldw-130901; SCALE: 1:750; DATE: SEPTEMBER 1, 2021.
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CLIENT
SHELL CANADA LIMITED

PROJECT
**CAMP FAREWELL
INUVALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES**

TITLE
GROUNDWATER ANALYTICAL RESULTS - DISSOLVED METALS

CONSULTANT	YYYY-MM-DD	2022-03-18
	DESIGNED	CMacLean
	PREPARED	LMoraes
	REVIEWED	ABellavance
	APPROVED	LHaderlein

PROJECT NO.	PHASE-TASK	REV.	FIGURE
20368099	6000-1004	0	11



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

SW21-01	Al	Sb	As	Ba	B	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Se	Ag	U	Zn (dissolved)
Date																
01-Sep-21	2.2	<0.00050	0.0020	0.14	0.029	0.000058	0.0036	0.0045	2.6	0.0015	0.072	0.0056	0.00046	<0.00010	0.0012	0.0041
01-Sep-21 (RUP)	3.1	<0.00050	0.0019	0.13	0.028	0.000063	0.0030	0.0038	2.8	0.0012	0.062	0.0047	0.00033	<0.00010	0.0011	0.0073

PARAMETERS	Al	Sb	As	Ba	B	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Se	Ag	U	Zn
CRITERIA**	0.1**	0.00050	0.0005	0.10	1.5	0.00009	0.0010	0.004**	0.3	0.007**	0.020*	0.15**	0.001	0.00025	0.015	0.01**
RDL	0.0030	0.00050	0.00050	0.010	0.020	0.000050	0.0010	0.0020	0.050	0.00020	0.0040	0.00050	0.00020	0.00010	0.0010	0.0030

(*) CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT WATER QUALITY GUIDELINES FOR THE PROTECTION OF AQUATIC LIFE (FRESHWATER) (CCME 1999 AND UPDATES).
 (**) GUIDELINE VALUE FOR THE PROTECTION OF AQUATIC LIFE VARIES WITH PH AND/OR HARDNESS. THE SELECTED VALUE IS BASED ON A PH OF 8.06 AND A HARDNESS OF 145 MG/L CaCO3 (AVERAGE OF SURFACE WATER SAMPLES).
 (***) THE SELECTED VALUE IS BASED ON A HARDNESS OF 155 mg/L (AS CaCO3) AND pH OF 8.06 (FROM SITE DATA) AND DOC OF 0.3 mg/L (SITE DATA NOT AVAILABLE, APPLIED LOWEST ALLOWABLE AND MOST CONSERVATIVE VALUE).
 (****) THE CCME GUIDELINE VALUE FOR ZINC APPLIES TO THE DISSOLVED ZINC CONCENTRATION (CCME 2018).



LEGEND

- PROPERTY BOUNDARY
- EXCAVATION LIMITS (FORMER)
- SURFACE WATER SAMPLE LOCATION

LIST OF APPLICABLE ABBREVIATIONS

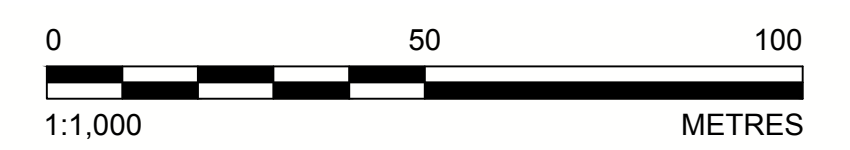
- LESS THAN
- NOT AVAILABLE OR NO DATA
- Ag SILVER
- Al ALUMINIUM
- As ARSENIC
- B BORON
- Ba BARIUM
- Cd CADMIUM
- Co COBALT
- Cr CHROMIUM
- Cu COPPER
- Fe IRON
- mbsg METRES BELOW GROUND SURFACE
- mg/L MILLIGRAMS PER LITRE
- Mn MANGANESE
- ng NO GUIDELINE
- Ni NICKEL
- Pb DISSOLVED LEAD
- RDL REPORTABLE DETECTION LIMIT
- Sb ANTIMONY
- Se SELENIUM
- U URANIUM
- Zn ZINC

NOTES

- LOCATIONS WHERE CURRENT SURFACE WATER SAMPLE MEETS APPLICABLE GUIDELINES/STANDARDS FOR ALL PARAMETERS ANALYZED SHOWN IN GREEN.
- LOCATIONS WHERE CURRENT SURFACE WATER SAMPLE EXCEEDS APPLICABLE GUIDELINES/STANDARDS FOR AT LEAST ONE OF THE PARAMETERS ANALYZED SHOWN IN RED.
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CLIENT
SHELL CANADA LIMITED

PROJECT
CAMP FAREWELL
INUVALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
SURFACE WATER ANALYTICAL RESULTS - TOTAL METALS

CONSULTANT	YYYY-MM-DD	2022-03-18
DESIGNED	CMacLean	
PREPARED	LMoraes	
REVIEWED	ABellavance	
APPROVED	LHaderlein	

PROJECT NO. 20368099 PHASE-TASK 6000-1004 REV. 0 FIGURE 12

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D 25 mm

Table 1
Summary of Groundwater Field Monitoring Results
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Well ID	Screen Interval (mbgs)	Top of Casing Elevation ^(a) (masl)	Ground Elevation ^(a) (masl)	Date	Depth to Groundwater (mbtoc)	Depth to Groundwater (mbgs)	Groundwater Elevation (masl)	LNAPL	Temperature (°C) ^(b)	pH ^(b)	Conductivity (µS/cm) ^(b)	Comments
P06-4	1.07 - 1.8	12.05	11.25	24-Aug-21	DRY	n/a	n/a	n/d	-	-	-	
P06-6	0.2 - 0.93	15.37	14.32	24-Aug-21	1.98	0.93	13.39	n/d	-	-	-	Insufficient water to sample
P06-7	0.15 - 0.56	15.41	14.73	24-Aug-21	1.10	0.42	14.31	n/d	13.6	7.17	403	Limited sample, silty at bottom of well
P19-2	0.4 - 0.8	14.28	13.60	24-Aug-21	1.49	0.81	12.79	n/d	10	6.72	789	Insufficient water to sample
P19-4	0.7 - 1.9	12.64	11.92	24-Aug-21	2.63	1.91	10.01	n/d	13.2	7.48	1,246	
P19-5	0.3 - 1.2	11.86	11.16	24-Aug-21	1.18	0.47	10.68	n/d	9.9	7.00	845	
P19-6	0.3 - 0.8	13.80	13.03	24-Aug-21	DRY	n/a	n/a	n/d	12.2	7.32	752	

Notes:

^(a) Control points co-ordinates derived from Natural Resources Canada Precise point positioning procedure

^(b) Field parameters measured on August 27, 2021

LNAPL - light non-aqueous phase liquid

m - metres

masl - metres above sea level

mbgs - metres below ground surface

mbtoc - metres below top of casing

n/a - not applicable

n/d - not detected

°C - degrees Celsius

µS/cm - microSiemens per centimetre

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-BH19-37			TP21-BH19-39				TP21-BH19-94		
						Sample ID	BH19-37-01	BH19-37-03	BH19-37-06	BH19-39-01	BH19-39-03	BH19-39-06	DUP D	BH19-94-01	BH19-94-03
BVL Sample ID						AEO249	AEO250	AEO251	AEO255	AEO256	AEO257	AEO258	AEO270	AEO271	AEO272
BVL Job Number						C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523
Sample Date						17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21
Sample Depth (mbgs)						0.15	0.5	1.5	0.15	0.5	1.5	1.5	0.15	0.5	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	0.0097	0.031	<0.0050	0.013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.23	<0.080	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.023	<0.034	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	0.15	<0.15	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<24	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	73	68	<10	50	<10	<10	<10	61	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	340	1,400	63	640	<71	<50	<50	320	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	<50	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	<50	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	83	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	83	410	<50	190	<50	<50	<50	87	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	n/c	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-BH19-110				TP21-BH19-117		
						TP21-BH19-110-02	TP21-BH19-110-04	DUP O	TP21-BH19-110-05	BH19-117-04	BH19-117-02	BH19-117-06
Sample ID						AEP491	AEP501	AEP503	AEP502	AEF072	AEF071	AEF073
BVL Sample ID						C162768	C162768	C162768	C162768	C161010	C161010	C161010
Sample Date						21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21
Sample Depth (mbgs)						0.3	0.7	1	1	0.7	0.3	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0080	<0.0050	<0.0050	<0.0050	0.15	0.098	0.023
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.12	0.96	0.078
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	0.18	0.14	0.34
Xylenes	mg/kg	0.045	1	-	-	<0.10	<0.045	<0.045	<0.045	10	1.1	2.3
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<23	<10	<10	<10	130	<10	170
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	580	110	1,700
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	280	<50	<50	<50	1,300	430	320
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	2,010	n/a	2,190
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	87	<50	<50	<50	610	210	93
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-TP19-08				TP-21-TP19-09			TP21-TP19-11			
						Sample ID	TP19-08-02	TP19-08-03	TP19-08-04	TP19-08-06	TP19-09-02	TP19-09-03	TP19-09-06	TP19-11-01	TP19-11-03	TP19-11-05
BVL Sample ID						AEO319	AEO320	AEO322	AEO321	AEO302	AEO303	AEO304	AEO325	AEO326	AEO327	
BVL Job Number						C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523
Sample Date						17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	
Sample Depth (mbgs)						0.3	0.5	0.7	1.5	0.3	0.5	1.5	0.15	0.5	1	
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)											
Benzene	mg/kg	0.0050	0.5	-	-	0.014	0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.017	0.019	<0.0050	
Toluene	mg/kg	0.050	0.8	-	-	0.078	0.30	<0.050	<0.050	0.15	0.25	<0.050	0.62	0.24	<0.050	
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.015	0.022	0.11	0.020	<0.010	0.014	<0.010	0.052	0.027	<0.010	
Xylenes	mg/kg	0.045	1	-	-	0.074	0.17	0.71	0.080	0.053	<0.045	<0.045	0.25	0.20	<0.045	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	77	45	<24	<10	17	<15	<10	13	<23	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	95	170	37	<10	130	230	<10	92	280	95	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	370	400	1,800	<50	320	510	<50	360	550	1,500	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	180	180	-	-	-	-	-	-	170	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	220	1,600	-	-	-	-	-	-	1,300	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	1,882	n/a	n/a	n/a	n/a	n/a	n/a	1,618	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	100	91	980	<50	62	120	<50	90	120	690	
BIC Value ^(d)	%	n/a	-	-	-	-	n/c	n/c	-	-	-	-	-	-	n/c	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

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n/a - not applicable

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RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-TP19-16			TP21-TP19-17				TP21-TP19-18		
						Sample ID	TP19-16-01	TP19-16-03	TP19-16-05	TP19-17-01	DUP E	TP19-17-03	TP19-17-06	TP19-18-02	TP19-18-03
BVL Sample ID						AEO252	AEO253	AEO254	AEO273	AEO276	AEO274	AEO275	AEO277	AEO278	AEO279
BVL Job Number						C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523	C162523
Sample Date						17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	0.15	0.5	0.5	1.5	0.3	0.5	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0078
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	0.28	0.38	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	79	120	<10	110	190	220	<10	99	77	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	250	370	<50	320	540	580	<50	270	200	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	90	<50	63	130	150	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-TP19-19				TP21-TP19-21		
						TP19-19-01	TP19-19-03	TP19-19-05	TP19-19-06	TP21-TP19-21-02	TP21-TP19-21-04	TP21-TP19-21-06
Sample ID						AEO295	AEO296	AEO297	AEO298	AEO135	AEO136	AEO137
BVL Sample ID						C162523	C162523	C162523	C162523	C162508	C162508	C162508
BVL Job Number						C162523	C162523	C162523	C162523	C162508	C162508	C162508
Sample Date						17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	1.5	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	0.084	<0.0050	<0.0050	<0.0050	0.018
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	0.17	<0.050	<0.050	<0.050	0.064
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	0.034	<0.010	<0.010	0.018	0.048
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.17	<0.045	<0.045	0.11	0.33
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	11	<26	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	130	150	<23	<10	32	12	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	280	340	290	<50	280	170	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	<120	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	290	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	339	n/a	n/a	192	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	75	<120	<50	100	58	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	n/c	-	-	-	-

Notes:

- ^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.
 - ^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.
 - ^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.
 - ^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b)) * 100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.
 - ^(d) Chromatogram interpretation indicated petrogenic origin
- Underlined** - value exceeds GNWT criteria
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 F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4
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 n/a - not applicable
 n/c - not calculated
 n/g - no guideline
 RDL - reportable detection limit
 > - greater than
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 < - less than
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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-TP19-24				TP21-01	TP21-02			TP21-03		
Sample ID						TP21-TP19-24-01	TP21-TP19-24-03	DUPJ	TP21-TP19-24-05	TP21-01-02	TP21-02-02	TP21-02-03	TP21-03-01	TP21-03-03	TP21-03-06	
BVL Sample ID						AEO132	AEO133	AEO153	AEO134	AFC300	AFC301	AFC302	AFC303	AFC304	AFC305	
BVL Job Number						C162508	C162508	C162508	C162508	C164989	C164989	C164989	C164989	C164989	C164989	
Sample Date						19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	
Sample Depth (mbgs)						0.15	0.5	1	1	0.3	0.3	0.5	0.15	0.5	1.2	
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)											
Benzene	mg/kg	0.0050	0.5	-	-	0.0068	<0.0050	<0.0050	<0.0050	<0.014	<0.017	<0.0050	0.014	0.035	<0.0050	
Toluene	mg/kg	0.050	0.8	-	-	0.16	0.22	0.36	0.22	<0.050	<0.080	<0.050	0.077	0.079	0.25	
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.035	<0.010	<0.010	<0.010	<0.016	<0.035	<0.010	0.022	0.11	0.11	
Xylenes	mg/kg	0.045	1	-	-	0.25	<0.045	<0.045	<0.045	<0.19	<0.16	<0.045	0.092	0.94	<u>1.3</u>	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<29	<24	<10	<10	<10	64	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	58	140	<10	<10	<27	140	<10	110	<u>960</u>	<u>1,000</u>	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	240	290	<50	<50	360	<u>1,700</u>	<50	150	220	210	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	<50	-	-	-	-	-	-	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	<50	-	-	-	-	-	-	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1,274	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	59	63	<50	<50	<130	810	<50	<50	<50	<50	
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	n/c	-	-	-	-	-	-	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(e) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-04			TP21-05			TP21-06			
						Sample ID	TP21-04-01	TP21-04-03	TP21-04-05	TP21-05-02	TP21-05-04	TP21-05-06	TP21-06-02	DUP-FF	TP21-06-03
BVL Sample ID						AFA119	AFA117	AFA118	AFA120	AFA121	AFA122	AFA095	AFA097	AFA096	AFA098
BVL Job Number						C164653	C164653	C164653	C164653	C164653	C164653	C164648	C164648	C164648	C164648
Sample Date						27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	0.3	0.7	1.2	0.3	0.5	0.5	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.41	<0.050	<0.050	0.12	<0.050	0.70	<0.050	<0.050	0.23
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.014	0.053	0.15	<0.010	<0.010	<0.010	0.071	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.20	0.54	<0.045	<0.045	<0.045	0.43	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<13	35	<10	<10	<10	26	14	14	17
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	320	44	160	95	<10	<10	230	200	72	330
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	770	1,100	130	230	70	<50	780	310	190	240
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	325	n/a	90	n/a	n/a	n/a	n/a	587
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	75	440	<50	<50	<50	<50	190	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-07			TP21-08				TP21-09		
						TP21-07-01	TP21-07-03	TP21-07-06	TP21-08-01	TP21-08-04	DUP-EE	TP21-08-05	TP21-09-02	TP21-09-05	
Sample ID						AFA092	AFA093	AFA094	AFA085	AFA086	AFA091	AFA087	AFA083	AFA084	
BVL Sample ID						C164648	C164648	C164648	C164648	C164648	C164648	C164648	C164648	C164648	C164648
Sample Date						26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21
Sample Depth (mbgs)						0.15	0.5	1.5	0.15	0.7	1	1	0.3	1	
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.017	0.023	0.026	0.28	0.077	0.064	<0.0050	0.012	
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.30	<0.050	<0.080	<0.050	<0.050	<0.050	<0.050	<0.050	
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.031	<0.010	0.062	0.11	0.14	0.13	<0.010	0.018	
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.12	<0.045	0.53	0.17	0.056	0.052	<0.045	<0.045	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	17	<10	<u>1,100</u>	<10	<10	<10	<10	<10	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	140	<u>340</u>	<10	<u>9,200</u>	51	<10	<10	<10	<10	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	330	390	<50	<u>750</u>	390	<50	<50	<50	<50	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	53	<50	<50	<110	130	<50	<50	<50	<50	
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

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- not available

**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-10			TP21-11				TP21-12		
						Sample ID	TP21-10-01	TP21-10-03	TP21-10-04	TP21-11-01	TP21-11-03	DUP-DD	TP21-11-06	TP21-12-02	TP21-12-04
BVL Sample ID						AFA080	AFA081	AFA082	AFA076	AFA077	AFA079	AFA078	AEO359	AEO360	AEO361
BVL Job Number						C164648	C164648	C164648	C164648	C164648	C164648	C164648	C162535	C162535	C162535
Sample Date						26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	18-Aug-21	18-Aug-21	18-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.7	0.15	0.5	1.5	1.5	0.3	0.7	0.9
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	0.030	0.18	0.075	0.20	<0.024	0.0076	0.0076	<0.0050	0.039	0.025
Toluene	mg/kg	0.050	0.8	-	-	<0.080	<0.27	<0.050	<0.050	0.50	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.044	<0.053	<0.010	0.49	<0.049	<0.010	<0.010	<0.010	0.041	0.020
Xylenes	mg/kg	0.045	1	-	-	<0.20	<0.24	<0.045	1.1	0.44	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<24	<24	<10	110	<24	<10	<10	17	31	<11
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	68	<38	<10	26	59	<10	<10	190	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	2,000	550	160	230	640	<50	<50	220	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	<190	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	480	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	180	n/a	n/a	n/a	n/a	n/a	91	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	730	190	65	<50	<170	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	3.8	-	-	-	-	-	-	-	-

Notes:

- ^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.
 - ^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.
 - ^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.
 - ^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.
 - ^(d) Chromatogram interpretation indicated petrogenic origin
Bold/Underlined - value exceeds GNWT criteria
Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)
Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.
- BTEX - benzene, toluene, ethylbenzene, xylenes
 BVL - Bureau Veritas Laboratories
 F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4
 mbgs - metres below ground surface
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 n/a - not applicable
 n/c - not calculated
 n/g - no guideline
 RDL - reportable detection limit
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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-13				TP21-14		TP21-15		TP21-16	
						TP21-13-02	TP21-13-03	DUPI	TP21-13-05	TP21-14-02	TP21-14-04	TP21-15-02	TP21-15-04	TP21-16-03	TP21-16-04
Sample ID						AEO189	AEO190	AEO138	AEO191	AEE836	AEE837	AEE834	AEE835	AEE832	AEE833
BVL Sample ID						C162508	C162508	C162508	C162508	C160993	C160993	C160993	C160993	C160993	C160993
Sample Date						19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21
Sample Depth (mbgs)						0.3	0.5	1	1	0.3	0.7	0.3	0.7	0.5	0.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<u>2.7</u>	0.48	<u>0.55</u>	<0.0050	<0.0050	<0.0050	0.059	<0.017	0.024
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.70	<u>5.3</u>	<u>6.3</u>	<0.050	<0.050	<0.050	<0.11	0.22	<u>3.4</u>
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.014	<u>1.6</u>	<u>2.2</u>	<u>2.7</u>	<0.010	<0.010	<0.010	<0.021	<0.034	<0.040
Xylenes	mg/kg	0.045	1	-	-	0.12	<u>9.5</u>	<u>120</u>	<u>130</u>	<0.045	<0.045	<0.045	<0.095	<0.15	<0.18
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	31	<49	<u>2,200</u>	<u>5,600</u>	<10	40	<10	<21	<34	<40
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<u>270</u>	<u>180</u>	<u>450</u>	140	16	<10	18	<u>330</u>	51	<u>380</u>
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	74	<u>3,100</u>	280	110	100	<50	57	<u>4,600</u>	<u>710</u>	<u>6,700</u>
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	310	-	-	-	-	-	-	<120	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	2,800	-	-	-	-	-	-	710	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	2,930	<u>5,850</u>	n/a	100	n/a	4,951	n/a	<u>7,120</u>
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	1,100	100	<50	<50	<50	<50	1,700	250	<u>3,300</u>
BIC Value ^(d)	%	n/a	-	-	-	-	n/c	-	-	-	-	-	-	n/c	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

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RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-17			TP21-18			TP21-19		
Sample ID						TP21-17-02	TP21-17-04	TP21-17-06	TP21-18-01	TP21-18-03	TP21-18-06	TP21-19-01	TP21-19-04	TP21-19-06
BVL Sample ID						AEE838	AEE839	AEE840	AEO218	AEO219	AEO220	AEO362	AEO363	AEO364
BVL Job Number						C160993	C160993	C160993	C162508	C162508	C162508	C162535	C162535	C162535
Sample Date						16-Aug-21	16-Aug-21	16-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	18-Aug-21	18-Aug-21	18-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	0.15	0.5	1.5	0.15	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	0.047	<0.0050	0.78	0.59	<0.0050	0.033	0.0086
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	0.64	0.072	0.85	<0.050	0.11	0.28	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	0.037	0.31	0.034	0.027	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	0.11	0.55	0.14	0.12	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	13	<10	62	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<12	<10	180	80	<10	57	200	25
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	82	390	590	<50	310	500	69
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	<50
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	<50
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	102	n/a	n/a	73	n/a	762	104
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	100	200	<50	70	120	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	n/c

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location			TP21-20			TP21-21		
						Sample ID	TP21-20-01	TP21-20-03	TP21-20-06	TP21-21-02	TP21-21-04	TP21-21-06		
						BVL Sample ID	AFA127	AFA128	AFA129	AFA130	AFA131	AFA132		
						BVL Job Number	C164653	C164653	C164653	C164653	C164653	C164653		
						Sample Date	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21		
						Sample Depth (mbgs)	0.15	0.5	1.5	0.3	0.7	1.5		
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	0.062	0.034	<0.0050			
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.091	<0.050	1.7	0.25	<0.050			
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	0.042	0.043	<0.010			
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	0.24	0.25	<0.045			
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	16	20	<16	46	<16	<10			
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	34	200	<10	500	20	<10			
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	190	380	<50	1,000	66	<50			
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-			
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-			
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	102	n/a			
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	210	<50	<50			
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-			

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

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BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-22						TP21-23			
						Sample ID	TP21-22-02	TP21-22-01	TP21-22-03	DUP-GG	TP21-22-05	TP21-22-06	TP21-23-01	TP21-23-03	DUP-HH
BVL Sample ID						AFC390	AFA133	AFA134	AFA136	AFA135	AFA137	AFA138	AFA139	AFA141	AFA140
BVL Job Number						C164989	C164653	C164653	C164653	C164653	C164653	C164653	C164653	C164653	C164653
Sample Date						23-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21
Sample Depth (mbgs)						0.3	0.15	0.5	1	1	1.2	0.15	0.5	1.5	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	0.013	<0.0050	0.11	0.091	0.088	0.39	<0.0050	<0.0050	0.23	0.56
Toluene	mg/kg	0.050	0.8	-	-	1.7	<0.050	2.8	0.14	0.074	4.8	<0.050	<0.050	0.086	0.073
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.16	0.014	<0.029	0.29	0.065	4.2	0.024	<0.010	0.56	0.60
Xylenes	mg/kg	0.045	1	-	-	1.1	<0.045	<0.14	1.2	0.25	19	0.071	<0.045	0.59	1.2
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	74	<10	<10	42	11	850	<10	<10	230	44
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	800	130	350	3,300	64	6,800	100	120	610	190
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	660	290	1,700	<50	<50	99	240	250	120	94
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	3,392	125	7,749	n/a	n/a	960	328
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	120	<50	390	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-24			TP21-25			TP21-26		
						Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID
BVL Sample ID						AFA142	AFA143	AFA144	AFA145	AFA146	AFA147	AFA148	AFA149	AFA150
BVL Job Number						C164653	C164653	C164653	C164653	C164653	C164653	C164653	C164653	C164653
Sample Date						27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21
Sample Depth (mbgs)						0.15	0.5	1.5	0.3	0.7	1.5	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.087	0.011
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.076	0.26	<0.050	<u>2.4</u>	0.12	<0.050	<u>1.8</u>	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.013	0.021	<0.010	0.028	<0.010	<0.010	1.1	0.055
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	0.054	<0.045	0.18	<0.045	<0.045	<u>5.4</u>	0.25
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	14	17	<10	17	<10	<10	<u>310</u>	17
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	97	<u>380</u>	39	<u>360</u>	74	<10	120	<u>2,100</u>	100
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	280	<u>520</u>	75	320	370	<50	320	<u>1,600</u>	130
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	131	n/a	461	n/a	n/a	4,010	247
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	110	<50	59	130	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

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n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-27			TP21-28			
						TP21-27-02	TP21-27-04	TP21-27-05	TP21-28-02	TP21-28-04	TP21-28-06	TP21-28-08
Sample ID						AFA151	AFA152	AFA153	AEP027	AEP028	AEP029	AEP030
BVL Sample ID						C164653	C164653	C164653	C162661	C162661	C162661	C162661
BVL Job Number						27-Aug-21	27-Aug-21	27-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21
Sample Date						0.3	0.7	1.5	0.3	0.7	1.5	2.5
Sample Depth (mbgs)												
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	0.23	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	0.017	0.022	0.035	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	0.13	0.17	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	19	11	11	31	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	230	140	50	480	220	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	460	190	110	690	370	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	349	171	n/a	621	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	65	<50	<50	72	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))^*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-29			TP21-30	TP21-31
Sample ID						TP21-29-02	TP21-29-04	TP21-29-05	TP21-30-02	TP21-31-02
BVL Sample ID						AEP031	AEP032	AEP033	AEP020	AEP019
BVL Job Number						C162661	C162661	C162661	C162661	C162661
Sample Date						22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21
Sample Depth (mbgs)						0.3	0.7	1	0.3	0.3
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)					
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0090	<0.017	<0.013	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.22	0.25	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.016	<0.030	<0.024	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.092	<0.17	<0.13	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<21	<24	<19	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	15	<28	<22	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	200	180	250	92
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	236	232	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	52	<140	<110	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-32					TP21-33		
Sample ID						TP21-32-01	TP21-32-03	DUP T	TP21-32-04	TP21-32-05	TP21-33-02	TP21-33-04	TP21-33-06
BVL Sample ID						AEP034	AEP024	AEP037	AEP025	AEP026	AEP021	AEP022	AEP023
BVL Job Number						C162661	C162661	C162661	C162661	C162661	C162661	C162661	C162661
Sample Date						22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.7	0.7	1	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	0.022	0.016	<0.016	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	0.33	0.28	0.20	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<u>6.7</u>	<u>6.1</u>	<0.028	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<u>35</u>	<u>32</u>	<0.16	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<u>640</u>	<u>800</u>	<22	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	20	<u>830</u>	<u>4,300</u>	<u>6,900</u>	30	<u>230</u>	38	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	110	<u>800</u>	<u>650</u>	<u>510</u>	330	110	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	<120	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	430	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	<u>5,740</u>	<u>8,350</u>	562	n/a	158	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	240	130	170	52	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	<u>6.5</u>	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-34				TP21-35			
Sample ID						TP21-34-01	TP21-34-03	DUP-II	TP21-34-05	TP21-35-02	TP21-35-04	DUP V	TP21-35-05
BVL Sample ID						AFA123	AFA124	AFA126	AFA125	AFC306	AFC307	AFC386	AFC308
BVL Job Number						C164653	C164653	C164653	C164653	C164989	C164989	C164989	C164989
Sample Date						27-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	1	0.3	0.7	1	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0078	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	0.21	0.54	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	0.038	<0.010	0.014
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	0.15	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<u>430</u>	26	<10	<10	<u>160</u>	<u>240</u>	39	66
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<u>580</u>	94	<50	<50	230	270	73	62
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	520	122	138
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

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RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-36					TP21-37		
Sample ID						TP21-36-02	TP21-36-03	DUP W	TP21-36-05	TP21-36-06	TP21-37-01	TP21-37-04	TP21-37-06
BVL Sample ID						AFC309	AFC321	AFC387	AFC322	AFC323	AFC324	AFC325	AFC326
BVL Job Number						C164989	C164989	C164989	C164989	C164989	C164989	C164989	C164989
Sample Date						23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21
Sample Depth (mbgs)						0.3	0.5	1	1	1.5	0.15	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.015	<0.013	0.0092	<0.0050	<0.0050	0.040
Toluene	mg/kg	0.050	0.8	-	-	0.25	0.61	<u>5.7</u>	<u>1.7</u>	0.16	0.077	0.091	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.019	0.078	0.22	0.073	0.018	0.017	<0.010	0.021
Xylenes	mg/kg	0.045	1	-	-	0.10	0.34	<u>1.8</u>	0.63	<0.045	0.075	<0.045	0.070
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	13	42	<30	<20	<10	18	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<u>320</u>	<u>300</u>	75	53	130	140	150	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<u>430</u>	370	<u>470</u>	<u>500</u>	75	320	290	<50
F3A (C ₁₆ -C ₂₂)	mg/kg	110	n/g	-	-	270	190	-	-	75	-	-	-
F3B (C ₂₂ -C ₃₄)	mg/kg	110	n/g	-	-	160	180	-	-	<50	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	575	573	215	n/a	450	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	53	64	<140	160	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	n/c	n/c	-	-	n/c	-	-	-

Notes:

- ^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.
- ^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.
- ^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.
- ^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.
- ^(d) Chromatogram interpretation indicated petrogenic origin
Bold/Underlined - value exceeds GNWT criteria
Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)
Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.
 BTEX - benzene, toluene, ethylbenzene, xylenes
 BVL - Bureau Veritas Laboratories
 F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4
 mbgs - metres below ground surface
 mg/kg - milligrams per kilogram
 n/a - not applicable
 n/c - not calculated
 n/g - no guideline
 RDL - reportable detection limit
 > - greater than
 ≥ - greater than or equal to
 < - less than
 - not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-38					TP21-39			
						Sample ID	TP21-38-03	TP21-38-04	DUP X	TP21-38-05	TP21-38-07	TP21-39-03	TP21-39-04	TP21-39-05
BVL Sample ID						AFC327	AFC328	AFC388	AFC329	AFC330	AFC341	AFC344	AFC342	AFC343
BVL Job Number						C164989	C164989	C164989	C164989	C164989	C164989	C164989	C164989	C164989
Sample Date						23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21
Sample Depth (mbgs)						0.5	0.7	1	1	2	0.5	0.7	1	1.8
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.0078	0.092	0.024	0.084	0.0069	<0.0050	0.16	0.079
Toluene	mg/kg	0.050	0.8	-	-	0.20	0.79	<u>1.6</u>	0.68	<u>0.93</u>	<0.050	0.11	<u>2.3</u>	0.10
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.019	0.027	0.64	0.17	<u>1.3</u>	0.015	0.020	<0.010	0.17
Xylenes	mg/kg	0.045	1	-	-	0.10	0.19	<u>4.0</u>	<u>1.3</u>	<u>7.2</u>	<0.045	0.10	<0.12	0.52
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	27	<u>210</u>	86	<u>270</u>	23	<10	<18	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<u>300</u>	<u>350</u>	<u>990</u>	<u>930</u>	<u>1,700</u>	130	150	41	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	290	260	<u>480</u>	<u>530</u>	310	190	190	<u>600</u>	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	57	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	540	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	637	1,680	1,546	2,280	n/a	350	659	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	55	<50	<50	<50	<50	190	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	n/c	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Red/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Blue/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location			TP21-40			TP21-41			TP21-42		
						Sample ID	TP21-40-02	TP21-40-04	TP21-40-06	TP21-41-02	TP21-41-04	TP21-41-05	TP21-42-03	TP21-42-04	TP21-42-05		
						BVL Sample ID	AFC345	AFC346	AFC347	AFC348	AFC349	AFC350	AEO397	AEO398	AEO399		
						BVL Job Number	C164989	C164989	C164989	C164989	C164989	C164989	C162535	C162535	C162535		
						Sample Date	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	18-Aug-21	18-Aug-21	18-Aug-21		
						Sample Depth (mbgs)	0.3	0.7	1.5	0.3	0.7	1	0.5	0.7	1		
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)												
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.016	<0.0050	<0.0050	<0.0050			
Toluene	mg/kg	0.050	0.8	-	-	0.072	0.090	<0.050	<0.050	0.11	0.22	0.11	0.23	<0.050			
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.022	<0.010	<0.010	<0.010	0.056	0.016	0.015	<0.010			
Xylenes	mg/kg	0.045	1	-	-	0.082	0.088	<0.045	<0.045	<0.045	0.18	0.055	0.087	<0.045			
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	11	<10	16	<10	13	16	22	<10			
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	190	140	12	200	150	150	250	140	11			
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	310	330	<50	400	290	490	450	280	270			
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	150	-	-	-			
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	340	-	-	-			
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	481	72	n/a	450	653	n/a	442	291			
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	54	76	<50	<50	<50	94	93	56	71			
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	n/c	-	-	-			

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-43			TP21-44			TP21-45			TP21-46	
						Sample ID	TP21-43-01	TP21-43-03	TP21-43-05	TP21-44-02	TP21-44-04	TP21-44-06	TP21-45-03	TP21-45-04	TP21-45-05	TP21-46-02
BVL Sample ID						AEO221	AEO222	AEO223	AEE844	AEE845	AEE846	AEF102	AEF103	AEF104	AEF096	AEF097
BVL Job Number						C162508	C162508	C162508	C160993	C160993	C160993	C161010	C161010	C161010	C161010	C161010
Sample Date						19-Aug-21	19-Aug-21	19-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	0.3	0.7	1.5	0.5	0.7	1	0.3	0.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)											
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.0076	<0.0050	<0.0050	<0.0050	0.017	0.036	<0.028	<0.0050	<0.0050	<0.017
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.10	<0.050	<0.050	0.11	<0.050	<u>2.2</u>	<u>21</u>	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.017	<0.010	<0.010	0.019	<0.010	<0.049	<0.061	<0.010	<0.010	0.25
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.091	<0.045	<0.045	<0.045	<0.045	<0.23	<0.28	<0.045	<0.045	<u>1.6</u>
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	40	<64	<10	<10	48
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	82	150	<10	140	63	<10	<u>190</u>	110	<10	25	120
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	320	330	<50	<u>410</u>	350	<50	<u>5,400</u>	<u>2,900</u>	<50	<50	<u>2,300</u>
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	110	-	-	-	-	-	-	-	-	250
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	220	-	-	-	-	-	-	-	-	2,000
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	423	n/a	n/a	3,074	n/a	n/a	2,468
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	83	96	<50	96	120	<50	2,600	1,400	<50	<50	1,100
BIC Value ^(d)	%	n/a	-	-	-	-	n/c	-	-	-	-	-	-	-	-	n/c

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-47			TP21-48			TP21-49			
						Sample ID	TP21-47-01	TP21-47-04	TP21-47-06	TP21-48-02	TP21-48-04	TP21-48-05	TP21-49-02	TP21-49-03	TP21-49-05
BVL Sample ID						AEF083	AEF084	AEF085	AEE841	AEE842	AEE843	AEO224	AEO225	AEO227	AEO226
BVL Job Number						C161010	C161010	C161010	C160993	C160993	C160993	C162508	C162508	C162508	C162508
Sample Date						15-Aug-21	15-Aug-21	15-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21
Sample Depth (mbgs)						0.15	0.7	1.5	0.3	0.7	1	0.3	0.5	1	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	0.014	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	0.064	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.016	<0.010	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.052	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	51	57	<10	320	50	<10	66	55	23	11
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	210	280	60	350	400	65	190	160	760	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	68	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	690	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	347	80	n/a	460	85	n/a	n/a	793	71
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	57	82	<50	85	110	<50	52	50	260	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	3.2	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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RDL - reportable detection limit

> - greater than

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-50				TP21-51		
Sample ID						TP21-50-02	DUP G	TP21-50-04	TP21-50-06	TP21-51-01	TP21-51-03	TP21-51-06
BVL Sample ID						AEO386	AEO389	AEO387	AEO388	AFC380	AFC381	AFC382
BVL Job Number						C162535	C162535	C162535	C162535	C164989	C164989	C164989
Sample Date						18-Aug-21	18-Aug-21	18-Aug-21	18-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21
Sample Depth (mbgs)						0.3	0.7	0.7	1.5	0.15	0.5	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.34	0.35	0.20	<0.050	<0.050	0.48	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	12	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	190	190	150	<10	170	290	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	370	380	310	<50	300	450	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	582	470	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	81	71	67	<50	<50	77	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-52				TP21-53			TP21-54		
						Sample ID	TP21-52-01	TP21-52-03	DUP Y	TP21-52-05	TP21-53-01	TP21-53-03	TP21-53-05	TP21-54-02	TP21-54-04
BVL Sample ID						AFC383	AFC384	AFC389	AFC385	AFA044	AFA042	AFA043	AFA045	AFA046	AFA047
BVL Job Number						C164989	C164989	C164989	C164989	C164647	C164647	C164647	C164647	C164647	C164647
Sample Date						23-Aug-21	23-Aug-21	23-Aug-21	23-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	1	0.15	0.5	1	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.072	0.068
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.085	0.16	<0.050	<0.050	<0.050	0.066	<0.050	8.7	0.081
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	0.016	0.16	0.18
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.082	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.77	0.51
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	21	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	37	52	<10	<10	95	100	<10	220	89	31
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	100	130	<50	<50	290	240	56	320	590	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	76	n/a	700	91
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50	<50	180	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-55				TP21-56			TP21-57			
						Sample ID	DUP Z	TP21-55-03	TP21-55-05	TP21-56-01	TP21-56-03	TP21-56-06	TP21-57-01	TP21-57-03	TP21-57-05	
BVL Sample ID						AFA048	AFA050	AFA049	AFA051	AFA052	AFA053	AFA054	AFA055	AFA056	AFA057	
BVL Job Number						C164647	C164647	C164647	C164647	C164647	C164647	C164647	C164647	C164647	C164647	C164647
Sample Date						24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	
Sample Depth (mbgs)						0.3	0.5	0.5	1	0.15	0.5	1.5	0.15	0.5	1	
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)											
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Toluene	mg/kg	0.050	0.8	-	-	0.064	<0.050	0.097	3.0	<0.050	0.20	<0.050	0.12	0.53	<0.050	
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	110	180	38	54	130	46	<10	87	98	<10	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	200	190	120	770	210	270	62	290	280	<50	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	834	n/a	n/a	82	n/a	n/a	n/a	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	280	<50	67	<50	<50	<50	<50	
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-58			TP21-59			
Sample ID						TP21-58-01	TP21-58-03	TP21-58-06	TP21-59-01	TP21-59-03	TP21-59-04	TP21-59-06
BVL Sample ID						AFA154	AFA155	AFA156	AEP011	AEP012	AEP013	AEP014
BVL Job Number						C164653	C164653	C164653	C162661	C162661	C162661	C162661
Sample Date						27-Aug-21	27-Aug-21	27-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21
Sample Depth (mbgs)						0.15	0.5	2	0.15	0.5	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.33	<0.050	<0.050	0.50	1.3	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	140	51	<10	340	63	45	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	290	270	<50	610	120	110	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	78	60	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	<50	51	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	165	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	58	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	n/c	n/c	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

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BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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mg/kg - milligrams per kilogram

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n/g - no guideline

RDL - reportable detection limit

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-60				TP21-61	TP21-62	
Sample ID						TP21-60-02	TP21-60-04	DUP S	TP21-60-06	TP21-61-02	TP21-62-02	TP21-62-04
BVL Sample ID						AEP015	AEP016	AEP036	AEP017	AEP018	AEP003	AEP004
BVL Job Number						C162661	C162661	C162661	C162661	C162661	C162661	C162661
Sample Date						22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.3	1.3	0.3	0.3	0.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.018	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.018	<0.033	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.10	<0.18	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<23	<25	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	46	28	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	74	350	76	67	1,300	410	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	62	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	350	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	370	96	87	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	68	<50	<50	480	160	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	7.6	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

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Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-63				TP21-64		
Sample ID						TP21-63-01	DUP U	TP21-63-03	TP21-63-05	TP21-64-01	TP21-64-03	TP21-64-06
BVL Sample ID						AEP005	AEP035	AEP006	AEP007	AEP008	AEP009	AEP010
BVL Job Number						C162661	C162661	C162661	C162661	C162661	C162661	C162661
Sample Date						22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21	22-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.5	1	0.15	0.5	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	120	80	230	<10	30	25	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	220	130	290	<50	120	66	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-65			TP21-66			TP21-67			
						Sample ID	TP21-65-01	TP21-65-03	TP21-65-06	TP21-66-01	TP21-66-03	TP21-66-06	TP21-67-02	TP21-67-04	DUP-JJ
BVL Sample ID						AFA000	AFA001	AFA002	AFA003	AFA004	AFA005	AFA006	AFA007	AFA009	AFA008
BVL Job Number						C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643
Sample Date						28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21
Sample Depth (mbgs)						0.15	0.5	2	0.15	0.5	1.5	0.3	0.7	1.4	1.4
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.014	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<u>1.0</u>	0.11	0.40	<u>9.0</u>	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.015	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.19	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<16	<10	<29	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	59	<u>370</u>	<10	<u>200</u>	150	<10	47	<26	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	200	<u>560</u>	<50	270	400	<50	270	270	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	290	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	55	<50	53	<130	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-68			TP21-69		TP21-70			
						Sample ID	TP21-68-04	TP21-68-05	TP21-68-06	TP21-69-03	TP21-69-06	TP21-70-03	TP21-70-04	DUP-KK
BVL Sample ID						AFA010	AFA011	AFA012	AFA013	AFA014	AFA015	AFA018	AFA017	AFA016
BVL Job Number						C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643
Sample Date						28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21
Sample Depth (mbgs)						0.7	1	1.7	0.5	1.5	0.5	0.7	1.5	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	0.0076	<0.011	<0.0050	<0.0050	0.0079	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.51	2.2	<0.050	0.42	0.36	0.069	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.012	<0.010	<0.010	0.073	0.016	0.025	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.15	<0.045	<0.045	0.35	<0.045	0.094	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<23	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	83	61	<10	340	<10	32	110	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	270	1,000	<50	280	<50	150	200	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	363	1,084	n/a	n/a	n/a	n/a	320	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	260	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-71			TP21-72		
Sample ID						TP21-71-02	TP21-71-04	TP21-71-06	TP21-72-03	TP21-72-05	TP21-72-06
BVL Sample ID						AFA019	AFA020	AFA021	AFA022	AFA023	AFA024
BVL Job Number						C164643	C164643	C164643	C164643	C164643	C164643
Sample Date						28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.7	0.5	1	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)						
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.47	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.023	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	0.13	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	30	70	<10	89	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	100	160	79	160	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	240	99	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b)) * 100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-73			TP21-74			
						TP21-73-02	TP21-73-04	TP21-73-05	TP21-74-02	TP21-74-03	DUP F	TP21-74-05
Sample ID						AEO365	AEO366	AEO367	AEO315	AEO316	AEO318	AEO317
BVL Sample ID						C162535	C162535	C162535	C162523	C162523	C162523	C162523
BVL Job Number						18-Aug-21	18-Aug-21	18-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21	17-Aug-21
Sample Date						0.3	0.7	1	0.3	0.5	0.5	1
Sample Depth (mbgs)												
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.015	<0.0050	<0.0050	0.0082	0.010	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.46	<0.050	<0.050	0.35	0.19	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.041	<0.010	<0.010	0.064	0.036	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.16	<0.045	<0.045	0.55	0.27	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	15	<10	<10	16	17	<11
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	16	66	<10	110	220	170	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	110	220	100	330	460	370	<71
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	<50	-	-	170	<50
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	79	-	-	200	<50
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	301	120	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	51	<50	91	120	77	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	n/c	-	-	n/c	n/c

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-75			TP21-76			TP21-77		TP21-78	
Sample ID						TP21-75-02	TP21-75-04	TP21-75-06	TP21-76-02	TP21-76-04	TP21-76-06	TP21-77-04	TP21-77-01	TP21-78-01	TP21-78-04
BVL Sample ID						AEE847	AEE848	AEE849	AEF080	AEF081	AEF082	AEF101	AEF100	AEF098	AEF099
BVL Job Number						C160993	C160993	C160993	C161010	C161010	C161010	C161010	C161010	C161010	C161010
Sample Date						16-Aug-21	16-Aug-21	16-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	0.3	0.7	1.5	0.7	0.15	0.15	0.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.011	<0.0050	0.0063	<0.0050	<0.0050	0.020	<0.0050	<0.0090	0.020
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.38	<0.050	0.11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.019	<0.010	0.015	<0.010	<0.010	<0.033	<0.010	0.047	<0.031
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.12	<0.045	0.17	<0.045	<0.045	<0.15	<0.045	0.10	<0.14
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	27	<10	<20	<20
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	64	180	<10	200	98	<10	110	18	43	250
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	280	420	<50	460	410	<50	2,500	110	610	3,400
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	230	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	2,200	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	610	n/a	n/a	518	n/a	2,637	n/a	n/a	3,670
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	76	110	<50	99	140	<50	1,100	54	250	1,900
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	n/c	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-79			TP21-80				
						TP21-79-03	TP21-79-04	TP21-79-05	TP21-80-01	TP21-80-04	TP21-80-05	TP21-80-05	TP21-80-06
Sample ID						AEF093	AEF094	AEF095	AEE871	AEE872	AEE873	AFW282	AFW283
BVL Sample ID						C161010	C161010	C161010	C160993	C160993	C160993	C168138	C168138
BVL Job Number						C161010	C161010	C161010	C160993	C160993	C160993	C168138	C168138
Sample Date						15-Aug-21	15-Aug-21	15-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	03-Sep-21	03-Sep-21
Sample Depth (mbgs)						0.5	0.7	1	0.15	0.7	1	1	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	0.0071	0.34	0.013	<0.0050	<0.0050	<0.015	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.32	0.082	<0.050	<0.050	0.22	0.24	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.025	0.058	0.020	<0.010	0.012	<0.030	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	0.18	0.23	<0.045	0.13	0.051	<0.13	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	20	<10	<10	<10	<10	<24	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	360	23	<10	87	190	42	27	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	560	540	<50	280	320	760	72	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	<50	-	-	-	<110	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	500	-	-	-	760	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	573	n/a	n/a	520	826	109	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	100	200	<50	<50	<50	320	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	4.4	-	-	-	n/c	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

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Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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RDL - reportable detection limit

> - greater than

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-81			TP21-82				TP21-83		
						Sample ID	TP21-81-01	TP21-81-03	TP21-81-06	TP21-82-03	TP21-82-04	DUP H	TP21-82-06	TP21-83-04	TP21-83-05
BVL Sample ID						AEO299	AEO300	AEO301	AEO383	AEO384	AEO368	AEO385	AFA025	AFA026	AFA027
BVL Job Number						C162523	C162523	C162523	C162535	C162535	C162535	C162535	C164643	C164643	C164643
Sample Date						17-Aug-21	17-Aug-21	17-Aug-21	18-Aug-21	18-Aug-21	18-Aug-21	18-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21
Sample Depth (mbgs)						0.15	0.5	1.5	0.5	0.7	1.5	1.5	0.7	1	1.6
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	0.0083	0.011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0074	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.072	0.24	<0.050	0.10	<0.050	<0.050	<0.050	0.45	0.76	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.015	0.039	<0.010	0.015	<0.010	<0.010	<0.010	0.019	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	0.064	0.25	<0.045	0.053	<0.045	<0.045	<0.045	0.14	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	23	<10	12	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	130	290	<10	150	47	<10	<10	170	28	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	430	530	<50	420	550	<50	<50	390	590	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	68	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	520	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	607	n/a	n/a	570	628	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	100	98	<50	130	200	<50	<50	52	170	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	5.1	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-84				TP21-85			TP21-86		
						Sample ID	TP21-84-03	TP21-84-04	DUP-LL	TP21-84-05	TP21-85-03	TP21-85-04	TP21-85-05	TP21-86-03	TP21-86-05
BVL Sample ID						AFA028	AFA031	AFA033	AFA032	AFA034	AFA035	AFA036	AFA037	AFA038	AFA039
BVL Job Number						C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643	C164643
Sample Date						28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21
Sample Depth (mbgs)						0.5	0.7	1	1	0.5	0.7	1	0.5	1	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	0.016	0.0099	<0.0050	<0.010	0.0094	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	0.13	0.10	<0.050	6.3	0.60	0.058	0.20	0.23
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	0.028	0.021	<0.010	0.50	0.062	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	0.058	<0.045	0.18	0.048	<0.045	4.3	0.36	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	36	<10	<10	<10	<23	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	90	93	97	49	12	47	<10	<10	<10	14
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	290	230	360	520	82	540	53	<50	<50	64
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	359	467	579	n/a	610	73	n/a	n/a	88
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	71	150	<50	160	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-87		TP21-88			TP21-89	
Sample ID						TP21-87-04	TP21-87-06	TP21-88-03	TP21-88-04	TP21-88-05	TP21-89-03	TP21-89-06
BVL Sample ID						AFB105	AFB106	AFB107	AFB108	AFB109	AFB110	AFB111
BVL Job Number						C164860	C164860	C164860	C164860	C164860	C164860	C164860
Sample Date						29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21
Sample Depth (mbgs)						0.7	1.5	0.5	0.7	1	0.5	1.4
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	0.027	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.35	<0.050	<0.050	18	<0.050	0.53	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.012	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.097	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<22	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	87	<10	<10	36	<10	37	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	180	<50	<50	680	<50	280	57
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	277	n/a	n/a	738	n/a	n/a	77
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	180	<50	65	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-90				TP21-91		
Sample ID						TP21-90-02	TP21-90-04	DUP-MM	TP21-90-06	TP21-91-02	TP21-91-04	TP21-91-06
BVL Sample ID						AFB112	AFB113	AFB066	AFB114	AEP523	AEP524	AEP525
BVL Job Number						C164860	C164860	C164860	C164860	C162768	C162768	C162768
Sample Date						29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21
Sample Depth (mbgs)						0.3	0.7	0.7	1.7	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<24	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	200	67	<10	<10	110	59	17
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	420	220	<50	<50	310	190	55
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	311	n/a	n/a	n/a	259	82
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-92				TP21-93			TP21-94		
						Sample ID	TP21-92-02	TP21-92-04	DUP R	TP21-92-06	TP21-93-02	TP21-93-04	TP21-93-06	TP21-94-01	TP21-94-03
BVL Sample ID						AEP526	AEP527	AEP529	AEP528	AEP530	AEP531	AEP532	AEP512	AEP513	AEP514
BVL Job Number						C162768	C162768	C162768	C162768	C162768	C162768	C162768	C162768	C162768	C162768
Sample Date						21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	1.5	0.3	0.7	1.5	0.15	0.5	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	60	75	<50	<50	<50	<50	<50	<50	<50	75
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	<50	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	<50	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	95	n/a	n/a	n/a	n/a	n/a	n/a	n/a	95
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	n/c	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))^*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $<10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

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BTEX - benzene, toluene, ethylbenzene, xylenes

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-95					TP21-96		
Sample ID						TP21-95-01	DUP Q	TP21-95-03	TP21-95-06	TP21-95-08	TP21-96-01	TP21-96-03	TP21-96-05
BVL Sample ID						AEP515	AEP519	AEP516	AEP517	AEP518	AEP520	AEP521	AEP522
BVL Job Number						C162768	C162768	C162768	C162768	C162768	C162768	C162768	C162768
Sample Date						21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.5	1.5	2.7	0.15	0.5	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	36	24	<10	43	<10	83	93	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	150	86	<50	<50	<50	190	230	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	103	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	55	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location			TP21-97			TP21-98		
						Sample ID	TP21-97-02	TP21-97-04	TP21-97-06	TP21-98-03	TP21-98-04	TP21-98-05		
						BVL Sample ID	AFB067	AFB068	AFB069	AFB070	AFB071	AFB072		
						BVL Job Number	C164860	C164860	C164860	C164860	C164860	C164860		
						Sample Date	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21		
						Sample Depth (mbgs)	0.3	0.7	1.4	0.5	0.7	1		
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0090	<0.0050	<0.0050	<0.0050	<0.011	<0.0050			
Toluene	mg/kg	0.050	0.8	-	-	0.31	<0.050	<0.050	<0.050	<0.14	<0.050			
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.013	<0.010	<0.010	<0.010	<0.016	<0.010			
Xylenes	mg/kg	0.045	1	-	-	<0.11	<0.045	<0.045	<0.045	<0.13	<0.045			
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<24	<10	<10	<10	<10	<10			
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	100	<10	23	470	30	<10			
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	2,300	<50	51	550	830	<50			
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-			
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-			
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	84	n/a	870	n/a			
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	910	<50	<50	83	300	<50			
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-			

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Red/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Blue/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location			TP21-99			TP21-100		
						Sample ID	TP21-99-01	TP21-99-04	TP21-99-06	TP21-100-01	TP21-100-03	TP21-100-06		
						BVL Sample ID	AFB073	AFB074	AFB075	AFB119	AFB120	AFB121		
						BVL Job Number	C164860	C164860	C164860	C164860	C164860	C164860		
						Sample Date	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21		
						Sample Depth (mbgs)	0.15	0.7	1.5	0.15	0.5	1.5		
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0086	<0.0050			
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	0.47	0.16			
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.012	<0.010	<0.010	<0.010	<0.010	<0.010			
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.12	<0.045			
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<18	<10			
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	30	<10	<10	18	<22	17			
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	130	<50	<50	92	370	120			
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-			
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-			
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	147			
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<110	<50			
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-			

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-101			TP21-102		TP21-103		
						Sample ID	TP21-101-01	TP21-101-04	TP21-101-05	TP21-102-03	TP21-102-06	TP21-103-02	TP21-103-04
BVL Sample ID						AFB122	AFB123	AFB124	AFB125	AFB126	AFB127	AFB128	AFB130
BVL Job Number						C164860	C164860	C164860	C164860	C164860	C164860	C164860	C164860
Sample Date						29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21	29-Aug-21
Sample Depth (mbgs)						0.15	0.7	1	0.5	1.5	0.3	0.7	1.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	33	28	<10	44	<10	51	55	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	110	120	<50	74	<50	190	120	100
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	158	n/a	n/a	n/a	n/a	185	120
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))^*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

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n/a - not applicable

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RDL - reportable detection limit

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\geq - greater than or equal to

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-104					TP21-105		
Sample ID						TP21-104-01	DUP NN	TP21-104-03	TP21-104-05	TP21-104-06	TP21-105-03	TP21-105-04	TP21-105-06
BVL Sample ID						AFU721	AFU724	AFU722	AFU741	AFU723	AEO380	AEO381	AEO382
BVL Job Number						C167913	C167913	C167913	C167913	C167913	C162535	C162535	C162535
Sample Date						31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	18-Aug-21	18-Aug-21	18-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.5	1	1.5	0.5	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	11	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	31	54	23	14	<10	32	140	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	130	170	130	230	<50	140	180	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	254	n/a	n/a	331	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	52	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-106			TP21-107			TP21-108		
						Sample ID	TP21-106-02	TP21-106-04	TP21-106-06	TP21-107-02	TP21-107-04	TP21-107-06	TP21-108-02	TP21-108-04
BVL Sample ID						AEE891	AEE892	AEE893	AEE874	AEE875	AEE876	AEF090	AEF091	AEF092
BVL Job Number						C160993	C160993	C160993	C160993	C160993	C160993	C161010	C161010	C161010
Sample Date						16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	0.3	0.7	1.5	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	0.0088	<0.0050	<0.0050	<0.0050	0.015	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.064	0.064	<0.050	<0.050	0.38	<0.050	0.12	0.51	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.013	<0.010	<0.010	<0.010	0.026	<0.010	<0.010	0.015	<0.010
Xylenes	mg/kg	0.045	1	-	-	0.052	<0.045	<0.045	<0.045	0.20	<0.045	<0.045	0.10	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	22	<10	<10	34	<19
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	120	110	<10	190	270	<10	350	550	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	370	390	<50	370	420	<50	560	780	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	160	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	230	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	712	n/a	n/a	1,364	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	55	94	<50	67	77	<50	100	140	<50
BIC Value ^(d)	%	n/a	-	-	-	-	n/c	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

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^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

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n/g - no guideline

RDL - reportable detection limit

> - greater than

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-109			TP21-110			TP21-111			
Sample ID						TP21-109-02	TP21-109-04	TP21-109-06	TP21-110-04	TP21-110-02	TP21-110-06	TP21-111-03	TP21-111-04	DUP B	TP21-111-05
BVL Sample ID						AEF077	AEF078	AEF079	AEF075	AEF074	AEF076	AEF086	AEF087	AEF089	AEF088
BVL Job Number						C161010	C161010	C161010	C161010	C161010	C161010	C161010	C161010	C161010	C161010
Sample Date						15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21	15-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	0.7	0.3	1.5	0.5	0.7	1	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.089	0.074	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.042	0.013	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.19	0.096	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	90	<10	<10	<17	<10	<u>220</u>	120	<10	11
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	<50	<50	<50	<50	<u>450</u>	290	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	150	n/a	n/a	n/a	n/a	n/a	420	n/a	71
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	120	68	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-112				TP21-113			TP21-114		
						Sample ID	TP21-112-02	TP21-112-04	DUPC	TP21-112-06	TP21-113-01	TP21-113-04	TP21-113-05	TP21-114-01	TP21-114-04
BVL Sample ID						AEE877	AEE878	AEE880	AEE879	AEE888	AEE889	AEE890	AEO186	AEO187	AEO188
BVL Job Number						C160993	C160993	C160993	C160993	C160993	C160993	C160993	C162508	C162508	C162508
Sample Date						16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	1.5	0.15	0.7	1	0.15	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.012	<0.0050	<0.0050	<0.0050	<0.0050	0.0078	<0.0050	<0.013	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.18	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.18	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.018	<0.010	0.026	0.013	<0.010	<0.010	<0.010	<0.023	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.12	<0.045	0.13	0.054	<0.045	<0.045	<0.045	<0.13	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	10	<10	<10	<10	<10	<19	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	39	200	<10	<10	170	63	<10	32	29	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	250	430	<50	<50	240	220	<50	250	270	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	<50	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	230	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	640	n/a	70	n/a	293	n/a	n/a	318	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	55	86	<50	<50	<50	<50	<50	<50	78	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	n/c	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-115				TP21-116		
Sample ID						TP21-115-01	TP21-115-03	TP21-115-06	TP21-115-05	TP21-116-02	TP21-116-04	TP21-116-06
BVL Sample ID						AFC794	AFC795	AFC796	AFC800	AFC797	AFC798	AFC799
BVL Job Number						C165063	C165063	C165063	C165063	C165063	C165063	C165063
Sample Date						30-Aug-21	30-Aug-21	30-Aug-21	30-Aug-21	30-Aug-21	30-Aug-21	30-Aug-21
Sample Depth (mbgs)						0.15	0.5	1.5	1	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	0.016	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	0.13	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	0.015	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	34	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	64	150	<50	<50	150	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-117				TP21-118			
						Sample ID	DUP OO	TP21-117-03	TP21-117-05	TP21-118-02	TP21-118-04	DUP PP	TP21-118-06
BVL Sample ID						AFU725	AFU728	AFU726	AFU727	AFU729	AFU730	AFU732	AFU731
BVL Job Number						C167913	C167913	C167913	C167913	C167913	C167913	C167913	C167913
Sample Date						31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.5	1	0.3	0.7	1.5	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.019	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	18	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	0.053	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	53	<10	10	<10	33	74	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	66	<50	<50	<50	98	1,400	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	1,484	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	580	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-119				TP21-120			
Sample ID						TP21-119-01	DUP QQ	TP21-119-03	TP21-119-05	TP21-120-02	DUP RR	TP21-120-04	TP21-120-06
BVL Sample ID						AFU733	AFU735	AFU734	AFU736	AFU737	AFU739	AFU738	AFU740
BVL Job Number						C167913	C167913	C167913	C167913	C167913	C167913	C167913	C167913
Sample Date						31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.5	1	0.3	0.7	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.079	<0.050	<0.050	0.10	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	77	68	51	<10	280	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	160	180	200	<50	280	<50	81	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	101	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	64	<50	71	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

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n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-121				TP21-122				TP21-123		
						TP21-121-01	TP21-121-03	DUP SS	TP21-121-05	TP21-122-02	TP21-122-04	DUP TT	TP21-122-06	TP21-123-01	TP21-123-04	TP21-123-06
Sample ID						AFU742	AFU743	AFU745	AFU744	AFU746	AFU747	AFU749	AFU748	AEP488	AEP489	AEP490
BVL Job Number						C167913	C167913	C167913	C167913	C167913	C167913	C167913	C167913	C162768	C162768	C162768
Sample Date						31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	1	0.3	0.7	1.5	1.5	0.15	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)											
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	0.57	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	100	43	<10	15	30	<10	<10	<10	38	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	280	360	<50	340	190	<50	<50	<50	160	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	365	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	81	<50	54	59	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

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Bold/Underlined - value exceeds GNWT criteria

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RDL - reportable detection limit

> - greater than

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-124			TP21-125				
						TP21-124-02	TP21-124-04	TP21-124-06	TP21-125-02	DUP P	TP21-125-04	TP21-125-05	TP21-125-08
Sample ID						AEP504	AEP505	AEP506	AEP507	AEP509	AEP508	AEP510	AEP511
BVL Sample ID						C162768	C162768	C162768	C162768	C162768	C162768	C162768	C162768
BVL Job Number						C162768	C162768	C162768	C162768	C162768	C162768	C162768	C162768
Sample Date						21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	0.3	0.7	0.7	1	2.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	0.023	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.031	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.11	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<24	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	72	<10	<10	57	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	2,100	<50	<50	170	<50	<50	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	850	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-126			TP21-127			TP21-128		
						TP21-126-02	TP21-126-04	TP21-126-06	TP21-127-02	TP21-127-04	TP21-127-05	TP21-128-02	TP21-128-04	TP21-128-06
Sample ID						AEP482	AEP483	AEP484	AEP066	AEP067	AEP068	AEP063	AEP064	AEP065
BVL Sample ID						C162768	C162768	C162768	C162662	C162662	C162662	C162662	C162662	C162662
Sample Date						21-Aug-21	21-Aug-21	21-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.5	0.3	0.7	1	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0070	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0067	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	0.083	<0.050	<0.050	0.41	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.095	<0.045	<0.045	<0.045	<0.045	<0.045	<0.090	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<21	<10	<10	<10	<10	<10	<20	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	12	14	<10	36	<10	<10	25	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	240	220	<50	570	59	<50	450	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	56	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	390	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	244	n/a	n/a	79	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	81	<50	200	<50	<50	110	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	6.0	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))^*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-129				TP21-130			
						TP21-129-01	DUP UU	TP21-129-03	TP21-129-05	TP21-130-02	DUP VV	TP21-130-04	TP21-130-06
Sample ID						AFU750	AFU752	AFU751	AFU753	AFU754	AFU756	AFU755	AFU757
BVL Sample ID						C167913	C167913	C167913	C167913	C167913	C167913	C167913	C167913
BVL Job Number						C167913	C167913	C167913	C167913	C167913	C167913	C167913	C167913
Sample Date						31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.5	1	0.3	0.7	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.15
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	74	16	10	<10	150	160	130	24
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	240	60	<50	<50	220	200	190	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	370	330	84
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	61	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-131				TP21-132			
						Sample ID	TP21-131-01	TP21-131-03	TP21-131-04	TP21-131-05	TP21-132-01	TP21-132-03	TP21-132-04
BVL Sample ID						AFU758	AFU759	AFU767	AFU760	AFU761	AFU769	AFU762	AFU763
BVL Job Number						C167913	C167913	C167913	C167913	C167913	C167913	C167913	C167913
Sample Date						31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21
Sample Depth (mbgs)						0.15	0.5	0.7	1	0.15	0.5	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	0.033	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	0.38	0.076	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	15	<12	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	120	140	32	<10	67	21	14	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	230	170	110	<50	200	250	100	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	<50	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	100	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	152	n/a	n/a	n/a	126	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	55	<50	<50	<50	50	80	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	n/c	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

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n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location				
						TP21-133				
						Sample ID	TP21-133-02	TP21-133-03	TP21-133-05	TP21-133-06
						BVL Sample ID	AFU764	AFU765	AFU766	AFU768
						BVL Job Number	C167913	C167913	C167913	C167913
						Sample Date	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21
						Sample Depth (mbgs)	0.3	0.5	1	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)					
Benzene	mg/kg	0.0050	0.5	-	-	<0.0080	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.12	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.012	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.094	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<21	<11	<16	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<u>3,200</u>	120	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<u>550</u>	240	<50	76	76
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	61	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	180	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	96	96
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	93	70	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	n/c	-	-	-

Notes:

- ^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.
 - ^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.
 - ^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.
 - ^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.
 - ^(d) Chromatogram interpretation indicated petrogenic origin
- Bold/Underlined** - value exceeds GNWT criteria
Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)
Blue/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.
- BTEX - benzene, toluene, ethylbenzene, xylenes
 BVL - Bureau Veritas Laboratories
 F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4
 mbgs - metres below ground surface
 mg/kg - milligrams per kilogram
 n/a - not applicable
 n/c - not calculated
 n/g - no guideline
 RDL - reportable detection limit
 > - greater than
 ≥ - greater than or equal to
 < - less than
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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-134					TP21-135				
						Sample ID	DUP WW	TP21-134-04	DUP XX	TP21-134-06	TP21-135-02	DUP YY	TP21-135-03	DUP ZZ	TP21-135-05
BVL Sample ID						AFU856	AFU864	AFU857	AFU859	AFU858	AFU860	AFU863	AFU861	AFU865	AFU862
Sample Date						01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21
Sample Depth (mbgs)						0.3	0.7	0.7	1.5	1.5	0.3	0.5	0.5	1	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	<10	84	79	35	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	<50	<50	<50	95	<50	<50	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))^*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $<10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-136			TP21-137			TP21-138				
						Sample ID	TP21-136-01	TP21-136-03	TP21-136-06	TP21-137-02	TP21-137-03	TP21-137-05	TP21-138-01	TP21-138-03	DUP K	TP21-138-06
BVL Sample ID						AEO144	AEO145	AEO146	AEO147	AEO148	AEO149	AEO150	AEO151	AEO192	AEO152	
BVL Job Number						C162508	C162508	C162508	C162508	C162508	C162508	C162508	C162508	C162508	C162508	C162508
Sample Date						19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21
Sample Depth (mbgs)						0.15	0.5	1.5	0.3	0.5	1	0.15	0.5	1.5	1.5	
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)											
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	23	<10	130	<10	13	<10	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	56	59	110	<50	<50	<50	300	<50	<50	<50	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	130	n/a	n/a	n/a	n/a	n/a	73	n/a	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	99	<50	<50	<50	
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-139				TP21-140		
						Sample ID	TP21-139-01	TP21-139-03	DUP M	TP21-139-05	TP21-140-02	TP21-140-04
BVL Sample ID						AEP043	AEP044	AEP046	AEP045	AEP047	AEP048	AEP049
BVL Job Number						C162662	C162662	C162662	C162662	C162662	C162662	C162662
Sample Date						20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21
Sample Depth (mbgs)						0.15	0.5	1	1	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	0.024	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	30	16	11	16	20	<10	19
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	130	150	66	72	110	<50	120
F3A (C16-C22)	mg/kg	110	n/g	-	-	<50	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	130	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	87	98	n/a	n/a	149
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	65	66	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	n/c	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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n/c - not calculated

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RDL - reportable detection limit

> - greater than

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-141				TP21-142			TP21-143		
Sample ID						TP21-141-04	DUP N	TP21-141-06	TP21-141-02	TP21-142-01	TP21-142-03	TP21-142-05	TP21-143-01	TP21-143-02	TP21-143-04
BVL Sample ID						AEP051	AEP053	AEP052	AEP050	AEP485	AEP486	AEP487	AEP055	AEP054	AEP056
BVL Job Number						C162662	C162662	C162662	C162662	C162768	C162768	C162768	C162662	C162662	C162662
Sample Date						20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21
Sample Depth (mbgs)						0.7	1.5	1.5	0.3	0.15	0.5	1	0.15	0.3	0.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	11	19	18	26	<10	<10	<10	<10	<10	11
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	89	99	130	140	120	<50	<50	77	92	200
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	110	128	158	n/a	n/a	n/a	n/a	n/a	n/a	221
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	57
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-144			TP21-145			TP21-146			
Sample ID						TP21-144-02	TP21-144-04	TP21-144-05	TP21-145-02	TP21-145-03	TP21-145-06	TP21-146-02	TP21-146-03	DUP L	TP21-146-05
BVL Sample ID						AEP057	AEP058	AEP059	AEP060	AEP061	AEP062	AEO183	AEO184	AEO229	AEO185
BVL Job Number						C162662	C162662	C162662	C162662	C162662	C162662	C162508	C162508	C162508	C162508
Sample Date						20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21	19-Aug-21
Sample Depth (mbgs)						0.3	0.7	1	0.3	0.7	1.5	0.3	0.5	1	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.012	0.010
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.034	0.020
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.049	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<u>270</u>	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	92	27	<10	<10	<10	19	<u>3,700</u>	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	110	<50	<50	<50	160	<u>1,100</u>	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	152	147	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	55	130	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b)) * 100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

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> - greater than

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location			TP21-147		TP21-148	
						Sample ID	TP21-147-01	TP21-147-03	TP21-147-05	TP21-148-02	TP21-148-04	
						BVL Sample ID	AEO129	AEO130	AEO131	AEC349	AEC350	
						BVL Job Number	C162508	C162508	C162508	C160616	C160616	
						Sample Date	19-Aug-21	19-Aug-21	19-Aug-21	12-Aug-21	12-Aug-21	
						Sample Depth (mbgs)	0.15	0.5	1	0.3	0.7	
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050		
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010		
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045		
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10		
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	<10		
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	420^(d)	<50	210	<50	54		
F3A (C16-C22)	mg/kg	110	n/g	-	-	<50	-	-	-	-		
F3B (C22-C34)	mg/kg	110	n/g	-	-	380	-	-	-	-		
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	230	n/a	74		
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	110	<50	84	<50	<50		
BIC Value ^(d)	%	n/a	-	-	-	1.3	-	-	-	-		

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

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^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-149					TP21-150		TP21-151	
						Sample ID	TP21-149-02	TP21-149-04	DUP A	TP21-149-05	TP21-149-06	TP21-150-02	TP21-150-04	TP21-151-02
BVL Sample ID						AEC351	AEC352	AEF046	AEF044	AEF045	AEF026	AEF027	AEC353	AEC354
BVL Job Number						C160616	C160616	C161006	C161006	C161006	C161006	C161006	C160616	C160616
Sample Date						12-Aug-21	12-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	12-Aug-21	12-Aug-21
Sample Depth (mbgs)						0.3	0.7	1.2	1.2	1.7	0.2	0.7	0.3	0.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	0.012	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	0.097	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	4.2	0.048	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	27	0.39	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	320	460	<10	150	<10	<10	<10	<15	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	10,000	4,700	1,100	4,000	<10	<10	<10	70	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	1,200	280	120	540	<50	<50	<50	380	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	410	130	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	790	150	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	5,440	1,230	4,690	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	250	120	<50	240	<50	<50	<50	120	<50
BIC Value ^(d)	%	n/a	-	-	-	n/c	n/c	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))^*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-152				TP21-153		TP21-154		TP21-155	
						Sample ID	TP21-152-02	TP21-152-03	TP21-152-04	TP21-152-05	TP21-153-02	TP21-153-04	TP21-154-02	TP21-154-04	TP21-155-02
BVL Sample ID						AFU829	AEF028	AEF029	AEF047	AEF030	AEF031	AEF032	AEF033	AEC355	AEC356
BVL Job Number						C167916	C161006	C161006	C161006	C161006	C161006	C161006	C161006	C160616	C160616
Sample Date						04-Sep-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	12-Aug-21	12-Aug-21
Sample Depth (mbgs)						0.3	0.5	0.7	1	0.3	0.7	0.3	0.7	0.3	0.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.011	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.021	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.095	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<21	<u>230</u>	<u>410</u>	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<u>1,700</u>	<u>4,800</u>	<u>3,600</u>	13	<10	<10	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<u>1,100</u>	230	180	<71	51	<50	120	<50	210	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	230	-	<50	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	<50	-	<50	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	4,190	73	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	220	<50	<50	<50	<50	<50	<50	<50	77	<50
BIC Value ^(d)	%	n/a	-	-	-	-	n/c	-	n/c	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

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BTEX - benzene, toluene, ethylbenzene, xylenes

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-156		TP21-157		TP21-158		TP21-159		
						TP21-156-02	TP21-156-04	TP21-157-03	TP21-157-04	TP21-158-02	TP21-158-04	TP21-159-02	TP21-159-04	TP21-159-06
Sample ID						AEC357	AEC358	AEF034	AEF035	AEF036	AEF037	AEF038	AEF039	AFW223
BVL Sample ID						C160616	C160616	C161006	C161006	C161006	C161006	C161006	C161006	C168138
BVL Job Number						C160616	C160616	C161006	C161006	C161006	C161006	C161006	C161006	C168138
Sample Date						12-Aug-21	12-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	14-Aug-21	03-Sep-21
Sample Depth (mbgs)						0.3	0.7	0.5	0.7	0.3	0.7	0.3	0.7	1.7
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.066	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.21	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.27	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	1.1	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<20	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	28	67	23	<10	<26	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	<50	510	85	70	96	440	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	<50	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	510	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	548	n/a	103	n/a	486	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	180	<50	<50	<50	<130	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	5.2	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))^*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-160					TP21-161		TP21-162		TP21-163
						Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID
BVL Sample ID						AEF040	AEF041	AFW224	AFW226	AFW227	AEF042	AEF043	AFA059	AFA058	AFA060
BVL Job Number						C161006	C161006	C168138	C168138	C168138	C161006	C161006	C164647	C164647	C164647
Sample Date						14-Aug-21	14-Aug-21	03-Sep-21	03-Sep-21	03-Sep-21	14-Aug-21	14-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21
Sample Depth (mbgs)						0.5	0.7	1	1.5	2	0.3	0.7	0.3	0.3	0.3
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)										
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	0.0065	<0.0050	0.012	<0.0050	0.27	<0.033	<0.028	<0.032
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	38	30	12
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	0.12	0.038	0.032	<0.010	0.13	<0.065	<0.055	<0.065
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	1.8	0.13	<0.045	<0.045	0.94	<0.29	<0.25	<0.29
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	42	150	34	<10	<23	<28	<65	<24	<24
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	410	890	12	96	<10	48	300	160	360	460
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	980	440	<71	110	<50	130	3,500	3,100	4,500	9,200
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	<50	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	<50	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	1,372	233	240	n/a	n/a	3,828	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	160	<50	<50	<50	<50	<50	1,200	1,100	1,600	3,800
BIC Value ^(d)	%	n/a	-	-	-	-	-	n/c	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(c) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

Sample Location						TP21-164		TP21-165			TP21-166	TP21-167		TP21-168
Sample ID						TP21-164-02	TP21-164-03	TP21-165-02	TP21-165-03	TP21-165-04	TP21-166-02	TP21-167-01	TP21-167-03	TP21-168-02
BVL Sample ID						AEP041	AEP042	AEP038	AEP040	AEP039	AFA075	AFA073	AFA074	AFA072
BVL Job Number						C162662	C162662	C162662	C162662	C162662	C164648	C164648	C164648	C164648
Sample Date						20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	20-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21
Sample Depth (mbgs)						0.3	0.5	0.3	0.5	0.7	0.3	0.15	0.5	0.3
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.076	<0.0068	<0.0068	<0.0068	<0.018	<0.0050	<0.0050	<0.010
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.12	<0.050	<0.050	0.32	0.21	<0.050	<0.050	<0.10
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.053	<0.018	<0.018	<0.018	<0.037	0.027	<0.010	<0.021
Xylenes	mg/kg	0.045	1	-	-	<0.045	0.11	<0.098	<0.10	<0.14	<0.16	<0.045	<0.045	<0.093
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<23	<22	<23	<31	<24	<10	<10	<21
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	57	<u>270</u>	39	92	140	44	53	33	15
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<u>870</u>	<u>5,100</u>	<u>790</u>	<u>1,400</u>	<u>2,900</u>	<u>990</u>	<u>720</u>	<u>640</u>	270
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	160	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	1,200	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	3,071	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	380	2,200	280	580	1,100	350	290	230	89
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	n/c	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

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Bold/Underlined - value exceeds GNWT criteria

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

						Sample Location		TP21-169	TP21-170	TP21-171	TP21-172	TP21-173
						Sample ID	TP21-169-01	TP21-169-02	TP21-170-02	TP21-171-02	TP21-172-02	TP21-173-02
						BVL Sample ID	AFA069	AFA071	AFA067	AFA064	AFA061	AFA062
						BVL Job Number	C164648	C164648	C164648	C164648	C164647	C164647
						Sample Date	26-Aug-21	26-Aug-21	26-Aug-21	26-Aug-21	24-Aug-21	24-Aug-21
						Sample Depth (mbgs)	0.15	0.3	0.3	0.3	0.3	0.3
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.016	0.0098	0.025	<0.014	<0.013	<0.019	
Toluene	mg/kg	0.050	0.8	-	-	<0.080	0.16	<0.050	<0.080	<0.080	<0.080	
Ethylbenzene	mg/kg	0.010	1.2	-	-	0.14	<0.010	0.026	0.070	<0.026	<0.037	
Xylenes	mg/kg	0.045	1	-	-	<0.57	<0.045	<0.045	1.1	<0.12	<0.17	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	41	<10	<10	<28	<24	<24	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	84	45	130	1,400	24	60	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	450	1,100	720	2,400	380	1,100	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<180	380	260	660	160	420	
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

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mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location	TP21-174	TP21-175		TP21-176	
						Sample ID	TP21-174-02	DUP-BB	TP21-175-02	DUP-CC	TP21-176-02
						BVL Sample ID	AFA063	AFA066	AFA065	AFA070	AFA068
						BVL Job Number	C164647	C164647	C164647	C164647	C164647
						Sample Date	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21	24-Aug-21
						Sample Depth (mbgs)	0.3	0.3	0.3	0.3	0.3
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)						
Benzene	mg/kg	0.0050	0.5	-	-	<0.020	<0.018	<0.027	<0.0050	<0.0050	
Toluene	mg/kg	0.050	0.8	-	-	<0.080	<0.080	<0.080	<0.050	<0.050	
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.040	<0.035	<0.054	0.055	0.055	
Xylenes	mg/kg	0.045	1	-	-	<0.18	<0.16	<0.24	0.28	0.26	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<24	51	<54	19	14	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	52	860	430	390	180	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	720	1,900	5,700	1,700	1,200	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	150	520	2,100	670	450	
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

						Sample Location					
						TP21-177					
						TP21-177-01	DUP AAA	TP21-177-02	DUP BBB	TP21-177-04	
						Sample ID	AFU830	AFU869	AFU868	AFU871	AFU870
						BVL Sample ID	C167916	C167920	C167920	C167920	C167920
						BVL Job Number	04-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21
						Sample Date	0.15	0.3	0.3	0.7	0.7
						Sample Depth (mbgs)					
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)						
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.10	<0.050	<0.050	<0.050	
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.021	<0.010	<0.010	<0.010	
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.093	<0.045	<0.045	<0.045	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<21	<10	<10	<10	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	35	36	52	<10	<10	
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	330	720	850	<50	<50	
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	110	240	290	<50	<50	
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

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n/a - not applicable

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RDL - reportable detection limit

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

						Sample Location					
						TP21-178					
Sample ID						DUP CCC	TP21-178-02	DUP DDD	TP21-178-04	DUP EEE	TP21-178-06
BVL Sample ID						AFU873	AFU872	AFU875	AFU874	AFU877	AFU876
BVL Job Number						C167920	C167920	C167920	C167920	C167920	C167920
Sample Date						01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21
Sample Depth (mbgs)						0.3	0.3	0.7	0.7	1.5	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)						
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	10	<10	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	<50	<50	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

						TP21-179					
						DUP FFF	TP21-179-02	DUP GGG	TP21-179-04	DUP HHH	TP21-179-06
Sample Location											
Sample ID						AFU882	AFU881	AFU884	AFU883	AFU886	AFU885
BVL Sample ID						C167920	C167920	C167920	C167920	C167920	C167920
BVL Job Number						01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21
Sample Date						0.3	0.3	0.7	0.7	1.5	1.5
Sample Depth (mbgs)											
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)						
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	<50	<50	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

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- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-180					TP21-181			
Sample ID						TP21-180-01	DUP III	TP21-180-03	TP21-180-05	TP21-180-06	TP21-181-02	DUP JJJ	TP21-181-04	TP21-181-06
BVL Sample ID						AFU887	AFU889	AFU888	AFU890	AFU891	AFU892	AFU898	AFU893	AFU894
BVL Job Number						C167920	C167920	C167920	C167920	C167920	C167920	C167920	C167920	C167920
Sample Date						01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21	01-Sep-21
Sample Depth (mbgs)						0.15	0.5	0.5	1	1.5	0.3	0.7	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)									
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	0.071	0.020	0.011	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	0.24	0.094	0.066	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	0.026	0.023	0.12	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	0.15	0.13	0.083	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	58	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	96	380	190	180	260	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	230	770	320	860	230	<50	<50	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	1,050	548	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	54	370	240	290	100	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

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F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

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n/a - not applicable

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RDL - reportable detection limit

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-182			TP21-183		TP21-184		
						Sample ID	TP21-182-02	TP21-182-04	TP21-183-02	TP21-183-04	TP21-184-02	TP21-184-04	TP21-184-05
BVL Sample ID						AFU896	AFU895	AFU897	AFW111	AFW112	AFW113	AFW114	AFW115
BVL Job Number						C167920	C167920	C167920	C168138	C168138	C168138	C168138	C168138
Sample Date						01-Sep-21	01-Sep-21	01-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21
Sample Depth (mbgs)						0.3	0.3	0.7	0.3	0.7	0.3	0.7	1
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.010	<0.014	<0.011	<0.0050	0.044	0.018
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.10	<0.080	<0.11	<0.050	69	0.78
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.021	<0.027	<0.021	<0.010	<0.047	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.092	<0.12	<0.094	<0.045	<0.21	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<21	<24	<21	<10	<47	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	18	11	83	110	21	<10	570	23
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	300	180	1,200	1,300	340	<50	9,800	410
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	140	<110	-	1,100	62
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	1,200	340	-	8,600	340
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	1,304	n/a	382	n/a	10,417	443
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	100	<50	390	480	140	<50	3,800	120
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	n/c	5.9	-	n/c	6.3

Notes:

- ^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.
- ^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.
- ^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.
- ^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.
- ^(d) Chromatogram interpretation indicated petrogenic origin
- Bold/Underlined** - value exceeds GNWT criteria
- Bold/Underlined/Red** - value exceeds ASMRP criteria (> 0.5 mbgs)
- Bold/Underlined/Blue** - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.
- BTEX - benzene, toluene, ethylbenzene, xylenes
- BVL - Bureau Veritas Laboratories
- F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4
- mbgs - metres below ground surface
- mg/kg - milligrams per kilogram
- n/a - not applicable
- n/c - not calculated
- n/g - no guideline
- RDL - reportable detection limit
- > - greater than
- \geq - greater than or equal to
- < - less than
- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-185				TP21-186			
Sample ID						TP21-185-02	TP21-185-03	TP21-185-04	TP21-185-05	TP21-186-01	TP21-186-02	TP21-186-04	TP21-186-06
BVL Sample ID						AFW116	AFW117	AFW119	AFW118	AFW222	AFW219	AFW220	AFW221
BVL Job Number						C168138	C168138	C168138	C168138	C168138	C168138	C168138	C168138
Sample Date						03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21
Sample Depth (mbgs)						0.3	0.5	0.7	1	0.15	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.013	<0.022	<0.012	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.080	<0.080	2.2	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.026	<0.044	<0.023	<0.010	0.013	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.12	<0.20	<0.10	<0.045	0.12	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<24	<24	<23	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	25	<30	<23	30	22	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	250	210	<160	<71	53	<71	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	<50	<150	<120	<50	-	<50	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	250	210	<120	<50	-	<50	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	264	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	67	<150	<120	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	n/c	n/c	n/c	n/c	-	n/c	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

\geq - greater than or equal to

< - less than

- not available

Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-187				TP21-188		
Sample ID						TP21-187-02	TP21-187-03	TP21-187-04	TP21-187-06	TP21-188-02	TP21-188-04	TP21-188-06
BVL Sample ID						AFW279	AFW287	AFW280	AFW281	AFW284	AFW285	AFW286
BVL Job Number						C168138	C168138	C168138	C168138	C168138	C168138	C168138
Sample Date						03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21
Sample Depth (mbgs)						0.3	0.5	0.7	1.7	0.3	0.7	1.5
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)							
Benzene	mg/kg	0.0050	0.5	-	-	<0.017	<0.0050	<0.0050	<0.0050	<0.0050	<0.013	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.080	<0.050	<0.050	<0.050	<0.050	<0.080	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.034	<0.010	<0.010	<0.010	<0.010	<0.026	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.15	<0.045	<0.045	<0.045	<0.045	<0.12	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<24	<10	<10	<10	<10	<24	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	110	34	<10	<10	<u>2,200</u>	<u>260</u>	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<u>2,900</u>	<u>790</u>	<50	<50	<u>950</u>	<u>410</u>	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	250	160	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	700	240	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	694	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	920	320	<50	<50	190	96	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	n/c	n/c	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

< - less than

- not available

**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

						Sample Location				
						TP21-189				
Sample ID						TP21-189-01	TP21-189-03	TP21-189-05	TP21-189-06	TP21-189-08
BVL Sample ID						AFW342	AFW343	AFW344	AFW345	AFW346
BVL Job Number						C168138	C168138	C168138	C168138	C168138
Sample Date						03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21
Sample Depth (mbgs)						0.15	0.5	1	1.5	2.3
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)					
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	0.23	0.088	0.039	0.026
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<u>1.5</u>	0.39	0.17	0.063
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	0.39	<u>1.4</u>	<u>1.7</u>	0.26
Xylenes	mg/kg	0.045	1	-	-	<0.045	<u>1.7</u>	<u>17</u>	<u>13</u>	<u>1.3</u>
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	28	<u>290</u>	<u>1,600</u>	<u>1,900</u>	<u>1,200</u>
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<u>170</u>	<u>6,900</u>	<u>3,100</u>	<u>3,800</u>	<u>4,100</u>
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	160	<u>4,500</u>	340	<u>770</u>	<u>740</u>
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	<u>5,040</u>	<u>6,470</u>	<u>6,040</u>
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	54	1,900	79	240	230
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as (F2/(F2+F3b))*100; if value is ≥10%, indicates potentially true PHC Fraction F3 exceedance; if value is <10%, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations >30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Underlined - value exceeds GNWT criteria

Underlined/Red - value exceeds ASMRP criteria (>0.5 mbgs)

Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

≥ - greater than or equal to

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Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location						TP21-190			TP21-191			HA21-192	
Sample ID						TP21-190-02	TP21-190-04	TP21-190-06	TP21-191-02	TP21-191-04	TP21-191-06	HA21-192-01	HA21-192-02
BVL Sample ID						AFU815	AFU816	AFU817	AFU818	AFU819	AFU820	AFU821	AFU822
BVL Job Number						C167916	C167916	C167916	C167916	C167916	C167916	C167916	C167916
Sample Date						04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21
Sample Depth (mbgs)						0.3	0.7	1.7	0.3	0.7	1.7	0.2	0.4
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	15	41	<10	<10	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	140	<50	<50	<50	<50	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	191	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	<50	<50	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b))*100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

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**Table 2
Summary of Soil Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited**

						Sample Location		HA21-193		HA21-194		FM21-01	FM21-02
						Sample ID	Sample ID	HA21-193-01	HA21-193-02	HA21-194-01	HA21-194-02	FM21-01	FM21-02
						BVL Sample ID	BVL Sample ID	AFU823	AFU824	AFU825	AFU826	AFU827	AFU828
						BVL Job Number	BVL Job Number	C167916	C167916	C167916	C167916	C167916	C167916
						Sample Date	Sample Date	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21
						Sample Depth (mbgs)	Sample Depth (mbgs)	0.2	0.4	0.2	0.4	0.4	0.45
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)	Criteria ^(c)								
Benzene	mg/kg	0.0050	0.5	-	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Toluene	mg/kg	0.050	0.8	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	mg/kg	0.010	1.2	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Xylenes	mg/kg	0.045	1	-	-	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	230	-	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	150	-	<10	<10	25	66	<10	<10	<10	<10
F3 (C ₁₆ -C ₃₄)	mg/kg	100	400	2,500	-	<50	<50	210	950	<50	<50	<50	<50
F3A (C16-C22)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
F3B (C22-C34)	mg/kg	110	n/g	-	-	-	-	-	-	-	-	-	-
Total F1 to F3	mg/kg	n/a	-	-	5,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
F4 (C ₃₄ -C ₅₀)	mg/kg	100	2,800	10,000	-	<50	<50	85	690	<50	<50	<50	<50
BIC Value ^(d)	%	n/a	-	-	-	-	-	-	-	-	-	-	-

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) GNWT. 2003. Environmental Guideline for Contaminated Site Remediation - subsoil. November 2003.

^(c) Soil analytical results for PHC Fractions F1 to F3 at depths greater than 0.5 mbgs were also compared to the management limit of 5,000 mg/kg recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol (ASMRP) (INAC 2008) for additional context.

^(d) BIC (Biogenic Interference Calculation) value is calculated as $(F2/(F2+F3b)) * 100$; if value is $\geq 10\%$, indicates potentially true PHC Fraction F3 exceedance; if value is $< 10\%$, indicates potentially false PHC Fraction F3 exceedance. BIC is not applicable to samples with F2 concentrations > 30 mg/kg or F3 concentration below guideline.

^(d) Chromatogram interpretation indicated petrogenic origin

Bold/Underlined - value exceeds GNWT criteria

Bold/Underlined/Red - value exceeds ASMRP criteria (> 0.5 mbgs)

Bold/Underlined/Blue - BIC value and chromatogram interpretation indicates PHC Fraction F3 of biogenic origin.

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/c - not calculated

n/g - no guideline

RDL - reportable detection limit

> - greater than

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< - less than

- not available

Table 3
Summary of Soil Analytical Results - Polycyclic Aromatic Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location				TP21-189					TP21-190			TP21-191			HA21-194	
Parameters	Units	RDL	Criteria ^(a)	TP21-189-01	TP21-189-03	TP21-189-05	TP21-189-06	TP21-189-08	TP21-190-02	TP21-190-04	TP21-190-06	TP21-191-02	TP21-191-04	TP21-191-06	HA21-194-01	HA21-194-02
				Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID	Sample ID
				BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID	BVL Sample ID
				BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number	BVL Job Number
				Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date	Sample Date
				Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)	Sample Depth (mbgs)
Acenaphthene	mg/kg	0.0050	n/g	<0.0050	<0.050	0.15	0.25	0.17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	mg/kg	0.0050	n/g	<0.0050	0.12	0.048	0.071	0.063	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.011
Acridine	mg/kg	0.010	n/g	<0.010	0.54	0.052	0.13	0.13	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Anthracene	mg/kg	0.0040	n/g	<0.0040	0.088	0.012	0.026	0.024	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0075
Benzo[a]anthracene	mg/kg	0.0050	1	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.012
B(a)P	mg/kg	0.0050	0.7	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.065
Benzo[e]pyrene	mg/kg	0.0050	n/g	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.047
Benzo[b,j]fluoranthene	mg/kg	0.0050	n/g	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.047
Benzo[g,h,i]perylene	mg/kg	0.0050	n/g	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.080
Benzo[k]fluoranthene	mg/kg	0.0050	1	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.011
Benzo[c]phenanthrene	mg/kg	0.0050	n/g	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chrysene	mg/kg	0.0050	n/g	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.012
Dibenzo[a,h]anthracene	mg/kg	0.0050	1	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	mg/kg	0.0050	n/g	<0.0050	0.086	0.0072	0.0097	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.013
Fluorene	mg/kg	0.0050	n/g	0.0071	0.32	0.27	0.42	0.29	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0070
Indeno[1,2,3-cd]pyrene	mg/kg	0.0050	1	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.072
1-Methylnaphthalene	mg/kg	0.0050	n/g	0.016	1.1	4.3	6.7	0.39	<0.0050	0.047	<0.0050	<0.0050	<0.0050	<0.0050	0.0054	0.029
2-Methylnaphthalene	mg/kg	0.0050	n/g	0.012	0.88	9.1	10	0.38	<0.0050	0.047	<0.0050	<0.0050	<0.0050	<0.0050	0.012	0.11
Naphthalene	mg/kg	0.0050	0.6	0.0090	0.79	3.7	2.4	0.29	<0.0050	0.018	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.070
Perylene	mg/kg	0.0050	n/g	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.022
Phenanthrene	mg/kg	0.0050	5	<0.0050	0.30	0.15	0.39	0.28	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.018
Pyrene	mg/kg	0.0050	10	<0.0050	0.52	0.018	0.024	0.018	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.060
Quinoline	mg/kg	0.010	n/g	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
B(a)P Total Potency Equivalents	mg/kg	0.0071	n/g	<0.0071	<0.071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	0.083

Notes:
^(a) Government of Northwest Territories (GNWT), 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

Bold/Underlined - value exceeds GNWT criteria

B(a)P - benzo(a)pyrene

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/g - no guideline

RDL - reportable detection limit

< - less than

- not available

Table 4
Summary of Soil Analytical Results - Volatile Organic Compounds
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

					Sample Location	FM21-01	FM21-02
					Sample ID	FM21-01	FM21-02
					BVL Sample ID	AFU827	AFU828
					BVL Job Number	C167916	C167916
					Sample Date	04-Sep-21	04-Sep-21
					Sample Depth (mbgs)	0.40	0.45
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)			
Bromodichloromethane	mg/kg	0.030	n/g	n/g	<0.030	<0.030	
Bromoform	mg/kg	0.050	n/g	n/g	<0.050	<0.050	
Bromomethane	mg/kg	0.020	n/g	n/g	<0.020	<0.020	
Carbon Tetrachloride	mg/kg	0.00050	n/g	n/g	<0.00050	<0.00050	
Chlorobenzene	mg/kg	0.0050	n/g	n/g	<0.0050	<0.0050	
Chloroethane	mg/kg	0.020	n/g	n/g	<0.020	<0.020	
Chloroform	mg/kg	0.010	n/g	n/g	<0.010	<0.010	
Chloromethane	mg/kg	0.030	n/g	n/g	<0.030	<0.030	
Dibromochloromethane (Chlorodibromomethane)	mg/kg	0.020	n/g	n/g	<0.020	<0.020	
1,2-Dibromoethane (Ethylene Dibromide)	mg/kg	0.0020	n/g	n/g	<0.0020	<0.0020	
1,2-Dichlorobenzene	mg/kg	0.020	n/g	1	0.025	0.023	
1,3-Dichlorobenzene	mg/kg	0.020	n/g	1	<0.020	<0.020	
1,4-Dichlorobenzene	mg/kg	0.020	n/g	1	<0.020	<0.020	
1,1-Dichloroethane	mg/kg	0.020	n/g	5	<0.020	<0.020	
1,2-Dichloroethane	mg/kg	0.0020	n/g	5	<0.0020	<0.0020	
1,1-Dichloroethylene	mg/kg	0.020	n/g	5	<0.020	<0.020	
cis-1,2-Dichloroethylene	mg/kg	0.020	n/g	n/g	<0.020	<0.020	
trans-1,2-Dichloroethylene	mg/kg	0.020	n/g	n/g	<0.020	<0.020	
Dichloromethane (Methylene Chloride)	mg/kg	0.030	n/g	n/g	<0.030	<0.030	
1,2-Dichloropropane	mg/kg	0.020	n/g	5	<0.020	<0.020	
cis-1,3-Dichloropropene	mg/kg	0.020	n/g	5	<0.020	<0.020	
trans-1,3-Dichloropropene	mg/kg	0.020	n/g	5	<0.020	<0.020	
Methyl Methacrylate	mg/kg	0.040	n/g	n/g	<0.040	<0.040	
Methyl tert-Butyl Ether	mg/kg	0.030	n/g	n/g	<0.030	<0.030	
Styrene	mg/kg	0.020	5	5	<0.020	<0.020	
1,1,1,2-Tetrachloroethane	mg/kg	0.050	n/g	n/g	<0.050	<0.050	
1,1,1,2-Tetrachloroethane	mg/kg	0.050	n/g	5	<0.050	<0.050	
Tetrachloroethylene (PCE)	mg/kg	0.010	n/g	5	<0.010	<0.010	
1,2,3-Trichlorobenzene	mg/kg	0.040	n/g	2	<0.040	<0.040	
1,2,4-Trichlorobenzene	mg/kg	0.040	n/g	2	<0.040	<0.040	
1,3,5-Trichlorobenzene	mg/kg	0.040	n/g	2	<0.040	<0.040	
1,1,1-Trichloroethane	mg/kg	0.020	n/g	5	<0.020	<0.020	
1,1,2-Trichloroethane	mg/kg	0.020	n/g	5	<0.020	<0.020	
Trichloroethylene (TCE)	mg/kg	0.010	n/g	n/g	<0.010	<0.010	
Trichlorofluoromethane	mg/kg	0.020	n/g	n/g	<0.020	<0.020	
1,2,4-Trimethylbenzene	mg/kg	0.50	n/g	n/g	<0.50	<0.50	
1,3,5-Trimethylbenzene	mg/kg	0.50	n/g	n/g	<0.50	<0.50	
Vinyl Chloride	mg/kg	0.00030	n/g	n/g	<0.00030	<0.00030	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.
^(b) Canadian Council of Ministers of the Environment Soil Quality Guidelines for residential/parkland land use (CCME 1999 and updates)

Bold/Underlined - value exceeds GNWT criteria

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/g - no guideline

RDL - reportable detection limit

> - greater than

< - less than

- not available

Table 5
Summary of Soil Analytical Results - Nitrate and Sulphate
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location	Sample ID	Sample Date	Sample Depth (mbgs)	BVL Sample ID	Nitrate as Nitrogen	Sulphate
TP21-BH19-117	BH19-117-02	15-Aug-21	0.30	AEF071	0.070	150
	BH19-117-04	15-Aug-21	0.70	AEF072	<0.14	1,800
	BH19-117-06	15-Aug-21	1.50	AEF073	<0.069	220
TP21-26	TP21-26-02	27-Aug-21	0.30	AFA148	<0.096	190
	TP21-26-04	27-Aug-21	0.70	AFA149	<0.13	46
	TP21-26-06	27-Aug-21	1.50	AFA150	<0.060	32
TP21-66	TP21-66-01	28-Aug-21	0.15	AFA003	<0.078	180
	TP21-66-03	28-Aug-21	0.50	AFA004	<0.12	38
	TP21-66-06	28-Aug-21	1.50	AFA005	<0.064	15
TP21-74	TP21-74-02	17-Aug-21	0.30	AEO315	<0.085	150
	TP21-74-03	17-Aug-21	0.50	AEO316	<0.083	110
	TP21-74-05	17-Aug-21	1.00	AEO317	<0.051	11
TP21-91	TP21-91-02	21-Aug-21	0.30	AEP523	5.5	140
	TP21-91-04	21-Aug-21	0.70	AEP524	2.9	62
	TP21-91-06	21-Aug-21	1.50	AEP525	0.28	21
TP21-107	TP21-107-02	16-Aug-21	0.30	AEE874	<0.071	190
	TP21-107-04	16-Aug-21	0.70	AEE875	<0.072	160
	TP21-107-06	16-Aug-21	1.50	AEE876	<0.055	13
TP21-117	TP21-117-01	31-Aug-21	0.15	AFU725	0.10	12
	TP21-117-03	31-Aug-21	0.50	AFU726	<0.056	24
	TP21-117-05	31-Aug-21	1.00	AFU727	<0.066	18
TP21-129	TP21-129-01	31-Aug-21	0.15	AFU750	<0.079	23
	TP21-129-03	31-Aug-21	0.50	AFU751	0.066	7.9
	TP21-129-05	31-Aug-21	1.00	AFU753	2.3	27
TP21-149	TP21-149-02	12-Aug-21	0.30	AEC351	<0.12	150
	TP21-149-02	14-Aug-21	0.30	AEF024	<0.28	980
	TP21-149-04	12-Aug-21	0.70	AEC352	<0.058	8.5
	TP21-149-04	14-Aug-21	0.70	AEF025	<0.12	230
TP21-189	TP21-189-01	03-Sep-21	0.15	AFW342	<0.099	<0.099
	TP21-189-03	03-Sep-21	0.50	AFW343	<0.074	<0.074
	TP21-189-05	03-Sep-21	1.00	AFW344	<0.059	<0.059
	TP21-189-06	03-Sep-21	1.50	AFW345	<0.061	<0.061
	TP21-189-08	03-Sep-21	2.30	AFW346	<0.061	<0.061
TP21-190	TP21-190-02	04-Sep-21	0.30	AFU815	0.28	<0.049
	TP21-190-04	04-Sep-21	0.70	AFU816	0.11	<0.069
	TP21-190-06	04-Sep-21	1.70	AFU817	0.34	<0.061
TP21-191	TP21-191-02	04-Sep-21	0.30	AFU818	0.60	<0.046
	TP21-191-04	04-Sep-21	0.70	AFU819	0.48	<0.050
	TP21-191-06	04-Sep-21	1.70	AFU820	1.2	<0.060
HA21-194	HA21-194-01	04-Sep-21	0.20	AFU825	<0.064	<0.064
	HA21-194-02	04-Sep-21	0.40	AFU826	<0.073	<0.073
Units					mg/kg	mg/kg
RDL					0.051	1.1
Criteria^(a)					n/g	n/g

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.
 BVL - Bureau Veritas Laboratories
 mbgs - metres below ground surface
 mg/kg - milligrams per kilogram
 n/g - no guideline
 RDL - reportable detection limit
 < - less than

Table 6
Summary of Soil Analytical Results - Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location				TP21-BH19-117			TP21-26			TP21-66		
Sample ID	BVL Sample ID	BVL Job Number	Sample Date	BH19-117-04	BH19-117-02	BH19-117-06	TP21-26-02	TP21-26-04	TP21-26-06	TP21-66-01	TP21-66-03	TP21-66-06
				AEF072	AEF071	AEF073	AFA148	AFA149	AFA150	AFA003	AFA004	AFA005
				C161010	C161010	C161010	C164653	C164653	C164653	C164643	C164643	C164643
				15-Aug-21	15-Aug-21	15-Aug-21	27-Aug-21	27-Aug-21	27-Aug-21	28-Aug-21	28-Aug-21	28-Aug-21
				0.70	0.30	1.50	0.30	0.70	1.50	0.15	0.50	1.50
Parameters	Units	RDL	Criteria ^(a)									
Antimony	mg/kg	0.50	20	<0.50	5.5	0.84	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Arsenic	mg/kg	1.0	12	5.1	8.2	5.3	5.5	6.6	6.6	5.9	4.7	5.8
Barium	mg/kg	1.0	500	230	<u>3,300</u>	<u>1,100</u>	<u>1,900</u>	<u>880</u>	<u>660</u>	<u>1,800</u>	<u>1,000</u>	150
Barium (True Total)	mg/kg	50	10,000 ^(b)	1,500	<u>13,000</u>	2,000	3,100	1,600	1,200	2,100	2,000	760
Beryllium	mg/kg	0.40	4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Boron (Saturation Paste)	mg/L	0.10	n/g	0.22	1.0	1.9	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	mg/kg	0.050	10	0.068	0.42	0.15	0.12	0.14	0.10	0.14	0.13	0.080
Chromium	mg/kg	1.0	64	17	24	19	8.8	8.5	7.6	<u>72</u>	40	12
Hexavalent Chromium	mg/kg	0.080	0.4	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
Cobalt	mg/kg	0.50	50	3.5	4.6	3.9	3.0	3.8	4.2	4.8	3.9	3.5
Copper	mg/kg	1.0	63	4.9	<u>120</u>	11	7.9	7.1	5.8	10	8.1	4.9
Lead	mg/kg	0.50	140	7.1	<u>480</u>	34	12	7.6	6.4	13	8.8	4.2
Mercury	mg/kg	0.050	6.6	0.057	0.066	<0.050	0.052	<0.050	<0.050	0.057	0.054	<0.050
Molybdenum	mg/kg	0.40	10	0.78	1.5	0.71	0.67	0.62	0.59	2.1	1.2	0.57
Nickel	mg/kg	1.0	50	12	17	15	8.1	10	12	39	23	12
Selenium	mg/kg	0.50	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	mg/kg	0.20	20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	mg/kg	0.10	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tin	mg/kg	1.0	50	<1.0	5.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Uranium	mg/kg	0.20	n/g	0.35	0.34	0.35	0.50	0.49	0.42	0.52	0.45	0.38
Vanadium	mg/kg	1.0	130	19	14	14	19	17	15	18	15	15
Zinc	mg/kg	10	200	24	140	63	28	27	31	35	29	24

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) Alberta Environment's Soil Remediation Guidelines for Barite. 2009.

Bold/Underlined - value exceeds criteria

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mbgs - metres below ground surface

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n/g - no guideline

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< - less than

Table 6
Summary of Soil Analytical Results - Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location				TP21-74			TP21-91			TP21-107		
Sample ID	TP21-74-02	TP21-74-03	TP21-74-05	TP21-91-02	TP21-91-04	TP21-91-06	TP21-107-02	TP21-107-04	TP21-107-06			
BVL Sample ID	AEO315	AEO316	AEO317	AEP523	AEP524	AEP525	AEE874	AEE875	AEE876			
BVL Job Number	C162523	C162523	C162523	C162768	C162768	C162768	C160993	C160993	C160993			
Sample Date	17-Aug-21	17-Aug-21	17-Aug-21	21-Aug-21	21-Aug-21	21-Aug-21	16-Aug-21	16-Aug-21	16-Aug-21			
Sample Depth (mbgs)	0.30	0.50	1.00	0.30	0.70	1.50	0.30	0.70	1.50			
Parameters	Units	RDL	Criteria ^(a)									
Antimony	mg/kg	0.50	20	0.58	0.51	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	<0.50
Arsenic	mg/kg	1.0	12	9.1	6.8	9.0	8.1	8.9	8.4	6.3	6.6	8.4
Barium	mg/kg	1.0	500	<u>2,700</u>	<u>2,400</u>	220	<u>2,200</u>	<u>2,100</u>	170	<u>1,800</u>	<u>1,800</u>	120
Barium (True Total)	mg/kg	50	10,000 ^(b)	3,700	4,000	980	2,400	3,300	750	3,600	4,100	850
Beryllium	mg/kg	0.40	4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Boron (Saturation Paste)	mg/L	0.10	n/g	-	-	-	0.16	<0.10	0.26	-	-	-
Cadmium	mg/kg	0.050	10	0.18	0.16	0.15	0.15	0.14	0.10	0.14	0.16	0.097
Chromium	mg/kg	1.0	64	<u>72</u>	<u>130</u>	27	39	27	8.4	9.7	9.1	6.9
Hexavalent Chromium	mg/kg	0.080	0.4	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
Cobalt	mg/kg	0.50	50	5.9	5.4	7.0	5.1	5.0	5.5	3.4	3.8	4.4
Copper	mg/kg	1.0	63	12	15	9.6	11	10	6.0	12	14	5.0
Lead	mg/kg	0.50	140	25	25	6.5	16	16	5.2	17	22	4.0
Mercury	mg/kg	0.050	6.6	0.080	0.083	<0.050	0.089	0.087	<0.050	0.056	0.057	<0.050
Molybdenum	mg/kg	0.40	10	2.2	3.0	1.2	1.3	1.2	0.65	0.78	0.75	0.57
Nickel	mg/kg	1.0	50	40	<u>67</u>	25	25	20	14	9.5	10	12
Selenium	mg/kg	0.50	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	mg/kg	0.20	20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	mg/kg	0.10	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tin	mg/kg	1.0	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Uranium	mg/kg	0.20	n/g	0.71	0.57	0.47	0.58	0.55	0.49	0.50	0.48	0.34
Vanadium	mg/kg	1.0	130	28	24	25	24	24	19	18	16	14
Zinc	mg/kg	10	200	44	36	41	39	40	38	33	39	33

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) Alberta Environment's Soil Remediation Guidelines for Barite. 2009.

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Table 6
Summary of Soil Analytical Results - Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location				TP21-117			TP21-129			TP21-149	
Sample ID				TP21-117-01	TP21-117-03	TP21-117-05	TP21-129-01	TP21-129-03	TP21-129-05	TP21-149-02	TP21-149-04
BVL Sample ID				AFU725	AFU726	AFU727	AFU750	AFU751	AFU753	AEF024	AEF025
BVL Job Number				C167913	C167913	C167913	C167913	C167913	C167913	C161006	C161006
Sample Date				31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	31-Aug-21	14-Aug-21	14-Aug-21
Sample Depth (mbgs)				0.15	0.50	1.00	0.15	0.50	1.00	0.30	0.70
Parameters	Units	RDL	Criteria ^(a)								
Antimony	mg/kg	0.50	20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.62
Arsenic	mg/kg	1.0	12	5.1	4.8	3.6	5.4	5.7	5.5	3.8	<u>28</u>
Barium	mg/kg	1.0	500	<u>880</u>	<u>850</u>	84	<u>790</u>	89	66	210	260
Barium (True Total)	mg/kg	50	10,000 ^(b)	-	-	-	-	-	-	600	710
Beryllium	mg/kg	0.40	4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.67
Boron (Saturation Paste)	mg/L	0.10	n/g	0.17	0.17	<0.10	0.15	0.10	0.15	-	-
Cadmium	mg/kg	0.050	10	0.064	0.065	0.075	0.10	0.077	0.070	0.073	0.18
Chromium	mg/kg	1.0	64	5.7	5.4	5.3	21	5.0	6.4	9.4	20
Hexavalent Chromium	mg/kg	0.080	0.4	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
Cobalt	mg/kg	0.50	50	2.1	1.9	3.4	3.2	3.6	3.6	1.9	6.2
Copper	mg/kg	1.0	63	5.2	4.7	5.0	6.0	3.4	3.9	6.1	8.1
Lead	mg/kg	0.50	140	8.8	8.7	2.8	10	2.9	2.9	4.5	15
Mercury	mg/kg	0.050	6.6	0.051	<0.050	<0.050	<0.050	<0.050	<0.050	0.056	0.10
Molybdenum	mg/kg	0.40	10	0.45	0.41	<0.40	0.87	0.40	0.50	0.58	3.3
Nickel	mg/kg	1.0	50	4.8	4.4	9.5	14	8.1	9.6	8.8	16
Selenium	mg/kg	0.50	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	1.0
Silver	mg/kg	0.20	20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	mg/kg	0.10	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tin	mg/kg	1.0	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Uranium	mg/kg	0.20	n/g	0.32	0.33	0.30	0.30	0.21	0.34	0.46	0.66
Vanadium	mg/kg	1.0	130	12	12	12	16	10	11	19	66
Zinc	mg/kg	10	200	18	20	24	26	23	26	19	34

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) Alberta Environment's Soil Remediation Guidelines for Barite. 2009.

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

mg/L - milligrams per litre

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 6
Summary of Soil Analytical Results - Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location				TP21-189					TP21-190		
Sample ID	TP21-189-01	TP21-189-03	TP21-189-05	TP21-189-06	TP21-189-08	TP21-190-02	TP21-190-04	TP21-190-06			
BVL Sample ID	AFW342	AFW343	AFW344	AFW345	AFW346	AFU815	AFU816	AFU817			
BVL Job Number	C168138	C168138	C168138	C168138	C168138	C167916	C167916	C167916			
Sample Date	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	03-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21			
Sample Depth (mbgs)	0.15	0.50	1.00	1.50	2.30	0.30	0.70	1.70			
Parameters	Units	RDL	Criteria ^(a)								
Antimony	mg/kg	0.50	20	<0.50	11	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Arsenic	mg/kg	1.0	12	5.3	9.1	6.1	6.8	5.3	4.5	5.9	5.6
Barium	mg/kg	1.0	500	2,300	1,700	460	90	85	220	340	110
Barium (True Total)	mg/kg	50	10,000 ^(b)	6,600	5,300	910	760	550	970	950	530
Beryllium	mg/kg	0.40	4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Boron (Saturation Paste)	mg/L	0.10	n/g	0.29	0.56	0.18	<0.10	<0.10	0.13	0.25	<0.10
Cadmium	mg/kg	0.050	10	0.24	14	0.37	0.086	0.090	<0.050	0.079	0.071
Chromium	mg/kg	1.0	64	110	82	6.4	5.3	5.6	4.9	5.7	5.5
Hexavalent Chromium	mg/kg	0.080	0.4	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
Cobalt	mg/kg	0.50	50	5.3	5.3	3.7	3.8	3.4	1.6	2.7	3.5
Copper	mg/kg	1.0	63	12	540	22	5.0	4.8	4.4	4.2	3.7
Lead	mg/kg	0.50	140	14	1,100	12	5.0	4.4	6.9	5.4	3.2
Mercury	mg/kg	0.050	6.6	0.054	0.43	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Molybdenum	mg/kg	0.40	10	2.9	3.4	0.55	0.55	<0.40	<0.40	0.52	<0.40
Nickel	mg/kg	1.0	50	54	41	8.8	9.3	9.1	3.6	5.2	9.0
Selenium	mg/kg	0.50	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	mg/kg	0.20	20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	mg/kg	0.10	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tin	mg/kg	1.0	50	<1.0	9.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Uranium	mg/kg	0.20	n/g	0.45	0.41	0.28	0.24	0.36	0.28	0.23	0.22
Vanadium	mg/kg	1.0	130	12	16	12	12	12	11	16	11
Zinc	mg/kg	10	200	61	690	54	26	27	12	21	25

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) Alberta Environment's Soil Remediation Guidelines for Barite. 2009.

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

mg/L - milligrams per litre

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 6
Summary of Soil Analytical Results - Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location				TP21-191			HA21-194		FM21-01	FM21-02
Parameters	Units	RDL	Criteria ^(a)	TP21-191-02	TP21-191-04	TP21-191-06	HA21-194-01	HA21-194-02	FM21-01	FM21-02
				AFU818	AFU819	AFU820	AFU825	AFU826	AFU827	AFU828
				C167916	C167916	C167916	C167916	C167916	C167916	C167916
				04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21	04-Sep-21
				0.30	0.70	1.70	0.20	0.40	0.40	0.45
Antimony	mg/kg	0.50	20	<0.50	<0.50	<0.50	0.76	1.1	<0.50	<0.50
Arsenic	mg/kg	1.0	12	5.8	4.7	5.1	4.7	8.2	6.5	5.1
Barium	mg/kg	1.0	500	260	290	65	2,300	2,400	250	89
Barium (True Total)	mg/kg	50	10,000 ^(b)	960	950	600	10,000	74,000	-	-
Beryllium	mg/kg	0.40	4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Boron (Saturation Paste)	mg/L	0.10	n/g	0.20	0.17	0.18	0.16	0.22	0.15	0.13
Cadmium	mg/kg	0.050	10	0.079	0.061	0.066	0.54	0.54	0.076	0.081
Chromium	mg/kg	1.0	64	5.5	5.2	5.1	7.8	9.8	6.6	6.0
Hexavalent Chromium	mg/kg	0.080	0.4	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
Cobalt	mg/kg	0.50	50	2.2	1.6	3.2	2.4	3.3	3.1	3.8
Copper	mg/kg	1.0	63	4.5	3.9	3.6	2,900	53	6.8	4.9
Lead	mg/kg	0.50	140	7.8	7.5	2.8	47	46	7.7	3.3
Mercury	mg/kg	0.050	6.6	<0.050	<0.050	<0.050	0.11	0.071	<0.050	<0.050
Molybdenum	mg/kg	0.40	10	0.52	<0.40	<0.40	0.59	1.1	0.52	0.44
Nickel	mg/kg	1.0	50	5.1	4.4	8.7	5.3	9.6	7.9	10
Selenium	mg/kg	0.50	1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	mg/kg	0.20	20	<0.20	<0.20	<0.20	0.28	<0.20	<0.20	<0.20
Thallium	mg/kg	0.10	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tin	mg/kg	1.0	50	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0
Uranium	mg/kg	0.20	n/g	0.30	0.34	0.30	0.26	0.42	0.36	0.36
Vanadium	mg/kg	1.0	130	13	11	10	12	16	15	12
Zinc	mg/kg	10	200	15	12	24	120	170	21	31

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) Alberta Environment's Soil Remediation Guidelines for Barite. 2009.

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

mg/L - milligrams per litre

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 7
Summary of Wood Pile Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

				Sample Location	WP21-CF01	WP21-CF02
				Sample ID	WP21-CF01	WP21-CF02
				BVL Sample ID	AFA115	AFA116
				BVL Job Number	C164652	C164652
				Sample Date	24-Aug-21	24-Aug-21
				Sample Depth (mbgs)	n/a	n/a
Parameters	Units	RDL	Criteria ^(a)			
Benzene	mg/kg	0.0050	0.5	<0.0050	<0.0050	
Toluene	mg/kg	0.050	0.8	0.12	0.092	
Ethylbenzene	mg/kg	0.010	1.2	0.018	0.024	
Xylenes	mg/kg	0.045	1	0.14	0.36	
F1 (C ₆ -C ₁₀) - BTEX	mg/kg	10	130	17	23	
F2 (C ₁₀ -C ₁₆)	mg/kg	10	150	110	110	
F3 (C ₁₆ -C ₃₄)	mg/kg	50	400	320	660	
F4 (C ₃₄ -C ₅₀)	mg/kg	50	2,800	<50	89	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

Bold/Underlined - value exceeds criteria

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2, F3, F4 - petroleum hydrocarbon fractions 1, 2, 3 and 4

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

RDL - reportable detection limit

< - less than

Table 8
Summary of Wood Pile Analytical Results - Polycyclic Aromatic Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

				Sample Location	WP21-CF01	WP21-CF02
				Sample ID	WP21-CF01	WP21-CF02
				BVL Sample ID	AFA115	AFA116
				BVL Sample ID	C164652	C164652
				Sample Date	24-Aug-21	24-Aug-21
				Sample Depth (mbgs)	n/a	n/a
Parameters	Units	RDL	Criteria ^(a)			
Acenaphthene	mg/kg	0.015	n/g	<0.020	0.025	
Acenaphthylene	mg/kg	0.015	n/g	<0.020	<0.015	
Acridine	mg/kg	0.030	n/g	0.058	<0.030	
Anthracene	mg/kg	0.012	n/g	<0.016	<0.012	
Benzo[a]anthracene	mg/kg	0.015	1	<0.020	<0.015	
B(a)P	mg/kg	0.015	0.7	<0.020	<0.015	
Benzo[e]pyrene	mg/kg	0.015	n/g	<0.020	<0.015	
Benzo[b,j]fluoranthene	mg/kg	0.015	n/g	<0.020	<0.015	
Benzo[g,h,i]perylene	mg/kg	0.015	n/g	<0.020	<0.015	
Benzo[k]fluoranthene	mg/kg	0.015	1	<0.020	<0.015	
Benzo[c]phenanthrene	mg/kg	0.015	n/g	<0.020	0.24	
Chrysene	mg/kg	0.015	n/g	<0.020	<0.015	
Dibenzo[a,h]anthracene	mg/kg	0.015	1	<0.020	<0.015	
Fluoranthene	mg/kg	0.015	n/g	<0.020	<0.015	
Fluorene	mg/kg	0.015	n/g	0.021	0.041	
Indeno[1,2,3-cd]pyrene	mg/kg	0.015	1	<0.020	<0.015	
1-Methylnaphthalene	mg/kg	0.015	n/g	0.18	1.5	
2-Methylnaphthalene	mg/kg	0.015	n/g	0.28	1.9	
Naphthalene	mg/kg	0.015	0.6	0.15	0.84	
Perylene	mg/kg	0.015	n/g	<0.020	<0.015	
Phenanthrene	mg/kg	0.015	5	0.29	<0.015	
Pyrene	mg/kg	0.015	10	<0.020	<0.015	
Quinoline	mg/kg	0.030	n/g	<0.040	<0.030	
B(a)P Total Potency Equivalents	mg/kg	0.021	n/g	<0.029	<0.021	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

Bold/Underlined - value exceeds criteria

B(a)P - benzo(a)pyrene

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 9
Summary of Wood Pile Analytical Results - Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

				Sample Location	WP21-CF01	WP21-CF02
				Sample ID	WP21-CF01	WP21-CF02
				BVL Sample ID	AFA115	AFA116
				BVL Sample ID	C164652	C164652
				Sample Date	24-Aug-21	24-Aug-21
				Sample Depth (mbgs)	n/a	n/a
Parameters	Units	RDL	Criteria ^(a)			
Arsenic	mg/kg	1.0	12	<2.0	<2.0	
Chromium	mg/kg	1.0	64	8.4	24	
Chromium (III)	mg/kg	2.0	n/g	8.4	24	
Hexavalent Chromium	mg/kg	0.080	0.4	<0.080	<0.080	
Copper	mg/kg	1.0	63	2.6	3.0	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

RDL - reportable detection limit

< - less than

Table 10
Summary of Wood Pile Analytical Results - Polychlorinated Biphenyls
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

					Sample Location	WP21-CF01	WP21-CF02
					Sample ID	WP21-CF01	WP21-CF02
					BVL Sample ID	AFA115	AFA116
					BVL Job Number	C164652	C164652
					Sample Date	24-Aug-21	24-Aug-21
					Sample Depth (mbgs)	n/a	n/a
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)			
Aroclor 1016	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1221	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1232	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1242	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1248	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1254	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1260	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1262	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Aroclor 1268	mg/kg	0.050	n/g	n/g	<0.060	<0.050	
Polychlorinated Biphenyls	mg/kg	0.050	n/g	1.3	<0.060	<0.050	

Notes:

^(a) Government of Northwest Territories (GNWT). 2003. Environmental Guideline for Contaminated Site Remediation. November 2003.

^(b) Canadian Council of Ministers of the Environment Soil Quality Guidelines for residential/parkland land use (CCME 1999)

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mbgs - metres below ground surface

mg/kg - milligrams per kilogram

n/a - not applicable

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 11
Summary of Debris Analytical Results - Asbestos
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

Sample Location	Sample ID	BVL Sample ID	Sample Date	Description	Other fibres detected	Asbestos Detected No/Yes
TP21-165	TP21-165-AS	AFA113	24-Aug-21	Homogeneous white fibrous material	Fibreglass	No
TP21-12	TP21-12-Foam	AFA114	24-Aug-21	Homogeneous off-white foam	-	No
				Homogeneous brown fibrous material	Cellulose	No

Notes:

Samples were analyzed using NIOSH 9002 and EPA 600R-93/116 methods
 BVL - Bureau Veritas Laboratories

Table 12
Summary of Groundwater Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

				Sample Location	P06-07	P19-4	P19-5
				Sample ID	P06-07	P19-4	P19-5D
				BVL Sample ID	AFU651	AEZ786	AEZ788
				BVL Job Number	C167904	C164600	C164600
				Sample Date	30-Aug-21	28-Aug-21	29-Aug-21
Parameters	Units	RDL	Criteria ^(a)				
Benzene	mg/L	0.00040	0.14	<0.00040	<0.00040	0.0010	
Toluene	mg/L	0.00040	0.083	0.0082	<0.00040	<0.00040	
Ethylbenzene	mg/L	0.00040	11	<0.00040	<0.00040	0.0025	
Xylenes	mg/L	0.00089	3.9	<0.00089	<0.00089	0.0017	
F1 (C ₆ -C ₁₀) - BTEX	mg/L	0.10	0.81	<0.10	<0.10	<0.10	
F2 (C ₁₀ -C ₁₆)	mg/L	0.10	1.3	<0.21	<0.10	0.43	

Notes:

^(a) Federal Contaminated Sites Action Plan (FCSAP). Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (residential/parkland land use and coarse grained soils), updated June 2016 (Version 4). (GoC 2016a)

Bold/Underlined - value exceeds criteria

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2 - petroleum hydrocarbon fractions 1, 2

mg/L - milligrams per litre

RDL - reportable detection limit

< - less than

Table 13
Summary of Groundwater Analytical Results - Polycyclic Aromatic Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

				Sample Location	P19-4	P19-5
				Sample ID	P19-4	P19-5D
				BVL Sample ID	AEZ786	AEZ788
				BVL Job Number	C164600	C164600
				Sample Date	28-Aug-21	29-Aug-21
Parameters	Units	RDL	Criteria ^(a)			
Acenaphthene	mg/L	0.00010	0.0058	<0.00010		0.00021
Acenaphthylene	mg/L	0.00010	0.046	<0.00010		<0.00010
Acridine	mg/L	0.000040	n/g	<0.000040		<0.000040
Anthracene	mg/L	0.000010	0.000012	<0.000010		<0.000010
Benzo[a]anthracene	mg/L	0.0000085	0.000018	<0.0000085		<0.0000085
B(a)P	mg/L	0.0000075	0.00001	<0.0000075		<0.0000075
Benzo[b,j]fluoranthene	mg/L	0.0000085	0.00048	<0.0000085		<0.0000085
Benzo[c]phenanthrene	mg/L	0.000050	n/g	<0.000050		<0.000050
Benzo[e]pyrene	mg/L	0.000050	n/g	<0.000050		<0.000050
Benzo[g,h,i]perylene	mg/L	0.0000085	0.00017	<0.0000085		<0.0000085
Benzo[k]fluoranthene	mg/L	0.0000085	0.00048	<0.0000085		<0.0000085
Chrysene	mg/L	0.0000085	0.0001	<0.0000085		0.000015
Dibenzo[a,h]anthracene	mg/L	0.0000075	0.00026	<0.0000075		<0.0000075
Fluoranthene	mg/L	0.000010	0.00004	<0.000010		<0.000010
Fluorene	mg/L	0.000050	0.003	<0.000050		0.00045
Indeno[1,2,3-cd]pyrene	mg/L	0.0000085	0.00021	<0.0000085		<0.0000085
1-Methylnaphthalene	mg/L	0.00010	n/g	<0.00010		0.0037
2-Methylnaphthalene	mg/L	0.00010	n/g	<0.00010		0.016
Naphthalene	mg/L	0.00010	0.0011	<0.00010		<u>0.0039</u>
Perylene	mg/L	0.000050	n/g	<0.000050		<0.000050
Phenanthrene	mg/L	0.000050	0.0004	<0.000050		<0.000050
Pyrene	mg/L	0.000020	0.000025	<0.000020		<0.000020
Quinoline	mg/L	0.00020	n/g	<0.00020		<0.00020
Low Molecular Weight PAHs	mg/L	0.00020	n/g	<0.00020		0.02
High Molecular Weight PAHs	mg/L	0.000050	n/g	<0.000050		<0.000050
Total PAH	mg/L	0.00020	n/g	<0.00020		0.02
B(a)P Total Potency Equivalents	mg/L	0.000010	n/g	<0.000010		<0.000010

Notes:

^(a) Federal Contaminated Sites Action Plan (FCSAP). Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (residential/parkland land use and coarse grained soils), updated June 2016 (Version 4). (GoC 2016a)

Bold/Underlined - value exceeds criteria

B(a)P - benzo(a)pyrene

BVL - Bureau Veritas Laboratories

mg/L - milligrams per litre

n/g - no guideline

PAH - polycyclic aromatic hydrocarbon

RDL - reportable detection limit

< - less than

Table 14
Summary of Groundwater Analytical Results - Salinity
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

				Sample Location	P19-4	P19-5
				Sample ID	P19-4	P19-5
				BVL Sample ID	AEZ790	AEZ787
				BVL Job Number	C164600	C164600
				Sample Date	29-Aug-21	29-Aug-21
Parameters	Units	RDL	Criteria^(a)			
pH	pH units	n/a	7 - 9	7.54	7.15	
Dissolved Calcium	mg/L	0.30	n/g	160	110	
Dissolved Chloride	mg/L	1.0	120	55	50	
Dissolved Magnesium	mg/L	0.20	n/g	65	34	
Dissolved Nitrate as Nitrogen	mg/L	0.010	13	18	<0.010	
Dissolved Nitrite as Nitrogen	mg/L	0.010	0.06	0.22	<0.010	
Dissolved Potassium	mg/L	0.30	n/g	5.9	34	
Dissolved Sodium	mg/L	0.50	n/g	48	28	
Dissolved Sulphate	mg/L	1.0	100	310	50	

Notes:

^(a) Federal Contaminated Sites Action Plan (FCSAP). Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (residential/parkland land use and coarse grained soils), updated June 2016 (Version 4). (GoC 2016a)

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mg/L - milligrams per litre

n/a - not applicable

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 15
Summary of Groundwater Analytical Results - Dissolved Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

			Sample Location	P19-4	P19-5
			Sample ID	P19-4	P19-5
			BVL Sample ID	AEZ790	AEZ785
			BVL Job Number	C164600	C164600
			Sample Date	29-Aug-21	28-Aug-21
Parameters	Units	RDL	Criteria ^(a)		
Aluminum	mg/L	0.0030	0.1	0.010	0.031
Antimony	mg/L	0.00060	2	<0.00060	<0.00060
Arsenic	mg/L	0.00020	0.005	0.00074	<u>0.011</u>
Barium	mg/L	0.010	0.5	0.074	0.18
Boron	mg/L	0.020	1.5 ^(b)	0.061	0.034
Cadmium	mg/L	0.000020	0.00009 ^(b)	0.000034	0.000065
Chromium	mg/L	0.0010	0.0089	0.0012	0.0022
Copper	mg/L	0.00020	0.004	<u>0.0060</u>	0.0010
Iron	mg/L	0.060	0.3	<0.060	<u>18</u>
Lead	mg/L	0.00020	0.007	<0.00020	<0.00020
Manganese	mg/L	0.0040	n/g	0.011	1.9
Nickel	mg/L	0.00050	0.15	0.0068	0.018
Selenium	mg/L	0.00020	0.001	0.0010	0.00033
Silver	mg/L	0.00010	0.00025 ^(b)	<0.00010	<0.00010
Uranium	mg/L	0.00010	n/g	0.014	0.00067
Zinc	mg/L	0.0030	0.01	<u>0.017</u>	<u>0.025</u>

Notes:

^(a) Federal Contaminated Sites Action Plan (FCSAP). Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites (residential/parkland land use and coarse grained soils), updated June 2016 (Version 4). (GoC 2016a)

^(b) FSCAP Federal Interim Groundwater Quality Guidelines Memo (GoC 2016b)

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mg/L - milligrams per litre

n/a - not applicable

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 16
Summary of Surface Water Analytical Results - Petroleum Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

					Sample Location	
					SW21-01	
					Sample ID	DUP A SW21-01
					BVL Sample ID	AFU654 AFU653
					BVL Job Number	C167904 C167904
					Sample Date	01-Sep-21 01-Sep-21
Parameters	Units	RDL	Criteria^(a)	Criteria^(b)		
Benzene	mg/L	0.00040	0.37	0.37	<0.00040	<0.00040
Toluene	mg/L	0.00040	0.002	0.002	<0.00040	<0.00040
Ethylbenzene	mg/L	0.00040	0.09	0.09	<0.00040	<0.00040
Xylenes	mg/L	0.00089	n/g	0.03	<0.00089	<0.00089
F1 (C ₆ -C ₁₀) - BTEX	mg/L	0.10	n/g	0.15 ^(c)	<0.10	<0.10
F2 (C ₁₀ -C ₁₆)	mg/L	0.10	n/g	0.11 ^(c)	<0.10	<0.10

Notes:

^(a) Canadian Council of Ministers of the Environment Water Quality Guidelines for the Protection of Aquatic Life (freshwater) (CCME 1999 and updates)

^(b) Environmental Quality Guidelines for Alberta Surface Waters (AEP 2018)

^(c) Interim guideline, short-term (acute) exposure value (AEP 2018)

Bold/Underlined - value exceeds criteria

BTEX - benzene, toluene, ethylbenzene, xylenes

BVL - Bureau Veritas Laboratories

F1, F2 - petroleum hydrocarbon fractions 1 and 2

mg/L - milligrams per litre

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 17
Summary of Surface Water Analytical Results - Polycyclic Aromatic Hydrocarbons
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

					Sample Location	
					SW21-01	
					Sample ID	DUP A SW21-01
					BVL Sample ID	AFU654 AFU653
					BVL Job Number	C167904 C167904
					Sample Date	01-Sep-21 01-Sep-21
Parameters	Units	RDL	Criteria ^(a)	Criteria ^(b)		
Acenaphthene	mg/L	0.00010	0.0058	0.0058	<0.00010	<0.00010
Acenaphthylene	mg/L	0.00010	0.046	n/g	<0.00010	<0.00010
Acridine	mg/L	0.000040	n/g	0.0044	<0.000040	<0.000040
Anthracene	mg/L	0.000010	0.000012	0.000012	<0.000010	<0.000010
Benzo[a]anthracene	mg/L	0.0000085	0.000018	0.000018	<0.0000085	<0.0000085
B(a)P	mg/L	0.0000075	0.00001	0.000015	<0.0000075	<0.0000075
Benzo[b,j]fluoranthene	mg/L	0.0000085	0.00048	n/g	<0.0000085	<0.0000085
Benzo[c]phenanthrene	mg/L	0.000050	n/g	n/g	<0.000050	<0.000050
Benzo[e]pyrene	mg/L	0.000050	n/g	n/g	<0.000050	<0.000050
Benzo[g,h,i]perylene	mg/L	0.0000085	0.00017	n/g	<0.0000085	<0.0000085
Benzo[k]fluoranthene	mg/L	0.0000085	0.00048	n/g	<0.0000085	<0.0000085
Chrysene	mg/L	0.0000085	0.0001	n/g	<0.0000085	<0.0000085
Dibenzo[a,h]anthracene	mg/L	0.0000075	0.00026	0.00026	<0.0000075	<0.0000075
Fluoranthene	mg/L	0.000010	0.00004	0.00004	<0.000010	<0.000010
Fluorene	mg/L	0.000050	0.003	0.003	<0.000050	<0.000050
Indeno[1,2,3-cd]pyrene	mg/L	0.0000085	0.00021	n/g	<0.0000085	<0.0000085
1-Methylnaphthalene	mg/L	0.00010	n/g	n/g	<0.00010	<0.00010
2-Methylnaphthalene	mg/L	0.00010	n/g	n/g	<0.00010	<0.00010
Naphthalene	mg/L	0.00010	0.0011	0.001	<0.00010	<0.00010
Perylene	mg/L	0.000050	n/g	n/g	<0.000050	<0.000050
Phenanthrene	mg/L	0.000050	0.0004	0.0004	<0.000050	<0.000050
Pyrene	mg/L	0.000020	0.000025	0.000025	<0.000020	<0.000020
Quinoline	mg/L	0.00020	n/g	0.0034	<0.00020	<0.00020
Low Molecular Weight PAHs	mg/L	0.00020	n/g	n/g	<0.00020	<0.00020
High Molecular Weight PAHs	mg/L	0.000050	n/g	n/g	<0.000050	<0.000050
Total PAHs	mg/L	0.00020	n/g	n/g	<0.00020	<0.00020
B(a)P Total Potency Equivalents	mg/L	0.000010	n/g	n/g	<0.000010	<0.000010

Notes:

^(a) Canadian Council of Ministers of the Environment Water Quality Guidelines for the Protection of Aquatic Life (freshwater) (CCME 1999 and updates)

^(b) Environmental Quality Guidelines for Alberta Surface Waters (AEP 2018)

Bold/Underlined - value exceeds criteria

B(a)P - benzo(a)pyrene

BVL - Bureau Veritas Laboratories

mg/L - milligrams per litre

n/g - no guideline

PAH - polycyclic aromatic hydrocarbon

RDL - reportable detection limit

< - less than

Table 18
Summary of Surface Water Analytical Results - Salinity
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

					Sample Location	
					SW21-01	
					Sample ID	DUP A SW21-01
					BVL Sample ID	AFU657 AFU656
					BVL Job Number	C167904 C167904
					Sample Date	06-Sep-21 06-Sep-21
Parameters	Units	RDL	Criteria^(a)	Criteria^(b)		
pH	pH units	n/a	6.5 - 9	6.5 - 9	8.01	8.12
Dissolved Calcium	mg/L	0.30	n/g	n/g	34	35
Dissolved Chloride	mg/L	1.0	120	120	31	33
Dissolved Magnesium	mg/L	0.20	n/g	n/g	14	15
Dissolved Nitrate as Nitrogen	mg/L	0.010	13	3	<0.010	<0.010
Dissolved Nitrite as Nitrogen	mg/L	0.010	0.06	0.06 ^(c)	<0.010	<0.010
Dissolved Potassium	mg/L	0.30	n/g	n/g	0.94	0.99
Dissolved Sodium	mg/L	0.50	n/g	n/g	19	20
Dissolved Sulphate	mg/L	1.0	n/g	309 ^(d)	45	45

Notes:

^(a) Canadian Council of Ministers of the Environment Water Quality Guidelines for the Protection of Aquatic Life (freshwater) (CCME 1999 and updates)

^(b) Environmental Quality Guidelines for Alberta Surface Waters (AEP 2018)

^(c) Guideline value for the protection of aquatic life varies with chloride concentration (AEP 2018). The selected value is based on a hardness of 32 mg/L (Average of surface water samples).

^(d) Guideline value for the protection of aquatic life varies with water hardness (AEP 2018). The selected value is based on a hardness of 145 mg/L (Average of surface water samples).

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

mg/L - milligrams per litre

n/g - no guideline

RDL - reportable detection limit

< - less than

Table 19
Summary of Surface Water Analytical Results - Total Metals
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories
Shell Canada Limited

					SW21-01	
					Sample Location	
					Sample ID	DUP A SW21-01
					BVL Sample ID	AFU654 AFU653
					BVL Job Number	C167904 C167904
					Sample Date	01-Sep-21 01-Sep-21
Parameters	Units	RDL	Criteria^(a)	Criteria^(b)		
Aluminum	mg/L	0.0030	0.1 ^(c)	0.05 ^(c)	1.1	2.2
Antimony	mg/L	0.00060	n/g	n/g	<0.00060	<0.00060
Arsenic	mg/L	0.00020	0.005	0.005	0.0019	0.0020
Barium	mg/L	0.010	n/g	n/g	0.13	0.14
Boron	mg/L	0.020	1.5	1.5	0.026	0.029
Cadmium	mg/L	0.00020	0.00009	0.00022 ^(c)	0.000063	0.000068
Chromium	mg/L	0.0010	n/g	n/g	0.0030	0.0036
Copper	mg/L	0.00020	0.004 ^(c)	0.007	0.0038	0.0045
Iron	mg/L	0.060	0.3	n/g	2.0	2.6
Lead	mg/L	0.00020	0.007 ^(c)	0.0051 ^(c)	0.0012	0.0015
Manganese	mg/L	0.0040	0.26 ^(c)	n/g	0.062	0.072
Nickel	mg/L	0.00050	0.15 ^(c)	0.071 ^(c)	0.0047	0.0056
Selenium	mg/L	0.00020	0.001	0.002	0.00033	0.00046
Silver	mg/L	0.00010	0.00025	0.00025	<0.00010	<0.00010
Uranium	mg/L	0.00010	0.015	0.015	0.0011	0.0012
Zinc (dissolved)	mg/L	0.0030	0.01 ^(d)	0.03	0.0073	0.0041

Notes:

^(a) Canadian Council of Ministers of the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life (freshwater) (CCME 1999 and updates)

^(b) Guideline value for the protection of aquatic life varies with pH and/or hardness. The selected value is based on a pH of 8.06 and a hardness of 145 mg/L CaCO₃ (average of surface water samples).

^(c) The selected value is based on a hardness of 155 mg/L (as CaCO₃) and pH of 8.06 (from site data) and dissolved organic carbon of 0.3 mg/L (site data not available, applied lowest allowable and most conservative value). The CCME guideline value for zinc applies to the dissolved zinc concentration (CCME 2018).

^(d) The CCME guideline value for zinc applies to the dissolved zinc concentration (CCME 2018).

Bold/Underlined - value exceeds criteria

BVL - Bureau Veritas Laboratories

CaCO₃ - calcium carbonate

mg/L - milligrams per litre

n/g - no guideline

RDL - reportable detection limit

< - less than

APPENDIX A

Site Photographs



Photo 1 – Camp Farewell – Anchor installation (August 9, 2021).



Photo 2 – Camp Farewell – Anchor (August 10, 2021).

CLIENT
Shell Canada Limited

CONSULTANT



DATE March 2022

PREPARED ABG

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PROJECT
Camp Farewell, Northwest Territories

TITLE
Photographic Document

PROJECT NO. 20368099-6000



Photo 3 – Camp Farewell – Communication equipment and surveying activities (August 10, 2021).



Photo 4 – Camp Farewell – Animal Track (August 11, 2021).

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Camp Farewell, Northwest Territories

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Photo 5 – Camp Farewell – Airstrip (August 11, 2021).



Photo 6 – Camp Farewell – Site overview with emergency shelter in the background (August 11, 2021).

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Photo 7 – Camp Farewell – Winter access (August 12, 2021).



Photo 8 – Camp Farewell – Emergency shelter (August 13, 2021).

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Photo 9 – Camp Farewell – Erosion control, facing south towards the Mackenzie river (August 13, 2021).



Photo 10 – Camp Farewell – slope towards the Mackenzie river (August 13, 2021).

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Photo 11 – Camp Farewell – buried wood pilings found in the southwest area of the Site (August 13, 2021).



Photo 12 – Camp Farewell – Test pitting (August 16, 2021).

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Photo 13 – Camp Farewell – Buried fiberglass material found in the north area of the Site (August 19, 2021).



Photo 14 – Camp Farewell – Buried foam found in the south area of the Site (August 20, 2021).

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Photo 15 – Camp Farewell – Kitchen area on the barge(August 22, 2021).



Photo 16 – Camp Farewell – Monitoring well P06-7 (August 24, 2021).

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Photo 17 – Camp Farewell – Test pit TP21-66 (August 28, 2021).



Photo 18 – Camp Farewell – Hand augering (September 4, 2021).

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Photo 19 – Camp Farewell – Metal debris disposed of (September 5, 2021).



Photo 20 – Camp Farewell – Barge demobilization (September 8, 2021).

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Photo 21 – Camp Farewell – Site conditions after demobilization (September 8, 2021).



Photo 22 – Camp Farewell – Barge arrival in Inuvik (September 8, 2021).

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APPENDIX B

Regulatory Framework

Table B1: Regulatory Framework Summary – Site Conditions

Assessment Item	Description/Comments	Selection	
LAND USE	On-Site Land Use		
	Historic	Parkland (Kendall Island Bird Sanctuary), former staging and storage site	Residential/parkland
	Current	Parkland (Kendall Island Bird Sanctuary), tundra	
	Bylaw zoning	Not applicable	
	Off-Site Land Use within 30 metres (m) from Site Boundary		Residential/parkland
	North	North – Tundra, Kendall Island Bird Sanctuary, former airstrip	
East	East – Tundra, Kendall Island Bird Sanctuary		
South	South – MacKenzie River and tundra		
West	West – MacKenzie River and tundra		
SUBSURFACE CONDITIONS	Stratigraphy		
	Stratigraphy	Sand and gravel fill were observed at surface on the Site footprint, extending to between 0.2 and 2.7 metres below ground surface (mbgs), the maximum depth investigated. This layer was underlain by peat or sand. Permafrost was encountered between about 1.4 and 2.7 mbgs on the Site footprint.	Coarse-grained
	Grain size	Outside of the Site footprint sand or peat were observed at surface extending to between 0.3 and 0.7 mbgs, when permafrost was encountered.	
NEARBY RECEPTORS	Groundwater Use (within 500 m)		
	On-site	None	
	Public/municipal sources	None	
	Private water wells	None	
	Surface Water (within 500 m)		
	Drainage	Surface water drainage is radial, draining toward the MacKenzie River to the south and the ponds to the east-southeast	
	Wetlands	The Site is on peatlands over permafrost	
	Permanent surface water bodies	Adjacent to the MacKenzie River to the west and south. Ponds about 50 m east-southeast	
Dugouts	None		
Other Receptors			
None	No other receptors were identified within 500 m from the Site.		

Table B2: Regulatory Framework Summary – Exposure Pathway Applicability

	Assessment Item	Description/Comments	Pathway Exclusion
EXPOSURE PATHWAYS / RECEPTORS	Human Pathways		
	Direct soil contact	Not applicable – no human occupancy	Excluded
	Vapour inhalation (basement)	Not applicable – no human occupancy	Excluded
	Vapour inhalation (slab)	Not applicable – no human occupancy	Excluded
	Protection of domestic use aquifer (DUA)	Not applicable – groundwater in the area not used by humans	Excluded
	Off-site migration	Not applicable – no human occupancy in the area	Excluded
	Ecological Pathways		
	Direct soil contact	Applicable	Not excluded
	Nutrient/Energy cycling check	Not applicable – no agricultural land use in area	Excluded
	Livestock soil and food ingestion	Not applicable – no livestock in the area	Excluded
	Wildlife soil and food ingestion	Applicable – wildlife in the area	Not excluded
	Freshwater aquatic life (FAL)	Surface water bodies identified within 30 m; therefore, the FAL exposure pathways is considered applicable	Not excluded
	Livestock water	Not applicable – no livestock in the area	Excluded
	Wildlife water	Applicable	Not excluded
Irrigation water	Not applicable – no irrigation in the area	Excluded	

Table B3: Regulatory Framework Summary – Selected Guidelines

SELECTED GUIDELINES	Soil Guidelines	
	Benzene, ethylbenzene, toluene, xylenes (BTEX)/PHC Fractions F1 to F4	Tier 1 Government of Northwest Territories (GNWT) Guideline for Contaminated Site Remediation for coarse-grained soil and residential/parkland land use
	Polycyclic aromatic hydrocarbon (PAH)	Tier 1 GNWT Guideline for Contaminated Site Remediation for coarse-grained soil and residential/parkland land use
	Volatile organic compound (VOC)	Tier 1 GNWT Guideline for Contaminated Site Remediation, Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines. Coarse-grained soil and residential/parkland land use
	Nitrate and sulphate	There are no applicable guidelines for nitrate and sulphate
	Metals	Tier 1 GNWT Guideline for Contaminated Site Remediation Alberta Soil Remediation Guidelines for Barite for residential/parkland land use
	Subsoil Guidelines (below 0.6 mbgs)	
	PHC Fractions F1 to F3	Site-Specific Risk Assessment guideline. This criterion is the same as the management limit recommended for soils at depths greater than 0.5 mbgs in the Abandoned Military Site Remediation Protocol
	Groundwater Guidelines	
	BTEX/PHC Fractions F1 to F4	Federal Contaminated Sites Action Plan (FCSAP). Guidance Document on Federal Interim Groundwater Quality Guidelines for Federal Contaminated Sites
	PAH	
	Salinity	
	Metals	
	Surface Water Guidelines	
BTEX/PHC Fractions F1 to F2	CCME Canadian Water Quality Guidelines for the Protection of Aquatic Life – Freshwater Alberta Environmental Quality Guidelines for surface waters protective of FAL Alberta guidelines used in the absence of CCME guidelines.	
PAH		
Salinity		
Metals		
Applicable Buffers		
Not applicable	Surrounding land use is residential/parkland	

APPENDIX C

Survey

APPENDIX D

Test Pit and Hand Auger Logs

LIST OF APPLICABLE ABBREVIATIONS

▽	GROUNDWATER LEVEL
%LEL	LOWER EXPLOSIVE LIMIT
µS/cm	MICROSIEMENS PER CENTIMETRE
1,2-DBA	1,2-DIBROMOETHANE
1,2-DCA	1,2-DICHLOROETHANE
ARS	AIR RETURN SAMPLE
As	ARSENIC
AS	AUGER SAMPLE
B-hws	BORON, HOT WATER SOLUBLE
Ba	BARIUM
Bsp	SATURATED PASTE BORON
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES
Cr	CHROMIUM
CS	CORE SAMPLE
Cu	COPPER
DP	DIRECT PUSH
dS/m	DECISIEMENS PER METRE
EC	ELECTRICAL CONDUCTIVITY
EPH	EXTRACTABLE PETROLEUM HYDROCARBONS
ELEV.	ELEVATION
F1-F4	PETROLEUM HYDROCARBON FRACTION 1 TO FRACTION 4
FOC	FRACTION ORGANIC CARBON
GS	GRAB SAMPLE
HEPH	HEAVY EXTRACTABLE PETROLEUM HYDROCARBONS
LEPH	LIGHT EXTRACTABLE PETROLEUM HYDROCARBONS
m	METRE
mg/L	MILLIGRAMS PER LITRE
maid	METRES ABOVE LOCAL DATUM
mard	METRES ABOVE RELATIVE DATUM
masl	METRES ABOVE SEA LEVEL
mS/cm	MILLISIEMENS PER CENTIMETRE
MTBE	METHYL TERT-BUTYL ETHER
mTPH	MODIFIED TOTAL PETROLEUM HYDROCARBONS
n/a	NOT APPLICABLE
NA	NOT AVAILABLE
NBN	SEGREGATED ICE IS NON-VISIBLE, WELL BONDED, WITH NO EXCESS ICE.
OVM	ORGANIC VAPOUR MONITOR
PAH	POLYCYCLIC AROMATIC HYDROCARBONS
Pb	LEAD
PCB	POLYCHLORINATED BIPHENYL
pH	CaCl (2:1) WET pH
PHC	PETROLEUM HYDROCARBONS
PJ	PION JAR
ppmv	PARTS PER MILLION BY VOLUME
RC	ROCK CORE
SAL	SALINITY
SC	SOIL CORE
SPT	STANDARD PENETRATION TEST
Sr	STRONTIUM
SS	SPLIT SPOON
ST	STYRENE
USCS	UNIFIED SOIL CLASSIFICATION SYSTEM
VPH	VOLATILE PETROLEUM HYDROCARBONS
VOC	VOLATILE ORGANIC COMPOUNDS
w<PL	MATERIAL IS ESTIMATED TO BE DRIER THAN THE PLASTIC LIMIT
w~PL	MATERIAL IS ESTIMATED TO BE CLOSE TO THE PLASTIC LIMIT
w>PL	MATERIAL IS ESTIMATED TO BE WETTER THAN THE PLASTIC LIMIT
WS	WET SAMPLE
Zn	ZINC

RECORD OF TEST PIT: TP21-BH19-37

CLIENT: Shell Canada Limited

DATE: August 17, 2021

ELEVATION: Data Not Available

PROJECT: Camp Farewell

PROJECT NO: 20368099-6000-1001

INCLINATION: 90.0°

COORD SYS: UTM Zone 08N

LOCATION: Camp Farewell

CONTRACTOR: EGT-NWI

HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS					
			DESCRIPTION	USCS	STRATA PLOT	ELEV. --- DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv								
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	CS												BH19-37-01 BTEX F1-F4	
			(PT) PEAT; dark brown, organic odour; moist, loose.	PT		0.50									BH19-37-03 BTEX F1-F4					
			(PT) SANDY PEAT; brown and grey, organic odour; non-cohesive, moist, loose.	PT		0.75														
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, compact.	SW		1.00														
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.																BH19-37-06 BTEX F1-F4	
3																				

DEPTH SCALE: 1:15

HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width

LOGGED: PT

CHECKED: AB/CM

REV:

A

DATE: Aug 17, 2021

DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-BH19-39

CLIENT: Shell Canada Limited	DATE: August 17, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS									BH19-39-01 BTEX F1-F4
			(SW) organic gravelly SAND, well graded; grey and dark brown, organic odour; non-cohesive, moist, loose.			0.45								BH19-39-03 BTEX F1-F4		
			(SW) SAND, well graded, some gravel; grey mottled light brown; non-cohesive, moist, compact.			0.70										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													BH19-39-06 Dup-D BTEX F1-F4 BTEX F1-F4
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 17, 2021
DATE: Feb 15, 2022

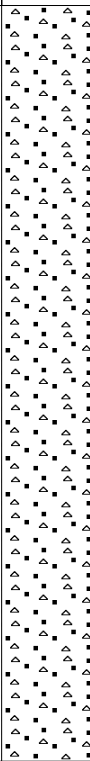
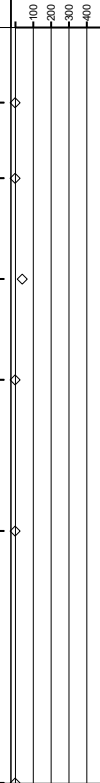
REV:

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RECORD OF TEST PIT: TP21-BH19-94

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: August 17, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, loose.	SW		0.00	GS								
			(SW) organic SAND, well graded, some gravel; dark brown and grey, organic odour; non-cohesive, moist, loose.			0.45									
			(SW) SAND, well graded, some gravel; light brown; non-cohesive, moist, compact.			0.70									
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.												
3															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 17, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-BH19-110

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose.	SW		0.00	GS									
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, dry, compact. - 0.20 to 0.30 m: some peat			0.20										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 21, 2021
DATE: Feb 15, 2022

REV: A

RECORD OF TEST PIT: TP21-BH19-117

CLIENT: Shell Canada Limited	DATE: August 15, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded, trace organics; grey; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	BH19-117-02 BTEX F1-F4, Metals, Sulphates, Nitrates	
			(SW) SAND, well graded, trace gravel; tan, hydrocarbon odour; non-cohesive, moist, compact.			0.70		-	-	-	-	BH19-117-04 BTEX F1-F4, Metals, Sulphates, Nitrates				
			(SW) SAND, well graded, trace gravel; tan, hydrocarbon odour; non-cohesive, moist, compact.			0.90		-	-	-	-					
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								-	-	-	-	BH19-117-06 BTEX F1-F4, Metals, Sulphates, Nitrates	
3											-	-	-	-		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 15, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-TP19-09

CLIENT: Shell Canada Limited DATE: August 17, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv						
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW	[Strata Plot]	0.00	GS											
			(SM) organic SILTY SAND, some gravel; grey and black; non-cohesive, moist, compact, black staining.	SM	[Strata Plot]	0.90											TP19-09-02 BTEX F1-F4	
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, moist, dense.	SW	[Strata Plot]	1.00											TP19-09-03 BTEX F1-F4	
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.															
															TP19-09-06 BTEX F1-F4			
3																		

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 17, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-TP19-11

CLIENT: Shell Canada Limited	DATE: August 17, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS				-	-	-	-	TP19-11-03 BTEX F1-F4	
			- 0.50 m: trace cobbles													
			(SM) organic SILTY SAND, some gravel; grey and black; non-cohesive, moist, compact.			SM		0.90			-					
(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, moist, dense.	SW	1.30														
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:
A

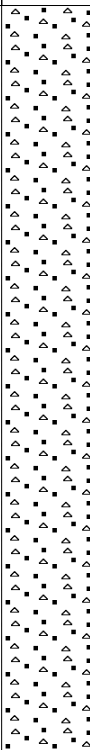
DATE: Aug 17, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-TP19-16

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 17, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
												200	400	600			800
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS				-	-	-	-	TP19-16-01 BTEX F1-F4		
			(SW) organic gravelly SAND, well graded; brown and dark brown, organic odour; non-cohesive, moist, loose.			0.65					-	-	-	-			TP19-16-03 BTEX F1-F4
			(SW) SAND, well graded, some gravel; grey mottled light brown; non-cohesive, moist, compact.			1.00					-	-	-	-			
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 17, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-TP19-17

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 17, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS				-	-	-	-	TP19-17-01 BTEX F1-F4 Dup-E TP19-17-03 BTEX F1-F4 BTEX F1-F4	
			(SW) organic gravelly SAND, well graded; very dark brown and dark grey, organic odour; non-cohesive, moist, loose.			0.75					-	-	-	-		
			(SW) SAND, well graded, some gravel; grey mottled light brown; non-cohesive, moist, compact.			1.20					-	-	-	-		
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-	-	TP19-17-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 17, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-TP19-18

CLIENT: Shell Canada Limited	DATE: August 17, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-200			-400
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS				-	-	-	-	TP19-18-01 DUP K, BTEX F1-F4, PAHs TP19-18-02 BTEX F1-F4 TP19-18-03 BTEX F1-F4 TP19-18-05 BTEX F1-F4	
			(SW) organic gravelly SAND, well graded; very dark brown and dark grey, organic odour; non-cohesive, moist, loose.			0.70										
			(SW) SAND, well graded, some gravel; grey mottled light brown; non-cohesive, moist, compact.			1.20										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								-	-	-	-		
3											-	-	-	-		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 17, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-TP19-19

CLIENT: Shell Canada Limited	DATE: August 17, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS					-				
			- 0.40 m: trace garbage			-										
			(SW) organic gravelly SAND, well graded; very dark brown and dark grey, organic odour; non-cohesive, moist, loose.			0.75						-				
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, compact.			1.15					-					
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.								-					
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



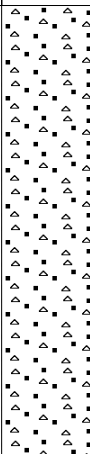
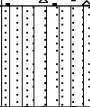
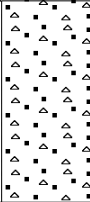
DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 17, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-TP19-21

CLIENT: Shell Canada Limited	DATE: August 19, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE	SOIL SAMPLE
1	CAT 322 Mechanical Excavation		FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, loose.	SW		0.00	GS								TP21-TP19-21-02 BTEX F1-F4		
			(SM) organic SILTY SAND, and fines, some gravel; dark brown and grey, organic odour; non-cohesive, moist, compact.	SM		0.90										TP21-TP19-21-04 BTEX F1-F4	
			(SW) SAND, well graded, some gravel; brown and grey, organic odour; non-cohesive, moist, compact.	SW		1.10											TP21-TP19-21-06 BTEX F1-F4
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.												TP21-TP19-21-06 BTEX F1-F4		
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:	A
DATE: Aug 19, 2021	
DATE: Feb 15, 2022	

RECORD OF TEST PIT: TP21-TP19-24

CLIENT: Shell Canada Limited DATE: August 19, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322		FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW	▴ ▽	0.00	GS					◇			TP21-TP19-24-01 BTEX F1-F4		
			(SM) organic gravelly SILTY SAND; brown and blackish grey, organic odour; non-cohesive, moist, loose. - 0.90 to 1.20 m: some peat	SM	▴ ▽	0.70						◇					TP21-TP19-24-03 BTEX F1-F4
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, compact.	SW	▴ ▽	1.00						◇					
			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								◇						
2																	
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 19, 2021
 DATE: Feb 15, 2022

REV: A

RECORD OF TEST PIT: TP21-01

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 23, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
	CAT 322	Mechanical Excavation	(SM) organic SILTY SAND; black, organic odour; non-cohesive, moist, compact, roots.	SM	[Strata Plot]	0.00	GS					I	◇				
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.									◇					TP21-01-02 BTEX F1-F4

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 23, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-02

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 23, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	200	400			600
	CAT 322 Mechanical Excavation		(SM) organic SILTY SAND; black, organic odour; non-cohesive, moist, compact, roots.	SM	[Strata Plot: Horizontal Dotted]	0.00	GS										
			(SW) SAND, well graded; grey, moderate cementation; non-cohesive, moist, compact.	SW	[Strata Plot: Diagonal Dotted]	0.30											TP21-02-02 BTEX F1-F4
				End of hole at 0.50 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-02-03 BTEX F1-F4

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 23, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-03

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 23, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-03-01 BTEX F1-F4		
			(SW) organic SAND, well graded, some gravel; dark brown and grey; non-cohesive, moist.			0.50					-	-	-	-			TP21-03-03 BTEX F1-F4
			(SW) SAND, well graded; brownish grey; non-cohesive, moist, dense.			1.00					-	-	-	-			
2			End of hole at 1.20 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-	-	TP21-03-06 BTEX F1-F4			
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 23, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-04

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: August 27, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS											TP21-04-01 BTEX F1-F4
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, wet, compact.	PT		0.40												TP21-04-03 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.60												
1			End of hole at 1.00 m. Refusal due to permafrost. Backfilled with test pit material.															TP21-04-05 BTEX F1-F4
2																		
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 27, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-05

CLIENT: Shell Canada Limited	DATE: August 27, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS					-	-	-	-	TP21-05-02 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.50		-									
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.60		-	-	-	-	TP21-05-04 BTEX F1-F4					
2			End of hole at 1.20 m. Refusal due to permafrost. Backfilled with test pit material.								-		-	-	-	TP21-05-06 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



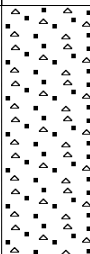

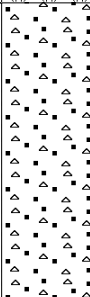
DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 27, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-06

CLIENT: Shell Canada Limited	DATE: August 26, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-200	-400			-600
	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS					-	-	-	-	TP21-06-02 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.50		-	-	-	-	DUP-FF TP21-06-03 BTEX F1-F4 BTEX F1-F4					
1			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.60		-	-	-	-	TP21-06-05 BTEX F1-F4					
2			End of hole at 1.20 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:
A

DATE: Aug 26, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-07

CLIENT: Shell Canada Limited	DATE: August 26, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	GS				-	-	-	-	TP21-07-01 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black, organic odour; non-cohesive, moist, compact.	PT	[Strata Plot]	0.50		-	-	-	-	TP21-07-03 BTEX F1-F4				
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot]	0.60		-	-	-	-					
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-	-	TP21-07-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:
A

DATE: Aug 26, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-08

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS												
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.50													
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.60													
1			End of hole at 1.00 m. Refusal due to permafrost. Backfilled with test pit material.														DUP-EE TP21-08-05 BTEX F1-F4 BTEX F1-F4		
2																			
3																			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV:
A

DATE: Aug 26, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-09

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS											
			- 0.30 m: Fiberglass Liner With Straw and Steel Mesh															
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.50												
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.60												
1			End of hole at 1.00 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-09-05 BTEX F1-F4		

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 26, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-10

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS									TP21-10-01 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.50											TP21-10-03 BTEX F1-F4
			End of hole at 0.70 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-10-04 BTEX F1-F4

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 26, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-11

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS										TP21-11-01 BTEX F1-F4		
			- 0.50 m: Foam Insulation																TP21-11-03 BTEX F1-F4
			(SW-SM) organic SAND, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	SW-SM		1.00													
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		1.30													
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														DUP-DD DUP-DD.1 TP21-11-06 BTEX F1-F4 BTEX F1-F4 BTEX F1-F4		
3																			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 26, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-12

CLIENT: Shell Canada Limited	DATE: August 18, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv	
	CAT 322	Mechanical Excavation	FILL - (SW) gravelly SAND, well graded; light brown; non-cohesive, moist, loose.	SW		0.00	GS											
			- 0.30 m: foam insulation															
			(SM) SILTY SAND, and fines, some gravel; grey, organic odour; non-cohesive, moist, compact. - 0.40 to 0.50 m: some peat	SM		0.40												
1			End of hole at 0.90 m. Refusal due to permafrost. Backfilled with test pit material.															
2																		
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



LOGGED: PT
CHECKED: AB/CM

DATE: Aug 18, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-13

CLIENT: Shell Canada Limited	DATE: August 19, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv			Hexane ppmv	Hexane ppmv	
1	CAT 322	Mechanical Excavation	FILL - (SW) gravelly SAND, well graded; light brown, hydrocarbon odour; non-cohesive, moist, loose.	SW		0.00	GS											
			- 0.40 m: foam insulation and plastic straps															
			(PT) PEAT; very dark brown, organic odour; non-cohesive, moist, loose. - 0.50 to 0.60 m: some peat	PT		0.50												
1	CAT 322	Mechanical Excavation	(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, compact.	SW		0.60												
			End of hole at 1.10 m. Refusal due to permafrost. Backfilled with test pit material.															
2																		
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:
A

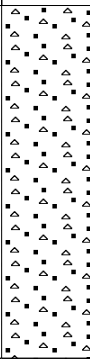
DATE: Aug 19, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-14

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 16, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-200	-400			-600
	CAT 322	Mechanical Excavation	FILL - (SW) organic SAND and GRAVEL, well graded; dark brown; non-cohesive, dry, loose, trace styrofoam.	SW		0.00	GS					I				TP21-14-02 BTEX F1-F4	
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.									I				TP21-14-04 BTEX F1-F4	
1																	
2																	
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



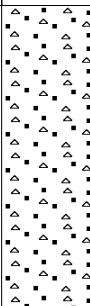
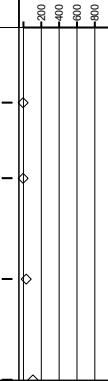

DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A

DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-15

CLIENT: Shell Canada Limited	START DATE: August 16, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell	END DATE: August 15, 2021	
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv						
	CAT 322 Mechanical Excavation		(SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW		0.00	GS									TP21-15-02 BTEX F1-F4		
			(PT) PEAT; dark brown, organic odour; non-cohesive, moist, soft.	PT		0.60											TP21-15-04 BTEX F1-F4	
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 16, 2021
DATE: Feb 15, 2022

REV:

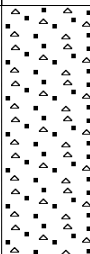
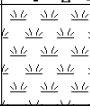
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RECORD OF TEST PIT: TP21-16

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 16, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
	CAT 322	Mechanical Excavation	(SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW		0.00	GS										
			(PT) PEAT; dark brown, organic odour; non-cohesive, soft.	PT		0.50											
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.														

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

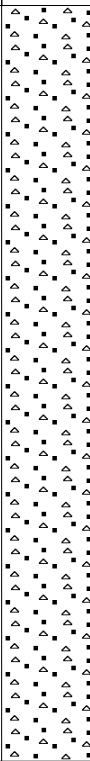
DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-17

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 16, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose, trace styrofoam.	SW		0.00	GS				-	-	-	-	TP21-17-02 BTEX F1-F4		
			(SW) gravelly SAND, well graded; non-cohesive, moist, very loose, trace styrofoam.			0.70					-	-	-	-			TP21-17-04 BTEX F1-F4
			(SW) SAND, well graded, some gravel; dark grey and black; non-cohesive, moist, compact.			1.00					-	-	-	-			
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								-	-	-	-	TP21-17-06 BTEX F1-F4		
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-18

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 19, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour, non-cohesive, moist, loose.	SW		0.00	GS									
			(SM) SILTY SAND, some gravel; grey and light brown; non-cohesive, moist, compact. - 0.60 to 0.70 m: some peat	SM		0.50										
2			End of hole at 1.50 m. Refusal, Backfilled with test pit material.													TP21-18-06 BTEX F1-F4

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 19, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-19

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 18, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE	SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist.	SW		0.00	GS										TP21-19-01 BTEX F1-F4
			(SW) SAND, well graded, some gravel; light brown; non-cohesive, moist, compact.			0.60											TP21-19-04 BTEX F1-F4
			End of hole at 1.50 m. Refusal. Backfilled with test pit material.														TP21-19-05 BTEX F1-F4
2																	TP21-19-06 BTEX F1-F4
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 18, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-21

CLIENT: Shell Canada Limited	DATE: August 27, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	▲▲▲▲▲	0.00	GS								TP21-21-02 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	▼▼▼▼▼	0.40										
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	▲▲▲▲▲	0.50										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.											TP21-21-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 27, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-22

CLIENT: Shell Canada Limited	DATE: August 27, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS										TP21-22-01 BTEX F1-F4		
			(PT) SANDY PEAT, well graded, some fines; dark brown and black, organic odour; non-cohesive, moist, compact.	PT		0.50													TP21-22-03 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.80													
			- 1.00 m: Hydrocarbon Odour																
			End of hole at 1.20 m. Refusal due to permafrost. Backfilled with test pit material.															TP21-22-06 BTEX F1-F4	
2																			
3																			

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 27, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-23

Sheet 1 of 1

CLIENT: Shell Canada Limited
PROJECT: Camp Farewell
PROJECT NO: 20368099-6000-1001
LOCATION: Camp Farewell

DATE: August 27, 2021
INCLINATION: 90.0°
CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
COORD SYS: UTM Zone 08N
HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS								TP21-23-01 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.80				TP21-23-03 BTEX F1-F4						
			(SW) SAND, well graded, trace organics; grey, hydrocarbon odour; non-cohesive, moist, compact.	SW		1.00										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.											DUP HH TP21-23-06 BTEX F1-F4 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 27, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-24

CLIENT: Shell Canada Limited DATE: August 27, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
												200	400	600		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: Sand/Gravel]	0.00	GS								TP21-24-01 BTEX F1-F4	
			- 0.50 m: Hydrocarbon Odour										TP21-24-03 BTEX F1-F4			
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: Peat]	0.60										
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: Sand]	0.80										
			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.											TP21-24-06 BTEX F1-F4		
2																
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: A

DATE: Aug 27, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-25

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 27, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA		ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS				-	-				TP21-25-02 BTEX F1-F4
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.80		-	-					TP21-25-04 BTEX F1-F4		
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.00		-	-							
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.								-					TP21-25-06 BTEX F1-F4
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: A

DATE: Aug 27, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-26

CLIENT: Shell Canada Limited	DATE: August 27, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS					-	-	-	-	TP21-26-02 BTEX F1-F4, Metals, Sulphates, Nitrates TP21-26-04 BTEX F1-F4, Metals, Sulphates, Nitrates	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	1.00		-	-	-	-						
			(SW) SAND, well graded, trace organics; grey, hydrocarbon odour; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.10		-	-	-	-	-	-	-	-		
2			End of hole at 1.60 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV: A
DATE: Aug 27, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-27

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 27, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. --- DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE
1	CAT 322 Mechanical Excavation		FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	▲▲▲▲ ▲▲▲▲ ▲▲▲▲	0.00	GS									TP21-27-02 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	▽▽▽▽ ▽▽▽▽	0.80						TP21-27-04 BTEX F1-F4					
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	▲▲▲▲ ▲▲▲▲ ▲▲▲▲	0.90						TP21-27-05 BTEX F1-F4					
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 27, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-28

CLIENT: Shell Canada Limited	DATE: August 22, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown; non-cohesive, moist, very loose.	SW		0.00	GS					-	-	-	-	TP21-28-02 BTEX F1-F4	
			FILL - (SW) SAND and GRAVEL, well graded; grey; non-cohesive, moist, very loose.			1.00						-	-	-	TP21-28-04 BTEX F1-F4		
			(SW) SAND, well graded; brownish grey; non-cohesive, moist, dense.			2.00						-	-	-			TP21-28-06 BTEX F1-F4
2			End of hole at 2.50 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-28-08 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 22, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-29

CLIENT: Shell Canada Limited DATE: August 22, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) gravelly SAND, well graded; light brown, organic odour; non-cohesive, dry, very loose.	SW	[Strata Plot: SW]	0.00	GS				-	-	-	-	TP21-29-02 BTEX F1-F4	
			(SM) organic SILTY SAND; dark brown and grey, hydrocarbon odour; non-cohesive, moist, compact.	SM	[Strata Plot: SM]	0.50		-	-	-	-	TP21-29-04 BTEX F1-F4				
			(SW) SAND, well graded, some gravel, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.90		-	-	-	-		-	TP21-29-05 BTEX F1-F4		
			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													
2																
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 22, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-30

CLIENT: Shell Canada Limited	DATE: August 22, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
	CAT 322	Mechanical Excavation	(SM) organic SILTY SAND; black, organic odour; non-cohesive, moist, compact, roots.	SM		0.00	GS									
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-30-02 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:
A

DATE: Aug 22, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-31

CLIENT: Shell Canada Limited	DATE: August 22, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-200	-400			-600	-800
	CAT 322	Mechanical Excavation	(SM) organic SILTY SAND; black, organic odour; non-cohesive, moist, roots.	SM	[Strata Plot: Dotted pattern]	0.00	GS					I	I				TP21-31-02 BTEX F1-F4	
1			End of hole at 0.40 m. Refusal due to permafrost. Backfilled with test pit material.															
2																		
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 22, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-32

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 22, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv		
1	CAT 322	Mechanical Excavation	FILL - (SW) gravelly SAND, well graded; light brown, organic odour; non-cohesive, dry, very loose.	SW	[Strata Plot: SW]	0.00	GS				-	-	-	-	TP21-32-01 BTEX F1-F4 TP21-32-03 BTEX F1-F4 Dup T TP21-32-04 BTEX F1-F4 BTEX F1-F4 TP21-32-05 BTEX F1-F4	
			(SM) organic SILTY SAND; dark brown and grey, hydrocarbon odour; non-cohesive, moist, compact.	SM	[Strata Plot: SM]	0.50						-	-	-		-
			(SW) SAND, well graded, some gravel, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.90						-	-	-		-
2			End of hole at 1.20 m. Refusal due to permafrost. Backfilled with test pit material.								-	-	-	-		
3											-	-	-	-		

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 22, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-33

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 22, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown, organic odour; non-cohesive, dry, very loose.	SW		0.00	GS								
			FILL - (SW) SAND and GRAVEL, well graded; dark grey, organic odour; non-cohesive, moist, loose.			0.30									
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.			1.00									
2			End of hole at 1.50 m. Backfilled with test pit material.												
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 22, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-34

CLIENT: Shell Canada Limited	DATE: August 27, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: Sand/Gravel]	0.00	GS					100			TP21-34-01 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: Peat]	0.90		100					TP21-34-03 BTEX F1-F4			
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: Sand]	1.00		100						DUP-ii TP21-34-05 BTEX F1-F4 BTEX F1-F4		
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 27, 2021
DATE: Feb 15, 2022

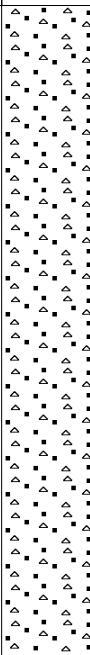
REV: A

RECORD OF TEST PIT: TP21-35

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 23, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown; non-cohesive, moist, very loose.	SW		0.00	CS									TP21-35-02 BTEX F1-F4 TP21-35-04 BTEX F1-F4 Dup V TP21-35-05 BTEX F1-F4 BTEX F1-F4	
			(SW) organic SAND, well graded; dark brown and grey, organic odour; non-cohesive, moist, loose.			1.00											
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.			1.20											
2			End of hole at 1.30 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A

DATE: Aug 23, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-36

CLIENT: Shell Canada Limited	DATE: August 23, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown; non-cohesive, moist, very loose.	SW		0.00	GS								TP21-36-02 BTEX F1-F4 TP21-36-03 BTEX F1-F4 Dup W TP21-36-05 BTEX F1-F4 BTEX F1-F4	
			(SW) organic SAND, well graded; dark brown and grey, organic odour; non-cohesive, moist, loose.			1.00										
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.			1.20										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.											TP21-36-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 23, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-37

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 23, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-37-01 BTEX F1-F4	
			(SW) organic SAND, well graded; dark brown and grey, organic odour; non-cohesive, moist, loose.			1.00		-	-	-	-	TP21-37-04 BTEX F1-F4				
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.			1.20		-	-	-	-					
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-	-	TP21-37-06 BTEX F1-F4		
3										-	-	-	-			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

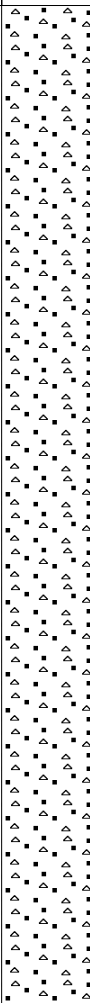
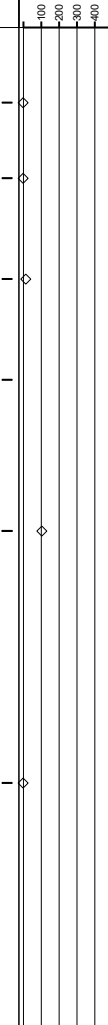
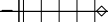


DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 23, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-38

CLIENT: Shell Canada Limited	DATE: August 23, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose. - 1.00 m: trace foam, trace straw (SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.00	CS						TP21-38-03 BTEX F1-F4 TP21-38-04 BTEX F1-F4 Dup X TP21-38-05 BTEX F1-F4 BTEX F1-F4		
2			End of hole at 2.00 m. Refusal due to permafrost. Backfilled with test pit material.										TP21-38-07 BTEX F1-F4		
3															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:
A

DATE: Aug 23, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-39

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 23, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv							
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS					100			TP21-39-03 BTEX F1-F4				
			(SW-SM) organic SAND, well graded, some fines; dark brown and black, hydrocarbon odour; non-cohesive, moist, compact.	SW-SM	[Strata Plot: SW-SM]	1.30						200					300		TP21-39-04 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.60						400						400	
2			End of hole at 1.80 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-39-06 BTEX F1-F4				
3																			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 23, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-40

CLIENT: Shell Canada Limited DATE: August 23, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	GS				1	100		TP21-40-02 BTEX F1-F4		
			(SW-SM) organic SAND, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	SW-SM	[Strata Plot]	1.30		1				TP21-40-04 BTEX F1-F4				
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot]	1.50		1					1			TP21-40-06 BTEX F1-F4
2			End of hole at 1.80 m. Refusal due to permafrost. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width

LOGGED: PT

CHECKED: AB/CM

DATE: Aug 23, 2021

DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-41

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 23, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS					
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv									
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS									TP21-41-02 BTEX F1-F4					
			- 1.00 m: trace foam, trace straw																		TP21-41-04 BTEX F1-F4
			(SW-SM) organic SAND, well graded, some fines; dark brown and black; non-cohesive, moist, compact.			SW-SM		1.30													
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.			SW		1.50													
2	End of hole at 1.80 m. Refusal due to permafrost. Backfilled with test pit material.																				
	3																				

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 23, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-42

CLIENT: Shell Canada Limited	DATE: August 18, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv						
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW	[Strata Plot: SW]	0.00	CS				-	-	-	-	TP21-42-03 BTEX F1-F4			
			(SM) organic gravelly SILTY SAND; brown and blackish grey, organic odour; non-cohesive, moist, loose. - 0.90 to 1.20 m: Peat	SM	[Strata Plot: SM]	0.75		-	-	-	-	-	-	-			-	TP21-42-04 BTEX F1-F4
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.00		-	-	-	-	-	-	-			-	TP21-42-05 BTEX F1-F4
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								-	-	-	-				
3											-	-	-	-				

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 18, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-43

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 19, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300	400	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, loose.	SW		0.00	GS												TP21-43-01 BTEX F1-F4
			- 0.50 to 0.60 m: trace peat																
			(SM) SILTY SAND, some gravel; grey and light brown; non-cohesive, moist, compact.	SM		0.70													TP21-43-05 BTEX F1-F4
			End of hole at 1.50 m. Target depth. Backfilled with test pit material.																
2																			
3																			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 19, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-44

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 16, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS					100 200 300 400			
			(SW) organic SAND, well graded, some gravel; very dark brown and grey, organic odour; non-cohesive, moist, compact.			0.70									
			(SW) organic SAND, well graded, some gravel; very dark brown and grey, organic odour; non-cohesive, moist, compact.			1.00									
			(SW) SAND, well graded, some gravel; grey, organic odour; non-cohesive, moist, compact.			1.20									
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.											TP21-44-06 BTEX F1-F4	
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-45

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 15, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv		
1	CAT 322	Mechanical Excavation	(SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW	[Strata Plot: Sand & Gravel]	0.00	GS								TP21-45-03 BTEX F1-F4	
			(PT) PEAT; dark brown, organic odour; non-cohesive, moist.	PT	[Strata Plot: Peat]	0.50						TP21-45-04 BTEX F1-F4				
			(SW-SM) SAND, well graded, some fines; grey; non-cohesive, wet, compact.	SW-SM	[Strata Plot: Sand with fines]	0.90										
2			End of hole at 1.20 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

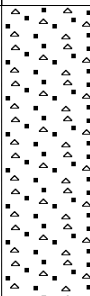
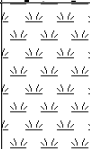
REV: A
 DATE: Aug 15, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-46

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 15, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
	CAT 322	Mechanical Excavation	(SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose, Steel debris.	SW		0.00	GS									
			(PT) PEAT, some fines; dark brown, organic odour; non-cohesive, moist, soft, Steel debris.	PT		0.60										
1			End of hole at 0.90 m. Target depth. Backfilled with test pit material.													
2																
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 15, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-47

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 15, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv						
1	CAT 322	Mechanical Excavation	(SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW	[Strata Plot: Sand & Gravel]	0.00	GS					100	200	300	400	TP21-47-01 BTEX F1-F4		
			(PT) PEAT; dark brown, organic odour; non-cohesive, moist, soft.	PT	[Strata Plot: Peat]	0.70						100	200	300	400			TP21-47-04 BTEX F1-F4
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, dense.	SW	[Strata Plot: Sand & Gravel]	1.00						100	200	300	400			
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								100	200	300	400	TP21-47-06 BTEX F1-F4			
3											100	200	300	400				

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



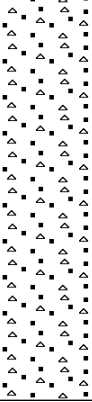
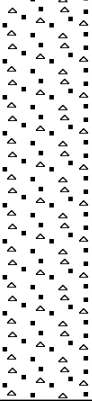


DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 15, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-48

CLIENT: Shell Canada Limited	DATE: August 16, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS				
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-100	-200			-300	-400		
			FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00														
			(SW-SM) SAND, well graded, some gravel, some fines; light grey; non-cohesive, moist, compact.	SW-SM		0.60														TP21-48-02 BTEX F1-F4
			(SW) organic SAND, well graded, some gravel; grey mottled pale brown, organic odour; non-cohesive, moist, compact.	SW		0.70			GS											TP21-48-04 BTEX F1-F4
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, dense.	SW		1.20														TP21-48-05 BTEX F1-F4
			End of hole at 1.50 m. Target depth. Backfilled with test pit material.																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 16, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-49

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 19, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv							
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, loose.	SW		0.00	GS												
			(SM) SILTY SAND, some gravel; grey and light brown; non-cohesive, moist, compact. - 1.00 to 1.20 m: some peat	SM		0.90													
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.																
3																			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 19, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-50

CLIENT: Shell Canada Limited	DATE: August 18, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW	[Strata Plot: SW]	0.00	CS								TP21-50-02 BTEX F1-F4		
			(SM) organic gravelly SILTY SAND; brown and blackish grey, organic odour; non-cohesive, moist, loose.	SM	[Strata Plot: SM]	0.70											Dup G TP21-50-04 BTEX F1-F4 BTEX F1-F4
			(SM) organic gravelly SILTY SAND; brown and blackish grey, organic odour; non-cohesive, moist, loose.			0.75											
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.00											
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.											TP21-50-06 BTEX F1-F4			
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 18, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-51

CLIENT: Shell Canada Limited	DATE: August 23, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	GS					100			TP21-51-01 BTEX F1-F4				
			(SW-SM) organic SAND, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	SW-SM	[Strata Plot]	1.00		1										200	
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot]	1.20		1									300		
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.									400			TP21-51-06 BTEX F1-F4				
3																			

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 23, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-52

CLIENT: Shell Canada Limited	DATE: August 23, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	GS					100	200	300	400	TP21-52-01 BTEX F1-F4	
			(SW-SM) organic SAND, well graded, some fines; dark brown and black, hydrocarbon odour; non-cohesive, moist, compact.	SW-SM	[Strata Plot]	1.00		1								TP21-52-03 BTEX F1-F4	
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot]	1.20		1									DUP Y TP21-52-05 BTEX F1-F4 BTEX F1-F4
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.									1	2	3	4		
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV: A
DATE: Aug 23, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-53

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	GS					100	200	300	400	TP21-53-01 BTEX F1-F4	
			(SW-SM) organic SAND, well graded, some fines; dark brown and black, hydrocarbon odour; non-cohesive, moist, compact. - 1.00 m: Foam Insulation	SW-SM	[Strata Plot]	1.00						100				TP21-53-03 BTEX F1-F4	
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot]	1.20											TP21-53-05 BTEX F1-F4
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV: A
DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-54

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS					100			TP21-54-04 BTEX F1-F4	
			- 0.50 m: Foam Insulation													
			(SW-SM) organic SAND, well graded, some fines; dark brown and black; non-cohesive, moist, compact.			SW-SM		1.00								
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	1.20											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.											TP21-54-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:
A

DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-55

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300	400
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS									TP21-55-02 BTEX F1-F4 DUP-Z TP21-55-03 BTEX F1-F4 BTEX F1-F4		
			- 0.50 m: Trace Foam															
			(SW-SM) organic SAND, well graded, some fines; dark brown and black, organic odour; non-cohesive, moist, compact.			SW-SM		1.00										
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		1.20												
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.															
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:
A

DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-56

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS					100			TP21-56-01 BTEX F1-F4			
			- 0.50 m: Trace Foam															
			(SW-SM) organic SAND, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	SW-SM	0.80													
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	1.00													
End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-56-06 BTEX F1-F4				
2																		
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 24, 2021
DATE: Feb 15, 2022

REV: A

RECORD OF TEST PIT: TP21-57

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	GS				-	-	-	-	TP21-57-03 BTEX F1-F4	
			(SW-SM) organic SAND, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	SW-SM	[Strata Plot]	0.80		-	-	-	-					
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot]	1.00		-	-	-	-	TP21-57-05 BTEX F1-F4				
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.							-	-		-	-		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 24, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-58

CLIENT: Shell Canada Limited	DATE: August 27, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300	400
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	CS					-					TP21-58-01 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.90						-						TP21-58-03 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.00						-						
2			End of hole at 2.00 m. Refusal due to permafrost. Backfilled with test pit material.									-					TP21-58-06 BTEX F1-F4	
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 27, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-59

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 22, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown, organic odour; non-cohesive, dry, very loose.	SW		0.00	GS				-	-	-	-	TP21-59-01 BTEX F1-F4		
			FILL - (SW) SAND and GRAVEL, well graded; dark grey, organic odour; non-cohesive, moist, loose.			0.30					-	-	-	-			TP21-59-03 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.			1.00					-	-	-	-			
2			End of hole at 1.50 m. Backfilled with test pit material.							-	-	-	-	TP21-59-06 BTEX F1-F4			
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 22, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-60

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 22, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) gravelly SAND, well graded; brown, organic odour; non-cohesive, dry, very loose.	SW		0.00	CS				-	-	-	-	TP21-60-02 BTEX F1-F4	
			(SW) organic gravelly SAND, well graded; dark brown and grey, organic odour; non-cohesive, moist, compact.			0.70		-	-	-	-	TP21-60-04 BTEX F1-F4				
			(SW) SAND, well graded, some gravel, trace organics; grey; non-cohesive, moist, compact.			1.00		-	-	-	-					
2			End of hole at 1.30 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-	-	Dup S TP21-60-06 BTEX F1-F4 BTEX F1-F4		
3										-	-	-	-			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 22, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-61

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 22, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
0	CAT 322	Mechanical Excavation	(SM) organic SILTY SAND; black, organic odour; non-cohesive, moist, roots.	SM	[Strata Plot]	0.00	GS					I				
0.30			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-61-02 BTEX F1-F4
1																
2																
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:

A

DATE: Aug 22, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-62

CLIENT: Shell Canada Limited	DATE: August 22, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS				
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300	400	
	CAT 322	Mechanical Excavation	(SW) organic SAND, well graded, some gravel; black, organic odour; non-cohesive, moist, very loose.	SW		0.00	GS												
			(SW) gravelly SAND, well graded, trace organics; brown and grey, organic odour; non-cohesive, moist, compact. - 0.30 to 0.50 m: Peat			0.30													
			End of hole at 0.80 m. Refusal due to permafrost. Backfilled with test pit material.																TP21-62-04 BTEX F1-F4
1																			
2																			
3																			

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 22, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-63

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 22, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) gravelly SAND, well graded; brown, organic odour; non-cohesive, dry, very loose.	SW	▲▲▲▲▲	0.00	GS					100			TP21-63-01 BTEX F1-F4	
			(PT) SANDY PEAT; dark brown, organic odour; non-cohesive, moist, compact. - 0.70 to 1.00 m: Peat	PT	▽▽▽▽▽	0.70						200		Dup U TP21-63-03 BTEX F1-F4 BTEX F1-F4		
			(SW) gravelly SAND, well graded, trace organics; brown and grey; non-cohesive, moist, compact.	SW	▲▲▲▲▲	1.00						300				
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.									400				
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 22, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-64

CLIENT: Shell Canada Limited	DATE: August 22, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE	SOIL SAMPLE	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown, organic odour; non-cohesive, dry, very loose.	SW		0.00	GS					-					-	TP21-64-01 BTEX F1-F4
			FILL - (SW) SAND and GRAVEL, well graded; light brown, organic odour; non-cohesive, dry, very loose.			0.40		-				-	TP21-64-03 BTEX F1-F4					
			(SW) gravelly SAND, well graded, trace organics; brown and grey; non-cohesive, moist, compact.			1.00		-				-						
2			End of hole at 1.50 m. Backfilled with test pit material.									-					TP21-64-06 BTEX F1-F4	
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A

DATE: Aug 22, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-65

CLIENT: Shell Canada Limited	DATE: August 28, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS				
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				100	200	300	400
	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black, hydrocarbon odour; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	CS					-					TP21-65-01 BTEX F1-F4		
1			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot]	0.90		-											TP21-65-03 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot]	1.00		-											
2	End of hole at 2.00 m. Refusal due to permafrost. Backfilled with test pit material.											-					TP21-65-06 BTEX F1-F4		
3																			

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 28, 2021
DATE: Feb 15, 2022

REV: A

RECORD OF TEST PIT: TP21-66

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black, hydrocarbon odour; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS									TP21-66-01 BTEX F1-F4, Metals, Sulphates, Nitrates	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.70						TP21-66-03 BTEX F1-F4, Metals, Sulphates, Nitrates					
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.80											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-66-06 BTEX F1-F4, Metals, Sulphates, Nitrates		
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: A
 DATE: Aug 28, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-67

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	▲▲▲	0.00	GS								TP21-67-02 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black, organic odour; non-cohesive, moist, compact.	PT	↓↓↓	0.60						TP21-67-04 BTEX F1-F4				
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	▲▲▲	0.80										
- 1.00 m: Trace Foam														DUP JJ TP21-67-06 BTEX F1-F4 BTEX F1-F4		
			End of hole at 1.40 m. Refusal due to permafrost. Backfilled with test pit material.													
2																
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 28, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-68

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: August 28, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: Sand and Gravel]	0.00	GS					100	200	300	400	TP21-68-04 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: Peat]	0.90											
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact. - 1.00 m: Trace Foam	SW	[Strata Plot: Sand]	1.00											
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-68-06 BTEX F1-F4		
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width

LOGGED: AB

DATE: Aug 28, 2021

CHECKED: AB/CM

DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-69

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS					100				TP21-69-03 BTEX F1-F4
			- 0.50 to 0.70 m: Trace Foam								200					
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.			PT		0.70				300				
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.90						400				
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.									100				TP21-69-06 BTEX F1-F4
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 28, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-70

CLIENT: Shell Canada Limited	DATE: August 28, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW Sand and Gravel]	0.00	GS									TP21-70-03 BTEX F1-F4 TP21-70-04 BTEX F1-F4	
			- 0.50 m: Trace Foam														
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: Sandy Peat]	0.70											
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW Sand]	0.90											
			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													DUP-KK TP21-70-06 BTEX F1-F4 BTEX F1-F4	
2																	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 28, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-71

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS									
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.80										
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		1.00										
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-71-06 BTEX F1-F4
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 28, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-72

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv						
0.00	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS								TP21-72-03 BTEX F1-F4			
0.90			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.90												TP21-72-05 BTEX F1-F4
1.00			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact. - 1.00 m: Trace wood debris	SW		1.00												
1.70			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV:
 A

DATE: Aug 28, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-73

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: August 18, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
PROJECT NO: 20368099-6000-1001	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83
LOCATION: Camp Farewell		

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-100	-200			-300	-400
1	CAT 322 Mechanical Excavation		FILL - (SW) SAND and GRAVEL, well graded; light brown and dark brown, organic odour; non-cohesive, moist, loose. - 0.50 m: Trace foam, trace liner	SW		0.00					-					TP21-73-02 BTEX F1-F4		
			(SM) organic gravelly SILTY SAND; brown and blackish grey, organic odour; non-cohesive, moist, loose. - 0.80 to 0.90 m: Peat	SM		0.70	GS					-					TP21-73-04 BTEX F1-F4	
			(SW) SAND, well graded, some gravel; grey and brown; non-cohesive, moist, compact.	SW		1.00						-					TP21-73-05 BTEX F1-F4	
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.										-					
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:
A

DATE: Aug 18, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-74

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 17, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW	[Strata Plot: SW]	0.00	GS					100			Dup-F TP21-74-03 BTEX F1-F4 BTEX F1-F4, Metals, Sulphates, Nitrates		
			(SM) organic SILTY SAND, some gravel; grey and black; non-cohesive, moist, compact.	SM	[Strata Plot: SM]	1.00		100									TP21-74-05 BTEX F1-F4, Metals, Sulphates, Nitrates
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, moist, dense.	SW	[Strata Plot: SW]	1.20											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



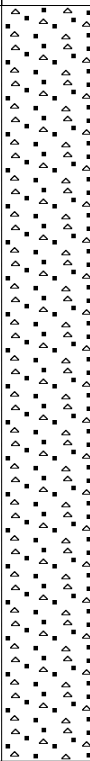
DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 17, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-75

CLIENT: Shell Canada Limited	DATE: August 16, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322 Mechanical Excavation		FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS									
			(SW) SAND, well graded, some gravel; grey; non-cohesive, moist, dense.			1.20										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													TP21-75-06 BTEX F1-F4
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 16, 2021
DATE: Feb 15, 2022

REV: A

RECORD OF TEST PIT: TP21-76

CLIENT: Shell Canada Limited	DATE: August 15, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, dry, loose.	SW	[Strata Plot]	0.00	GS					100	200	300	400	TP21-76-02 BTEX F1-F4		
			FILL - (SW-SM) SAND and GRAVEL, well graded, some fines; dark brown; non-cohesive, moist, compact.	SW-SM	[Strata Plot]	0.65						100						TP21-76-04 BTEX F1-F4
			(SW) SAND, well graded; grey; non-cohesive, wet, dense.	SW	[Strata Plot]	1.00						100						
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.									100			TP21-76-06 BTEX F1-F4			
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

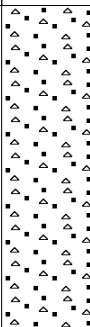



REV: A
DATE: Aug 15, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-77

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 15, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
	CAT 322	Mechanical Excavation	(SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW		0.00	GS									TP21-77-01 BTEX F1-F4	
			(PT) PEAT, some fines; dark brown, organic odour; non-cohesive, moist, soft.	PT		0.65									TP21-77-04 BTEX F1-F4		
			(SW) SAND, well graded; grey; non-cohesive, moist, compact.	SW		0.80											
1			End of hole at 0.90 m. Target depth. Backfilled with test pit material.														
2																	
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 15, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-78

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 15, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW		0.00	GS										
			(PT) SANDY PEAT; very dark brown with reddish brown, organic odour; non-cohesive, moist, compact.	PT		0.55											TP21-78-01 BTEX F1-F4
			(SM) SILTY SAND; grey; non-cohesive, moist, compact.	SM		0.75											TP21-78-04 BTEX F1-F4
			End of hole at 1.00 m. Target depth. Backfilled with test pit material.														
2																	
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 15, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-79

CLIENT: Shell Canada Limited	DATE: August 15, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown; non-cohesive, dry, dense.	SW		0.00	GS					100			TP21-79-03 BTEX F1-F4	
			(SW) SAND, well graded, trace gravel; grey; non-cohesive, moist, dense.			0.80						200				
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 15, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-80

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

START DATE: August 16, 2021
 END DATE: September 03, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE	SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS										TP21-80-01 BTEX F1-F4
			- 1.00 m: black staining														
			(SW) organic SAND, well graded, some gravel; grey, organic odour; non-cohesive, moist, dense.			1.20											TP21-80-05 BTEX F1-F4
			End of hole at 1.50 m. Target depth. Permafrost at bottom of test pit. Backfilled with test pit material.														TP21-80-06 BTEX F1-F4
2																	
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-81

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 17, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose. - 0.70 m: trace cobbles	SW		0.00	GS										TP21-81-01 BTEX F1-F4	
			(SM) organic SILTY SAND, some gravel; grey and black; non-cohesive, moist, compact.	SM		1.00												TP21-81-03 BTEX F1-F4
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, moist, dense.	SW		1.30												
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-81-06 BTEX F1-F4	
3																		

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 17, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-82

CLIENT: Shell Canada Limited	DATE: August 18, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown dark, organic odour; non-cohesive, moist, loose.	SW	[Strata Plot: SW]	0.00	GS								TP21-82-03 BTEX F1-F4	
			(SM) organic SILTY SAND, and fines, some gravel; grey; non-cohesive, moist, loose. - 0.80 m: Trace wood debris	SM	[Strata Plot: SM]	0.60						TP21-82-04 BTEX F1-F4				
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.00										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.												Dup H TP21-82-06 BTEX F1-F4 BTEX F1-F4	
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:
A

DATE: Aug 18, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-83

CLIENT: Shell Canada Limited	DATE: August 28, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300	400
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: Sand & Gravel]	0.00	GS									TP21-83-04 BTEX F1-F4		
			(PT) SANDY PEAT, well graded, some fines; dark brown and black, organic odour; non-cohesive, moist, compact.	PT	[Strata Plot: Peat]	0.90												TP21-83-05 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact. - 1.00 to 1.60 m: Wood Piling	SW	[Strata Plot: Sand]	1.00												
2			End of hole at 1.60 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-83-06 BTEX F1-F4			
3																		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width

LOGGED: AB

DATE: Aug 28, 2021

CHECKED: AB/CM

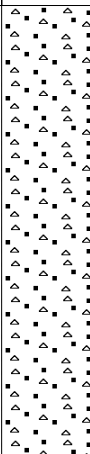

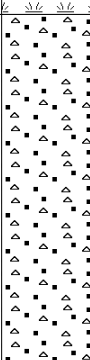
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-84

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS									TP21-84-03 BTEX F1-F4 TP21-84-04 BTEX F1-F4 DUP-LL TP21-84-05 BTEX F1-F4 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.90											
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		1.00											
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV:
A

DATE: Aug 28, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-85

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS					100 200 300 400		TP21-85-03 BTEX F1-F4		
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.70								TP21-85-04 BTEX F1-F4		
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.90								TP21-85-05 BTEX F1-F4		
2			End of hole at 1.60 m. Refusal due to permafrost. Backfilled with test pit material.													
			3													

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV: **A**

wsp GOLDER

DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 28, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-86

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 28, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS								TP21-86-03 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.70										
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.90										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.											TP21-86-06 BTEX F1-F4		
			3													

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV: A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 28, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-87

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 29, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv							
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: Sand & Gravel]	0.00	GS					100							
			(PT) SANDY PEAT, well graded, some fines; dark brown and black, organic odour; non-cohesive, moist, compact.	PT	[Strata Plot: Peat]	0.70						200							TP21-87-04 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: Sand]	1.00						300							
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.									400					TP21-87-06 BTEX F1-F4		
3																			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: A
 DATE: Aug 29, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-88

CLIENT: Shell Canada Limited	DATE: August 29, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS									TP21-88-03 BTEX F1-F4 TP21-88-04 BTEX F1-F4 TP21-88-05 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.70											
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.80											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 29, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-89

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 29, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS					100			TP21-89-03 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black, organic odour; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.70		200								
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.90		300								
2			End of hole at 1.40 m. Refusal due to permafrost. Backfilled with test pit material.								400			TP21-89-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 29, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-90

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 29, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: Sand & Gravel]	0.00	GS									TP21-90-02 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: Peat]	0.70						TP21-90-04 BTEX F1-F4					
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: Sand]	0.90											
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.												DUP-MM TP21-90-06 BTEX F1-F4 BTEX F1-F4		
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



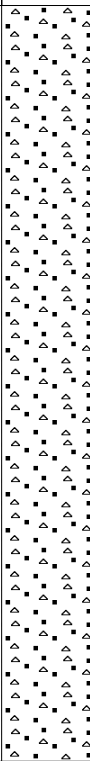
DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: A

DATE: Aug 29, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-91

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, dry, very loose.	SW		0.00	GS					-	-	-	-	TP21-91-02 BTEX F1-F4, Metals, Sulphates, Nitrates TP21-91-04 BTEX F1-F4, Metals, Sulphates, Nitrates	
			(SW) gravelly SAND, well graded; brown and grey; non-cohesive, dry, compact.			1.00		-	-	-	-						
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.									-				TP21-91-06 BTEX F1-F4, Metals, Sulphates, Nitrates	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

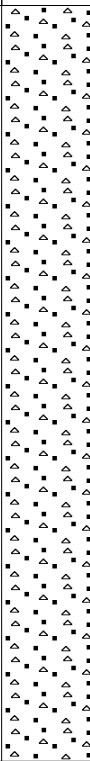


DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:	A
DATE: Aug 21, 2021	
DATE: Feb 15, 2022	

RECORD OF TEST PIT: TP21-92

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, dry, very loose.	SW		0.00	GS									
			(SW) gravelly SAND, well graded; brown and grey; non-cohesive, dry, compact. - 0.60 to 0.80 m: some peat			0.60										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													Dup R TP21-92-06 BTEX F1-F4 BTEX F1-F4
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

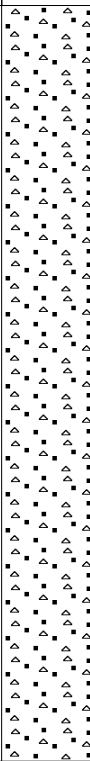
DATE: Aug 21, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-93

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS				
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300	400	
1	CAT 322 Mechanical Excavation		FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, dry, very loose.	SW		0.00	GS												
		(SW) gravelly SAND, well graded; brown and grey; non-cohesive, dry, compact.	0.30																TP21-93-02 BTEX F1-F4
		(SW) organic SAND, well graded, some gravel; dark brown and grey, organic odour; non-cohesive, moist, compact. - 1.00 to 1.30 m: some peat	1.00																TP21-93-04 BTEX F1-F4
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-93-06 BTEX F1-F4		
3																			

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 21, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-94

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose. - 0.00 to 0.40 m: Roots	SW		0.00	GS										TP21-94-01 BTEX F1-F4
			(SW) gravelly SAND, well graded; brown; non-cohesive, dry, compact. - 0.40 to 0.50 m: some peat			0.40											TP21-94-03 BTEX F1-F4
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 21, 2021
DATE: Feb 15, 2022

REV:

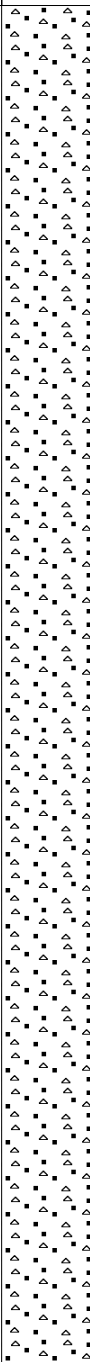
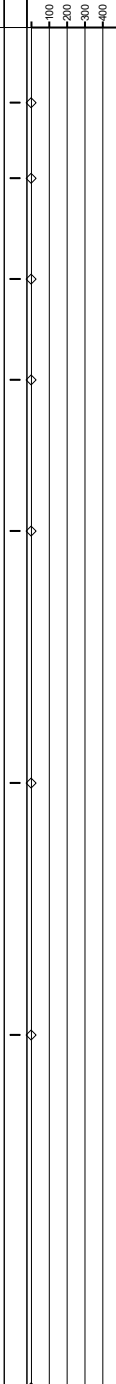
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RECORD OF TEST PIT: TP21-95

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 21, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS				
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv								
1	CAT 322 Mechanical Excavation		FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	CS										TP21-95-01 BTEX F1-F4 Dup Q TP21-95-03 BTEX F1-F4 BTEX F1-F4 TP21-95-06 BTEX F1-F4			
2			- 2.00 to 2.70 m: Wet																	
3			End of hole at 2.70 m. Refusal due to permafrost. Backfilled with test pit material.																	TP21-95-08 BTEX F1-F4

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 21, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-96

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, dry, very loose.	SW		0.00	GS										TP21-96-01 BTEX F1-F4
			(SW) gravelly SAND, well graded; brown; non-cohesive, dry, compact.			0.60											
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV:
A

DATE: Aug 21, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-97

CLIENT: Shell Canada Limited	DATE: August 29, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	▲▲▲▲▲	0.00	GS					100				
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	▽▽▽▽▽	0.20						200				TP21-97-02 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	▲▲▲▲▲	0.50						300				TP21-97-04 BTEX F1-F4
2			End of hole at 1.40 m. Refusal due to permafrost. Backfilled with test pit material.									400				TP21-97-06 BTEX F1-F4
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV: A
DATE: Aug 29, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-98

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 29, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS									
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.50										TP21-98-03 BTEX F1-F4
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.70										TP21-98-04 BTEX F1-F4
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 29, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-99

CLIENT: Shell Canada Limited	DATE: August 29, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS				
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv								
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS													
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.30														
			(SW) SAND, well graded, trace organics; brownish grey; non-cohesive, moist, compact.	SW		0.50														
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.																TP21-99-06 BTEX F1-F4	
3																				

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 29, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-100

CLIENT: Shell Canada Limited DATE: August 29, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW		0.00	GS									TP21-100-01 BTEX F1-F4
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT		0.60									TP21-100-03 BTEX F1-F4	
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW		0.80										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-100-06 BTEX F1-F4
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: A
 DATE: Aug 29, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-101

CLIENT: Shell Canada Limited DATE: August 29, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300	400
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS					-	-	-	-	TP21-101-01 BTEX F1-F4		
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.80						-	-	-	-	TP21-101-04 BTEX F1-F4		
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.90						-	-	-	-	TP21-101-05 BTEX F1-F4		
2			End of hole at 1.60 m. Refusal due to permafrost. Backfilled with test pit material.										-	-	-	-		
3												-	-	-	-			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 29, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-102

CLIENT: Shell Canada Limited	DATE: August 29, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	Hexane ppmv	Hexane ppmv			Hexane ppmv
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS					100	200	300	400	TP21-102-03 BTEX F1-F4	
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT]	0.90											
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.00											
2			End of hole at 1.60 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

DATE: Aug 29, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-103

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 29, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv						
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; black; non-cohesive, moist, very loose.	SW	[Strata Plot: SW Sand and Gravel]	0.00	GS					100	200	300	400	TP21-103-02 BTEX F1-F4		
			(PT) SANDY PEAT, well graded, some fines; dark brown and black; non-cohesive, moist, compact.	PT	[Strata Plot: PT Sandy Peat]	0.90												
			(SW) SAND, well graded, trace organics; grey; non-cohesive, moist, compact.	SW	[Strata Plot: SW Sand]	1.00												
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-103-06 BTEX F1-F4			
3																		

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

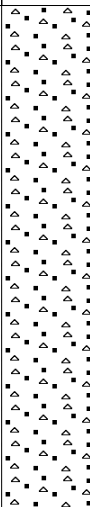
DATE: Aug 29, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-104

CLIENT: Shell Canada Limited	DATE: August 31, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS					100		TP21-104-01 BTEX F1-F4 Dup NN TP21-104-03 BTEX F1-F4 BTEX F1-F4		
			(SW) SAND, well graded, trace organics; brown; non-cohesive, moist, compact.			1.00		100					TP21-104-05 BTEX F1-F4			
			(SW-SM) SAND, well graded, some fines; grey; non-cohesive, moist, compact.			1.30		SW-SM								
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.											TP21-104-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

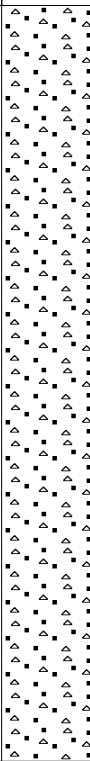

REV: A
DATE: Aug 31, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-106

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 16, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded, trace organics; very dark brown and light brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS								TP21-106-02 BTEX F1-F4	
			- 0.80 to 1.10 m: silty sand			1.20										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.											TP21-106-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:

A

DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-107

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 16, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS									
			- 0.70 m: trace cobbles			1.20										
2			(SW) SAND, well graded, some gravel; grey, organic odour; 5% by volume cobbles/boulders; non-cohesive, moist, dense.													
3			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-108

CLIENT: Shell Canada Limited	DATE: August 15, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown; non-cohesive, dry, dense.	SW		0.00	GS									TP21-108-02 BTEX F1-F4	
			(SW) SAND, well graded, trace gravel; grey; non-cohesive, moist, dense.			0.90											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-108-06 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 15, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-109

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 15, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83
 HOLE LOC: Large steel debris present

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv						
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW	[Strata Plot: SW]	0.00	GS					100				TP21-109-02 BTEX F1-F4		
			(SM) organic SILTY SAND; black; non-cohesive, moist, loose.	SM	[Strata Plot: SM]	0.70						200						TP21-109-04 BTEX F1-F4
			(SW-SM) SAND, well graded, some fines; brown and grey, sensitive; non-cohesive, moist, compact.	SW-SM	[Strata Plot: SW-SM]	0.90						300						
			(SW-SM) SAND, well graded, some fines; brown; non-cohesive, moist, compact.			1.20						400						
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.												TP21-109-06 BTEX F1-F4			
3																		

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 15, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-110

CLIENT: Shell Canada Limited	DATE: August 15, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW		0.00	GS					-	-	-	-	TP21-110-02 BTEX F1-F4	
			(SW) SAND, well graded, trace gravel; brown; non-cohesive, moist, compact.			0.80						-	-	-	-		
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.									-	-	-	-	TP21-110-06 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 15, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-111

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 15, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown; non-cohesive, dry, dense.	SW		0.00	GS					-	-	-	-	TP21-111-03 BTEX F1-F4	TP21-111-04 BTEX F1-F4
			(SW) SAND, well graded, trace gravel; grey; non-cohesive, moist, compact.			0.90						-	-	-	-		
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 15, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-112

CLIENT: Shell Canada Limited	DATE: August 16, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; very dark brown, organic odour; non-cohesive, moist, loose. - 0.70 m: trace cobbles	SW		0.00	GS					100	200	300	400	TP21-112-02 BTEX F1-F4 TP21-112-04 BTEX F1-F4	
			(SW) SAND, well graded, some gravel; grey, organic odour; 5% by volume cobbles/boulders; non-cohesive, moist, dense.			1.20											
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													Dup C TP21-112-06 BTEX F1-F4 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 16, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-113

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 16, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded, trace organics; very dark brown and light brown, organic odour; non-cohesive, moist, loose.	SW		0.00	GS											TP21-113-01 BTEX F1-F4	
			(SW) SAND, well graded, some gravel; grey, organic odour; non-cohesive, moist, dense.			1.20													
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.																
3																			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

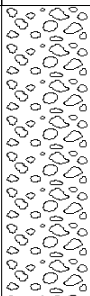
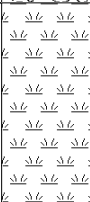
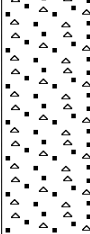


DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: **A**
 DATE: Aug 16, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-114

CLIENT: Shell Canada Limited DATE: August 19, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (GP) GRAVEL and SAND, poorly graded; very dark brown dark; non-cohesive, moist, loose.	GP		0.00	GS				-	-	-	-	TP21-114-01 BTEX F1-F4		
			(PT) SANDY PEAT; very dark brown and greyish brown, organic odour; non-cohesive, moist, loose.	PT		0.60					-	-	-	-			TP21-114-04 BTEX F1-F4
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact.	SW		1.00					-	-	-	-			
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.							-	-	-	-	TP21-114-06 BTEX F1-F4			
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: DD
 CHECKED: AB/CM

DATE: Aug 19, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-115

CLIENT: Shell Canada Limited	DATE: August 30, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS									TP21-115-01 BTEX F1-F4
			(SW) SAND, well graded, trace organics; brown; non-cohesive, moist, compact.			1.00							TP21-115-03 BTEX F1-F4			
			(SW-SM) SAND, well graded, some fines; grey; non-cohesive, moist, compact.			1.40						TP21-115-05 BTEX F1-F4				
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width

LOGGED: PT

CHECKED: AB/CM

REV: <b style="font-size: 1.5em;">A
DATE: Aug 30, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-116

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 30, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS					100				TP21-116-02 BTEX F1-F4
			(SW) SAND, well graded, some gravel, trace organics; brown to dark brown; non-cohesive, moist, compact.			0.60						200				
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.			0.90						300				
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								400				TP21-116-04 BTEX F1-F4	
3															TP21-116-06 BTEX F1-F4	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 30, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-117

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS					-	-	-	-	TP21-117-01 BTEX F1-F4 Dup 00 TP21-117-03 BTEX F1-F4 BTEX F1-F4, Metals, Sulphates, Nitrates	
			(SW) SAND, well graded, some gravel, trace organics; brown to dark brown; non-cohesive, moist, compact. - 0.60 to 0.70 m: some peat			0.50						-	-	-			
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.			0.90						-	-	-	TP21-117-05 BTEX F1-F4, Metals, Sulphates, Nitrates		
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 31, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-118

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-118-02 BTEX F1-F4	
			(SW) SAND, well graded, some gravel, trace organics; brown to dark brown; non-cohesive, moist, compact.			0.50					-	-	-	-		
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.	0.80	SW-SM						-	-	-	-		
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								-	-	-	Dup PP TP21-118-06 BTEX F1-F4 BTEX F1-F4		
3											-	-	-			

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:
A

DATE: Aug 31, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-119

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS					-	-	-	-	TP21-119-01 BTEX F1-F4
			(SW) SAND, well graded, some gravel, trace organics; brown to dark brown; non-cohesive, moist, compact.			0.50						-	-	-	Dup QQ TP21-119-03 BTEX F1-F4 BTEX F1-F4	
			(SW-SM) SAND, well graded, some fines; brown and grey, iron oxide staining; non-cohesive, moist, compact.			0.90						-	-	-		
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.								-					
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 31, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-120

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, very loose.	SW		0.00	GS								
			(SW) SAND, well graded, some gravel, trace organics; brown to dark brown; non-cohesive, moist, compact.			0.30									
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.			0.90									
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.												
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 31, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-121

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour, non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS					100			TP21-121-01 BTEX F1-F4	
			(SW) SAND, well graded, some gravel, trace organics; brown to dark brown; non-cohesive, moist, compact.			0.50					200		TP21-121-03 BTEX F1-F4			
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.	SW-SM	1.00					300		Dup SS TP21-121-05 BTEX F1-F4 BTEX F1-F4				
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.								400					
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 31, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-122

CLIENT: Shell Canada Limited	DATE: August 31, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour, non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-122-02 BTEX F1-F4	
			(SW) SAND, well graded, some gravel, trace organics; brown to dark brown; non-cohesive, moist, compact. - 0.60 m: Trace Foam			0.60					-	-	-	-		
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.	1.00	SW-SM						-	-	-	-		
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.								-	-	-	-	Dup TT TP21-122-06 BTEX F1-F4 BTEX F1-F4	
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 31, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-123

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 21, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose.	SW		0.00	GS									
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, dry, compact.			0.30										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:

A

DATE: Aug 21, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-124

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose.	SW		0.00	GS									
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, dry, compact. - 0.20 to 0.30 m: some peat			0.20										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													TP21-124-06 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



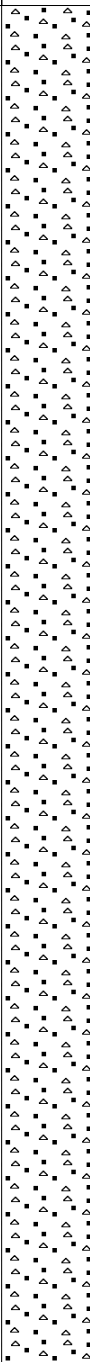
DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: **A**
DATE: Aug 21, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-125

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORIZ DATUM: NAD83
		HOLE LOC: Relocated due to steep ridge

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-100	-200			-300	-400
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose. - 0.00 to 0.30 m: Dark Brown	SW		0.00	CS										TP21-125-02 BTEX F1-F4	
2			- 1.50 to 2.50 m: coarse sand, wet			Dup P TP21-125-04 BTEX F1-F4 BTEX F1-F4											TP21-125-05 BTEX F1-F4	
3			End of hole at 2.70 m. Refusal due to permafrost. Backfilled with test pit material.															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 21, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-126

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 21, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83
 HOLE LOC: Relocated due to steep ridge

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose, roots.	SW		0.00	GS				-	-					TP21-126-02 BTEX F1-F4
			(SW) organic SAND, well graded, some gravel; very dark brown and grey; non-cohesive, dry, loose.			0.20						-					
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, dry, compact.			0.50						-					
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.							-	-						TP21-126-06 BTEX F1-F4
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 21, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-127

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 20, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				TPH ppm	
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose.	SW		0.00	GS				I					TP21-127-02 BTEX F1-F4	
			(SW) organic SAND, well graded, some gravel; very dark brown and grey; non-cohesive, moist, compact. - 0.30 to 0.60 m: some peat			0.30					I						
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, moist, compact.			0.60					I				◇		
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.														
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 20, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-128

CLIENT: Shell Canada Limited	DATE: August 20, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS							TP21-128-02 BTEX F1-F4	
			(SW) organic SAND, well graded, some gravel; very dark brown and grey, iron oxide staining; non-cohesive, moist, compact. - 0.40 to 0.70 m: some peat			0.40									
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, moist, compact.			0.70									
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.											TP21-128-06 BTEX F1-F4	
3															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 20, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-129

CLIENT: Shell Canada Limited	DATE: August 31, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour, non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-129-01 BTEX F1-F4, Metals, Sulphates, Nitrates Dup UU TP21-129-03 BTEX F1-F4 BTEX F1-F4, Metals, Sulphates, Nitrates TP21-129-05 BTEX F1-F4, Metals, Sulphates, Nitrates	
			(SW) SAND, well graded, some gravel, trace organics; brown; non-cohesive, moist, compact.			0.30										
			- 0.50 m: Wood Piling													
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.	1.20	SW-SM											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-	-			
3										-	-	-	-			

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 31, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-130

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100	200			300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS									TP21-130-02 BTEX F1-F4	
			(SW-SM) SAND, well graded, some fines; grey, hydrocarbon odour; non-cohesive, moist, compact.	SW-SM	[Strata Plot: SW-SM]	1.00											Dup VV TP21-130-04 BTEX F1-F4 BTEX F1-F4
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-130-06 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 31, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-131

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour, non-cohesive, moist, very loose.	SW		0.00	GS										TP21-131-01 BTEX F1-F4
			- 0.60 m: trace plastic and steel debris														
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.	SW-SM		1.20											TP21-131-04 BTEX F1-F4
			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-131-05 BTEX F1-F4
2																	
3																	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 31, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-132

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 31, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, very loose.	SW		0.00	GS										TP21-132-01 BTEX F1-F4
			(SW) organic SAND, well graded, some gravel; brown and dark brown, organic odour; non-cohesive, moist, compact.			0.50											TP21-132-03 BTEX F1-F4
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.			0.80											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-132-06 BTEX F1-F4
			3														

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 31, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-133

CLIENT: Shell Canada Limited	DATE: August 31, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100			200	300
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, very loose.	SW		0.00	GS									TP21-133-02 BTEX F1-F4	
			(SW) organic SAND, well graded, some gravel; brown and dark brown, organic odour; non-cohesive, moist, compact.			0.40											
			(SW-SM) SAND, well graded, some fines; brown and grey; non-cohesive, moist, compact.	0.80	SW-SM												
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-133-06 BTEX F1-F4		
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 31, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-134

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-134-02 BTEX F1-F4	
			(SW) organic SAND, well graded, some gravel; brown and dark brown, organic odour; non-cohesive, moist, compact.			0.30		-	-	-	-					
			(SW) SAND, well graded; brown and grey; non-cohesive, moist, compact.			0.50		-	-	-	-					
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-	-	Dup XX TP21-134-06 BTEX F1-F4 BTEX F1-F4		
3										-	-	-	-			

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-135

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, organic odour; non-cohesive, moist, very loose.	SW		0.00	GS					100 200 300 400			
			(SW) organic SAND, well graded, some gravel; brown and dark brown, organic odour; non-cohesive, moist, compact.			0.40									
			(SW) SAND, well graded; brown and grey; non-cohesive, moist, compact.			0.60									
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.												
3															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-136

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 19, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS			
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, loose.	SW	[Strata Plot: SW]	0.00	GS											
			(PT) SANDY PEAT; very dark brown and greyish brown, organic odour; non-cohesive, moist, loose.	PT	[Strata Plot: PT]	0.60												
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.90												
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.															
3																		

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: DD
 CHECKED: AB/CM

DATE: Aug 19, 2021
 DATE: Feb 15, 2022

REV: A

RECORD OF TEST PIT: TP21-137

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 19, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				TPH ppm
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; light brown; non-cohesive, moist, loose.	SW	[Strata Plot: SW]	0.00	GS								TP21-137-02 BTEX F1-F4 TP21-137-03 BTEX F1-F4 TP21-137-05 BTEX F1-F4	
			(PT) SANDY PEAT; very dark brown to brown, organic odour; non-cohesive, moist, loose.	PT	[Strata Plot: PT]	0.80										
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	1.00										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 19, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-138

CLIENT: Shell Canada Limited	DATE: August 19, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; light brown; non-cohesive, moist, very loose.	SW	[Strata Plot: SW]	0.00	GS								TP21-138-01 BTEX F1-F4		
			(PT) SANDY PEAT; very dark brown to brown, organic odour; non-cohesive, moist, loose.	PT	[Strata Plot: PT]	0.50											TP21-138-03 BTEX F1-F4
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact.	SW	[Strata Plot: SW]	0.80											
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.											Dup K TP21-138-06 BTEX F1-F4 BTEX F1-F4			
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 19, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-139

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 20, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-139-01 BTEX F1-F4	
			FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, loose.			0.40					-	-	-	-		TP21-139-03 BTEX F1-F4
			(SW) SAND, well graded, some gravel; grey and brown; non-cohesive, moist, compact. - 0.70 to 0.80 m: some peat			0.70					-	-	-	-		
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

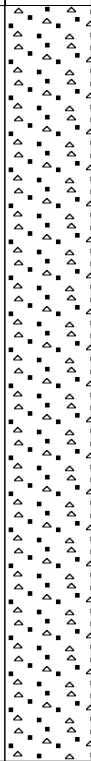
DATE: Aug 20, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-140

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 20, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS									
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact.			0.40										
			- 0.70 to 0.80 m: some peat													TP21-140-02 BTEX F1-F4
			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													TP21-140-06 BTEX F1-F4
2																
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV:

A

DATE: Aug 20, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-141

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 20, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS							TP21-141-02 BTEX F1-F4	
			(SW) organic SAND, well graded, some gravel; very dark brown and orangish brown, iron oxide staining; non-cohesive, moist, compact.			0.40									
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact. - 0.70 to 0.80 m: some peat			0.70									
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.											Dup N TP21-141-06 BTEX F1-F4 BTEX F1-F4	
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 20, 2021
 DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-142

CLIENT: Shell Canada Limited	DATE: August 21, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83
		HOLE LOC: Relocated due to steep ridge

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose, roots, trace cobbles.	SW		0.00	GS									
			(SW) organic SAND, well graded, some gravel; very dark brown and grey; non-cohesive, dry, loose.			0.20										
			(SW) SAND, well graded, some gravel; brown and grey; non-cohesive, dry, compact.			0.50										
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 21, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-143

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 20, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm			
	CAT 322	Mechanical Excavation	(SW) SAND, well graded, some gravel; light brown; non-cohesive, dry, loose. - 0.00 to 0.50 m: Roots	SW		0.00	GS									
			(PT) SANDY PEAT, well graded, some gravel; very dark brown; non-cohesive, moist, compact.	PT		0.60										
1			End of hole at 0.80 m. Target depth. Backfilled with test pit material.													
2																
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 20, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-144

CLIENT: Shell Canada Limited	DATE: August 20, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND, well graded, some gravel; light brown; non-cohesive, dry, loose. - 0.00 to 0.20 m: Roots	SW		0.00	GS								TP21-144-02 BTEX F1-F4	
			(SW) SAND, well graded, some gravel; light brown; non-cohesive, moist, compact.			0.60										TP21-144-04 BTEX F1-F4
			- 0.90 to 1.20 m: some peat													
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:
A

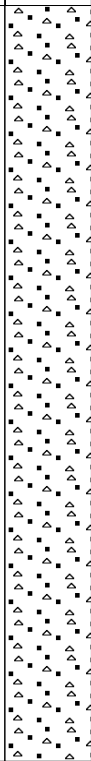


DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 20, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-145

CLIENT: Shell Canada Limited	DATE: August 20, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm				
1	CAT 322	Mechanical Excavation	(SW) SAND and GRAVEL, well graded; brown; non-cohesive, dry, loose.	SW		0.00	GS										
			(SW) SAND, well graded, some gravel; light brown; non-cohesive, moist, compact. - 0.70 to 1.00 m: some peat			0.70											
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													TP21-145-02 BTEX F1-F4	
3																	TP21-145-03 BTEX F1-F4
																	TP21-145-06 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 20, 2021
DATE: Feb 15, 2022


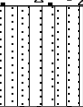

REV:
A

RECORD OF TEST PIT: TP21-146

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 19, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				TPH ppm
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose.	SW		0.00	GS									
			(SW) SAND and GRAVEL, well graded; grey to, hydrocarbon odour; non-cohesive, moist, loose.			0.50										
			(SM) organic SILTY SAND, and fines, some gravel; dark brown and grey, organic odour; non-cohesive, moist, compact.	SM		0.90										
			(SW) SAND, well graded, some gravel; brown and grey, organic odour; non-cohesive, moist, compact.	SW												
2			End of hole at 1.50 m. Target depth. Backfilled with test pit material.													
3																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

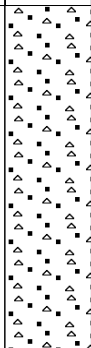
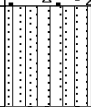
REV:

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DATE: Aug 19, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-147

CLIENT: Shell Canada Limited	DATE: August 19, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm			
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, loose.	SW		0.00	GS								TP21-147-01 BTEX F1-F4	
			FILL - (SW) SAND and GRAVEL, well graded; grey to; non-cohesive, moist, loose.			0.70										
			(SM) organic SILTY SAND, and fines, some gravel; dark brown and grey, organic odour; non-cohesive, moist, compact.	SM		0.90										
			(SW) SAND, well graded, some gravel; brown and grey, organic odour; non-cohesive, moist, compact.	SW		1.10										
End of hole at 1.50 m. Target depth. Backfilled with test pit material.																
2																
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM


REV: A
DATE: Aug 19, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-148

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 12, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
0	CAT 322 Mechanical Excavation		(SW) SAND and GRAVEL, medium, well graded; brown; non-cohesive, dry, very loose.	SW		0.00	GS				I	I	I	TP21-148-02 BTEX F1-F4	
1			End of hole at 0.70 m. Target depth. Backfilled with test pit material.			I					I	I	TP21-148-04 BTEX F1-F4		
2															
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 12, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-149

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

START DATE: August 12, 2021
 END DATE: August 14, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
1	CAT 322	Mechanical Excavation	(SW) SAND, medium, well graded; black, hydrocarbon odour; non-cohesive, moist, loose, Rootlets, some organics.	SW		0.00	GS								TP21-149-02 BTEX F1-F4, Metals, Sulphates, Nitrates
			(SW) SAND, medium to coarse, well graded; brown; non-cohesive, moist, compact.			0.30									
			- 1.50 to 1.70 m: Wet											TP21-149-04 BTEX F1-F4, Metals, Sulphates, Nitrates	
End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.					Dup A TP21-149-05 BTEX F1-F4, Metals, Sulphates, Nitrates BTEX F1-F4, Metals, Sulphates, Nitrates										
2															TP21-149-06 BTEX F1-F4
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

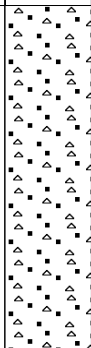


DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 12, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-150

CLIENT: Shell Canada Limited	DATE: August 14, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
	CAT 322	Mechanical Excavation	(SW) SAND, medium, well graded; black; non-cohesive, moist, loose, Rootlets, some peat, some organics.	SW		0.00	GS							TP21-150-02 BTEX F1-F4	
			(SW) SAND, medium to coarse, well graded; brown; non-cohesive, moist, compact.			0.30									
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.											TP21-150-04 BTEX F1-F4	
1															
2															
3															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

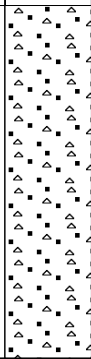
REV:
A
DATE: Aug 14, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-151

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

START DATE: August 12, 2021
 END DATE: August 14, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
	CAT 322 Mechanical Excavation		(SW) SAND, medium, well graded; black; non-cohesive, moist, loose, Rootlets, some organics, trace peat.	SW		0.00	GS				I	I		TP21-151-02 BTEX F1-F4	
		(SW) SAND, medium to coarse, well graded; brown; non-cohesive, moist, compact.	0.30			I					I				
		End of hole at 0.70 m. Target depth. Backfilled with test pit material.				I					I	TP21-151-04 BTEX F1-F4			
1															
2															
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM


REV: A
 DATE: Aug 12, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-152

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 14, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
0.00 - 0.30	CAT 322	Mechanical Excavation	(SW) SAND, medium, well graded; black, hydrocarbon odour; non-cohesive, moist, loose, Rootlets, some peat, some organics.	SW		0.00	GS								
			(SW) SAND, medium to coarse, well graded; brown mottled grey; non-cohesive, moist, compact.			0.30									
1.00			End of hole at 1.00 m. Target depth. Backfilled with test pit material.											TP21-152-02 BTEX F1-F4	
														TP21-152-03 BTEX F1-F4	
														TP21-152-05 BTEX F1-F4	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

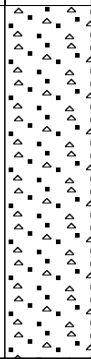


DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 14, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-153

CLIENT: Shell Canada Limited	DATE: August 14, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
	CAT 322 Mechanical Excavation		(SW) SAND, medium, well graded; black; non-cohesive, moist, loose, Rootlets, some peat, some organics.	SW		0.00	GS								
		(SW) SAND, medium to coarse, well graded; brown; non-cohesive, moist, compact.	0.30												
		End of hole at 0.70 m. Target depth. Backfilled with test pit material.													

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

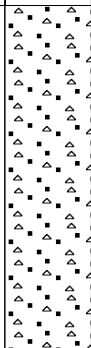


DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 14, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-154

CLIENT: Shell Canada Limited	DATE: August 14, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	ENVIRO DATA			TPH ppm
			(SW) SAND, medium, well graded; black; non-cohesive, moist, loose, Rootlets, some organics.			0.00										
	CAT 322	Mechanical Excavation	(SW) SAND, medium to coarse, well graded; brown; non-cohesive, moist, compact.	SW		0.30	GS									TP21-154-02 BTEX F1-F4
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.													TP21-154-04 BTEX F1-F4
1																
2																
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A





DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 14, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-155

CLIENT: Shell Canada Limited	START DATE: August 12, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell	END DATE: August 14, 2021	
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
	CAT 322	Mechanical Excavation	(SW) SAND, medium, well graded; black; non-cohesive, moist, loose, Rootlets, some organics, trace peat.	SW		0.00									
			(SW) SAND, medium to coarse, well graded; brown; non-cohesive, moist, compact.			0.40	GS								TP21-155-02 BTEX F1-F4
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.												TP21-155-04 BTEX F1-F4
1															
2															
3															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A




DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 12, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-156

CLIENT: Shell Canada Limited DATE: August 12, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS						
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m	-100			-200	-300	-400	-5000000	-10000000	-15000000
	CAT 322	Mechanical Excavation	(SW) SAND, medium, well graded; black; non-cohesive, moist, loose, Rootlets, some organics, trace peat.	SW		0.00	GS														TP21-156-02 BTEX F1-F4	
			(SW) SAND, medium to coarse, well graded; brown and grey; non-cohesive, moist, compact.			0.30																
1			End of hole at 0.70 m. Target depth. Backfilled with test pit material.																		TP21-156-04 BTEX F1-F4	
2																						
3																						

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 12, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-157

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 14, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m		
	CAT 322	Mechanical Excavation	(SW) SAND, medium, well graded, trace gravel; black; non-cohesive, moist, loose, Rootlets, some organics.	SW		0.00	GS								
(SW) SAND, medium to coarse, well graded; brown; non-cohesive, moist, compact.			0.30												
(SM) SILTY SAND, trace gravel; dark brown; non-cohesive, moist, compact.			SM	0.50											
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.											TP21-157-03 BTEX F1-F4	
1															
2															
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 14, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-158

CLIENT: Shell Canada Limited	DATE: August 14, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			ENVIRO DATA	ENVIRO DATA
	CAT 322	Mechanical Excavation	(SW) SAND, medium, well graded, trace gravel; black; non-cohesive, moist, loose, Rootlets, some organics, trace cobbles.	SW		0.00	GS										
			(SW) SAND, medium to coarse, well graded, trace gravel; brown and white; non-cohesive, dry, loose.			0.20											
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.														TP21-158-04 BTEX F1-F4
1																	
2																	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 14, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-159

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

START DATE: August 14, 2021
 END DATE: September 03, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, medium, well graded; black; non-cohesive, moist, very loose, Rootlets, some organics, trace cobbles.	SW	[Strata Plot]	0.00	GS								TP21-159-02 BTEX F1-F4
			(PT) PEAT, medium to coarse,; very dark brown and, organic odour; non-cohesive, moist.	PT	[Strata Plot]	0.50									
	(SW) organic SAND, well graded; grey and black, organic odour; non-cohesive, moist, compact.	SW	[Strata Plot]	0.70									TP21-159-04 BTEX F1-F4		
	(SW) SAND, well graded; grey, organic odour; non-cohesive, moist, compact.			1.00											
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.											TP21-159-06 BTEX F1-F4	
3															

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

DATE: Aug 14, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-160

CLIENT: Shell Canada Limited
PROJECT: Camp Farewell
PROJECT NO: 20368099-6000-1001
LOCATION: Camp Farewell

START DATE: August 14, 2021
END DATE: September 03, 2021
INCLINATION: 90.0°
CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
COORD SYS: UTM Zone 08N
HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY			ENVIRO DATA		ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS												
			DESCRIPTION	USCS	STRA TA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE			SOIL SAMPLE	Hexane	TPH									
														ppmv	ppm									
			FILL - (SW) SAND and GRAVEL, medium, well graded; black, hydrocarbon odour; non-cohesive, moist, very loose, Rootlets, some organics, trace cobbles.			0.00																		
	CAT 322	Mechanical Excavation	(SW) organic SAND, medium to coarse, well graded, some gravel; grey, hydrocarbon odour; non-cohesive, moist, compact.			0.40																		TP21-160-03 BTEX F1-F4
	CAT 322	Mechanical Excavation	(SW) SAND, well graded; grey; non-cohesive, moist, compact.			0.70																		TP21-160-04 BTEX F1-F4
1	CAT 322	Mechanical Excavation	- 1.00 to 2.00 m: Mild hydrocarbon odour	SW																				TP21-160-05 BTEX F1-F4
																								TP21-160-06 BTEX F1-F4
2			End of hole at 2.00 m. Refusal due to permafrost. Backfilled with test pit material.																					TP21-160-07 BTEX F1-F4
3																								

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Aug 14, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-161

CLIENT: Shell Canada Limited	DATE: August 14, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH ppm			ENVIRO DATA
	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, medium, well graded; black; non-cohesive, moist, very loose, Rootlets, some organics, trace cobbles.	SW		0.00	GS									
			(SW) SAND, medium to coarse, well graded, some gravel; grey; non-cohesive, moist, compact.			0.40										
			End of hole at 0.70 m. Target depth. Backfilled with test pit material.													TP21-161-04 BTEX F1-F4
1																
2																
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 14, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-162

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, well graded, some gravel; black, organic odour; non-cohesive, moist, roots.	PT		0.00	GS					I				
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.													DUP-AA TP21-162-02 BTEX F1-F4 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



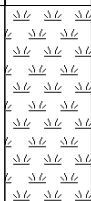
DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:
A

DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-163

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			ENVIRO DATA	ENVIRO DATA
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, well graded, some gravel; black; non-cohesive, moist, roots.	PT		0.00											
			End of hole at 0.40 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-163-02 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV: A
DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-164

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 20, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			TPH %m	TPH %m
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, well graded, some gravel; black, organic odour; non-cohesive, moist, roots.	PT		0.00	GS										
			(SM) SILTY SAND, and fines, some gravel; grey and brown, organic odour; non-cohesive, moist, compact. - 0.30 m: Fiberglass Liner With Straw and Steel Mesh	SM		0.30											
			End of hole at 0.50 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-164-03 BTEX F1-F4

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
 LOGGED: PT
 CHECKED: AB/CM

REV: A
 DATE: Aug 20, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-165

CLIENT: Shell Canada Limited	DATE: August 20, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m		
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, well graded, some gravel; black, organic odour; non-cohesive, moist, roots.	PT		0.00									
			(SM) SILTY SAND, and fines, some gravel; grey and brown, organic odour; non-cohesive, moist, compact.	SM		0.30	GS								
			End of hole at 0.70 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-165-03 BTEX F1-F4
1															
2															
3															

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Aug 20, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-166

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, some gravel, some fines; black; non-cohesive, moist, compact, roots.	PT		0.00										TP21-166-02 BTEX F1-F4	
			End of hole at 0.50 m. Refusal due to permafrost. Backfilled with test pit material.														

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 26, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-167

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			ENVIRO DATA	ENVIRO DATA
	CAT 322	Mechanical Excavation	(SW-SM) organic SAND, well graded, some gravel, some fines; black; non-cohesive, moist, compact, roots.	SW-SM		0.00	GS									TP21-167-01 BTEX F1-F4	
			(PT) SANDY PEAT, some gravel, some fines; black; non-cohesive, moist, compact, roots.	PT		0.30											
			End of hole at 0.50 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-167-03 BTEX F1-F4	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

DATE: Aug 26, 2021
 DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-168

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			ENVIRO DATA	ENVIRO DATA
	CAT 322	Mechanical Excavation	(SW-SM) organic SAND, well graded, some gravel, some fines; black; non-cohesive, moist, compact, roots.	SW-SM		0.00	GS										
			(PT) SANDY PEAT, some gravel, some fines; black; non-cohesive, moist, compact, roots.	PT		0.30											TP21-168-02 BTEX F1-F4
			End of hole at 0.40 m. Refusal due to permafrost. Backfilled with test pit material.														

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: **A**
 DATE: Aug 26, 2021
 DATE: Feb 15, 2022

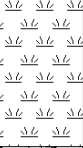

RECORD OF TEST PIT: TP21-169

Sheet 1 of 1

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS				
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	ENVIRO DATA						
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, some gravel, some fines; black; non-cohesive, moist, compact, roots.	PT		0.00	GS											TP21-169-01 BTEX F1-F4	
			(SW-SM) organic SAND, well graded, some gravel, some fines; black; non-cohesive, moist, compact, roots.	SW-SM		0.30													
			End of hole at 0.40 m. Refusal due to permafrost. Backfilled with test pit material.																

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV: A
 DATE: Aug 26, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-170

CLIENT: Shell Canada Limited	DATE: August 26, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m		
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, some gravel, some fines; black; non-cohesive, moist, compact, roots.	PT		0.00	GS								
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-170-02 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:

A

DATE: Aug 26, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-171

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 26, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			ENVIRO DATA	ENVIRO DATA
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT, some gravel, some fines; black, organic odour; non-cohesive, moist, compact, roots.	PT		0.00	GS					I					
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-171-02 BTEX F1-F4

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV:
A

DATE: Aug 26, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-172

CLIENT: Shell Canada Limited
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001
 LOCATION: Camp Farewell

DATE: August 24, 2021
 INCLINATION: 90.0°
 CONTRACTOR: EGT-NWI

ELEVATION: Data Not Available
 COORD SYS: UTM Zone 08N
 HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT; black; non-cohesive, moist, compact, roots.	PT		0.00	GS					I				
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-172-02 BTEX F1-F4	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
 LOGGED: AB
 CHECKED: AB/CM

REV:

A

DATE: Aug 24, 2021
 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-173

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			TPH %m
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT; black; non-cohesive, moist, compact, roots.	PT		0.00	GS					I				
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-173-02 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV: A
DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-174

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT; black; non-cohesive, moist, compact, roots.	PT		0.00	GS					I				
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-174-02 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:
A

DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-175

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	TPH %m			TPH %m
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT; black; non-cohesive, moist, compact, roots.	PT		0.00	GS									
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.													DUP-BB TP21-175-02 BTEX F1-F4 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV:
A

DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-176

CLIENT: Shell Canada Limited	DATE: August 24, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
	CAT 322	Mechanical Excavation	(PT) SANDY PEAT; black; non-cohesive, moist, compact, roots.	PT		0.00	GS					I			
			End of hole at 0.30 m. Refusal due to permafrost. Backfilled with test pit material.											DUP-CC TP21-176-02 BTEX F1-F4 BTEX F1-F4	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 1.0 m length x 1.5 m width
LOGGED: AB
CHECKED: AB/CM

REV: A
DATE: Aug 24, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-177

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE			SOIL SAMPLE
	CAT 322	Mechanical Excavation	FILL - (SW) gravelly SAND, medium, well graded; dark brown; non-cohesive, moist, very loose, Rootlets, some peat, some organics.	SW		0.00											
			(SW-SM) SAND, medium to coarse, well graded, some fines; brown and grey; non-cohesive, moist.	SW-SM		0.20	GS										
			End of hole at 0.80 m. Target depth. Backfilled with test pit material.														Dup AAA TP21-177-02 BTEX F1-F4 BTEX F1-F4
1																	Dup BBB TP21-177-04 BTEX F1-F4 BTEX F1-F4
2																	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-178

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE	SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown; non-cohesive, moist, very loose.	SW		0.00	GS					100	200	300	400	Dup CCC TP21-178-02 BTEX F1-F4 BTEX F1-F4 Dup DDD TP21-178-04 BTEX F1-F4 BTEX F1-F4	
			(SW) organic SAND, well graded; brown and black, organic odour; non-cohesive, moist, compact.			1.00											
			(SW-SM) SAND, well graded, some fines; grey, organic odour; non-cohesive, moist, dense.	1.20	SW-SM												
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													Dup EEE TP21-178-06 BTEX F1-F4 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-179

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE	SOIL SAMPLE		
1	CAT 322	Mechanical Excavation	FILL - (GP) GRAVEL and SAND, poorly graded; very dark brown dark; non-cohesive, moist, loose.	GP		0.00	GS					-	-	-	Dup FFF TP21-179-02 BTEX F1-F4 BTEX F1-F4	
			(SM) organic SILTY SAND; very dark brown and greyish brown, organic odour; non-cohesive, moist, loose.	SM		0.60						-	-	Dup GGG TP21-179-04 BTEX F1-F4 BTEX F1-F4		
			(SW) SAND, well graded, some gravel; brown; non-cohesive, moist, compact.	SW		1.00						-	-			
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.								-	-	-	Dup HHH TP21-179-06 BTEX F1-F4 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-180

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-180-01 BTEX F1-F4 Dup III TP21-180-03 BTEX F1-F4 BTEX F1-F4	
			- 0.30 to 0.40 m: black staining													
			(SW) organic SAND, well graded, some gravel; brown and dark brown, hydrocarbon odour; non-cohesive, moist, compact.			1.00										
			(SW) SAND, well graded; brown and grey; non-cohesive, moist, compact.			1.20										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.								-			TP21-180-06 BTEX F1-F4		
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-181

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE	SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; brown and orange; non-cohesive, moist, very loose.	SW		0.00	GS					100	200	300	400	TP21-181-02 BTEX F1-F4 Dup JJJ TP21-181-04 BTEX F1-F4 BTEX F1-F4	
			(SW) organic SAND, well graded, some gravel; dark brown and grey, organic odour; non-cohesive, moist, compact.			1.00											
			(SW) SAND, well graded, some gravel; brown and grey, organic odour; non-cohesive, moist, compact.			1.30											
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-181-06 BTEX F1-F4	
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-182

CLIENT: Shell Canada Limited	DATE: September 01, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
	CAT 322	Mechanical Excavation	(SW) SAND, well graded; grey, organic odour; non-cohesive, moist, very loose. - 0.00 to 0.40 m: Roots	SW		0.00	GS										
			(SW-SM) SAND, well graded, some fines; brown and dark grey, organic odour; non-cohesive, moist, compact.	SW-SM		0.30											
			End of hole at 0.70 m. Refusal due to permafrost. Backfilled with test pit material.														TP21-182-04 BTEX F1-F4

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 01, 2021
DATE: Feb 15, 2022

REV:

A

RECORD OF TEST PIT: TP21-183

CLIENT: Shell Canada Limited	DATE: September 03, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
	CAT 322 Mechanical Excavation		(SW-SM) organic SAND, well graded, some fines; black and brown, organic odour; non-cohesive, moist, very loose, roots.	SW-SM	[Strata Plot]	0.00										
			(SM) organic SILTY SAND; dark brown and grey, organic odour; non-cohesive, moist, compact.	SM	[Strata Plot]	0.30	GS									TP21-183-02 BTEX F1-F4
			End of hole at 0.70 m. Refusal due to permafrost. Backfilled with test pit material.													TP21-183-04 BTEX F1-F4
1																
2																
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



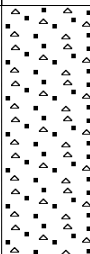
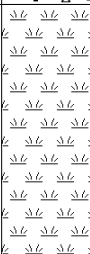
DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 03, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-184

CLIENT: Shell Canada Limited	DATE: September 03, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, very loose.	SW		0.00	GS				-	-	-	-	TP21-184-02 BTEX F1-F4	
			(PT) SANDY PEAT, some fines; dark brown, organic odour; non-cohesive, moist.	PT		0.50					-	-	-	TP21-184-04 BTEX F1-F4		
			(PT) SANDY PEAT, some fines; dark brown and grey, organic odour; non-cohesive, moist.		0.70	-					-	-	TP21-184-05 BTEX F1-F4			
1			End of hole at 1.00 m. Refusal due to permafrost. Backfilled with test pit material.							-	-	-		-	TP21-184-05 BTEX F1-F4	
2																
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 03, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-185

CLIENT: Shell Canada Limited	DATE: September 03, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	SOIL SAMPLE			SOIL SAMPLE
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; grey; non-cohesive, dry, loose.	SW		0.00	GS				-	-	-	-	TP21-185-02 BTEX F1-F4 TP21-185-03 BTEX F1-F4 TP21-185-04 BTEX F1-F4	
			(PT) SANDY PEAT, some fines; dark brown and grey, organic odour; non-cohesive, moist.	PT		0.60		-	-	-	-					
			(SW) SAND, well graded; grey, organic odour; non-cohesive, moist, dense.	SW		0.80		-	-	-	-					
			End of hole at 1.00 m. Refusal due to permafrost. Backfilled with test pit material.					-	-	-	-	-	-	-		-
2																
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 03, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: TP21-186

Sheet 1 of 1

CLIENT: Shell Canada Limited DATE: September 03, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: EGT-NWI HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	-1000	-2000		
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; grey and brown, organic odour; non-cohesive, moist, very loose.	SW	[Strata Plot]	0.00	GS									TP21-186-01 BTEX F1-F4 TP21-186-02 BTEX F1-F4 TP21-186-04 BTEX F1-F4
			(PT) SANDY PEAT; dark brown and black, organic odour; non-cohesive, moist.	PT	[Strata Plot]	0.80										
			(SW-SM) SAND, well graded, some fines; grey, organic odour; non-cohesive, wet, compact.	SW-SM	[Strata Plot]	1.00										
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.												TP21-186-06 BTEX F1-F4	

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width

LOGGED: PT

CHECKED: AB/CM

REV:

A

DATE: Sep 03, 2021

DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-187

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: September 03, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND, medium, well graded, some gravel; brown, organic odour; non-cohesive, moist, very loose, Rootlets, some organics.	SW		0.00	GS				-	-	-	-		
			(SW) organic SAND, medium to coarse, well graded, trace gravel; brown and black, organic odour; non-cohesive, moist, compact.			0.30					-	-	-	-		TP21-187-02 BTEX F1-F4
			(SW-SM) SAND, well graded, some fines; grey; non-cohesive, moist, compact.			0.50					-	-	-	-		TP21-187-03 BTEX F1-F4
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.								-	-	-	-	TP21-187-06 BTEX F1-F4	
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 03, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-188

CLIENT: Shell Canada Limited	DATE: September 03, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS		
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose.	SW		0.00	GS				-	-	-	-	TP21-188-02 BTEX F1-F4		
			(SW) organic SAND, well graded, some gravel; brown and dark brown; non-cohesive, moist, compact. - 0.70 to 0.80 m: Dark Brown			0.70					-	-	-	-			TP21-188-04 BTEX F1-F4
			(SW) SAND, well graded; brown; non-cohesive, moist, compact.			1.10					-	-	-	-			
2			End of hole at 1.50 m. Refusal due to permafrost. Backfilled with test pit material.								-	-	-	TP21-188-06 BTEX F1-F4			
3																	

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

REV: A
DATE: Sep 03, 2021 DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-189

CLIENT: Shell Canada Limited	DATE: September 03, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, hydrocarbon odour; non-cohesive, dry, very loose, landfill debris, concrete.	SW		0.00	GS				-	-	-	-	TP21-189-01 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates TP21-189-03 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates TP21-189-05 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates TP21-189-06 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates	
			(SW) organic SAND, well graded, some gravel; brown and dark black, hydrocarbon odour; non-cohesive, moist, compact.			1.00					-	-	-	-		
			(SW) SAND, well graded; brown, hydrocarbon odour; non-cohesive, moist, compact. - 1.50 to 1.80 m: Peat			1.50					-	-	-	-		
2			End of hole at 2.30 m. Refusal due to permafrost. Backfilled with test pit material.								-	-	-	-	TP21-189-08 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates	
3											-	-	-	-		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:
A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 03, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-190

Sheet 1 of 1

CLIENT: Shell Canada Limited	DATE: September 04, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown, hydrocarbon odour; non-cohesive, moist, very loose, mild hydrocarbon odour.	SW		0.00	GS				-1000 -2000 -3000 -4000	-		TP21-190-02 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates		
			(SW) organic SAND, well graded; brown and dark brown; non-cohesive, moist, compact, mild hydrocarbon odour. - 0.80 to 1.00 m: Dark Brown			0.70						-				TP21-190-04 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates
			(SW) SAND, well graded; brown; non-cohesive, moist, compact, mild hydrocarbon odour.			1.00						-				
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.								-		TP21-190-06 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates			
3																

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A



DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 04, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: TP21-191

CLIENT: Shell Canada Limited	DATE: September 04, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: EGT-NWI	HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv				
1	CAT 322	Mechanical Excavation	FILL - (SW) SAND and GRAVEL, well graded; dark brown; non-cohesive, moist, very loose, mild hydrocarbon odour.	SW		0.00	GS				-	-	-	-	TP21-191-02 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates TP21-191-04 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates	
			(SW) organic SAND, well graded, some gravel; brown and dark brown; non-cohesive, moist, compact, mild hydrocarbon odour. - 1.00 to 1.30 m: Dark Brown			1.00		-	-	-	-					
			(SW) SAND, well graded; brown; non-cohesive, moist, compact, mild hydrocarbon odour.			1.30		-	-	-	-					
2			End of hole at 1.70 m. Refusal due to permafrost. Backfilled with test pit material.								-	-	-	-	TP21-191-06 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates	
3											-	-	-	-		

DEPTH SCALE: 1:15
HAMMER TYPE: N/A

REV:

A

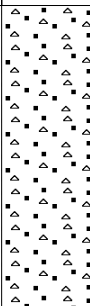


DIMENSIONS: 3.0 m length x 1.5 m width
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 04, 2021
DATE: Feb 15, 2022

RECORD OF TEST PIT: HA21-192

CLIENT: Shell Canada Limited	DATE: September 04, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: Golder	HORZ DATUM: NAD83
		HOLE LOC: In bottom of ditch

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv	100		
	Hand Auger	Hand Auger	FILL - (SW) gravelly SAND, medium, well graded; grey and brown; non-cohesive, moist, very loose, rootlets, some organics.	SW		0.00	AS								
			FILL - (SW) gravelly SAND, medium, well graded; grey; non-cohesive, moist, very loose.			0.30									
			End of hole at 0.60 m. Target depth. Backfilled with cuttings.												

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



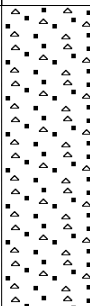
LOGGED: PT
CHECKED: AB/CM

DATE: Sep 04, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: HA21-193

CLIENT: Shell Canada Limited	DATE: September 04, 2021	ELEVATION: Data Not Available
PROJECT: Camp Farewell		
PROJECT NO: 20368099-6000-1001	INCLINATION: 90.0°	COORD SYS: UTM Zone 08N
LOCATION: Camp Farewell	CONTRACTOR: Golder	HORZ DATUM: NAD83
		HOLE LOC: South of ditch

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE			SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv			
	Hand Auger	Hand Auger	FILL - (SW) gravelly SAND, medium, well graded; grey and brown; non-cohesive, moist, very loose, rootlets, some organics.	SW		0.00	AS								
			FILL - (SW) gravelly SAND, medium, well graded; grey; non-cohesive, moist, very loose.			0.30									
			End of hole at 0.60 m. Target depth. Backfilled with cuttings.												

DEPTH SCALE: 1:15
HAMMER TYPE: N/A



LOGGED: PT
CHECKED: AB/CM

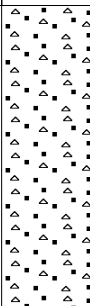

DATE: Sep 04, 2021
DATE: Feb 15, 2022

REV:
A

RECORD OF TEST PIT: HA21-194

Sheet 1 of 1

CLIENT: Shell Canada Limited DATE: September 04, 2021 ELEVATION: Data Not Available
 PROJECT: Camp Farewell
 PROJECT NO: 20368099-6000-1001 INCLINATION: 90.0° COORD SYS: UTM Zone 08N
 LOCATION: Camp Farewell CONTRACTOR: Golder HORZ DATUM: NAD83

DEPTH (m)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE				SAMPLING ACTIVITY				ENVIRO DATA				ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	
			DESCRIPTION	USCS	STRATA PLOT	ELEV. DEPTH (m)	TYPE	REC %	BLOWS	N-VALUE	SOIL SAMPLE	Hexane ppmv					
	Hand Auger Hand Auger		FILL - (SW) gravelly SAND, medium, well graded; brown; non-cohesive, dry, very loose.	SW		0.00	AS									HA21-194-01 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates	HA21-194-02 BTEX F1-F4, PAH, Metals, Sulphates, Nitrates
			FILL - (SW) gravelly SAND, medium, well graded; brown and white; non-cohesive, dry, very loose. - 0.40 to 0.60 m: Possible Barite			0.40											
			End of hole at 0.60 m. Refusal - gravelly. Backfilled with cuttings.														

DEPTH SCALE: 1:15
 HAMMER TYPE: N/A



LOGGED: PT
 CHECKED: AB/CM

DATE: Sep 04, 2021
 DATE: Feb 15, 2022

REV:
A

APPENDIX E

**Laboratory Certificates of Analysis
and Data Quality Reports**



Your P.O. #: 20368099-7000-1001
 Your Project #: 20368099-6000-1001
 Your C.O.C. #: 644511-01-01

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
 2800, 700 -2nd Street SW
 CALGARY, AB
 CANADA T2P 2W2

Report Date: 2021/08/31
 Report #: R3065423
 Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C160616

Received: 2021/08/17, 08:30

Sample Matrix: Soil
 # Samples Received: 10

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Barium on ICP using Fusion Extraction (1)	2	2021/08/27	2021/08/29	AB SOP-00044 / AB SOP-00042	EPA 6010d R5 m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	10	N/A	2021/08/23	AB SOP-00039	CCME CWS/EPA 8260d m
F1-BTEX (1)	10	N/A	2021/08/24		Auto Calc
Hexavalent Chromium (1, 3)	2	2021/08/23	2021/08/24	AB SOP-00063	SM 23 3500-Cr B m
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 4)	2	2021/08/22	2021/08/22	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	8	2021/08/22	2021/08/22	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 6)	2	N/A	2021/08/23		Auto Calc
Moisture (1)	10	N/A	2021/08/23	AB SOP-00002	CCME PHC-CWS m
Soluble NO2 (N);Soluble NO2 (N) + NO3(N) (1)	2	2021/08/23	2021/08/23	AB SOP-00091	SM 23 4500 NO3m
Nitrate-N (soluble) (1)	2	2021/08/23	2021/08/24		Auto Calc
Soluble Ions (1)	2	2021/08/23	2021/08/23	AB SOP-00033 / AB SOP-00042	EPA 6010d R5 m
Soluble Paste (1)	2	2021/08/23	2021/08/23	AB SOP-00033	Carter 2nd ed 15.2 m
Soluble Ions Calculation (1)	2	N/A	2021/08/23		Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.



Your P.O. #: 20368099-7000-1001
Your Project #: 20368099-6000-1001
Your C.O.C. #: 644511-01-01

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
2800, 700 -2nd Street SW
CALGARY, AB
CANADA T2P 2W2

Report Date: 2021/08/31
Report #: R3065423
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C160616

Received: 2021/08/17, 08:30

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested. This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Bureau Veritas Calgary Environmental
- (2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is date sampled unless otherwise stated.
- (3) Some soil samples may react with the Cr(VI) spike reducing it to Cr(III). These samples are highly unlikely to contain native hexavalent chromium. Thus a failed spike recovery does not invalidate a negative result on the native sample.
- (4) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (5) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
- (6) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key



**AUTHORIZED REPORT
RAPPORT AUTORISÉ**

Bureau Veritas
31 Aug 2021 09:28:13

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Cynny Hagen, Key Account Specialist
Email: Cynny.HAGEN@bureauveritas.com
Phone# (403)735-2273

=====
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEC349	AEC349	AEC350		AEC351	AEC352		
Sampling Date		2021/08/12 13:30	2021/08/12 13:30	2021/08/12 13:30		2021/08/12 14:15	2021/08/12 14:15		
COC Number		644511-01-01	644511-01-01	644511-01-01		644511-01-01	644511-01-01		
	UNITS	TP21-148-02	TP21-148-02 Lab-Dup	TP21-148-04	QC Batch	TP21-149-02	TP21-149-04	RDL	QC Batch

Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	N/A	<10	A327723	N/A	N/A	10	A327723
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	N/A	54	A327723	N/A	N/A	50	A327723
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	N/A	<50	A327723	N/A	N/A	50	A327723
Reached Baseline at C50	mg/kg	Yes	N/A	Yes	A327723	N/A	N/A	N/A	A327723

Physical Properties									
Moisture	%	4.7	N/A	4.5	A327724	28	7.4	0.30	A327843

Volatiles									
Xylenes (Total)	mg/kg	<0.045	N/A	<0.045	A326954	27	0.39	0.045	A326954
F1 (C6-C10) - BTEX	mg/kg	<10	N/A	<10	A326954	320	460	10	A326954

Field Preserved Volatiles									
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	A327685	0.012	<0.0050	0.0050	A327685
Toluene	mg/kg	<0.050	<0.050	<0.050	A327685	0.097	<0.050	0.050	A327685
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	A327685	4.2	0.048	0.010	A327685
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	A327685	16	0.21	0.040	A327685
o-Xylene	mg/kg	<0.020	<0.020	<0.020	A327685	11	0.18	0.020	A327685
F1 (C6-C10)	mg/kg	<10	<10	<10	A327685	350	460	10	A327685

Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	98	96	97	A327685	97	96	N/A	A327685
4-Bromofluorobenzene (sur.)	%	100	103	103	A327685	103	120	N/A	A327685
D10-o-Xylene (sur.)	%	117	119	103	A327685	103	127	N/A	A327685
D4-1,2-Dichloroethane (sur.)	%	103	100	101	A327685	101	101	N/A	A327685
O-TERPHENYL (sur.)	%	105	N/A	100	A327723	N/A	N/A	N/A	N/A

RDL = Reportable Detection Limit
 Lab-Dup = Laboratory Initiated Duplicate
 N/A = Not Applicable



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEC353		AEC354	AEC354		AEC355	AEC356		
Sampling Date		2021/08/12 15:30		2021/08/12 15:30	2021/08/12 15:30		2021/08/12 15:00	2021/08/12 15:00		
COC Number		644511-01-01		644511-01-01	644511-01-01		644511-01-01	644511-01-01		
	UNITS	TP21-151-02	RDL	TP21-151-04	TP21-151-04 Lab-Dup	QC Batch	TP21-155-02	TP21-155-04	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	70	10	<10	N/A	A327723	<10	<10	10	A327723
F3 (C16-C34 Hydrocarbons)	mg/kg	380	50	<50	N/A	A327723	210	<50	50	A327723
F4 (C34-C50 Hydrocarbons)	mg/kg	120	50	<50	N/A	A327723	77	<50	50	A327723
Reached Baseline at C50	mg/kg	Yes	N/A	Yes	N/A	A327723	Yes	Yes	N/A	A327723

Physical Properties										
Moisture	%	36	0.30	18	18	A327724	22	15	0.30	A327724

Volatiles										
Xylenes (Total)	mg/kg	<0.045	0.045	<0.045	N/A	A326954	<0.045	<0.045	0.045	A327109
F1 (C6-C10) - BTEX	mg/kg	<15	15	<10	N/A	A326954	<10	<10	10	A327109

Field Preserved Volatiles										
Benzene	mg/kg	<0.0050	0.0050	<0.0050	N/A	A327685	<0.0050	<0.0050	0.0050	A327685
Toluene	mg/kg	<0.050	0.050	<0.050	N/A	A327685	<0.050	<0.050	0.050	A327685
Ethylbenzene	mg/kg	<0.010	0.010	<0.010	N/A	A327685	<0.010	<0.010	0.010	A327685
m & p-Xylene	mg/kg	<0.040	0.040	<0.040	N/A	A327685	<0.040	<0.040	0.040	A327685
o-Xylene	mg/kg	<0.020	0.020	<0.020	N/A	A327685	<0.020	<0.020	0.020	A327685
F1 (C6-C10)	mg/kg	<15 (1)	15	<10	N/A	A327685	<10	<10	10	A327685

Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	98	N/A	96	N/A	A327685	97	95	N/A	A327685
4-Bromofluorobenzene (sur.)	%	100	N/A	101	N/A	A327685	99	103	N/A	A327685
D10-o-Xylene (sur.)	%	115	N/A	110	N/A	A327685	120	119	N/A	A327685
D4-1,2-Dichloroethane (sur.)	%	106	N/A	101	N/A	A327685	101	105	N/A	A327685
O-TERPHENYL (sur.)	%	110	N/A	103	N/A	A327723	99	106	N/A	A327723

RDL = Reportable Detection Limit
 Lab-Dup = Laboratory Initiated Duplicate
 N/A = Not Applicable
 (1) Detection limit raised due to interferent.



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEC357	AEC358		
Sampling Date		2021/08/12 14:00	2021/08/12 14:00		
COC Number		644511-01-01	644511-01-01		
	UNITS	TP21-156-02	TP21-156-04	RDL	QC Batch
Ext. Pet. Hydrocarbon					
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	10	A327723
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	<50	50	A327723
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	<50	50	A327723
Reached Baseline at C50	mg/kg	Yes	Yes	N/A	A327723
Physical Properties					
Moisture	%	10	17	0.30	A327724
Volatiles					
Xylenes (Total)	mg/kg	<0.045	<0.045	0.045	A327109
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	A327109
Field Preserved Volatiles					
Benzene	mg/kg	<0.0050	<0.0050	0.0050	A327685
Toluene	mg/kg	<0.050	<0.050	0.050	A327685
Ethylbenzene	mg/kg	<0.010	<0.010	0.010	A327685
m & p-Xylene	mg/kg	<0.040	<0.040	0.040	A327685
o-Xylene	mg/kg	<0.020	<0.020	0.020	A327685
F1 (C6-C10)	mg/kg	<10	<10	10	A327685
Surrogate Recovery (%)					
1,4-Difluorobenzene (sur.)	%	95	97	N/A	A327685
4-Bromofluorobenzene (sur.)	%	103	104	N/A	A327685
D10-o-Xylene (sur.)	%	103	113	N/A	A327685
D4-1,2-Dichloroethane (sur.)	%	105	106	N/A	A327685
O-TERPHENYL (sur.)	%	101	100	N/A	A327723
RDL = Reportable Detection Limit N/A = Not Applicable					



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

RESULTS OF CHEMICAL ANALYSES OF SOIL

BV Labs ID		AEC351		AEC352	AEC352		
Sampling Date		2021/08/12 14:15		2021/08/12 14:15	2021/08/12 14:15		
COC Number		644511-01-01		644511-01-01	644511-01-01		
	UNITS	TP21-149-02	RDL	TP21-149-04	TP21-149-04 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Soluble Nitrate (N)	mg/L	<0.20	0.20	<0.20	N/A	0.20	A329026
Calculated Sulphate (SO4)	mg/kg	150	3.1	8.5	N/A	1.4	A326842
Calculated Nitrate (N)	mg/kg	<0.12	0.12	<0.058	N/A	0.058	A326842
Elements							
Hex. Chromium (Cr 6+)	mg/kg	<0.080	0.080	<0.080	N/A	0.080	A328649
Soluble Parameters							
Soluble Nitrite (N)	mg/L	<0.20	0.20	<0.20	<0.20	0.20	A329021
Soluble Nitrate plus Nitrite (N)	mg/L	<0.20	0.20	<0.20	<0.20	0.20	A329021
Saturation %	%	61	N/A	29	28	N/A	A328066
Soluble Sulphate (SO4)	mg/L	240	5.0	29	N/A	5.0	A328809
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

PETROLEUM HYDROCARBONS (CCME)

BV Labs ID		AEC351	AEC351		AEC352		
Sampling Date		2021/08/12 14:15	2021/08/12 14:15		2021/08/12 14:15		
COC Number		644511-01-01	644511-01-01		644511-01-01		
	UNITS	TP21-149-02	TP21-149-02 Lab-Dup	QC Batch	TP21-149-04	RDL	QC Batch
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	10000	11000	A327722	4700	10	A327722
F3 (C16-C34 Hydrocarbons)	mg/kg	1200	N/A	A327113	280	71	A327115
F3A (C16-C22)	mg/kg	410	440	A327722	130	50	A327722
F3B (C22-C34)	mg/kg	790	800	A327722	150	50	A327722
F2% (BIC)	mg/kg	NC	N/A	A327113	NC	N/A	A327115
F4 (C34-C50 Hydrocarbons)	mg/kg	250	260	A327722	120	50	A327722
Reached Baseline at C50	mg/kg	Yes	Yes	A327722	Yes	N/A	A327722
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	101	100	A327722	110	N/A	A327722
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



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VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID		AEC351	AEC352		
Sampling Date		2021/08/12 14:15	2021/08/12 14:15		
COC Number		644511-01-01	644511-01-01		
	UNITS	TP21-149-02	TP21-149-04	RDL	QC Batch
Elements					
Total Fusion Barium (Ba)	mg/kg	650	790	50	A333687
RDL = Reportable Detection Limit					



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.7°C
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Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A327685	DO1	Matrix Spike [AEC349-02]	1,4-Difluorobenzene (sur.)	2021/08/23	96	%	50 - 140		
			4-Bromofluorobenzene (sur.)	2021/08/23	102	%	50 - 140		
			D10-o-Xylene (sur.)	2021/08/23	124	%	50 - 140		
			D4-1,2-Dichloroethane (sur.)	2021/08/23	103	%	50 - 140		
			Benzene	2021/08/23	90	%	50 - 140		
			Toluene	2021/08/23	97	%	50 - 140		
			Ethylbenzene	2021/08/23	101	%	50 - 140		
			m & p-Xylene	2021/08/23	97	%	50 - 140		
			o-Xylene	2021/08/23	89	%	50 - 140		
			F1 (C6-C10)	2021/08/23	96	%	60 - 140		
			A327685	DO1	Spiked Blank	1,4-Difluorobenzene (sur.)	2021/08/23	88	%
4-Bromofluorobenzene (sur.)	2021/08/23	95				%	50 - 140		
D10-o-Xylene (sur.)	2021/08/23	92				%	50 - 140		
D4-1,2-Dichloroethane (sur.)	2021/08/23	100				%	50 - 140		
Benzene	2021/08/23	80				%	60 - 130		
Toluene	2021/08/23	88				%	60 - 130		
Ethylbenzene	2021/08/23	89				%	60 - 130		
m & p-Xylene	2021/08/23	86				%	60 - 130		
o-Xylene	2021/08/23	74				%	60 - 130		
F1 (C6-C10)	2021/08/23	112				%	60 - 140		
A327685	DO1	Method Blank				1,4-Difluorobenzene (sur.)	2021/08/23	95	%
			4-Bromofluorobenzene (sur.)	2021/08/23	99	%	50 - 140		
			D10-o-Xylene (sur.)	2021/08/23	88	%	50 - 140		
			D4-1,2-Dichloroethane (sur.)	2021/08/23	103	%	50 - 140		
			Benzene	2021/08/23	<0.0050		mg/kg		
			Toluene	2021/08/23	<0.050		mg/kg		
			Ethylbenzene	2021/08/23	<0.010		mg/kg		
			m & p-Xylene	2021/08/23	<0.040		mg/kg		
			o-Xylene	2021/08/23	<0.020		mg/kg		
			F1 (C6-C10)	2021/08/23	<10		mg/kg		
			A327685	DO1	RPD [AEC349-02]	Benzene	2021/08/23	NC	%
Toluene	2021/08/23	NC				%	50		
Ethylbenzene	2021/08/23	NC				%	50		
m & p-Xylene	2021/08/23	NC				%	50		
o-Xylene	2021/08/23	NC				%	50		
F1 (C6-C10)	2021/08/23	NC				%	30		
A327722	MHF	Matrix Spike [AEC351-01]	O-TERPHENYL (sur.)	2021/08/22		116	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/22	NC	%	60 - 140		
			F3A (C16-C22)	2021/08/22	NC	%	60 - 140		
			F3B (C22-C34)	2021/08/22	112	%	60 - 140		
			F4 (C34-C50 Hydrocarbons)	2021/08/22	115	%	60 - 140		
			A327722	MHF	Spiked Blank	O-TERPHENYL (sur.)	2021/08/22		106
F2 (C10-C16 Hydrocarbons)	2021/08/22					103	%	60 - 140	
F3A (C16-C22)	2021/08/22					102	%	60 - 140	
F3B (C22-C34)	2021/08/22					104	%	60 - 140	
F4 (C34-C50 Hydrocarbons)	2021/08/22					100	%	60 - 140	
A327722	MHF	Method Blank				O-TERPHENYL (sur.)	2021/08/22		106
			F2 (C10-C16 Hydrocarbons)	2021/08/22	<10		mg/kg		
			F3A (C16-C22)	2021/08/22	<50		mg/kg		
			F3B (C22-C34)	2021/08/22	<50		mg/kg		
			F4 (C34-C50 Hydrocarbons)	2021/08/22	<50		mg/kg		
			A327722	MHF	RPD [AEC351-01]	F2 (C10-C16 Hydrocarbons)	2021/08/22	6.3	%
F3A (C16-C22)	2021/08/22	8.4				%	40		



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VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A327723	MHF	Matrix Spike	F3B (C22-C34)	2021/08/22	1.8		%	40
			F4 (C34-C50 Hydrocarbons)	2021/08/22	3.6		%	40
			O-TERPHENYL (sur.)	2021/08/22		119	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/22		103	%	60 - 140
A327723	MHF	Spiked Blank	F3 (C16-C34 Hydrocarbons)	2021/08/22		103	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/22		108	%	60 - 140
			O-TERPHENYL (sur.)	2021/08/22		114	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/22		118	%	60 - 140
A327723	MHF	Method Blank	F3 (C16-C34 Hydrocarbons)	2021/08/22		119	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/22		110	%	60 - 140
			O-TERPHENYL (sur.)	2021/08/22		98	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/22	<10		mg/kg	
A327723	MHF	RPD	F3 (C16-C34 Hydrocarbons)	2021/08/22	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/22	<50		mg/kg	
			F2 (C10-C16 Hydrocarbons)	2021/08/22	2.1		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/22	9.2		%	40
A327724	MAE	Method Blank	F4 (C34-C50 Hydrocarbons)	2021/08/22	7.5		%	40
			Moisture	2021/08/23	<0.30		%	
			Moisture	2021/08/23	1.7		%	20
A327843	MAE	RPD [AEC354-01]	Moisture	2021/08/23	<0.30		%	
A327843	SVI	Method Blank	Moisture	2021/08/23	<0.30		%	
A327843	SVI	RPD	Moisture	2021/08/23	3.5		%	20
A328066	KKC	QC Standard	Saturation %	2021/08/23		100	%	75 - 125
A328066	KKC	RPD	Saturation %	2021/08/23	1.5		%	12
A328066	KKC	RPD [AEC352-01]	Saturation %	2021/08/23	4.3		%	12
A328649	KWE	Matrix Spike	Hex. Chromium (Cr 6+)	2021/08/24		98	%	75 - 125
A328649	KWE	Spiked Blank	Hex. Chromium (Cr 6+)	2021/08/24		108	%	80 - 120
A328649	KWE	Method Blank	Hex. Chromium (Cr 6+)	2021/08/24	<0.080		mg/kg	
A328649	KWE	RPD	Hex. Chromium (Cr 6+)	2021/08/24	NC		%	35
A328809	MAP	QC Standard	Soluble Sulphate (SO4)	2021/08/23		112	%	75 - 125
A328809	MAP	Method Blank	Soluble Sulphate (SO4)	2021/08/23	<5.0		mg/L	
A328809	MAP	RPD	Soluble Sulphate (SO4)	2021/08/23	4.0		%	30
A329021	SKM	Matrix Spike [AEC352-01]	Soluble Nitrite (N)	2021/08/23		99	%	75 - 125
			Soluble Nitrate plus Nitrite (N)	2021/08/23		113	%	75 - 125
A329021	SKM	QC Standard	Soluble Nitrate plus Nitrite (N)	2021/08/23		87	%	75 - 125
A329021	SKM	Spiked Blank	Soluble Nitrite (N)	2021/08/23		105	%	80 - 120
			Soluble Nitrate plus Nitrite (N)	2021/08/23		105	%	80 - 120
A329021	SKM	Method Blank	Soluble Nitrite (N)	2021/08/23	<0.20		mg/L	
			Soluble Nitrate plus Nitrite (N)	2021/08/23	<0.20		mg/L	
A329021	SKM	RPD [AEC352-01]	Soluble Nitrite (N)	2021/08/23	NC		%	30
			Soluble Nitrate plus Nitrite (N)	2021/08/23	NC		%	30
A333687	JAB	QC Standard	Total Fusion Barium (Ba)	2021/08/29		122	%	75 - 125
A333687	JAB	Spiked Blank	Total Fusion Barium (Ba)	2021/08/29		116	%	75 - 125
A333687	JAB	Method Blank	Total Fusion Barium (Ba)	2021/08/29	<50		mg/kg	



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC									
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits	
A333687	JAB	RPD	Total Fusion Barium (Ba)	2021/08/29	18		%	35	
<p>Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.</p> <p>Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.</p> <p>QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.</p> <p>Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.</p> <p>Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.</p> <p>Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.</p> <p>NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)</p> <p>NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).</p>									



BUREAU
VERITAS

BV Labs Job #: C160616
Report Date: 2021/08/31

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Gita Pokhrel, Laboratory Supervisor

Janet Gao, B.Sc., QP, Supervisor, Organics

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

CHAIN OF CUSTODY RECORD

743

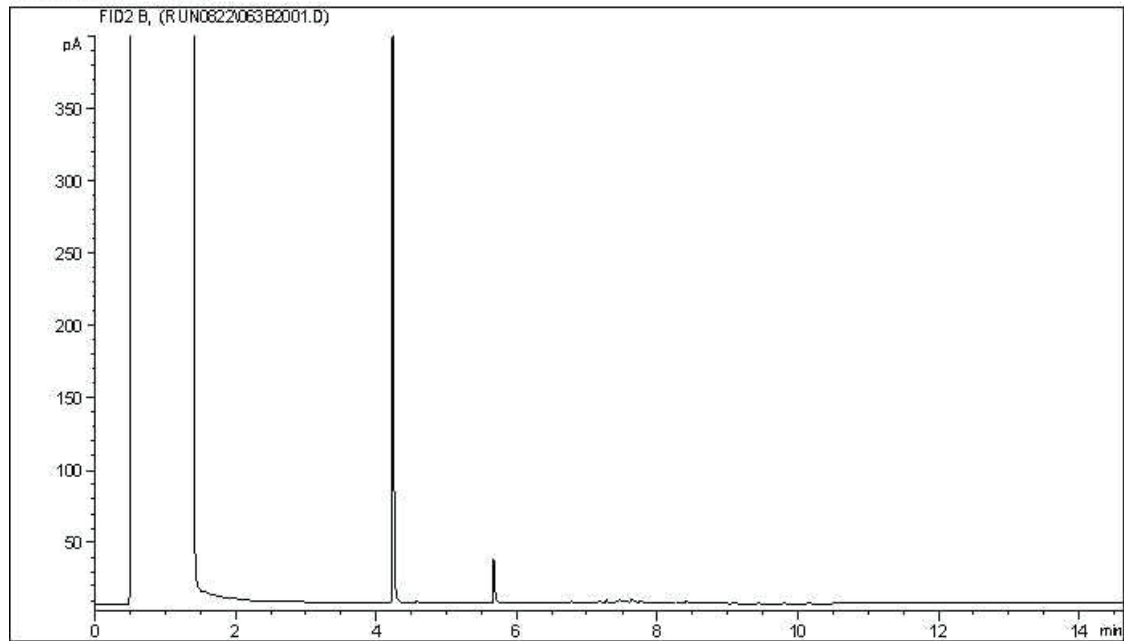
Bureau Veritas Laboratories
4000 198th N.E. Calgary, Alberta Canada T2E 6P8 Tel: (403) 291-3077 Toll-free 800-563-6266 Fax: (403) 291-9468 www.bvlabs.com

INVOICE TO: #254 GOLDER ASSOCIATES LTD. ACCOUNTS PAYABLE 2800, 700 -2nd Street SW CALGARY AB T2P 2W2 Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606 Email: canadaaccounts@bvlabs.com		REPORT TO: #6340 GOLDER ASSOCIATES LTD. Aurelie Belavance 2800, 700 -2nd Street SW CALGARY AB T2P 2W2 Tel: (403) 299-5600 Fax: Email: abelavance@golder.com		PROJECT INFORMATION: Quotation #: C00480 P.O. #: 20368099-7000-1001 Project: 20368099-6000-1001 Project Name: Site #: Sampled By:		Laboratory Use Only: BV Labs Job #: 160616 Bottle Order #: 54511 Project Manager: Carmen McKay COC #: 4511-01-01 Site #:	
Regulatory Criteria: <input type="checkbox"/> ATI <input checked="" type="checkbox"/> CCME <input type="checkbox"/> Other		Special Instructions: may concern headspace due to soil nature.		ANALYSIS REQUESTED (PLEASE BE SPECIFIC) Metals Field Filtered? (Y/N) Regulated Metals - Soils BTEX and F1-F4 in Soil (Vials) BIC SCALE Analysis (F2/F2+FB3) in soil Suphate / nitrate TRUE TO THE BARKUM		Turnaround Time (TAT) Required: Regular (Standard) TAT: <input checked="" type="checkbox"/> (will be applied if Rush TAT is not specified). Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details. Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Rush Confirmation Number: _____	
Special Instructions: SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BVLABS		Time Sampled 12-AUG-21 1330 1330 1415 1415 1530 1530 1500 1500 1400 1400		Matrix SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL		Time Sensitive <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Temperature (°C) on Receipt: 19/2.6/4.6 Custody Seal Intact on Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No White: BV Labs Yellow: Client 10/11/04 ICE-Y	
Sample Barcode Label NA TP21-148-02 TP21-148-04 TP21-149-02 TP21-149-04 TP21-151-02 TP21-151-04 TP21-155-02 TP21-155-04 TP21-156-02 TP21-156-04		Date Sampled 12-AUG-21 1330 1330 1415 1415 1530 1530 1500 1500 1400 1400		Time 07:45 07:45 07:45 07:45 07:45 07:45 07:45 07:45 07:45 07:45 07:45		Time Sensitive <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Temperature (°C) on Receipt: 19/2.6/4.6 Custody Seal Intact on Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No White: BV Labs Yellow: Client 10/11/04 ICE-Y	
RELEASING BY: (Signature/Print) PETER TAN		RECEIVED BY: (Signature/Print) Alicia Liu		Date: (YY/MM/DD) 21/08/14		Date: (YY/MM/DD) 2021/08/18	
Relinquished Limited Sample		Regulated Metals (CCME/AT1) Routine Water CCMETX and F1-F2 in Water Barium on ICP using Fusion Extraction (True Barium) CCMETX and F1-F2 in Water		Regulated Metals (CCME/AT1) Routine Water CCMETX and F1-F2 in Water Barium on ICP using Fusion Extraction (True Barium) CCMETX and F1-F2 in Water		Regulated Metals (CCME/AT1) Routine Water CCMETX and F1-F2 in Water Barium on ICP using Fusion Extraction (True Barium) CCMETX and F1-F2 in Water	
Comments Limited soil volume; bag broke. Received in Yellowknife By: J. MCCARD AUG 17 2021 Temp: 7 1 8 1 5 ice-4cs -cs-4cs		Comments Limited soil volume; bag broke. Received in Yellowknife By: J. MCCARD AUG 17 2021 Temp: 7 1 8 1 5 ice-4cs -cs-4cs		Comments Limited soil volume; bag broke. Received in Yellowknife By: J. MCCARD AUG 17 2021 Temp: 7 1 8 1 5 ice-4cs -cs-4cs		Comments Limited soil volume; bag broke. Received in Yellowknife By: J. MCCARD AUG 17 2021 Temp: 7 1 8 1 5 ice-4cs -cs-4cs	

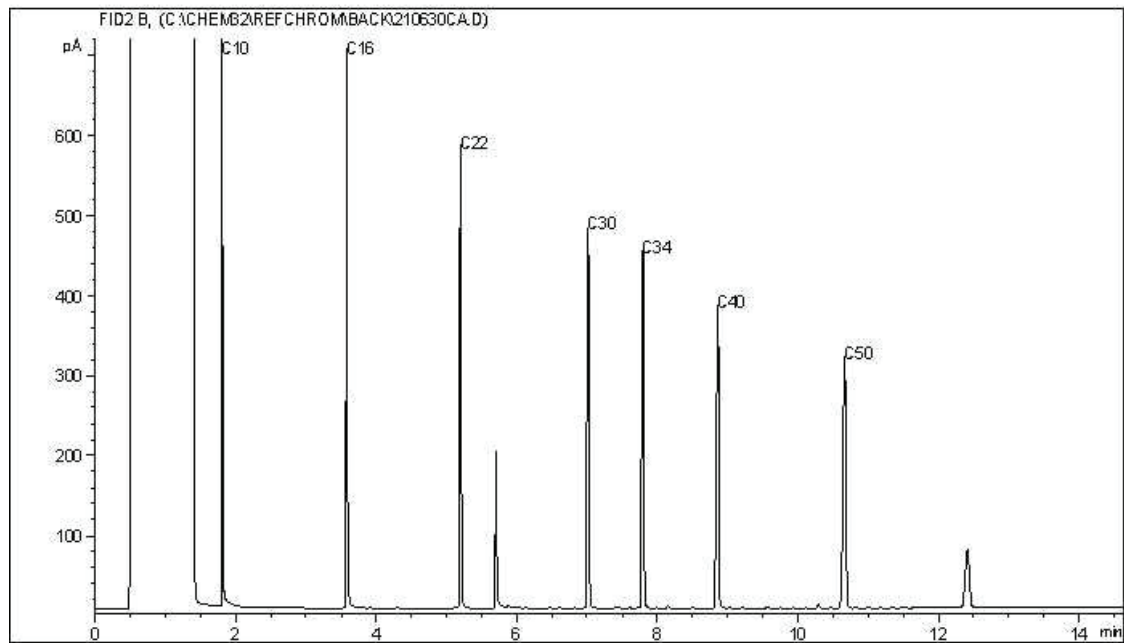
Bureau Veritas Canada (2019) Inc.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



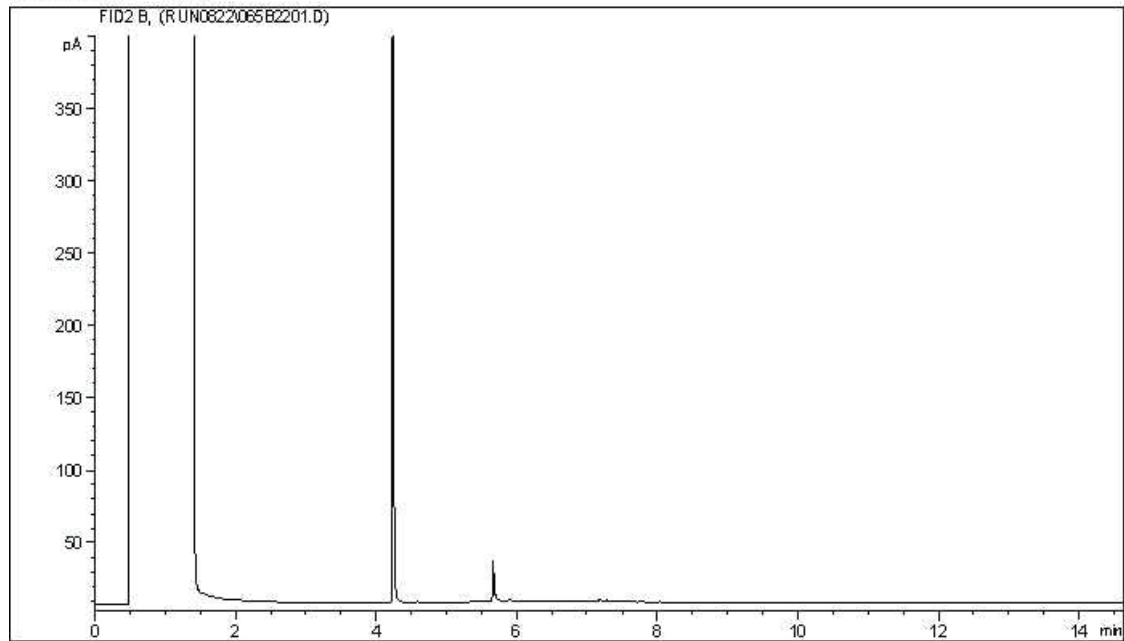
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

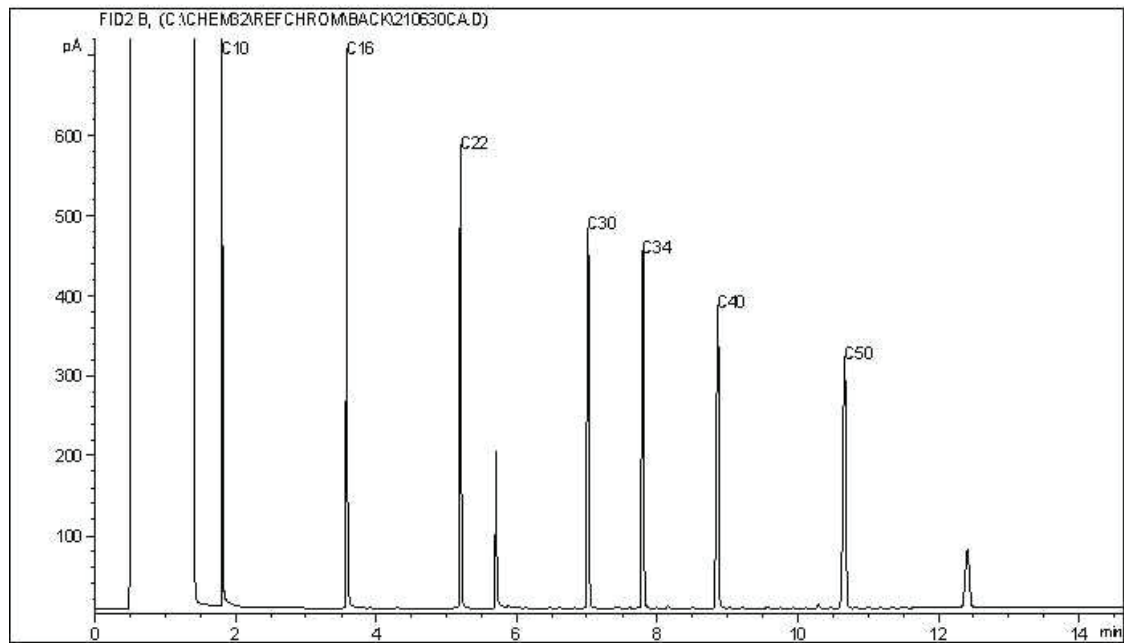
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



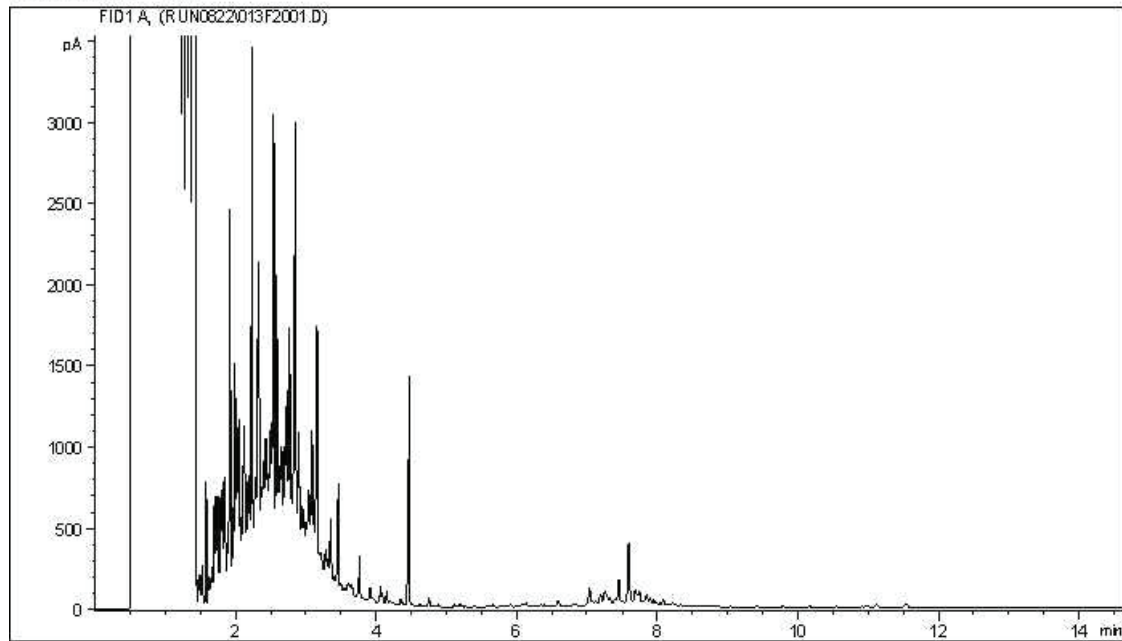
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

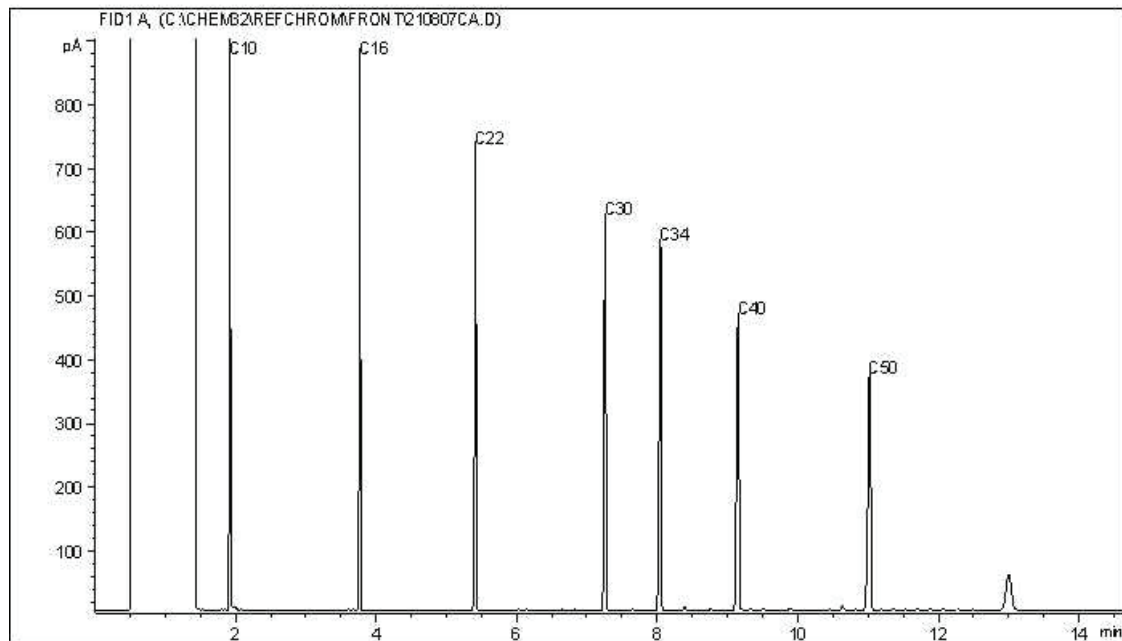
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



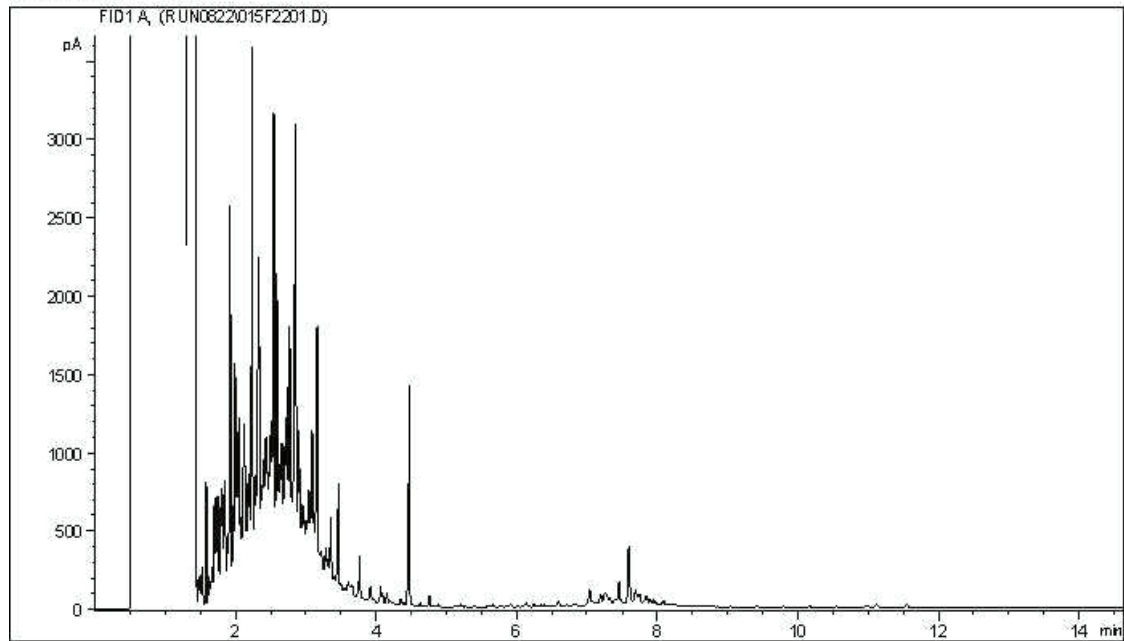
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

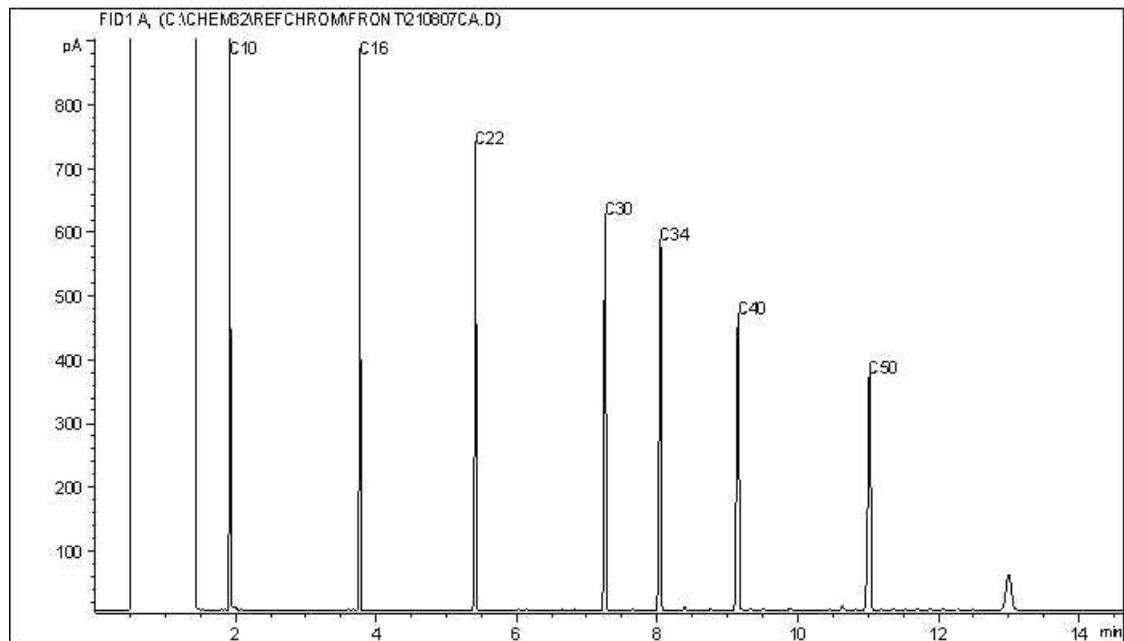
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



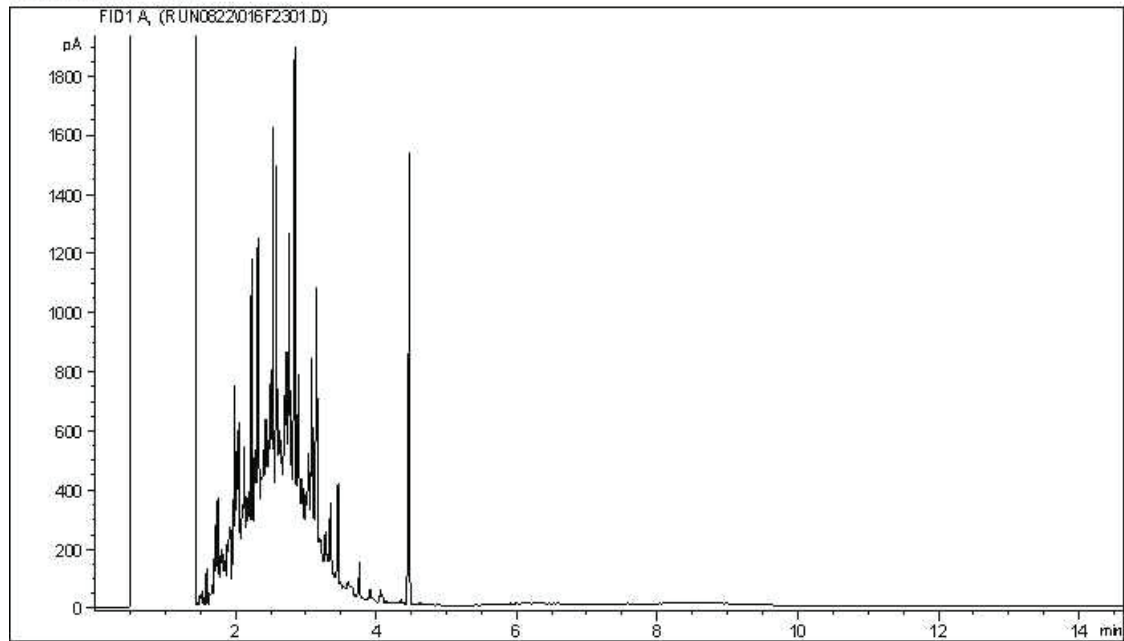
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

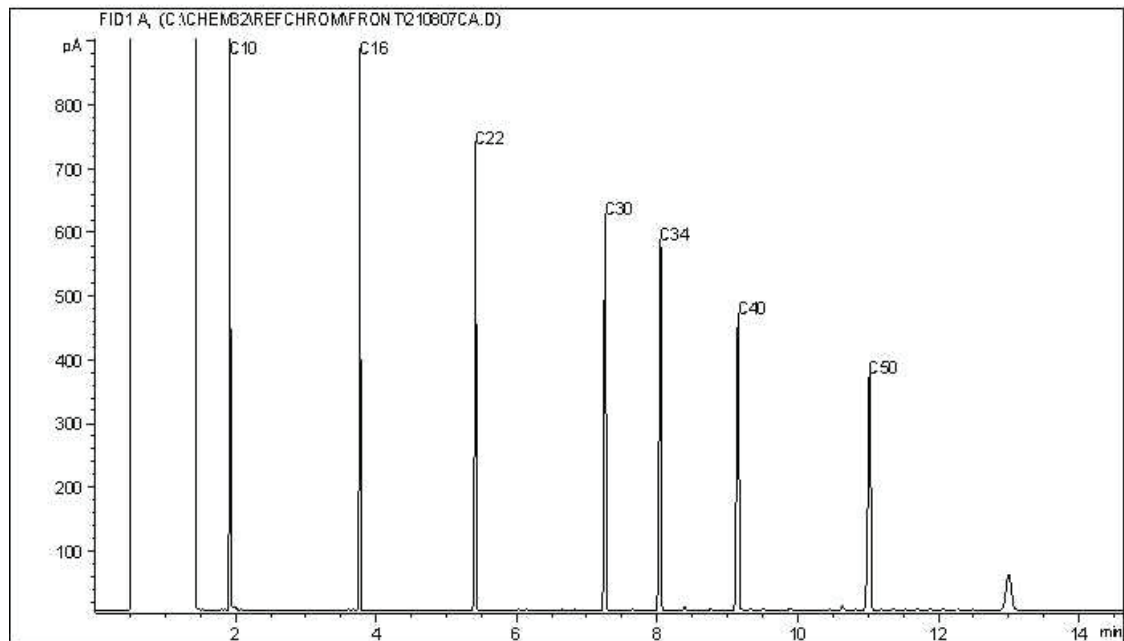
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



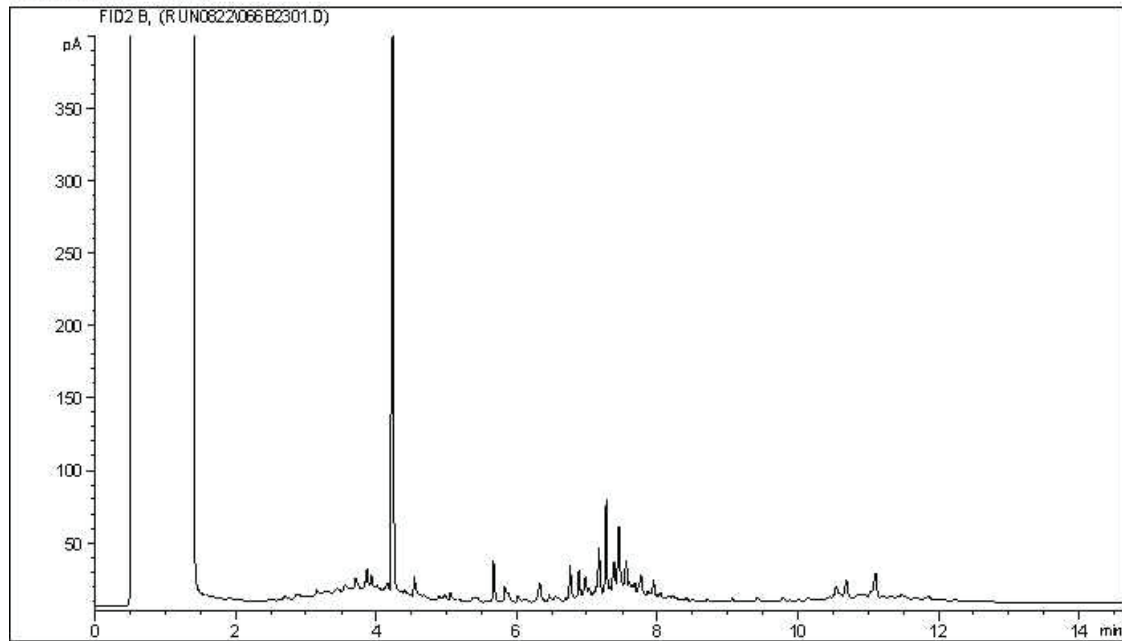
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

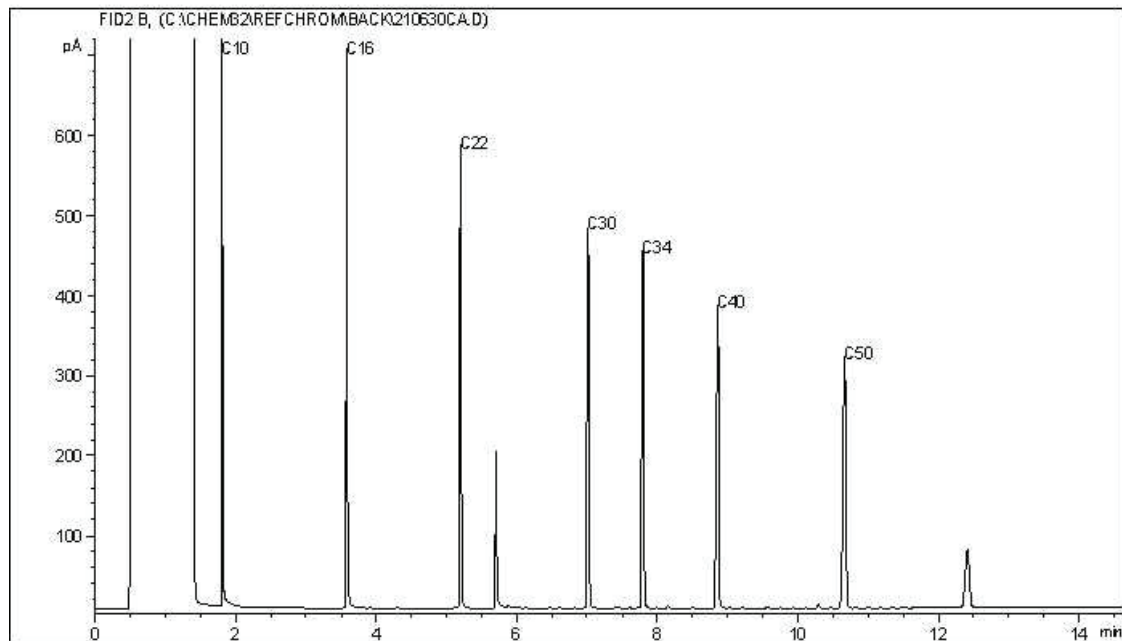
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



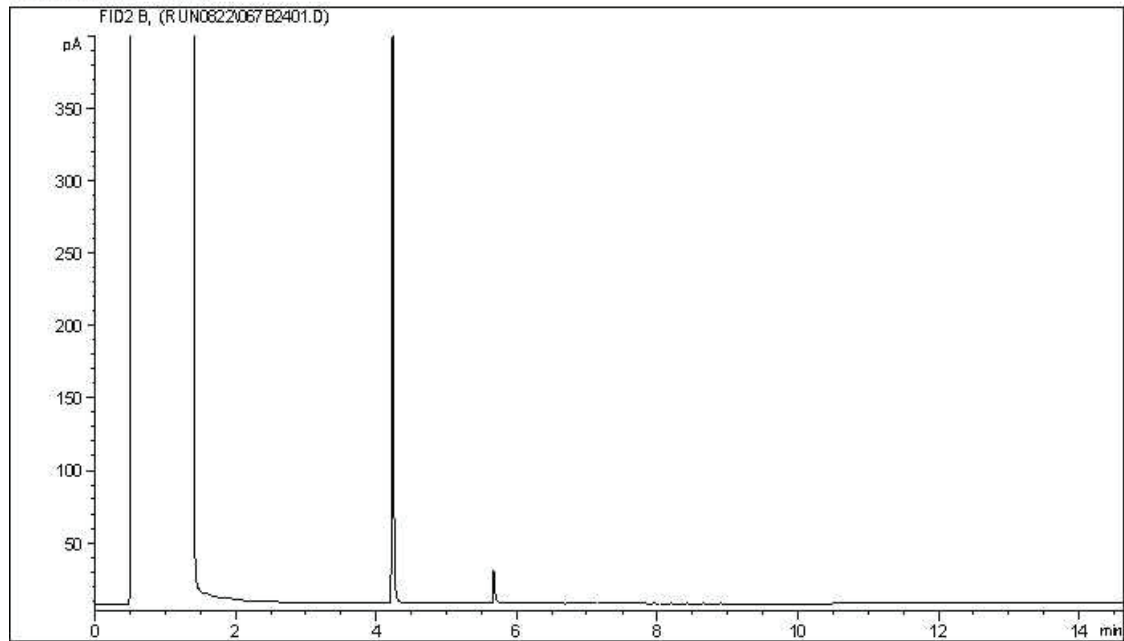
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

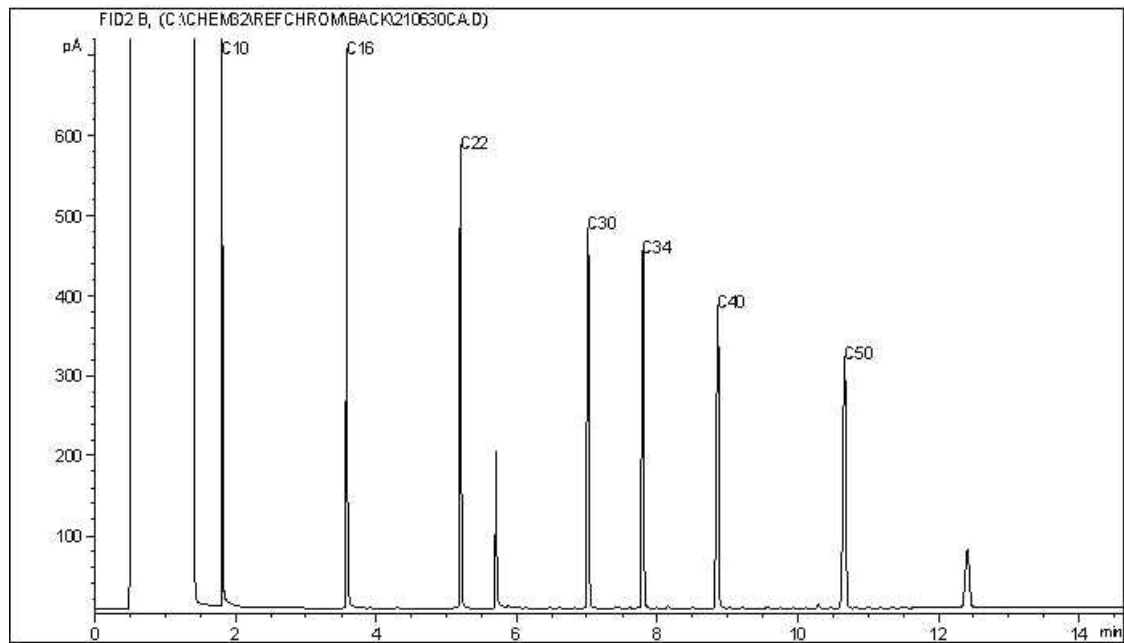
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



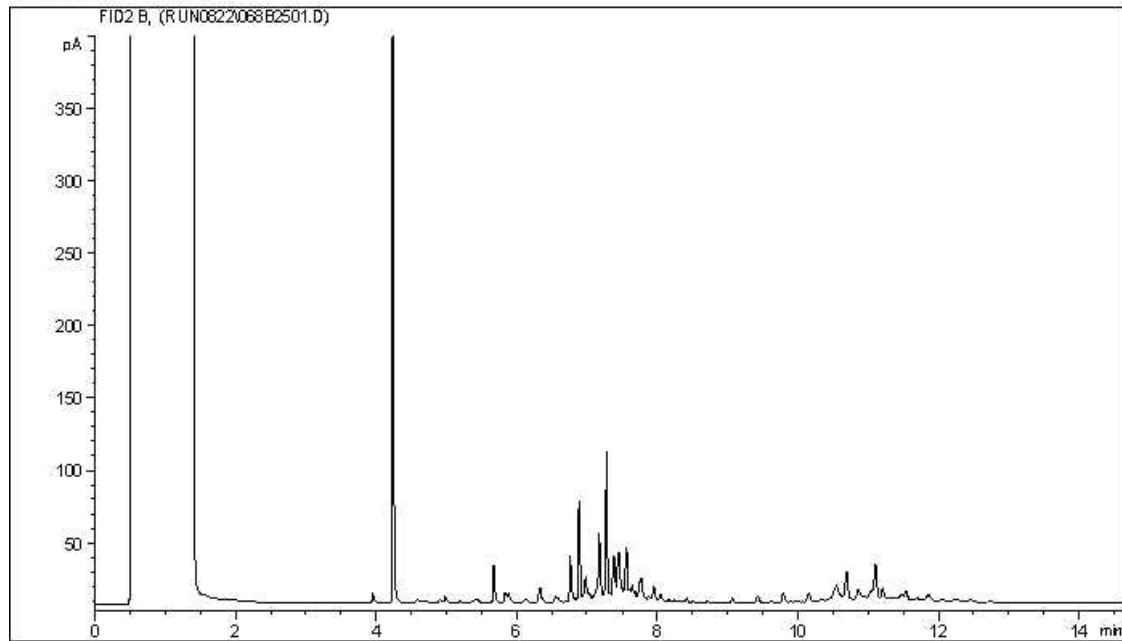
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

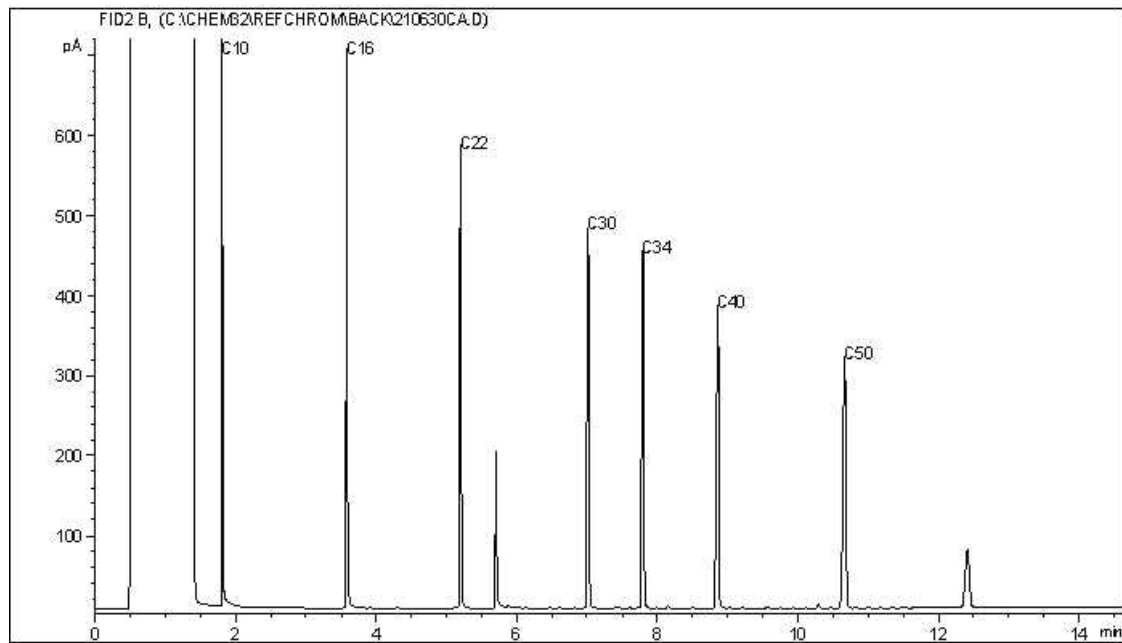
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



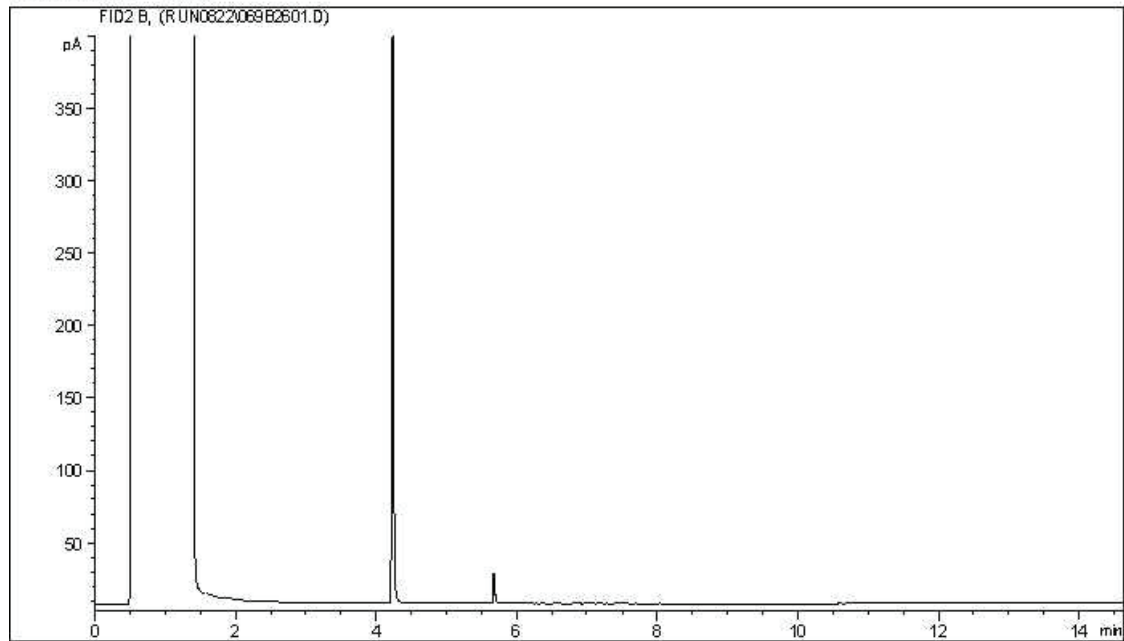
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

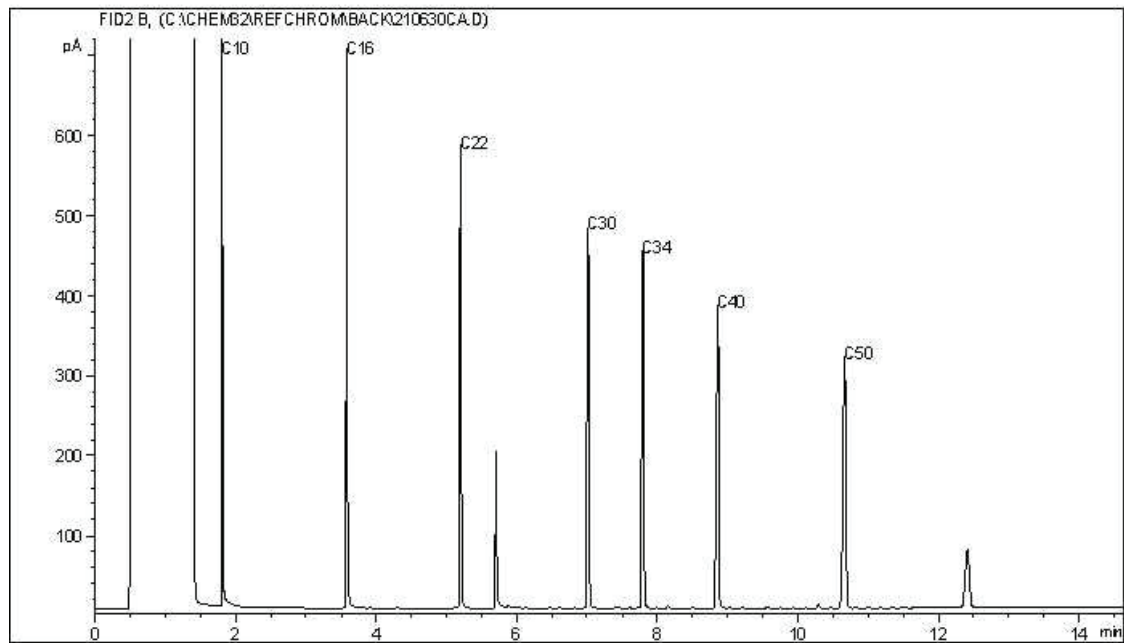
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



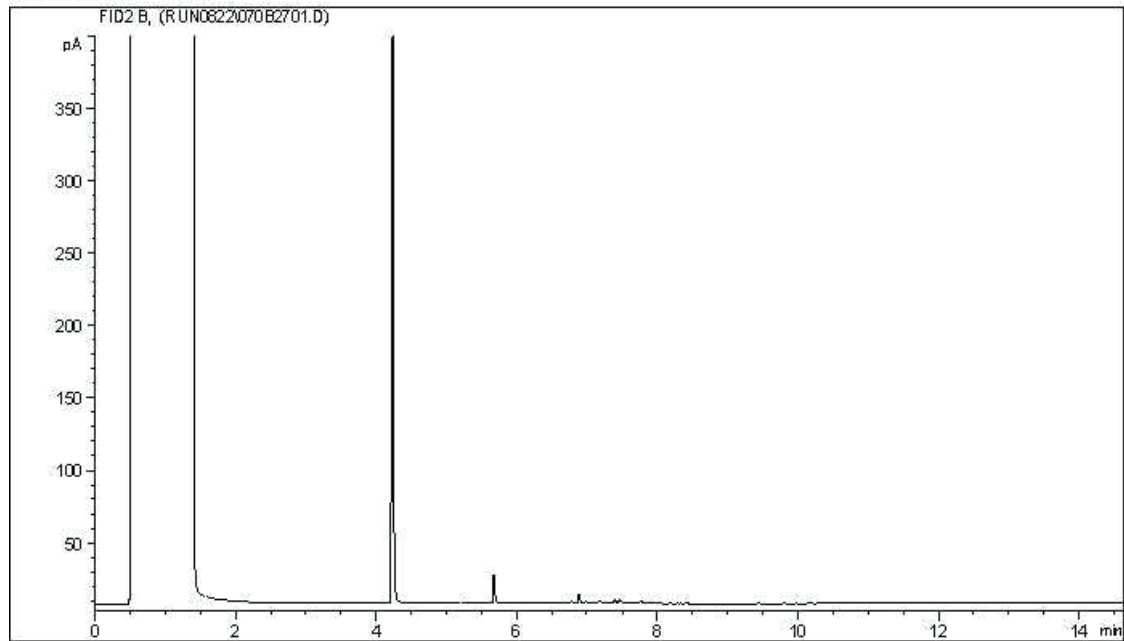
TYPICAL PRODUCT CARBON NUMBER RANGES

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Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

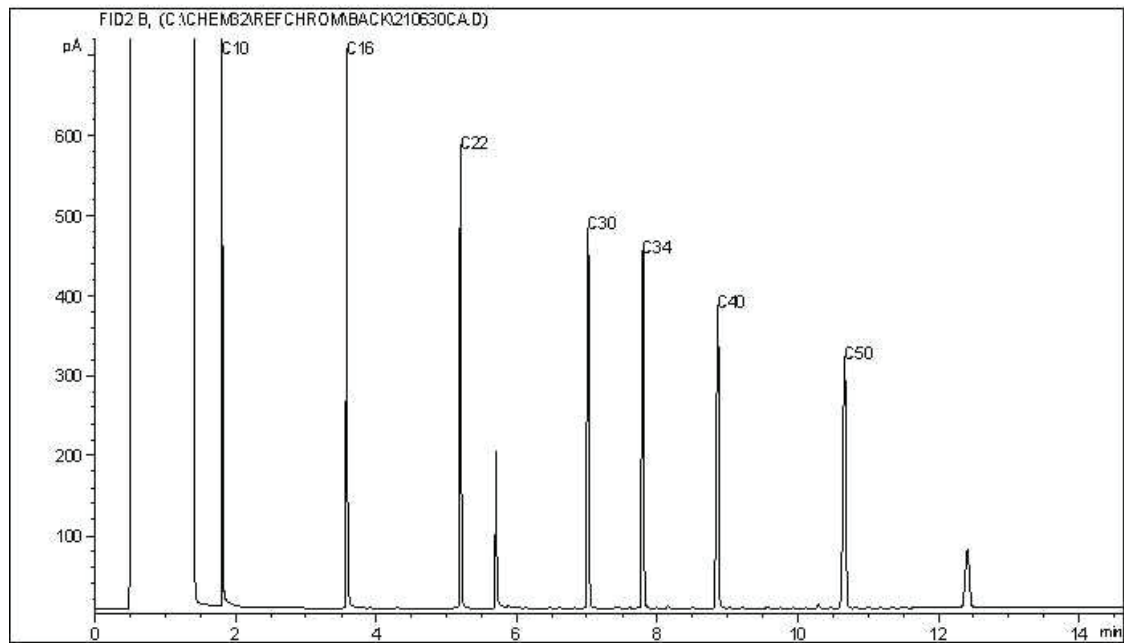
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



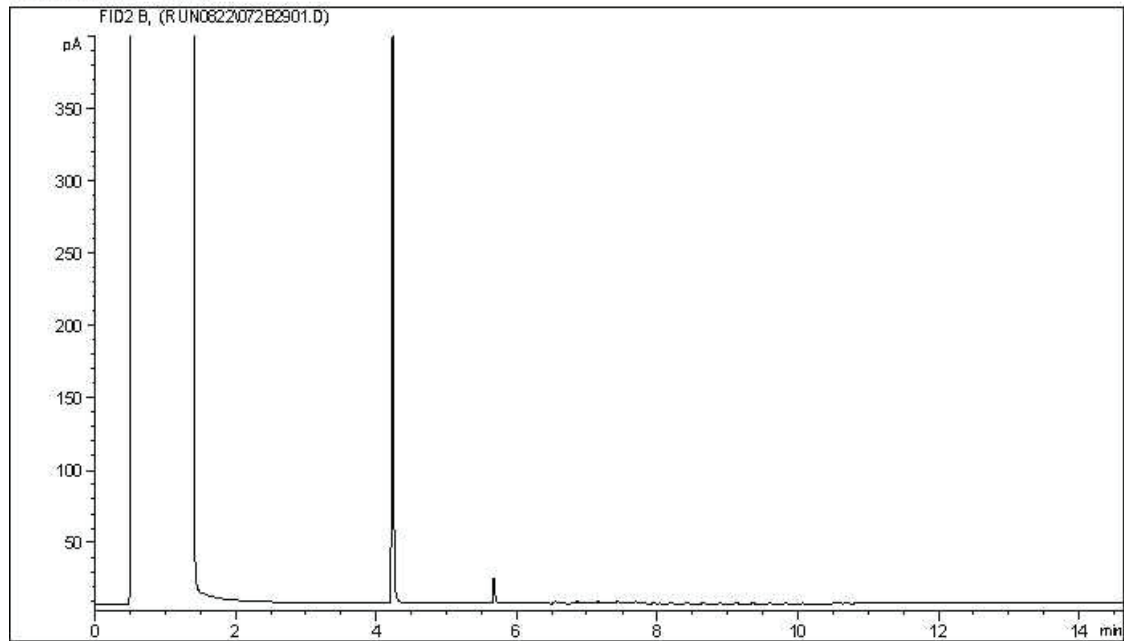
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

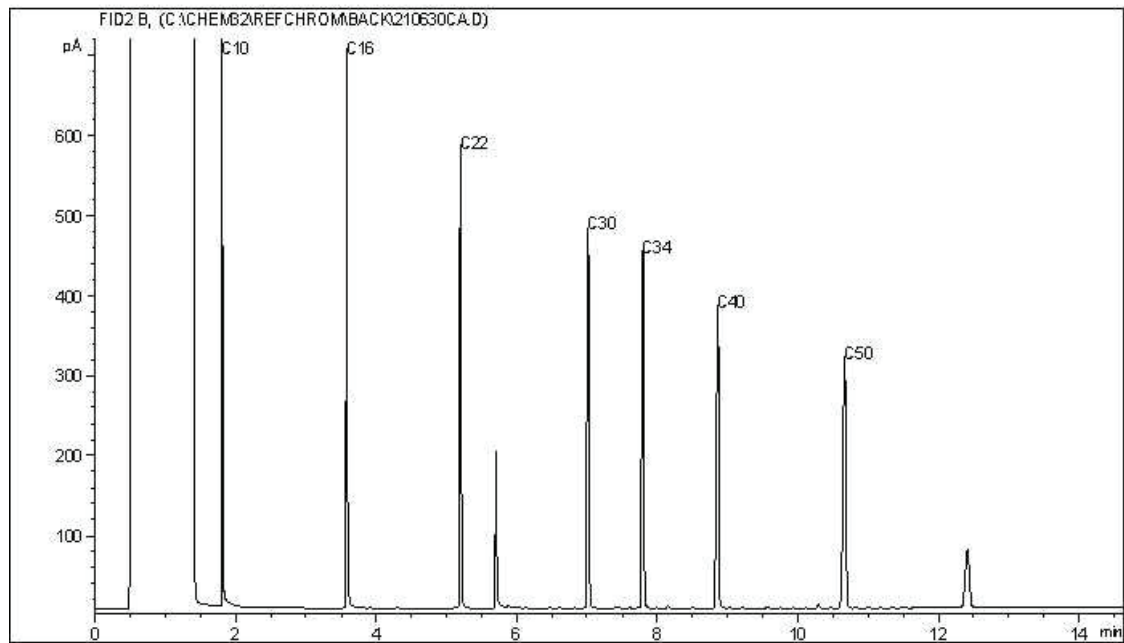
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC12



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

GOLDER DATA QUALITY REVIEW CHECKLIST

Site Location: Camp Farewell

Sampling Date: August 12, 2021

Golder Project Number: 20368099-6000-1001

Laboratory: Bureau Veritas Edmonton

Lab Submission Number: C160616

Was the Cooler Received at the lab under a sealed and intact custody seal? Yes
 Was proper chain of custody of the samples documented and kept? Yes
 Were sample temperatures acceptable when they reached lab?: Yes
 Were all samples analyzed and extracted within hold times?: Yes
 Has lab warranted all tests were in statistical control in CoA?: Yes
 Was sufficient sample provided for the requested analysis? Yes
 Has lab warranted all samples were analyzed with limited headspace present?: Yes

Are All Laboratory QC Within Acceptance Criteria (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Surrogate Recovery	X			All laboratory QC results are within acceptance criteria.
Method Blank Concentration	X			
Laboratory Duplicate RPD	X			
Matrix Spike Recovery	X			
Blank Spike Recovery	X			

Are All Field QC Samples Within Alert Limits (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Field Blank Concentration			X	No field QC samples were collected.
Trip Blank Concentration			X	
Field Duplicate RPD			X	

Is data considered reliable (Yes/No/Suspect)?: Yes
 If answer is "No" or "Suspect", describe and provide rationale:

Data Reviewed by (Print): Anita Colbert

Data Reviewed by (Signature): Anita Colbert

Date: September 20, 2021



Your P.O. #: 20368099-7000-1001
 Your Project #: 20368099-6000-1001
 Site Location: Camp Farewell and Unipkat I-22, Northwest Territories

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
 2800, 700 -2nd Street SW
 CALGARY, AB
 CANADA T2P 2W2

Your C.O.C. #: 644511-10-01, 644511-11-01, 644511-13-01, 644511-14-01

Report Date: 2021/09/22
 Report #: R3075215
 Version: 4 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C160993

Received: 2021/08/18, 10:00

Sample Matrix: Soil
 # Samples Received: 34

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Barium on ICP using Fusion Extraction (1)	3	2021/08/27	2021/08/29	AB SOP-00044 / AB SOP-00042	EPA 6010d R5 m
Boron (Hot Water Soluble) (1)	3	2021/08/27	2021/08/28	AB SOP-00034 / AB SOP-00042	EPA 6010d R5 m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	10	N/A	2021/08/27	AB SOP-00039	CCME CWS/EPA 8260d m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	10	N/A	2021/08/28	AB SOP-00039	CCME CWS/EPA 8260d m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	9	N/A	2021/08/30	AB SOP-00039	CCME CWS/EPA 8260d m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	5	N/A	2021/09/02	AB SOP-00039	CCME CWS/EPA 8260d m
F1-BTEX (1)	20	N/A	2021/08/28		Auto Calc
F1-BTEX (1)	9	N/A	2021/08/31		Auto Calc
F1-BTEX (1)	5	N/A	2021/09/02		Auto Calc
Hexavalent Chromium (1, 3)	3	2021/08/25	2021/08/25	AB SOP-00063	SM 23 3500-Cr B m
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 4)	3	2021/08/24	2021/08/25	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	1	2021/08/23	2021/08/25	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	8	2021/08/24	2021/08/26	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	5	2021/08/24	2021/08/29	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	14	2021/08/24	2021/08/30	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	3	2021/08/24	2021/08/31	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 6)	3	N/A	2021/08/25		Auto Calc
CCME Hydrocarbons (F4G in soil) (1, 5)	1	2021/08/24	2021/08/26	AB SOP-00036 AB SOP-00040	CCME PHC-CWS m
CCME Hydrocarbons (F4G in soil) (1, 5)	1	2021/08/24	2021/08/31	AB SOP-00036 AB SOP-00040	CCME PHC-CWS m
Elements by ICPMS - Soils (1)	3	2021/08/26	2021/08/27	AB SOP-00001 / AB SOP-00043	EPA 6020b R2 m
Moisture (1)	1	N/A	2021/08/24	AB SOP-00002	CCME PHC-CWS m
Moisture (1)	33	N/A	2021/08/25	AB SOP-00002	CCME PHC-CWS m
Nitrite-N and Nitrate-N (soluble) (1)	3	2021/08/28	2021/08/29	AB SOP-00033 / AB SOP-00023	SM 23 4110 B m



Your P.O. #: 20368099-7000-1001
 Your Project #: 20368099-6000-1001
 Site Location: Camp Farewell and Unipkat I-22, Northwest Territories

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
 2800, 700 -2nd Street SW
 CALGARY, AB
 CANADA T2P 2W2

Your C.O.C. #: 644511-10-01, 644511-11-01, 644511-13-01, 644511-14-01

Report Date: 2021/09/22
 Report #: R3075215
 Version: 4 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C160993

Received: 2021/08/18, 10:00

Sample Matrix: Soil
 # Samples Received: 34

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Soluble Ions (1)	3	2021/08/28	2021/08/28	AB SOP-00033 / AB SOP-00042	EPA 6010d R5 m
Soluble Paste (1)	3	2021/08/27	2021/08/27	AB SOP-00033	Carter 2nd ed 15.2 m
Soluble Ions Calculation (1)	3	N/A	2021/09/22		Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is date sampled unless otherwise stated.

(3) Some soil samples may react with the Cr(VI) spike reducing it to Cr(III). These samples are highly unlikely to contain native hexavalent chromium. Thus a failed spike recovery does not invalidate a negative result on the native sample.

(4) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories



Your P.O. #: 20368099-7000-1001
Your Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
2800, 700 -2nd Street SW
CALGARY, AB
CANADA T2P 2W2

Your C.O.C. #: 644511-10-01, 644511-11-01, 644511-13-01, 644511-14-01

Report Date: 2021/09/22
Report #: R3075215
Version: 4 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C160993

Received: 2021/08/18, 10:00

conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(5) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(6) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Cynny Hagen
Key Account Specialist
22 Sep 2021 17:25:42

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Cynny Hagen, Key Account Specialist
Email: Cynny.HAGEN@bureauveritas.com
Phone# (403)735-2273

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BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU VERITAS

BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE832	AEE832		AEE833			AEE834		
Sampling Date		2021/08/16 09:45	2021/08/16 09:45		2021/08/16 09:50			2021/08/16 09:20		
COC Number		644511-10-01	644511-10-01		644511-10-01			644511-10-01		
	UNITS	TP21-16-03	TP21-16-03 Lab-Dup	RDL	TP21-16-04	RDL	QC Batch	TP21-15-02	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	N/A	N/A	27	380 (1)	27	A330263	18	10	A330555
F3 (C16-C34 Hydrocarbons)	mg/kg	N/A	N/A	140	6700 (1)	140	A330263	57	50	A330555
F4 (C34-C50 Hydrocarbons)	mg/kg	N/A	N/A	140	3300 (1)	140	A330263	<50	50	A330555
Reached Baseline at C50	mg/kg	N/A	N/A	N/A	No	N/A	A330263	Yes	N/A	A330555
Physical Properties										
Moisture	%	60	N/A	0.30	63	0.30	A330437	6.9	0.30	A330550
Volatiles										
Xylenes (Total)	mg/kg	<0.15	N/A	0.15	<0.18	0.18	A327601	<0.045	0.045	A327601
F1 (C6-C10) - BTEX	mg/kg	<34	N/A	34	<40	40	A327601	<10	10	A327601
Field Preserved Volatiles										
Benzene	mg/kg	<0.017 (2)	0.019	0.017	0.024 (2)	0.020	A330384	<0.0050	0.0050	A330384
Toluene	mg/kg	0.22 (2)	0.26	0.17	34 (2)	0.20	A330384	<0.050	0.050	A330384
Ethylbenzene	mg/kg	<0.034 (2)	0.045	0.034	<0.040 (2)	0.040	A330384	<0.010	0.010	A330384
m & p-Xylene	mg/kg	<0.13 (2)	<0.13	0.13	<0.16 (2)	0.16	A330384	<0.040	0.040	A330384
o-Xylene	mg/kg	<0.067 (2)	<0.067	0.067	<0.080 (2)	0.080	A330384	<0.020	0.020	A330384
F1 (C6-C10)	mg/kg	<34 (2)	<34	34	45 (2)	40	A330384	<10	10	A330384
Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	99	97	N/A	98	N/A	A330384	97	N/A	A330384
4-Bromofluorobenzene (sur.)	%	103	102	N/A	100	N/A	A330384	102	N/A	A330384
D10-o-Xylene (sur.)	%	119	120	N/A	103	N/A	A330384	111	N/A	A330384
D4-1,2-Dichloroethane (sur.)	%	100	99	N/A	100	N/A	A330384	98	N/A	A330384
O-TERPHENYL (sur.)	%	N/A	N/A	N/A	101	N/A	A330263	100	N/A	A330555

RDL = Reportable Detection Limit
 Lab-Dup = Laboratory Initiated Duplicate
 N/A = Not Applicable
 (1) Detection limits raised due to high moisture content, sample contains => 50% moisture.
 (2) Detection limits raised based on sample weight used for analysis.



BUREAU
VERITAS

BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE835			AEE836	AEE837		AEE838		
Sampling Date		2021/08/16 09:25			2021/08/16 09:40	2021/08/16 09:43		2021/08/16 10:05		
COC Number		644511-10-01			644511-10-01	644511-10-01		644511-10-01		
	UNITS	TP21-15-04	RDL	QC Batch	TP21-14-02	TP21-14-04	QC Batch	TP21-17-02	RDL	QC Batch
Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	330 (1)	21	A330555	16	<10	A330555	<10	10	A330263
F3 (C16-C34 Hydrocarbons)	mg/kg	4600 (1)	100	A330555	100	<50	A330555	<50	50	A330263
F4 (C34-C50 Hydrocarbons)	mg/kg	1700 (1)	100	A330555	<50	<50	A330555	<50	50	A330263
Reached Baseline at C50	mg/kg	No	N/A	A330555	Yes	Yes	A330555	Yes	N/A	A330263
Physical Properties										
Moisture	%	52	0.30	A330549	5.7	9.1	A330550	7.0	0.30	A330437
Volatiles										
Xylenes (Total)	mg/kg	<0.095	0.095	A327601	<0.045	<0.045	A327601	<0.045	0.045	A327601
F1 (C6-C10) - BTEX	mg/kg	<21	21	A327601	<10	40	A327601	<10	10	A327601
Field Preserved Volatiles										
Benzene	mg/kg	0.059 (2)	0.011	A330384	<0.0050	<0.0050	A330384	<0.0050	0.0050	A330384
Toluene	mg/kg	<0.11 (2)	0.11	A330384	<0.050	<0.050	A330384	<0.050	0.050	A330384
Ethylbenzene	mg/kg	<0.021 (2)	0.021	A330384	<0.010	<0.010	A330384	<0.010	0.010	A330384
m & p-Xylene	mg/kg	<0.085 (2)	0.085	A330384	<0.040	<0.040	A330384	<0.040	0.040	A330384
o-Xylene	mg/kg	<0.042 (2)	0.042	A330384	<0.020	<0.020	A330384	<0.020	0.020	A330384
F1 (C6-C10)	mg/kg	<21 (2)	21	A330384	<10	40	A330384	<10	10	A330384
Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	98	N/A	A330384	96	102	A330384	98	N/A	A330384
4-Bromofluorobenzene (sur.)	%	102	N/A	A330384	100	102	A330384	103	N/A	A330384
D10-o-Xylene (sur.)	%	116	N/A	A330384	99	119	A330384	117	N/A	A330384
D4-1,2-Dichloroethane (sur.)	%	99	N/A	A330384	99	97	A330384	99	N/A	A330384
O-TERPHENYL (sur.)	%	112	N/A	A330555	95	96	A330555	98	N/A	A330263
RDL = Reportable Detection Limit N/A = Not Applicable (1) Detection limits raised due to high moisture content, sample contains => 50% moisture. (2) Detection limits raised based on sample weight used for analysis.										



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE839	AEE839			AEE840		AEE841		
Sampling Date		2021/08/16 10:08	2021/08/16 10:08			2021/08/16 10:17		2021/08/16 10:48		
COC Number		644511-10-01	644511-10-01			644511-10-01		644511-11-01		
	UNITS	TP21-17-04	TP21-17-04 Lab-Dup	RDL	QC Batch	TP21-17-06	QC Batch	TP21-48-02	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	<12 (1)	N/A	12	A329225	<10	A330380	320	10	A330555
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	N/A	50	A329225	82	A330380	350	50	A330555
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	N/A	50	A329225	<50	A330380	85	50	A330555
Reached Baseline at C50	mg/kg	Yes	N/A	N/A	A329225	Yes	A330380	Yes	N/A	A330555

Physical Properties										
Moisture	%	9.0	8.3	0.30	A329224	18	A330437	11	0.30	A330549

Volatiles										
Xylenes (Total)	mg/kg	<0.045	N/A	0.045	A327601	<0.045	A327601	<0.045	0.045	A327601
F1 (C6-C10) - BTEX	mg/kg	<10	N/A	10	A327601	<10	A327601	<10	10	A327601

Field Preserved Volatiles										
Benzene	mg/kg	<0.0050	N/A	0.0050	A330384	0.047	A330384	<0.0050	0.0050	A330384
Toluene	mg/kg	<0.050	N/A	0.050	A330384	0.64	A330384	<0.050	0.050	A330384
Ethylbenzene	mg/kg	<0.010	N/A	0.010	A330384	<0.010	A330384	0.018	0.010	A330384
m & p-Xylene	mg/kg	<0.040	N/A	0.040	A330384	<0.040	A330384	<0.040	0.040	A330384
o-Xylene	mg/kg	<0.020	N/A	0.020	A330384	<0.020	A330384	<0.020	0.020	A330384
F1 (C6-C10)	mg/kg	<10	N/A	10	A330384	<10	A330384	<10	10	A330384

Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	98	N/A	N/A	A330384	99	A330384	99	N/A	A330384
4-Bromofluorobenzene (sur.)	%	101	N/A	N/A	A330384	101	A330384	100	N/A	A330384
D10-o-Xylene (sur.)	%	111	N/A	N/A	A330384	109	A330384	113	N/A	A330384
D4-1,2-Dichloroethane (sur.)	%	100	N/A	N/A	A330384	100	A330384	101	N/A	A330384
O-TERPHENYL (sur.)	%	112	N/A	N/A	A329225	123	A330380	99	N/A	A330555

RDL = Reportable Detection Limit
 Lab-Dup = Laboratory Initiated Duplicate
 N/A = Not Applicable
 (1) Detection limit raised due to interferent.



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE842	AEE842	AEE843	AEE844		AEE845		
Sampling Date		2021/08/16 10:49	2021/08/16 10:49	2021/08/16 10:50	2021/08/16 10:25		2021/08/16 10:29		
COC Number		644511-11-01	644511-11-01	644511-11-01	644511-11-01		644511-11-01		
	UNITS	TP21-48-04	TP21-48-04 Lab-Dup	TP21-48-05	TP21-44-02	QC Batch	TP21-44-04	RDL	QC Batch

Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	50	55	<10	140	A330555	63	10	A330263
F3 (C16-C34 Hydrocarbons)	mg/kg	400	390	65	410	A330555	350	50	A330263
F4 (C34-C50 Hydrocarbons)	mg/kg	110	120	<50	96	A330555	120	50	A330263
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	A330555	Yes	N/A	A330263
Physical Properties									
Moisture	%	13	N/A	11	16	A330549	16	0.30	A330437
Volatiles									
Xylenes (Total)	mg/kg	<0.045	N/A	<0.045	<0.045	A327601	<0.045	0.045	A327601
F1 (C6-C10) - BTEX	mg/kg	<10	N/A	<10	<10	A327601	<10	10	A327601
Field Preserved Volatiles									
Benzene	mg/kg	0.014	N/A	<0.0050	<0.0050	A330384	<0.0050	0.0050	A330384
Toluene	mg/kg	0.064	N/A	<0.050	<0.050	A330384	0.11	0.050	A330384
Ethylbenzene	mg/kg	<0.010	N/A	<0.010	<0.010	A330384	0.019	0.010	A330384
m & p-Xylene	mg/kg	<0.040	N/A	<0.040	<0.040	A330384	<0.040	0.040	A330384
o-Xylene	mg/kg	<0.020	N/A	<0.020	<0.020	A330384	<0.020	0.020	A330384
F1 (C6-C10)	mg/kg	<10	N/A	<10	<10	A330384	<10	10	A330384
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	98	N/A	98	98	A330384	99	N/A	A330384
4-Bromofluorobenzene (sur.)	%	99	N/A	103	102	A330384	101	N/A	A330384
D10-o-Xylene (sur.)	%	117	N/A	118	98	A330384	125	N/A	A330384
D4-1,2-Dichloroethane (sur.)	%	98	N/A	100	101	A330384	103	N/A	A330384
O-TERPHENYL (sur.)	%	99	101	104	97	A330555	103	N/A	A330263
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable									



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE846	AEE847	AEE848	AEE848	AEE849		
Sampling Date		2021/08/16 10:30	2021/08/16 13:47	2021/08/16 13:48	2021/08/16 13:48	2021/08/16 13:57		
COC Number		644511-11-01	644511-11-01	644511-11-01	644511-11-01	644511-11-01		
	UNITS	TP21-44-06	TP21-75-02	TP21-75-04	TP21-75-04 Lab-Dup	TP21-75-06	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	64	180	N/A	<10	10	A330263
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	280	420	N/A	<50	50	A330263
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	76	110	N/A	<50	50	A330263
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	N/A	Yes	N/A	A330263
Physical Properties								
Moisture	%	14	13	12	11	18	0.30	A330437
Volatiles								
Xylenes (Total)	mg/kg	<0.045	<0.045	0.12	N/A	<0.045	0.045	A327601
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	N/A	<10	10	A327601
Field Preserved Volatiles								
Benzene	mg/kg	0.017	<0.0050	0.011	N/A	<0.0050	0.0050	A330384
Toluene	mg/kg	<0.050	<0.050	0.38	N/A	<0.050	0.050	A330384
Ethylbenzene	mg/kg	<0.010	<0.010	0.019	N/A	<0.010	0.010	A330384
m & p-Xylene	mg/kg	<0.040	<0.040	0.080	N/A	<0.040	0.040	A330384
o-Xylene	mg/kg	<0.020	<0.020	0.037	N/A	<0.020	0.020	A330384
F1 (C6-C10)	mg/kg	<10	<10	<10	N/A	<10	10	A330384
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	97	98	97	N/A	97	N/A	A330384
4-Bromofluorobenzene (sur.)	%	103	100	99	N/A	101	N/A	A330384
D10-o-Xylene (sur.)	%	102	110	112	N/A	115	N/A	A330384
D4-1,2-Dichloroethane (sur.)	%	100	99	99	N/A	99	N/A	A330384
O-TERPHENYL (sur.)	%	103	102	105	N/A	103	N/A	A330263
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable								



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE871	AEE872			AEE873		AEE874		
Sampling Date		2021/08/16 14:10	2021/08/16 14:11			2021/08/16 14:18		2021/08/16 14:29		
COC Number		644511-13-01	644511-13-01			644511-13-01		644511-13-01		
	UNITS	TP21-80-01	TP21-80-04	RDL	QC Batch	TP21-80-05	RDL	TP21-107-02	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	87	190	10	A330487	N/A	10	190	10	A330487
F3 (C16-C34 Hydrocarbons)	mg/kg	280	320	50	A330487	N/A	50	370	50	A330487
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	<50	50	A330487	N/A	50	67	50	A330487
Reached Baseline at C50	mg/kg	Yes	Yes	N/A	A330487	N/A	N/A	Yes	N/A	A330487

Physical Properties										
Moisture	%	12	9.7	0.30	A330481	53	0.30	N/A	0.30	A330481

Volatiles										
Xylenes (Total)	mg/kg	0.13	0.051	0.045	A327601	<0.13	0.13	<0.045	0.045	A327601
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	A327601	<24	24	<10	10	A327601

Field Preserved Volatiles										
Benzene	mg/kg	<0.0050	<0.0050	0.0050	A330384	<0.015 (1)	0.015	<0.0050	0.0050	A333257
Toluene	mg/kg	<0.050	0.22	0.050	A330384	0.24 (1)	0.15	<0.050	0.050	A333257
Ethylbenzene	mg/kg	<0.010	0.012	0.010	A330384	<0.030 (1)	0.030	<0.010	0.010	A333257
m & p-Xylene	mg/kg	0.060	0.051	0.040	A330384	<0.12 (1)	0.12	<0.040	0.040	A333257
o-Xylene	mg/kg	0.074	<0.020	0.020	A330384	<0.060 (1)	0.060	<0.020	0.020	A333257
F1 (C6-C10)	mg/kg	<10	<10	10	A330384	<24 (2)	24	<10	10	A333257

Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	98	96	N/A	A330384	91	N/A	77	N/A	A333257
4-Bromofluorobenzene (sur.)	%	101	101	N/A	A330384	108	N/A	94	N/A	A333257
D10-o-Xylene (sur.)	%	110	110	N/A	A330384	140	N/A	123	N/A	A333257
D4-1,2-Dichloroethane (sur.)	%	99	98	N/A	A330384	114	N/A	97	N/A	A333257
O-TERPHENYL (sur.)	%	105	108	N/A	A330487	N/A	N/A	106	N/A	A330487

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised based on sample weight used for analysis.
(2) Detection limits raised based on MDL and sample weight used for analysis.



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE875	AEE876		AEE877		AEE878		
Sampling Date		2021/08/16 14:30	2021/08/16 14:31		2021/08/16 14:46		2021/08/16 14:47		
COC Number		644511-13-01	644511-13-01		644511-13-01		644511-13-01		
	UNITS	TP21-107-04	TP21-107-06	QC Batch	TP21-112-02	QC Batch	TP21-112-04	RDL	QC Batch
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	270	<10	A330487	39	A330555	200	10	A330555
F3 (C16-C34 Hydrocarbons)	mg/kg	420	<50	A330487	250	A330555	430	50	A330555
F4 (C34-C50 Hydrocarbons)	mg/kg	77	<50	A330487	55	A330555	86	50	A330555
Reached Baseline at C50	mg/kg	Yes	Yes	A330487	Yes	A330555	Yes	N/A	A330555
Physical Properties									
Moisture	%	N/A	N/A	A330481	11	A330549	13	0.30	A330549
Volatiles									
Xylenes (Total)	mg/kg	0.20	<0.045	A327601	<0.045	A327601	0.12	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	22	<10	A327601	<10	A327601	<10	10	A328743
Field Preserved Volatiles									
Benzene	mg/kg	0.015	<0.0050	A333257	<0.0050	A333257	0.012	0.0050	A333257
Toluene	mg/kg	0.38	<0.050	A333257	<0.050	A333257	0.18	0.050	A333257
Ethylbenzene	mg/kg	0.026	<0.010	A333257	<0.010	A333257	0.018	0.010	A333257
m & p-Xylene	mg/kg	0.14	<0.040	A333257	<0.040	A333257	0.083	0.040	A333257
o-Xylene	mg/kg	0.059	<0.020	A333257	<0.020	A333257	0.041	0.020	A333257
F1 (C6-C10)	mg/kg	23	<10	A333257	<10	A333257	10	10	A333257
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	86	85	A333257	90	A333257	90	N/A	A333257
4-Bromofluorobenzene (sur.)	%	100	101	A333257	106	A333257	105	N/A	A333257
D10-o-Xylene (sur.)	%	139	140	A333257	135	A333257	123	N/A	A333257
D4-1,2-Dichloroethane (sur.)	%	107	104	A333257	109	A333257	109	N/A	A333257
O-TERPHENYL (sur.)	%	114	104	A330487	105	A330555	109	N/A	A330555
RDL = Reportable Detection Limit N/A = Not Applicable									



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE879		AEE880		AEE888		AEE889		
Sampling Date		2021/08/16 14:57		2021/08/16 14:57		2021/08/16 15:11		2021/08/16 15:12		
COC Number		644511-13-01		644511-13-01		644511-14-01		644511-14-01		
	UNITS	TP21-112-06	QC Batch	DUPC	QC Batch	TP21-113-01	QC Batch	TP21-113-04	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	A330555	<10	A330555	170	A330555	63	10	A330555
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	A330555	<50	A330555	240	A330555	220	50	A330555
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	A330555	<50	A330555	<50	A330555	<50	50	A330555
Reached Baseline at C50	mg/kg	Yes	A330555	Yes	A330555	Yes	A330555	Yes	N/A	A330555

Physical Properties										
Moisture	%	11	A330481	12	A330549	8.4	A330481	6.0	0.30	A330549

Volatiles										
Xylenes (Total)	mg/kg	0.13	A328743	<0.045	A328743	0.054	A328743	<0.045	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	10	A328743	<10	A328743	<10	A328743	<10	10	A328743

Field Preserved Volatiles										
Benzene	mg/kg	<0.0050	A333257	<0.0050	A333257	<0.0050	A333257	<0.0050	0.0050	A333262
Toluene	mg/kg	<0.050	A333257	<0.050	A333257	<0.050	A333257	<0.050	0.050	A333262
Ethylbenzene	mg/kg	0.026	A333257	<0.010	A333257	0.013	A333257	<0.010	0.010	A333262
m & p-Xylene	mg/kg	0.093	A333257	<0.040	A333257	0.054	A333257	<0.040	0.040	A333262
o-Xylene	mg/kg	0.039	A333257	<0.020	A333257	<0.020	A333257	<0.020	0.020	A333262
F1 (C6-C10)	mg/kg	11	A333257	<10	A333257	<10	A333257	<10	10	A333262

Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	92	A333257	88	A333257	91	A333257	103	N/A	A333262
4-Bromofluorobenzene (sur.)	%	108	A333257	104	A333257	106	A333257	87	N/A	A333262
D10-o-Xylene (sur.)	%	139	A333257	123	A333257	133	A333257	129	N/A	A333262
D4-1,2-Dichloroethane (sur.)	%	110	A333257	106	A333257	108	A333257	135	N/A	A333262
O-TERPHENYL (sur.)	%	102	A330555	97	A330555	105	A330555	102	N/A	A330555

RDL = Reportable Detection Limit
N/A = Not Applicable



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

BV Labs ID		AEE889	AEE890	AEE891	AEE892	AEE893		
Sampling Date		2021/08/16 15:12	2021/08/16 15:16	2021/08/16 15:30	2021/08/16 15:31	2021/08/16 15:41		
COC Number		644511-14-01	644511-14-01	644511-14-01	644511-14-01	644511-14-01		
	UNITS	TP21-113-04 Lab-Dup	TP21-113-05	TP21-106-02	TP21-106-04	TP21-106-06	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	N/A	<10	120	N/A	<10	10	A330555
F3 (C16-C34 Hydrocarbons)	mg/kg	N/A	<50	370	N/A	<50	50	A330555
F4 (C34-C50 Hydrocarbons)	mg/kg	N/A	<50	55	N/A	<50	50	A330555
Reached Baseline at C50	mg/kg	N/A	Yes	Yes	N/A	Yes	N/A	A330555
Physical Properties								
Moisture	%	5.7	5.4	11	14	5.0	0.30	A330549
Volatiles								
Xylenes (Total)	mg/kg	N/A	<0.045	0.052	<0.045	<0.045	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	N/A	<10	<10	<10	<10	10	A328743
Field Preserved Volatiles								
Benzene	mg/kg	<0.0050	0.0078	0.0088	<0.0050	<0.0050	0.0050	A333262
Toluene	mg/kg	<0.050	<0.050	0.064	0.064	<0.050	0.050	A333262
Ethylbenzene	mg/kg	<0.010	<0.010	0.013	<0.010	<0.010	0.010	A333262
m & p-Xylene	mg/kg	<0.040	<0.040	0.052	<0.040	<0.040	0.040	A333262
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A333262
F1 (C6-C10)	mg/kg	<10	<10	<10	<10	<10	10	A333262
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	98	103	98	98	97	N/A	A333262
4-Bromofluorobenzene (sur.)	%	103	87	102	103	104	N/A	A333262
D10-o-Xylene (sur.)	%	114	138	113	121	100	N/A	A333262
D4-1,2-Dichloroethane (sur.)	%	115	134	115	114	114	N/A	A333262
O-TERPHENYL (sur.)	%	N/A	107	106	N/A	101	N/A	A330555
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable								



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VERITAS

BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

CCME REGULATED METALS - SOILS (SOIL)

BV Labs ID		AEE874	AEE875	AEE876		
Sampling Date		2021/08/16 14:29	2021/08/16 14:30	2021/08/16 14:31		
COC Number		644511-13-01	644511-13-01	644511-13-01		
	UNITS	TP21-107-02	TP21-107-04	TP21-107-06	RDL	QC Batch
Elements						
Soluble (Hot water) Boron (B)	mg/kg	0.53	0.58	<0.10	0.10	A334531
Hex. Chromium (Cr 6+)	mg/kg	<0.080	<0.080	<0.080	0.080	A330973
Total Antimony (Sb)	mg/kg	<0.50	0.56	<0.50	0.50	A333424
Total Arsenic (As)	mg/kg	6.3	6.6	8.4	1.0	A333424
Total Barium (Ba)	mg/kg	1800	1800	120	1.0	A333424
Total Beryllium (Be)	mg/kg	<0.40	<0.40	<0.40	0.40	A333424
Total Cadmium (Cd)	mg/kg	0.14	0.16	0.097	0.050	A333424
Total Chromium (Cr)	mg/kg	9.7	9.1	6.9	1.0	A333424
Total Cobalt (Co)	mg/kg	3.4	3.8	4.4	0.50	A333424
Total Copper (Cu)	mg/kg	12	14	5.0	1.0	A333424
Total Lead (Pb)	mg/kg	17	22	4.0	0.50	A333424
Total Mercury (Hg)	mg/kg	0.056	0.057	<0.050	0.050	A333424
Total Molybdenum (Mo)	mg/kg	0.78	0.75	0.57	0.40	A333424
Total Nickel (Ni)	mg/kg	9.5	10	12	1.0	A333424
Total Selenium (Se)	mg/kg	<0.50	<0.50	<0.50	0.50	A333424
Total Silver (Ag)	mg/kg	<0.20	<0.20	<0.20	0.20	A333424
Total Thallium (Tl)	mg/kg	<0.10	<0.10	<0.10	0.10	A333424
Total Tin (Sn)	mg/kg	<1.0	<1.0	<1.0	1.0	A333424
Total Uranium (U)	mg/kg	0.50	0.48	0.34	0.20	A333424
Total Vanadium (V)	mg/kg	18	16	14	1.0	A333424
Total Zinc (Zn)	mg/kg	33	39	33	10	A333424
RDL = Reportable Detection Limit						



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Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

RESULTS OF CHEMICAL ANALYSES OF SOIL

BV Labs ID		AEE874		AEE875		AEE876		AEE876	
Sampling Date		2021/08/16 14:29		2021/08/16 14:30		2021/08/16 14:31		2021/08/16 14:31	
COC Number		644511-13-01		644511-13-01		644511-13-01		644511-13-01	
	UNITS	TP21-107-02	RDL	TP21-107-04	RDL	TP21-107-06	RDL	TP21-107-06 Lab-Dup	QC Batch
Calculated Parameters									
Calculated Calcium (Ca)	mg/kg	55	0.54	44	0.54	15	0.41	N/A	A362207
Calculated Magnesium (Mg)	mg/kg	12	0.36	11	0.36	2.4	0.27	N/A	A362207
Calculated Sodium (Na)	mg/kg	29	0.89	36	0.90	11	0.68	N/A	A362207
Calculated Potassium (K)	mg/kg	2.9	0.46	3.3	0.47	3.8	0.36	N/A	A362207
Calculated Boron (B)	mg/kg	<0.036	0.036	<0.036	0.036	<0.027	0.027	N/A	A362207
Calculated Sulphate (SO4)	mg/kg	190	1.8	160	1.8	13	1.4	N/A	A362207
Calculated Nitrate (N)	mg/kg	<0.071	0.071	<0.072	0.072	<0.055	0.055	N/A	A362207
Calculated Nitrite (N)	mg/kg	<0.071	0.071	0.51	0.072	<0.055	0.055	N/A	A362207
Calculated Total Nitrogen (N)	mg/kg	CALCERROR	N/A	CALCERROR	N/A	CALCERROR	N/A	N/A	A362207
Soluble Parameters									
Soluble Nitrite (N)	mg/L	<0.20	0.20	1.4	0.20	<0.20	0.20	N/A	A335070
Soluble Nitrate (N)	mg/L	<0.20	0.20	<0.20	0.20	<0.20	0.20	N/A	A335070
Saturation %	%	36	N/A	36	N/A	27	N/A	27	A332687
Soluble Sulphate (SO4)	mg/L	520	5.0	440	5.0	47	5.0	N/A	A335166
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable									



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Sampler Initials: PT

PETROLEUM HYDROCARBONS (CCME)

BV Labs ID		AEE832	AEE832	AEE833		AEE835		
Sampling Date		2021/08/16 09:45	2021/08/16 09:45	2021/08/16 09:50		2021/08/16 09:25		
COC Number		644511-10-01	644511-10-01	644511-10-01		644511-10-01		
	UNITS	TP21-16-03	TP21-16-03 Lab-Dup	TP21-16-04	QC Batch	TP21-15-04	RDL	QC Batch

Ext. Pet. Hydrocarbon								
F3A (C16-C22)	mg/kg	<120 (1)	<120	N/A	A330260	N/A	120	A330260
F3B (C22-C34)	mg/kg	710 (2)	850	N/A	A330260	N/A	120	A330260
F2% (BIC)	mg/kg	6.7	N/A	N/A	A328747	N/A	N/A	A328747
Reached Baseline at C50	mg/kg	Yes	Yes	N/A	A330260	N/A	N/A	A330260
F4G-SG (Heavy Hydrocarbons-Grav.)	mg/kg	N/A	N/A	12000	A332744	5600	500	A337167

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.
(2) Detection limits raised due to high moisture content, sample contains => 50% moisture.
Matrix spike exceeds acceptance limits due to matrix interference.

BV Labs ID		AEE873		AEE892		
Sampling Date		2021/08/16 14:18		2021/08/16 15:31		
COC Number		644511-13-01		644511-14-01		
	UNITS	TP21-80-05	RDL	TP21-106-04	RDL	QC Batch

Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	42 (1)	21	N/A	21	A330260
F3 (C16-C34 Hydrocarbons)	mg/kg	760	150	N/A	150	A328747
F3A (C16-C22)	mg/kg	<110 (1)	110	160	50	A330260
F3B (C22-C34)	mg/kg	760 (1)	110	230	50	A330260
F2% (BIC)	mg/kg	5.2	N/A	32	N/A	A328747
F4 (C34-C50 Hydrocarbons)	mg/kg	320 (1)	110	N/A	N/A	A330260
Reached Baseline at C50	mg/kg	Yes	N/A	Yes	N/A	A330260

Surrogate Recovery (%)						
O-TERPHENYL (sur.)	%	98	N/A	N/A	N/A	A330260

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.



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Territories
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Sampler Initials: PT

PHYSICAL TESTING (SOIL)

BV Labs ID		AEE874	AEE875	AEE876		
Sampling Date		2021/08/16 14:29	2021/08/16 14:30	2021/08/16 14:31		
COC Number		644511-13-01	644511-13-01	644511-13-01		
	UNITS	TP21-107-02	TP21-107-04	TP21-107-06	RDL	QC Batch
Physical Properties						
Moisture	%	10	12	16	0.30	A330498
RDL = Reportable Detection Limit						



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Sampler Initials: PT

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID		AEE874	AEE875	AEE876		
Sampling Date		2021/08/16 14:29	2021/08/16 14:30	2021/08/16 14:31		
COC Number		644511-13-01	644511-13-01	644511-13-01		
	UNITS	TP21-107-02	TP21-107-04	TP21-107-06	RDL	QC Batch
Elements						
Total Fusion Barium (Ba)	mg/kg	3600	4100	850	50	A333687
RDL = Reportable Detection Limit						



GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.7°C
Package 2	2.3°C
Package 3	9.0°C
Package 4	5.7°C
Package 5	2.0°C

Version #3: Report re-issued to provide results for F2, F3 & F4 parameter on sample AEE873(TP21-80-05) requested on the original Chain of custody.

Version #4: Report re-issued to provide results in mg/kg for Sulphate and Nitrate data.

Results relate only to the items tested.



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Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A329224	ARV	Method Blank	Moisture	2021/08/24	<0.30		%	
A329224	ARV	RPD [AEE839-01]	Moisture	2021/08/24	8.1		%	20
A329225	SEH	Matrix Spike	O-TERPHENYL (sur.)	2021/08/25		123	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		112	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		125	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		123	%	60 - 140
A329225	SEH	Spiked Blank	O-TERPHENYL (sur.)	2021/08/25		102	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		97	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		106	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		102	%	60 - 140
A329225	SEH	Method Blank	O-TERPHENYL (sur.)	2021/08/25		105	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2021/08/25	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/25	<50		mg/kg	
A329225	SEH	RPD	F2 (C10-C16 Hydrocarbons)	2021/08/25	20		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/25	22		%	40
			F4 (C34-C50 Hydrocarbons)	2021/08/25	NC		%	40
A330260	GG3	Matrix Spike [AEE832-01]	O-TERPHENYL (sur.)	2021/08/25		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		90	%	60 - 140
			F3A (C16-C22)	2021/08/25		87	%	60 - 140
			F3B (C22-C34)	2021/08/25		58 (1)	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		88	%	60 - 140
A330260	GG3	Spiked Blank	O-TERPHENYL (sur.)	2021/08/25		112	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		97	%	60 - 140
			F3A (C16-C22)	2021/08/25		96	%	60 - 140
			F3B (C22-C34)	2021/08/25		100	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		99	%	60 - 140
A330260	GG3	Method Blank	O-TERPHENYL (sur.)	2021/08/25		105	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25	<10		mg/kg	
			F3A (C16-C22)	2021/08/25	<50		mg/kg	
			F3B (C22-C34)	2021/08/25	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/25	<50		mg/kg	
A330260	GG3	RPD [AEE832-01]	F3A (C16-C22)	2021/08/25	NC		%	40
			F3B (C22-C34)	2021/08/25	18		%	40
A330263	HAZ	Matrix Spike	O-TERPHENYL (sur.)	2021/08/25		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		88	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		91	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		92	%	60 - 140
A330263	HAZ	Spiked Blank	O-TERPHENYL (sur.)	2021/08/25		96	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		90	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		94	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		94	%	60 - 140
A330263	HAZ	Method Blank	O-TERPHENYL (sur.)	2021/08/25		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2021/08/25	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/25	<50		mg/kg	
A330263	HAZ	RPD	F2 (C10-C16 Hydrocarbons)	2021/08/25	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/25	NC		%	40
			F4 (C34-C50 Hydrocarbons)	2021/08/25	NC		%	40
A330380	SEH	Matrix Spike	O-TERPHENYL (sur.)	2021/08/26		131	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/26		123	%	60 - 140



BUREAU VERITAS

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Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A330380	SEH	Spiked Blank	F3 (C16-C34 Hydrocarbons)	2021/08/26		133	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/26		130	%	60 - 140
			O-TERPHENYL (sur.)	2021/08/26		113	%	60 - 140
A330380	SEH	Method Blank	F2 (C10-C16 Hydrocarbons)	2021/08/26		107	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/26		115	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/26		111	%	60 - 140
A330380	SEH	RPD	O-TERPHENYL (sur.)	2021/08/26		102	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/26	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2021/08/26	<50		mg/kg	
A330380	SEH	RPD	F4 (C34-C50 Hydrocarbons)	2021/08/26	<50		mg/kg	
			F2 (C10-C16 Hydrocarbons)	2021/08/26	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/26	15		%	40
A330384	RSU	Matrix Spike [AEE832-02]	F4 (C34-C50 Hydrocarbons)	2021/08/26	7.0		%	40
			1,4-Difluorobenzene (sur.)	2021/08/27		97	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/27		102	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/27		112	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/27		100	%	50 - 140
			Benzene	2021/08/27		92	%	50 - 140
			Toluene	2021/08/27		93	%	50 - 140
			Ethylbenzene	2021/08/27		100	%	50 - 140
			m & p-Xylene	2021/08/27		96	%	50 - 140
			o-Xylene	2021/08/27		100	%	50 - 140
A330384	RSU	Spiked Blank	F1 (C6-C10)	2021/08/27		107	%	60 - 140
			1,4-Difluorobenzene (sur.)	2021/08/27		96	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/27		104	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/27		107	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/27		107	%	50 - 140
			Benzene	2021/08/27		88	%	60 - 130
			Toluene	2021/08/27		93	%	60 - 130
			Ethylbenzene	2021/08/27		96	%	60 - 130
			m & p-Xylene	2021/08/27		96	%	60 - 130
			o-Xylene	2021/08/27		92	%	60 - 130
A330384	RSU	Method Blank	F1 (C6-C10)	2021/08/27		106	%	60 - 140
			1,4-Difluorobenzene (sur.)	2021/08/27		98	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/27		102	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/27		105	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/27		101	%	50 - 140
			Benzene	2021/08/27	<0.0050		mg/kg	
			Toluene	2021/08/27	<0.050		mg/kg	
			Ethylbenzene	2021/08/27	<0.010		mg/kg	
			m & p-Xylene	2021/08/27	<0.040		mg/kg	
			o-Xylene	2021/08/27	<0.020		mg/kg	
A330384	RSU	RPD [AEE832-02]	F1 (C6-C10)	2021/08/27	<10		mg/kg	
			Benzene	2021/08/27	15		%	50
			Toluene	2021/08/27	13		%	50
			Ethylbenzene	2021/08/27	29		%	50
			m & p-Xylene	2021/08/27	NC		%	50
A330437	SVI	Method Blank	o-Xylene	2021/08/27	NC		%	50
			F1 (C6-C10)	2021/08/27	NC		%	30
			Moisture	2021/08/25	<0.30		%	
A330437	SVI	RPD [AEE848-01]	Moisture	2021/08/25	7.9		%	20



BUREAU VERITAS

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Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A330481	ARV	Method Blank	Moisture	2021/08/25	<0.30		%	
A330481	ARV	RPD	Moisture	2021/08/25	1.2		%	20
A330487	MHF	Matrix Spike	O-TERPHENYL (sur.)	2021/08/29		115	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/29		104	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/29		107	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/29		96	%	60 - 140
A330487	MHF	Spiked Blank	O-TERPHENYL (sur.)	2021/08/29		96	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/29		83	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/29		86	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/29		78	%	60 - 140
A330487	MHF	Method Blank	O-TERPHENYL (sur.)	2021/08/29		107	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/29	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2021/08/29	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/29	<50		mg/kg	
A330487	MHF	RPD	F2 (C10-C16 Hydrocarbons)	2021/08/29	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/29	16		%	40
			F4 (C34-C50 Hydrocarbons)	2021/08/29	NC		%	40
A330498	KLK	Method Blank	Moisture	2021/08/25	<0.30		%	
A330498	KLK	RPD	Moisture	2021/08/25	9.7		%	20
A330549	ARV	Method Blank	Moisture	2021/08/25	<0.30		%	
A330549	ARV	RPD [AEE889-01]	Moisture	2021/08/25	5.1		%	20
A330550	ARV	Method Blank	Moisture	2021/08/25	<0.30		%	
A330550	ARV	RPD	Moisture	2021/08/25	7.8		%	20
A330555	GG3	Matrix Spike [AEE842-01]	O-TERPHENYL (sur.)	2021/08/30		105	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/30		104	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/30		102	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/30		104	%	60 - 140
A330555	GG3	Spiked Blank	O-TERPHENYL (sur.)	2021/08/30		102	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/30		100	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/30		96	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/30		98	%	60 - 140
A330555	GG3	Method Blank	O-TERPHENYL (sur.)	2021/08/30		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/30	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2021/08/30	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/30	<50		mg/kg	
A330555	GG3	RPD [AEE842-01]	F2 (C10-C16 Hydrocarbons)	2021/08/30	11		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/30	1.2		%	40
			F4 (C34-C50 Hydrocarbons)	2021/08/30	12		%	40
A330973	KWE	Matrix Spike	Hex. Chromium (Cr 6+)	2021/08/25		93	%	75 - 125
A330973	KWE	Spiked Blank	Hex. Chromium (Cr 6+)	2021/08/25		101	%	80 - 120
A330973	KWE	Method Blank	Hex. Chromium (Cr 6+)	2021/08/25	<0.080		mg/kg	
A330973	KWE	RPD	Hex. Chromium (Cr 6+)	2021/08/25	NC		%	35
A332687	STB	QC Standard	Saturation %	2021/08/27		100	%	75 - 125
A332687	STB	RPD [AEE876-03]	Saturation %	2021/08/27	0.46		%	12
A332687	STB	RPD	Saturation %	2021/08/27	6.4		%	12
A332744	JB9	Spiked Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/26		105	%	60 - 140
A332744	JB9	Method Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/26	<500		mg/kg	
A333257	RSU	Matrix Spike	1,4-Difluorobenzene (sur.)	2021/08/30		74	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/30		86	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/30		113	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/30		98	%	50 - 140



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BV Labs Job #: C160993
Report Date: 2021/09/22

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits			
A333257	RSU	Spiked Blank	Benzene	2021/08/30		98	%	50 - 140			
			Toluene	2021/08/30		99	%	50 - 140			
			Ethylbenzene	2021/08/30		105	%	50 - 140			
			m & p-Xylene	2021/08/30		104	%	50 - 140			
			o-Xylene	2021/08/30		108	%	50 - 140			
			F1 (C6-C10)	2021/08/30		99	%	60 - 140			
			1,4-Difluorobenzene (sur.)	2021/08/30		87	%	50 - 140			
			4-Bromofluorobenzene (sur.)	2021/08/30		101	%	50 - 140			
			D10-o-Xylene (sur.)	2021/08/30		122	%	50 - 140			
			D4-1,2-Dichloroethane (sur.)	2021/08/30		114	%	50 - 140			
			Benzene	2021/08/30		102	%	60 - 130			
			Toluene	2021/08/30		108	%	60 - 130			
			Ethylbenzene	2021/08/30		112	%	60 - 130			
			m & p-Xylene	2021/08/30		111	%	60 - 130			
A333257	RSU	Method Blank	o-Xylene	2021/08/30		106	%	60 - 130			
			F1 (C6-C10)	2021/08/30		77	%	60 - 140			
			1,4-Difluorobenzene (sur.)	2021/08/30		92	%	50 - 140			
			4-Bromofluorobenzene (sur.)	2021/08/30		103	%	50 - 140			
			D10-o-Xylene (sur.)	2021/08/30		131	%	50 - 140			
			D4-1,2-Dichloroethane (sur.)	2021/08/30		111	%	50 - 140			
			Benzene	2021/08/30	<0.0050		mg/kg				
			Toluene	2021/08/30	<0.050		mg/kg				
			Ethylbenzene	2021/08/30	<0.010		mg/kg				
			m & p-Xylene	2021/08/30	<0.040		mg/kg				
			o-Xylene	2021/08/30	<0.020		mg/kg				
			F1 (C6-C10)	2021/08/30	<10		mg/kg				
			Benzene	2021/08/30	NC		%	50			
			Toluene	2021/08/30	NC		%	50			
A333257	RSU	RPD	Ethylbenzene	2021/08/30		NC	%	50			
			m & p-Xylene	2021/08/30		NC	%	50			
			o-Xylene	2021/08/30		NC	%	50			
			F1 (C6-C10)	2021/08/30		NC	%	30			
			A333262	DO1	Matrix Spike [AEE889-02]	Benzene	2021/08/30		NC	%	50
						Toluene	2021/08/30		NC	%	50
						Ethylbenzene	2021/08/30		NC	%	50
						m & p-Xylene	2021/08/30		NC	%	50
						o-Xylene	2021/08/30		NC	%	50
						F1 (C6-C10)	2021/08/30		NC	%	30
						1,4-Difluorobenzene (sur.)	2021/09/01		92	%	50 - 140
						4-Bromofluorobenzene (sur.)	2021/09/01		102	%	50 - 140
						D10-o-Xylene (sur.)	2021/09/01		109	%	50 - 140
						D4-1,2-Dichloroethane (sur.)	2021/09/01		102	%	50 - 140
Benzene	2021/09/01					96	%	50 - 140			
Toluene	2021/09/01					90	%	50 - 140			
Ethylbenzene	2021/09/01					96	%	50 - 140			
m & p-Xylene	2021/09/01					90	%	50 - 140			
A333262	DO1	Spiked Blank	o-Xylene	2021/09/01		93	%	50 - 140			
			F1 (C6-C10)	2021/09/01		85	%	60 - 140			
			1,4-Difluorobenzene (sur.)	2021/09/01		88	%	50 - 140			
			4-Bromofluorobenzene (sur.)	2021/09/01		90	%	50 - 140			
			D10-o-Xylene (sur.)	2021/09/01		94	%	50 - 140			
			D4-1,2-Dichloroethane (sur.)	2021/09/01		101	%	50 - 140			
			Benzene	2021/09/01		88	%	60 - 130			
			Toluene	2021/09/01		89	%	60 - 130			
			Ethylbenzene	2021/09/01		91	%	60 - 130			
			m & p-Xylene	2021/09/01		86	%	60 - 130			
			o-Xylene	2021/09/01		79	%	60 - 130			



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VERITAS

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GOLDER ASSOCIATES LTD.
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Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A333262	DO1	Method Blank	F1 (C6-C10)	2021/09/01		104	%	60 - 140
			1,4-Difluorobenzene (sur.)	2021/09/02		104	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/09/02		86	%	50 - 140
			D10-o-Xylene (sur.)	2021/09/02		125	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/09/02		136	%	50 - 140
			Benzene	2021/09/02	<0.0050		mg/kg	
			Toluene	2021/09/02	<0.050		mg/kg	
			Ethylbenzene	2021/09/02	<0.010		mg/kg	
			m & p-Xylene	2021/09/02	<0.040		mg/kg	
			o-Xylene	2021/09/02	<0.020		mg/kg	
A333262	DO1	RPD [AEE889-02]	F1 (C6-C10)	2021/09/02	<10		mg/kg	
			Benzene	2021/09/02	NC		%	50
			Toluene	2021/09/02	NC		%	50
			Ethylbenzene	2021/09/02	NC		%	50
			m & p-Xylene	2021/09/02	NC		%	50
			o-Xylene	2021/09/02	NC		%	50
A333424	KH2	Matrix Spike	F1 (C6-C10)	2021/09/02	NC		%	30
			Total Antimony (Sb)	2021/08/27		110	%	75 - 125
			Total Arsenic (As)	2021/08/27		111	%	75 - 125
			Total Barium (Ba)	2021/08/27		NC	%	75 - 125
			Total Beryllium (Be)	2021/08/27		110	%	75 - 125
			Total Cadmium (Cd)	2021/08/27		110	%	75 - 125
			Total Chromium (Cr)	2021/08/27		134 (1)	%	75 - 125
			Total Cobalt (Co)	2021/08/27		114	%	75 - 125
			Total Copper (Cu)	2021/08/27		114	%	75 - 125
			Total Lead (Pb)	2021/08/27		111	%	75 - 125
			Total Mercury (Hg)	2021/08/27		113	%	75 - 125
			Total Molybdenum (Mo)	2021/08/27		109	%	75 - 125
			Total Nickel (Ni)	2021/08/27		118	%	75 - 125
			Total Selenium (Se)	2021/08/27		114	%	75 - 125
			Total Silver (Ag)	2021/08/27		110	%	75 - 125
			Total Thallium (Tl)	2021/08/27		106	%	75 - 125
			Total Tin (Sn)	2021/08/27		107	%	75 - 125
			Total Uranium (U)	2021/08/27		117	%	75 - 125
			Total Vanadium (V)	2021/08/27		161 (1)	%	75 - 125
			A333424	KH2	QC Standard	Total Zinc (Zn)	2021/08/27	
Total Antimony (Sb)	2021/08/27					129	%	15 - 182
Total Arsenic (As)	2021/08/27					112	%	53 - 147
Total Barium (Ba)	2021/08/27					108	%	80 - 119
Total Cadmium (Cd)	2021/08/27					111	%	72 - 128
Total Chromium (Cr)	2021/08/27					112	%	59 - 141
Total Cobalt (Co)	2021/08/27					108	%	58 - 142
Total Copper (Cu)	2021/08/27					111	%	83 - 117
Total Lead (Pb)	2021/08/27					116	%	79 - 121
Total Molybdenum (Mo)	2021/08/27					114	%	67 - 133
Total Nickel (Ni)	2021/08/27					118	%	79 - 121
Total Silver (Ag)	2021/08/27					100	%	47 - 153
Total Tin (Sn)	2021/08/27					108	%	67 - 133
Total Uranium (U)	2021/08/27					105	%	77 - 123
Total Vanadium (V)	2021/08/27		119	%	79 - 121			
Total Zinc (Zn)	2021/08/27		114	%	79 - 121			



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GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC								
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A333424	KH2	Spiked Blank	Total Antimony (Sb)	2021/08/27		113	%	80 - 120
			Total Arsenic (As)	2021/08/27		106	%	80 - 120
			Total Barium (Ba)	2021/08/27		107	%	80 - 120
			Total Beryllium (Be)	2021/08/27		103	%	80 - 120
			Total Cadmium (Cd)	2021/08/27		104	%	80 - 120
			Total Chromium (Cr)	2021/08/27		109	%	80 - 120
			Total Cobalt (Co)	2021/08/27		110	%	80 - 120
			Total Copper (Cu)	2021/08/27		112	%	80 - 120
			Total Lead (Pb)	2021/08/27		108	%	80 - 120
			Total Mercury (Hg)	2021/08/27		112	%	80 - 120
			Total Molybdenum (Mo)	2021/08/27		109	%	80 - 120
			Total Nickel (Ni)	2021/08/27		109	%	80 - 120
			Total Selenium (Se)	2021/08/27		111	%	80 - 120
			Total Silver (Ag)	2021/08/27		106	%	80 - 120
			Total Thallium (Tl)	2021/08/27		107	%	80 - 120
			Total Tin (Sn)	2021/08/27		104	%	80 - 120
			Total Uranium (U)	2021/08/27		111	%	80 - 120
			Total Vanadium (V)	2021/08/27		110	%	80 - 120
Total Zinc (Zn)	2021/08/27		107	%	80 - 120			
A333424	KH2	Method Blank	Total Antimony (Sb)	2021/08/27	<0.50		mg/kg	
			Total Arsenic (As)	2021/08/27	<1.0		mg/kg	
			Total Barium (Ba)	2021/08/27	<1.0		mg/kg	
			Total Beryllium (Be)	2021/08/27	<0.40		mg/kg	
			Total Cadmium (Cd)	2021/08/27	<0.050		mg/kg	
			Total Chromium (Cr)	2021/08/27	<1.0		mg/kg	
			Total Cobalt (Co)	2021/08/27	<0.50		mg/kg	
			Total Copper (Cu)	2021/08/27	<1.0		mg/kg	
			Total Lead (Pb)	2021/08/27	<0.50		mg/kg	
			Total Mercury (Hg)	2021/08/27	<0.050		mg/kg	
			Total Molybdenum (Mo)	2021/08/27	<0.40		mg/kg	
			Total Nickel (Ni)	2021/08/27	<1.0		mg/kg	
			Total Selenium (Se)	2021/08/27	<0.50		mg/kg	
			Total Silver (Ag)	2021/08/27	<0.20		mg/kg	
			Total Thallium (Tl)	2021/08/27	<0.10		mg/kg	
			Total Tin (Sn)	2021/08/27	<1.0		mg/kg	
			Total Uranium (U)	2021/08/27	<0.20		mg/kg	
			Total Vanadium (V)	2021/08/27	<1.0		mg/kg	
Total Zinc (Zn)	2021/08/27	<10		mg/kg				
A333424	KH2	RPD	Total Antimony (Sb)	2021/08/27	NC		%	30
			Total Arsenic (As)	2021/08/27	15		%	30
			Total Barium (Ba)	2021/08/27	17		%	35
			Total Beryllium (Be)	2021/08/27	15		%	30
			Total Cadmium (Cd)	2021/08/27	19		%	30
			Total Chromium (Cr)	2021/08/27	16		%	30
			Total Cobalt (Co)	2021/08/27	17		%	30
			Total Copper (Cu)	2021/08/27	14		%	30
			Total Lead (Pb)	2021/08/27	18		%	35
			Total Mercury (Hg)	2021/08/27	NC		%	35
			Total Molybdenum (Mo)	2021/08/27	19		%	35
			Total Nickel (Ni)	2021/08/27	17		%	30
Total Selenium (Se)	2021/08/27	NC		%	30			



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Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Silver (Ag)	2021/08/27	NC		%	35
			Total Thallium (Tl)	2021/08/27	14		%	30
			Total Tin (Sn)	2021/08/27	NC		%	35
			Total Uranium (U)	2021/08/27	8.3		%	30
			Total Vanadium (V)	2021/08/27	18		%	30
			Total Zinc (Zn)	2021/08/27	14		%	30
A333687	JAB	QC Standard	Total Fusion Barium (Ba)	2021/08/29		122	%	75 - 125
A333687	JAB	Spiked Blank	Total Fusion Barium (Ba)	2021/08/29		116	%	75 - 125
A333687	JAB	Method Blank	Total Fusion Barium (Ba)	2021/08/29	<50		mg/kg	
A333687	JAB	RPD	Total Fusion Barium (Ba)	2021/08/29	18		%	35
A334531	JAB	Matrix Spike	Soluble (Hot water) Boron (B)	2021/08/28		105	%	75 - 125
A334531	JAB	Spiked Blank	Soluble (Hot water) Boron (B)	2021/08/28		103	%	80 - 120
A334531	JAB	Method Blank	Soluble (Hot water) Boron (B)	2021/08/28	<0.10		mg/kg	
A334531	JAB	RPD	Soluble (Hot water) Boron (B)	2021/08/28	6.1		%	35
A335070	KGR	Matrix Spike	Soluble Nitrite (N)	2021/08/29		101	%	75 - 125
			Soluble Nitrate (N)	2021/08/29		103	%	75 - 125
A335070	KGR	QC Standard	Soluble Nitrate (N)	2021/08/29		96	%	75 - 125
A335070	KGR	Spiked Blank	Soluble Nitrite (N)	2021/08/29		100	%	80 - 120
			Soluble Nitrate (N)	2021/08/29		102	%	80 - 120
A335070	KGR	Method Blank	Soluble Nitrite (N)	2021/08/29	<0.20		mg/L	
			Soluble Nitrate (N)	2021/08/29	<0.20		mg/L	
A335070	KGR	RPD	Soluble Nitrite (N)	2021/08/29	NC		%	30
			Soluble Nitrate (N)	2021/08/29	NC		%	30
A335166	JAB	QC Standard	Soluble Sulphate (SO4)	2021/08/28		118	%	75 - 125
A335166	JAB	Method Blank	Soluble Sulphate (SO4)	2021/08/28	<5.0		mg/L	
A335166	JAB	RPD	Soluble Sulphate (SO4)	2021/08/28	8.6		%	30
A337167	JB9	Spiked Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/31		109	%	60 - 140
A337167	JB9	Method Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/31	<500		mg/kg	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



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BV Labs Job #: C160993
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GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Gita Pokhrel, Laboratory Supervisor

Janet Gao, B.Sc., QP, Supervisor, Organics

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

CHAIN OF CUSTODY RECORD

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Bureau Veritas Laboratories
400 15th N.E. Calgary, Alberta Canada T2E 6P8 Tel: (403) 291-3077 Toll-Free 800-563-6266 Fax: (403) 291-9488 www.bvlabs.com

INVOICE TO:
#254, GOLDER ASSOCIATES LTD
ACCOUNTS PAYABLE
2800, 700-2nd Street SW
CALGARY AB T2P 2W2
(905) 567-6100 Ext: 1167 Fax: (403) 299-5606
canadaaccounts@payableinvoices@golder.com

REPORT TO:
Company Name: #5340 GOLDER ASSOCIATES LTD.
Attention: Aurelie Belavance
Address: 2800, 700-2nd Street SW
CALGARY AB T2P 2W2
Tel: (403) 299-5600
Email: abelavance@golder.com

PROJECT INFORMATION:
Quotation #: C00480
BV Labs Job #: 20366099-7000-1001
P.O. #: 20366099-6000-1001
Project Name: Project
Site #: C1644511-10-01
Sampled By: Carmen McKay

Regulatory Criteria:
 ATI
 CCM
 Other

Special Instructions:
SAMPLER MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS

Sample Barcodes Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix
1 N/A	TP21-16-03	16MAY12	9:45	SOIL
2	TP21-16-04		9:50	
3	TP21-15-02		9:20	
4	TP21-15-04		9:25	
5	TP21-14-02		9:40	
6	TP21-14-04		9:43	
7	TP21-17-02		10:05	
8	TP21-17-04		10:08	
9	TP21-17-06		10:17	

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Metals Field Filtered ? (Y/N)	Regulated Metals - Soils	BTEX and F1-F4 in Soil (Vals)	BIC SCALE Analysis (F2/F2+F3/B) in soil	Heavy Metal Chromium Superoxide Nitrate	Barium on ICP using Fusion Extraction (True Barium)	CME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					

Regular (Standard) TAT: (will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____
Rush Confirmation Number: _____
of Batches: _____
Comments: _____

Received in Yellowknife
By: J. McCreary
@ 10:30 AM
AUG 18 2021
Temp: see ACTC

LABORATORY USE ONLY

Turnaround Time (TAT) Required: _____
Please provide advance notice for rush projects

Date: YYMMDD: 20210819 15:00
Time: 15:00
Temperature (°C) on Receipt: _____
Custody Seal intact on Receipt? Yes No

White: BV Labs Yellow: Client

C160993

see ACTC

INVOICE TO:

Company Name: #254 GOLDER ASSOCIATES LTD.
 Attention: ACCOUNTS PAYABLE
 Address: 2800, 700-2nd Street SW
 CALGARY AB T2P 2W2
 Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606
 Email: canadaaccounts@bvlabs.com

REPORT TO:

Company Name: #6340 GOLDER ASSOCIATES LTD.
 Attention: Aurelie Belavance
 Address: 2800, 700-2nd Street SW
 CALGARY AB T2P 2W2
 Tel: (403) 299-5600 Fax: abelavance@golder.com

PROJECT INFORMATION:

Quotation #: C00480
 P.O. #: 20368099-7000-1001
 Project: 20368099-6000-1001
 Project Name:
 Site #:
 Sampled By:

Laboratory Use Only:

BV Labs Job #: 20368099-7000-1001
 Project Manager: Carmen McKay
 COE #: C064511-11-01

Regulatory Criteria

ATI
 CCME
 Other

Special Instructions

Turnaround Time (TAT) Required: Regular (Standard) TAT: (will be applied if Rush TAT is not specified). Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.
 Job Specific Rush TAT (if applies to entire submission)
 Date Required: _____
 Rush Confirmation Number: _____ (call lab for #)

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y / N)	Regulated Metals - Soils	BTEX and F-1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Suphate / nitrate	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F-1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample
N/A	TP21-48-02	16 AUG 21	10:48	SOIL		✓	✓								
	TP21-48-04		10:49			✓	✓								
	TP21-48-65		10:50			✓	✓								
	TP21-44-02		10:29			✓	✓								
	TP21-44-04		10:29			✓	✓								
	TP21-44-06		10:30			✓	✓								
	TP21-75-02		13:47			✓	✓								
	TP21-75-04		13:48			✓	✓								
	TP21-75-06		13:57			✓	✓								

RECEIVED BY: (Signature/Print) *PETER TAN* Date: 21/08/16 Time: 11:30

RECEIVED BY: (Signature/Print) *Aurelie Belavance* Date: 2021/08/19 Time: 15:00

Temperature (°C) on Receipt _____

Time Sensitive **Time Sensitive and not submitted**

Custom Seal Intact on Cooler? Yes No

White: BV Labs Yellow: Client

UNLESS OTHERWISE ORDERED BY THE CLIENT, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.

IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

ALL SAMPLES ARE HELD FOR 90 DAYS AFTER SAMPLE RECEIPT. FOR SPECIAL REQUESTS CONTACT YOUR PROJECT MANAGER.

see ACME

C160993

CHAIN OF CUSTODY RECORD

Bureau Veritas Laboratories
4000 18th N.E. Calgary, Alberta Canada T2E 6P6 Tel: (403) 241-3077 Toll-free 800-363-6285 Fax: (403) 291-9460 www.bvlabs.com

INVOICE TO:
 #254 GOLDER ASSOCIATES LTD.
 ACCOUNTS PAYABLE
 2800, 700-2nd Street SW
 CALGARY AB T2P 2W2
 (905) 567-6100 Ext: 1167 Fax: (403) 299-5606
 Email: canadaaccounts@bvlabs.com

REPORT TO:
 #6340 GOLDER ASSOCIATES LTD.
 Aurelie Belavance
 2800, 700-2nd Street SW
 CALGARY AB T2P 2W2
 (403) 299-5600
 Email: abelavance@golder.com

PROJECT INFORMATION:
 Quotation # C00480
 P.O. # 20368099-7000-1001
 Project 20368099-6000-1001
 Project Name:
 Site #
 Sampled By:
 BV Labs Job #:
 Laboratory Use Only:
 Bottle Order #:
 Project Manager:
 COC #:
 Project Name:
 Site #
 Sampled By:
 Project Manager:
 COC #:
 Project Name:
 Site #
 Sampled By:

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Metals - Soils	Regulated Metals (COC/AT1)	PAH in Water by GC/MS	Limited Sample	# of Bottles	Comments
1	TP21-80-01	16/08/16	14:10	Soil	✓	✓			3	
2	TP21-80-04		14:11		✓	✓			3	
3	TP21-80-05		14:18		✓	✓			3	
4	TP21-107-00		14:29		✓	✓			3	Received in Yellowknife By: J. McCreath
5	TP21-107-04		14:30		✓	✓			3	+ bag @ 10:00 AM
6	TP21-107-06		14:31		✓	✓			3	AUG 18 2021
7	TP21-112-02		14:46		✓	✓			3	see ACTR
8	TP21-112-04		14:47		✓	✓			3	Temp:
9	TP21-112-06		14:57		✓	✓			3	
10	DUPC		14:57		✓	✓			3	

Regulatory Criteria:
 ATI
 COCME
 Other

Special Instructions:

ANALYSIS REQUESTED (PLEASE BE SPECIFIC):
 Hexavalent Chromium
 Sulphate / nitrate
 Barium on ICP using Fusion
 Extraction (True Barium)
 CME BTEX and F-F2 in
 Water
 Routine Water
 Regulated Metals (COC/AT1)
 PAH in Water by GC/MS
 Limited Sample

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified):
 Standard TAT = 5-7 Working days for most tests.
 Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission):
 Date Required:
 Rush Confirmation Number:
 (call us for #)

Turnaround Time (TAT) Required:

RECEIVED BY: (Signature/Print) PETER TAN Date: 24/08/16 Time: 16:30
RECEIVED BY: (Signature/Print) J. McCreath Date: 2021/08/19 Time: 15:00

Laboratory Use Only:
 Temperature (°C) on Receipt:
 Custom Seal Intact on Cooler? Yes No
 White BV Labs Yellow Client

6160993

CHAIN OF CUSTODY RECORD

INVOICE TO:
 #254 GOLDER ASSOCIATES LTD.
 ACCOUNTS PAYABLE
 2800, 700 -2nd Street SW
 CALGARY AB T2P 2W2
 (905) 567-6100 Ext: 1167 Fax: (403) 299-5606
 canadaaccounts@balmirvoices@golder.com

REPORT TO:
 #6340 GOLDER ASSOCIATES LTD.
 Aurelie Belavance
 2800, 700 -2nd Street SW
 CALGARY AB T2P 2W2
 (403) 299-5600
 abelavance@golder.com

PROJECT INFORMATION:
 C00480
 20368095-7000-1001
 20368095-6000-1001

LABORATORY USE ONLY:
 BV Labs Job #:
 Bottle Order #: 84511
 Project Manager: Carmen McKay
 CQC #:
 C#644511-14-01

INVOICE TO:
 #254 GOLDER ASSOCIATES LTD.
 ACCOUNTS PAYABLE
 2800, 700 -2nd Street SW
 CALGARY AB T2P 2W2
 (905) 567-6100 Ext: 1167 Fax: (403) 299-5606
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REPORT TO:
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 (403) 299-5600
 abelavance@golder.com

PROJECT INFORMATION:
 C00480
 20368095-7000-1001
 20368095-6000-1001

LABORATORY USE ONLY:
 BV Labs Job #:
 Bottle Order #: 84511
 Project Manager: Carmen McKay
 CQC #:
 C#644511-14-01

Turnaround Time (TAT) Required: Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Requested: _____ Rush Confirmation Number: _____ (call lab for #) _____

of Bottles: _____ Comments: _____

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1 BTEX and F-1,4 in Soil (Nals)	BIC SCALE Analysis (F2/F2+3B) in Soil	Sulphate / nitrate	Barium on ICP using Fusion Extraction (True Barium)	Water CME BTEX and F-1,2 in	Routine Water	Regulated Metals (CME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample
N/A	TP21-113-01	16 AUG 21	15:11	Soil											
	TP21-113-04		15:12												
	TP21-113-05		15:16												
	TP21-106-02		15:30												
	TP21-106-04		15:31												
	TP21-106-06		15:41												

Received in Yellowknife
 By: J. McKay
 AUG 18 2021
 Temp: see ACTL

RECEIVED BY: (Signature/Print) *FRISTY AVILA* Date: (YY/MM/DD) 2021/08/19 Time 15:00

RECEIVED BY: (Signature/Print) *PETER TAN* Date: (YY/MM/DD) 21/08/16 Time 16:30

Time Sensitive # Kits used and not submitted Laboratory Use Only: Temperature (°C) on Receipt Yes No Custody Seal Intact on Cooler? Yes No White BV Labs Yellow Client

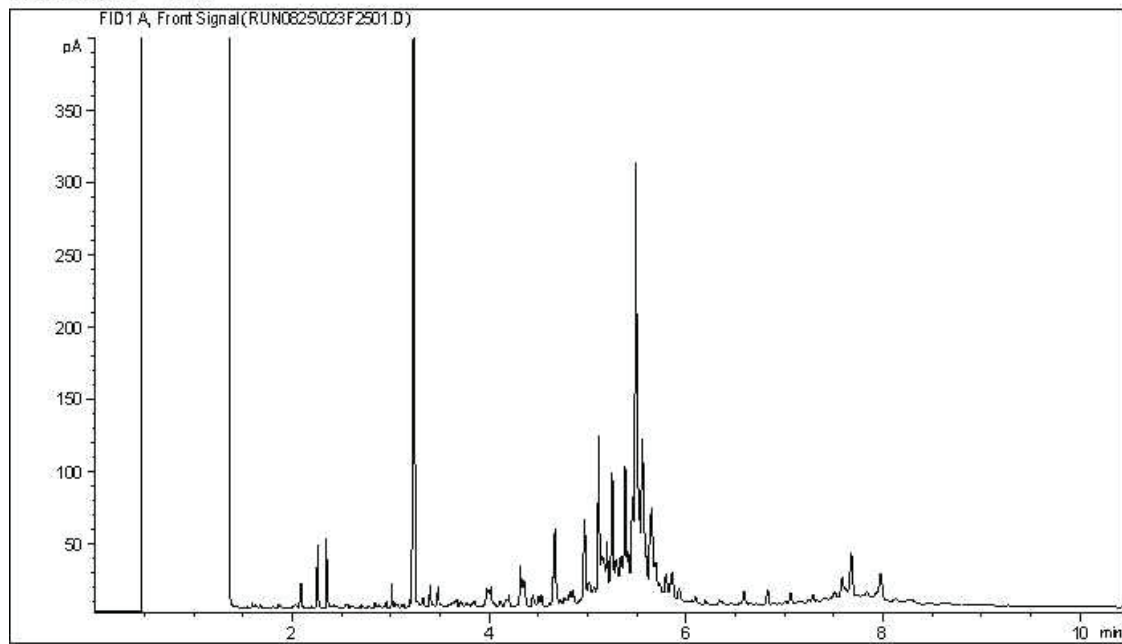
see ACTL

C160993

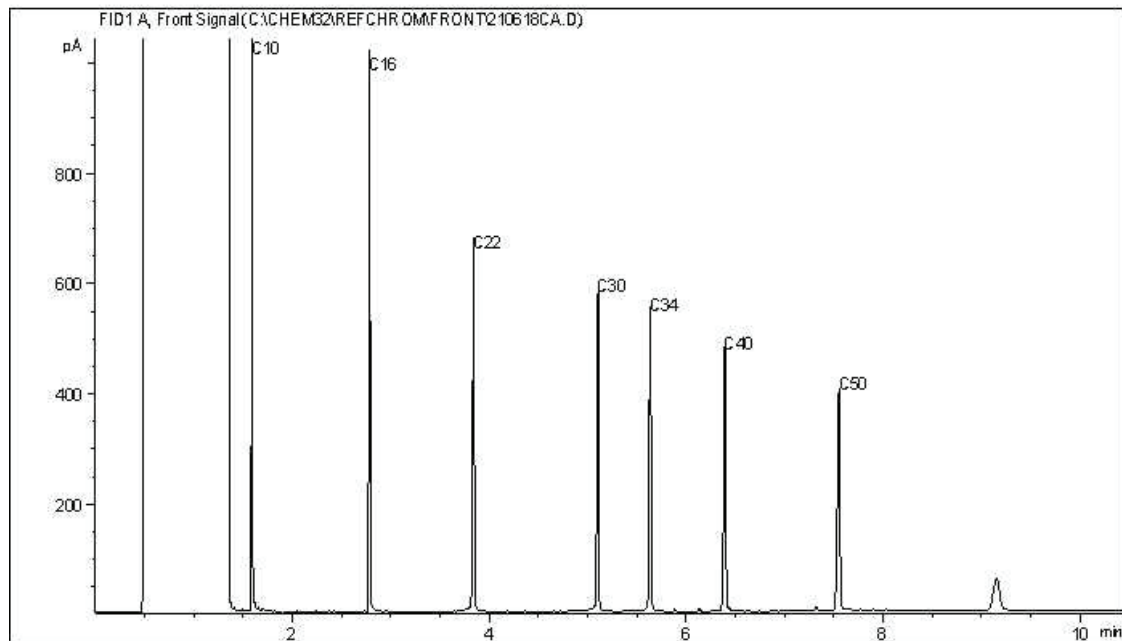
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT www.bvlabs.com/terms-and-conditions.
 ** IT IS THE RESPONSIBILITY OF THE REQUESTER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
 *** ALL SAMPLES ARE HELD FOR 90 DAYS AFTER SAMPLE RECEIPT. FOR SPECIAL REQUESTS CONTACT YOUR PROJECT MANAGER.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



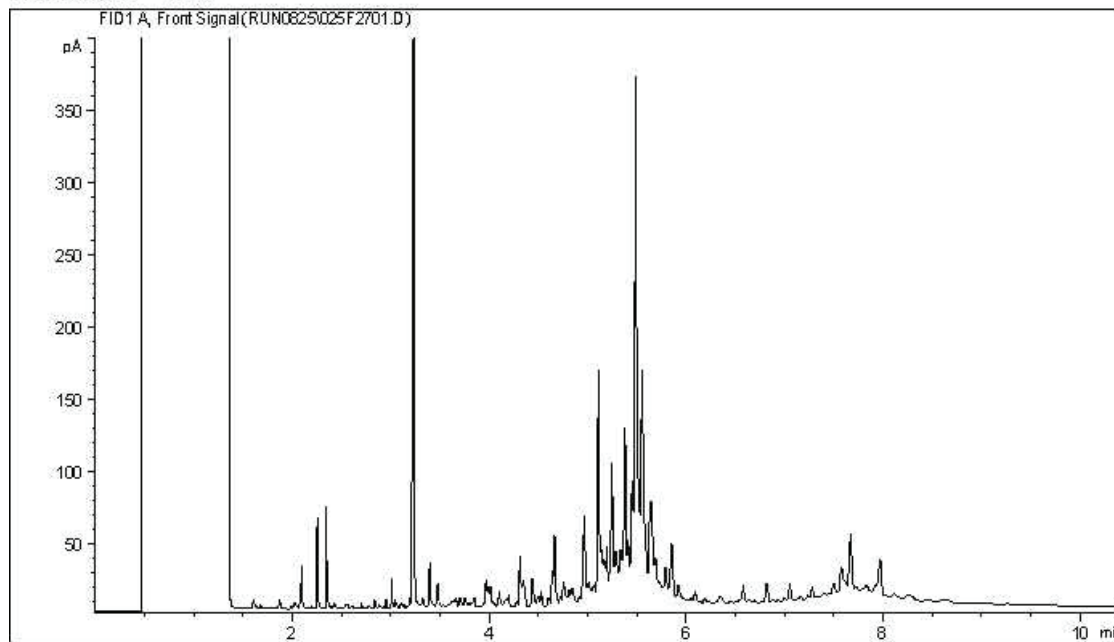
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

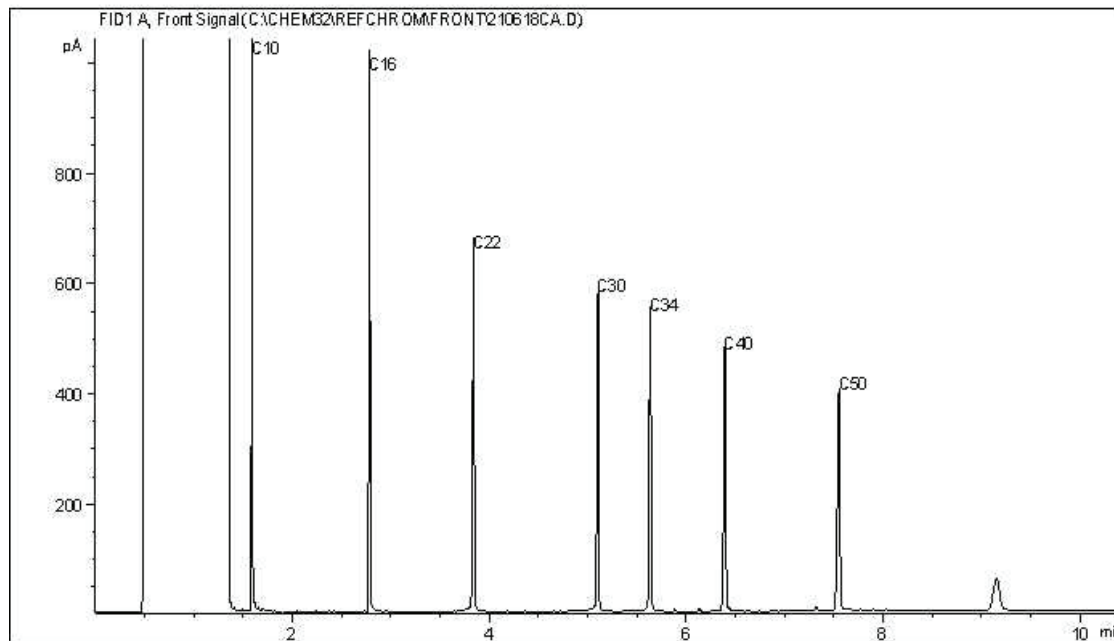
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



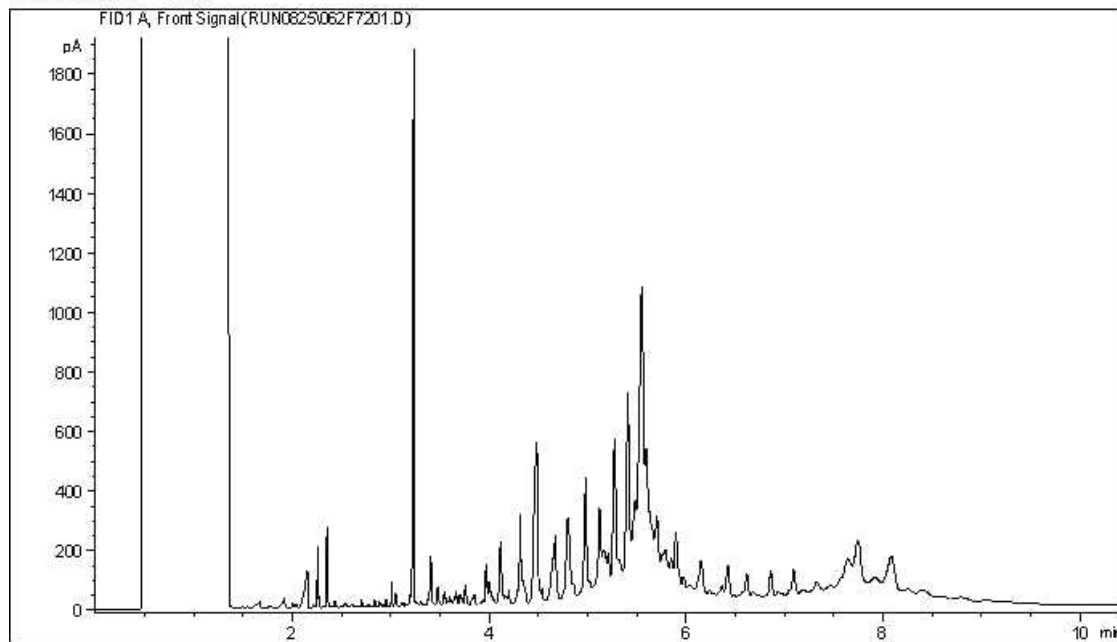
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

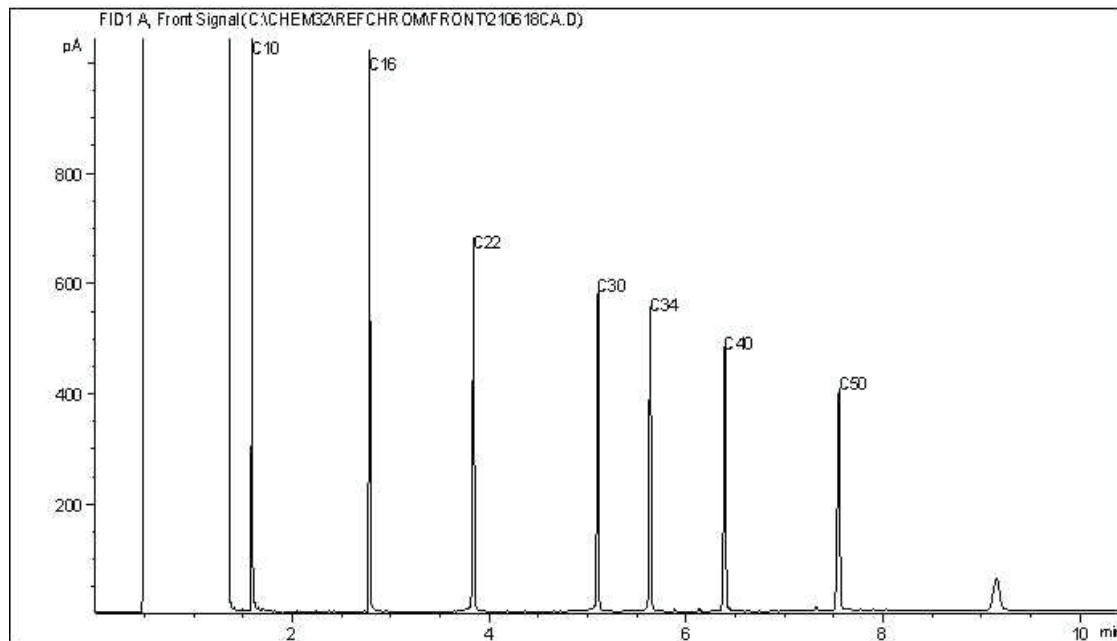
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



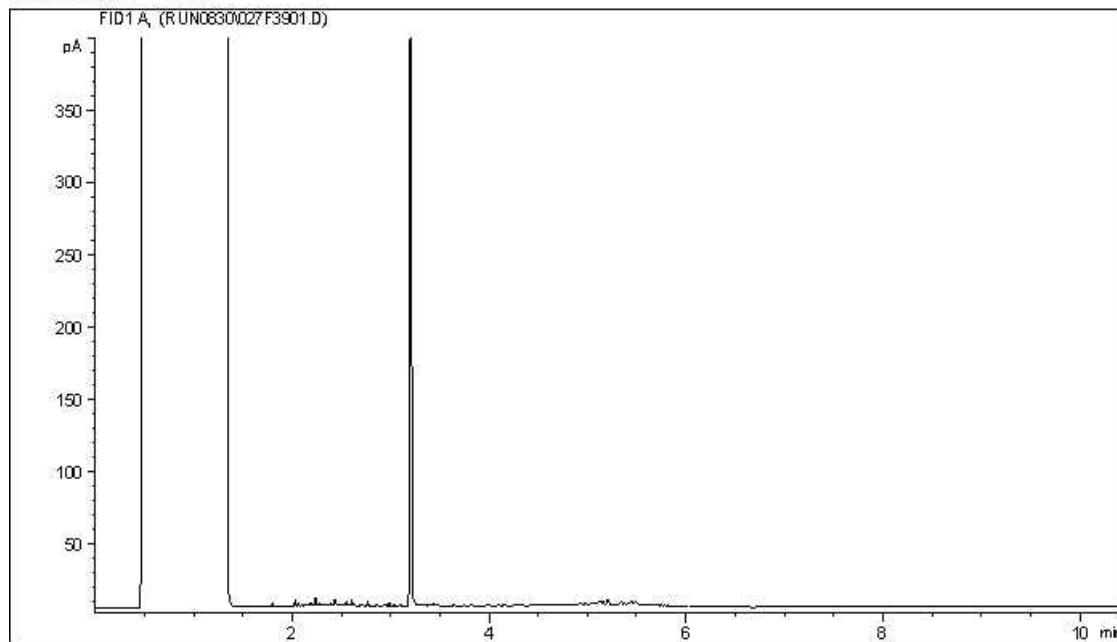
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

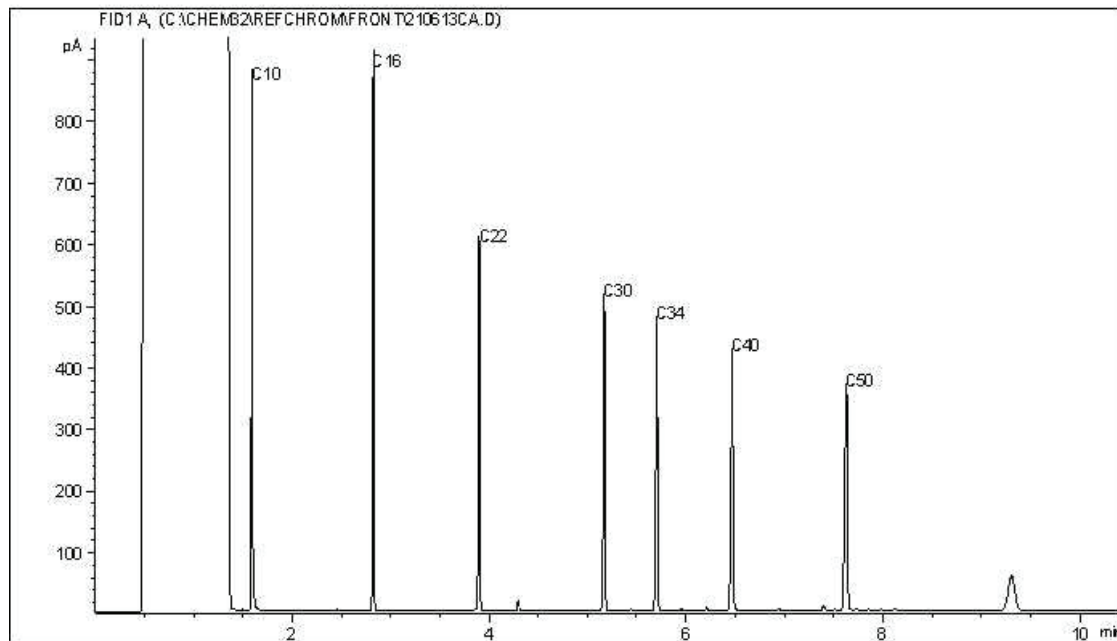
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



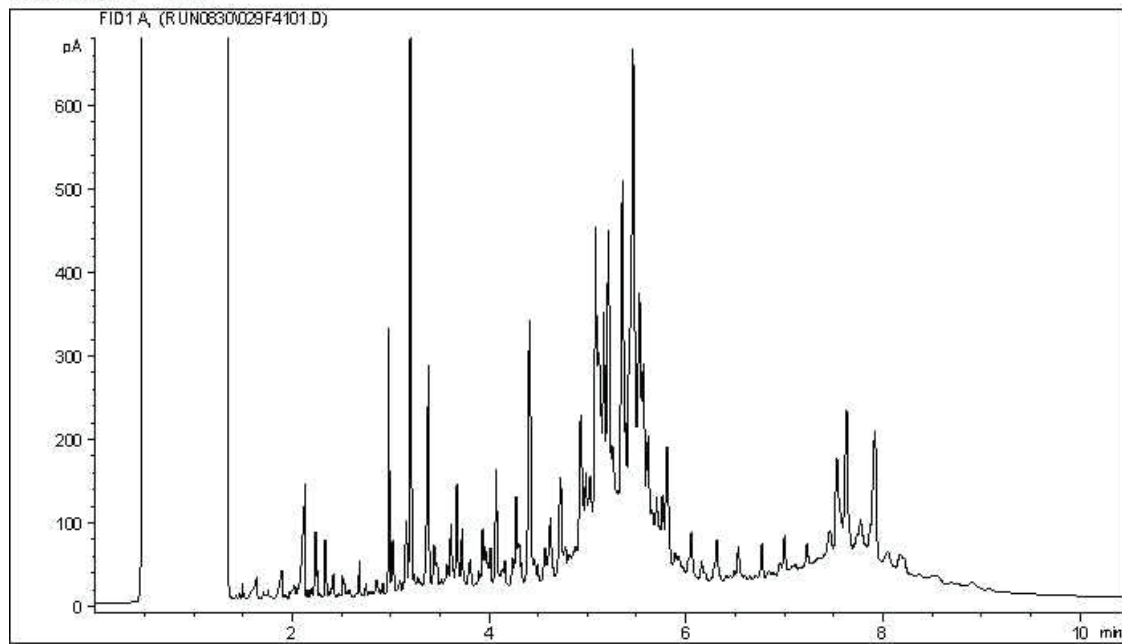
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

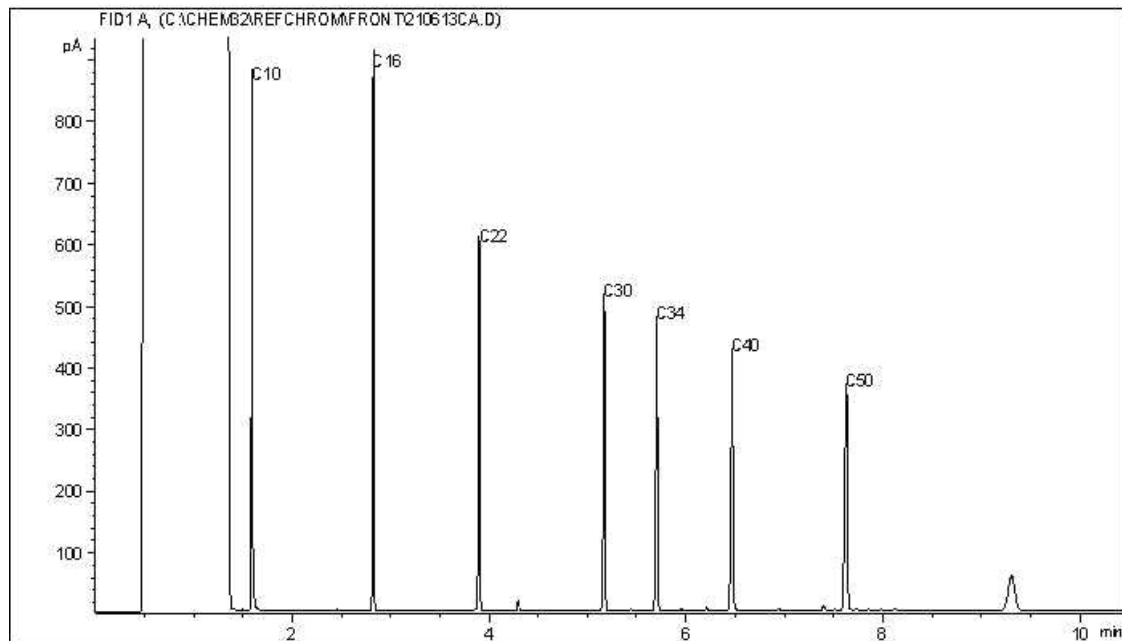
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



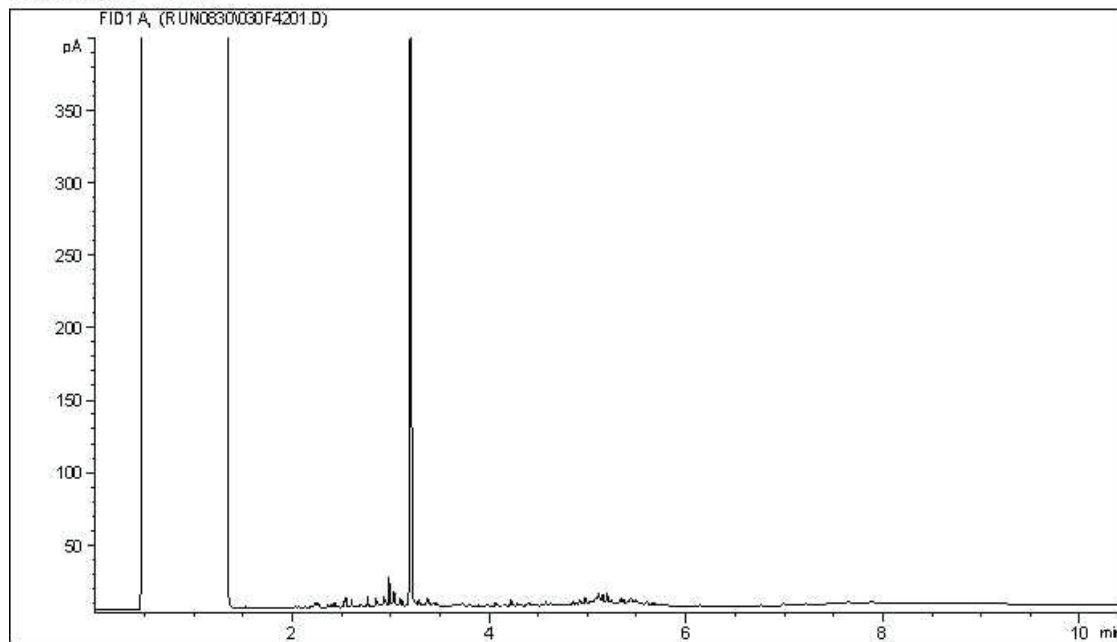
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

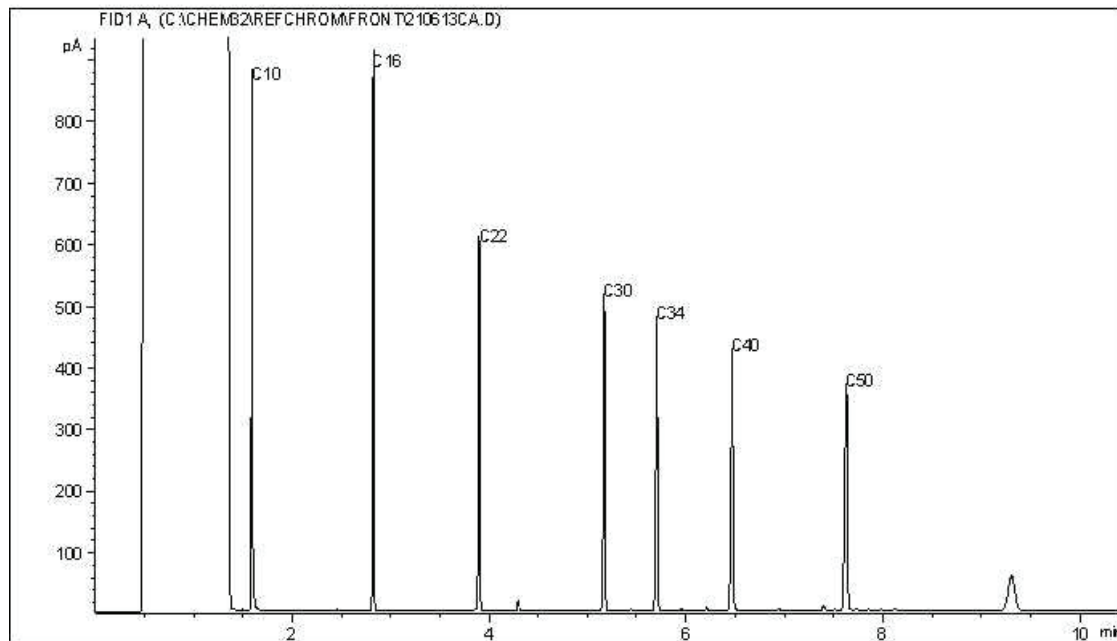
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



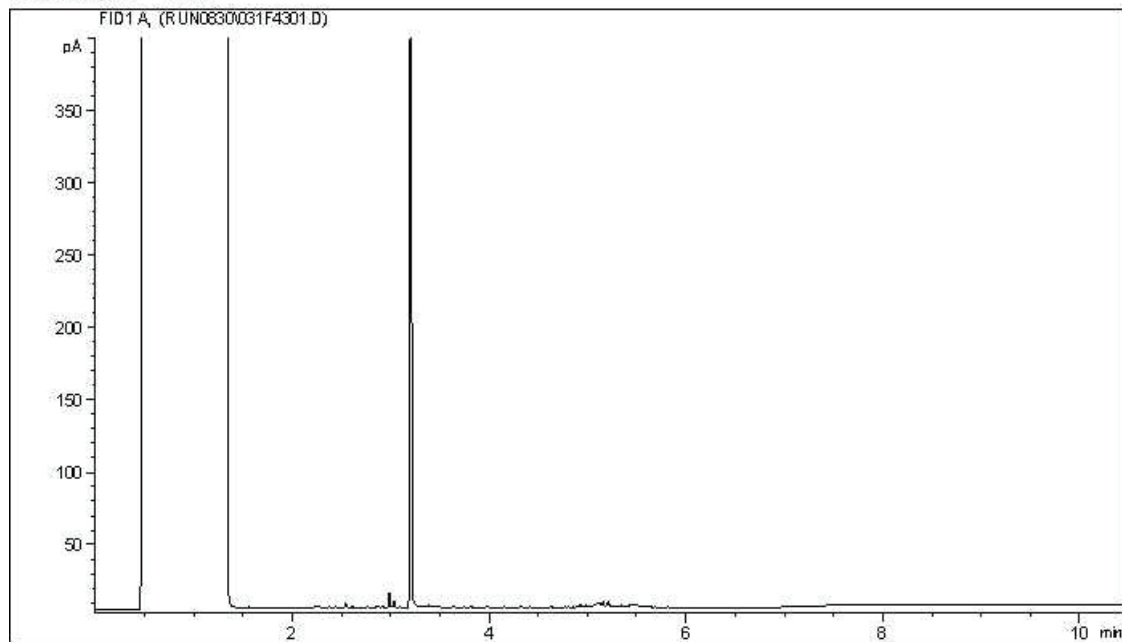
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

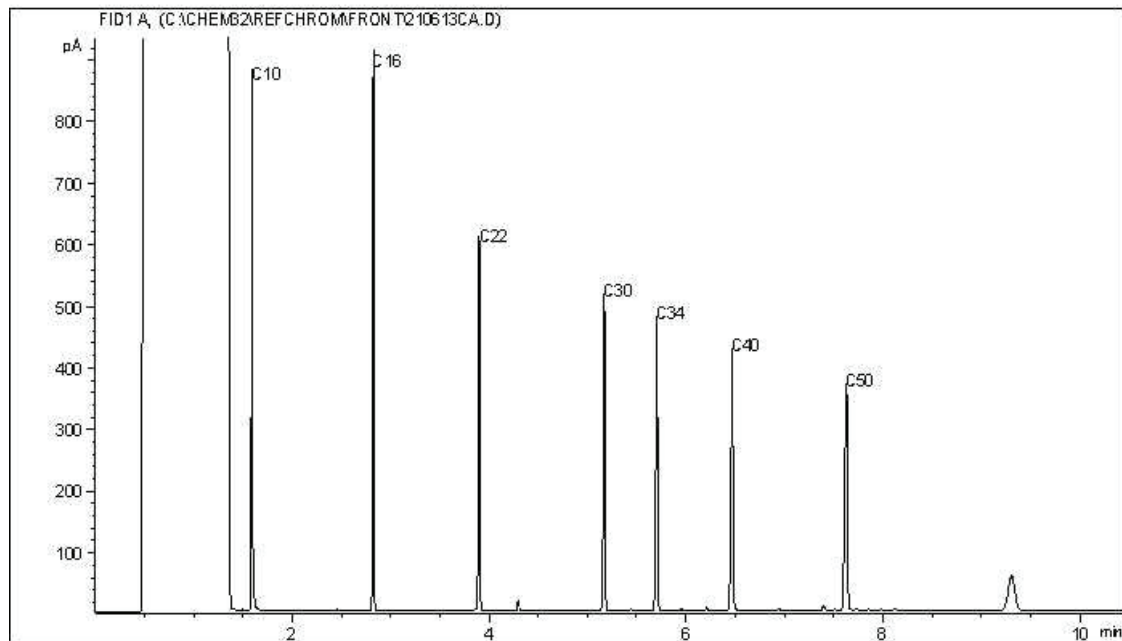
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



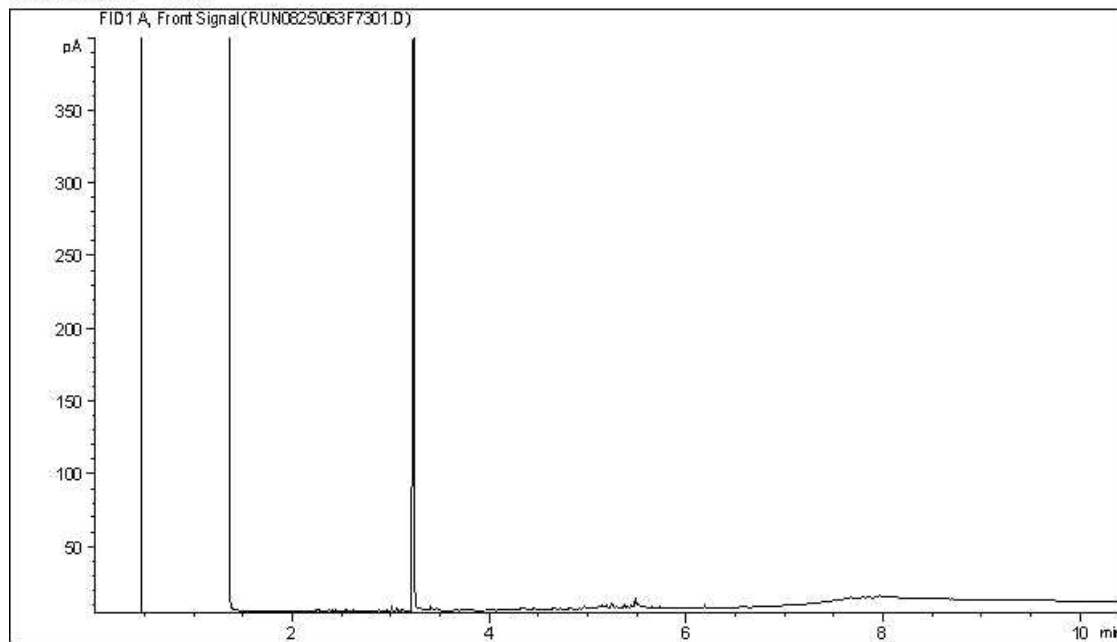
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

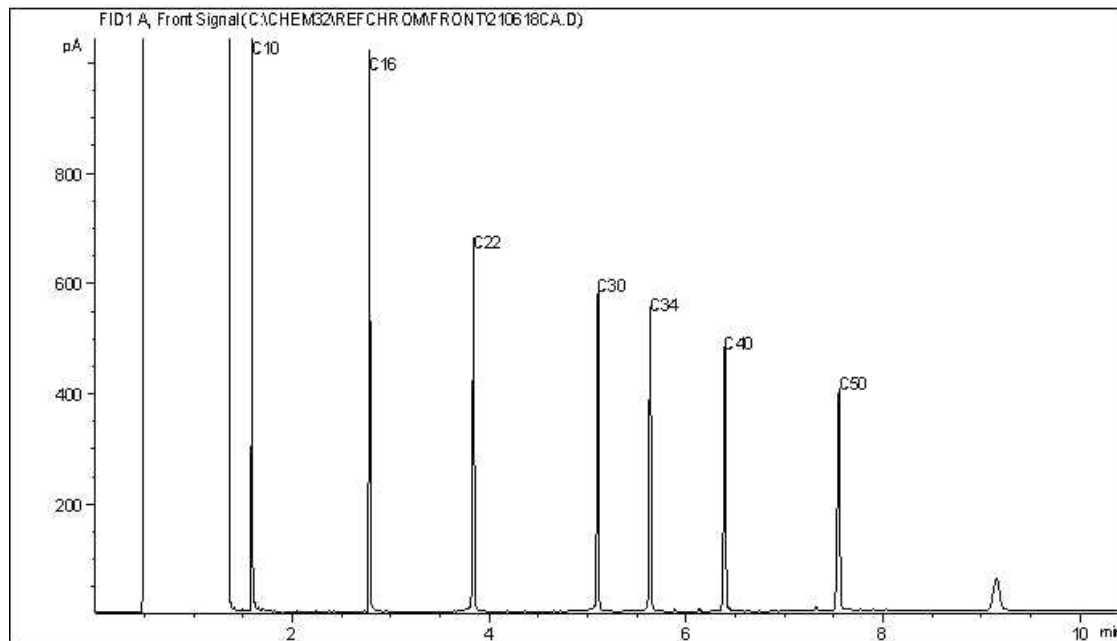
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



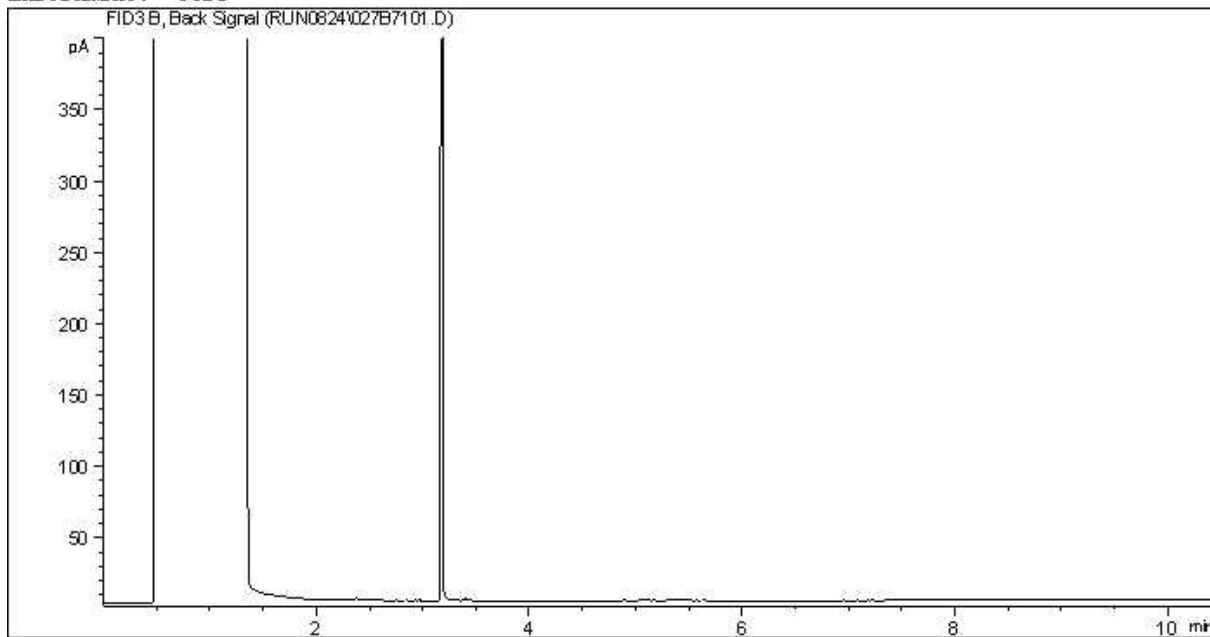
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

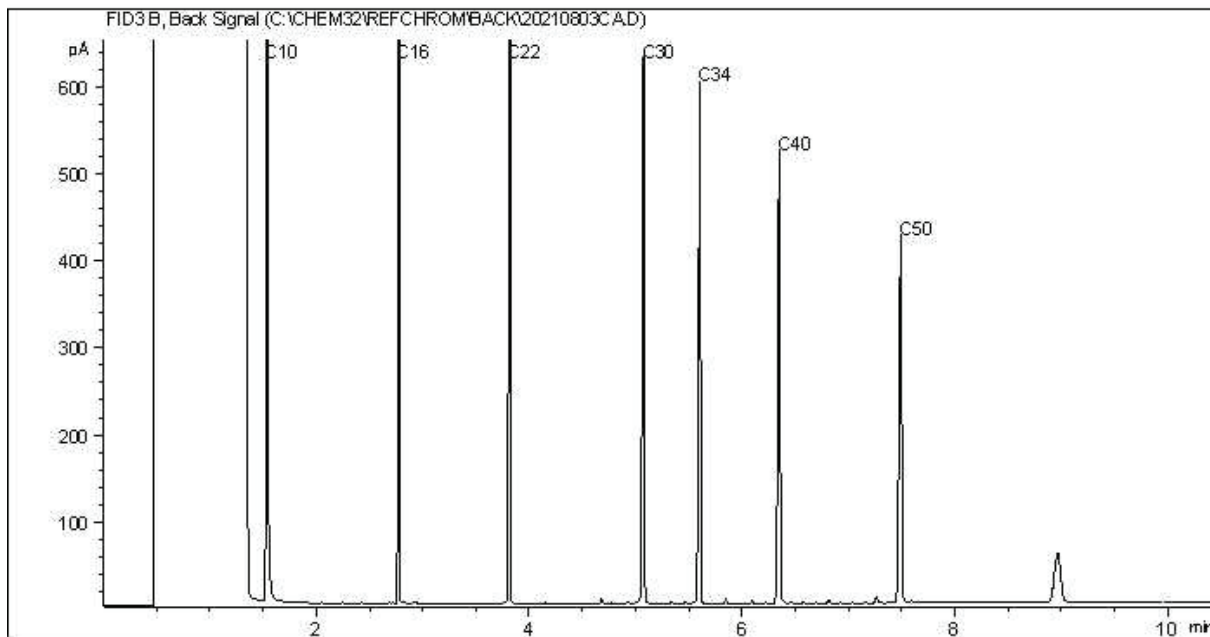
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram

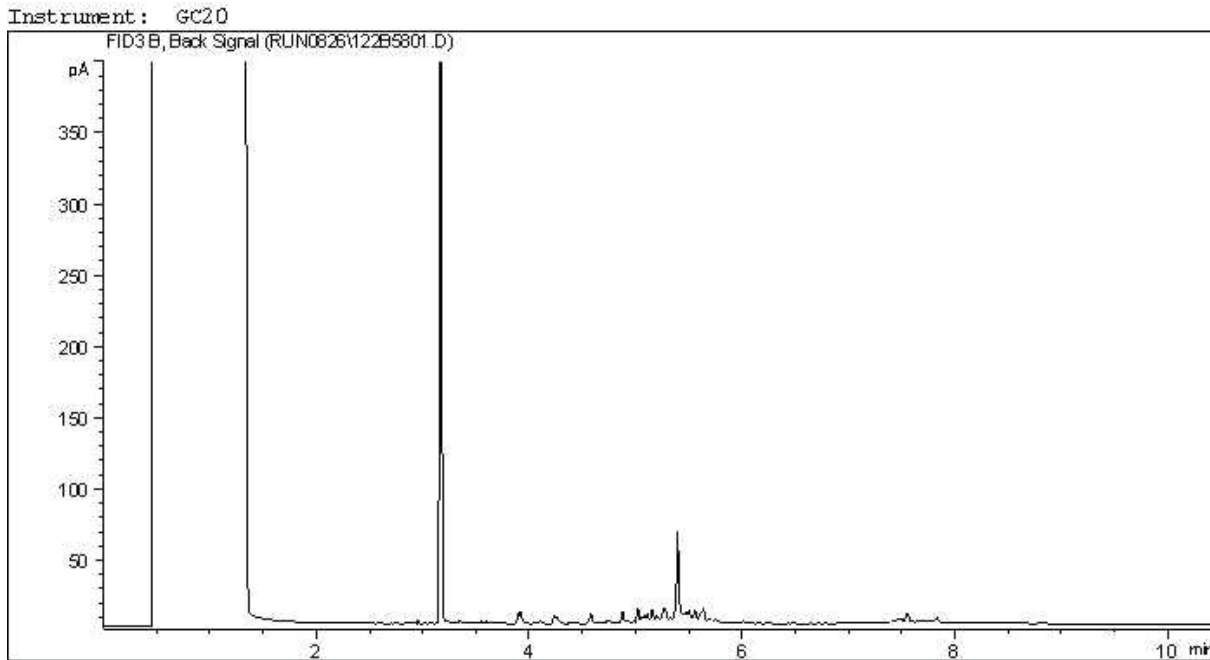


TYPICAL PRODUCT CARBON NUMBER RANGES

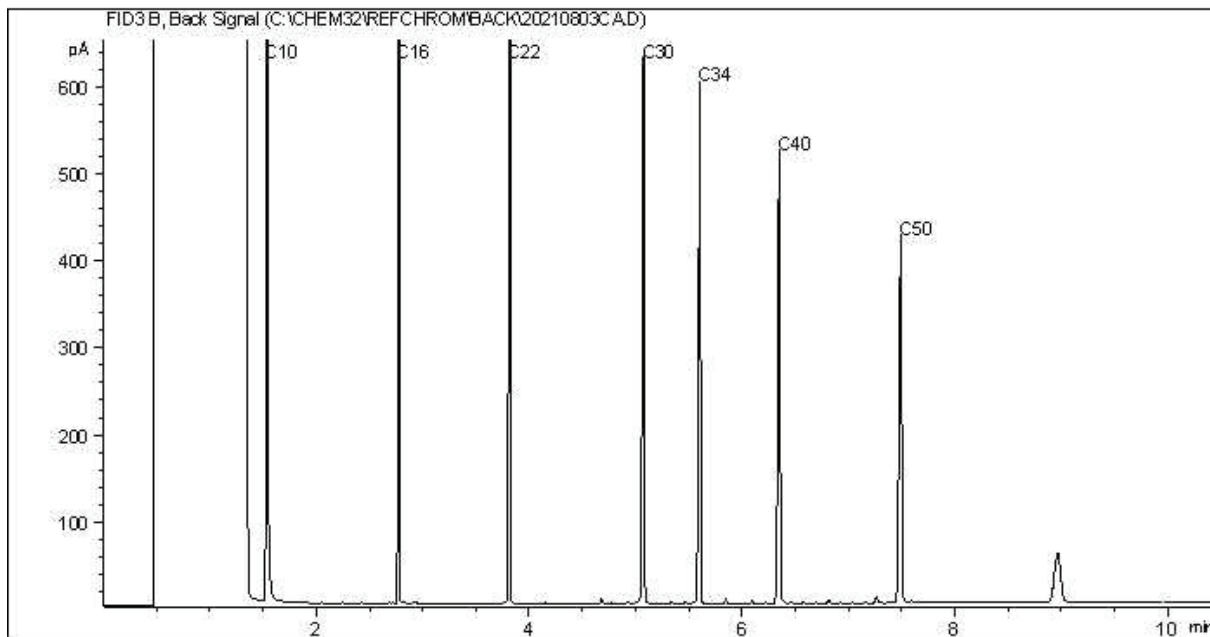
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



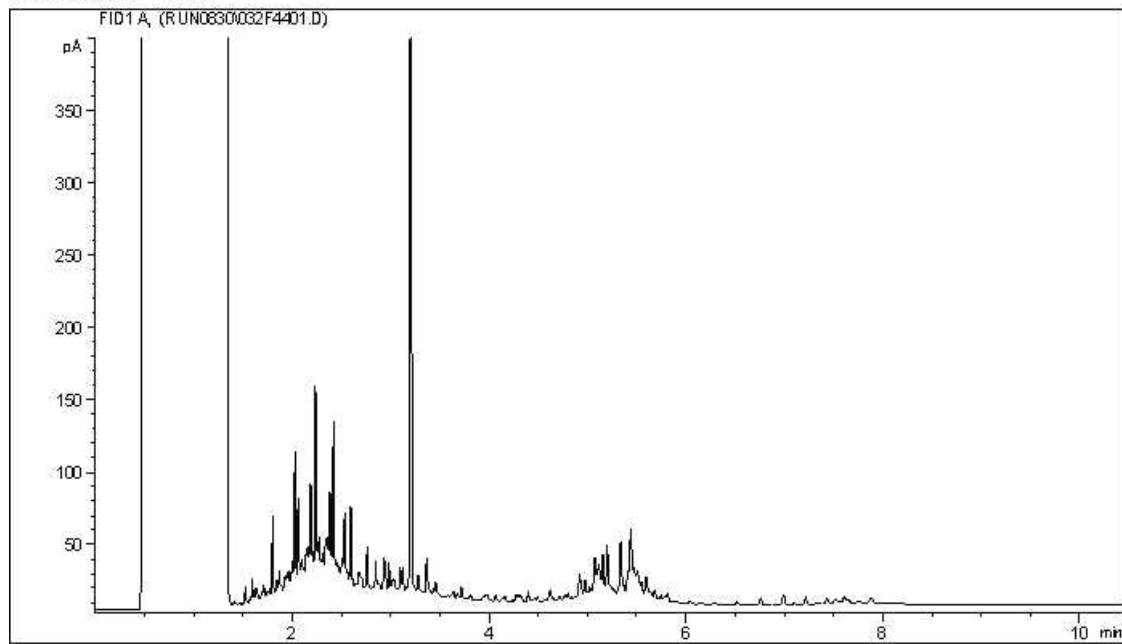
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

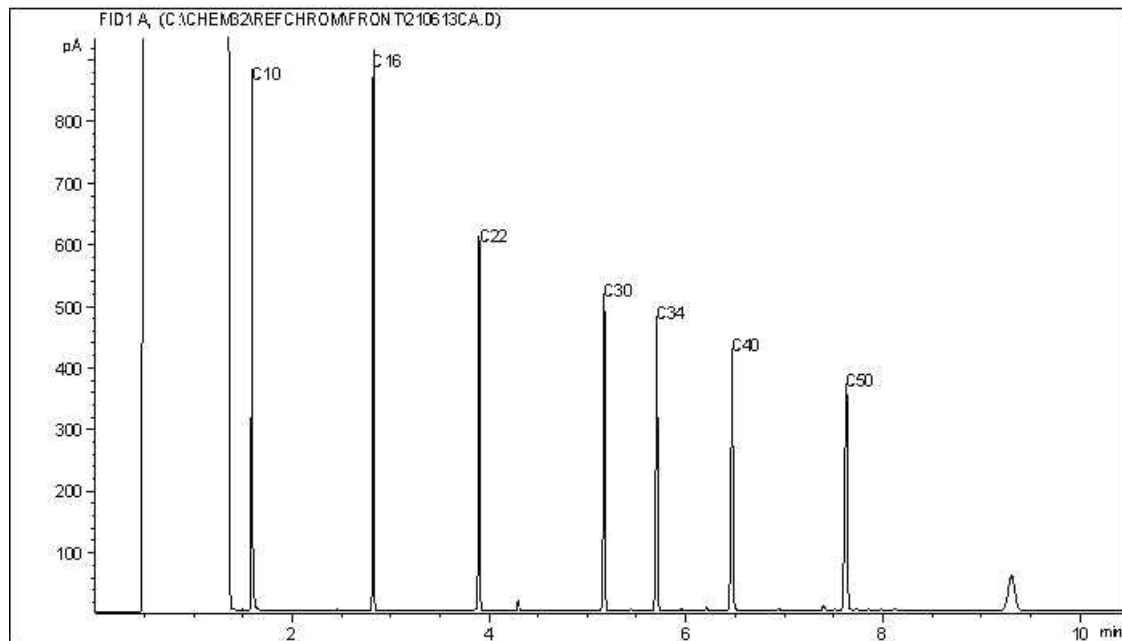
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



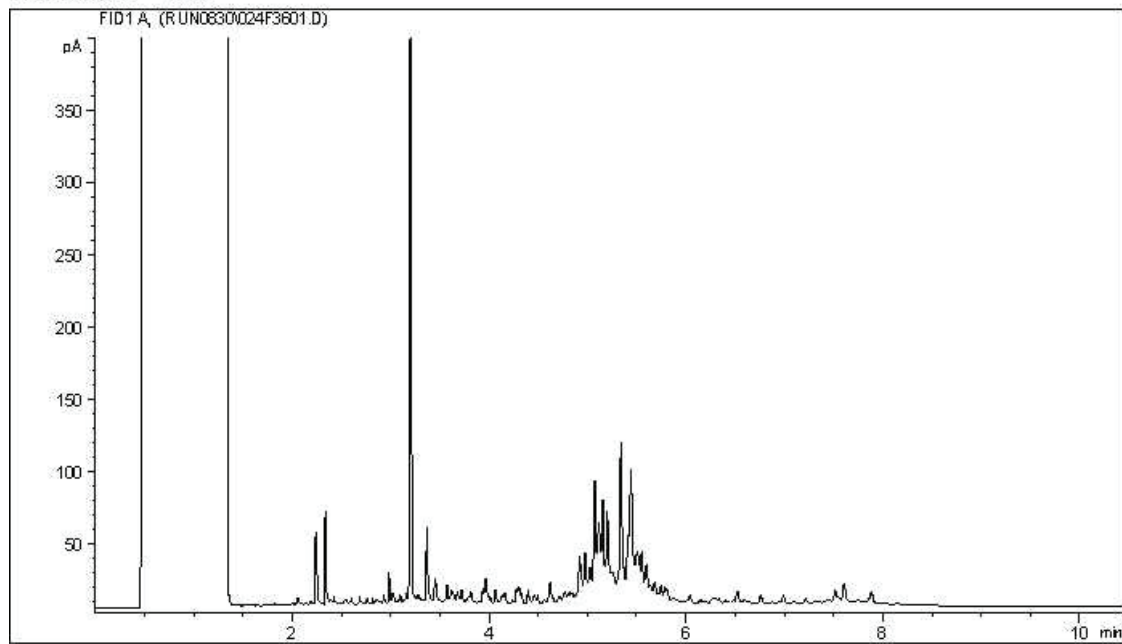
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

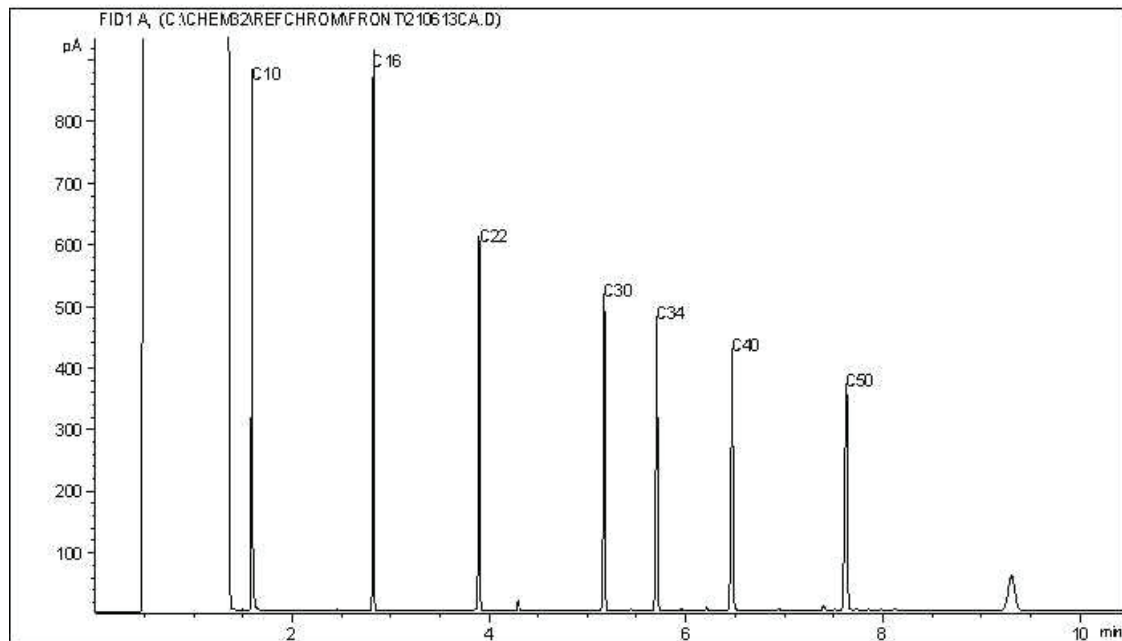
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram

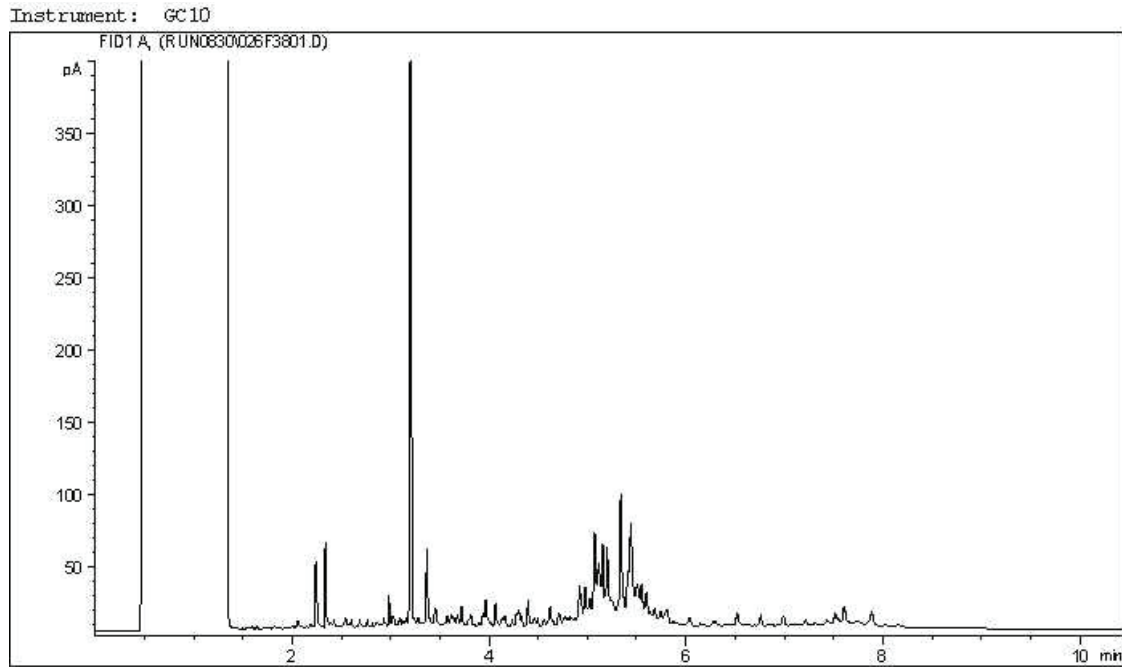


TYPICAL PRODUCT CARBON NUMBER RANGES

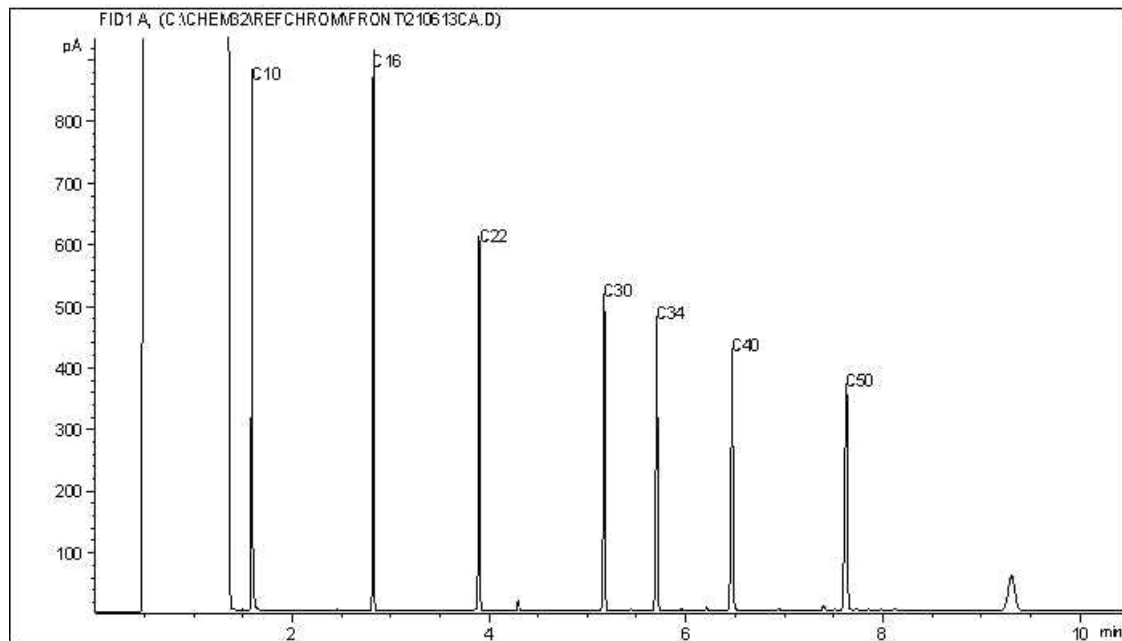
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



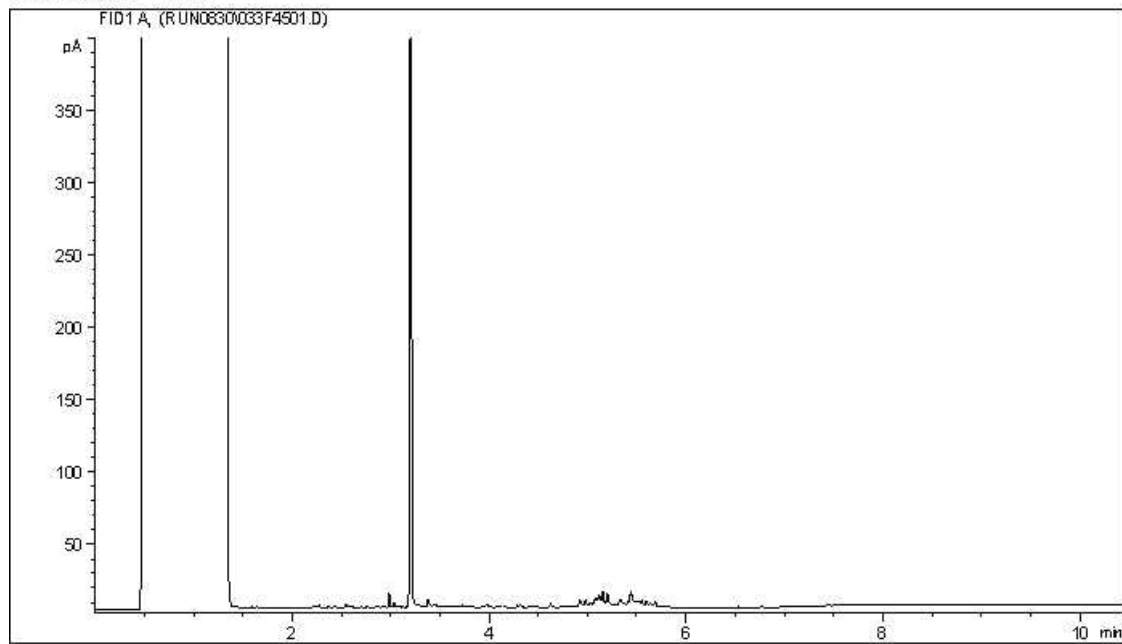
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

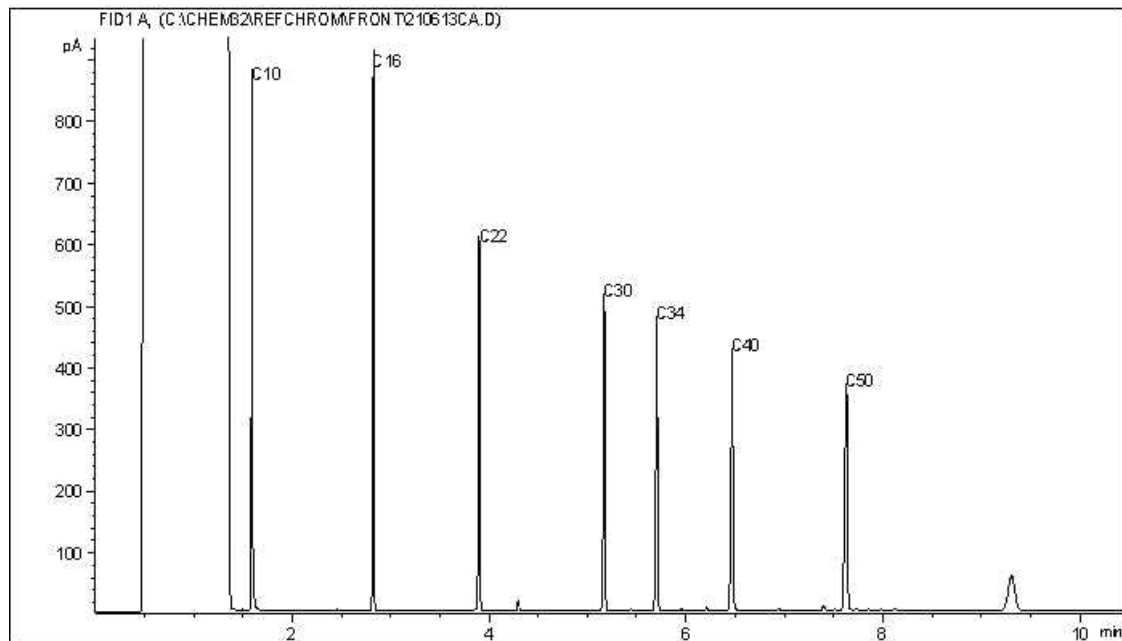
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



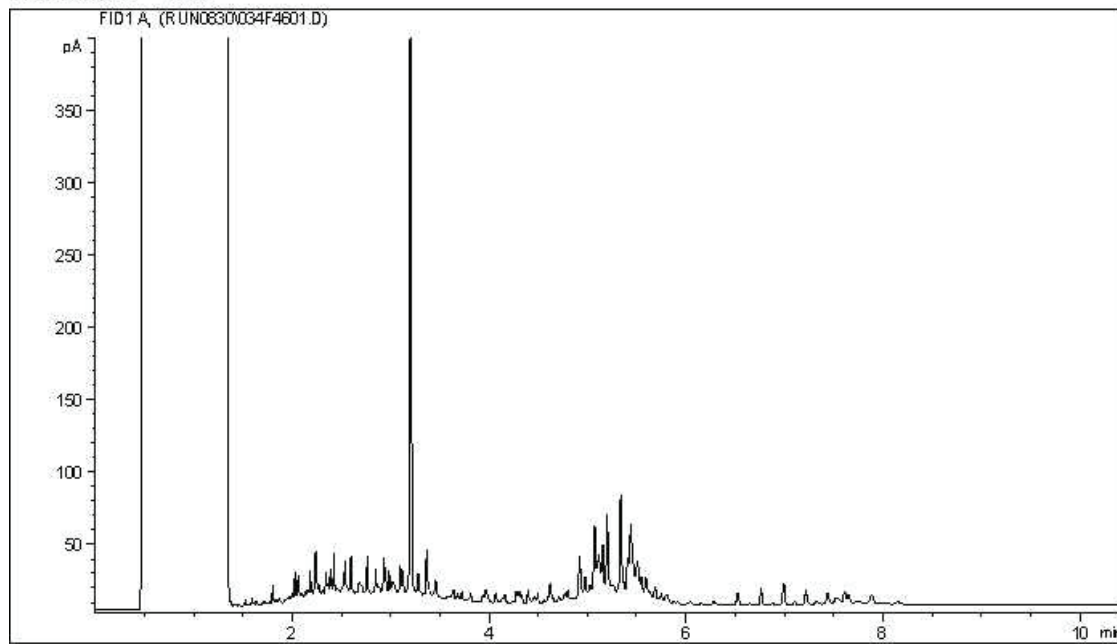
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

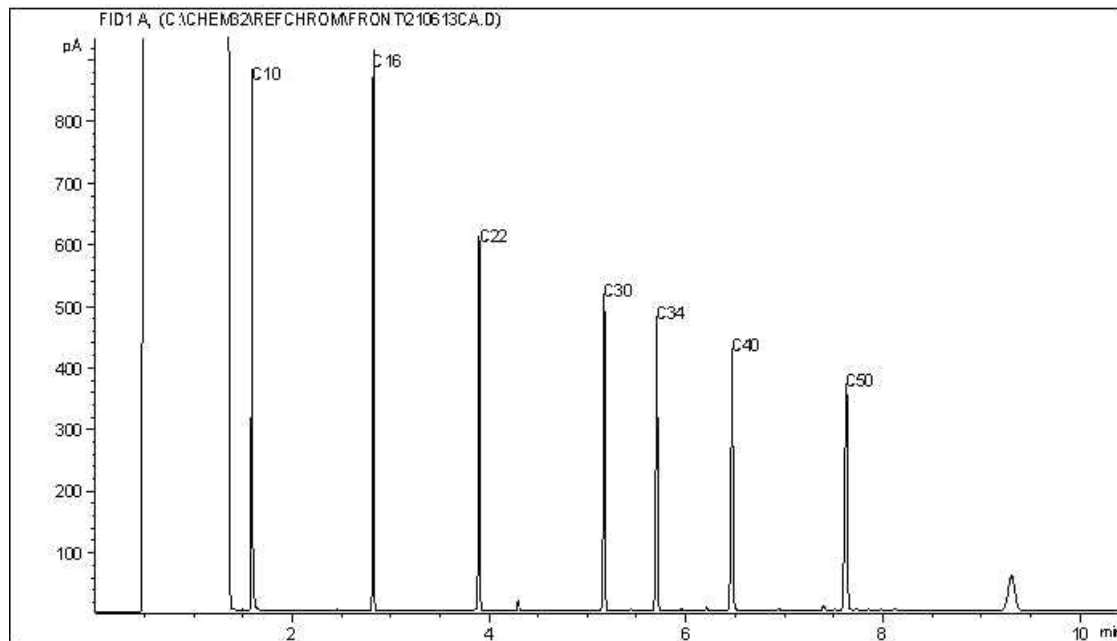
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



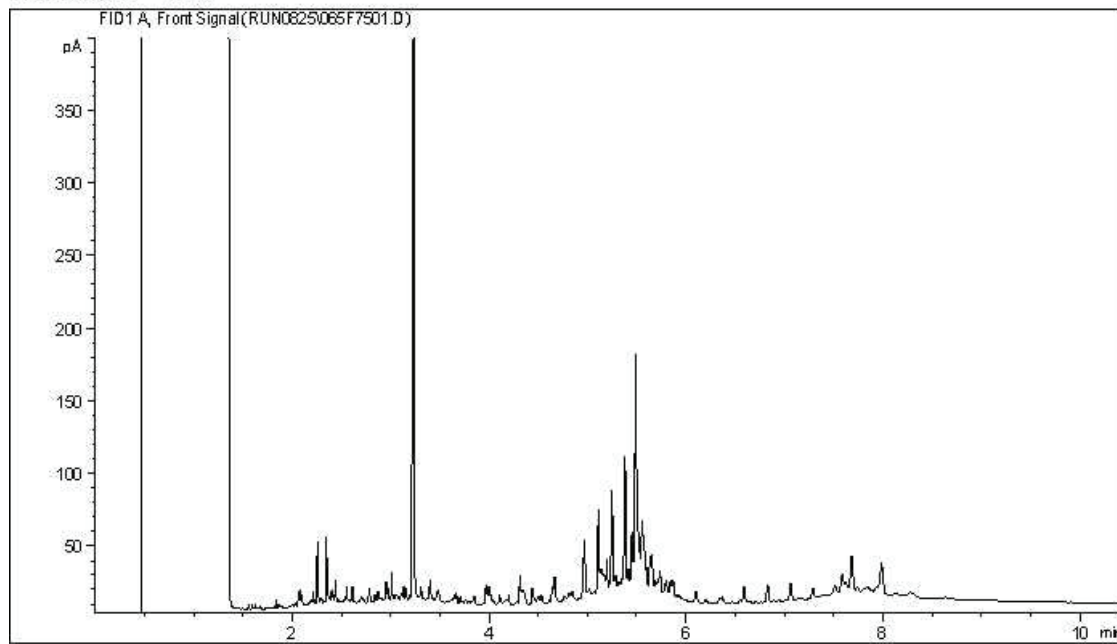
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

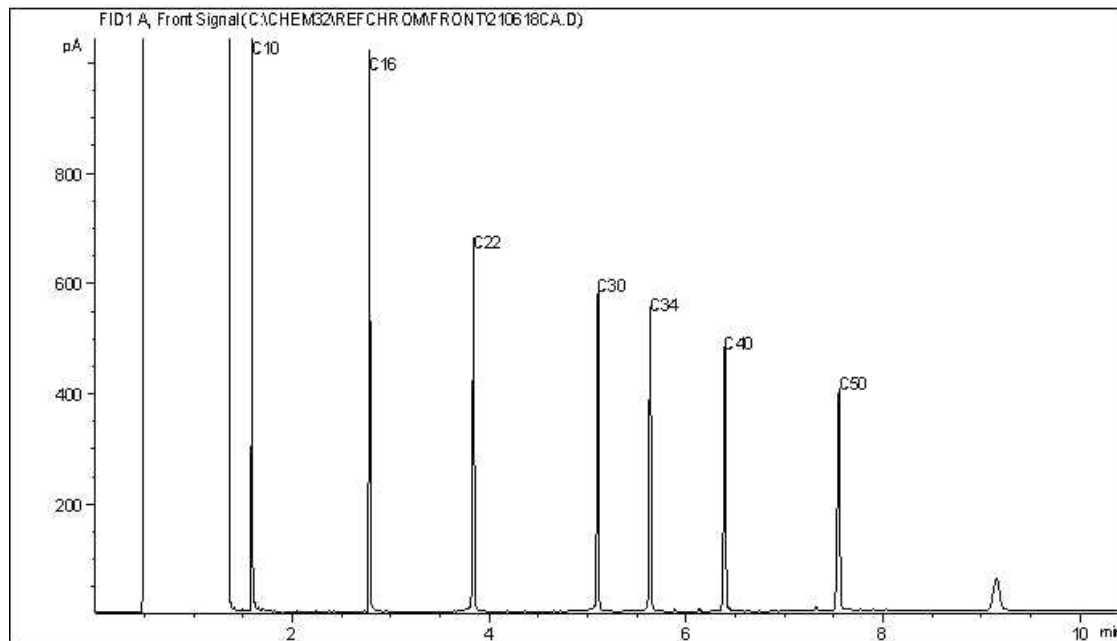
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



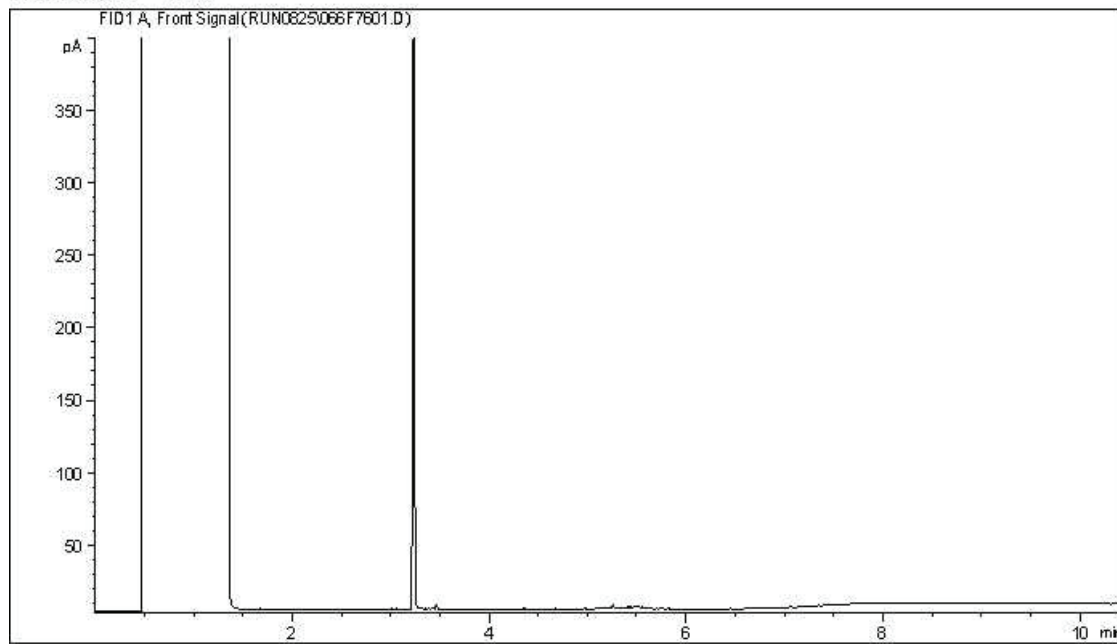
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

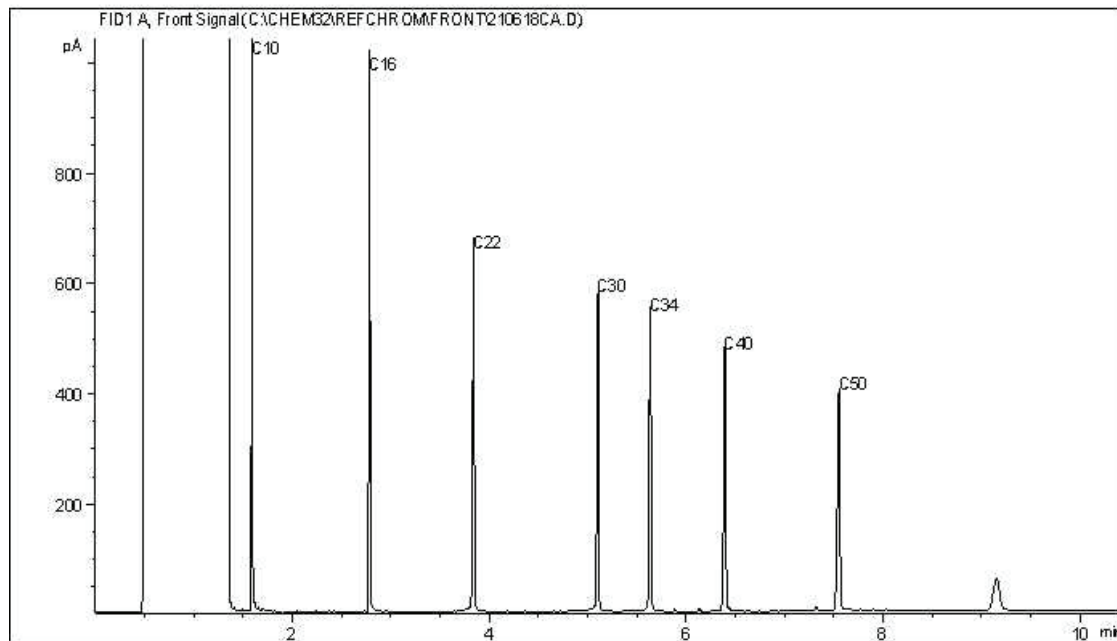
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



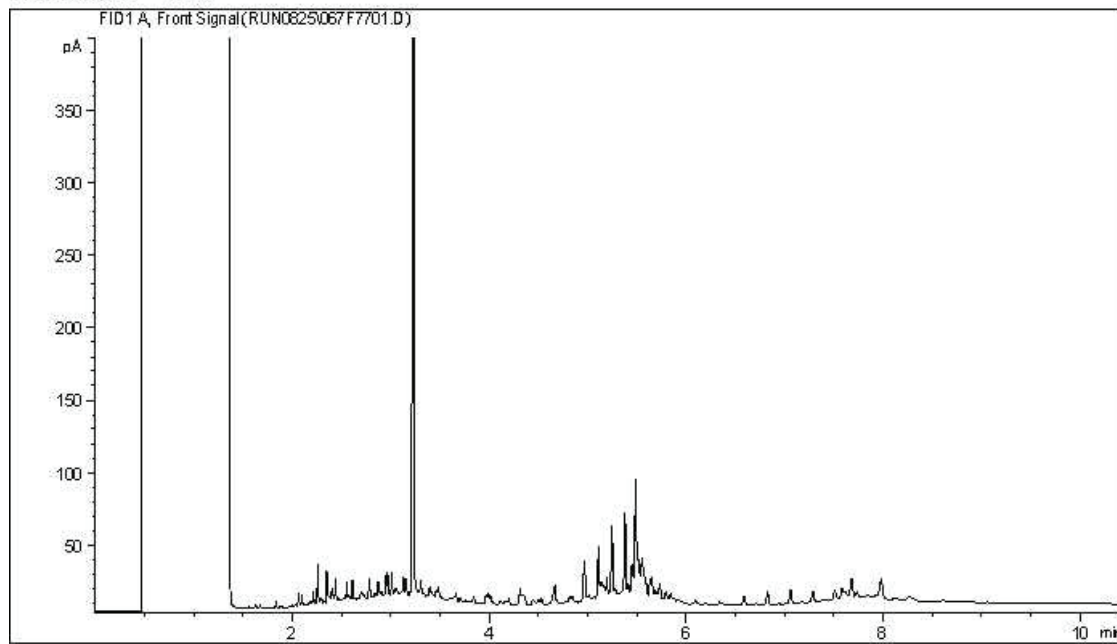
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Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
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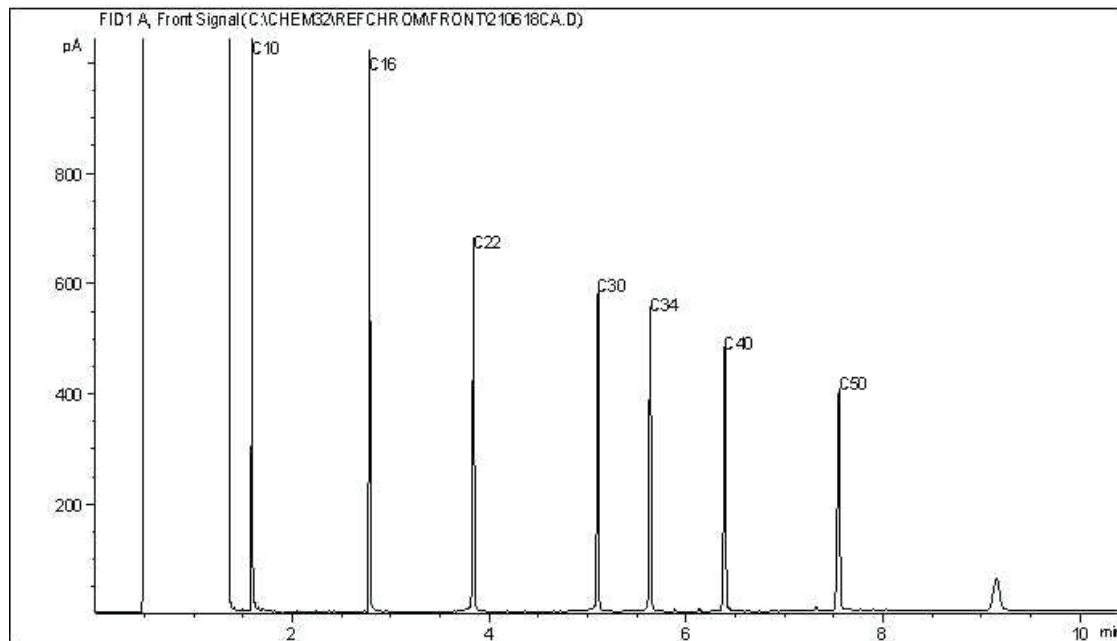
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



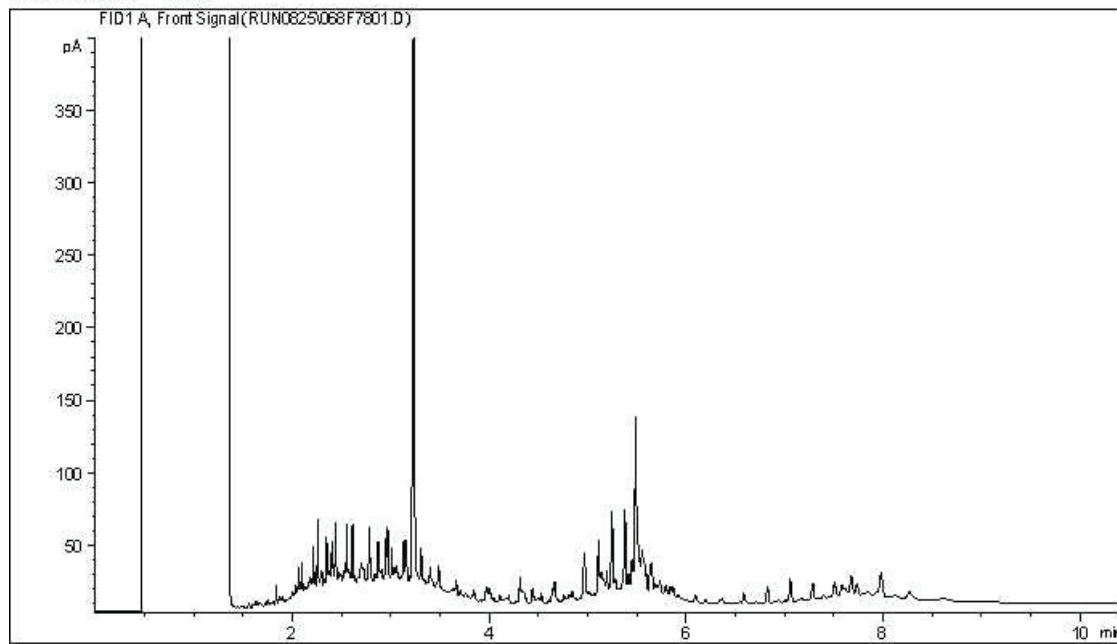
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Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

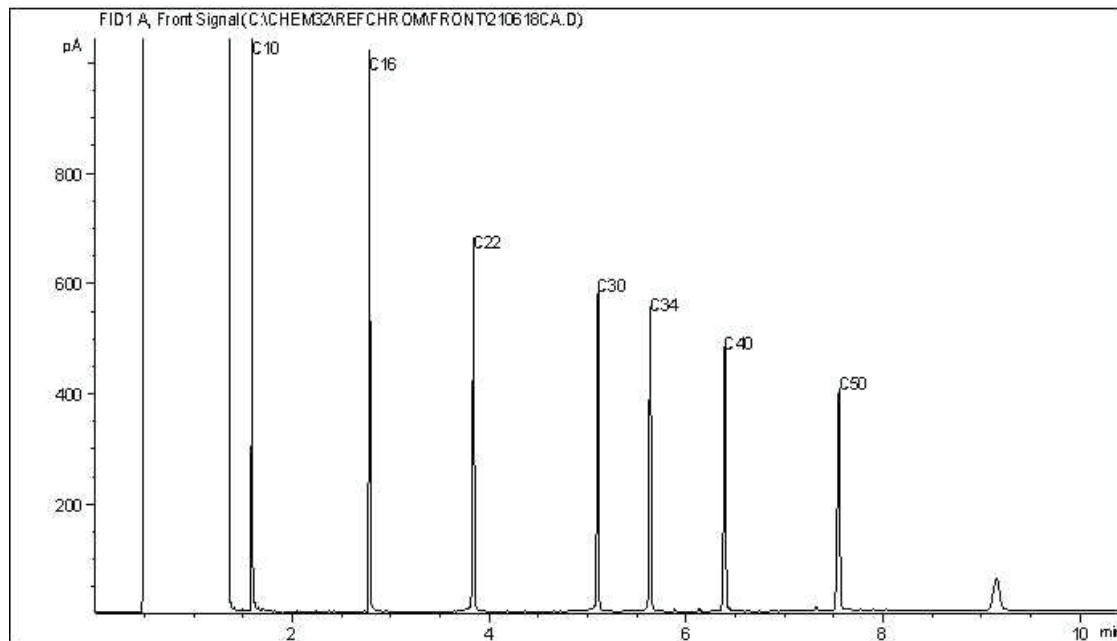
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



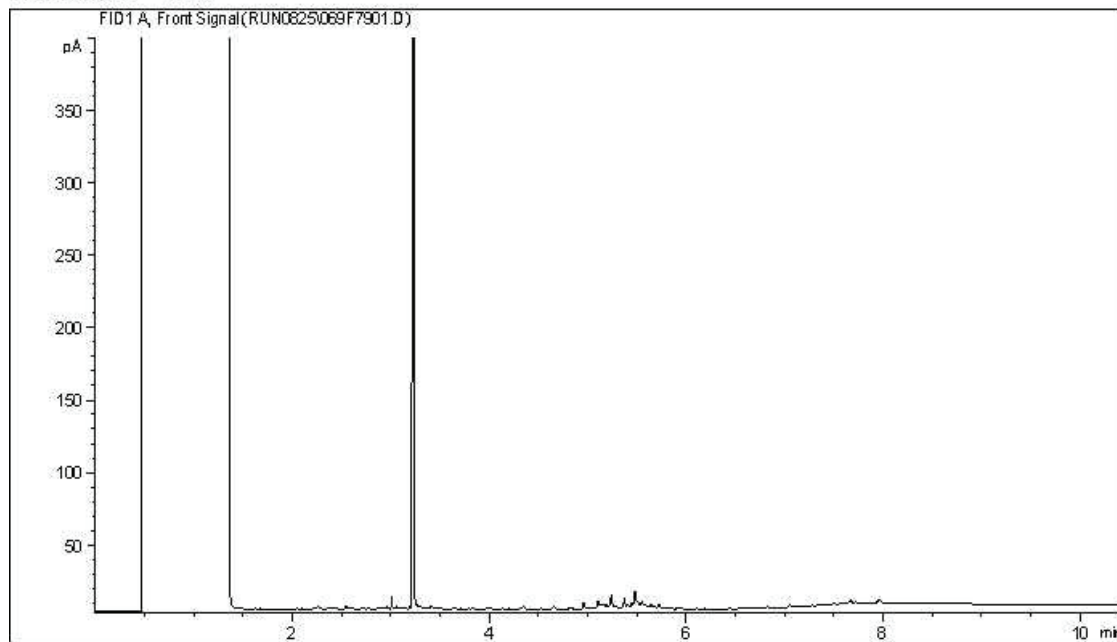
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

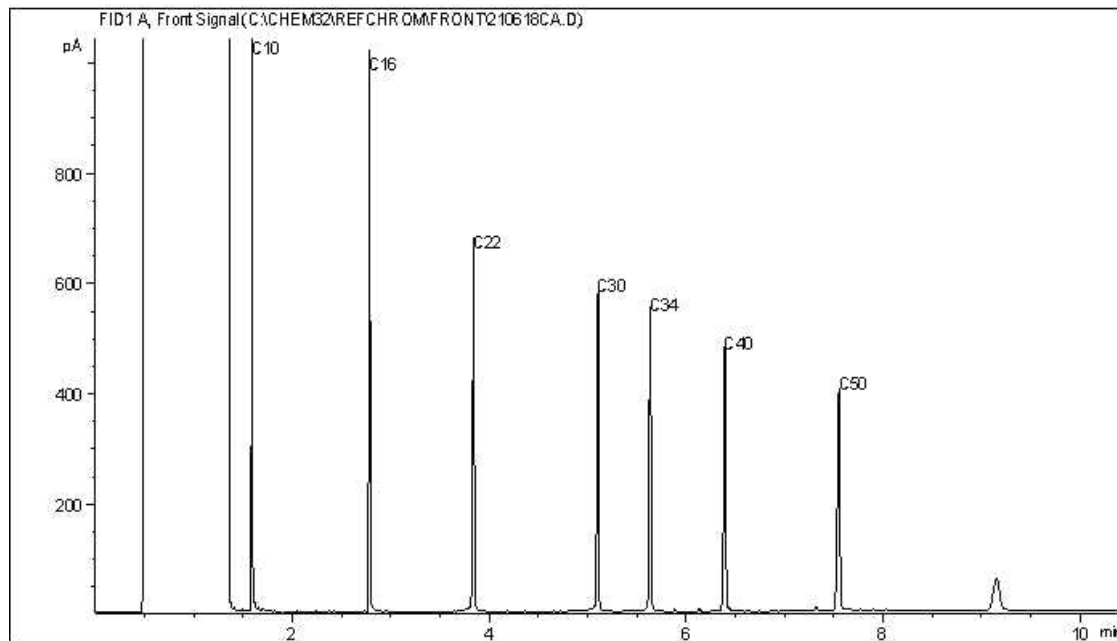
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram

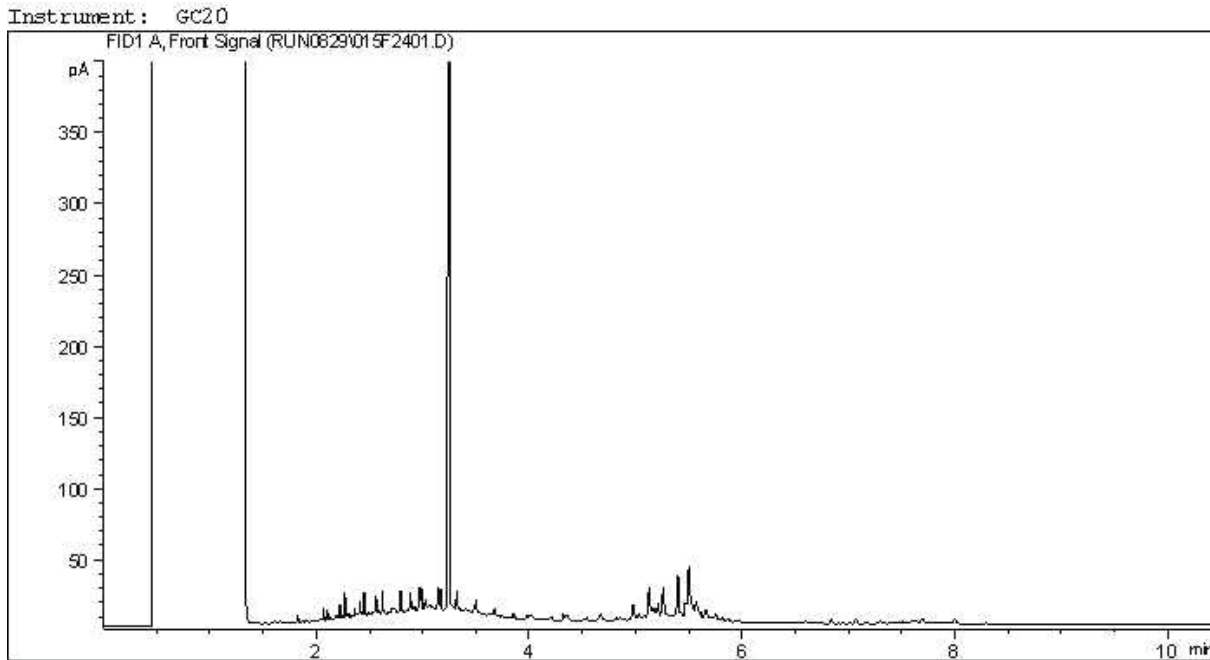


TYPICAL PRODUCT CARBON NUMBER RANGES

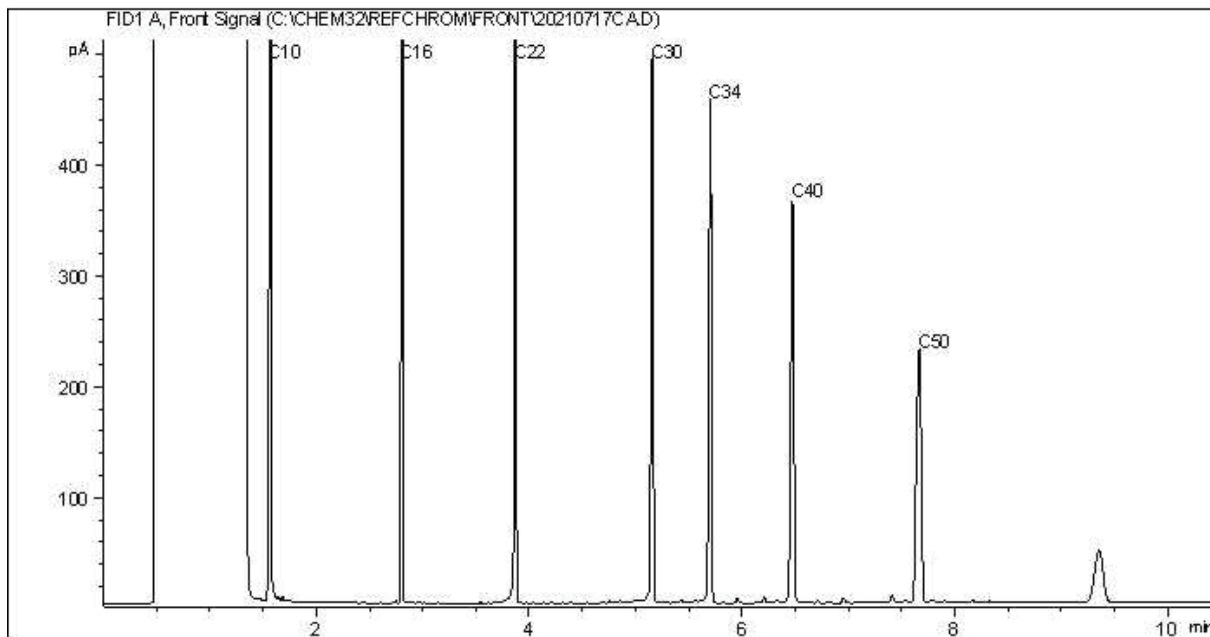
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram

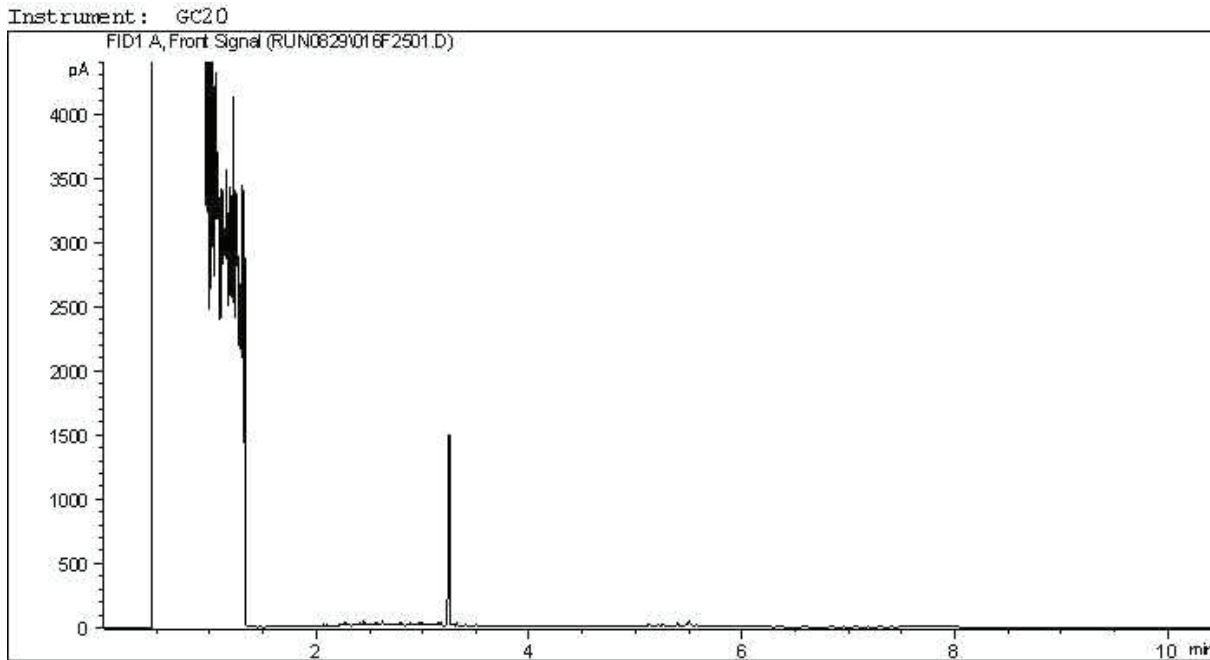


TYPICAL PRODUCT CARBON NUMBER RANGES

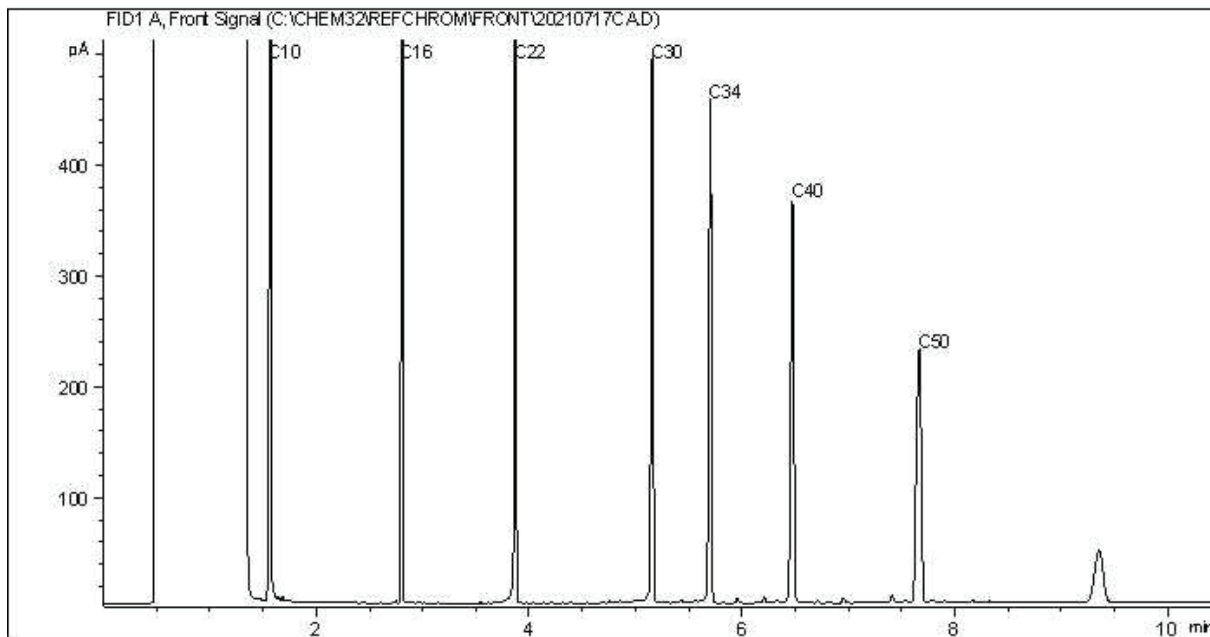
Gasoline:	C4 - C12	Diesel:	C8 - C22
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Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



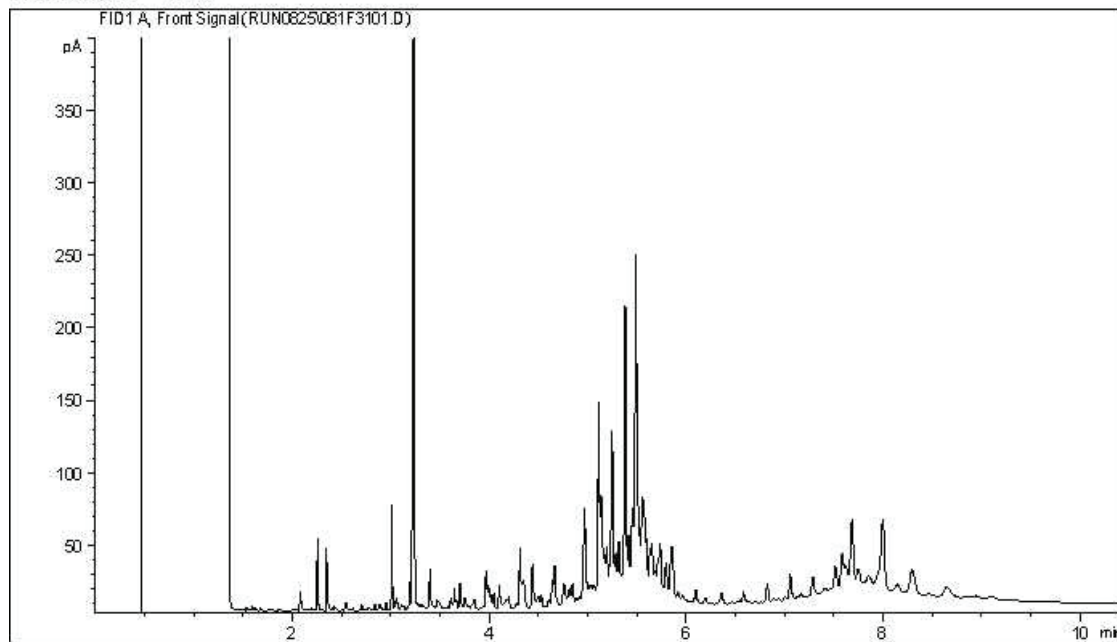
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
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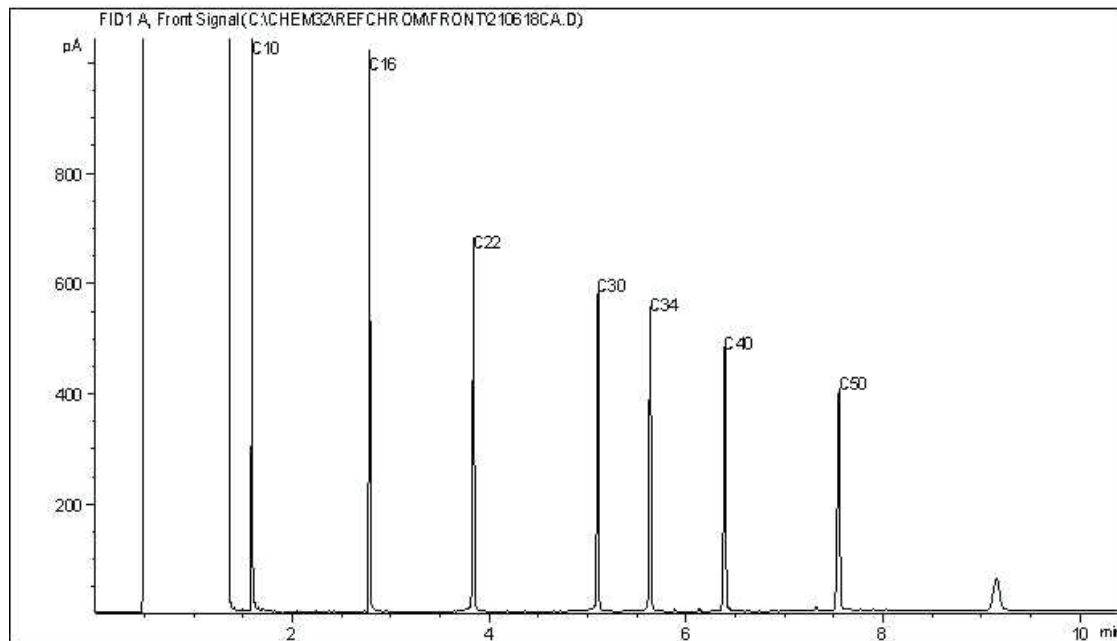
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram

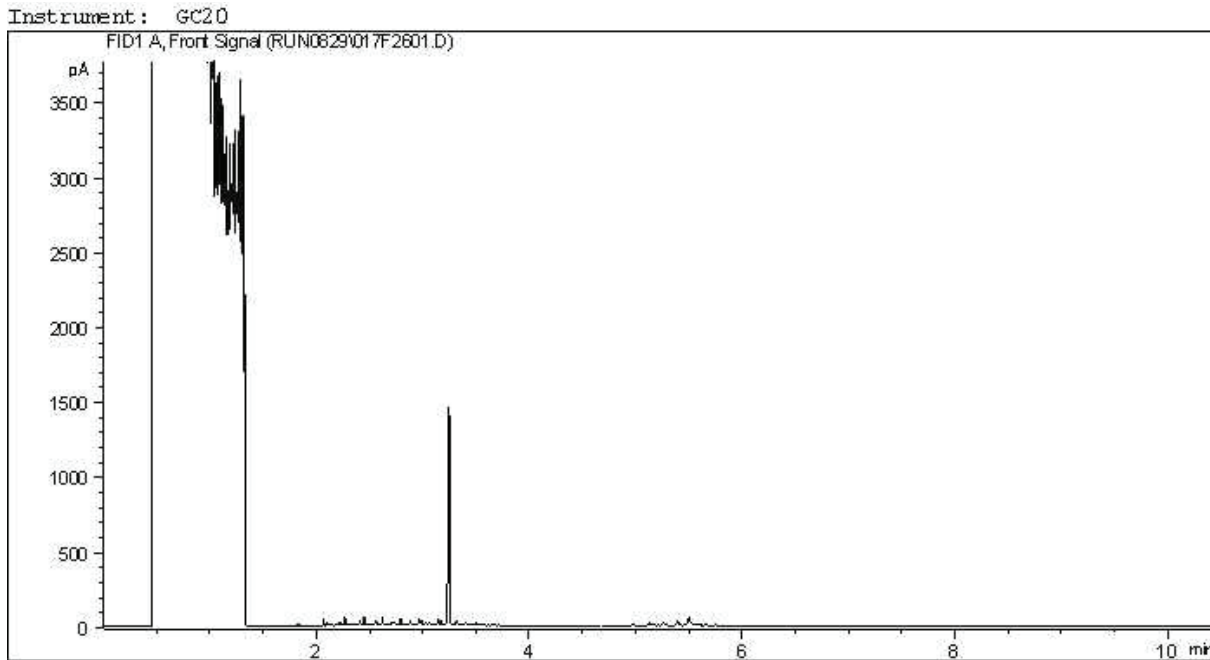


TYPICAL PRODUCT CARBON NUMBER RANGES

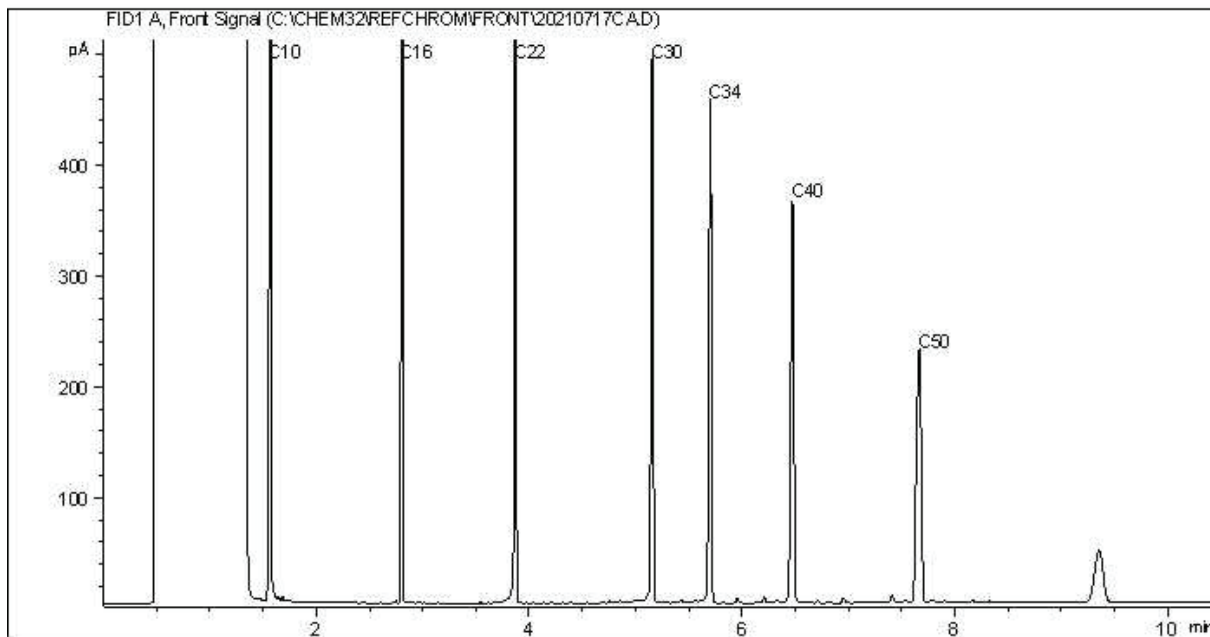
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

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CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram

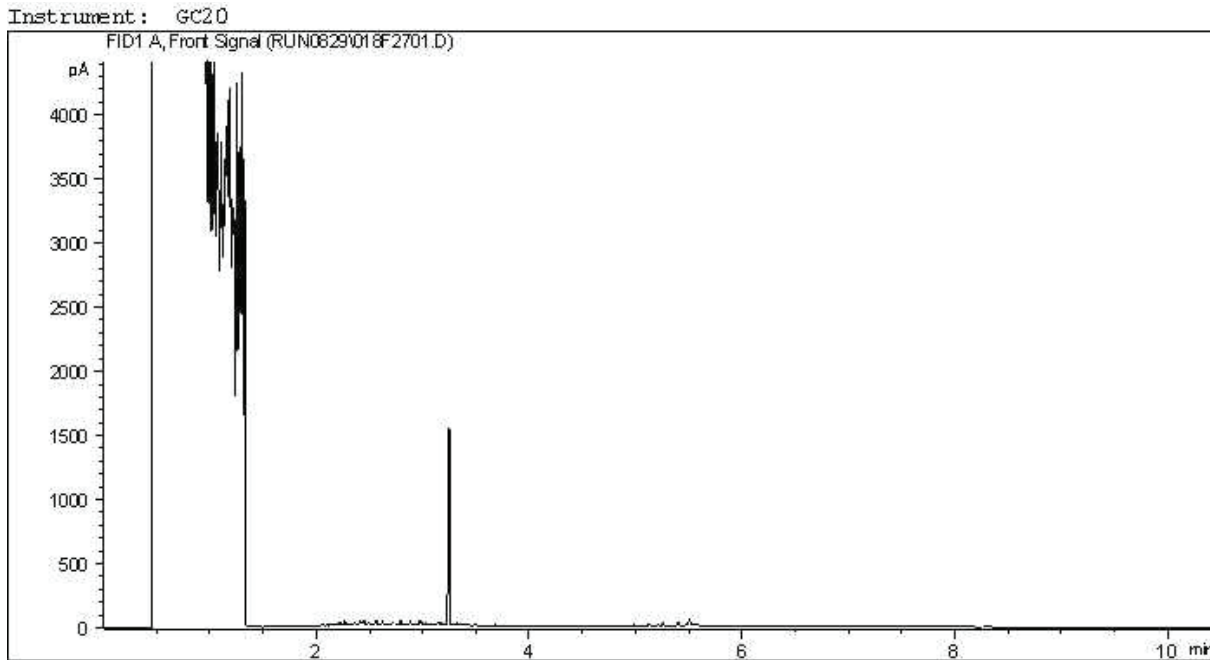


TYPICAL PRODUCT CARBON NUMBER RANGES

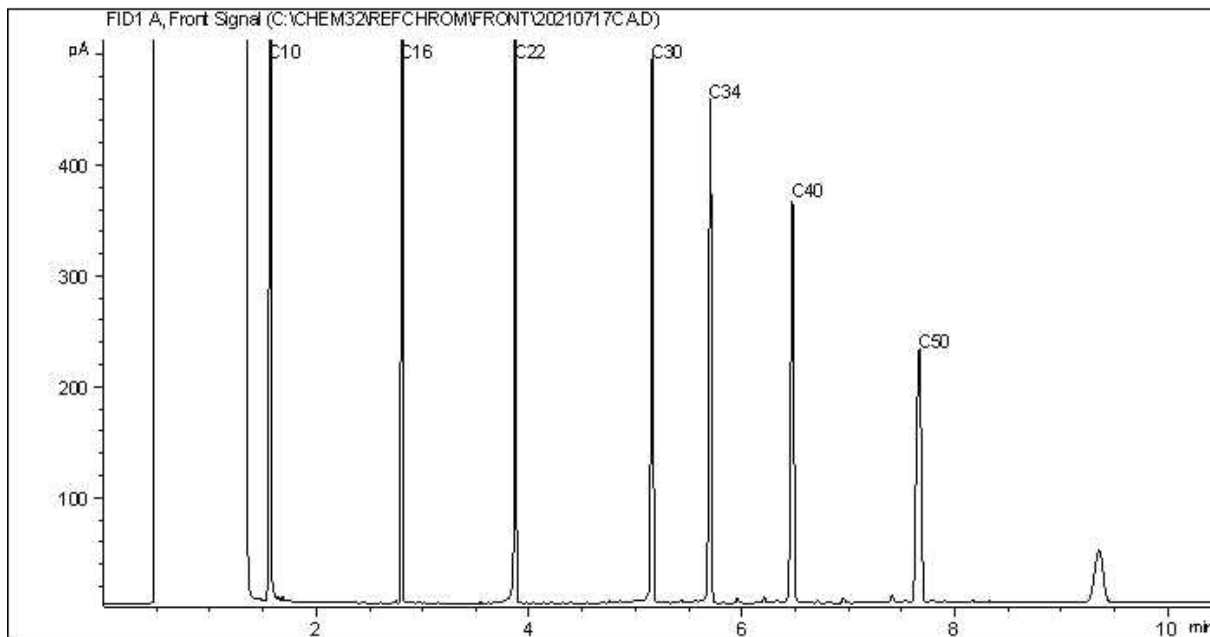
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

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CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram

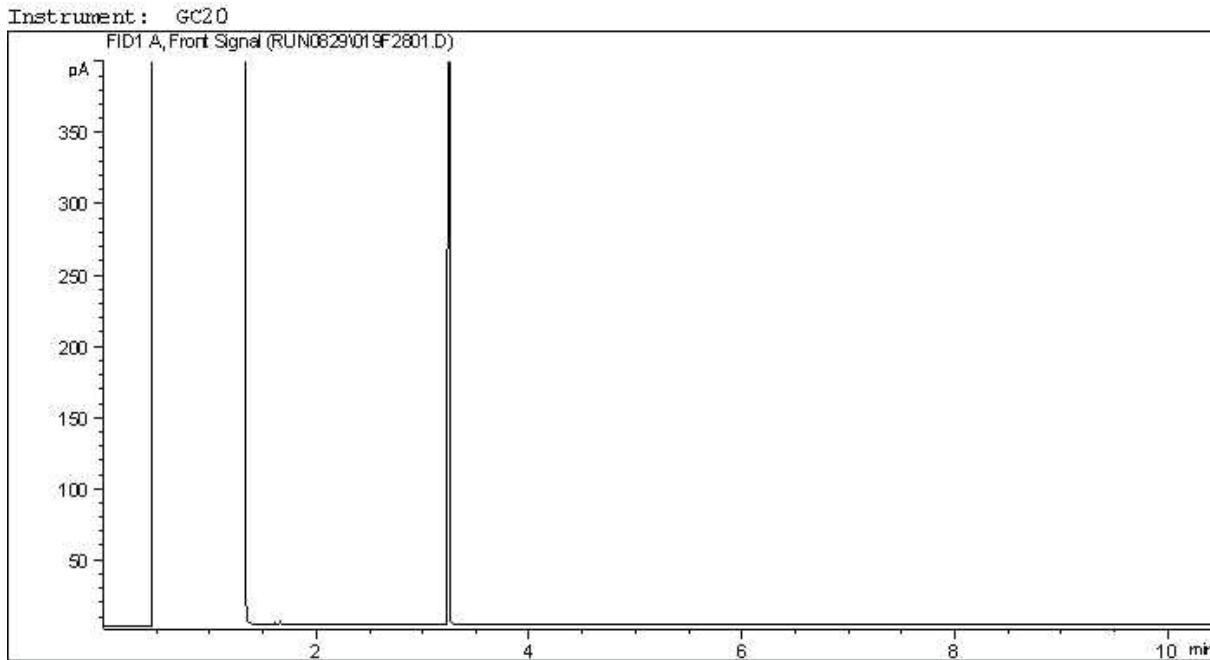


TYPICAL PRODUCT CARBON NUMBER RANGES

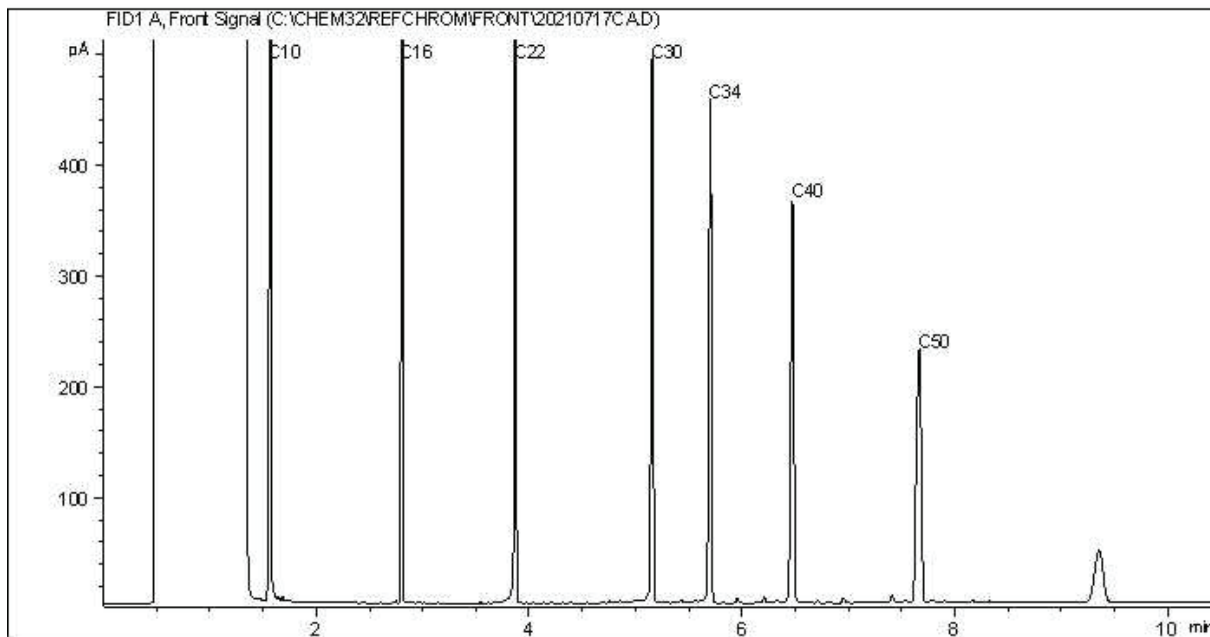
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



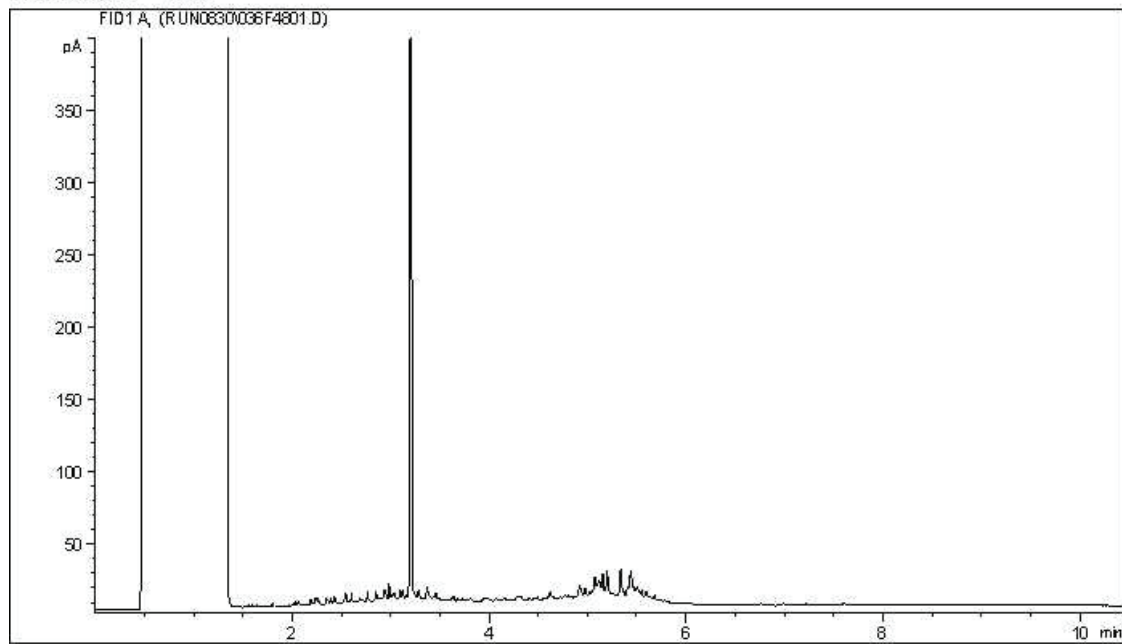
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Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

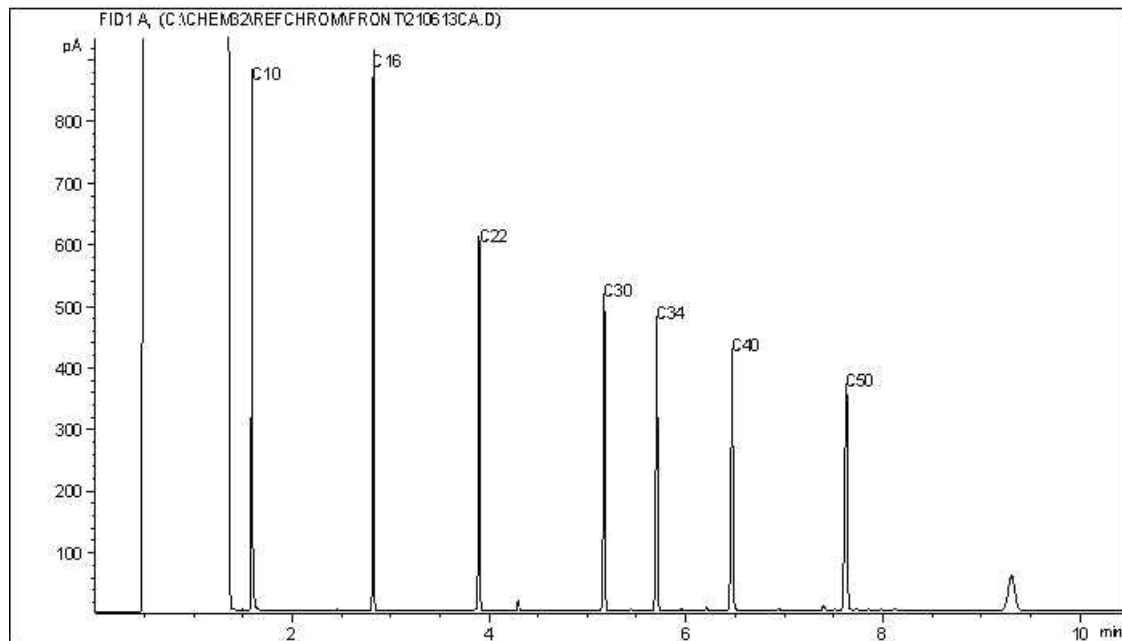
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



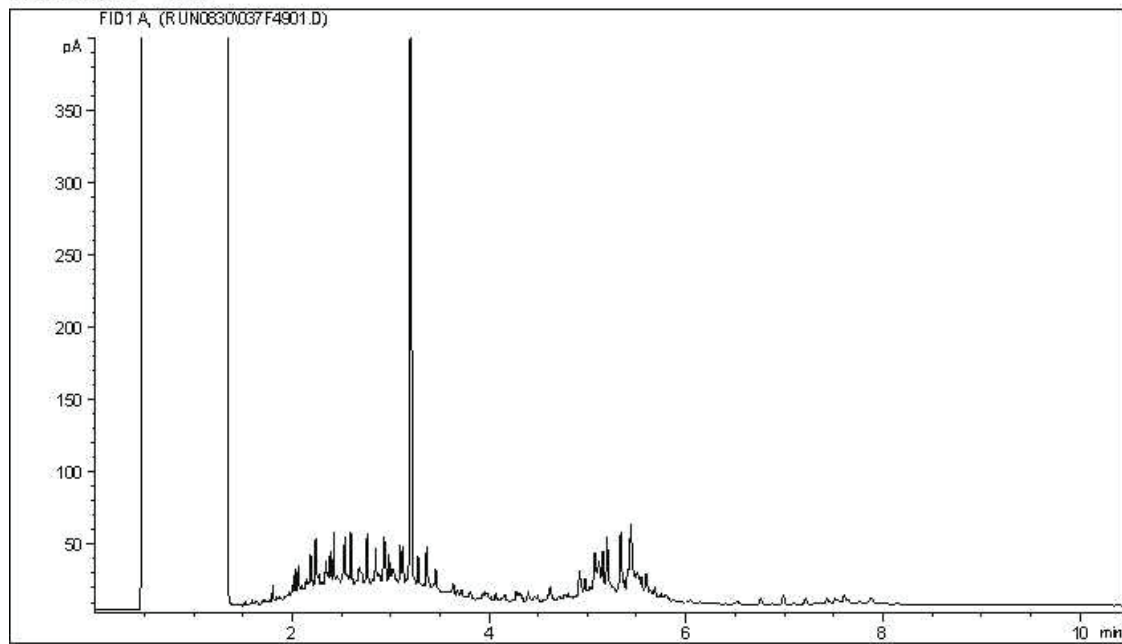
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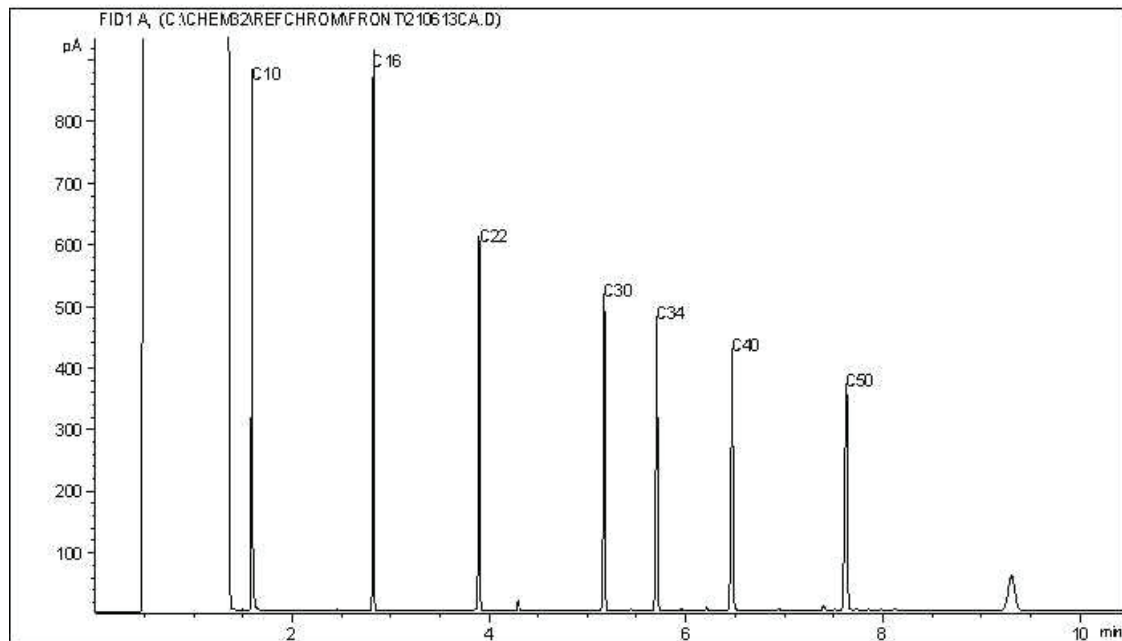
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



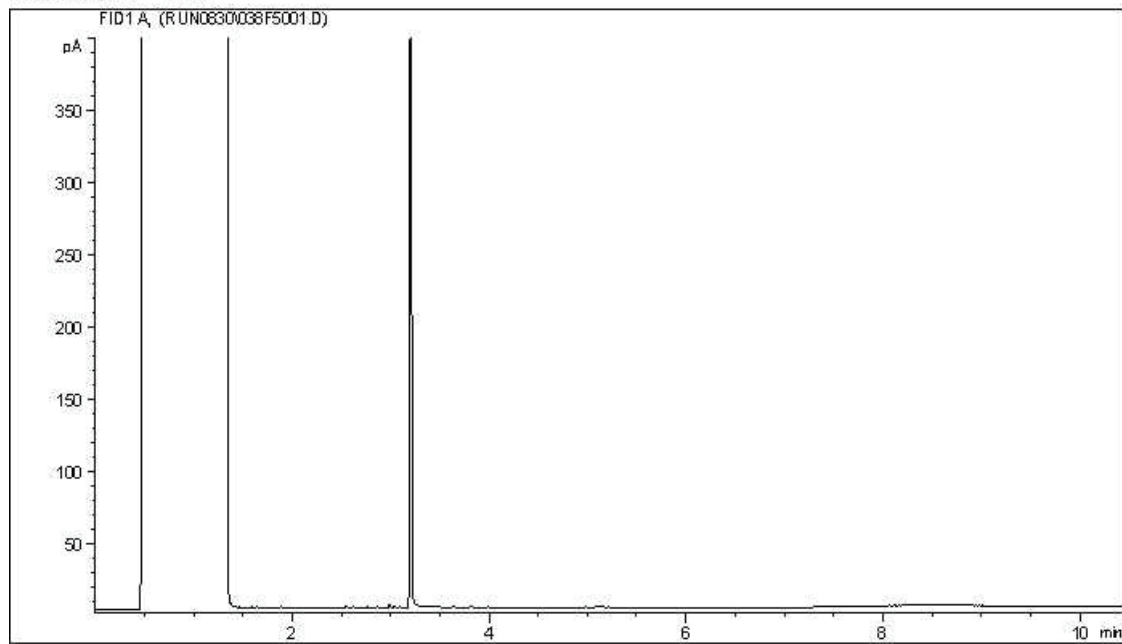
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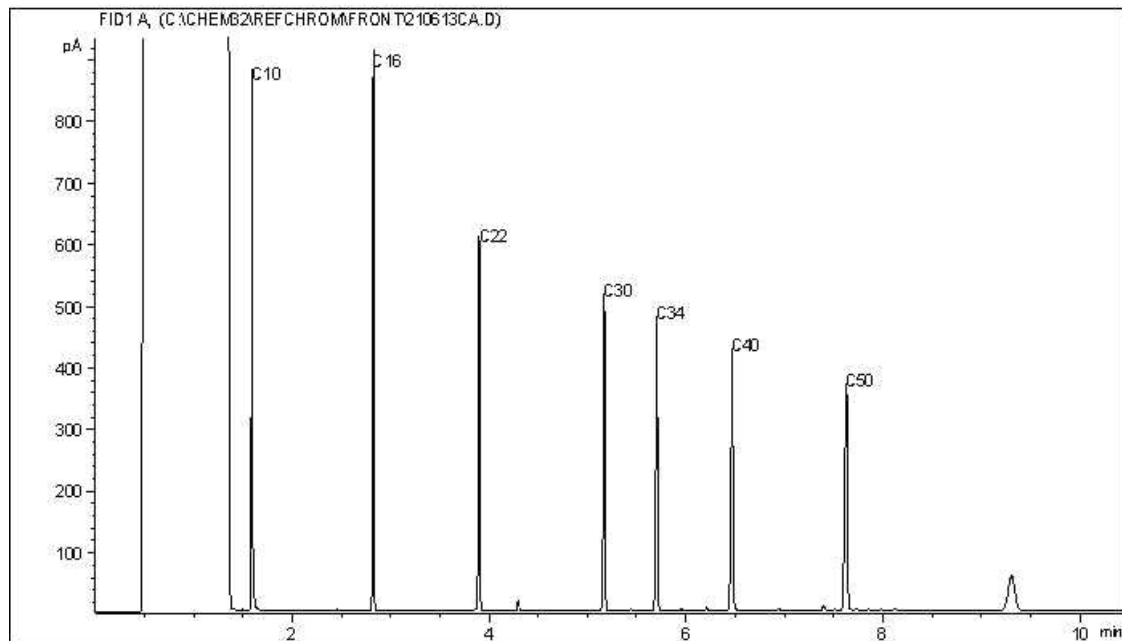
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



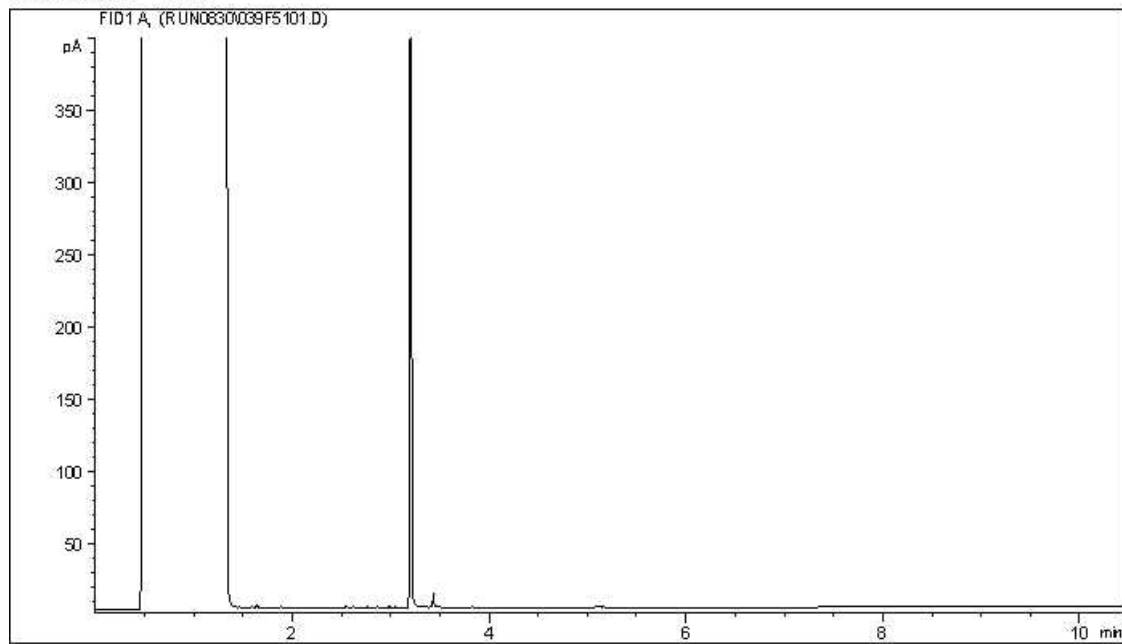
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Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
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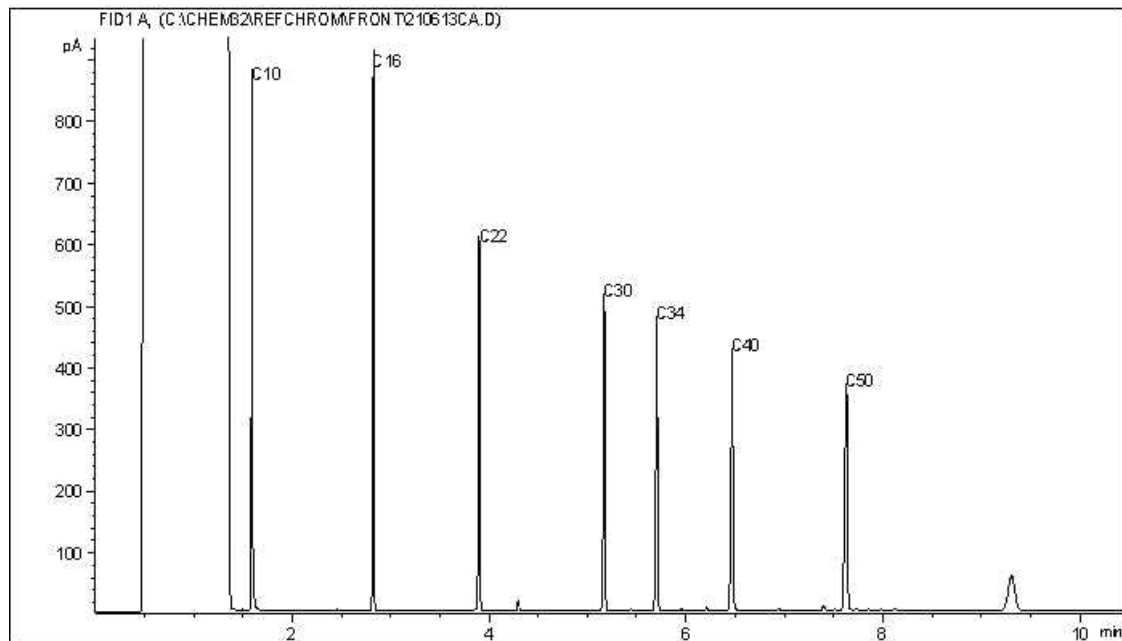
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



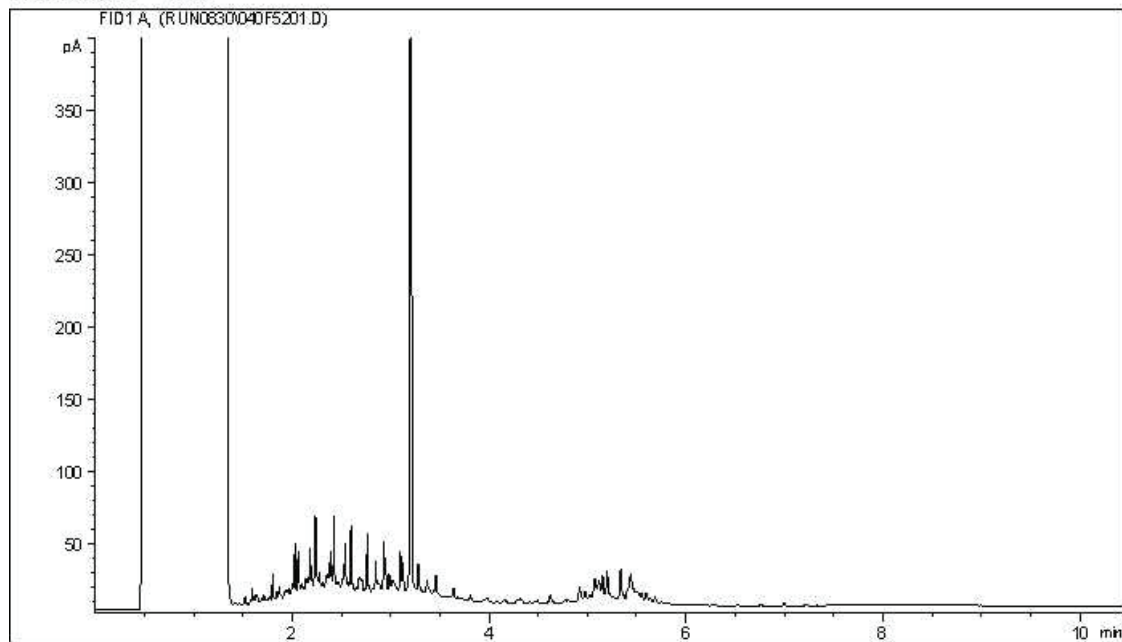
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Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
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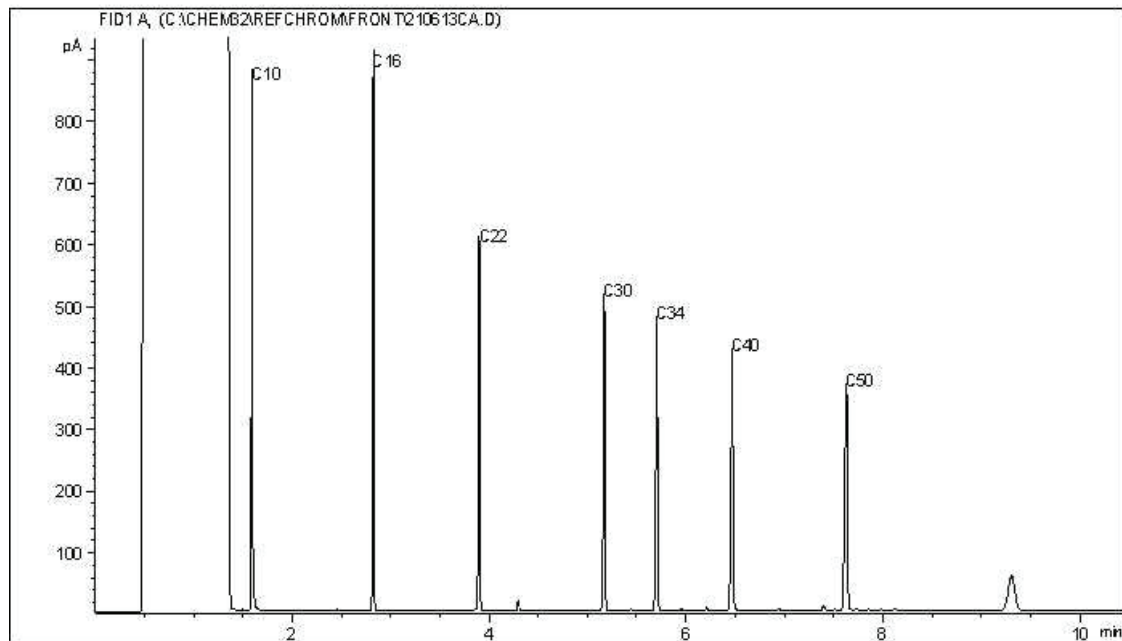
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



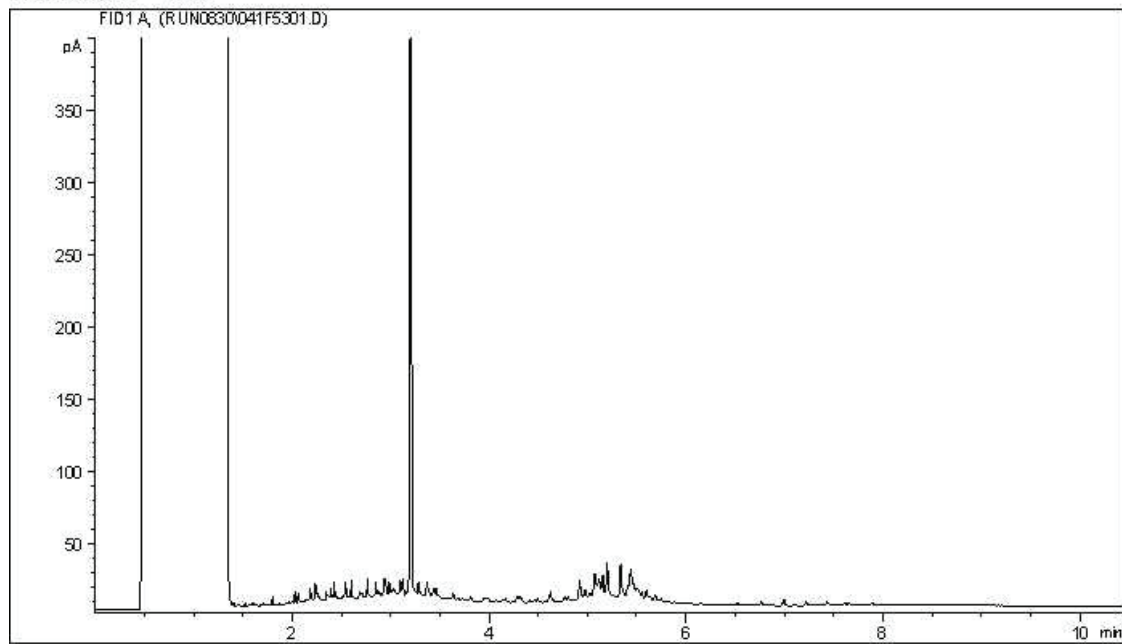
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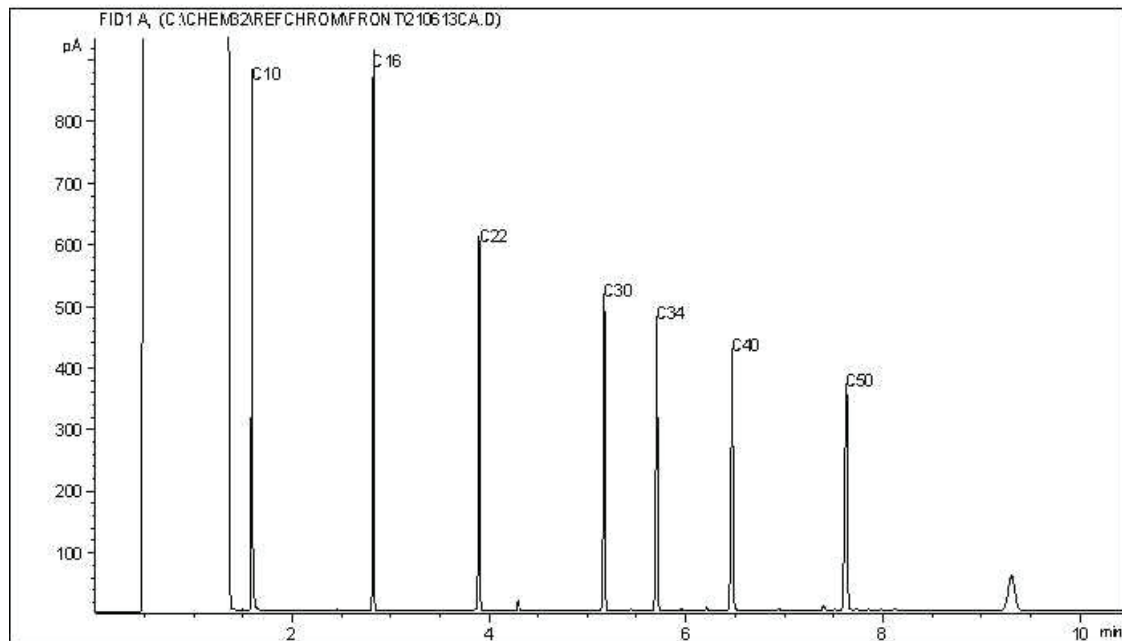
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



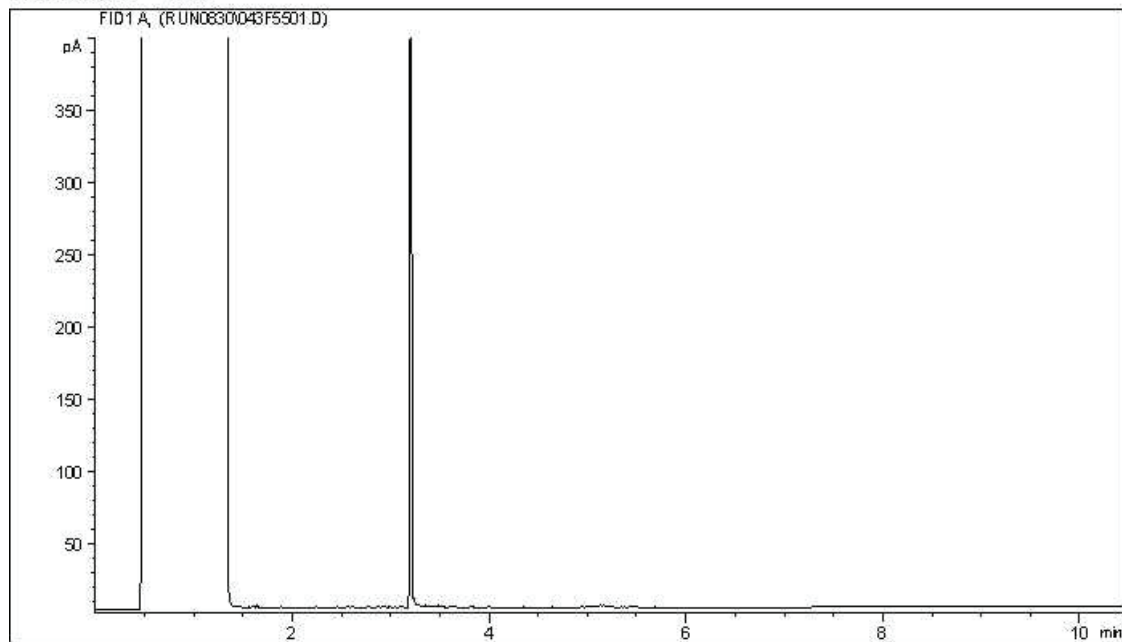
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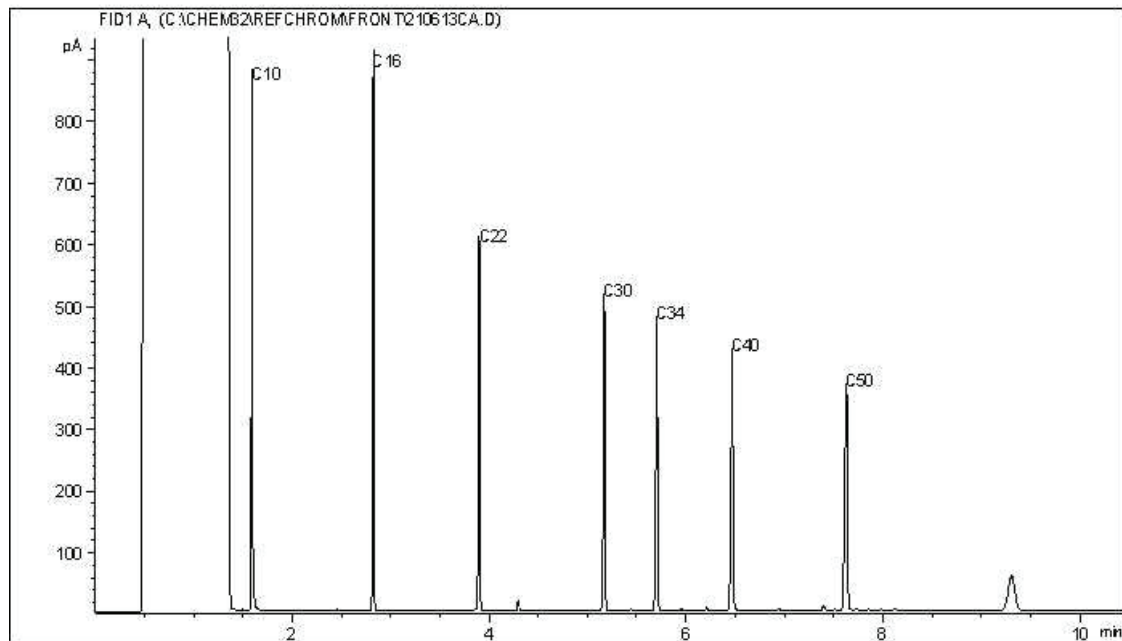
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



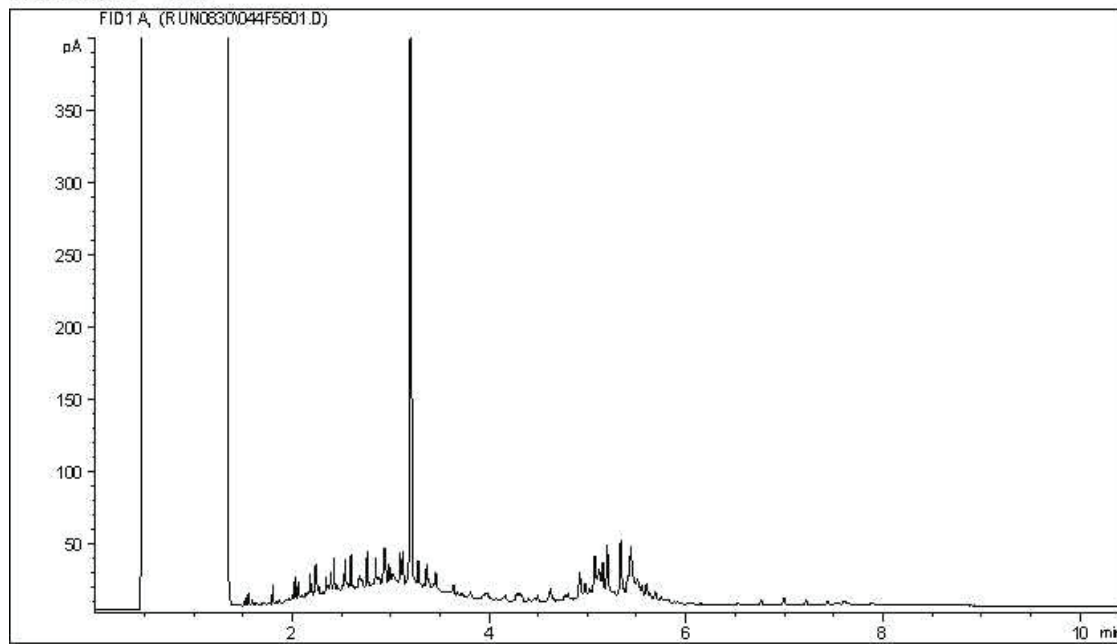
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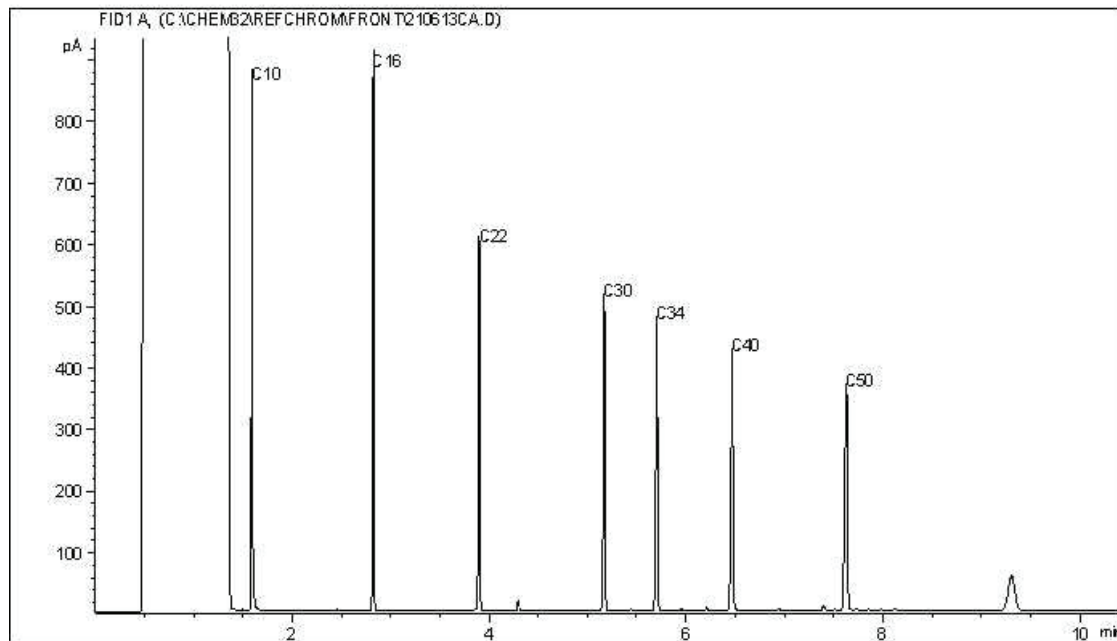
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



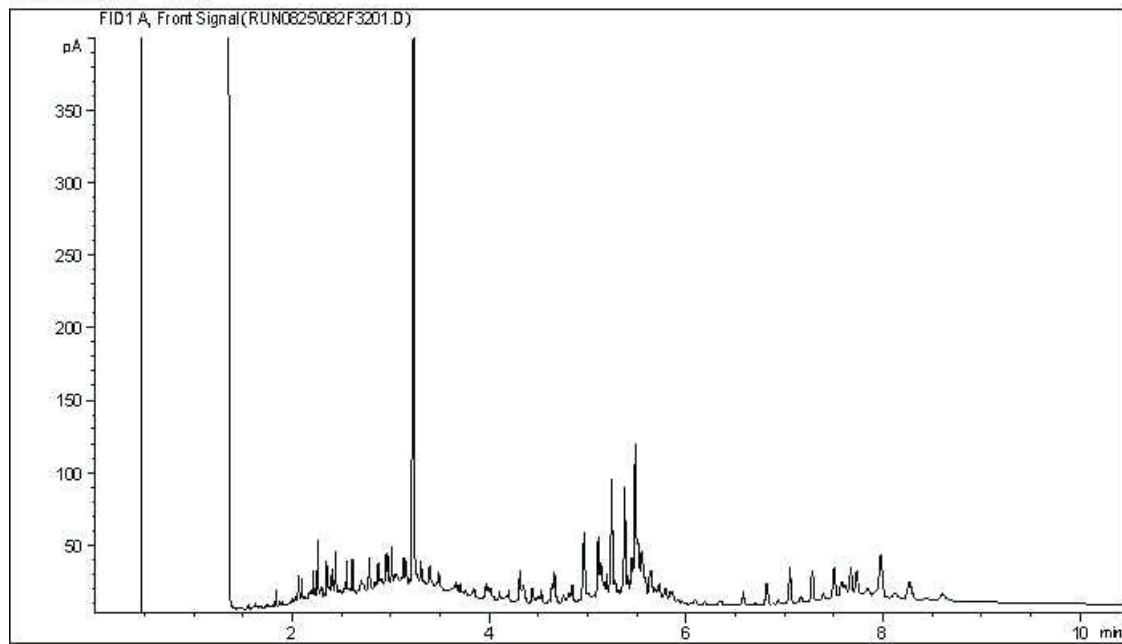
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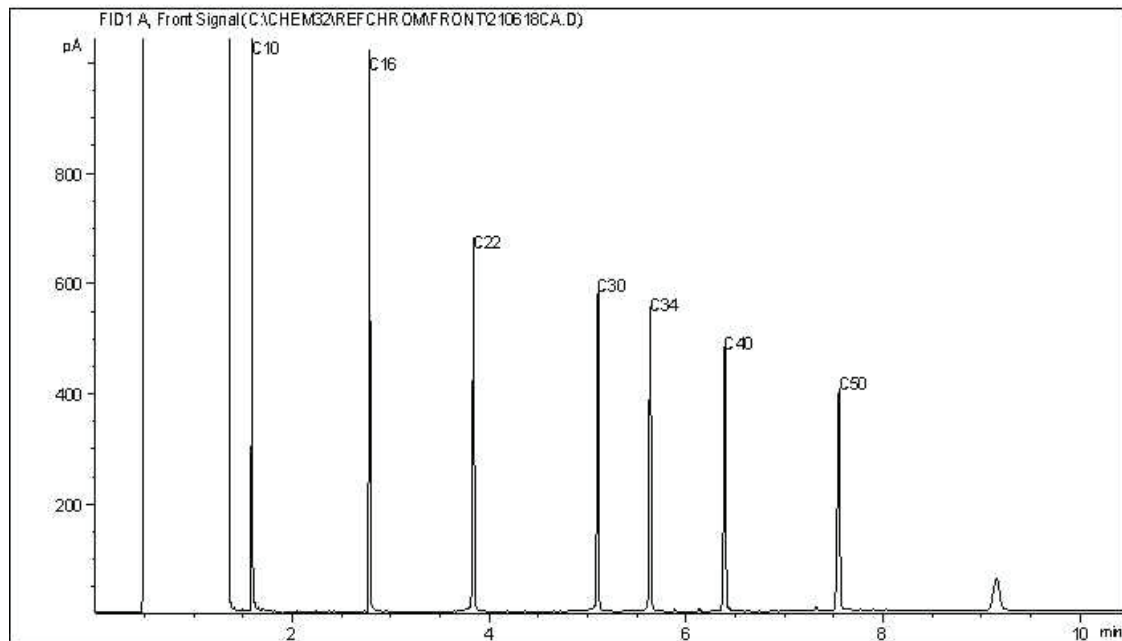
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CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



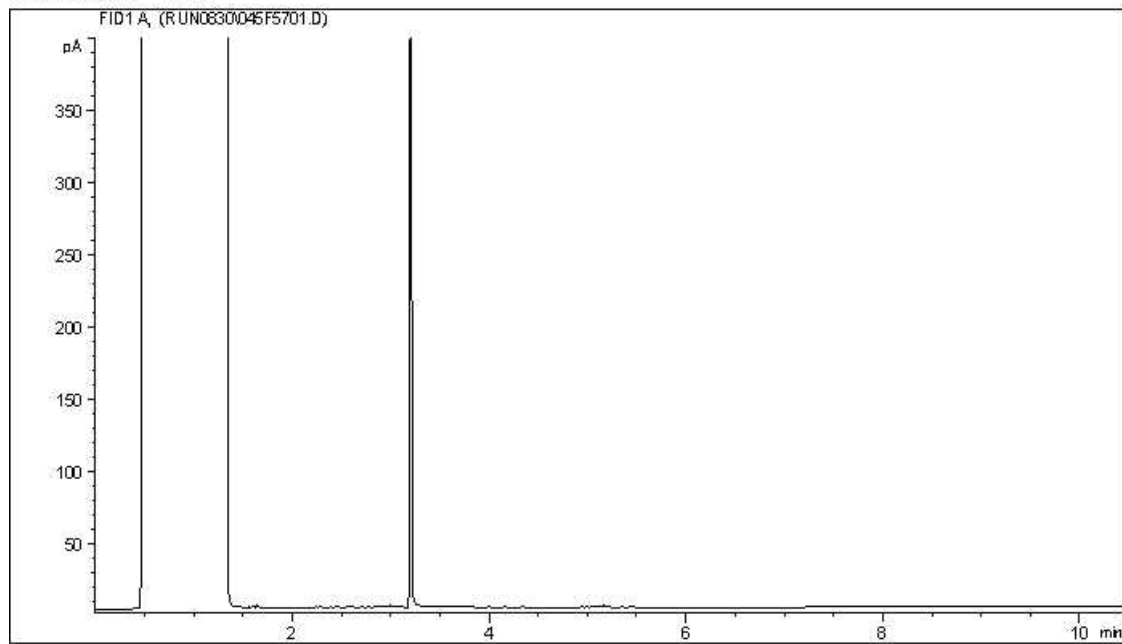
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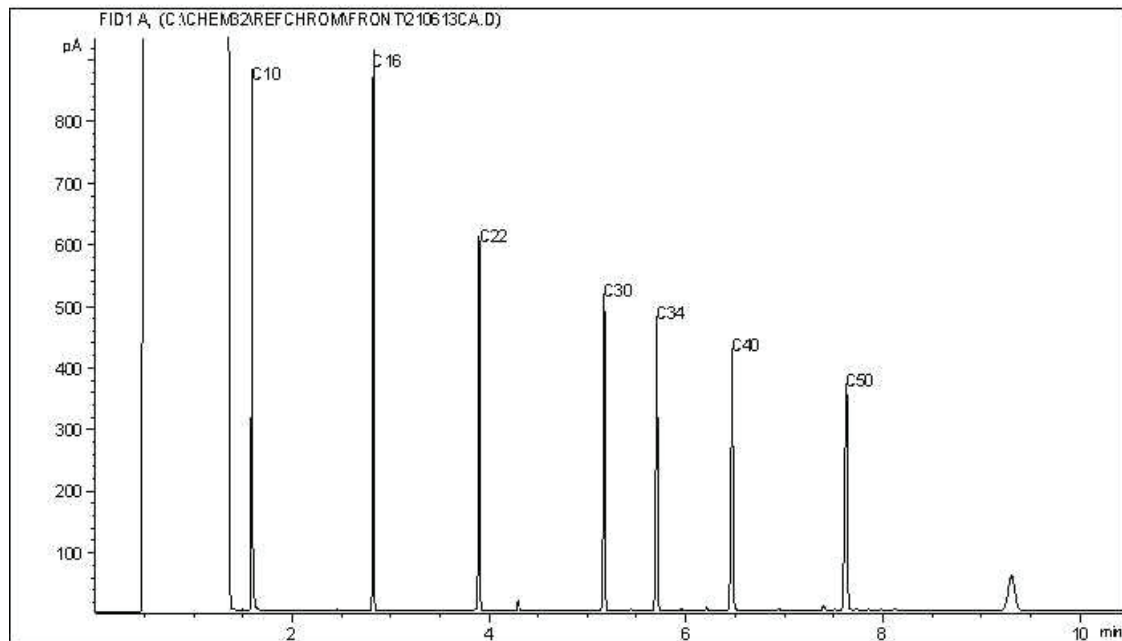
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

GOLDER DATA QUALITY REVIEW CHECKLIST

Site Location: Camp Farewell

Sampling Date: August 16, 2021

Golder Project Number: 20368099-6000-1001

Laboratory: Bureau Veritas Edmonton

Lab Submission Number: C160993

Was the Cooler Received at the lab under a sealed and intact custody seal? Yes
 Was proper chain of custody of the samples documented and kept? Yes
 Were sample temperatures acceptable when they reached lab?: Yes
 Were all samples analyzed and extracted within hold times?: Yes
 Has lab warranted all tests were in statistical control in CoA?: Yes
 Was sufficient sample provided for the requested analysis? Yes
 Has lab warranted all samples were analyzed with limited headspace present?: Yes

Are All Laboratory QC Within Acceptance Criteria (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Surrogate Recovery	X			Matrix spike recovery for F3B (C22-C34) (58%) below the acceptance criteria of (60-140%). Matrix spike recovery for chromium (134%) and vanadium(161%) exceeded the acceptance criteria of (75-125%). All remaining laboratory QC results are within acceptance criteria.
Method Blank Concentration	X			
Laboratory Duplicate RPD	X			
Matrix Spike Recovery		X		
Blank Spike Recovery	X			

Are All Field QC Samples Within Alert Limits (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Field Blank Concentration			X	All field QC samples are within alert limits.
Trip Blank Concentration			X	
Field Duplicate RPD	X			

Is data considered reliable (Yes/No/Suspect)?: Yes
 If answer is "No" or "Suspect", describe and provide rationale:

Data Reviewed by (Print): Anita Colbert

Data Reviewed by (Signature): Anita Colbert

Date: September 2, 2021



Your P.O. #: 20368099-7000-1001
 Your Project #: 20368099-6000-1001

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
 2800, 700 -2nd Street SW
 CALGARY, AB
 CANADA T2P 2W2

Your C.O.C. #: 644511-03-01, 644511-05-01, 644511-04-01

Report Date: 2021/12/23
 Report #: R3113109
 Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C161006

Received: 2021/08/18, 10:00

Sample Matrix: Soil
 # Samples Received: 24

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Barium on ICP using Fusion Extraction (1)	2	2021/08/27	2021/08/29	AB SOP-00044 / AB SOP-00042	EPA 6010d R5 m
Boron (Hot Water Soluble) (1)	2	2021/08/27	2021/08/27	AB SOP-00034 / AB SOP-00042	EPA 6010d R5 m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	22	N/A	2021/08/26	AB SOP-00039	CCME CWS/EPA 8260d m
F1-BTEX (1)	22	N/A	2021/08/27		Auto Calc
Hexavalent Chromium (1, 3)	2	2021/08/25	2021/08/25	AB SOP-00063	SM 23 3500-Cr B m
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 4)	3	2021/08/24	2021/08/25	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	19	2021/08/24	2021/08/29	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 6)	3	N/A	2021/08/25		Auto Calc
CCME Hydrocarbons (F4G in soil) (1, 5)	1	2021/08/24	2021/08/30	AB SOP-00036 AB SOP-00040	CCME PHC-CWS m
Elements by ICPMS - Soils (1)	2	2021/08/26	2021/08/27	AB SOP-00001 / AB SOP-00043	EPA 6020b R2 m
Moisture (1)	24	N/A	2021/08/25	AB SOP-00002	CCME PHC-CWS m
Nitrite-N and Nitrate-N (soluble) (1)	2	2021/08/28	2021/08/29	AB SOP-00033 / AB SOP-00023	SM 23 4110 B m
Soluble Ions (1)	2	2021/08/28	2021/08/28	AB SOP-00033 / AB SOP-00042	EPA 6010d R5 m
Soluble Paste (1)	2	2021/08/27	2021/08/27	AB SOP-00033	Carter 2nd ed 15.2 m
Soluble Ions Calculation (1)	2	N/A	2021/08/25		Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.



Your P.O. #: 20368099-7000-1001
Your Project #: 20368099-6000-1001

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
2800, 700 -2nd Street SW
CALGARY, AB
CANADA T2P 2W2

Your C.O.C. #: 644511-03-01, 644511-05-01, 644511-04-01

Report Date: 2021/12/23
Report #: R3113109
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C161006

Received: 2021/08/18, 10:00

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is date sampled unless otherwise stated.

(3) Some soil samples may react with the Cr(VI) spike reducing it to Cr(III). These samples are highly unlikely to contain native hexavalent chromium. Thus a failed spike recovery does not invalidate a negative result on the native sample.

(4) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(5) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(6) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.



Your P.O. #: 20368099-7000-1001
Your Project #: 20368099-6000-1001

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
2800, 700 -2nd Street SW
CALGARY, AB
CANADA T2P 2W2

Your C.O.C. #: 644511-03-01, 644511-05-01, 644511-04-01

Report Date: 2021/12/23
Report #: R3113109
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C161006

Received: 2021/08/18, 10:00

Encryption Key



**AUTHORIZED REPORT
RAPPORT AUTORISÉ**

Bureau Veritas

23 Dec 2021 16:44:47

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Cynny Hagen, Key Account Specialist

Email: Cynny.HAGEN@bureauveritas.com

Phone# (403)735-2273

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BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



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Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF026	AEF026	AEF027	AEF028	AEF029		
Sampling Date		2021/08/14 10:54	2021/08/14 10:54	2021/08/14 10:54	2021/08/14 11:20	2021/08/14 11:20		
COC Number		644511-05-01	644511-05-01	644511-05-01	644511-05-01	644511-05-01		
	UNITS	TP21-150-02	TP21-150-02 Lab-Dup	TP21-150-04	TP21-152-03	TP21-152-04	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	N/A	<10	N/A	3600	10	A330487
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	N/A	<50	N/A	180	50	A330487
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	N/A	<50	N/A	<50	50	A330487
Reached Baseline at C50	mg/kg	Yes	N/A	Yes	N/A	Yes	N/A	A330487
Physical Properties								
Moisture	%	6.7	N/A	9.0	6.9	18	0.30	A330481
Volatiles								
Xylenes (Total)	mg/kg	<0.045	N/A	<0.045	<0.045	<0.045	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	<10	N/A	<10	230	410	10	A328743
Field Preserved Volatiles								
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	A331773
Toluene	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	A331773
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	0.012	<0.010	0.010	A331773
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	A331773
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A331773
F1 (C6-C10)	mg/kg	<10	<10	<10	230	410	10	A331773
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	103	102	102	102	102	N/A	A331773
4-Bromofluorobenzene (sur.)	%	97	97	97	99	100	N/A	A331773
D10-o-Xylene (sur.)	%	110	105	108	120	129	N/A	A331773
D4-1,2-Dichloroethane (sur.)	%	99	97	99	97	101	N/A	A331773
O-TERPHENYL (sur.)	%	102	N/A	103	N/A	115	N/A	A330487
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable								



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Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF030	AEF031	AEF032	AEF033		AEF034		
Sampling Date		2021/08/14 11:10	2021/08/14 11:10	2021/08/14 11:15	2021/08/14 11:15		2021/08/14 15:32		
COC Number		644511-05-01	644511-05-01	644511-05-01	644511-05-01		644511-04-01		
	UNITS	TP21-153-02	TP21-153-04	TP21-154-02	TP21-154-04	QC Batch	TP21-157-03	RDL	QC Batch
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	A330484	<10	10	A330487
F3 (C16-C34 Hydrocarbons)	mg/kg	51	<50	120	<50	A330484	<50	50	A330487
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	<50	<50	<50	A330484	<50	50	A330487
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	A330484	Yes	N/A	A330487
Physical Properties									
Moisture	%	13	20	14	4.2	A330480	13	0.30	A330481
Volatiles									
Xylenes (Total)	mg/kg	<0.045	<0.045	<0.045	<0.045	A328743	<0.045	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	A328743	<10	10	A328743
Field Preserved Volatiles									
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	A331773	<0.0050	0.0050	A331773
Toluene	mg/kg	<0.050	<0.050	<0.050	<0.050	A331773	<0.050	0.050	A331773
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	A331773	<0.010	0.010	A331773
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	A331773	<0.040	0.040	A331773
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	A331773	<0.020	0.020	A331773
F1 (C6-C10)	mg/kg	<10	<10	<10	<10	A331773	<10	10	A331773
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	103	103	102	102	A331773	102	N/A	A331773
4-Bromofluorobenzene (sur.)	%	95	96	97	96	A331773	96	N/A	A331773
D10-o-Xylene (sur.)	%	98	116	110	110	A331773	115	N/A	A331773
D4-1,2-Dichloroethane (sur.)	%	99	100	99	99	A331773	98	N/A	A331773
O-TERPHENYL (sur.)	%	96	89	95	100	A330484	103	N/A	A330487
RDL = Reportable Detection Limit N/A = Not Applicable									



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Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF035	AEF036	AEF037	AEF038	AEF038		
Sampling Date		2021/08/14 15:33	2021/08/14 15:38	2021/08/14 15:39	2021/08/14 15:41	2021/08/14 15:41		
COC Number		644511-04-01	644511-04-01	644511-04-01	644511-04-01	644511-04-01		
	UNITS	TP21-157-04	TP21-158-02	TP21-158-04	TP21-159-02	TP21-159-02 Lab-Dup	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	N/A	67	23	<10	<10	10	A330487
F3 (C16-C34 Hydrocarbons)	mg/kg	N/A	85	70	96	110	50	A330487
F4 (C34-C50 Hydrocarbons)	mg/kg	N/A	<50	<50	<50	<50	50	A330487
Reached Baseline at C50	mg/kg	N/A	Yes	Yes	Yes	Yes	N/A	A330487
Physical Properties								
Moisture	%	26	6.7	12	6.3	N/A	0.30	A330481
Volatiles								
Xylenes (Total)	mg/kg	<0.045	<0.045	<0.045	<0.045	N/A	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	N/A	10	A328743
Field Preserved Volatiles								
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	N/A	0.0050	A331773
Toluene	mg/kg	<0.050	<0.050	<0.050	<0.050	N/A	0.050	A331773
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	N/A	0.010	A331773
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	N/A	0.040	A331773
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	N/A	0.020	A331773
F1 (C6-C10)	mg/kg	<10	<10	<10	<10	N/A	10	A331773
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	100	103	102	102	N/A	N/A	A331773
4-Bromofluorobenzene (sur.)	%	96	97	97	97	N/A	N/A	A331773
D10-o-Xylene (sur.)	%	102	102	109	110	N/A	N/A	A331773
D4-1,2-Dichloroethane (sur.)	%	98	99	98	98	N/A	N/A	A331773
O-TERPHENYL (sur.)	%	N/A	109	97	106	107	N/A	A330487
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable								



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Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF039		AEF040		AEF041		
Sampling Date		2021/08/14 15:43		2021/08/14 15:47		2021/08/14 15:49		
COC Number		644511-04-01		644511-04-01		644511-04-01		
	UNITS	TP21-159-04	RDL	TP21-160-03	QC Batch	TP21-160-04	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<26 (1)	26	410	A330487	890	10	A330484
F3 (C16-C34 Hydrocarbons)	mg/kg	440 (1)	130	980	A330487	440	50	A330484
F4 (C34-C50 Hydrocarbons)	mg/kg	<130 (1)	130	160	A330487	<50	50	A330484
Reached Baseline at C50	mg/kg	Yes	N/A	Yes	A330487	Yes	N/A	A330484
Physical Properties								
Moisture	%	62	0.30	5.8	A330481	5.6	0.30	A330480
Volatiles								
Xylenes (Total)	mg/kg	1.1	0.13	<0.045	A328743	<0.045	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	<20	20	<10	A328743	42	10	A328743
Field Preserved Volatiles								
Benzene	mg/kg	0.066 (2)	0.015	<0.0050	A331773	<0.0050	0.0050	A331773
Toluene	mg/kg	0.21 (2)	0.15	<0.050	A331773	<0.050	0.050	A331773
Ethylbenzene	mg/kg	0.27 (2)	0.030	<0.010	A331773	<0.010	0.010	A331773
m & p-Xylene	mg/kg	0.76 (2)	0.12	<0.040	A331773	<0.040	0.040	A331773
o-Xylene	mg/kg	0.37 (2)	0.059	<0.020	A331773	<0.020	0.020	A331773
F1 (C6-C10)	mg/kg	<20 (3)	20	<10	A331773	42	10	A331773
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	102	N/A	102	A331773	103	N/A	A331773
4-Bromofluorobenzene (sur.)	%	97	N/A	95	A331773	94	N/A	A331773
D10-o-Xylene (sur.)	%	115	N/A	103	A331773	114	N/A	A331773
D4-1,2-Dichloroethane (sur.)	%	100	N/A	98	A331773	99	N/A	A331773
O-TERPHENYL (sur.)	%	97	N/A	106	A330487	121	N/A	A330484
RDL = Reportable Detection Limit N/A = Not Applicable (1) Detection limits raised due to high moisture content, sample contains => 50% moisture. (2) Detection limits raised based on sample weight used for analysis. (3) Detection limit reported based on MDL and sample weight used for analysis.								



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Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF042		AEF043			AEF044	AEF045		
Sampling Date		2021/08/14 15:51		2021/08/14 15:52			2021/08/14 10:00	2021/08/14 10:00		
COC Number		644511-04-01		644511-04-01			644511-05-01	644511-05-01		
	UNITS	TP21-161-02	RDL	TP21-161-04	RDL	QC Batch	TP21-149-05	TP21-149-06	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	48	10	300 (1)	31	A330487	4000	<10	10	A330487
F3 (C16-C34 Hydrocarbons)	mg/kg	130	50	3500 (1)	150	A330487	540	<50	50	A330487
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	50	1200 (1)	150	A330487	240	<50	50	A330487
Reached Baseline at C50	mg/kg	Yes	N/A	No	N/A	A330487	Yes	Yes	N/A	A330487

Physical Properties										
Moisture	%	5.6	0.30	68	0.30	A330480	15	18	0.30	A330481

Volatiles										
Xylenes (Total)	mg/kg	<0.045	0.045	0.94	0.19	A328743	<0.045	<0.045	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	<23	23	<28	28	A328743	150	<10	10	A328743

Field Preserved Volatiles										
Benzene	mg/kg	<0.0050	0.0050	0.27 (2)	0.021	A331773	<0.0050	<0.0050	0.0050	A331773
Toluene	mg/kg	<0.050	0.050	<0.050 (3)	0.050	A331773	<0.050	<0.050	0.050	A331773
Ethylbenzene	mg/kg	<0.010	0.010	0.13 (2)	0.042	A331773	<0.010	<0.010	0.010	A331773
m & p-Xylene	mg/kg	<0.040	0.040	0.49 (2)	0.17	A331773	<0.040	<0.040	0.040	A331773
o-Xylene	mg/kg	<0.020	0.020	0.45 (2)	0.084	A331773	<0.020	<0.020	0.020	A331773
F1 (C6-C10)	mg/kg	<23 (4)	23	<28 (3)	28	A331773	150	<10	10	A331773

Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	102	N/A	102	N/A	A331773	101	101	N/A	A331773
4-Bromofluorobenzene (sur.)	%	98	N/A	97	N/A	A331773	101	95	N/A	A331773
D10-o-Xylene (sur.)	%	103	N/A	106	N/A	A331773	120	106	N/A	A331773
D4-1,2-Dichloroethane (sur.)	%	99	N/A	99	N/A	A331773	97	98	N/A	A331773
O-TERPHENYL (sur.)	%	104	N/A	96	N/A	A330487	120	105	N/A	A330487

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.

(2) Detection limits raised based on sample weight used for analysis.

(3) Detection limit reported based on MDL and sample weight used for analysis.

(4) Detection limit raised due to interferent.



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Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF046	AEF046	AEF047	AEF047		
Sampling Date		2021/08/14 10:00	2021/08/14 10:00	2021/08/14 11:20	2021/08/14 11:20		
COC Number		644511-05-01	644511-05-01	644511-05-01	644511-05-01		
	UNITS	DUP A	DUP A Lab-Dup	TP21-152-05	TP21-152-05 Lab-Dup	RDL	QC Batch
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	1100	N/A	N/A	N/A	10	A330487
F3 (C16-C34 Hydrocarbons)	mg/kg	120	N/A	N/A	N/A	50	A330487
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	N/A	N/A	N/A	50	A330487
Reached Baseline at C50	mg/kg	Yes	N/A	N/A	N/A	N/A	A330487
Physical Properties							
Moisture	%	14	N/A	8.6	8.5	0.30	A330481
Volatiles							
Xylenes (Total)	mg/kg	<0.045	N/A	<0.045	N/A	0.045	A328743
F1 (C6-C10) - BTEX	mg/kg	<10	N/A	<10	N/A	10	A328743
Field Preserved Volatiles							
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	N/A	0.0050	A331783
Toluene	mg/kg	<0.050	<0.050	<0.050	N/A	0.050	A331783
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	N/A	0.010	A331783
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	N/A	0.040	A331783
o-Xylene	mg/kg	<0.020	<0.020	<0.020	N/A	0.020	A331783
F1 (C6-C10)	mg/kg	<10	<10	<10	N/A	10	A331783
Surrogate Recovery (%)							
1,4-Difluorobenzene (sur.)	%	102	102	102	N/A	N/A	A331783
4-Bromofluorobenzene (sur.)	%	93	97	96	N/A	N/A	A331783
D10-o-Xylene (sur.)	%	110	112	113	N/A	N/A	A331783
D4-1,2-Dichloroethane (sur.)	%	98	99	99	N/A	N/A	A331783
O-TERPHENYL (sur.)	%	105	N/A	N/A	N/A	N/A	A330487
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



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Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

CCME REGULATED METALS - SOILS (SOIL)

Bureau Veritas ID		AEF024		AEF025		
Sampling Date		2021/08/14 10:00		2021/08/14 10:00		
COC Number		644511-05-01		644511-05-01		
	UNITS	TP21-149-02	RDL	TP21-149-04	RDL	QC Batch
Elements						
Soluble (Hot water) Boron (B)	mg/kg	1.1	0.20	0.29	0.10	A3334357
Hex. Chromium (Cr 6+)	mg/kg	<0.080	0.080	<0.080	0.080	A331381
Total Antimony (Sb)	mg/kg	<0.50	0.50	0.62	0.50	A333424
Total Arsenic (As)	mg/kg	3.8	1.0	28	1.0	A333424
Total Barium (Ba)	mg/kg	210	1.0	260	1.0	A333424
Total Beryllium (Be)	mg/kg	<0.40	0.40	0.67	0.40	A333424
Total Cadmium (Cd)	mg/kg	0.073	0.050	0.18	0.050	A333424
Total Chromium (Cr)	mg/kg	9.4	1.0	20	1.0	A333424
Total Cobalt (Co)	mg/kg	1.9	0.50	6.2	0.50	A333424
Total Copper (Cu)	mg/kg	6.1	1.0	8.1	1.0	A333424
Total Lead (Pb)	mg/kg	4.5	0.50	15	0.50	A333424
Total Mercury (Hg)	mg/kg	0.056	0.050	0.10	0.050	A333424
Total Molybdenum (Mo)	mg/kg	0.58	0.40	3.3	0.40	A333424
Total Nickel (Ni)	mg/kg	8.8	1.0	16	1.0	A333424
Total Selenium (Se)	mg/kg	0.56	0.50	1.0	0.50	A333424
Total Silver (Ag)	mg/kg	<0.20	0.20	<0.20	0.20	A333424
Total Thallium (Tl)	mg/kg	<0.10	0.10	<0.10	0.10	A333424
Total Tin (Sn)	mg/kg	<1.0	1.0	<1.0	1.0	A333424
Total Uranium (U)	mg/kg	0.46	0.20	0.66	0.20	A333424
Total Vanadium (V)	mg/kg	19	1.0	66	1.0	A333424
Total Zinc (Zn)	mg/kg	19	10	34	10	A333424
RDL = Reportable Detection Limit						



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GOLDER ASSOCIATES LTD.
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Sampler Initials: PT

RESULTS OF CHEMICAL ANALYSES OF SOIL

Bureau Veritas ID		AEF024		AEF025		
Sampling Date		2021/08/14 10:00		2021/08/14 10:00		
COC Number		644511-05-01		644511-05-01		
	UNITS	TP21-149-02	RDL	TP21-149-04	RDL	QC Batch
Calculated Parameters						
Calculated Sulphate (SO4)	mg/kg	980	7.0	230	3.1	A327351
Calculated Nitrate (N)	mg/kg	<0.28	0.28	<0.12	0.12	A327351
Soluble Parameters						
Soluble Nitrite (N)	mg/L	<0.20	0.20	<0.20	0.20	A335070
Soluble Nitrate (N)	mg/L	<0.20	0.20	<0.20	0.20	A335070
Saturation %	%	140	N/A	61	N/A	A332687
Soluble Sulphate (SO4)	mg/L	700	5.0	380	5.0	A335166
RDL = Reportable Detection Limit N/A = Not Applicable						



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PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AEF028	AEF035	AEF043	AEF047		
Sampling Date		2021/08/14 11:20	2021/08/14 15:33	2021/08/14 15:52	2021/08/14 11:20		
COC Number		644511-05-01	644511-04-01	644511-04-01	644511-05-01		
	UNITS	TP21-152-03	TP21-157-04	TP21-161-04	TP21-152-05	RDL	QC Batch
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	4800	28	N/A	13	10	A330260
F3 (C16-C34 Hydrocarbons)	mg/kg	230	510	N/A	<71	71	A328747
F3A (C16-C22)	mg/kg	230	<50	N/A	<50	50	A330260
F3B (C22-C34)	mg/kg	<50	510	N/A	<50	50	A330260
F2% (BIC)	mg/kg	NC	5.2	N/A	NC	N/A	A328747
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	180	N/A	<50	50	A330260
Reached Baseline at C50	mg/kg	Yes	Yes	N/A	Yes	N/A	A330260
F4G-SG (Heavy Hydrocarbons-Grav.)	mg/kg	N/A	N/A	10000 (1)	N/A	1500	A336044
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	100	100	N/A	100	N/A	A330260
RDL = Reportable Detection Limit N/A = Not Applicable (1) Detection limits raised due to high moisture content, samples contain => 50% moisture.							



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Sampler Initials: PT

PHYSICAL TESTING (SOIL)

Bureau Veritas ID		AEF024	AEF025	AEF025		
Sampling Date		2021/08/14 10:00	2021/08/14 10:00	2021/08/14 10:00		
COC Number		644511-05-01	644511-05-01	644511-05-01		
	UNITS	TP21-149-02	TP21-149-04	TP21-149-04 Lab-Dup	RDL	QC Batch
Physical Properties						
Moisture	%	38	34	34	0.30	A330500
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate						



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Sampler Initials: PT

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AEF024	AEF025		
Sampling Date		2021/08/14 10:00	2021/08/14 10:00		
COC Number		644511-05-01	644511-05-01		
	UNITS	TP21-149-02	TP21-149-04	RDL	QC Batch
Elements					
Total Fusion Barium (Ba)	mg/kg	600	710	50	A333687
RDL = Reportable Detection Limit					



GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.7°C
Package 2	2.0°C
Package 3	9.0°C
Package 4	5.7°C
Package 5	2.0°C

Version #2: Report reissued to amend missing ACTR form.

Version #3: Report reissued to include Chromatogram on sample TP21-157-04/AEF0351 as per client request received 2021/12/16.

HYDROCARBON RESEMBLANCE

The reported hydrocarbon resemblance was obtained by visual comparison of the sample chromatogram with a library of reference product chromatograms. Since variables such as the degree and type of weathering and the presence of non-petrogenic hydrocarbons cannot be duplicated in reference spectra, the resemblance information must be regarded as approximate and qualitative and as such, Bureau Veritas Laboratories can assume no liability for any conclusions drawn from these data.

Sample AEF035 [TP21-157-04] : The CCME F2-F4 chromatographic peak profile is consistent with biogenic organic material (e.g. peat). Chromatograms of biogenic organic material may contain peak patterns spanning the C18 to C50 range, but they are most commonly characterized by a profile of unevenly distributed sharp peaks between C28 and C34. The impacts are not consistent with a petroleum product or crude oil.

CCME REGULATED METALS - SOILS (SOIL) Comments

Sample AEF024 [TP21-149-02] Boron (Hot Water Soluble): Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Results relate only to the items tested.



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Sampler Initials: PT

QUALITY ASSURANCE REPORT

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A330260	GG3	Matrix Spike	O-TERPHENYL (sur.)	2021/08/25		103	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/25		90	%	60 - 140	
			F3A (C16-C22)	2021/08/25		87	%	60 - 140	
			F3B (C22-C34)	2021/08/25		58 (1)	%	60 - 140	
			F4 (C34-C50 Hydrocarbons)	2021/08/25		88	%	60 - 140	
A330260	GG3	Spiked Blank	O-TERPHENYL (sur.)	2021/08/25		112	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/25		97	%	60 - 140	
			F3A (C16-C22)	2021/08/25		96	%	60 - 140	
			F3B (C22-C34)	2021/08/25		100	%	60 - 140	
			F4 (C34-C50 Hydrocarbons)	2021/08/25		99	%	60 - 140	
A330260	GG3	Method Blank	O-TERPHENYL (sur.)	2021/08/25		105	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/25	<10		mg/kg		
			F3A (C16-C22)	2021/08/25	<50		mg/kg		
			F3B (C22-C34)	2021/08/25	<50		mg/kg		
			F4 (C34-C50 Hydrocarbons)	2021/08/25	<50		mg/kg		
A330260	GG3	RPD	F2 (C10-C16 Hydrocarbons)	2021/08/25		28	%	40	
			F3A (C16-C22)	2021/08/25		NC	%	40	
			F3B (C22-C34)	2021/08/25		18	%	40	
			F4 (C34-C50 Hydrocarbons)	2021/08/25		31	%	40	
			A330480	ARV	Method Blank	Moisture	2021/08/25	<0.30	
A330480	ARV	RPD	Moisture	2021/08/25	0.52		%	20	
A330481	ARV	Method Blank	Moisture	2021/08/25	<0.30		%		
A330481	ARV	RPD [AEF047-01]	Moisture	2021/08/25	1.2		%	20	
A330484	MHF	Matrix Spike	O-TERPHENYL (sur.)	2021/08/29		108	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/29		102	%	60 - 140	
			F3 (C16-C34 Hydrocarbons)	2021/08/29		99	%	60 - 140	
			F4 (C34-C50 Hydrocarbons)	2021/08/29		102	%	60 - 140	
			A330484	MHF	Spiked Blank	O-TERPHENYL (sur.)	2021/08/29		109
A330484	MHF	Method Blank	F2 (C10-C16 Hydrocarbons)	2021/08/29		102	%	60 - 140	
			F3 (C16-C34 Hydrocarbons)	2021/08/29		99	%	60 - 140	
			F4 (C34-C50 Hydrocarbons)	2021/08/29		100	%	60 - 140	
			O-TERPHENYL (sur.)	2021/08/29		103	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/29	<10		mg/kg		
A330484	MHF	RPD	F3 (C16-C34 Hydrocarbons)	2021/08/29	<50		mg/kg		
			F4 (C34-C50 Hydrocarbons)	2021/08/29	<50		mg/kg		
			F2 (C10-C16 Hydrocarbons)	2021/08/29		NC	%	40	
			F3 (C16-C34 Hydrocarbons)	2021/08/29		NC	%	40	
			F4 (C34-C50 Hydrocarbons)	2021/08/29		NC	%	40	
A330487	MHF	Matrix Spike [AEF038-01]	O-TERPHENYL (sur.)	2021/08/29		115	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/29		104	%	60 - 140	
			F3 (C16-C34 Hydrocarbons)	2021/08/29		107	%	60 - 140	
			F4 (C34-C50 Hydrocarbons)	2021/08/29		96	%	60 - 140	
			A330487	MHF	Spiked Blank	O-TERPHENYL (sur.)	2021/08/29		96
A330487	MHF	Method Blank	F2 (C10-C16 Hydrocarbons)	2021/08/29		83	%	60 - 140	
			F3 (C16-C34 Hydrocarbons)	2021/08/29		86	%	60 - 140	
			F4 (C34-C50 Hydrocarbons)	2021/08/29		78	%	60 - 140	
			O-TERPHENYL (sur.)	2021/08/29		107	%	60 - 140	
			F2 (C10-C16 Hydrocarbons)	2021/08/29	<10		mg/kg		
A330487	MHF	RPD [AEF038-01]	F3 (C16-C34 Hydrocarbons)	2021/08/29	<50		mg/kg		
			F4 (C34-C50 Hydrocarbons)	2021/08/29	<50		mg/kg		
			F2 (C10-C16 Hydrocarbons)	2021/08/29		NC	%	40	
			F3 (C16-C34 Hydrocarbons)	2021/08/29		16	%	40	
			F4 (C34-C50 Hydrocarbons)	2021/08/29		NC	%	40	



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Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
	A330500	KLK	Method Blank	Moisture	2021/08/25	<0.30		%	
	A330500	KLK	RPD [AEF025-01]	Moisture	2021/08/25	0.89		%	20
	A331381	KWE	Matrix Spike	Hex. Chromium (Cr 6+)	2021/08/25		101	%	75 - 125
	A331381	KWE	Spiked Blank	Hex. Chromium (Cr 6+)	2021/08/25		99	%	80 - 120
	A331381	KWE	Method Blank	Hex. Chromium (Cr 6+)	2021/08/25	<0.080		mg/kg	
	A331381	KWE	RPD	Hex. Chromium (Cr 6+)	2021/08/25	NC		%	35
	A331773	DO1	Matrix Spike [AEF026-02]	1,4-Difluorobenzene (sur.)	2021/08/26		93	%	50 - 140
				4-Bromofluorobenzene (sur.)	2021/08/26		97	%	50 - 140
				D10-o-Xylene (sur.)	2021/08/26		107	%	50 - 140
				D4-1,2-Dichloroethane (sur.)	2021/08/26		94	%	50 - 140
				Benzene	2021/08/26		88	%	50 - 140
				Toluene	2021/08/26		85	%	50 - 140
				Ethylbenzene	2021/08/26		90	%	50 - 140
				m & p-Xylene	2021/08/26		88	%	50 - 140
				o-Xylene	2021/08/26		90	%	50 - 140
				F1 (C6-C10)	2021/08/26		103	%	60 - 140
	A331773	DO1	Spiked Blank	1,4-Difluorobenzene (sur.)	2021/08/26		90	%	50 - 140
				4-Bromofluorobenzene (sur.)	2021/08/26		85	%	50 - 140
				D10-o-Xylene (sur.)	2021/08/26		91	%	50 - 140
				D4-1,2-Dichloroethane (sur.)	2021/08/26		96	%	50 - 140
				Benzene	2021/08/26		85	%	60 - 130
				Toluene	2021/08/26		87	%	60 - 130
				Ethylbenzene	2021/08/26		85	%	60 - 130
				m & p-Xylene	2021/08/26		85	%	60 - 130
				o-Xylene	2021/08/26		76	%	60 - 130
				F1 (C6-C10)	2021/08/26		92	%	60 - 140
	A331773	DO1	Method Blank	1,4-Difluorobenzene (sur.)	2021/08/26		103	%	50 - 140
				4-Bromofluorobenzene (sur.)	2021/08/26		96	%	50 - 140
				D10-o-Xylene (sur.)	2021/08/26		98	%	50 - 140
				D4-1,2-Dichloroethane (sur.)	2021/08/26		100	%	50 - 140
				Benzene	2021/08/26	<0.0050		mg/kg	
				Toluene	2021/08/26	<0.050		mg/kg	
				Ethylbenzene	2021/08/26	<0.010		mg/kg	
				m & p-Xylene	2021/08/26	<0.040		mg/kg	
				o-Xylene	2021/08/26	<0.020		mg/kg	
				F1 (C6-C10)	2021/08/26	<10		mg/kg	
	A331773	DO1	RPD [AEF026-02]	Benzene	2021/08/26	NC		%	50
				Toluene	2021/08/26	NC		%	50
				Ethylbenzene	2021/08/26	NC		%	50
				m & p-Xylene	2021/08/26	NC		%	50
				o-Xylene	2021/08/26	NC		%	50
				F1 (C6-C10)	2021/08/26	NC		%	30
	A331783	DO1	Matrix Spike [AEF046-02]	1,4-Difluorobenzene (sur.)	2021/08/26		92	%	50 - 140
				4-Bromofluorobenzene (sur.)	2021/08/26		96	%	50 - 140
				D10-o-Xylene (sur.)	2021/08/26		111	%	50 - 140
				D4-1,2-Dichloroethane (sur.)	2021/08/26		96	%	50 - 140
				Benzene	2021/08/26		93	%	50 - 140
				Toluene	2021/08/26		90	%	50 - 140
				Ethylbenzene	2021/08/26		94	%	50 - 140
				m & p-Xylene	2021/08/26		92	%	50 - 140
				o-Xylene	2021/08/26		94	%	50 - 140
				F1 (C6-C10)	2021/08/26		87	%	60 - 140
	A331783	DO1	Spiked Blank	1,4-Difluorobenzene (sur.)	2021/08/26		89	%	50 - 140



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Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				4-Bromofluorobenzene (sur.)	2021/08/26		85	%	50 - 140
				D10-o-Xylene (sur.)	2021/08/26		89	%	50 - 140
				D4-1,2-Dichloroethane (sur.)	2021/08/26		95	%	50 - 140
				Benzene	2021/08/26		81	%	60 - 130
				Toluene	2021/08/26		84	%	60 - 130
				Ethylbenzene	2021/08/26		83	%	60 - 130
				m & p-Xylene	2021/08/26		84	%	60 - 130
				o-Xylene	2021/08/26		75	%	60 - 130
				F1 (C6-C10)	2021/08/26		111	%	60 - 140
A331783	DO1		Method Blank	1,4-Difluorobenzene (sur.)	2021/08/26		103	%	50 - 140
				4-Bromofluorobenzene (sur.)	2021/08/26		96	%	50 - 140
				D10-o-Xylene (sur.)	2021/08/26		93	%	50 - 140
				D4-1,2-Dichloroethane (sur.)	2021/08/26		100	%	50 - 140
				Benzene	2021/08/26	<0.0050		mg/kg	
				Toluene	2021/08/26	<0.050		mg/kg	
				Ethylbenzene	2021/08/26	<0.010		mg/kg	
				m & p-Xylene	2021/08/26	<0.040		mg/kg	
				o-Xylene	2021/08/26	<0.020		mg/kg	
				F1 (C6-C10)	2021/08/26	<10		mg/kg	
A331783	DO1		RPD [AEF046-02]	Benzene	2021/08/26	NC		%	50
				Toluene	2021/08/26	NC		%	50
				Ethylbenzene	2021/08/26	NC		%	50
				m & p-Xylene	2021/08/26	NC		%	50
				o-Xylene	2021/08/26	NC		%	50
				F1 (C6-C10)	2021/08/26	NC		%	30
A332687	STB		QC Standard	Saturation %	2021/08/27		100	%	75 - 125
A332687	STB		RPD	Saturation %	2021/08/27	0.46		%	12
				Saturation %	2021/08/27	6.4		%	12
A333424	KH2		Matrix Spike	Total Antimony (Sb)	2021/08/27		110	%	75 - 125
				Total Arsenic (As)	2021/08/27		111	%	75 - 125
				Total Barium (Ba)	2021/08/27		NC	%	75 - 125
				Total Beryllium (Be)	2021/08/27		110	%	75 - 125
				Total Cadmium (Cd)	2021/08/27		110	%	75 - 125
				Total Chromium (Cr)	2021/08/27		134 (1)	%	75 - 125
				Total Cobalt (Co)	2021/08/27		114	%	75 - 125
				Total Copper (Cu)	2021/08/27		114	%	75 - 125
				Total Lead (Pb)	2021/08/27		111	%	75 - 125
				Total Mercury (Hg)	2021/08/27		113	%	75 - 125
				Total Molybdenum (Mo)	2021/08/27		109	%	75 - 125
				Total Nickel (Ni)	2021/08/27		118	%	75 - 125
				Total Selenium (Se)	2021/08/27		114	%	75 - 125
				Total Silver (Ag)	2021/08/27		110	%	75 - 125
				Total Thallium (Tl)	2021/08/27		106	%	75 - 125
				Total Tin (Sn)	2021/08/27		107	%	75 - 125
				Total Uranium (U)	2021/08/27		117	%	75 - 125
				Total Vanadium (V)	2021/08/27		161 (1)	%	75 - 125
				Total Zinc (Zn)	2021/08/27		NC	%	75 - 125
A333424	KH2		QC Standard	Total Antimony (Sb)	2021/08/27		129	%	15 - 182
				Total Arsenic (As)	2021/08/27		112	%	53 - 147
				Total Barium (Ba)	2021/08/27		108	%	80 - 119
				Total Cadmium (Cd)	2021/08/27		111	%	72 - 128
				Total Chromium (Cr)	2021/08/27		112	%	59 - 141
				Total Cobalt (Co)	2021/08/27		108	%	58 - 142



BUREAU
VERITAS

Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A333424	KH2	Spiked Blank	Total Copper (Cu)	2021/08/27		111	%	83 - 117
			Total Lead (Pb)	2021/08/27		116	%	79 - 121
			Total Molybdenum (Mo)	2021/08/27		114	%	67 - 133
			Total Nickel (Ni)	2021/08/27		118	%	79 - 121
			Total Silver (Ag)	2021/08/27		100	%	47 - 153
			Total Tin (Sn)	2021/08/27		108	%	67 - 133
			Total Uranium (U)	2021/08/27		105	%	77 - 123
			Total Vanadium (V)	2021/08/27		119	%	79 - 121
			Total Zinc (Zn)	2021/08/27		114	%	79 - 121
			Total Antimony (Sb)	2021/08/27		113	%	80 - 120
			Total Arsenic (As)	2021/08/27		106	%	80 - 120
			Total Barium (Ba)	2021/08/27		107	%	80 - 120
			Total Beryllium (Be)	2021/08/27		103	%	80 - 120
			Total Cadmium (Cd)	2021/08/27		104	%	80 - 120
			Total Chromium (Cr)	2021/08/27		109	%	80 - 120
			Total Cobalt (Co)	2021/08/27		110	%	80 - 120
			Total Copper (Cu)	2021/08/27		112	%	80 - 120
			Total Lead (Pb)	2021/08/27		108	%	80 - 120
			Total Mercury (Hg)	2021/08/27		112	%	80 - 120
			Total Molybdenum (Mo)	2021/08/27		109	%	80 - 120
			Total Nickel (Ni)	2021/08/27		109	%	80 - 120
			Total Selenium (Se)	2021/08/27		111	%	80 - 120
			Total Silver (Ag)	2021/08/27		106	%	80 - 120
			Total Thallium (Tl)	2021/08/27		107	%	80 - 120
			Total Tin (Sn)	2021/08/27		104	%	80 - 120
			Total Uranium (U)	2021/08/27		111	%	80 - 120
			Total Vanadium (V)	2021/08/27		110	%	80 - 120
			Total Zinc (Zn)	2021/08/27		107	%	80 - 120
A333424	KH2	Method Blank	Total Antimony (Sb)	2021/08/27	<0.50		mg/kg	
			Total Arsenic (As)	2021/08/27	<1.0		mg/kg	
			Total Barium (Ba)	2021/08/27	<1.0		mg/kg	
			Total Beryllium (Be)	2021/08/27	<0.40		mg/kg	
			Total Cadmium (Cd)	2021/08/27	<0.050		mg/kg	
			Total Chromium (Cr)	2021/08/27	<1.0		mg/kg	
			Total Cobalt (Co)	2021/08/27	<0.50		mg/kg	
			Total Copper (Cu)	2021/08/27	<1.0		mg/kg	
			Total Lead (Pb)	2021/08/27	<0.50		mg/kg	
			Total Mercury (Hg)	2021/08/27	<0.050		mg/kg	
			Total Molybdenum (Mo)	2021/08/27	<0.40		mg/kg	
			Total Nickel (Ni)	2021/08/27	<1.0		mg/kg	
			Total Selenium (Se)	2021/08/27	<0.50		mg/kg	
			Total Silver (Ag)	2021/08/27	<0.20		mg/kg	
			Total Thallium (Tl)	2021/08/27	<0.10		mg/kg	
			Total Tin (Sn)	2021/08/27	<1.0		mg/kg	
			Total Uranium (U)	2021/08/27	<0.20		mg/kg	
			Total Vanadium (V)	2021/08/27	<1.0		mg/kg	
			Total Zinc (Zn)	2021/08/27	<10		mg/kg	
			A333424	KH2	RPD	Total Antimony (Sb)	2021/08/27	NC
Total Arsenic (As)	2021/08/27	15					%	30
Total Barium (Ba)	2021/08/27	17					%	35
Total Beryllium (Be)	2021/08/27	15					%	30
Total Cadmium (Cd)	2021/08/27	19					%	30
Total Chromium (Cr)	2021/08/27	16					%	30



BUREAU
VERITAS

Bureau Veritas Job #: C161006
Report Date: 2021/12/23

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Cobalt (Co)	2021/08/27	17		%	30
			Total Copper (Cu)	2021/08/27	14		%	30
			Total Lead (Pb)	2021/08/27	18		%	35
			Total Mercury (Hg)	2021/08/27	NC		%	35
			Total Molybdenum (Mo)	2021/08/27	19		%	35
			Total Nickel (Ni)	2021/08/27	17		%	30
			Total Selenium (Se)	2021/08/27	NC		%	30
			Total Silver (Ag)	2021/08/27	NC		%	35
			Total Thallium (Tl)	2021/08/27	14		%	30
			Total Tin (Sn)	2021/08/27	NC		%	35
			Total Uranium (U)	2021/08/27	8.3		%	30
			Total Vanadium (V)	2021/08/27	18		%	30
			Total Zinc (Zn)	2021/08/27	14		%	30
A333687	JAB	QC Standard	Total Fusion Barium (Ba)	2021/08/29		122	%	75 - 125
A333687	JAB	Spiked Blank	Total Fusion Barium (Ba)	2021/08/29		116	%	75 - 125
A333687	JAB	Method Blank	Total Fusion Barium (Ba)	2021/08/29	<50		mg/kg	
A333687	JAB	RPD	Total Fusion Barium (Ba)	2021/08/29	18		%	35
A334357	MAP	Matrix Spike	Soluble (Hot water) Boron (B)	2021/08/27		101	%	75 - 125
A334357	MAP	Spiked Blank	Soluble (Hot water) Boron (B)	2021/08/27		99	%	80 - 120
A334357	MAP	Method Blank	Soluble (Hot water) Boron (B)	2021/08/27	<0.10		mg/kg	
A334357	MAP	RPD	Soluble (Hot water) Boron (B)	2021/08/27	3.9		%	35
A335070	KGR	Matrix Spike	Soluble Nitrite (N)	2021/08/29		101	%	75 - 125
			Soluble Nitrate (N)	2021/08/29		103	%	75 - 125
A335070	KGR	QC Standard	Soluble Nitrate (N)	2021/08/29		96	%	75 - 125
A335070	KGR	Spiked Blank	Soluble Nitrite (N)	2021/08/29		100	%	80 - 120
			Soluble Nitrate (N)	2021/08/29		102	%	80 - 120
A335070	KGR	Method Blank	Soluble Nitrite (N)	2021/08/29	<0.20		mg/L	
			Soluble Nitrate (N)	2021/08/29	<0.20		mg/L	
A335070	KGR	RPD	Soluble Nitrite (N)	2021/08/29	NC		%	30
			Soluble Nitrate (N)	2021/08/29	NC		%	30
A335166	JAB	QC Standard	Soluble Sulphate (SO4)	2021/08/28		118	%	75 - 125
A335166	JAB	Method Blank	Soluble Sulphate (SO4)	2021/08/28	<5.0		mg/L	
A335166	JAB	RPD	Soluble Sulphate (SO4)	2021/08/28	8.6		%	30
A336044	JB9	Spiked Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/30		109	%	60 - 140
A336044	JB9	Method Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/30	<500		mg/kg	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Gita Pokhrel, Laboratory Supervisor

Janet Gao, B.Sc., QP, Supervisor, Organics

Maria Magdalena Florescu, Ph.D., P.Chem., QP, Inorganics Manager

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
1 of 4	644511-06-01
2 of 4	644511-07-01
3 of 4	644511-08-01
4 of 4	644511-09-01
___ of ___	
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___ of ___	
___ of ___	
___ of ___	
___ of ___	
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COOLER OBSERVATIONS:					
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	/				
INTACT	/				
ICE PRESENT	/		TEMP	6	9
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	/				
INTACT	/				
ICE PRESENT	/		TEMP	2	2
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	/				
INTACT	/				
ICE PRESENT	/		TEMP	8	10
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	/				
INTACT	/				
ICE PRESENT	/		TEMP	4	7
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT	/				
INTACT	/				
ICE PRESENT	/		TEMP	4	1

MAXXAM JOB#: JHR 2021/08/23 6160122 - 6161010					
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		
CUSTODY SEAL	YES	NO	COOLER ID		
PRESENT					
INTACT					
ICE PRESENT			TEMP		

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
Jose Mercurio	2021/08/18	10:00 AM



ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page 1 of 4	644511-06-01
Page 2 of 4	644511-07-01
Page 3 of 4	644511-08-01
Page 4 of 4	644511-09-01
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COOLER OBSERVATIONS:				
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	1 1 1
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	3 3 2
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	2 3 3
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	3 4 4
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	2 3 2
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 1
ICE PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3

MAXXAM JOB#: 210 202108123				
CHLOTZ C161010				
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3
CUSTODY SEAL	YES	NO	COOLER ID	
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP	1 2 3
ICE PRESENT	<input type="checkbox"/>	<input type="checkbox"/>		1 2 3

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>[Signature]</i> Kristyll Avila	2021/08/19	15:00



Bureau Veritas Laboratories
4000 19st N.E., Calgary, Alberta Canada T2E 6P8 Tel (403) 291-3077 Toll-free 800-563-6266 Fax (403) 291-9468 www.bvlabs.com

CHAIN OF CUSTODY RECORD

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INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#254 GOLDER ASSOCIATES LTD.	Company Name:	#6340 GOLDER ASSOCIATES LTD.	Quotation #:	C00480	BV Labs Job #:	644511
Attention:	ACCOUNTS PAYABLE	Attention:	Aurelie Belavance	P.O. #:	20368099-7000-1001	<i>c161006</i>	
Address:	2800, 700 -2nd Street SW CALGARY AB T2P 2W2	Address:	2800, 700 -2nd Street SW CALGARY AB T2P 2W2	Project:	20368099-6000-1001		
Tel:	(905) 567-6100 Ext: 1167 Fax: (403) 299-5606	Tel:	(403) 299-5600 Fax:	Project Name:		COC #:	Project Manager:
Email:	canadaaccounts payableinvoices@golder.com	Email:	abellavance@golder.com	Site #:			Carmen McKay

Regulatory Criteria:	Special Instructions	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)						Turnaround Time (TAT) Required:					
<input type="checkbox"/> ATI <input checked="" type="checkbox"/> CCME <input type="checkbox"/> Other	<i>Some samples may contain headspace due to soil conditions</i>	Metals Field Filtered? (Y/N)	Regulated Metals - Soils	BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	HEAVY METALS CHROMIUM Sulphate / nitrate, TRUE TOTAL LEAD	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	Regular (Standard) TAT: <input checked="" type="checkbox"/>
SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS													

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	Regulated Metals - Soils	BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	HEAVY METALS CHROMIUM Sulphate / nitrate, TRUE TOTAL LEAD	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	# of Bottles	Comments
<i>NA</i>	TP21-149-02	14-Aug-21	10:00	SOIL		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>							3	Bag
	TP21-149-04		10:00			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>							3	Bag
	TP21-150-02		10:54			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									3	
	TP21-150-04		10:54			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									3	
	TP21-152-03		11:20			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								3	
	TP21-152-04		11:20			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									3	
	TP21-153-02		11:10			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									3	
	TP21-153-04		11:10			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									3	
	TP21-154-02		11:15			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									3	
	TP21-154-04		11:15			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									3	

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only	
<i>PETER TAN</i>	21/08/15	09:00	<i>Kristyill Anjo</i>	2021/08/19	15:00		Time Sensitive	Temperature (°C) on Receipt
							<input type="checkbox"/>	Custody Seal Intact on Cooler?
							<input type="checkbox"/> Yes <input type="checkbox"/> No	

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.
 ** ALL SAMPLES ARE HELD FOR 90 DAYS AFTER SAMPLE RECEIPT, FOR SPECIAL REQUESTS CONTACT YOUR PROJECT MANAGER

CHAIN OF CUSTODY RECORD



Bureau Veritas Laboratories
4000 19st N.E. Calgary, Alberta Canada T2E 6P8 Tel: (403) 291-3077 Toll-free 800-563-6266 Fax: (403) 291-9468 www.bvlabs.com

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #254 GOLDER ASSOCIATES LTD.		Company Name: #6340 GOLDER ASSOCIATES LTD.		Quotation #: C00480		BV Labs Job #: C161006	
Attention: ACCOUNTS PAYABLE		Attention: Aurelie Belavance		P.O. #: 20368099-7000-1001		Bottle Order #: 644511	
Address: 2800, 700 -2nd Street SW		Address: 2800, 700 -2nd Street SW		Project: 20368099-6000-1001		COC #: [Barcode]	
Address: CALGARY AB T2P 2W2		Address: CALGARY AB T2P 2W2		Project Name:		Project Manager: Carmen McKay	
Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606		Tel: (403) 299-5600 Fax:		Site #:		C#644511-04-01	
Email: canadaaccountspayableinvoices@golder.com		Email: abellavance@golder.com		Sampled By:		Turnaround Time (TAT) Required:	

Regulatory Criteria:

ATI

CCME

Other

Special Instructions

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Metals Field Filtered? (Y/N)	ATI Regulated Metals - Soils	ATI BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Hexavalent Chromium #	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/ATI) - Dissolved	PAH in Water by GC/MS	Limited Sample
------------------------------	------------------------------	------------------------------------	--	-----------------------	---	------------------------------	---------------	---	-----------------------	----------------

Turnaround Time (TAT) Required:

Please provide advance notice for rush projects

Regular (Standard) TAT:
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____
Rush Confirmation Number: _____ (call lab for #)

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	ATI	ATI BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Hexavalent Chromium #	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/ATI) - Dissolved	PAH in Water by GC/MS	Limited Sample	# of Bottles	Comments
NA	TR21-157-03	14 AUG 21	15:32	Soil	✓	✓	✓									
✓2	TR21-157-04		15:33		✓	✓	✓									
✓3	TR21-158-02		15:36		✓	✓	✓									
✓4	TR21-158-04		15:39		✓	✓	✓									
✓5	TR21-159-02		15:41		✓	✓	✓									
✓6	TR21-159-04		15:43		✓	✓	✓									
✓7	TR21-160-03		15:47		✓	✓	✓									
✓8	TR21-160-04		15:49		✓	✓	✓									
✓9	TR21-161-02		15:51		✓	✓	✓									
✓10	TR21-161-04		15:52		✓	✓	✓									

Received in Yellowknife
By: J. McCann
@ 10:00 AM
AUG 18 2021
see ACTR
Temp:

RECEIVED BY: (Signature/Print) *[Signature]* Date: (YY/MM/DD) 2021/08/19 Time 15:00 # jars used and not submitted []

RELINQUISHED BY: (Signature/Print) *PETER TAN* Date: (YY/MM/DD) 21/08/15 Time 09:00

Time Sensitive Temperature (°C) on Receipt [] Custody Seal Intact on Cooler? Yes No

White: BV Labs Yellow: Client

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* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** ALL SAMPLES ARE HELD FOR 60 DAYS AFTER SAMPLE RECEIPT, FOR SPECIAL REQUESTS CONTACT YOUR PROJECT MANAGER

see ACTR



Bureau Veritas Laboratories
4000 19th N.E. Calgary, Alberta Canada T2E 6P8 Tel: (403) 291-3077 Toll-free 800-563-6266 Fax: (403) 291-9468 www.bvlabs.com

CHAIN OF CUSTODY RECORD

Page *3 of 3* of

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #254 GOLDER ASSOCIATES LTD.	Company Name: #6340 GOLDER ASSOCIATES LTD.	Quotation #: C00480	BV Labs Job #: <i>c161006</i>		Bottle Order #:		
Attention: ACCOUNTS PAYABLE	Attention: Aurelie Belavance	P.O. #: 20368099-7000-1001	COC #: <i>644511</i>		Project Manager:		
Address: 2800, 700 -2nd Street SW	Address: 2800, 700 -2nd Street SW	Project: 20368099-6000-1001	COC #: <i>644511</i>		Carmen McKay		
Address: CALGARY AB T2P 2W2	Address: CALGARY AB T2P 2W2	Project Name:	Site #:		Carmen McKay		
Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606	Tel: (403) 299-5600 Fax:	Site #:	Sampled By:		Carmen McKay		
Email: canadaaccounts payableinvoices@golder.com	Email: abellavance@golder.com	Sampled By:			C#644511-05-01		

Regulatory Criteria:		Special Instructions		ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required:																							
<input type="checkbox"/> ATI <input checked="" type="checkbox"/> CCME <input type="checkbox"/> Other				Metals Field Filtered? (Y/N) <table border="1"> <tr> <th>AT1 Regulated Metals - Soils</th> <th>AT1 BTEX and F1-F4 in Soil (Vials)</th> <th>BIC SCALE Analysis (F2/F2-F3B) in soil</th> <th>Heavy Metals Chromium Sulphate / nitrate</th> <th>TRUE Total Furan</th> <th>Barium on ICP using Fusion Extraction (True Barium)</th> <th>CCME BTEX and F1-F2 in Water</th> <th>Routine Water</th> <th>Regulated Metals (CCME/AT1) - Dissolved</th> <th>PAH in Water by GC/MS</th> <th>Limited Sample</th> </tr> <tr> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> <td><i>NA</i></td> </tr> </table>										AT1 Regulated Metals - Soils	AT1 BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2-F3B) in soil	Heavy Metals Chromium Sulphate / nitrate	TRUE Total Furan	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	Regular (Standard) TAT: <input checked="" type="checkbox"/> <i>(will be applied if Rush TAT is not specified):</i> Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details Job Specific Rush TAT (if applies to entire submission) <input type="checkbox"/> Date Required: <input type="text"/> Rush Confirmation Number: <input type="text"/> (call lab for #)	
AT1 Regulated Metals - Soils	AT1 BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2-F3B) in soil	Heavy Metals Chromium Sulphate / nitrate	TRUE Total Furan	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample																											
<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>																											
SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS																																					
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1 BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2-F3B) in soil	Heavy Metals Chromium Sulphate / nitrate	TRUE Total Furan	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	# of Bottles	Comments																			
<i>NA</i>	<i>TP21-149-05</i>	<i>14 Aug 21</i>	<i>10:00</i>	<i>SOIL</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>3</i>	<i>NA</i>																			
<i>NA</i>	<i>TP21-149-06</i>	<i>↓</i>	<i>10:00</i>	<i>SOIL</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>3</i>	<i>NA</i>																			
<i>NA</i>	<i>DUP A</i>	<i>↓</i>	<i>10:00</i>	<i>SOIL</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>3</i>	<i>NA</i>																			
<i>NA</i>	<i>TP21-152-05</i>	<i>14 Aug 21</i>	<i>11:20</i>	<i>SOIL</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>3</i>	<i>NA</i>																			

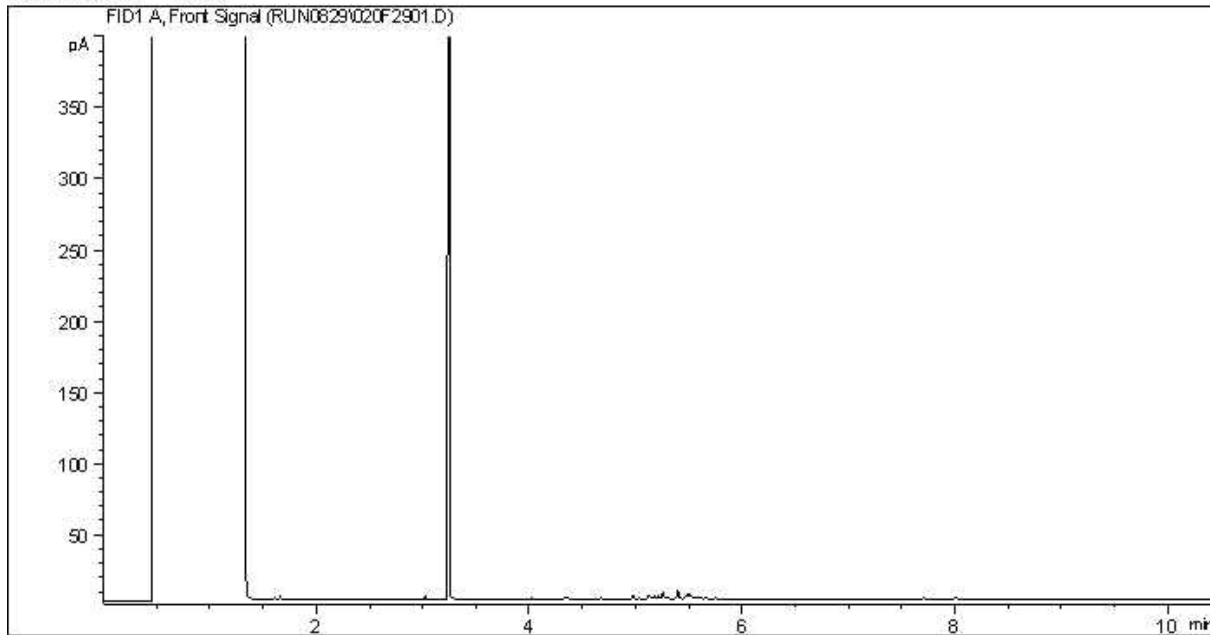
Received in Yellowknife
By: *J. McCann*
@ 10:20 AM
AUG 18 2021
see ACTR
Temp:

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only	
<i>PETER TAN</i>	<i>21/08/15</i>	<i>09:00</i>	<i>Kristyli Aniq</i>	<i>2021/08/19</i>	<i>15:00</i>		Time Sensitive <input type="checkbox"/>	Temperature (°C) on Receipt
							Custody Seal Intact on Cooler? <input type="checkbox"/> Yes <input type="checkbox"/> No	

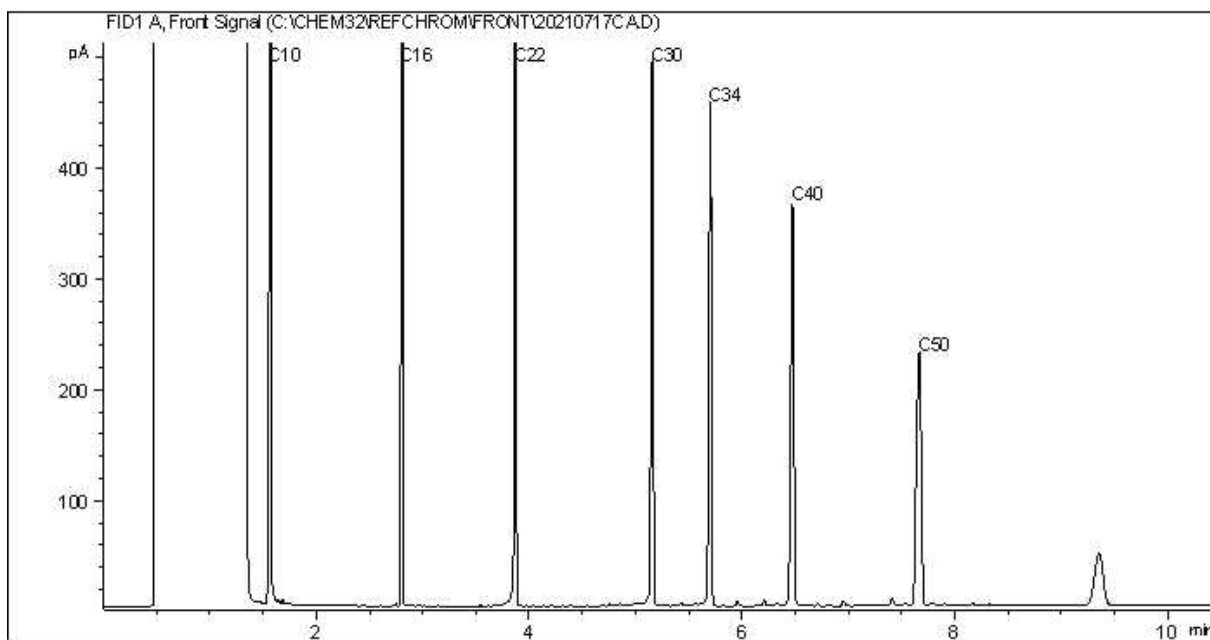
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



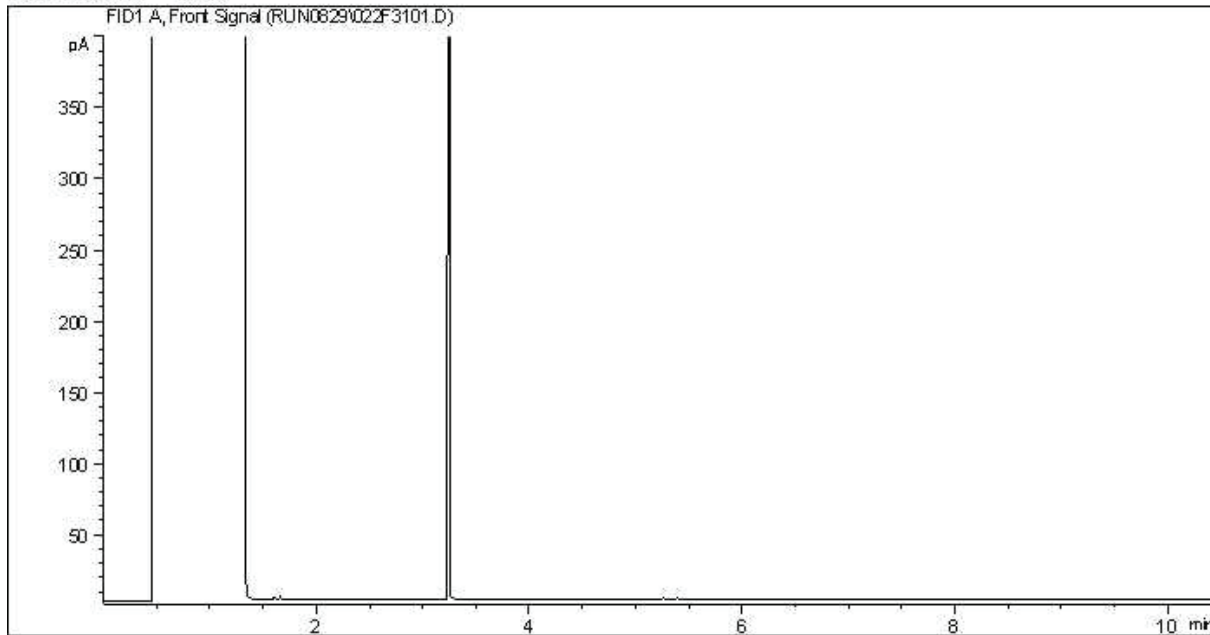
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

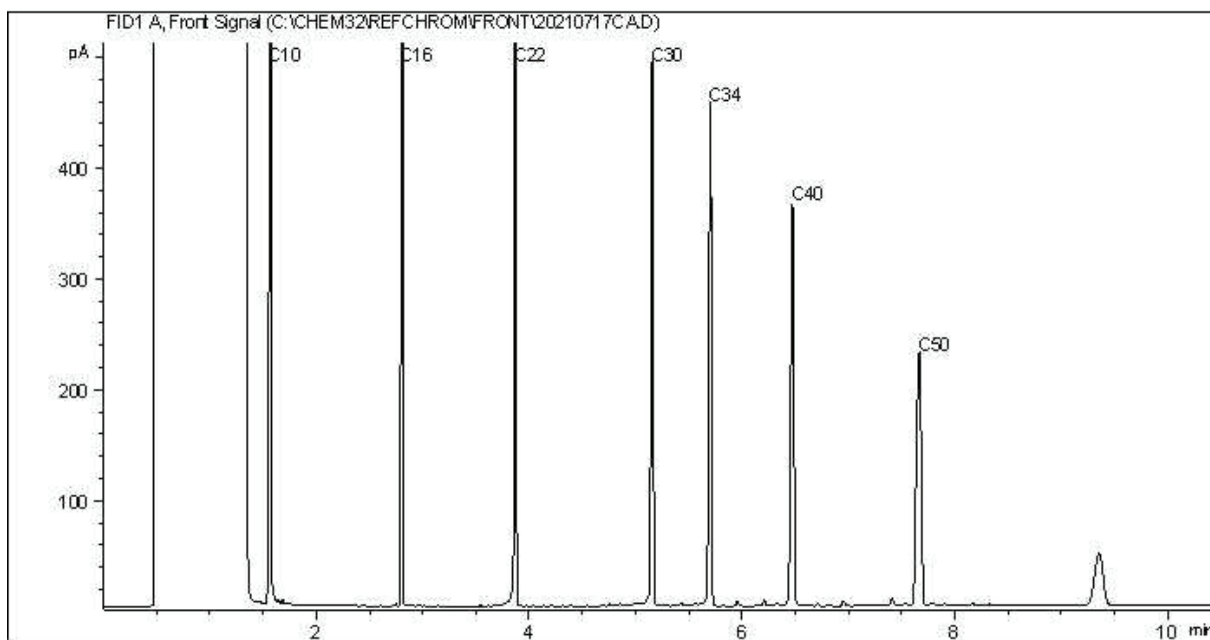
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



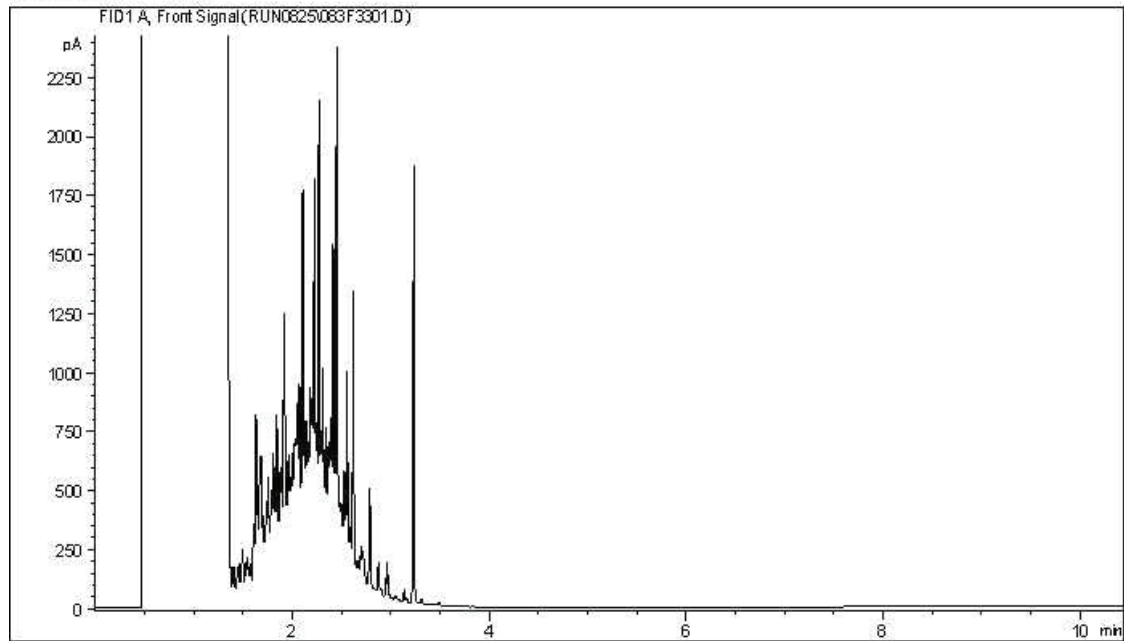
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

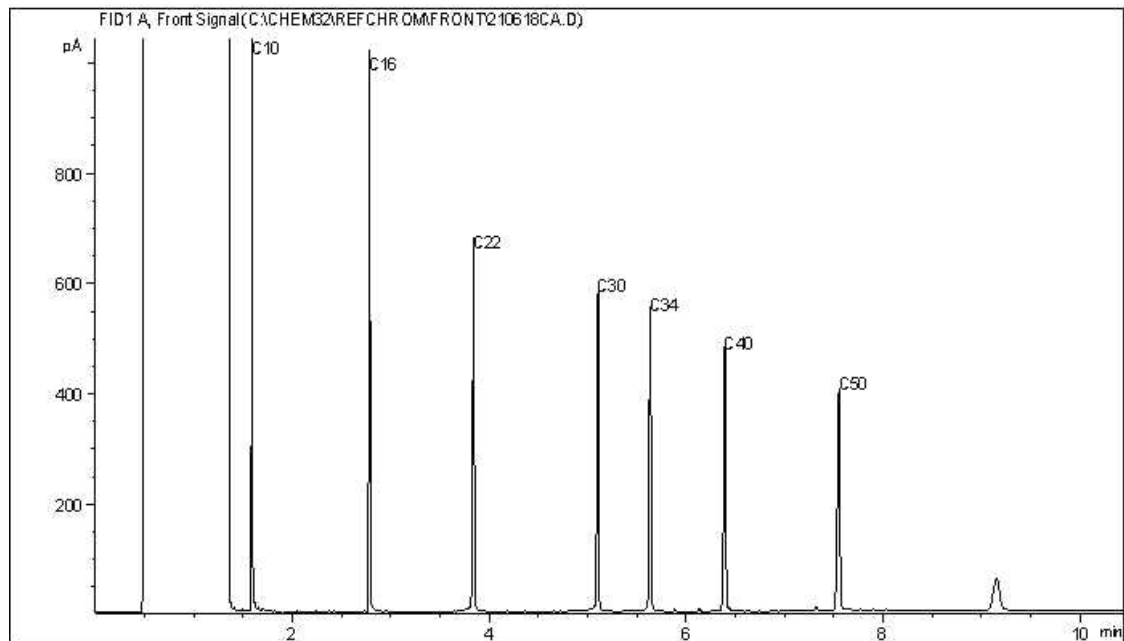
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CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



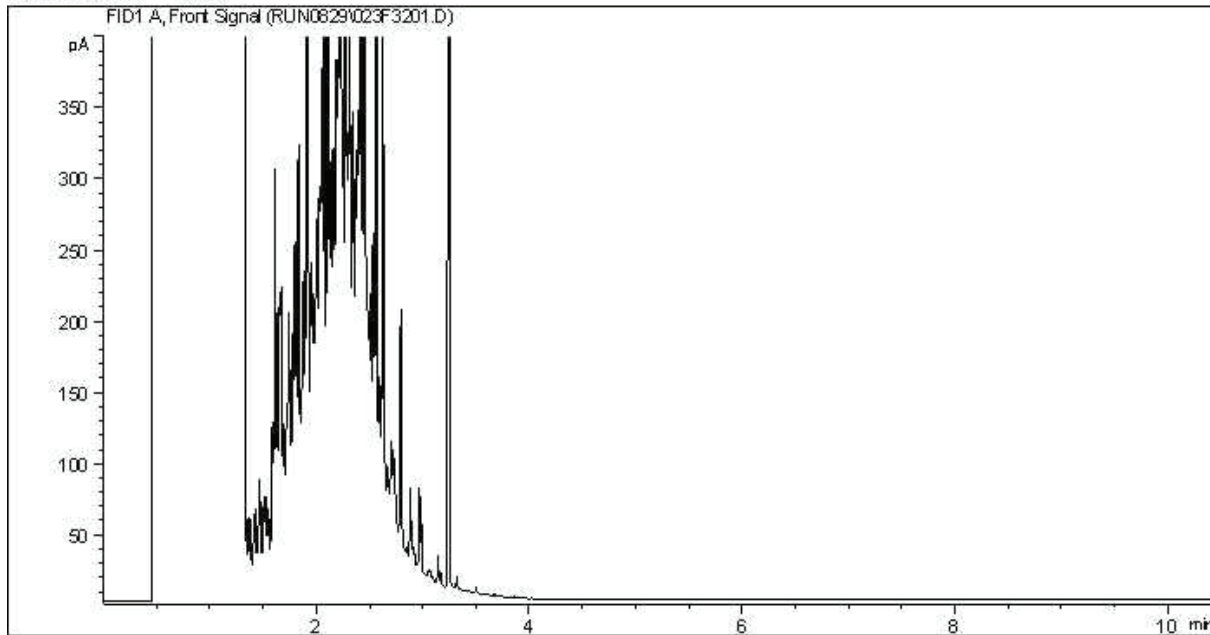
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

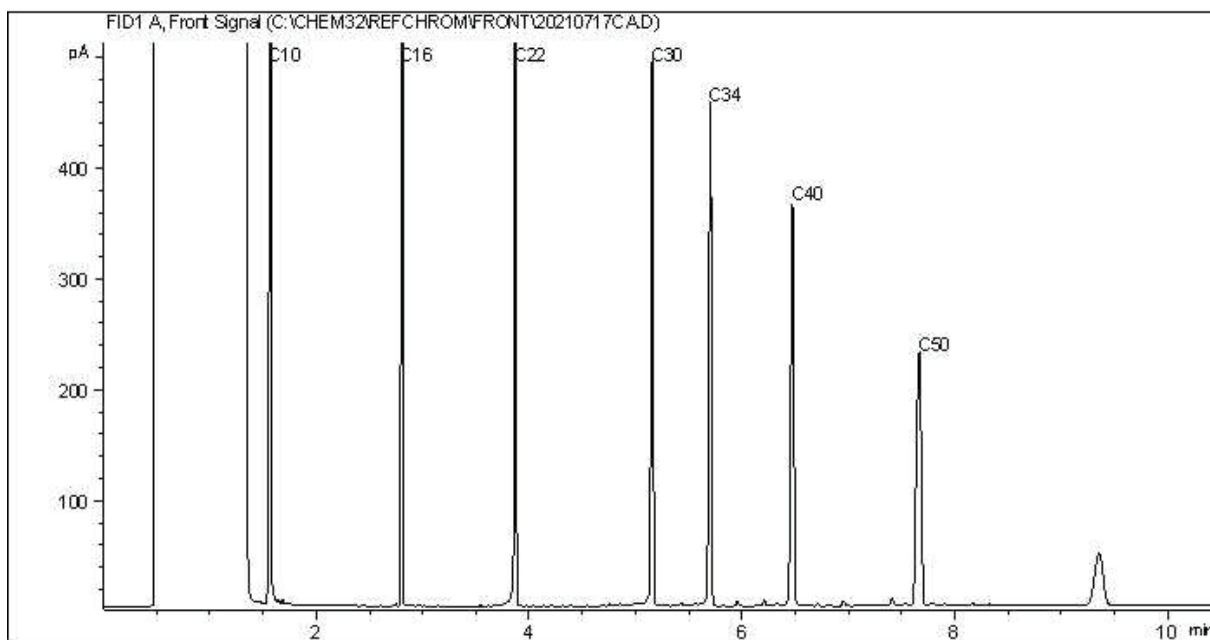
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



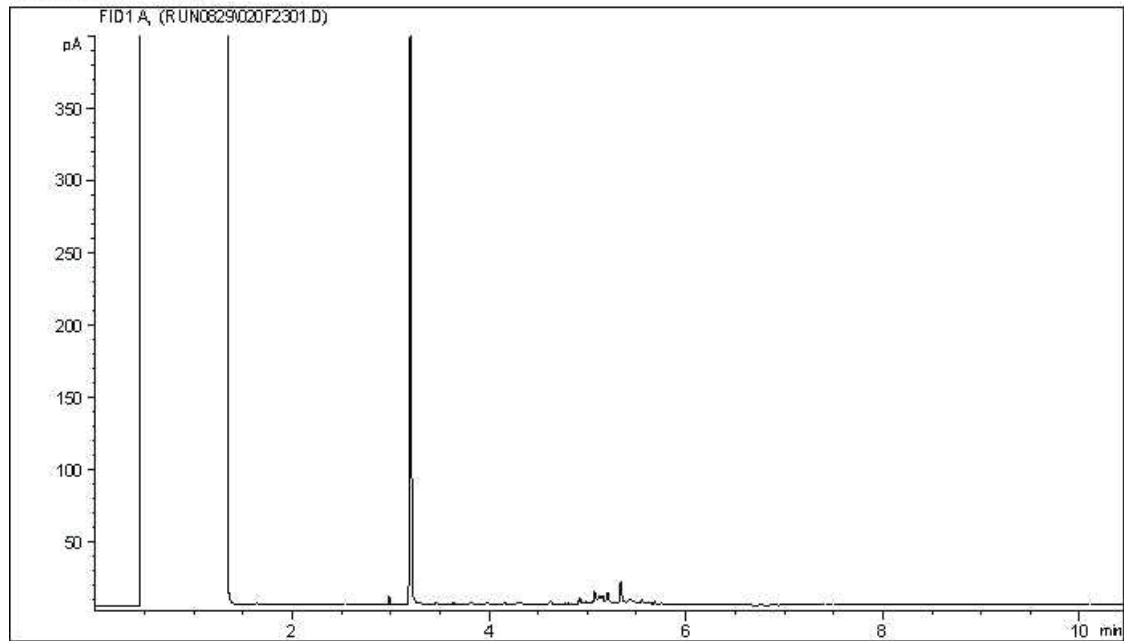
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

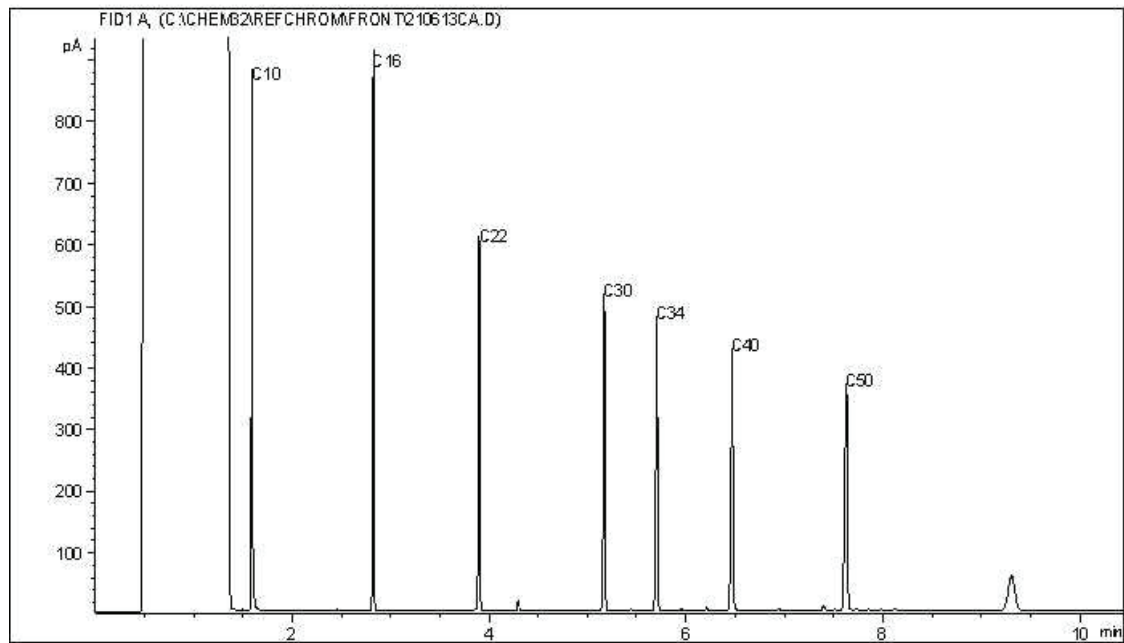
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



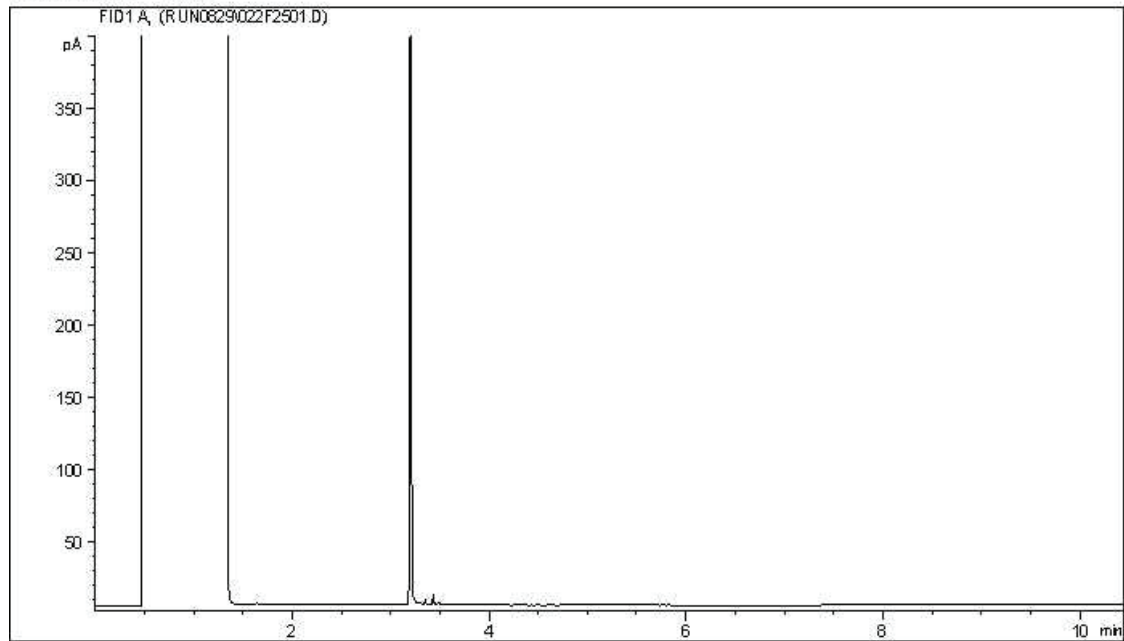
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

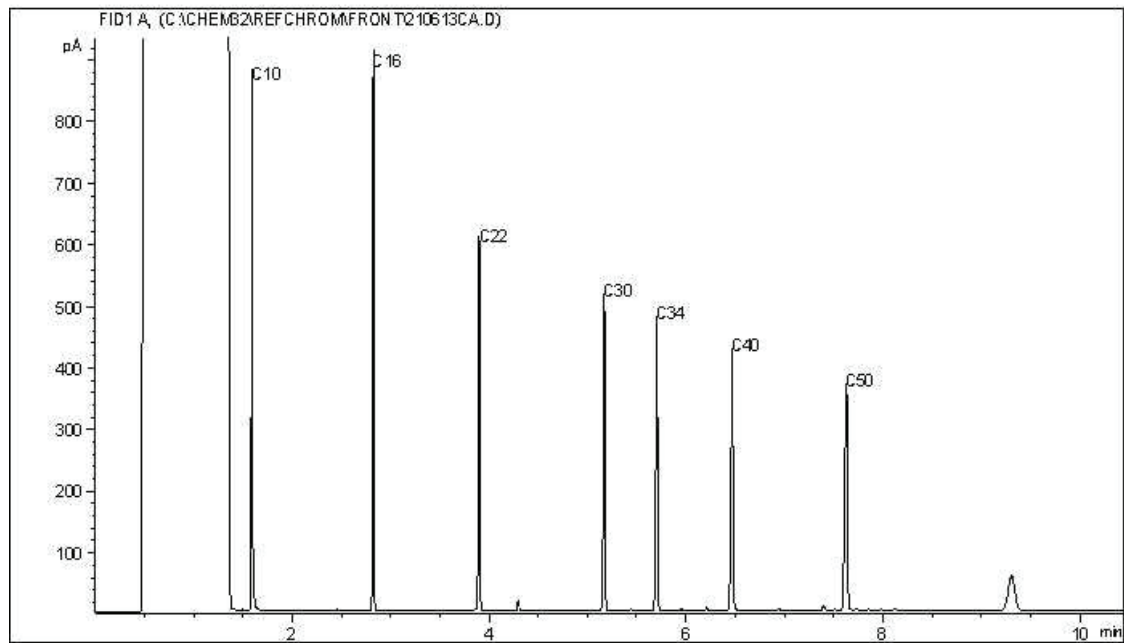
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



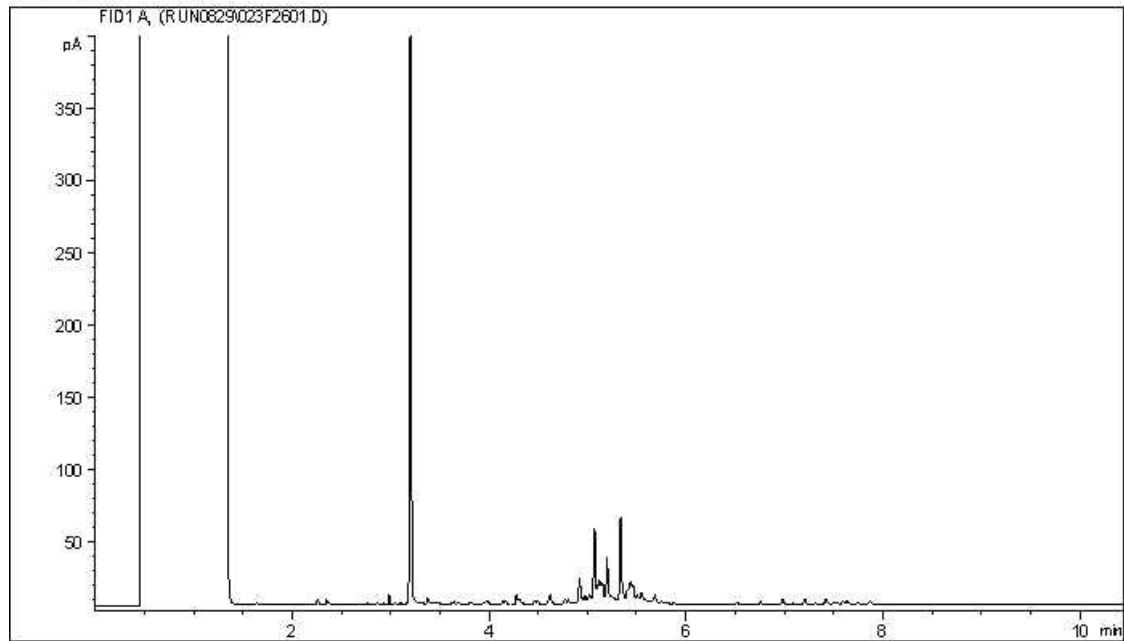
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

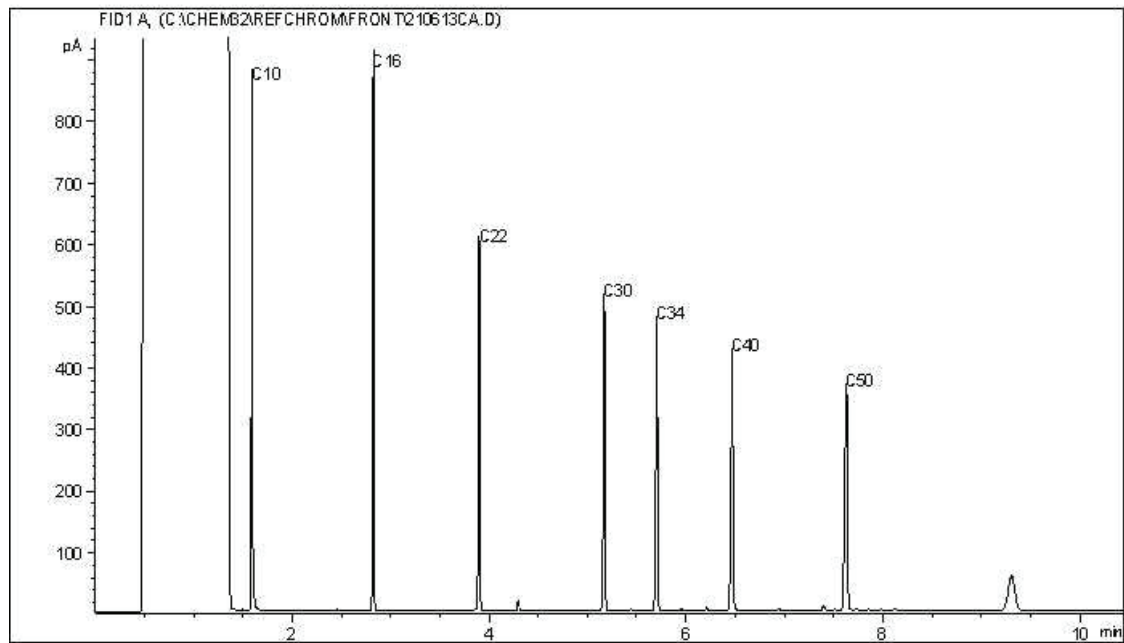
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



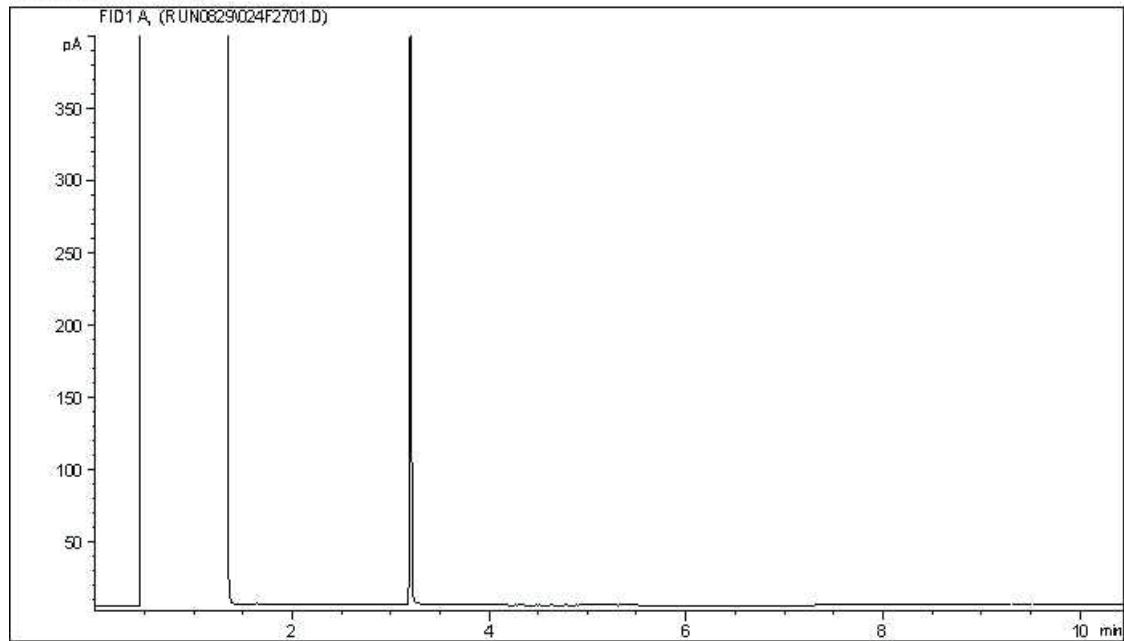
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

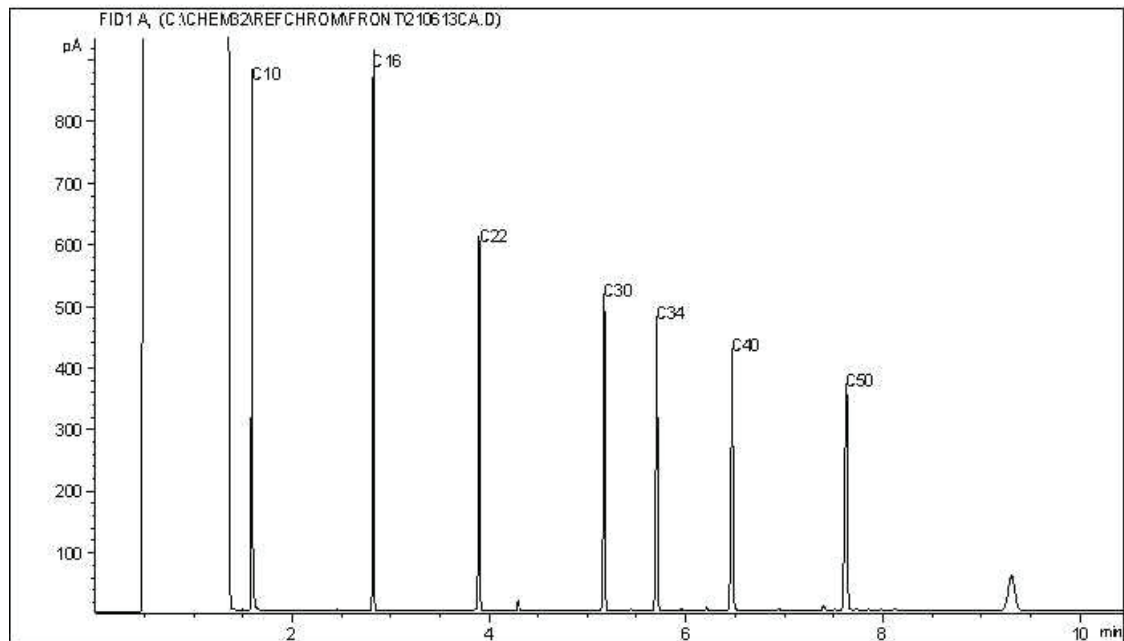
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



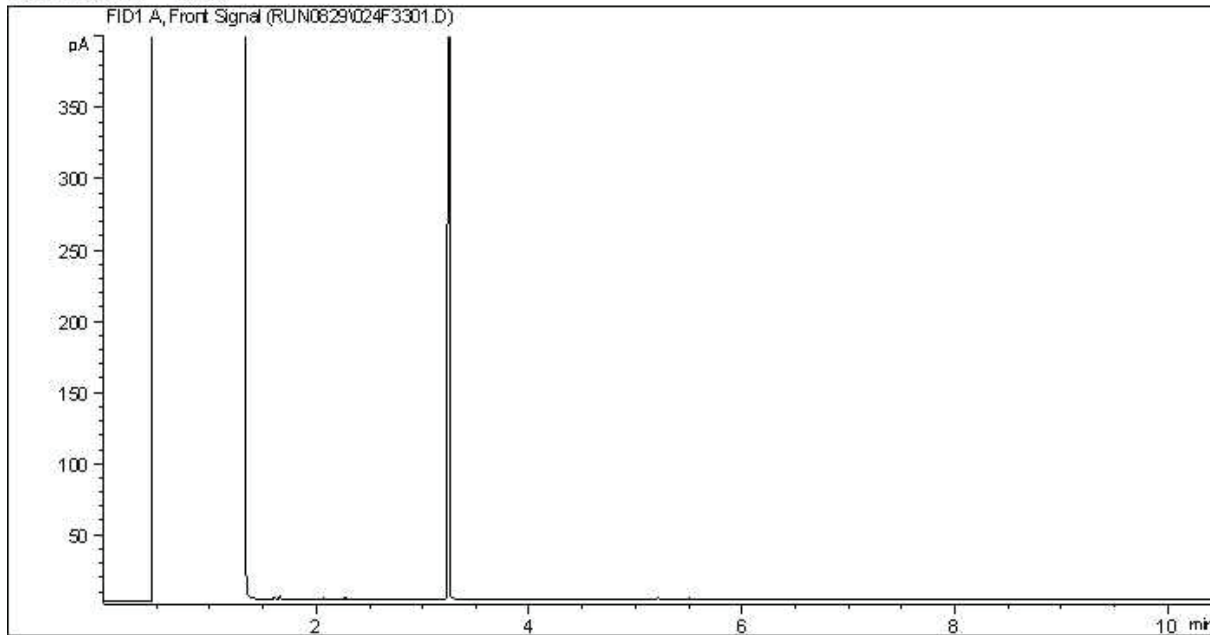
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

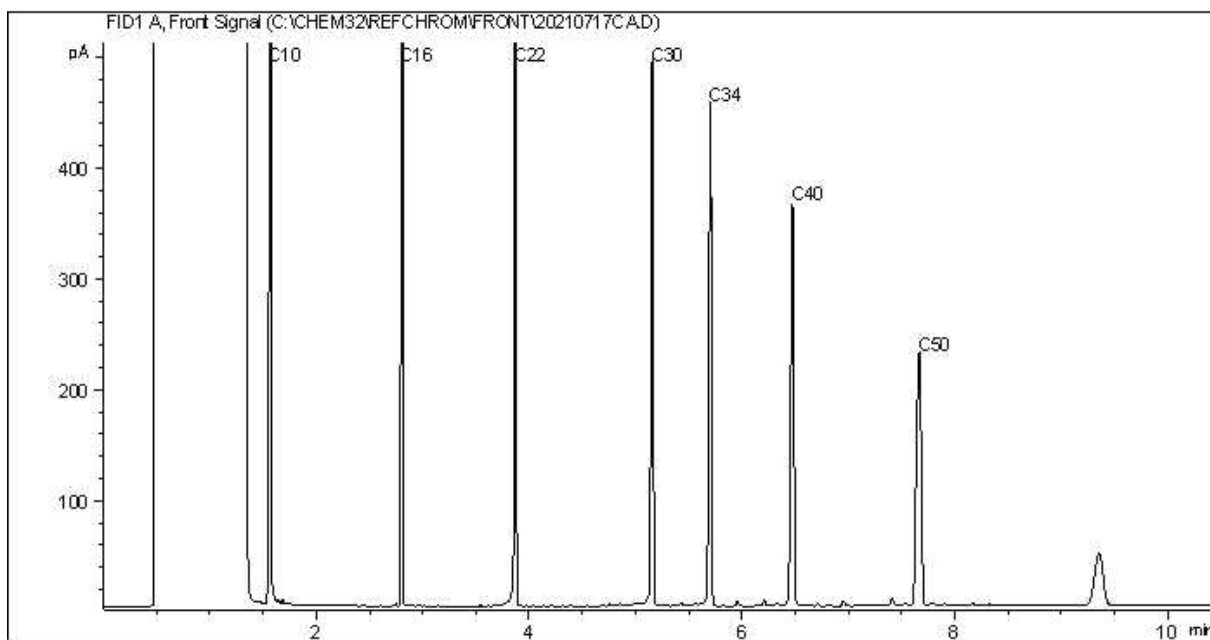
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



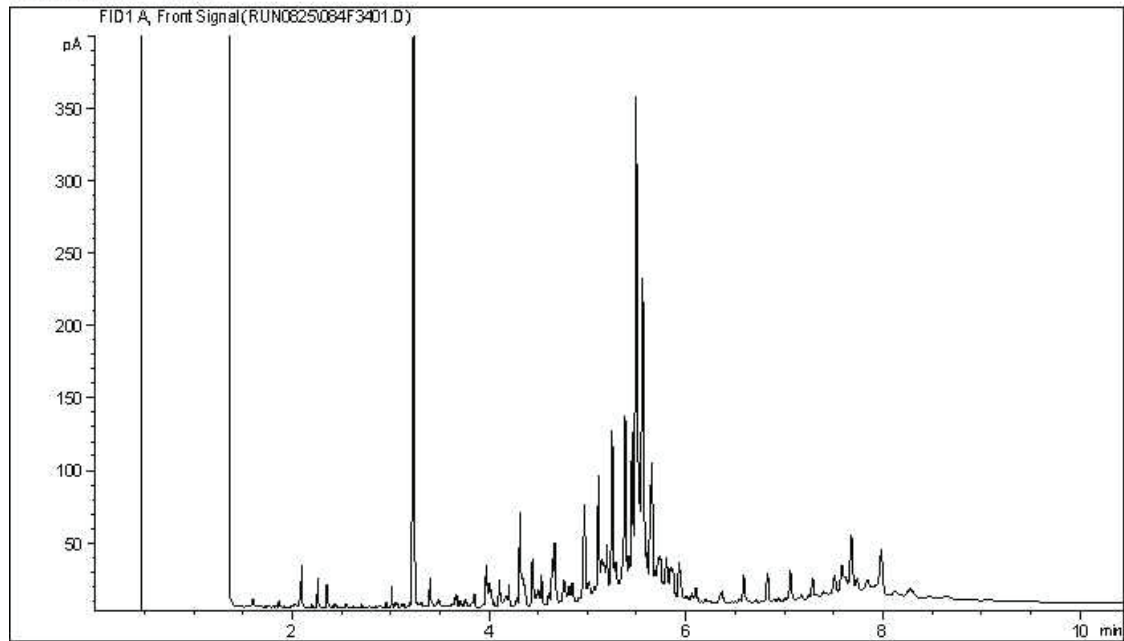
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

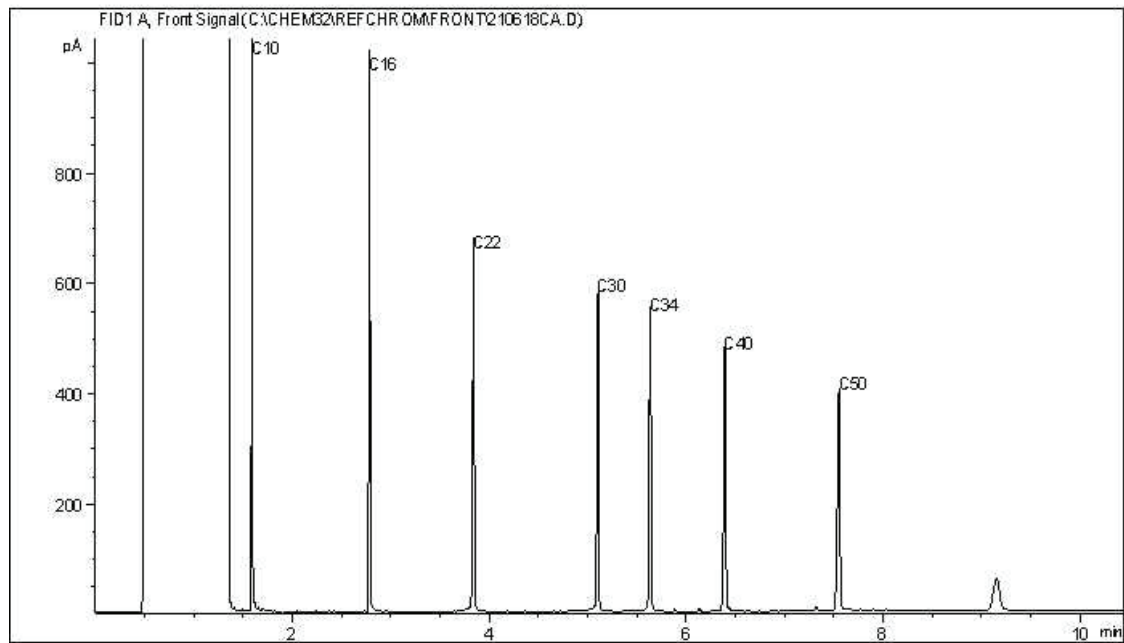
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CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



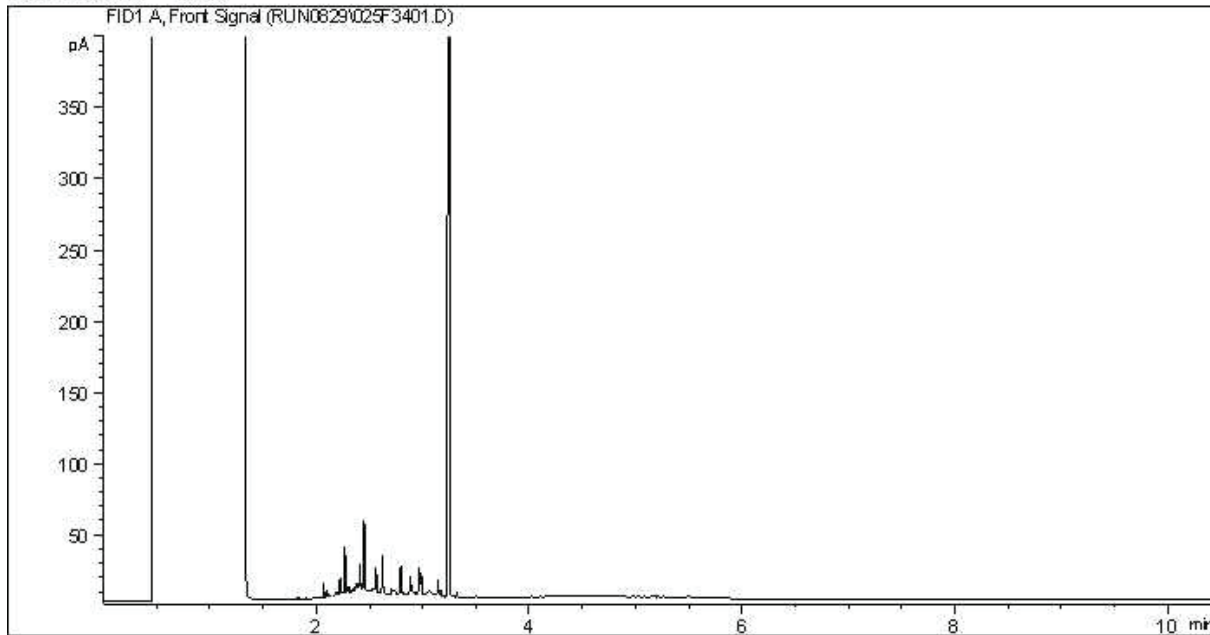
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

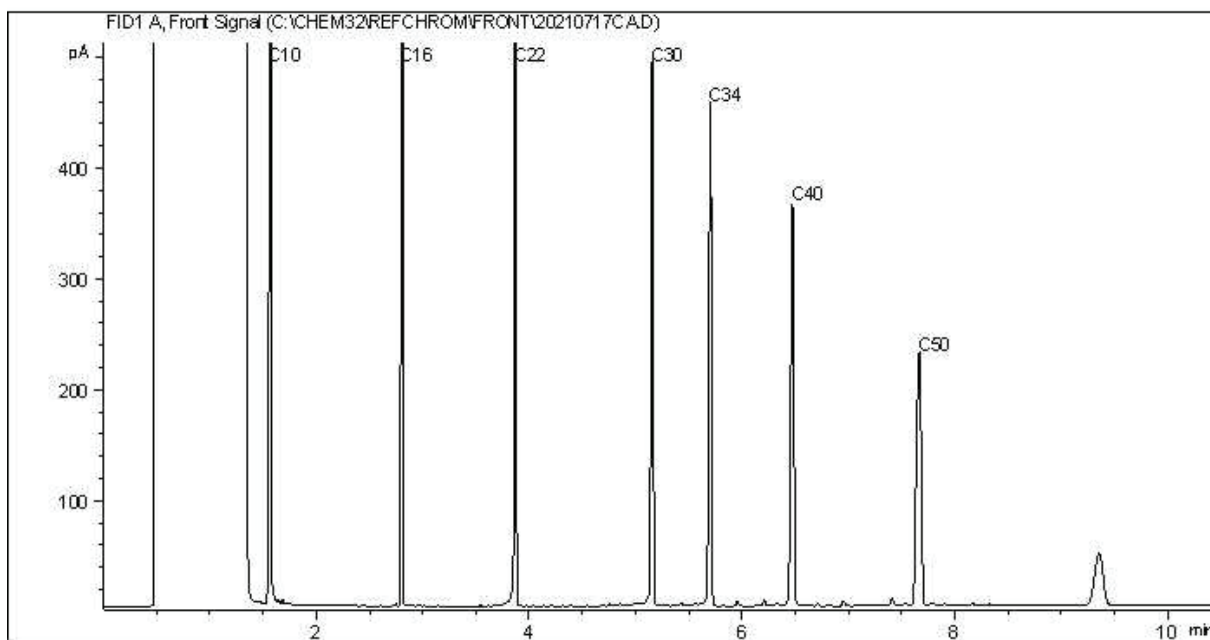
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



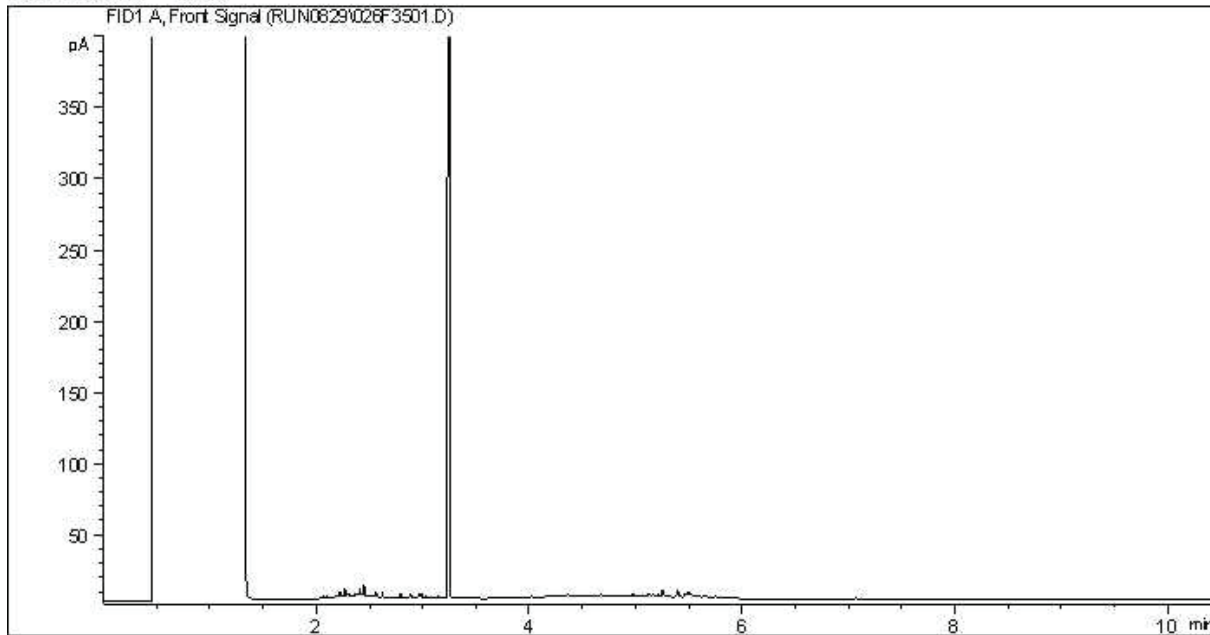
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

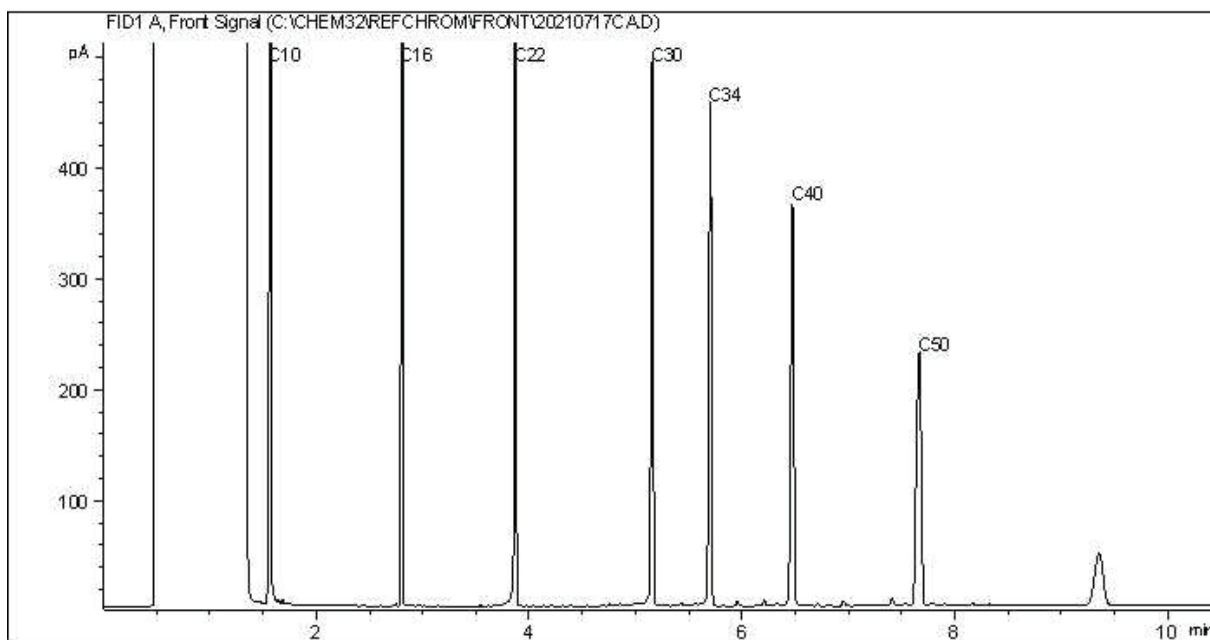
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



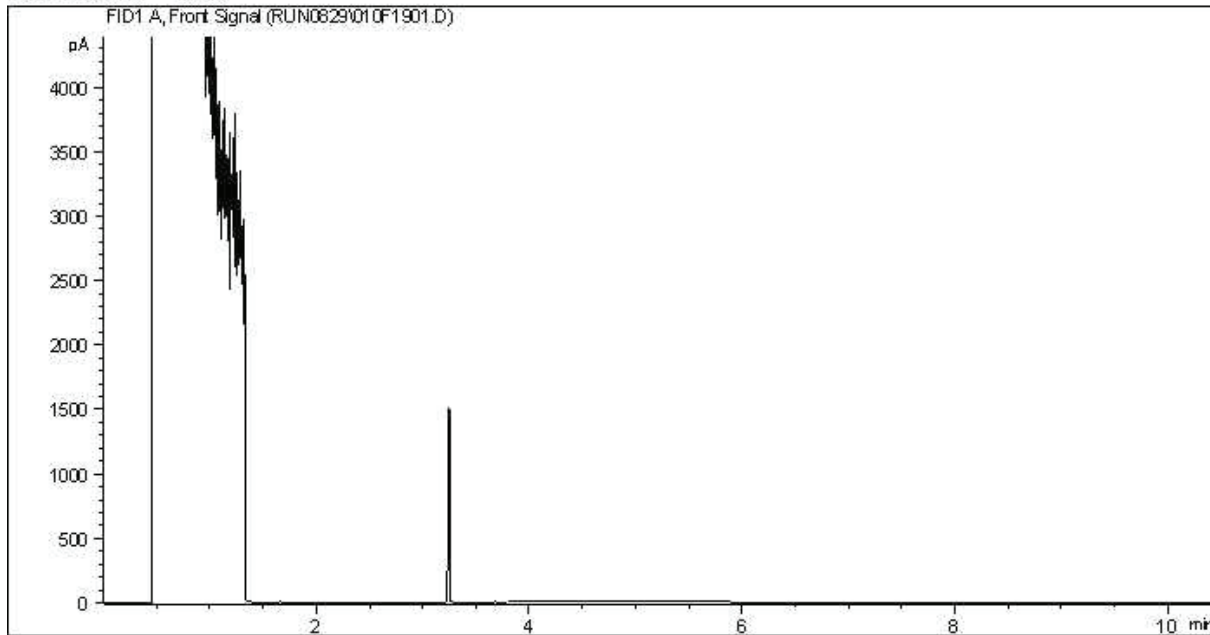
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

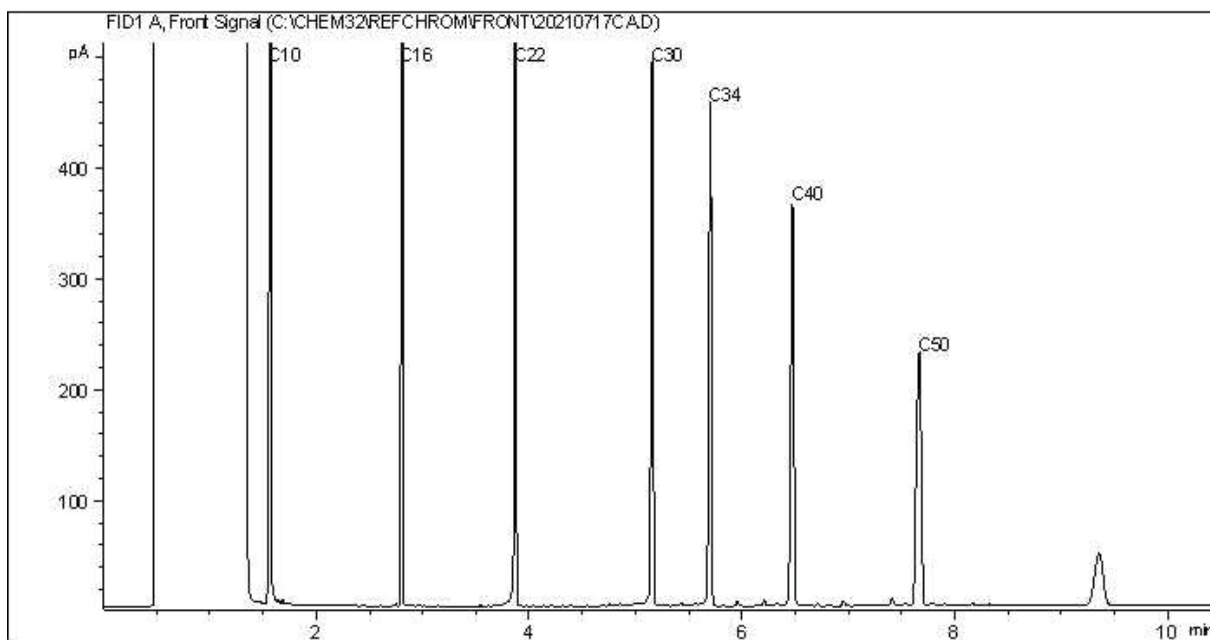
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



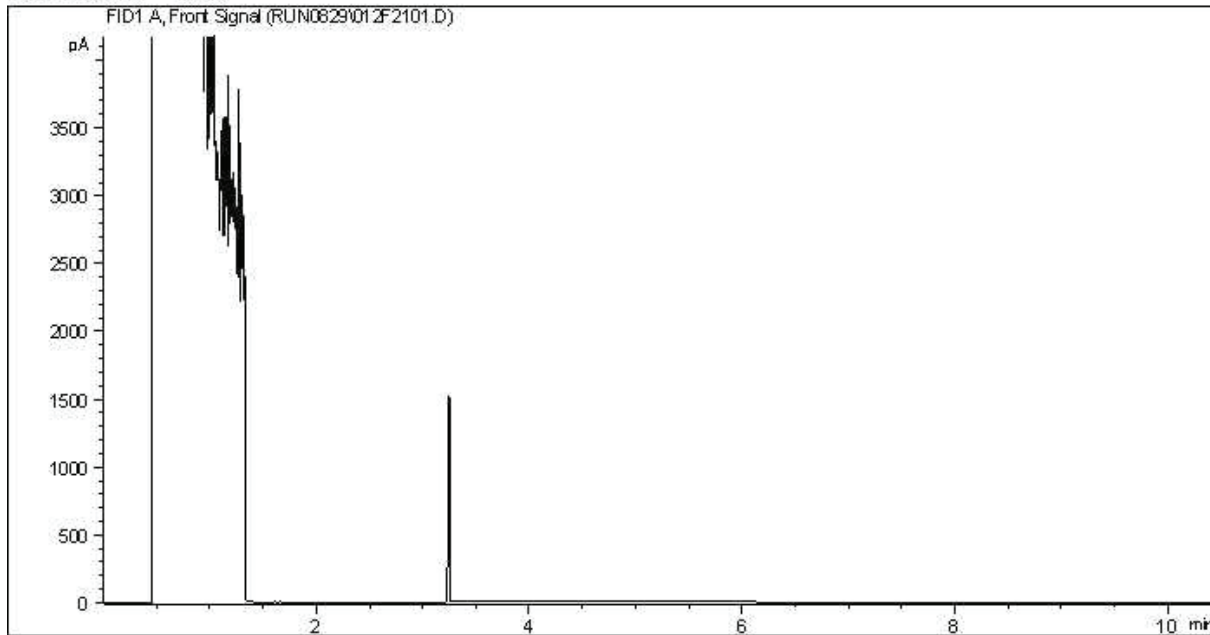
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

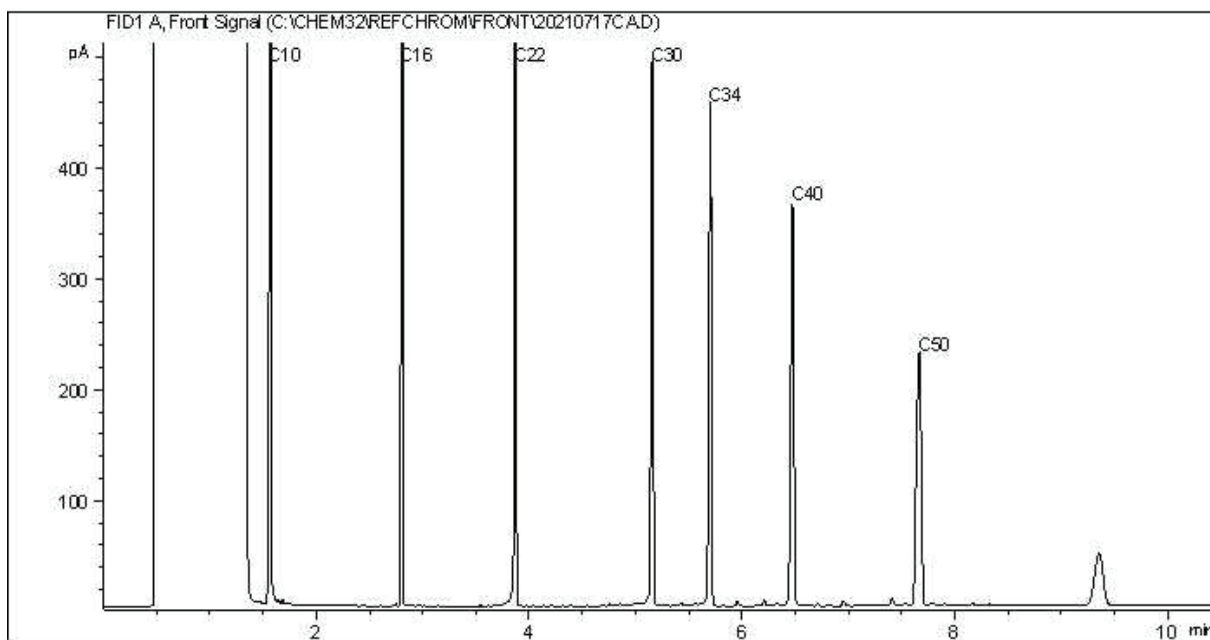
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



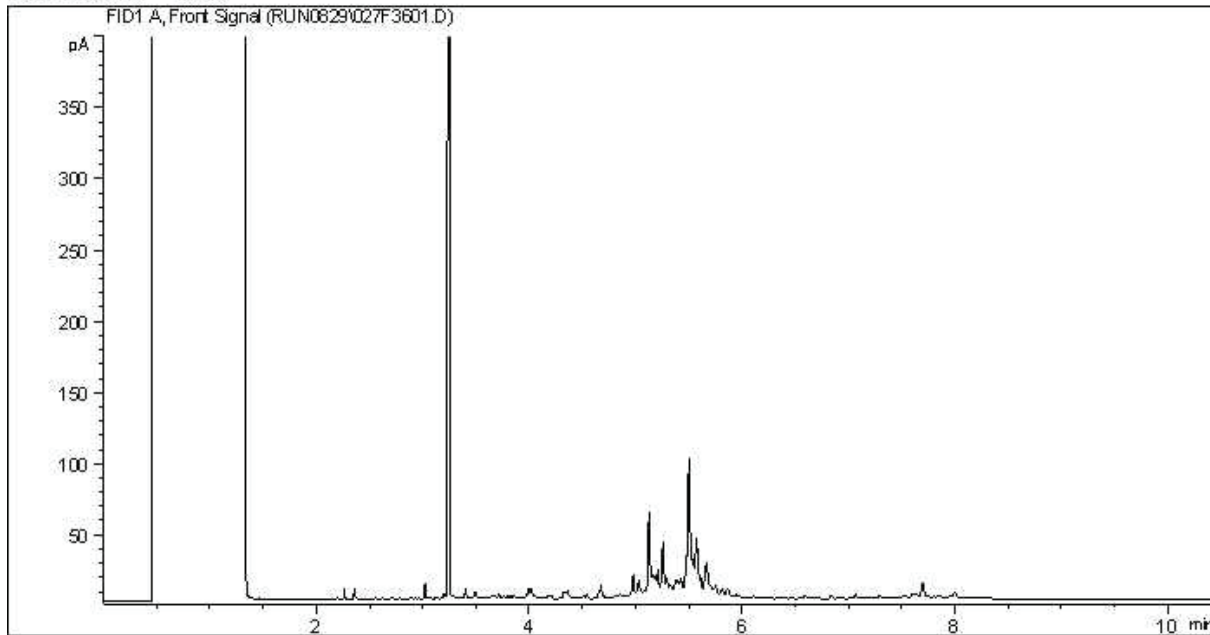
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

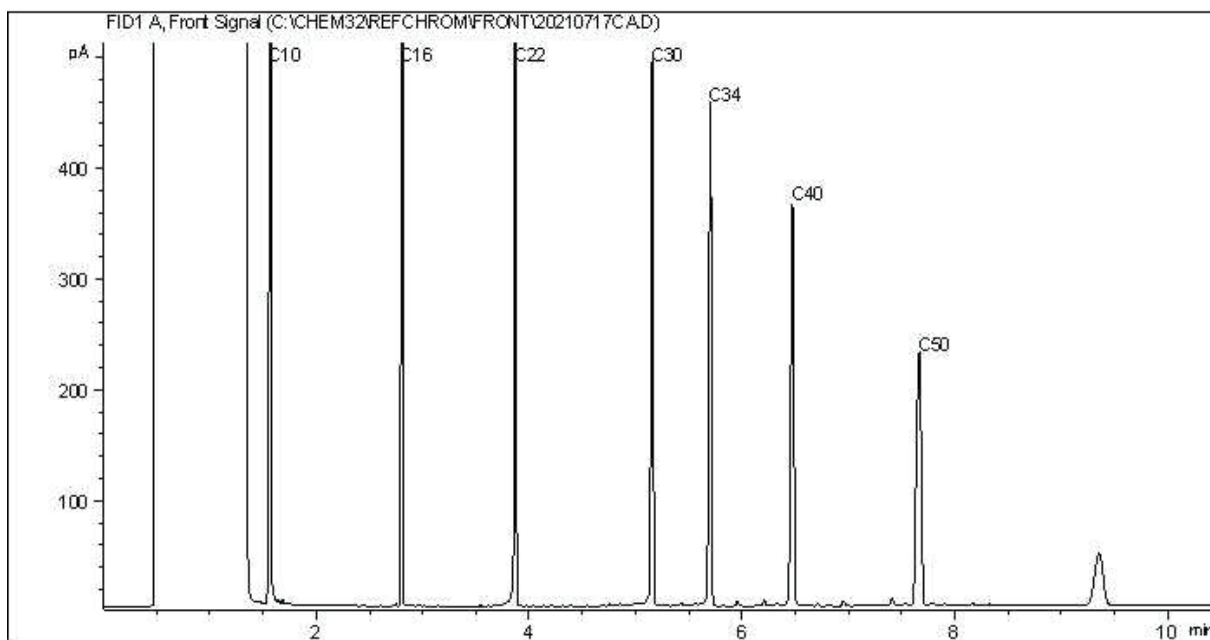
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



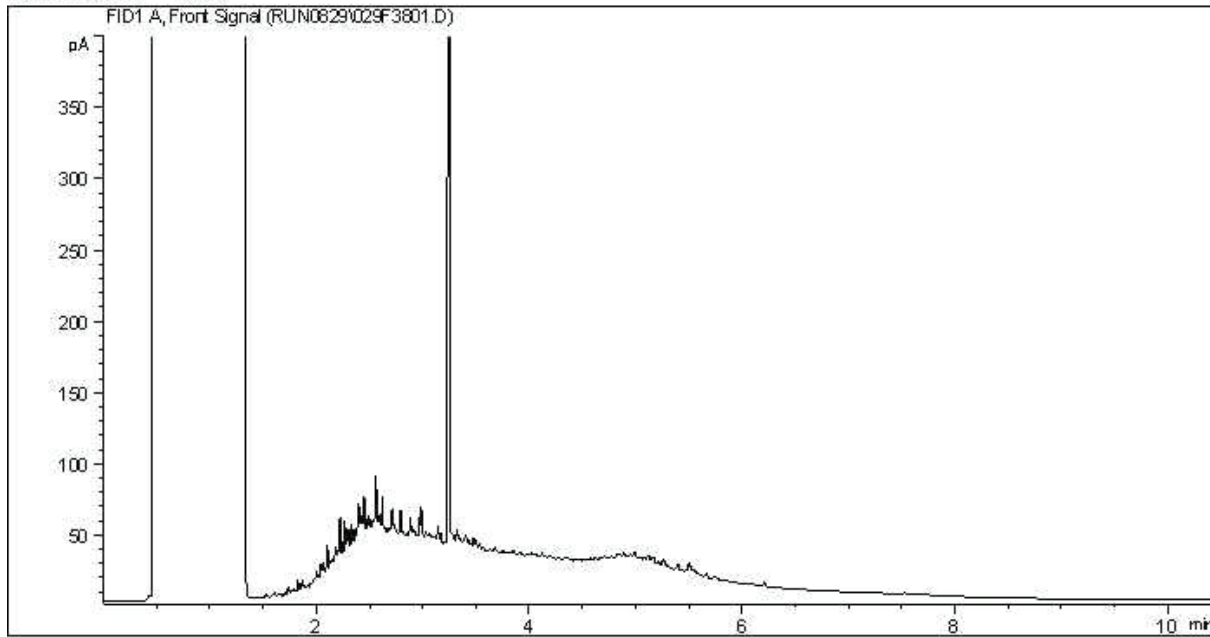
TYPICAL PRODUCT CARBON NUMBER RANGES

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Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

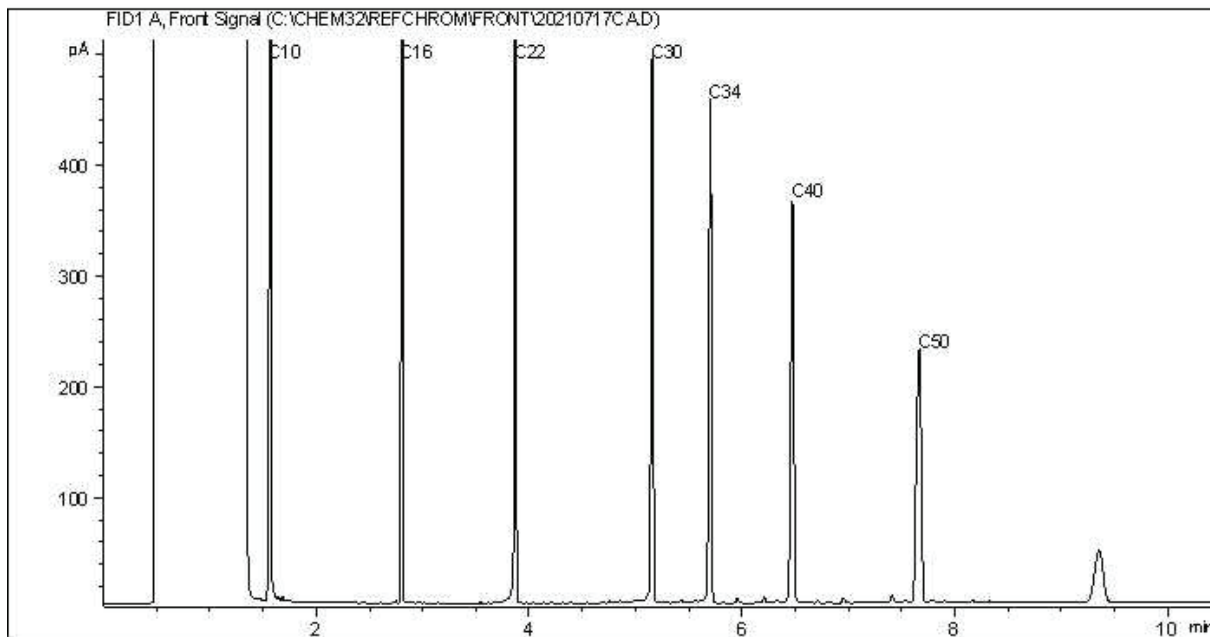
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



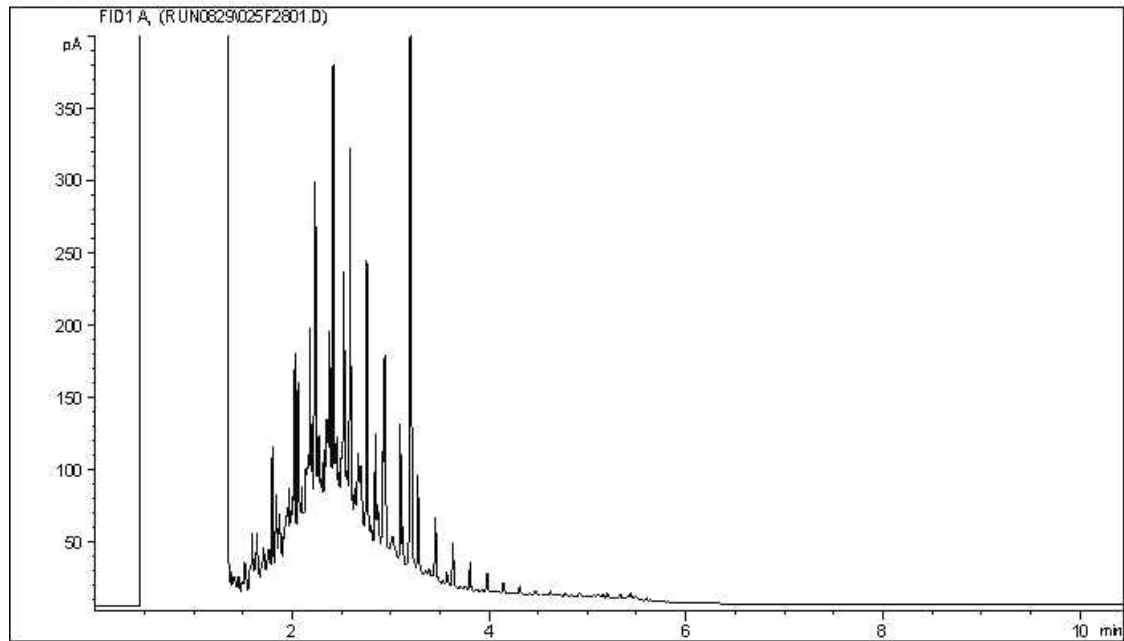
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

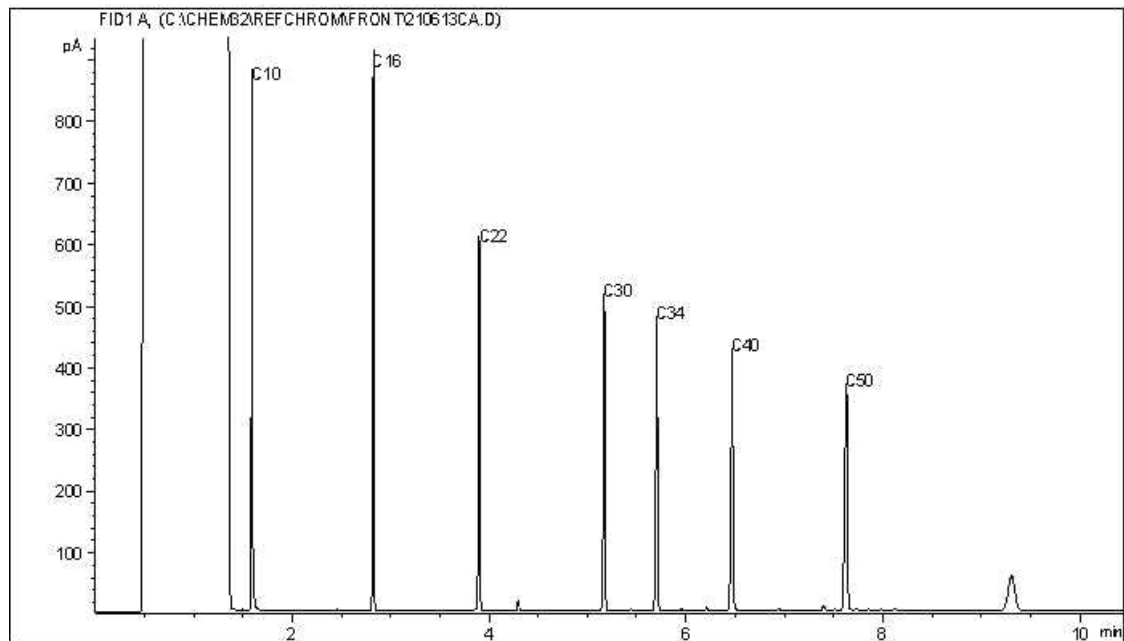
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



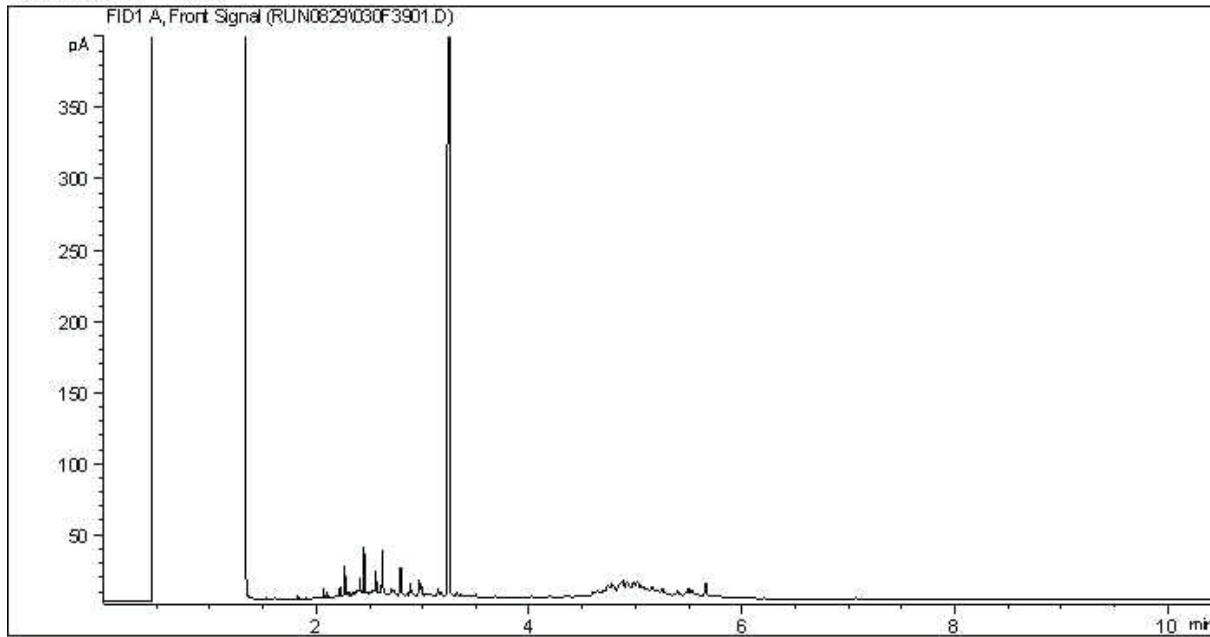
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

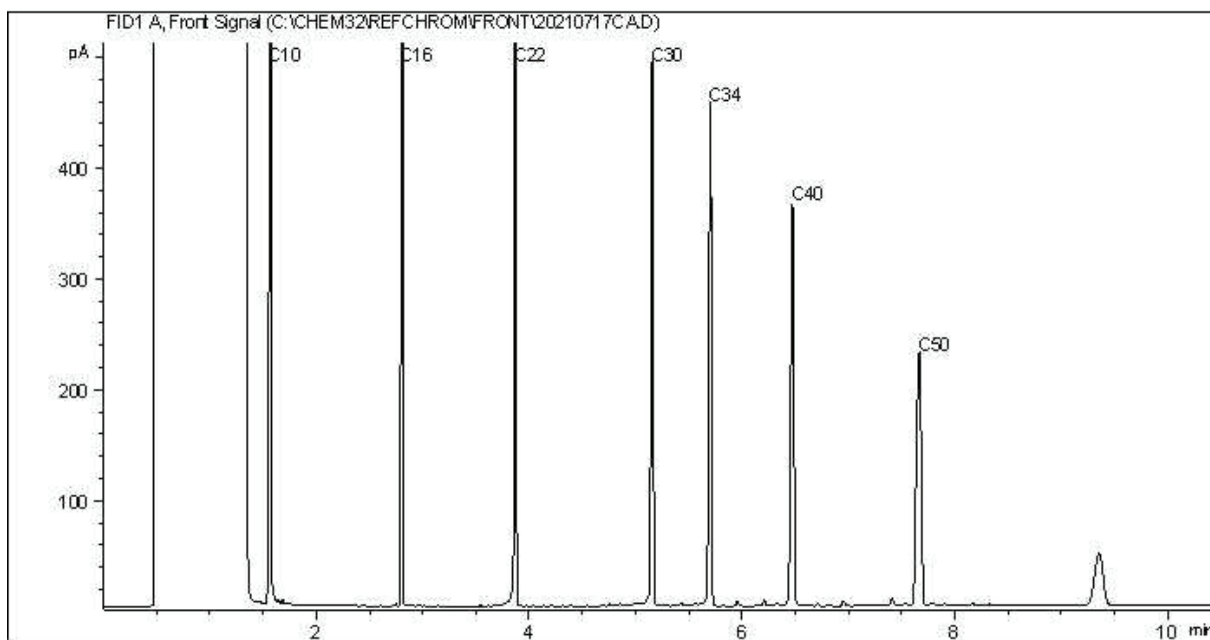
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



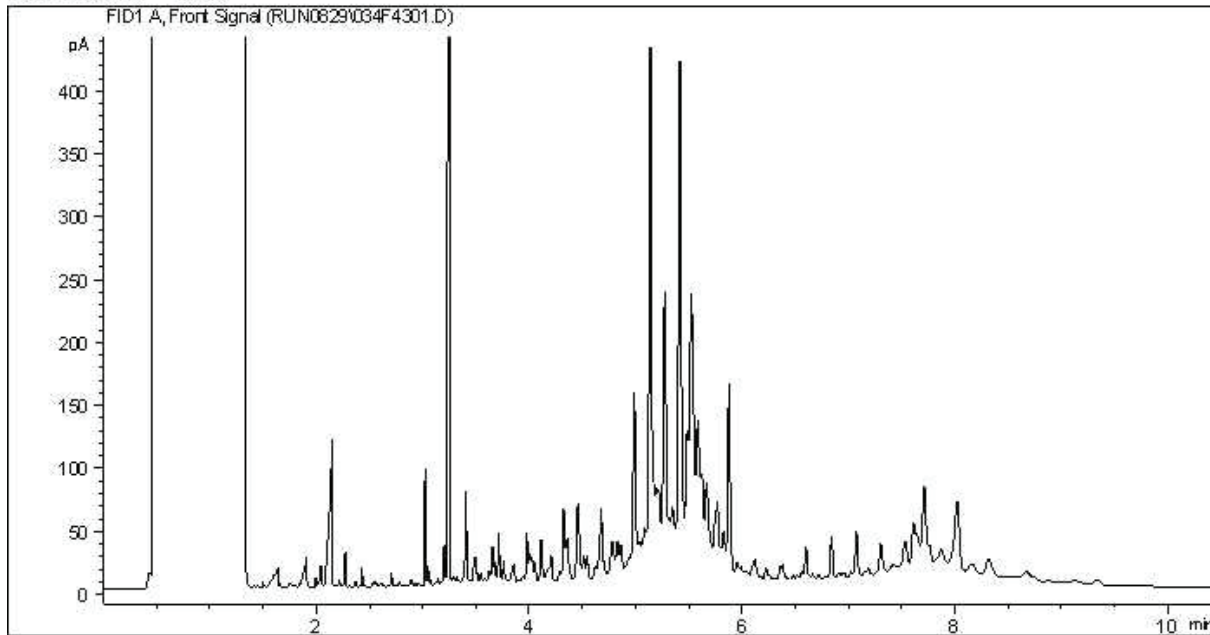
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

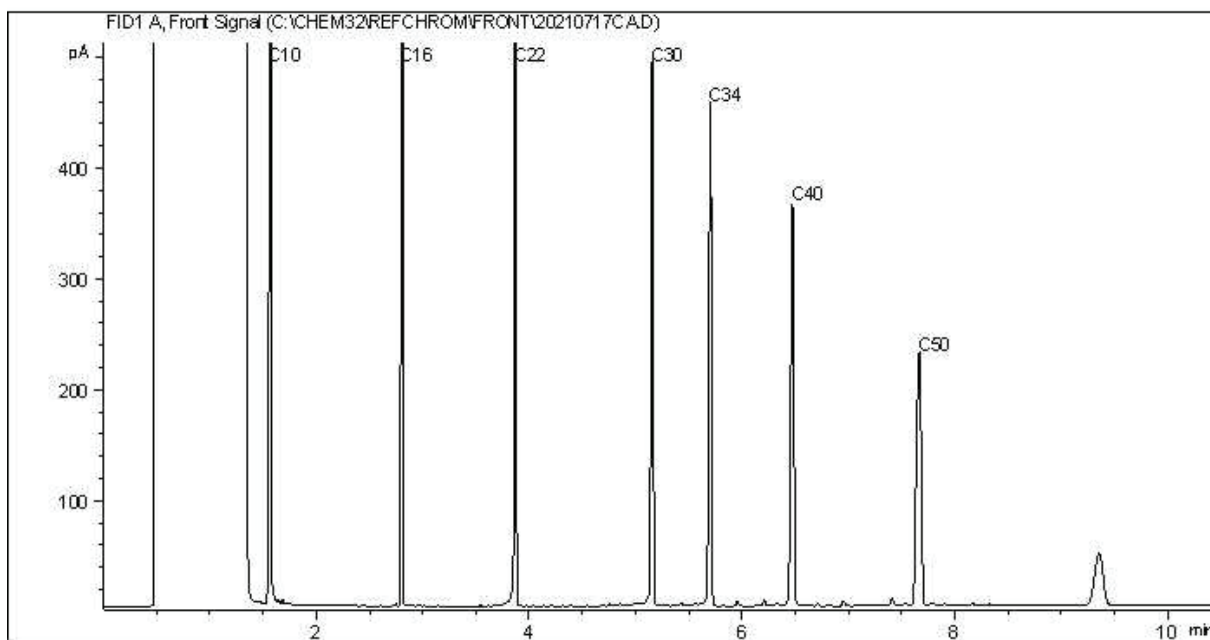
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



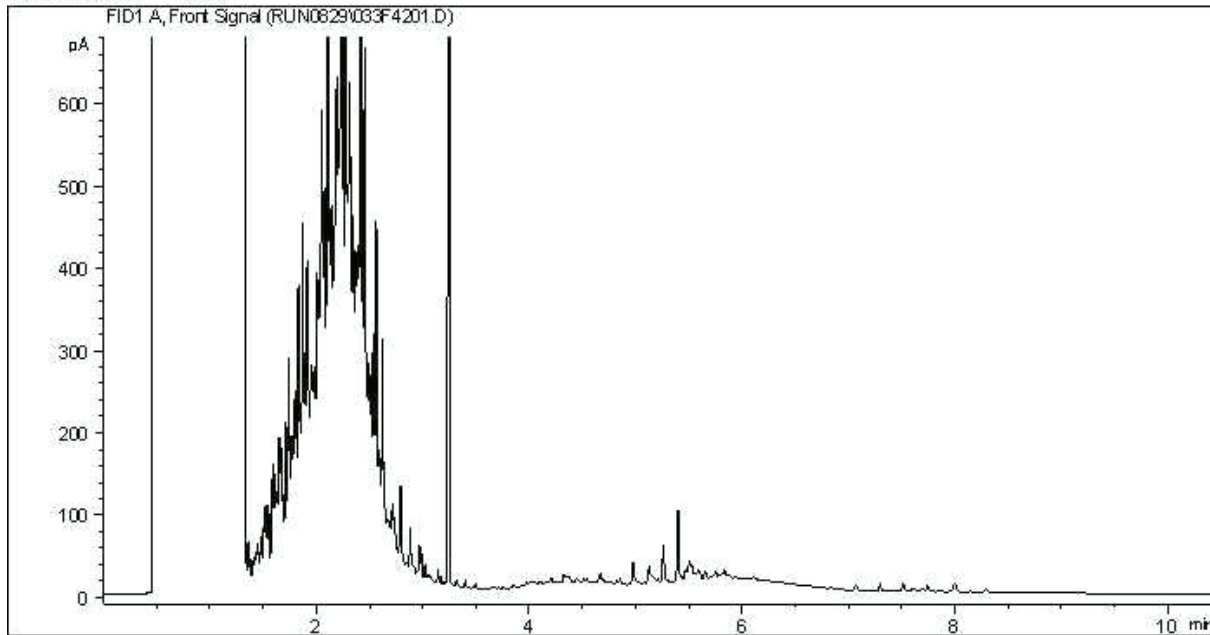
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

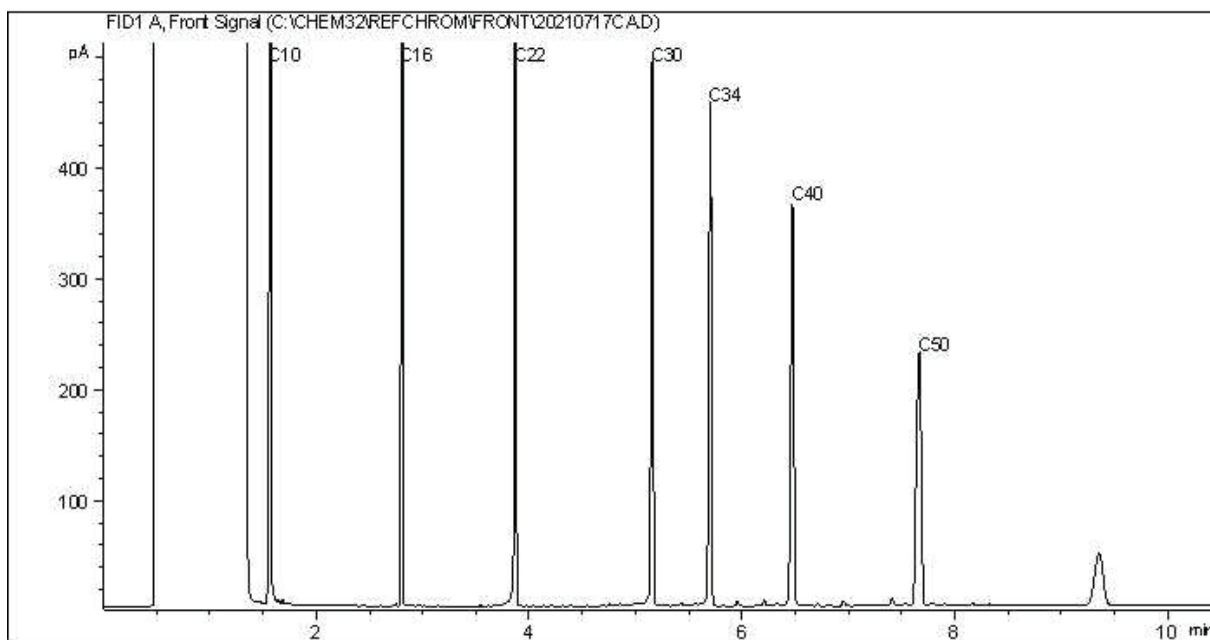
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



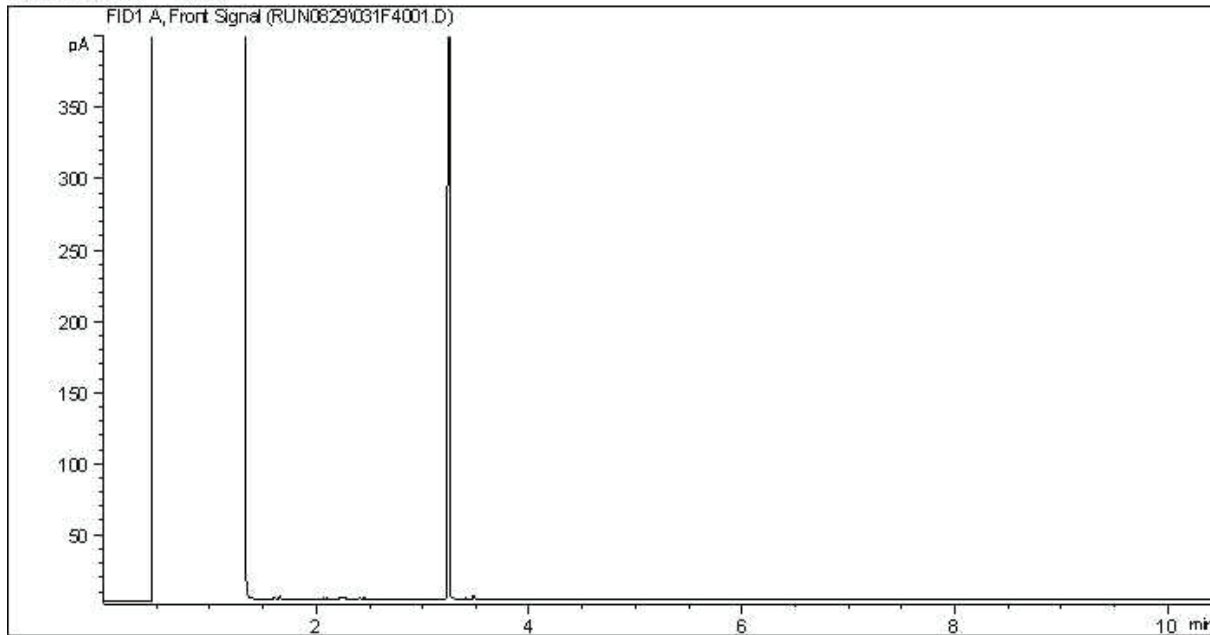
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

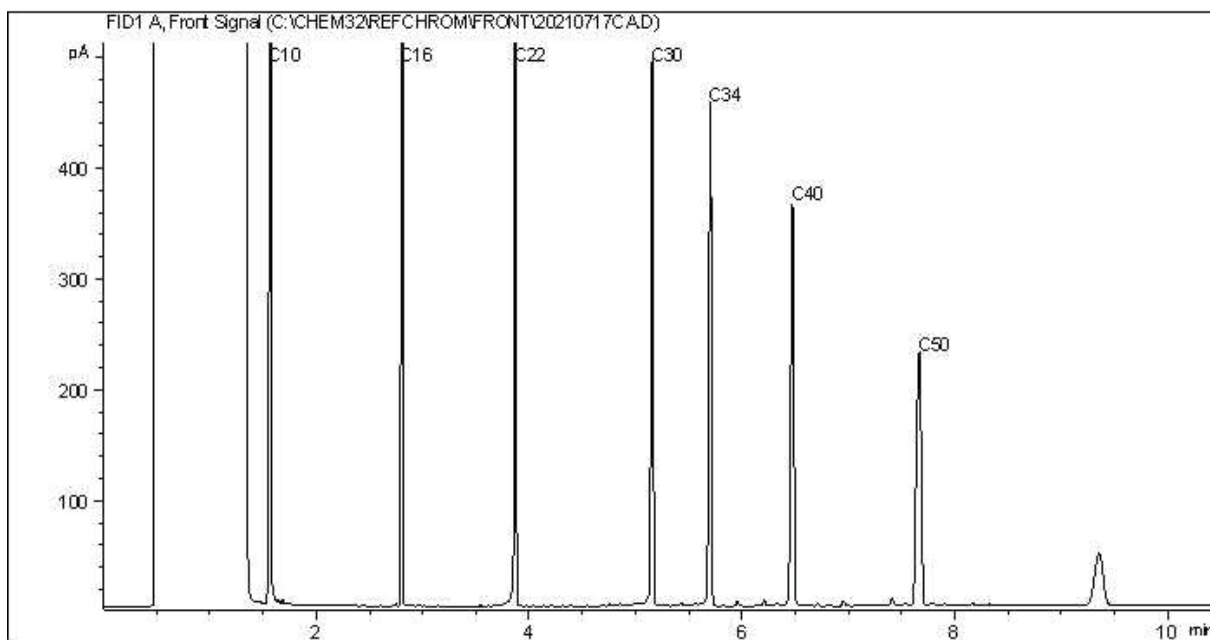
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



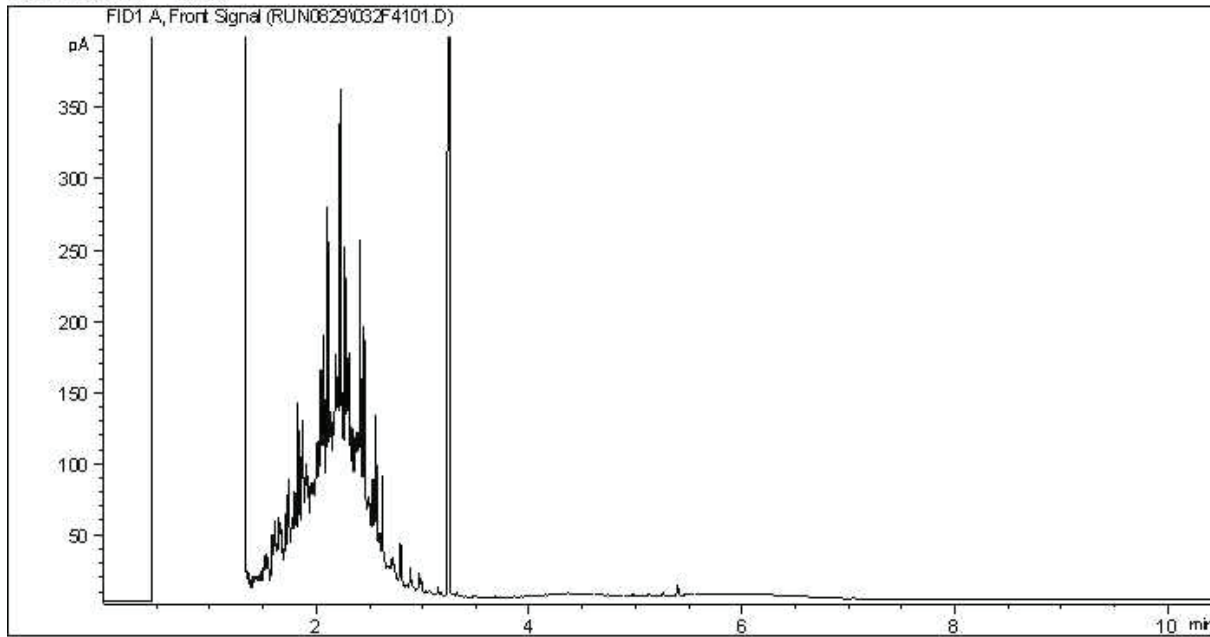
TYPICAL PRODUCT CARBON NUMBER RANGES

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Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
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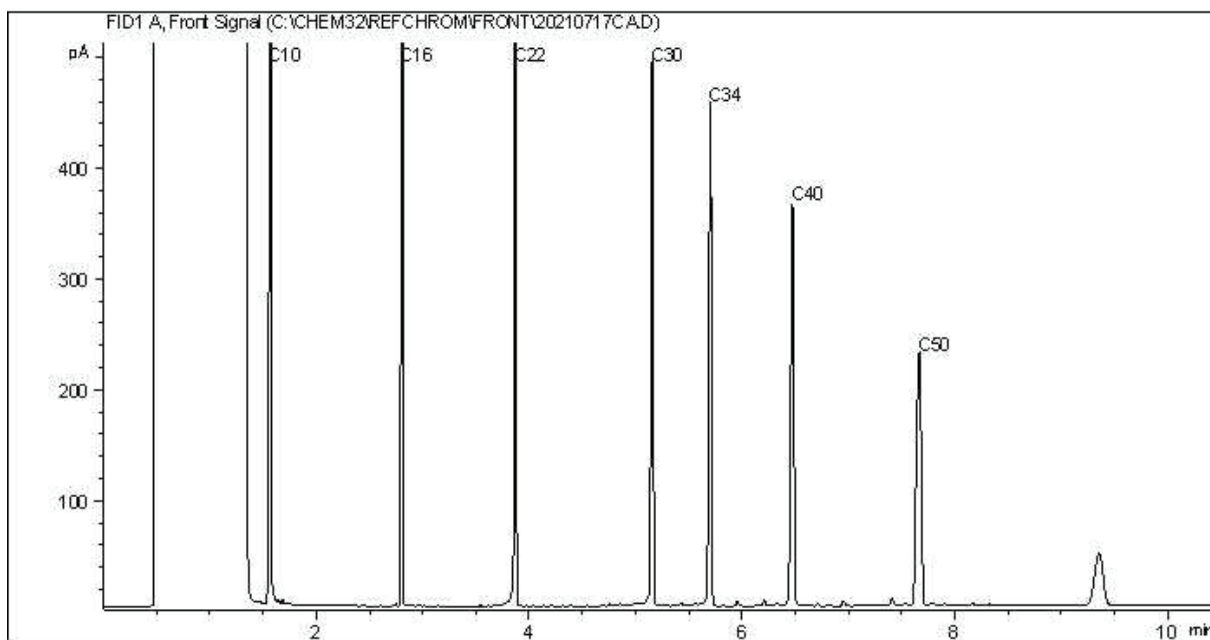
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



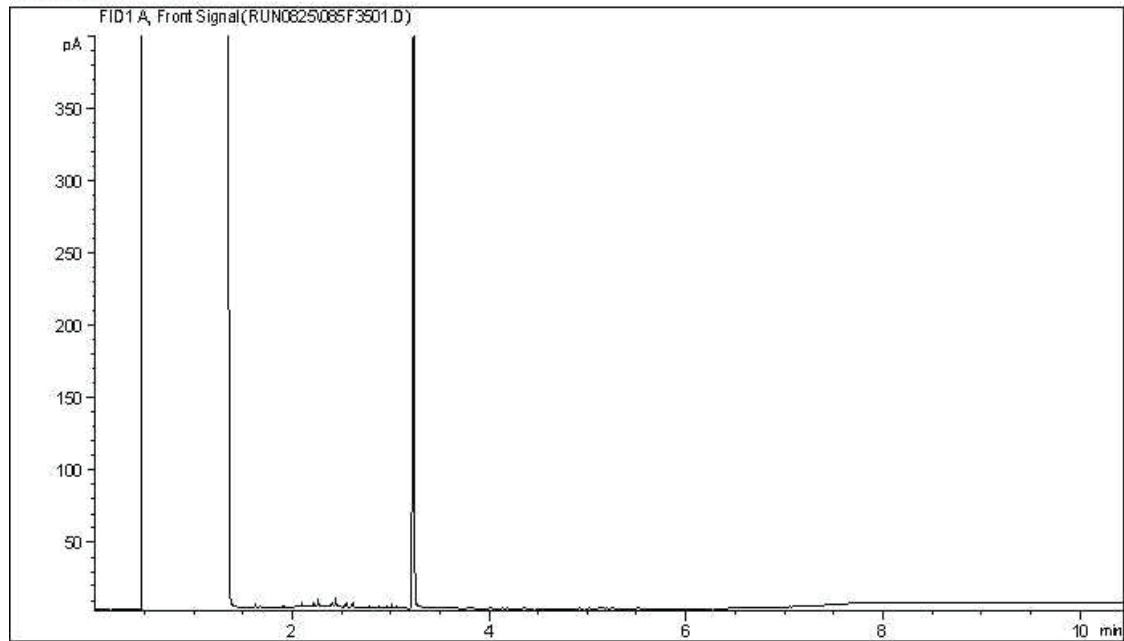
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

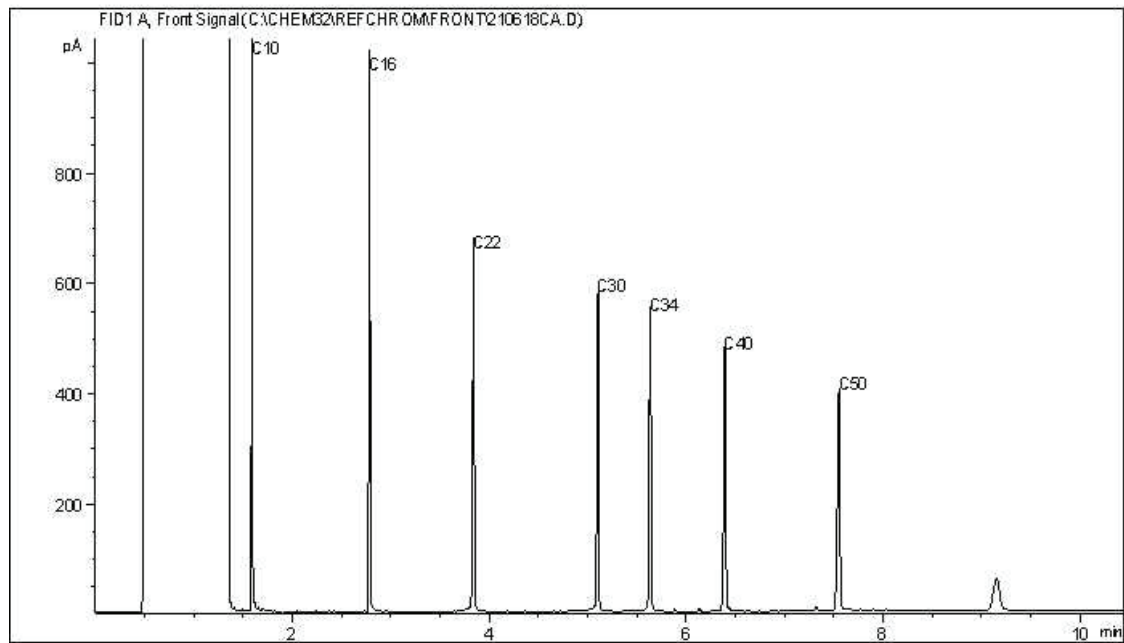
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

GOLDER DATA QUALITY REVIEW CHECKLIST

Site Location: Camp Farewell

Sampling Date: August 14, 2021

Golder Project Number: 20368099-6000-1001

Laboratory: Bureau Veritas Edmonton

Lab Submission Number: C161006

Was the Cooler Received at the lab under a sealed and intact custody seal? Yes
 Was proper chain of custody of the samples documented and kept? Yes
 Were sample temperatures acceptable when they reached lab?: Yes
 Were all samples analyzed and extracted within hold times?: Yes
 Has lab warranted all tests were in statistical control in CoA?: Yes
 Was sufficient sample provided for the requested analysis? Yes
 Has lab warranted all samples were analyzed with limited headspace present?: Yes

Are All Laboratory QC Within Acceptance Criteria (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Surrogate Recovery	X			Matrix spike recovery for F3B (C22-C34) (58%) below the acceptance criteria of (60-140%). Matrix spike recovery for chromium (134%) and vanadium(161%) exceeded the acceptance criteria of (75-125%). All remaining laboratory QC results are within acceptance criteria.
Method Blank Concentration	X			
Laboratory Duplicate RPD	X			
Matrix Spike Recovery		X		
Blank Spike Recovery	X			

Are All Field QC Samples Within Alert Limits (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Field Blank Concentration			X	Samples TP21-149-05 and DUP A exceed the alert limit for F2 (C10-C16) (114%).
Trip Blank Concentration			X	
Field Duplicate RPD		X		

Is data considered reliable (Yes/No/Suspect)? Yes
 If answer is "No" or "Suspect", describe and provide rationale:

Data Reviewed by (Print): Anita Colbert

Data Reviewed by (Signature): Anita Colbert

Date: September 3, 2021



Your P.O. #: 20368099-7000-1001
 Your Project #: 20368099-6000-1001
 Site Location: Camp Farewell and Unipkat I-22, Northwest Territories

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
 2800, 700 -2nd Street SW
 CALGARY, AB
 CANADA T2P 2W2

Your C.O.C. #: 644511-06-01, 644511-07-01, 644511-08-01, 644511-09-01

Report Date: 2021/12/24
 Report #: R3113899
 Version: 5 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C161010

Received: 2021/08/18, 10:00

Sample Matrix: Soil
 # Samples Received: 34

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Barium on ICP using Fusion Extraction (1)	3	2021/08/27	2021/08/29	AB SOP-00044 / AB SOP-00042	EPA 6010d R5 m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	13	N/A	2021/08/24	AB SOP-00039	CCME CWS/EPA 8260d m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	21	N/A	2021/08/25	AB SOP-00039	CCME CWS/EPA 8260d m
F1-BTEX (1)	14	N/A	2021/08/25		Auto Calc
F1-BTEX (1)	20	N/A	2021/08/26		Auto Calc
Hexavalent Chromium (1, 3)	3	2021/08/24	2021/08/24	AB SOP-00063	SM 23 3500-Cr B m
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 4)	3	2021/08/24	2021/08/25	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	17	2021/08/23	2021/08/25	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	14	2021/08/24	2021/08/25	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	2	2021/08/24	2021/08/26	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 5)	1	2021/08/26	2021/08/26	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 6)	2	N/A	2021/08/25		Auto Calc
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 6)	1	N/A	2021/12/23		Auto Calc
CCME Hydrocarbons (F4G in soil) (1, 5)	1	2021/08/23	2021/08/25	AB SOP-00036 AB SOP-00040	CCME PHC-CWS m
CCME Hydrocarbons (F4G in soil) (1, 5)	4	2021/08/24	2021/08/25	AB SOP-00036 AB SOP-00040	CCME PHC-CWS m
CCME Hydrocarbons (F4G in soil) (1, 5)	1	2021/08/24	2021/08/26	AB SOP-00036 AB SOP-00040	CCME PHC-CWS m
Elements by ICPMS - Soils (1)	3	2021/08/25	2021/08/25	AB SOP-00001 / AB SOP-00043	EPA 6020b R2 m
Moisture (1)	18	N/A	2021/08/24	AB SOP-00002	CCME PHC-CWS m
Moisture (1)	16	N/A	2021/08/25	AB SOP-00002	CCME PHC-CWS m
Soluble NO2 (N);Soluble NO2 (N) + NO3(N) (1)	3	2021/08/25	2021/08/25	AB SOP-00091	SM 23 4500 NO3m
Nitrate-N (soluble) (1)	3	2021/08/25	2021/08/27		Auto Calc
Soluble Ions (1)	3	2021/08/25	2021/08/25	AB SOP-00033 / AB SOP-00042	EPA 6010d R5 m
Soluble Paste (1)	3	2021/08/25	2021/08/25	AB SOP-00033	Carter 2nd ed 15.2 m



Your P.O. #: 20368099-7000-1001
 Your Project #: 20368099-6000-1001
 Site Location: Camp Farewell and Unipkat I-22, Northwest Territories

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
 2800, 700 -2nd Street SW
 CALGARY, AB
 CANADA T2P 2W2

Your C.O.C. #: 644511-06-01, 644511-07-01, 644511-08-01, 644511-09-01

Report Date: 2021/12/24
 Report #: R3113899
 Version: 5 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C161010

Received: 2021/08/18, 10:00

Sample Matrix: Soil
 # Samples Received: 34

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Soluble Boron Calculation (1)	3	N/A	2021/08/26		Auto Calc
Soluble Ions Calculation (1)	3	N/A	2021/08/24		Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) No lab extraction date is given for F1BTX & VOC samples that are field preserved with methanol. Extraction date is date sampled unless otherwise stated.

(3) Some soil samples may react with the Cr(VI) spike reducing it to Cr(III). These samples are highly unlikely to contain native hexavalent chromium. Thus a failed spike recovery does not invalidate a negative result on the native sample.

(4) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons



Your P.O. #: 20368099-7000-1001
Your Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
2800, 700 -2nd Street SW
CALGARY, AB
CANADA T2P 2W2

Your C.O.C. #: 644511-06-01, 644511-07-01, 644511-08-01, 644511-09-01

Report Date: 2021/12/24
Report #: R3113899
Version: 5 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C161010

Received: 2021/08/18, 10:00

in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(5) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(6) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key



**AUTHORIZED REPORT
RAPPORT AUTORISÉ**

Bureau Veritas

24 Dec 2021 13:59:26

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Cynny Hagen, Key Account Specialist
Email: Cynny.HAGEN@bureauveritas.com
Phone# (403)735-2273

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BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF071	AEF071		AEF072		
Sampling Date		2021/08/15 09:35	2021/08/15 09:35		2021/08/15 09:27		
COC Number		644511-06-01	644511-06-01		644511-06-01		
	UNITS	TP21-BH19-117-02	TP21-BH19-117-02 Lab-Dup	RDL	TP21-BH19-117-04	RDL	QC Batch
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	110	N/A	10	580	10	A329225
F3 (C16-C34 Hydrocarbons)	mg/kg	430	N/A	50	1300	50	A329225
F4 (C34-C50 Hydrocarbons)	mg/kg	210	N/A	50	610	50	A329225
Reached Baseline at C50	mg/kg	Yes	N/A	N/A	No	N/A	A329225
Physical Properties							
Moisture	%	12	N/A	0.30	38	0.30	A329223
Volatiles							
Xylenes (Total)	mg/kg	1.1	N/A	0.045	10	0.11	A328320
F1 (C6-C10) - BTEX	mg/kg	<10	N/A	10	130	24	A328320
Field Preserved Volatiles							
Benzene	mg/kg	0.098	0.090	0.0050	0.15 (1)	0.012	A330278
Toluene	mg/kg	0.96	0.84	0.050	<0.12 (1)	0.12	A330278
Ethylbenzene	mg/kg	0.14	0.12	0.010	0.18 (1)	0.024	A330278
m & p-Xylene	mg/kg	0.97	0.88	0.040	4.4 (1)	0.097	A330278
o-Xylene	mg/kg	0.17	0.15	0.020	5.5 (1)	0.049	A330278
F1 (C6-C10)	mg/kg	<10	<10	10	140 (1)	24	A330278
Surrogate Recovery (%)							
1,4-Difluorobenzene (sur.)	%	98	99	N/A	97	N/A	A330278
4-Bromofluorobenzene (sur.)	%	95	98	N/A	96	N/A	A330278
D10-o-Xylene (sur.)	%	90	79	N/A	83	N/A	A330278
D4-1,2-Dichloroethane (sur.)	%	98	96	N/A	95	N/A	A330278
O-TERPHENYL (sur.)	%	88	N/A	N/A	102	N/A	A329225
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable (1) Detection limits raised based on sample weight used for analysis.							



BUREAU VERITAS

Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF073	AEF073		AEF074		AEF075		
Sampling Date		2021/08/15 10:37	2021/08/15 10:37		2021/08/15 09:38		2021/08/15 09:36		
COC Number		644511-06-01	644511-06-01		644511-06-01		644511-06-01		
	UNITS	TP21-BH19-117-06	TP21-BH19-117-06 Lab-Dup	RDL	TP21-110-02	RDL	TP21-110-04	RDL	QC Batch

Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	1700	N/A	10	<17 (1)	17	<10	10	A329225
F3 (C16-C34 Hydrocarbons)	mg/kg	320	N/A	50	<50	50	<50	50	A329225
F4 (C34-C50 Hydrocarbons)	mg/kg	93	N/A	50	<50	50	<50	50	A329225
Reached Baseline at C50	mg/kg	Yes	N/A	N/A	Yes	N/A	Yes	N/A	A329225

Physical Properties									
Moisture	%	5.6	5.3	0.30	2.5	0.30	9.0	0.30	A329223

Volatiles									
Xylenes (Total)	mg/kg	2.3	N/A	0.045	<0.045	0.045	<0.045	0.045	A328320
F1 (C6-C10) - BTEX	mg/kg	170	N/A	10	<10	10	<10	10	A328320

Field Preserved Volatiles									
Benzene	mg/kg	0.023 (2)	N/A	0.0050	<0.0050	0.0050	<0.0050	0.0050	A330278
Toluene	mg/kg	0.078	N/A	0.050	<0.050	0.050	<0.050	0.050	A330278
Ethylbenzene	mg/kg	0.34	N/A	0.010	<0.010	0.010	<0.010	0.010	A330278
m & p-Xylene	mg/kg	2.3	N/A	0.040	<0.040	0.040	<0.040	0.040	A330278
o-Xylene	mg/kg	0.089	N/A	0.020	<0.020	0.020	<0.020	0.020	A330278
F1 (C6-C10)	mg/kg	170	N/A	10	<10	10	<10	10	A330278

Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	100	N/A	N/A	99	N/A	98	N/A	A330278
4-Bromofluorobenzene (sur.)	%	99	N/A	N/A	98	N/A	99	N/A	A330278
D10-o-Xylene (sur.)	%	87	N/A	N/A	89	N/A	85	N/A	A330278
D4-1,2-Dichloroethane (sur.)	%	107	N/A	N/A	97	N/A	97	N/A	A330278
O-TERPHENYL (sur.)	%	102	N/A	N/A	97	N/A	97	N/A	A329225

RDL = Reportable Detection Limit
 Lab-Dup = Laboratory Initiated Duplicate
 N/A = Not Applicable
 (1) Detection limit raised due to interferent.
 (2) Qualifying ion outside of acceptance criteria. Results are tentatively identified and potentially biased high.



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Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF076	AEF077	AEF078	AEF079	AEF080	AEF081		
Sampling Date		2021/08/15 10:31	2021/08/15 09:43	2021/08/15 09:44	2021/08/15 10:24	2021/08/15 14:20	2021/08/15 14:22		
COC Number		644511-06-01	644511-06-01	644511-06-01	644511-06-01	644511-07-01	644511-07-01		
	UNITS	TP21-110-06	TP21-109-02	TP21-109-04	TP21-109-06	TP21-76-02	TP21-76-04	RDL	QC Batch

Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	90	<10	200	98	10	A329225
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	<50	<50	<50	460	410	50	A329225
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	<50	<50	<50	99	140	50	A329225
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	A329225

Physical Properties									
Moisture	%	16	3.3	4.3	17	10	32	0.30	A329223

Volatiles									
Xylenes (Total)	mg/kg	<0.045	<0.045	<0.045	<0.045	0.17	<0.045	0.045	A328320
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	<10	<10	10	A328320

Field Preserved Volatiles									
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	<0.0050	0.0063	<0.0050	0.0050	A330278
Toluene	mg/kg	<0.050	<0.050	<0.050	<0.050	0.11	<0.050	0.050	A330278
Ethylbenzene	mg/kg	<0.010	<0.010	<0.010	<0.010	0.015	<0.010	0.010	A330278
m & p-Xylene	mg/kg	<0.040	<0.040	<0.040	<0.040	0.12	<0.040	0.040	A330278
o-Xylene	mg/kg	<0.020	<0.020	<0.020	<0.020	0.045	<0.020	0.020	A330278
F1 (C6-C10)	mg/kg	<10	<10	<10	<10	<10	<10	10	A330278

Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	99	100	98	98	96	97	N/A	A330278
4-Bromofluorobenzene (sur.)	%	96	97	95	96	97	96	N/A	A330278
D10-o-Xylene (sur.)	%	85	92	101	95	84	108	N/A	A330278
D4-1,2-Dichloroethane (sur.)	%	98	97	96	95	94	97	N/A	A330278
O-TERPHENYL (sur.)	%	102	118	100	109	116	113	N/A	A329225

RDL = Reportable Detection Limit
N/A = Not Applicable



BUREAU VERITAS

Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF081	AEF082	AEF083	AEF084		AEF085		
Sampling Date		2021/08/15 14:22	2021/08/15 14:36	2021/08/15 14:24	2021/08/15 14:25		2021/08/15 14:54		
COC Number		644511-07-01	644511-07-01	644511-07-01	644511-07-01		644511-07-01		
	UNITS	TP21-76-04 Lab-Dup	TP21-76-06	TP21-47-01	TP21-47-04	QC Batch	TP21-47-06	RDL	QC Batch
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	81	<10	51	57	A329225	<10	10	A329225
F3 (C16-C34 Hydrocarbons)	mg/kg	330	<50	210	280	A329225	60	50	A329225
F4 (C34-C50 Hydrocarbons)	mg/kg	73	<50	57	82	A329225	<50	50	A329225
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	A329225	Yes	N/A	A329225
Physical Properties									
Moisture	%	N/A	18	11	16	A329223	16	0.30	A329224
Volatiles									
Xylenes (Total)	mg/kg	N/A	<0.045	<0.045	0.052	A328320	<0.045	0.045	A328320
F1 (C6-C10) - BTEX	mg/kg	N/A	<10	<10	<10	A328320	<10	10	A328320
Field Preserved Volatiles									
Benzene	mg/kg	N/A	<0.0050	<0.0050	<0.0050	A330278	<0.0050	0.0050	A330278
Toluene	mg/kg	N/A	<0.050	<0.050	<0.050	A330278	<0.050	0.050	A330278
Ethylbenzene	mg/kg	N/A	<0.010	<0.010	0.016	A330278	<0.010	0.010	A330278
m & p-Xylene	mg/kg	N/A	<0.040	<0.040	0.052	A330278	<0.040	0.040	A330278
o-Xylene	mg/kg	N/A	<0.020	<0.020	<0.020	A330278	<0.020	0.020	A330278
F1 (C6-C10)	mg/kg	N/A	<10	<10	<10	A330278	<10	10	A330278
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	N/A	99	97	97	A330278	96	N/A	A330278
4-Bromofluorobenzene (sur.)	%	N/A	98	97	97	A330278	96	N/A	A330278
D10-o-Xylene (sur.)	%	N/A	93	91	89	A330278	91	N/A	A330278
D4-1,2-Dichloroethane (sur.)	%	N/A	96	96	98	A330278	97	N/A	A330278
O-TERPHENYL (sur.)	%	109	105	104	95	A329225	106	N/A	A329225
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable									



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Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
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Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF086	AEF087	AEF088		AEF089	AEF090		
Sampling Date		2021/08/15 14:47	2021/08/15 14:47	2021/08/15 15:50		2021/08/15 15:50	2021/08/15 16:16		
COC Number		644511-07-01	644511-07-01	644511-07-01		644511-07-01	644511-08-01		
	UNITS	TP21-111-03	TP21-111-04	TP21-111-05	QC Batch	DUP B	TP21-108-02	RDL	QC Batch

Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	220	120	11	A329225	<10	350	10	A329533
F3 (C16-C34 Hydrocarbons)	mg/kg	450	290	<50	A329225	<50	560	50	A329533
F4 (C34-C50 Hydrocarbons)	mg/kg	120	68	<50	A329225	<50	100	50	A329533
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	A329225	Yes	Yes	N/A	A329533

Physical Properties									
Moisture	%	16	15	11	A329224	14	14	0.30	A330257

Volatiles									
Xylenes (Total)	mg/kg	0.19	0.096	<0.045	A328320	<0.045	<0.045	0.045	A328320
F1 (C6-C10) - BTEX	mg/kg	10	<10	<10	A328320	<10	<10	10	A328320

Field Preserved Volatiles									
Benzene	mg/kg	<0.0050	<0.0050	<0.0050	A330278	<0.0050	<0.0050	0.0050	A330278
Toluene	mg/kg	0.089	0.074	<0.050	A330278	<0.050	0.12	0.050	A330278
Ethylbenzene	mg/kg	0.042	0.013	<0.010	A330278	<0.010	<0.010	0.010	A330278
m & p-Xylene	mg/kg	0.16	0.065	<0.040	A330278	<0.040	<0.040	0.040	A330278
o-Xylene	mg/kg	0.030	0.031	<0.020	A330278	<0.020	<0.020	0.020	A330278
F1 (C6-C10)	mg/kg	10	<10	<10	A330278	<10	<10	10	A330278

Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	98	95	96	A330278	96	97	N/A	A330278
4-Bromofluorobenzene (sur.)	%	97	96	97	A330278	97	97	N/A	A330278
D10-o-Xylene (sur.)	%	94	82	108	A330278	105	94	N/A	A330278
D4-1,2-Dichloroethane (sur.)	%	97	96	96	A330278	97	99	N/A	A330278
O-TERPHENYL (sur.)	%	107	110	92	A329225	114	116	N/A	A329533

RDL = Reportable Detection Limit
N/A = Not Applicable



BUREAU
VERITAS

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Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF091	AEF091		AEF092		AEF093	AEF094		
Sampling Date		2021/08/15 16:17	2021/08/15 16:17		2021/08/15 16:18		2021/08/15 16:29	2021/08/15 16:29		
COC Number		644511-08-01	644511-08-01		644511-08-01		644511-08-01	644511-08-01		
	UNITS	TP21-108-04	TP21-108-04 Lab-Dup	RDL	TP21-108-06	RDL	TP21-79-03	TP21-79-04	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	550	N/A	10	<10	10	360	23	10	A329533
F3 (C16-C34 Hydrocarbons)	mg/kg	780	N/A	50	<50	50	560	540	50	A329533
F4 (C34-C50 Hydrocarbons)	mg/kg	140	N/A	50	<50	50	100	200	50	A329533
Reached Baseline at C50	mg/kg	Yes	N/A	N/A	Yes	N/A	Yes	Yes	N/A	A329533

Physical Properties										
Moisture	%	14	14	0.30	19	0.30	14	24	0.30	A330257

Volatiles										
Xylenes (Total)	mg/kg	0.10	N/A	0.045	<0.045	0.045	0.18	0.23	0.045	A328320
F1 (C6-C10) - BTEX	mg/kg	34	N/A	10	<19	19	20	<10	10	A328320

Field Preserved Volatiles										
Benzene	mg/kg	<0.0050	N/A	0.0050	<0.0050	0.0050	0.0071	0.34	0.0050	A330318
Toluene	mg/kg	0.51	N/A	0.050	<0.050	0.050	0.32	0.082	0.050	A330318
Ethylbenzene	mg/kg	0.015	N/A	0.010	<0.010	0.010	0.025	0.058	0.010	A330318
m & p-Xylene	mg/kg	0.059	N/A	0.040	<0.040	0.040	0.097	0.19	0.040	A330318
o-Xylene	mg/kg	0.043	N/A	0.020	<0.020	0.020	0.080	0.042	0.020	A330318
F1 (C6-C10)	mg/kg	35	N/A	10	<19 (1)	19	21	<10	10	A330318

Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	97	N/A	N/A	94	N/A	95	96	N/A	A330318
4-Bromofluorobenzene (sur.)	%	98	N/A	N/A	96	N/A	95	101	N/A	A330318
D10-o-Xylene (sur.)	%	94	N/A	N/A	89	N/A	97	111	N/A	A330318
D4-1,2-Dichloroethane (sur.)	%	97	N/A	N/A	95	N/A	95	105	N/A	A330318
O-TERPHENYL (sur.)	%	127	N/A	N/A	107	N/A	122	104	N/A	A329533

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Detection limit raised due to interferent.



BUREAU VERITAS

Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF095	AEF096		AEF097			AEF098		
Sampling Date		2021/08/15 16:32	2021/08/15 11:27		2021/08/15 11:30			2021/08/15 09:56		
COC Number		644511-08-01	644511-08-01		644511-08-01			644511-08-01		
	UNITS	TP21-79-05	TP21-46-02	RDL	TP21-46-04	RDL	QC Batch	TP21-78-01	RDL	QC Batch

Ext. Pet. Hydrocarbon										
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	25	10	120 (1)	28	A329533	43	10	A330263
F3 (C16-C34 Hydrocarbons)	mg/kg	<50	<50	50	2300 (1)	140	A329533	610	50	A330263
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	<50	50	1100 (1)	140	A329533	250	50	A330263
Reached Baseline at C50	mg/kg	Yes	Yes	N/A	No	N/A	A329533	Yes	N/A	A330263

Physical Properties										
Moisture	%	16	4.4	0.30	65	0.30	A330257	31	0.30	A330257

Volatiles										
Xylenes (Total)	mg/kg	<0.045	<0.045	0.045	1.6	0.17	A328348	0.10	0.090	A328348
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	48	38	A328348	<20	20	A328348

Field Preserved Volatiles										
Benzene	mg/kg	0.013	<0.0050	0.0050	<0.017 (2)	0.017	A330318	<0.0090 (2)	0.0090	A330318
Toluene	mg/kg	<0.050	<0.050	0.050	<0.050 (2)	0.050	A330318	<0.050 (2)	0.050	A330318
Ethylbenzene	mg/kg	0.020	<0.010	0.010	0.25 (3)	0.038	A330318	0.047 (3)	0.020	A330318
m & p-Xylene	mg/kg	<0.040	<0.040	0.040	1.0 (4)	0.15	A330318	0.10 (3)	0.080	A330318
o-Xylene	mg/kg	<0.020	<0.020	0.020	0.58 (3)	0.077	A330318	<0.040 (3)	0.040	A330318
F1 (C6-C10)	mg/kg	<10	<10	10	50 (3)	38	A330318	<20 (3)	20	A330318

Surrogate Recovery (%)										
1,4-Difluorobenzene (sur.)	%	96	94	N/A	95	N/A	A330318	95	N/A	A330318
4-Bromofluorobenzene (sur.)	%	95	96	N/A	97	N/A	A330318	96	N/A	A330318
D10-o-Xylene (sur.)	%	83	92	N/A	89	N/A	A330318	90	N/A	A330318
D4-1,2-Dichloroethane (sur.)	%	92	95	N/A	95	N/A	A330318	95	N/A	A330318
O-TERPHENYL (sur.)	%	105	108	N/A	105	N/A	A329533	112	N/A	A330263

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.
(2) Detection limit reported based on MDL and sample weight used for analysis.
(3) Detection limits raised based on sample weight used for analysis.
(4) Qualifying ion outside of acceptance criteria. Results are tentatively identified and potentially biased high. Detection limits raised based on sample weight used for analysis.



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VERITAS

Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF099			AEF100		AEF101		AEF102		
Sampling Date		2021/08/15 10:02			2021/08/15 11:09		2021/08/15 11:08		2021/08/15 15:16		
COC Number		644511-08-01			644511-09-01		644511-09-01		644511-09-01		
	UNITS	TP21-78-04	RDL	QC Batch	TP21-77-01	RDL	TP21-77-04	RDL	TP21-45-03	RDL	QC Batch

Ext. Pet. Hydrocarbon											
F2 (C10-C16 Hydrocarbons)	mg/kg	250 (1)	23	A330263	18	10	110 (1)	25	190 (1)	30	A329533
F3 (C16-C34 Hydrocarbons)	mg/kg	3400 (1)	120	A330263	110	50	2500 (1)	130	5400 (1)	150	A329533
F4 (C34-C50 Hydrocarbons)	mg/kg	1900 (1)	120	A330263	54	50	1100 (1)	130	2600 (1)	150	A329533
Reached Baseline at C50	mg/kg	No	N/A	A330263	Yes	N/A	No	N/A	No	N/A	A329533

Physical Properties											
Moisture	%	57	0.30	A330257	14	0.30	60	0.30	67	0.30	A330257

Volatiles											
Xylenes (Total)	mg/kg	<0.14	0.14	A328348	<0.045	0.045	<0.15	0.15	<0.23	0.23	A328348
F1 (C6-C10) - BTEX	mg/kg	<20	20	A328348	<10	10	27	10	40	13	A328348

Field Preserved Volatiles											
Benzene	mg/kg	0.020 (2)	0.016	A330318	<0.0050	0.0050	0.020 (2)	0.017	0.036 (2)	0.026	A330318
Toluene	mg/kg	<0.050 (3)	0.050	A330318	<0.050	0.050	<0.050 (3)	0.050	2.2 (2)	0.26	A330318
Ethylbenzene	mg/kg	<0.031 (2)	0.031	A330318	<0.010	0.010	<0.033 (3)	0.033	<0.049 (3)	0.049	A330318
m & p-Xylene	mg/kg	<0.12 (2)	0.12	A330318	<0.040	0.040	<0.14 (2)	0.14	<0.20 (2)	0.20	A330318
o-Xylene	mg/kg	<0.062 (2)	0.062	A330318	<0.020	0.020	<0.069 (2)	0.069	<0.10 (2)	0.10	A330318
F1 (C6-C10)	mg/kg	<20 (3)	20	A330318	<10	10	27 (3)	10	42 (2)	13	A330318

Surrogate Recovery (%)											
1,4-Difluorobenzene (sur.)	%	94	N/A	A330318	95	N/A	94	N/A	96	N/A	A330318
4-Bromofluorobenzene (sur.)	%	97	N/A	A330318	96	N/A	99	N/A	95	N/A	A330318
D10-o-Xylene (sur.)	%	80	N/A	A330318	93	N/A	88	N/A	89	N/A	A330318
D4-1,2-Dichloroethane (sur.)	%	96	N/A	A330318	94	N/A	95	N/A	97	N/A	A330318
O-TERPHENYL (sur.)	%	100	N/A	A330263	106	N/A	101	N/A	100	N/A	A329533

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Detection limits raised due to high moisture content, sample contains => 50% moisture.
(2) Detection limits raised based on sample weight used for analysis.
(3) Detection limit reported based on MDL and sample weight used for analysis.



AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEF103		AEF104		
Sampling Date		2021/08/15 15:16		2021/08/15 15:17		
COC Number		644511-09-01		644511-09-01		
	UNITS	TP21-45-04	RDL	TP21-45-05	RDL	QC Batch
Ext. Pet. Hydrocarbon						
F2 (C10-C16 Hydrocarbons)	mg/kg	110 (1)	38	<10	10	A329533
F3 (C16-C34 Hydrocarbons)	mg/kg	2900 (1)	190	<50	50	A329533
F4 (C34-C50 Hydrocarbons)	mg/kg	1400 (1)	190	<50	50	A329533
Reached Baseline at C50	mg/kg	No	N/A	Yes	N/A	A329533
Physical Properties						
Moisture	%	74	0.30	16	0.30	A330257
Volatiles						
Xylenes (Total)	mg/kg	<0.28	0.28	<0.045	0.045	A328348
F1 (C6-C10) - BTEX	mg/kg	<64	64	<10	10	A328348
Field Preserved Volatiles						
Benzene	mg/kg	<0.028 (2)	0.028	<0.0050	0.0050	A330318
Toluene	mg/kg	21 (3)	0.32	<0.050	0.050	A330318
Ethylbenzene	mg/kg	<0.061 (2)	0.061	<0.010	0.010	A330318
m & p-Xylene	mg/kg	<0.25 (3)	0.25	<0.040	0.040	A330318
o-Xylene	mg/kg	<0.13 (3)	0.13	<0.020	0.020	A330318
F1 (C6-C10)	mg/kg	64 (3)	64	<10	10	A330318
Surrogate Recovery (%)						
1,4-Difluorobenzene (sur.)	%	96	N/A	95	N/A	A330318
4-Bromofluorobenzene (sur.)	%	96	N/A	96	N/A	A330318
D10-o-Xylene (sur.)	%	93	N/A	89	N/A	A330318
D4-1,2-Dichloroethane (sur.)	%	96	N/A	96	N/A	A330318
O-TERPHENYL (sur.)	%	122	N/A	105	N/A	A329533
RDL = Reportable Detection Limit N/A = Not Applicable (1) Detection limits raised due to high moisture content, sample contains => 50% moisture. (2) Detection limit reported based on MDL and sample weight used for analysis. (3) Detection limits raised based on sample weight used for analysis.						



BUREAU VERITAS

Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 REGULATED METALS - SOILS (SOIL)

Bureau Veritas ID		AEF071		AEF072		AEF072	AEF073		
Sampling Date		2021/08/15 09:35		2021/08/15 09:27		2021/08/15 09:27	2021/08/15 10:37		
COC Number		644511-06-01		644511-06-01		644511-06-01	644511-06-01		
	UNITS	TP21-BH19-117-02	RDL	TP21-BH19-117-04	RDL	TP21-BH19-117-04 Lab-Dup	TP21-BH19-117-06	RDL	QC Batch

Calculated Parameters									
Calculated Boron (B)	mg/kg	0.30	0.029	0.15	0.070	N/A	0.66	0.035	A327906
Elements									
Hex. Chromium (Cr 6+)	mg/kg	<0.080	0.080	<0.080	0.080	N/A	<0.080	0.080	A329767
Soluble Parameters									
Soluble Boron (B)	mg/L	1.0	0.10	0.22	0.10	N/A	1.9	0.10	A331639
Saturation %	%	29	N/A	70	N/A	69	35	N/A	A330662
Soluble Sulphate (SO4)	mg/L	540	5.0	2500	5.0	N/A	630	5.0	A331639
Elements									
Total Antimony (Sb)	mg/kg	5.5	0.50	<0.50	0.50	N/A	0.84	0.50	A331374
Total Arsenic (As)	mg/kg	8.2	1.0	5.1	1.0	N/A	5.3	1.0	A331374
Total Barium (Ba)	mg/kg	3300	1.0	230	1.0	N/A	1100	1.0	A331374
Total Beryllium (Be)	mg/kg	<0.40	0.40	<0.40	0.40	N/A	<0.40	0.40	A331374
Total Cadmium (Cd)	mg/kg	0.42	0.050	0.068	0.050	N/A	0.15	0.050	A331374
Total Chromium (Cr)	mg/kg	24	1.0	17	1.0	N/A	19	1.0	A331374
Total Cobalt (Co)	mg/kg	4.6	0.50	3.5	0.50	N/A	3.9	0.50	A331374
Total Copper (Cu)	mg/kg	120	1.0	4.9	1.0	N/A	11	1.0	A331374
Total Lead (Pb)	mg/kg	480	0.50	7.1	0.50	N/A	34	0.50	A331374
Total Mercury (Hg)	mg/kg	0.066	0.050	0.057	0.050	N/A	<0.050	0.050	A331374
Total Molybdenum (Mo)	mg/kg	1.5	0.40	0.78	0.40	N/A	0.71	0.40	A331374
Total Nickel (Ni)	mg/kg	17	1.0	12	1.0	N/A	15	1.0	A331374
Total Selenium (Se)	mg/kg	<0.50	0.50	<0.50	0.50	N/A	<0.50	0.50	A331374
Total Silver (Ag)	mg/kg	<0.20	0.20	<0.20	0.20	N/A	<0.20	0.20	A331374
Total Thallium (Tl)	mg/kg	<0.10	0.10	<0.10	0.10	N/A	<0.10	0.10	A331374
Total Tin (Sn)	mg/kg	5.6	1.0	<1.0	1.0	N/A	<1.0	1.0	A331374
Total Uranium (U)	mg/kg	0.34	0.20	0.35	0.20	N/A	0.35	0.20	A331374
Total Vanadium (V)	mg/kg	14	1.0	19	1.0	N/A	14	1.0	A331374
Total Zinc (Zn)	mg/kg	140	10	24	10	N/A	63	10	A331374

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable



BUREAU
VERITAS

Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

RESULTS OF CHEMICAL ANALYSES OF SOIL

Bureau Veritas ID		AEF071		AEF072	AEF072		AEF073		
Sampling Date		2021/08/15 09:35		2021/08/15 09:27	2021/08/15 09:27		2021/08/15 10:37		
COC Number		644511-06-01		644511-06-01	644511-06-01		644511-06-01		
	UNITS	TP21-BH19-117-02	RDL	TP21-BH19-117-04	TP21-BH19-117-04 Lab-Dup	RDL	TP21-BH19-117-06	RDL	QC Batch

Calculated Parameters									
Soluble Nitrate (N)	mg/L	0.25	0.20	<0.20	N/A	0.20	<0.20	0.20	A331729
Calculated Sulphate (SO4)	mg/kg	150	1.4	1800	N/A	3.5	220	1.7	A328283
Calculated Nitrate (N)	mg/kg	0.070	0.057	<0.14	N/A	0.14	<0.069	0.069	A328283
Soluble Parameters									
Soluble Nitrite (N)	mg/L	<0.20	0.20	<0.20	<0.20	0.20	<0.20	0.20	A331840
Soluble Nitrate plus Nitrite (N)	mg/L	0.25	0.20	<0.20	<0.20	0.20	<0.20	0.20	A331840

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable



BUREAU
VERITAS

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PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AEF072	AEF094			AEF097		
Sampling Date		2021/08/15 09:27	2021/08/15 16:29			2021/08/15 11:30		
COC Number		644511-06-01	644511-08-01			644511-08-01		
	UNITS	TP21-BH19-117-04	TP21-79-04	RDL	QC Batch	TP21-46-04	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F3 (C16-C34 Hydrocarbons)	mg/kg	N/A	500	71	A454259	N/A	71	A454259
F3A (C16-C22)	mg/kg	N/A	<50	50	A457151	250 (1)	140	A330260
F3B (C22-C34)	mg/kg	N/A	500	50	A457151	2000 (1)	140	A330260
F2% (BIC)	mg/kg	N/A	4.4	N/A	A454259	5.7	N/A	A328350
F4G-SG (Heavy Hydrocarbons-Grav.)	mg/kg	4400	N/A	500	A331147	5200	1400	A331147
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	N/A	104	N/A	A457151	N/A	N/A	N/A
RDL = Reportable Detection Limit N/A = Not Applicable (1) Detection limits raised due to high moisture content, sample contains => 50% moisture.								

Bureau Veritas ID		AEF099			AEF101		AEF102		AEF103		
Sampling Date		2021/08/15 10:02			2021/08/15 11:08		2021/08/15 15:16		2021/08/15 15:16		
COC Number		644511-08-01			644511-09-01		644511-09-01		644511-09-01		
	UNITS	TP21-78-04	RDL	QC Batch	TP21-77-04	RDL	TP21-45-03	RDL	TP21-45-04	RDL	QC Batch
Ext. Pet. Hydrocarbon											
F3A (C16-C22)	mg/kg	N/A	140	A330260	230 (1)	130	N/A	130	N/A	130	A330260
F3B (C22-C34)	mg/kg	N/A	140	A330260	2200 (1)	130	N/A	130	N/A	130	A330260
F2% (BIC)	mg/kg	N/A	N/A	A328350	4.7	N/A	N/A	N/A	N/A	N/A	A328350
F4G-SG (Heavy Hydrocarbons-Grav.)	mg/kg	6100	500	A332744	5200 (2)	1300	13000 (2)	1500	4800 (2)	1900	A331147
RDL = Reportable Detection Limit N/A = Not Applicable (1) Detection limits raised due to high moisture content, sample contains => 50% moisture. (2) Detection limits raised due to high moisture content, samples contain => 50% moisture.											



BUREAU
VERITAS

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GOLDER ASSOCIATES LTD.
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Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		AEF071	AEF072	AEF073		
Sampling Date		2021/08/15 09:35	2021/08/15 09:27	2021/08/15 10:37		
COC Number		644511-06-01	644511-06-01	644511-06-01		
	UNITS	TP21-BH19-117-02	TP21-BH19-117-04	TP21-BH19-117-06	RDL	QC Batch
Elements						
Total Fusion Barium (Ba)	mg/kg	13000	1500	2000	50	A333687
RDL = Reportable Detection Limit						



GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	6.7°C
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Version #3: Report reissued to include ACTR form in the report. NO data changed.

Version #4: Client sample ID was changed with "TP21 "as per client request received 2021/10/07.

Version #5: Report reissued to include results for F3A/F3B/Chromatogram on sample TP21-79-04/AEF094, as per client request received 2021/12/16.

HYDROCARBON RESEMBLANCE

The reported hydrocarbon resemblance was obtained by visual comparison of the sample chromatogram with a library of reference product chromatograms. Since variables such as the degree and type of weathering and the presence of non-petrogenic hydrocarbons cannot be duplicated in reference spectra, the resemblance information must be regarded as approximate and qualitative and as such, Bureau Veritas Laboratories can assume no liability for any conclusions drawn from these data.

Sample AEF094 [TP21-79-04] : The CCME F2-F4 chromatographic peak profile is consistent with biogenic organic material (e.g. peat). Chromatograms of biogenic organic material may contain peak patterns spanning the C18 to C50 range, but they are most commonly characterized by a profile of unevenly distributed sharp peaks between C28 and C34. The impacts are not consistent with a petroleum product or crude oil.

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C161010
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Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A329223	ARV	Method Blank	Moisture	2021/08/24	<0.30		%	
A329223	ARV	RPD [AEF073-01]	Moisture	2021/08/24	5.5		%	20
A329224	ARV	Method Blank	Moisture	2021/08/24	<0.30		%	
A329224	ARV	RPD	Moisture	2021/08/24	8.1		%	20
A329225	SEH	Matrix Spike [AEF081-01]	O-TERPHENYL (sur.)	2021/08/25		123	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		112	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		125	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		123	%	60 - 140
A329225	SEH	Spiked Blank	O-TERPHENYL (sur.)	2021/08/25		102	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		97	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		106	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/25		102	%	60 - 140
A329225	SEH	Method Blank	O-TERPHENYL (sur.)	2021/08/25		105	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2021/08/25	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/25	<50		mg/kg	
A329225	SEH	RPD [AEF081-01]	F2 (C10-C16 Hydrocarbons)	2021/08/25	20		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/25	22		%	40
			F4 (C34-C50 Hydrocarbons)	2021/08/25	NC		%	40
A329533	GG3	Matrix Spike	O-TERPHENYL (sur.)	2021/08/24		105	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/24		86	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/24		NC	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/24		98	%	60 - 140
A329533	GG3	Spiked Blank	O-TERPHENYL (sur.)	2021/08/24		106	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/24		108	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/24		111	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2021/08/24		107	%	60 - 140
A329533	GG3	Method Blank	O-TERPHENYL (sur.)	2021/08/24		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/24	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2021/08/24	<50		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2021/08/24	<50		mg/kg	
A329533	GG3	RPD	F2 (C10-C16 Hydrocarbons)	2021/08/24	22		%	40
			F3 (C16-C34 Hydrocarbons)	2021/08/24	30		%	40
			F4 (C34-C50 Hydrocarbons)	2021/08/24	29		%	40
A329767	KWE	Matrix Spike	Hex. Chromium (Cr 6+)	2021/08/24		108	%	75 - 125
A329767	KWE	Spiked Blank	Hex. Chromium (Cr 6+)	2021/08/24		111	%	80 - 120
A329767	KWE	Method Blank	Hex. Chromium (Cr 6+)	2021/08/24	<0.080		mg/kg	
A329767	KWE	RPD	Hex. Chromium (Cr 6+)	2021/08/24	NC		%	35
A330257	SVI	Method Blank	Moisture	2021/08/25	<0.30		%	
A330257	SVI	RPD [AEF091-01]	Moisture	2021/08/25	0.74		%	20
A330260	GG3	Matrix Spike	F3A (C16-C22)	2021/08/25		87	%	60 - 140
			F3B (C22-C34)	2021/08/25		58 (1)	%	60 - 140
A330260	GG3	Spiked Blank	F3A (C16-C22)	2021/08/25		96	%	60 - 140
			F3B (C22-C34)	2021/08/25		100	%	60 - 140
A330260	GG3	Method Blank	F3A (C16-C22)	2021/08/25	<50		mg/kg	
			F3B (C22-C34)	2021/08/25	<50		mg/kg	
A330260	GG3	RPD	F3A (C16-C22)	2021/08/25	NC		%	40
			F3B (C22-C34)	2021/08/25	18		%	40
A330263	HAZ	Matrix Spike	O-TERPHENYL (sur.)	2021/08/25		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		88	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		91	%	60 - 140



BUREAU VERITAS

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GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A330263	HAZ	Spiked Blank	F4 (C34-C50 Hydrocarbons)	2021/08/25		92	%	60 - 140
			O-TERPHENYL (sur.)	2021/08/25		96	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25		90	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2021/08/25		94	%	60 - 140
A330263	HAZ	Method Blank	F4 (C34-C50 Hydrocarbons)	2021/08/25		94	%	60 - 140
			O-TERPHENYL (sur.)	2021/08/25		103	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2021/08/25	<10	mg/kg		
			F3 (C16-C34 Hydrocarbons)	2021/08/25	<50	mg/kg		
A330263	HAZ	RPD	F4 (C34-C50 Hydrocarbons)	2021/08/25	<50	mg/kg		
			F2 (C10-C16 Hydrocarbons)	2021/08/25	NC	%	40	
			F3 (C16-C34 Hydrocarbons)	2021/08/25	NC	%	40	
A330278	DO1	Matrix Spike [AEF071-02]	F4 (C34-C50 Hydrocarbons)	2021/08/25	NC	%	40	
			1,4-Difluorobenzene (sur.)	2021/08/25		101	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/25		100	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/25		95	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/25		98	%	50 - 140
			Benzene	2021/08/25		99	%	50 - 140
			Toluene	2021/08/25		100	%	50 - 140
			Ethylbenzene	2021/08/25		100	%	50 - 140
			m & p-Xylene	2021/08/25		101	%	50 - 140
			o-Xylene	2021/08/25		102	%	50 - 140
A330278	DO1	Spiked Blank	F1 (C6-C10)	2021/08/25		96	%	60 - 140
			1,4-Difluorobenzene (sur.)	2021/08/25		97	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/25		98	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/25		85	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/25		101	%	50 - 140
			Benzene	2021/08/25		83	%	60 - 130
			Toluene	2021/08/25		87	%	60 - 130
			Ethylbenzene	2021/08/25		87	%	60 - 130
			m & p-Xylene	2021/08/25		89	%	60 - 130
			o-Xylene	2021/08/25		81	%	60 - 130
A330278	DO1	Method Blank	F1 (C6-C10)	2021/08/25		106	%	60 - 140
			1,4-Difluorobenzene (sur.)	2021/08/25		99	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/25		97	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/25		83	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/25		97	%	50 - 140
			Benzene	2021/08/25	<0.0050	mg/kg		
			Toluene	2021/08/25	<0.050	mg/kg		
			Ethylbenzene	2021/08/25	<0.010	mg/kg		
			m & p-Xylene	2021/08/25	<0.040	mg/kg		
			o-Xylene	2021/08/25	<0.020	mg/kg		
A330278	DO1	RPD [AEF071-02]	F1 (C6-C10)	2021/08/25	<10	mg/kg		
			Benzene	2021/08/25	8.9	%	50	
			Toluene	2021/08/25	14	%	50	
			Ethylbenzene	2021/08/25	16	%	50	
			m & p-Xylene	2021/08/25	9.7	%	50	
			o-Xylene	2021/08/25	11	%	50	
A330318	RSU	Matrix Spike	F1 (C6-C10)	2021/08/25	NC	%	30	
			1,4-Difluorobenzene (sur.)	2021/08/24		94	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/24		98	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/24		82	%	50 - 140



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Bureau Veritas Job #: C161010
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Site Location: Camp Farewell and Unipkat I-22, Northwest
Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A330318	RSU	Spiked Blank	D4-1,2-Dichloroethane (sur.)	2021/08/24		92	%	50 - 140
			Benzene	2021/08/24		82	%	50 - 140
			Toluene	2021/08/24		85	%	50 - 140
			Ethylbenzene	2021/08/24		86	%	50 - 140
			m & p-Xylene	2021/08/24		84	%	50 - 140
			o-Xylene	2021/08/24		85	%	50 - 140
			F1 (C6-C10)	2021/08/24		86	%	60 - 140
			1,4-Difluorobenzene (sur.)	2021/08/24		85	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/24		88	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/24		74	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/24		91	%	50 - 140
			Benzene	2021/08/24		67	%	60 - 130
			Toluene	2021/08/24		69	%	60 - 130
			Ethylbenzene	2021/08/24		66	%	60 - 130
A330318	RSU	Method Blank	m & p-Xylene	2021/08/24		66	%	60 - 130
			o-Xylene	2021/08/24		62	%	60 - 130
			F1 (C6-C10)	2021/08/24		96	%	60 - 140
			1,4-Difluorobenzene (sur.)	2021/08/24		93	%	50 - 140
			4-Bromofluorobenzene (sur.)	2021/08/24		97	%	50 - 140
			D10-o-Xylene (sur.)	2021/08/24		81	%	50 - 140
			D4-1,2-Dichloroethane (sur.)	2021/08/24		96	%	50 - 140
			Benzene	2021/08/24	<0.0050		mg/kg	
			Toluene	2021/08/24	<0.050		mg/kg	
			Ethylbenzene	2021/08/24	<0.010		mg/kg	
			m & p-Xylene	2021/08/24	<0.040		mg/kg	
			o-Xylene	2021/08/24	<0.020		mg/kg	
			F1 (C6-C10)	2021/08/24	<10		mg/kg	
			A330318	RSU	RPD	Benzene	2021/08/24	NC
Toluene	2021/08/24	NC					%	50
Ethylbenzene	2021/08/24	NC					%	50
m & p-Xylene	2021/08/24	NC					%	50
o-Xylene	2021/08/24	2.9					%	50
F1 (C6-C10)	2021/08/24	2.1					%	30
A330662	STB	QC Standard	Saturation %	2021/08/25		100	%	75 - 125
A330662	STB	RPD	Saturation %	2021/08/25	0.61		%	12
			Saturation %	2021/08/25	0.69		%	12
A330662	STB	RPD [AEF072-03]	Saturation %	2021/08/25	1.8		%	12
A331147	JB9	Spiked Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/25		109	%	60 - 140
A331147	JB9	Method Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/25	<500		mg/kg	
A331374	KH2	Matrix Spike	Total Antimony (Sb)	2021/08/25		106	%	75 - 125
			Total Arsenic (As)	2021/08/25		122	%	75 - 125
			Total Barium (Ba)	2021/08/25		NC	%	75 - 125
			Total Beryllium (Be)	2021/08/25		117	%	75 - 125
			Total Cadmium (Cd)	2021/08/25		112	%	75 - 125
			Total Chromium (Cr)	2021/08/25		142 (1)	%	75 - 125
			Total Cobalt (Co)	2021/08/25		119	%	75 - 125
			Total Copper (Cu)	2021/08/25		122	%	75 - 125
			Total Lead (Pb)	2021/08/25		114	%	75 - 125
			Total Mercury (Hg)	2021/08/25		114	%	75 - 125
			Total Molybdenum (Mo)	2021/08/25		119	%	75 - 125
			Total Nickel (Ni)	2021/08/25		132 (1)	%	75 - 125



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Bureau Veritas Job #: C161010
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GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
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Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits			
A331374	KH2	QC Standard	Total Selenium (Se)	2021/08/25		116	%	75 - 125			
			Total Silver (Ag)	2021/08/25		113	%	75 - 125			
			Total Thallium (Tl)	2021/08/25		110	%	75 - 125			
			Total Tin (Sn)	2021/08/25		112	%	75 - 125			
			Total Uranium (U)	2021/08/25		120	%	75 - 125			
			Total Vanadium (V)	2021/08/25		177 (1)	%	75 - 125			
			Total Zinc (Zn)	2021/08/25		123	%	75 - 125			
			Total Antimony (Sb)	2021/08/25		130	%	15 - 182			
			Total Arsenic (As)	2021/08/25		125	%	53 - 147			
			Total Barium (Ba)	2021/08/25		117	%	80 - 119			
			Total Cadmium (Cd)	2021/08/25		115	%	72 - 128			
			Total Chromium (Cr)	2021/08/25		119	%	59 - 141			
			Total Cobalt (Co)	2021/08/25		118	%	58 - 142			
			Total Copper (Cu)	2021/08/25		114	%	83 - 117			
			Total Lead (Pb)	2021/08/25		117	%	79 - 121			
			Total Molybdenum (Mo)	2021/08/25		124	%	67 - 133			
			Total Nickel (Ni)	2021/08/25		118	%	79 - 121			
			Total Silver (Ag)	2021/08/25		117	%	47 - 153			
			A331374	KH2	Spiked Blank	Total Tin (Sn)	2021/08/25		113	%	67 - 133
						Total Uranium (U)	2021/08/25		104	%	77 - 123
Total Vanadium (V)	2021/08/25					115	%	79 - 121			
Total Zinc (Zn)	2021/08/25					109	%	79 - 121			
Total Antimony (Sb)	2021/08/25					101	%	80 - 120			
Total Arsenic (As)	2021/08/25					110	%	80 - 120			
Total Barium (Ba)	2021/08/25					107	%	80 - 120			
Total Beryllium (Be)	2021/08/25					108	%	80 - 120			
Total Cadmium (Cd)	2021/08/25					108	%	80 - 120			
Total Chromium (Cr)	2021/08/25					113	%	80 - 120			
Total Cobalt (Co)	2021/08/25					115	%	80 - 120			
Total Copper (Cu)	2021/08/25					117	%	80 - 120			
Total Lead (Pb)	2021/08/25					109	%	80 - 120			
Total Mercury (Hg)	2021/08/25					112	%	80 - 120			
Total Molybdenum (Mo)	2021/08/25					107	%	80 - 120			
Total Nickel (Ni)	2021/08/25					114	%	80 - 120			
Total Selenium (Se)	2021/08/25					115	%	80 - 120			
Total Silver (Ag)	2021/08/25					110	%	80 - 120			
A331374	KH2	Method Blank				Total Thallium (Tl)	2021/08/25		108	%	80 - 120
						Total Tin (Sn)	2021/08/25		102	%	80 - 120
			Total Uranium (U)	2021/08/25		115	%	80 - 120			
			Total Vanadium (V)	2021/08/25		114	%	80 - 120			
			Total Zinc (Zn)	2021/08/25		121 (1)	%	80 - 120			
			Total Antimony (Sb)	2021/08/25	<0.50		mg/kg				
			Total Arsenic (As)	2021/08/25	<1.0		mg/kg				
			Total Barium (Ba)	2021/08/25	<1.0		mg/kg				
			Total Beryllium (Be)	2021/08/25	<0.40		mg/kg				
			Total Cadmium (Cd)	2021/08/25	<0.050		mg/kg				
			Total Chromium (Cr)	2021/08/25	<1.0		mg/kg				
			Total Cobalt (Co)	2021/08/25	<0.50		mg/kg				
			Total Copper (Cu)	2021/08/25	<1.0		mg/kg				
Total Lead (Pb)	2021/08/25	<0.50		mg/kg							
Total Mercury (Hg)	2021/08/25	<0.050		mg/kg							



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Territories
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits			
A331374	KH2	RPD	Total Molybdenum (Mo)	2021/08/25	<0.40		mg/kg				
			Total Nickel (Ni)	2021/08/25	<1.0		mg/kg				
			Total Selenium (Se)	2021/08/25	<0.50		mg/kg				
			Total Silver (Ag)	2021/08/25	<0.20		mg/kg				
			Total Thallium (Tl)	2021/08/25	<0.10		mg/kg				
			Total Tin (Sn)	2021/08/25	<1.0		mg/kg				
			Total Uranium (U)	2021/08/25	<0.20		mg/kg				
			Total Vanadium (V)	2021/08/25	<1.0		mg/kg				
			Total Zinc (Zn)	2021/08/25	<10		mg/kg				
			Total Antimony (Sb)	2021/08/25	NC		%	30			
			Total Arsenic (As)	2021/08/25	8.3		%	30			
			Total Barium (Ba)	2021/08/25	0.73		%	35			
			Total Beryllium (Be)	2021/08/25	7.1		%	30			
			Total Cadmium (Cd)	2021/08/25	2.9		%	30			
			Total Chromium (Cr)	2021/08/25	19		%	30			
			Total Cobalt (Co)	2021/08/25	2.2		%	30			
			Total Copper (Cu)	2021/08/25	1.9		%	30			
			Total Lead (Pb)	2021/08/25	2.8		%	35			
			Total Mercury (Hg)	2021/08/25	NC		%	35			
			Total Molybdenum (Mo)	2021/08/25	1.4		%	35			
			Total Nickel (Ni)	2021/08/25	10		%	30			
			Total Selenium (Se)	2021/08/25	NC		%	30			
			Total Silver (Ag)	2021/08/25	NC		%	35			
			Total Thallium (Tl)	2021/08/25	1.8		%	30			
			Total Tin (Sn)	2021/08/25	NC		%	35			
			Total Uranium (U)	2021/08/25	2.6		%	30			
			Total Vanadium (V)	2021/08/25	4.7		%	30			
			Total Zinc (Zn)	2021/08/25	15		%	30			
			A331639	MAP	Matrix Spike	Soluble Boron (B)	2021/08/25		104	%	75 - 125
			A331639	MAP	QC Standard	Soluble Sulphate (SO4)	2021/08/25		116	%	75 - 125
			A331639	MAP	Spiked Blank	Soluble Boron (B)	2021/08/25		103	%	80 - 120
			A331639	MAP	Method Blank	Soluble Boron (B)	2021/08/25	<0.10		mg/L	
			Soluble Sulphate (SO4)	2021/08/25	<5.0		mg/L				
A331639	MAP	RPD	Soluble Boron (B)	2021/08/25	20		%	30			
A331840	SKM	Matrix Spike [AEF072-03]	Soluble Nitrite (N)	2021/08/25		86	%	75 - 125			
			Soluble Nitrate plus Nitrite (N)	2021/08/25		95	%	75 - 125			
A331840	SKM	QC Standard	Soluble Nitrate plus Nitrite (N)	2021/08/25		90	%	75 - 125			
A331840	SKM	Spiked Blank	Soluble Nitrite (N)	2021/08/27		100	%	80 - 120			
			Soluble Nitrate plus Nitrite (N)	2021/08/27		92	%	80 - 120			
A331840	SKM	Method Blank	Soluble Nitrite (N)	2021/08/25	<0.20		mg/L				
			Soluble Nitrate plus Nitrite (N)	2021/08/25	<0.20		mg/L				
A331840	SKM	RPD [AEF072-03]	Soluble Nitrite (N)	2021/08/25	NC		%	30			
			Soluble Nitrate plus Nitrite (N)	2021/08/25	NC		%	30			
A332744	JB9	Spiked Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/26		105	%	60 - 140			
A332744	JB9	Method Blank	F4G-SG (Heavy Hydrocarbons-Grav.)	2021/08/26	<500		mg/kg				
A333687	JAB	QC Standard	Total Fusion Barium (Ba)	2021/08/29		122	%	75 - 125			
A333687	JAB	Spiked Blank	Total Fusion Barium (Ba)	2021/08/29		116	%	75 - 125			
A333687	JAB	Method Blank	Total Fusion Barium (Ba)	2021/08/29	<50		mg/kg				
A333687	JAB	RPD	Total Fusion Barium (Ba)	2021/08/29	18		%	35			
A457151	MHF	Spiked Blank	O-TERPHENYL (sur.)	2021/08/24		106	%	60 - 140			
			F3A (C16-C22)	2021/08/24		109	%	60 - 140			



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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A457151	MHF	Method Blank	F3B (C22-C34)	2021/08/24		112	%	60 - 140
			O-TERPHENYL (sur.)	2021/08/24		103	%	60 - 140
			F3A (C16-C22)	2021/08/24	<50		mg/kg	
			F3B (C22-C34)	2021/08/24	<50		mg/kg	
<p>Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.</p> <p>Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.</p> <p>QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.</p> <p>Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.</p> <p>Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.</p> <p>Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.</p> <p>NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)</p> <p>NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).</p> <p>(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.</p>								



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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Gita Pokhrel, Laboratory Supervisor

Janet Gao, B.Sc., QP, Supervisor, Organics

Sandy Yuan, M.Sc., QP, Scientific Specialist

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
1 of 4	644511-06-01
2 of 4	644511-07-01
3 of 4	644511-08-01
4 of 4	644511-09-01

COOLER OBSERVATIONS:			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		
ICE PRESENT	/		

MAXXAM JOB#:			
JHR 2021/08/18			
6160122-0161010			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			
ICE PRESENT			

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
Jose Mercano	2021/08/18	10:00 AM



ADDITIONAL COOLER TEMPERATURE RECORD CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

mca1

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 1 1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 3 2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 2 3 3
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 3 4 4
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 2 3 2
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 1
INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT

MAXXAM JOB#: MCO 202108123

C16077 C161010

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT
CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	<input type="checkbox"/>	<input type="checkbox"/>	TEMP 1 2 3
INTACT	<input type="checkbox"/>	<input type="checkbox"/>	ICE PRESENT

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
<i>Kristyll Avila</i>	2021/08/19	15:00



1/4

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #254 GOLDER ASSOCIATES LTD.	Company Name: #6340 GOLDER ASSOCIATES LTD.	Quotation #: C00480	BV Labs Job #: 202108123		Bottle Order #: 644511	Project Manager: Carmen McKay	
Attention: ACCOUNTS PAYABLE	Attention: Aurelie Belavance	P.O #: 20368099-7000-1001	COC #: 202108123		Barcode: C#644511-06-01		
Address: 2800, 700 -2nd Street SW	Address: 2800, 700 -2nd Street SW	Project: 20368099-6000-1001					
Address: CALGARY AB T2P 2W2	Address: CALGARY AB T2P 2W2	Project Name:					
Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606	Tel: (403) 299-5600 Fax:	Site #:					
Email: canadaaccounts payableinvoices@golder.com	Email: abellavance@golder.com	Sampled By:					

Regulatory Criteria: <input type="checkbox"/> ATI <input checked="" type="checkbox"/> CCME <input type="checkbox"/> Other	Special Instructions	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects.		
		Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1 BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Hexavalent Chromium VI Sulphate / nitrate Trace to Fed Guidelines	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	Regular (Standard) TAT: (will be applied if Rush TAT is not specified). Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.	<input checked="" type="checkbox"/>
SAMPLER MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS													Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Rush Confirmation Number: _____ (call lab for #)	

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1 BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Hexavalent Chromium VI Sulphate / nitrate Trace to Fed Guidelines	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	# of Bottles	Comments
N/A	BH19-117-02	15 AUG/21	09:35	Soil		✓	✓		✓						✓	3 + bag	
	BH19-117-04		09:27			✓	✓		✓							3 + bag	
	BH19-117-06		10:37			✓	✓		✓							3 + bag	
	TP21-110-02		09:38				✓									3	Received in Yellowknife By: J. McNamee @ 10:00 am AUG 18 2021 see ACTR
	TP21-110-04		09:36				✓									3	
	TP21-110-06		10:31				✓									3	
	TP21-109-02		09:43				✓									3	
	TP21-109-04		09:44				✓									3	
	TP21-109-06		10:24				✓									3	

RELINQUISHED BY: (Signature/Print) Peter Tan	Date: (YY/MM/DD) 21/08/21	Time 0800	RECEIVED BY: (Signature/Print) Alexander Kostyilov	Date: (YY/MM/DD) 2021/08/19	Time 15:00	# jars used and not submitted	Laboratory Use Only
							Time Sensitive <input type="checkbox"/> Temperature (°C) on Receipt <input type="checkbox"/> Custody Seal Intact on Cooler? <input type="checkbox"/> Yes <input type="checkbox"/> No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.
 ** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
 *** ALL SAMPLES ARE HELD FOR 60 DAYS AFTER SAMPLE RECEIPT. FOR SPECIAL REQUESTS CONTACT YOUR PROJECT MANAGER

see ACTR.



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INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #254 GOLDER ASSOCIATES LTD.	Company Name: #6340 GOLDER ASSOCIATES LTD.	Quotation #: C00480	BV Labs Job #:		Bottle Order #:	JMO 202108123 E1100122 C161010	
Attention: ACCOUNTS PAYABLE	Attention: Aurelie Belavance	P O #: 20368099-7000-1001	COC #:		644511		Project Manager: Carmen McKay
Address: 2800, 700 -2nd Street SW CALGARY AB T2P 2W2	Address: 2800, 700 -2nd Street SW CALGARY AB T2P 2W2	Project: 20368099-6000-1001	Site #:		C#644511-07-01		
Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606	Tel: (403) 299-5600 Fax:	Project Name:	Sampled By:				
Email: canadaaccounts payableinvoices@golder.com	Email: abellavance@golder.com						

Regulatory Criteria: <input type="checkbox"/> ATI <input checked="" type="checkbox"/> CCME <input type="checkbox"/> Other	Special Instructions	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects		
		Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1 BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Sulphate / nitrate	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.	
				✓									Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Rush Confirmation Number: _____ (call lab for #)	

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS						# of Bottles	Comments
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix			
N/A	TP21-76-02	15 AUG 21	14:20	SOIL	✓	3	
	TP21-76-04		14:22		✓	3	
	TP21-76-06		14:36		✓	3	
	TP21-47-01		14:24		✓	3	Received in Yellowknife
	TP21-47-04		14:25		✓	3	By: J. M. Sano @ 10:00 am
	TP21-47-06		14:54		✓	3	AUG 18 2021
	TP21-111-03		14:47		✓	3	Temp:
	TP21-111-04		14:47		✓	3	
	TP21-111-05		15:50		✓	3	see ACTR
	DUP B	15 AUG 21	15:50		✓	3	

RELINQUISHED BY: (Signature/Print) <i>Peter Tran</i>	Date: (YY/MM/DD) 21/08/16	Time 0800	RECEIVED BY: (Signature/Print) <i>Kristyil Avila</i>	Date: (YY/MM/DD) 2021/08/19	Time 15:00	# jars used and not submitted	Time Sensitive <input type="checkbox"/>	Laboratory Use Only Temperature (°C) on Receipt	Custody Seal Intact on Cooler? <input type="checkbox"/> Yes <input type="checkbox"/> No
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see ACTR



Bureau Veritas Laboratories
4000 19st N.E. Calgary, Alberta Canada T2E 6P8 Tel: (403) 291-3077 Toll-free 800-563-6266 Fax: (403) 291-9468 www.bvlabs.com

CHAIN OF CUSTODY RECORD

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INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #254 GOLDER ASSOCIATES LTD.	Company Name: #6340 GOLDER ASSOCIATES LTD.	Quotation #: C00480	BV Labs Job #: 20368099-7000-1001		Bottle Order #: 644511		
Attention: ACCOUNTS PAYABLE	Attention: Aurelie Belavance	P.O. #: 20368099-7000-1001	Project: 20368099-6000-1001		COC #: CHA22C161010		
Address: 2800, 700 -2nd Street SW	Address: 2800, 700 -2nd Street SW	Project Name:	Site #:		Project Manager: Carmen McKay		
Address: CALGARY AB T2P 2W2	Address: CALGARY AB T2P 2W2	Sampled By:	Site #:		C#644511-08-01		
Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606	Tel: (403) 299-5600 Fax:						
Email: canadaaccounts payableinvoices@golder.com	Email: abellavance@golder.com						

Regulatory Criteria: <input type="checkbox"/> ATI <input checked="" type="checkbox"/> CCME <input type="checkbox"/> Other	Special Instructions	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects		
		Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1, BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Sulphate / nitrate	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.	
SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS													Job Specific Rush TAT (if applies to entire submission) Date Required: <input type="checkbox"/> Rush Confirmation Number: _____ (call lab for #)	

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1, BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Sulphate / nitrate	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	# of Bottles	Comments
N/A	TP21-108-02	15 AUG 21	16:16	Soil			✓									3	
	TP21-108-04		16:17				✓									3	
	TP21-108-06		16:18				✓									3	
	TP21-79-03		16:29				✓									3	Received in Yellowknife
	TP21-79-04		16:29				✓									3	BY: J. McKay @ 10:00 Am
	TP21-79-05		16:32				✓									3	AUG 18 2021
	TP21-46-02		11:27				✓									3	see ACTR
	TP21-46-04		11:30				✓	✓								3	Temp:
	TP21-78-01		09:56				✓									3	
	TP21-78-04		10:02				✓									3	

RELINQUISHED BY: (Signature/Print) <i>PETER TAN</i>	Date: (YY/MM/DD) 21/08/26	Time 07:30	RECEIVED BY: (Signature/Print) <i>KRISTYLL ANIA</i>	Date: (YY/MM/DD) 2021/08/19	Time 15:00	# jars used and not submitted	Laboratory Use Only	
						<input type="checkbox"/>	Temperature (°C) on Receipt	Custody Seal intact on Cooler? <input type="checkbox"/> Yes <input type="checkbox"/> No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.
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see ACTR



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4000 19st N.E. Calgary, Alberta Canada T2E 6P8 Tel: (403) 291-3077 Toll-free 800-563-6266 Fax: (403) 291-9468 www.bvlabs.com

CHAIN OF CUSTODY RECORD

Page of

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INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #254 GOLDER ASSOCIATES LTD.	Company Name: #6340 GOLDER ASSOCIATES LTD.	Quotation #: C00480	BV Labs Job #: 202108123		Bottle Order #: 644511		
Attention: ACCOUNTS PAYABLE	Attention: Aurelie Belavance	P.O. #: 20368099-7000-1001	Project: 20368099-6000-1001		COC #: CH0122C161010	Project Manager:	
Address: 2800, 700 -2nd Street SW	Address: 2800, 700 -2nd Street SW	Project Name:	Site #:				Carmen McKay
Address: CALGARY AB T2P 2W2	Address: CALGARY AB T2P 2W2	Sampled By:			C#644511-09-01		
Tel: (905) 567-6100 Ext: 1167 Fax: (403) 299-5606	Tel: (403) 299-5600 Fax:						
Email: canadaaccounts payableinvoices@golder.com	Email: abellavance@golder.com						

Regulatory Criteria: <input type="checkbox"/> ATI <input checked="" type="checkbox"/> CCME <input type="checkbox"/> Other	Special Instructions	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects		
		Metals Field Filtered? (Y/N)	AT1 Regulated Metals - Soils	AT1, BTEX and F1-F4 in Soil (Vials)	BIC SCALE Analysis (F2/F2+F3B) in soil	Sulphate / nitrate	Barium on ICP using Fusion Extraction (True Barium)	CCME BTEX and F1-F2 in Water	Routine Water	Regulated Metals (CCME/AT1) - Dissolved	PAH in Water by GC/MS	Limited Sample	Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.	
													Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Rush Confirmation Number: _____ (call lab for #)	

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS																	# of Bottles	Comments
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix														
1 N/A	TP21-77-01	15 AUG/21	11:09	SOIL													3	
2 ↓	TP21-77-04	↓	11:08	↓													3	
3 ↓	TP21-45-03	↓	15:16	↓													3	
4 ↓	TP21-45-04	↓	15:16	↓													3	Received in Yellowknife
5 ↓	TP21-45-05	↓	15:17	↓													3	By: J. Mercano @ 10:00 AM AUG 18 2021 see ACTR
6																		Temp: / /
7																		
8																		
9																		
10																		

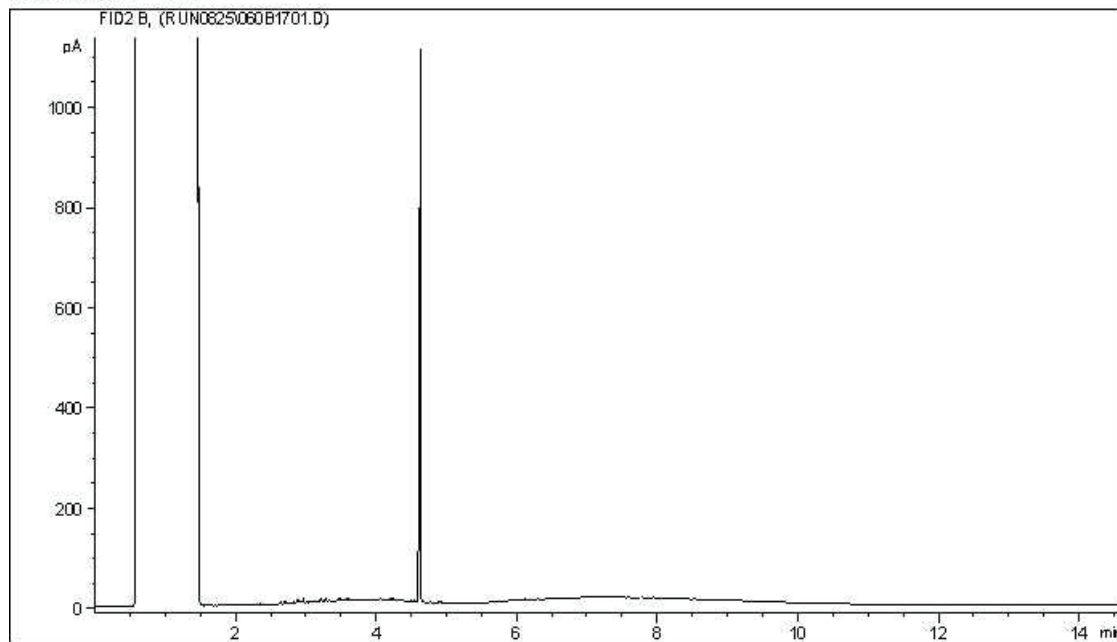
* RELINQUISHED BY: (Signature/Print) PETER TAN	Date: (YY/MM/DD) 21/08/21	Time 0700	RECEIVED BY: (Signature/Print) Kirstyil Avila	Date: (YY/MM/DD) 2021/08/19	Time 15:00	# jars used and not submitted	Laboratory Use Only		
						<input type="checkbox"/>	Temperature (°C) on Receipt	Custody Seal Intact on Cooler? <input type="checkbox"/> Yes <input type="checkbox"/> No	

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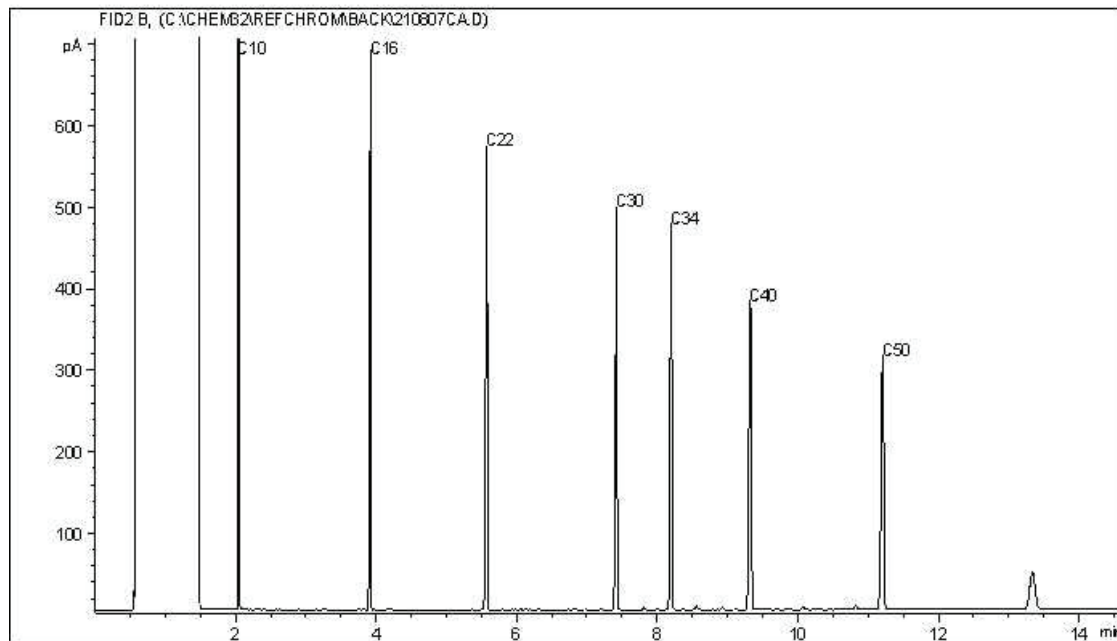
see ACTR

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram



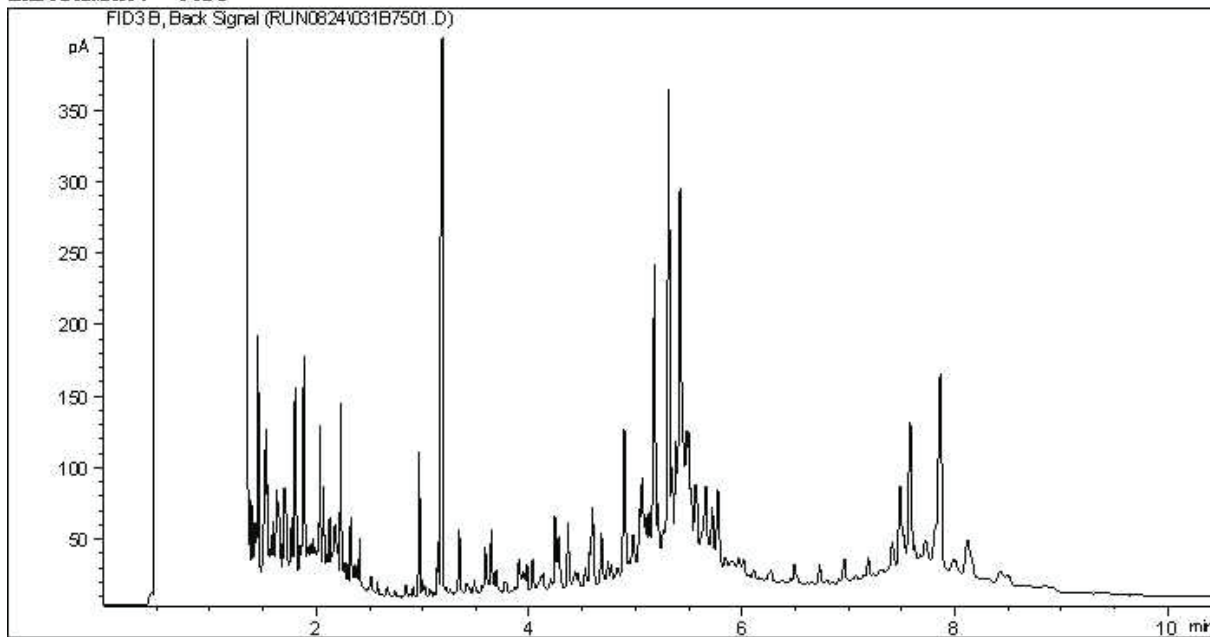
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

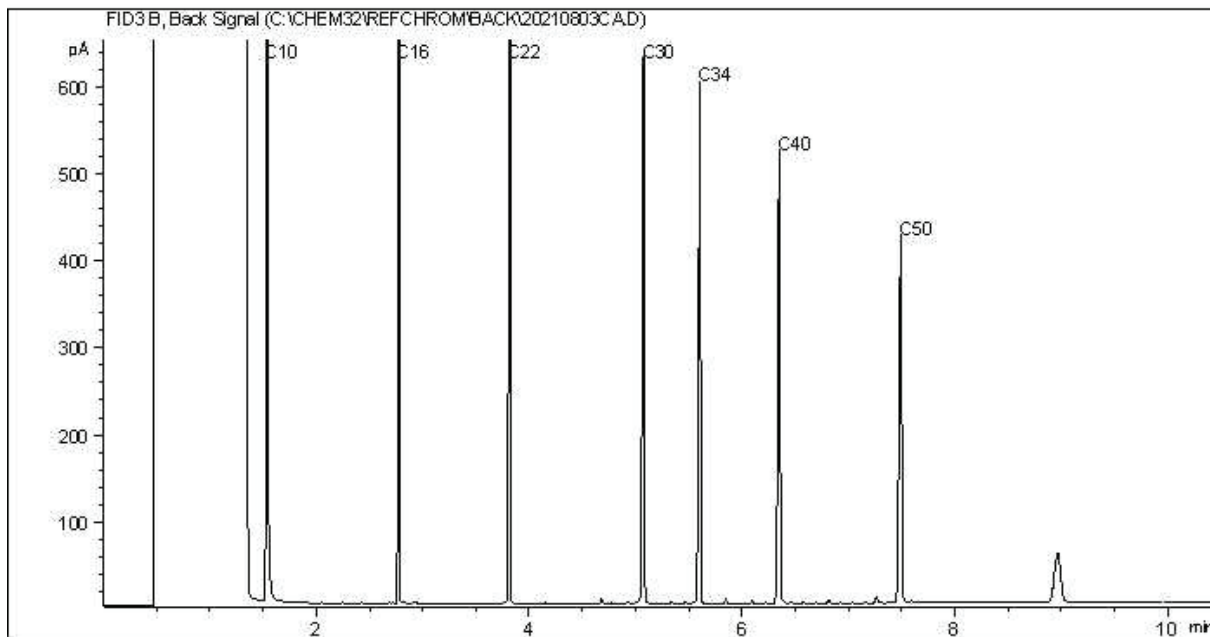
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram

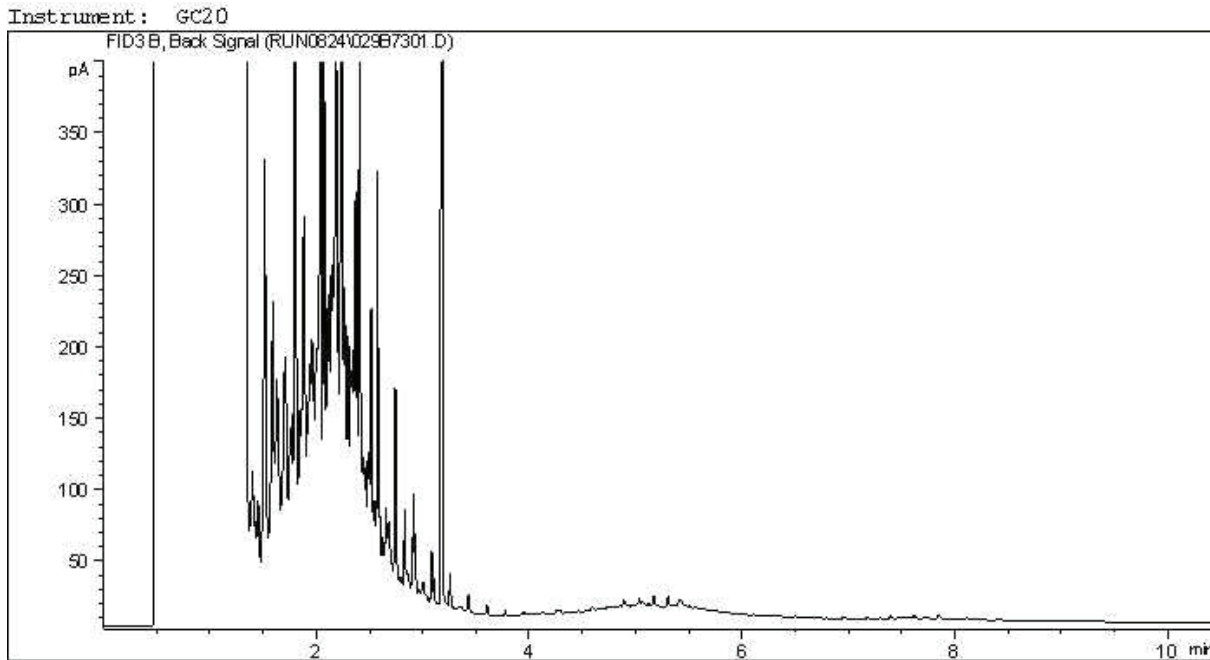


TYPICAL PRODUCT CARBON NUMBER RANGES

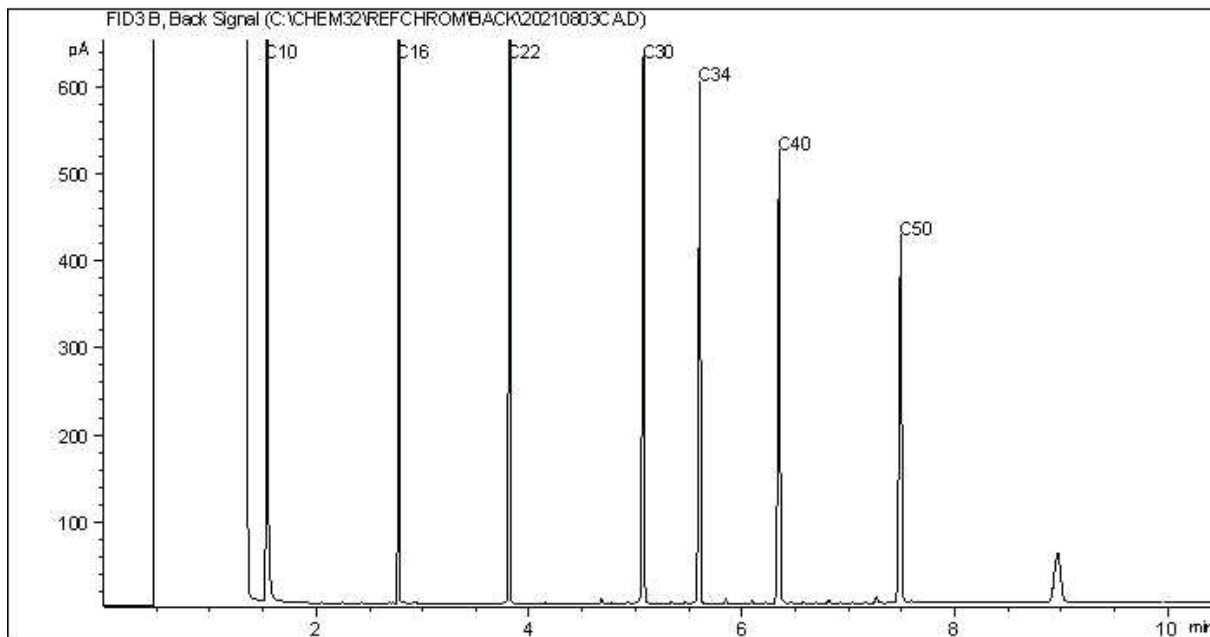
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



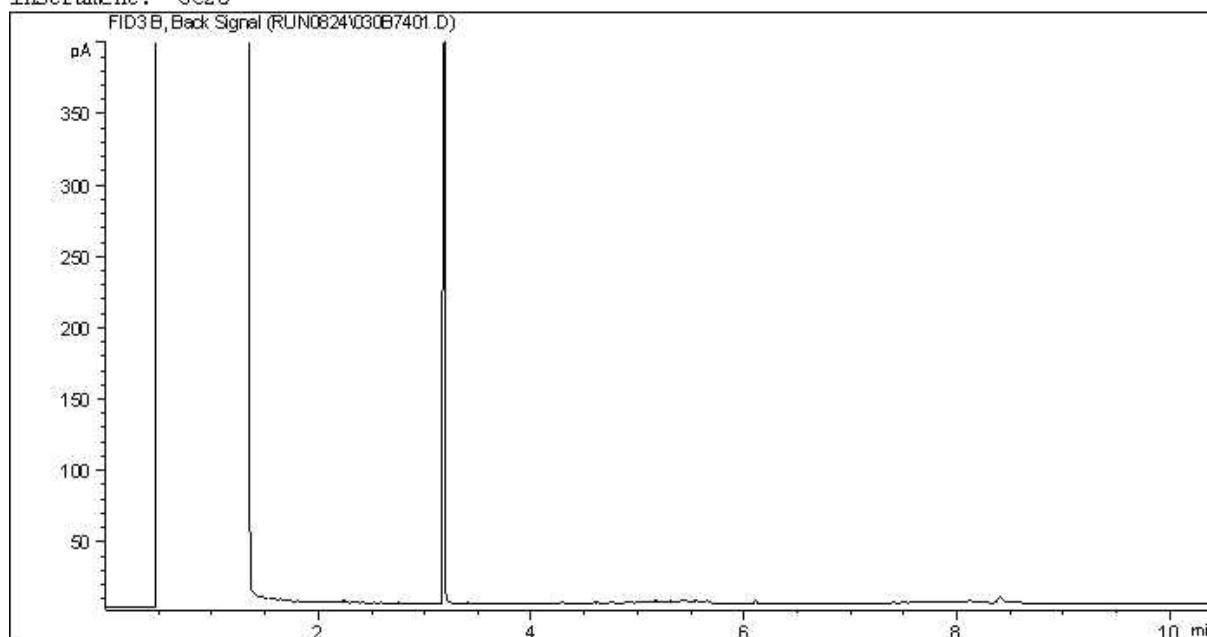
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

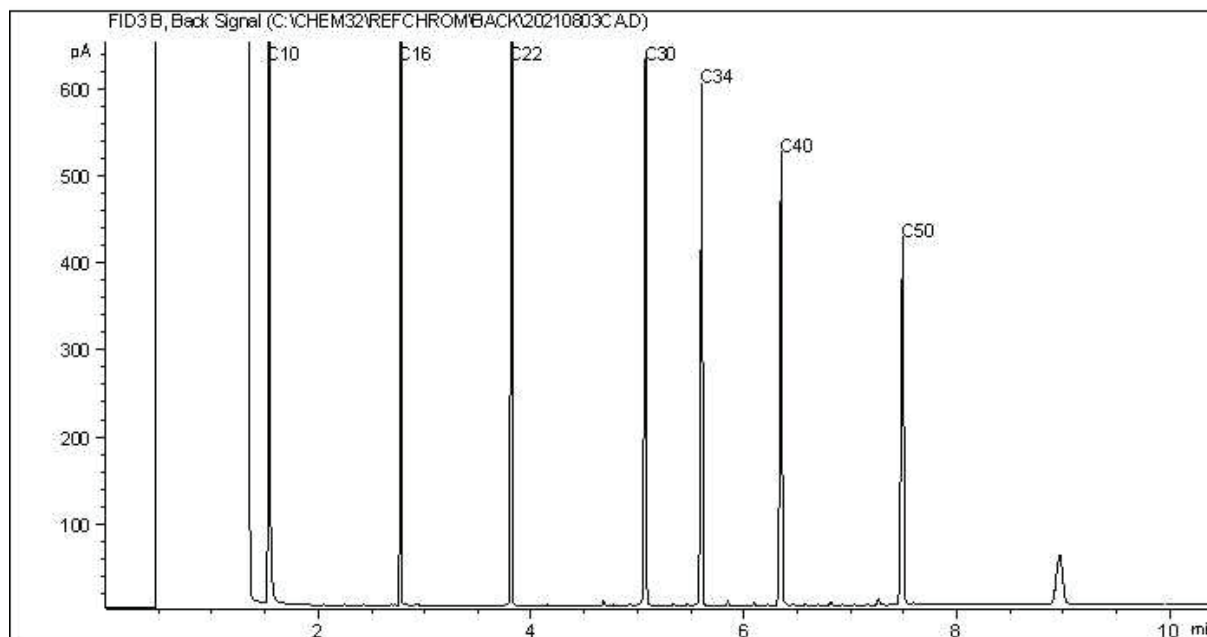
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



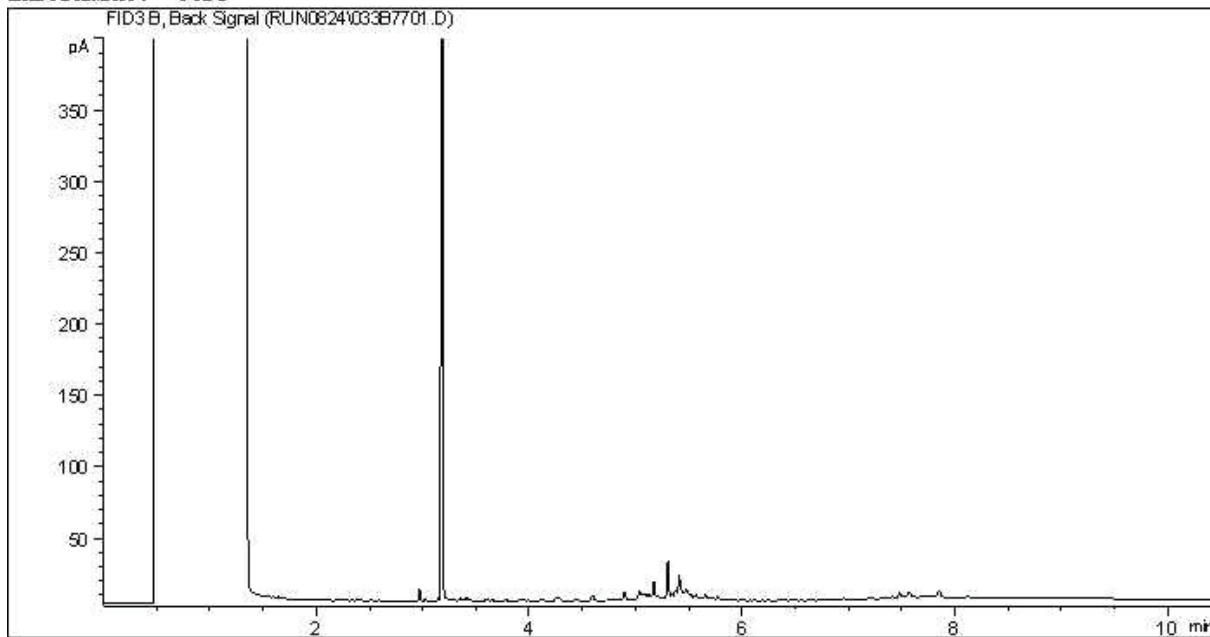
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

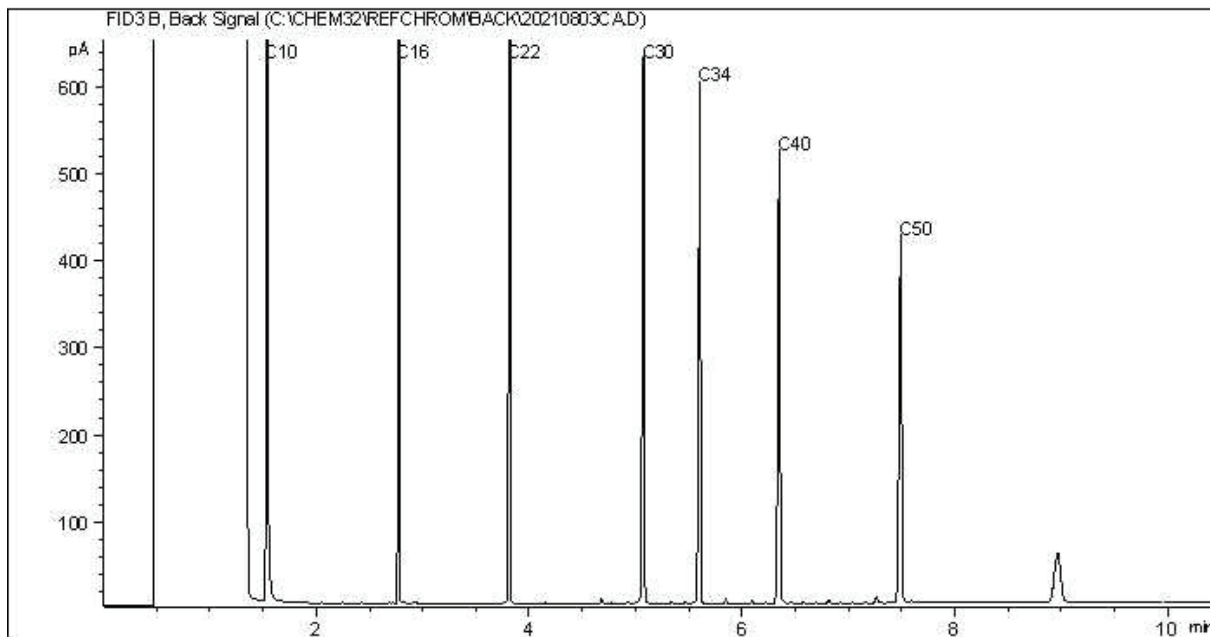
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



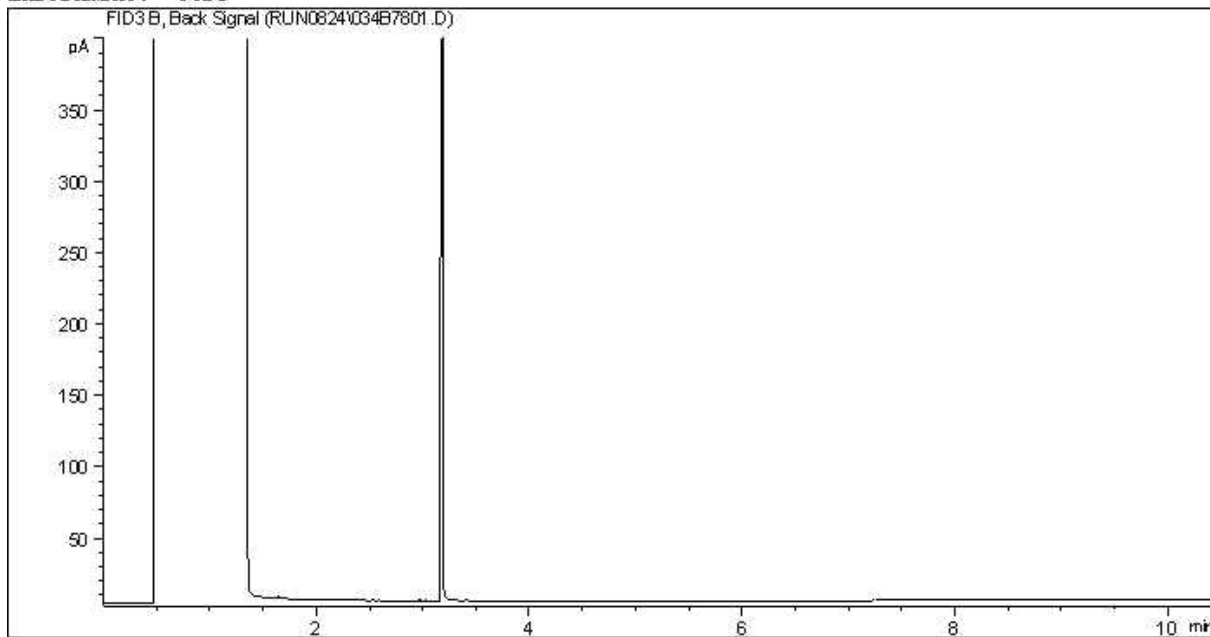
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

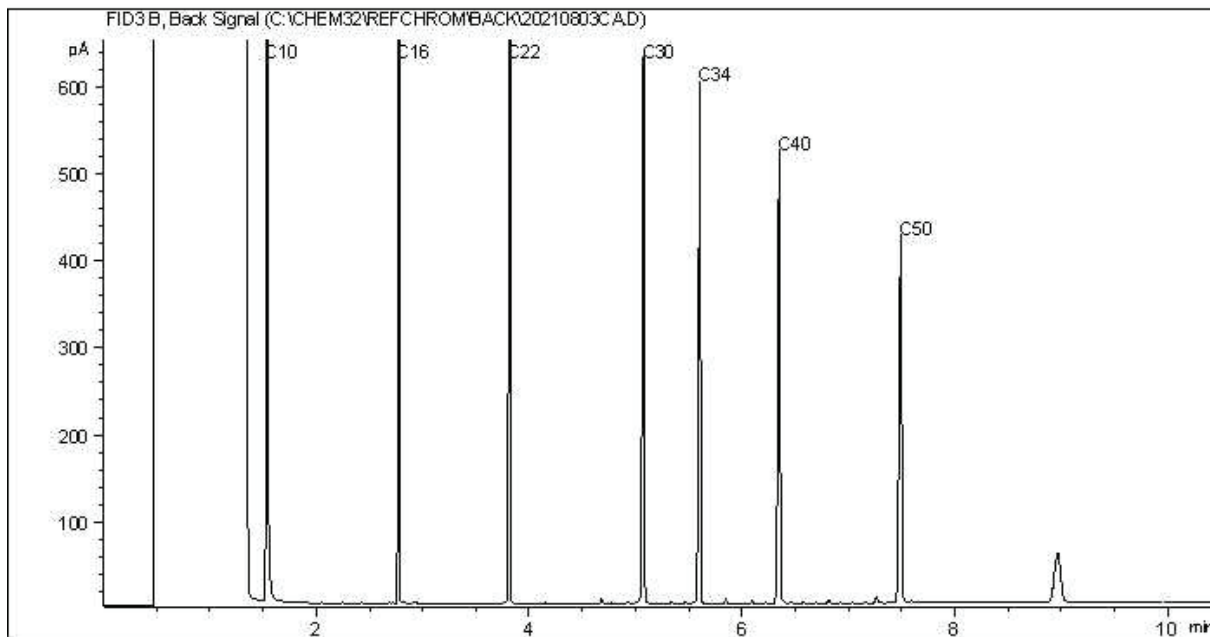
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



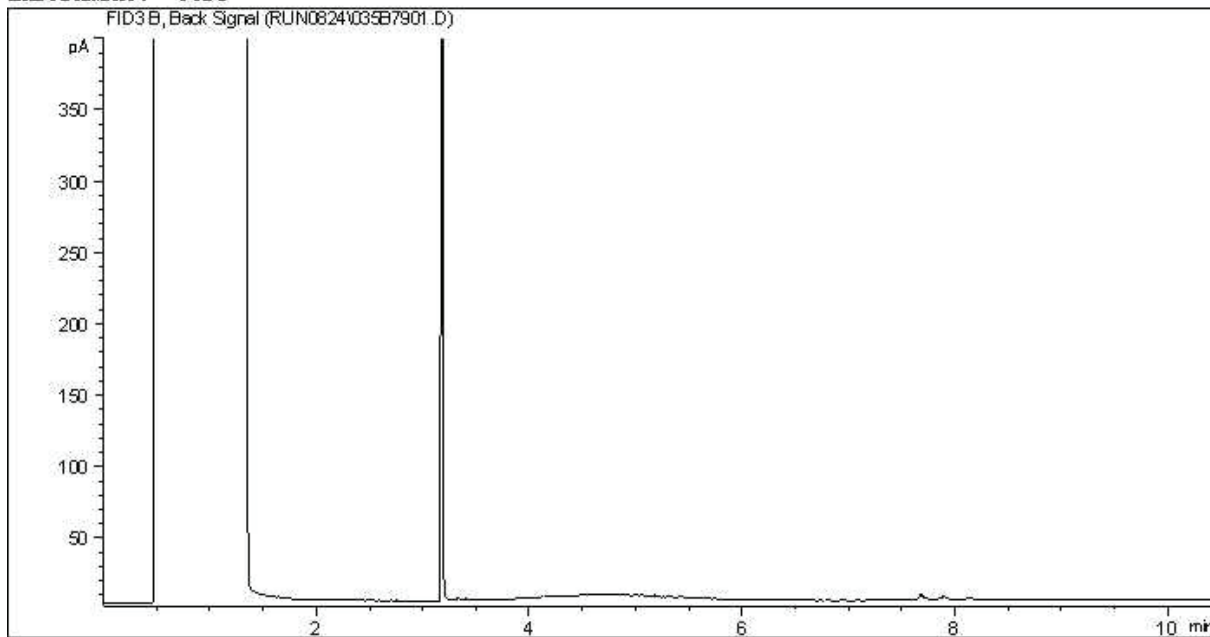
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

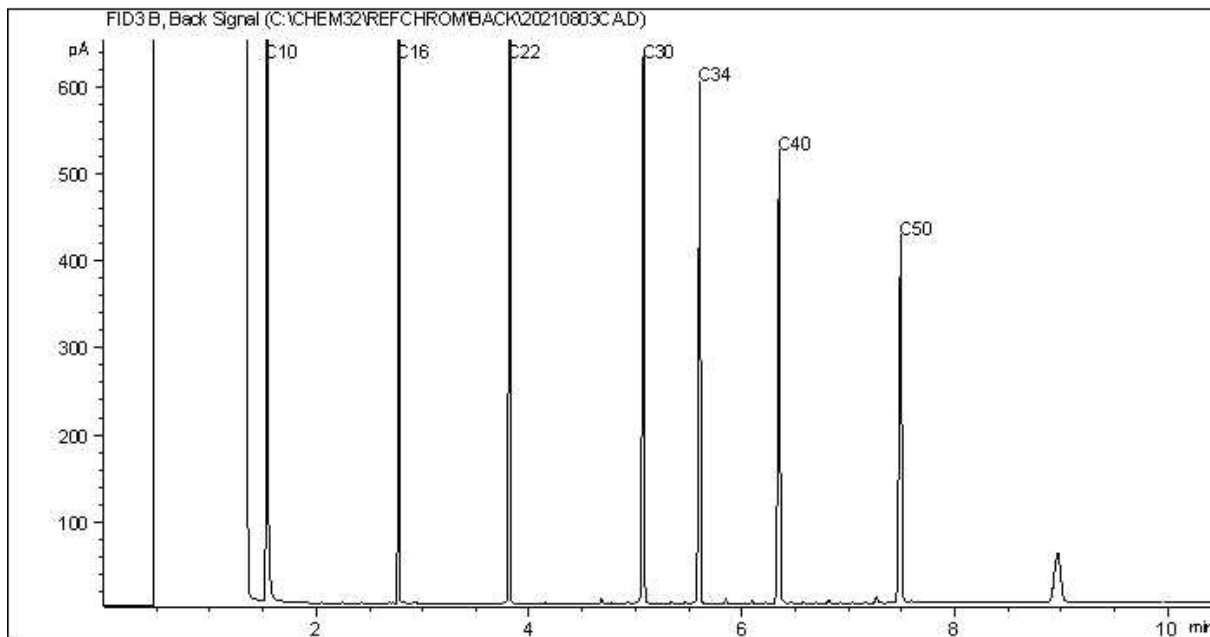
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



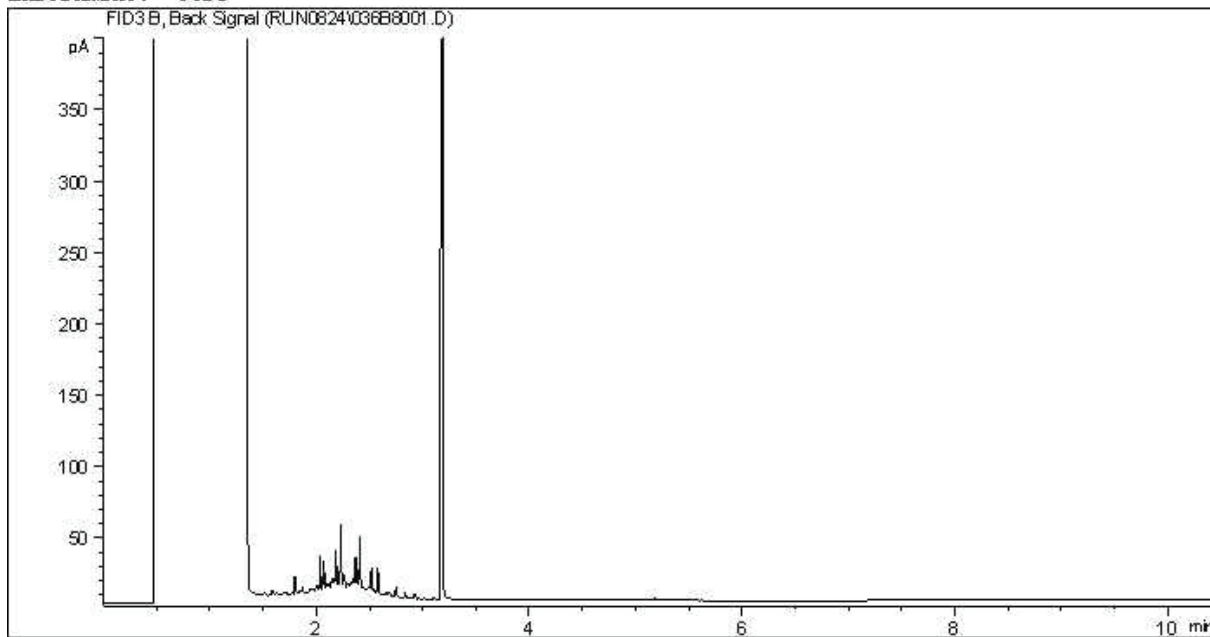
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

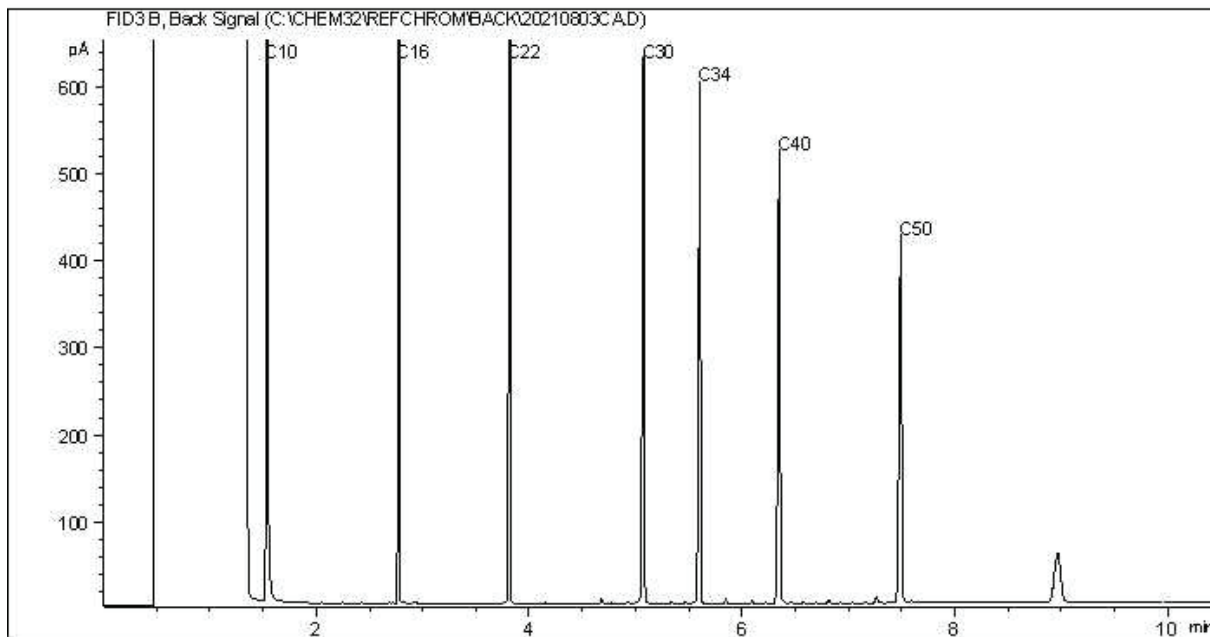
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



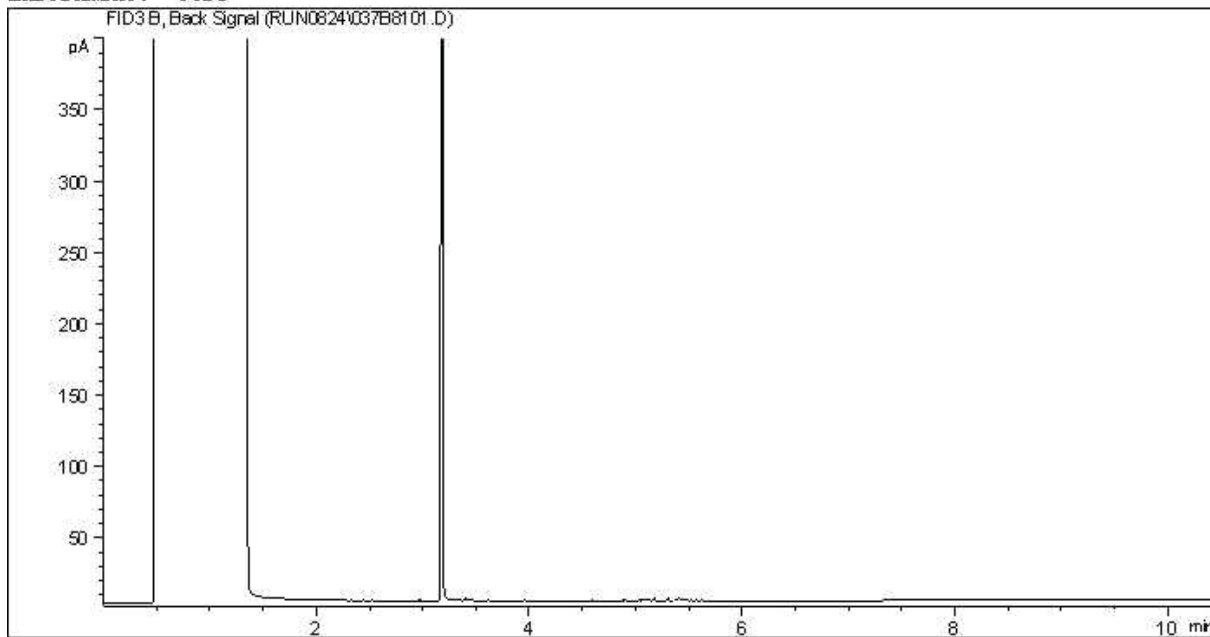
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

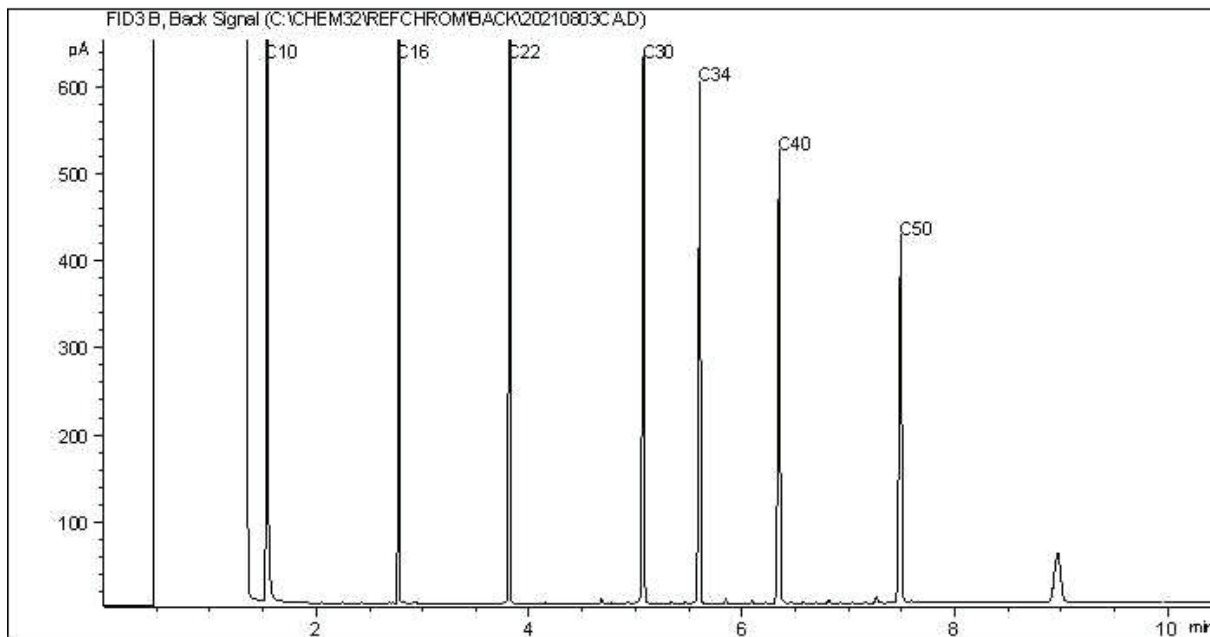
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram

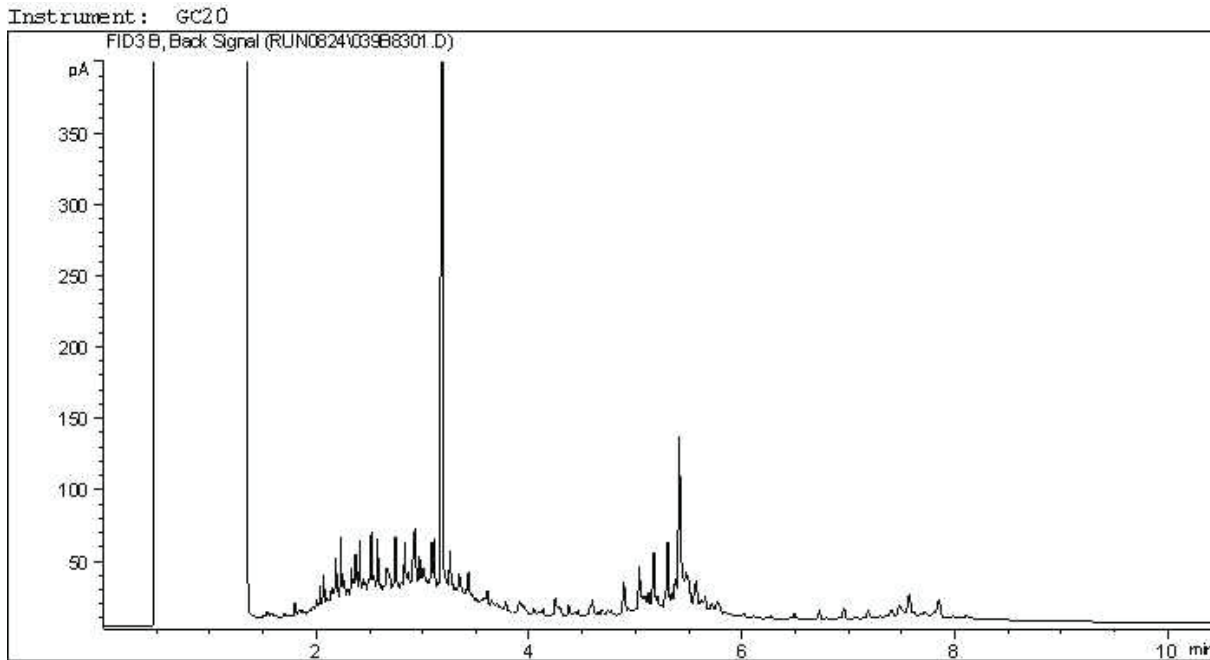


TYPICAL PRODUCT CARBON NUMBER RANGES

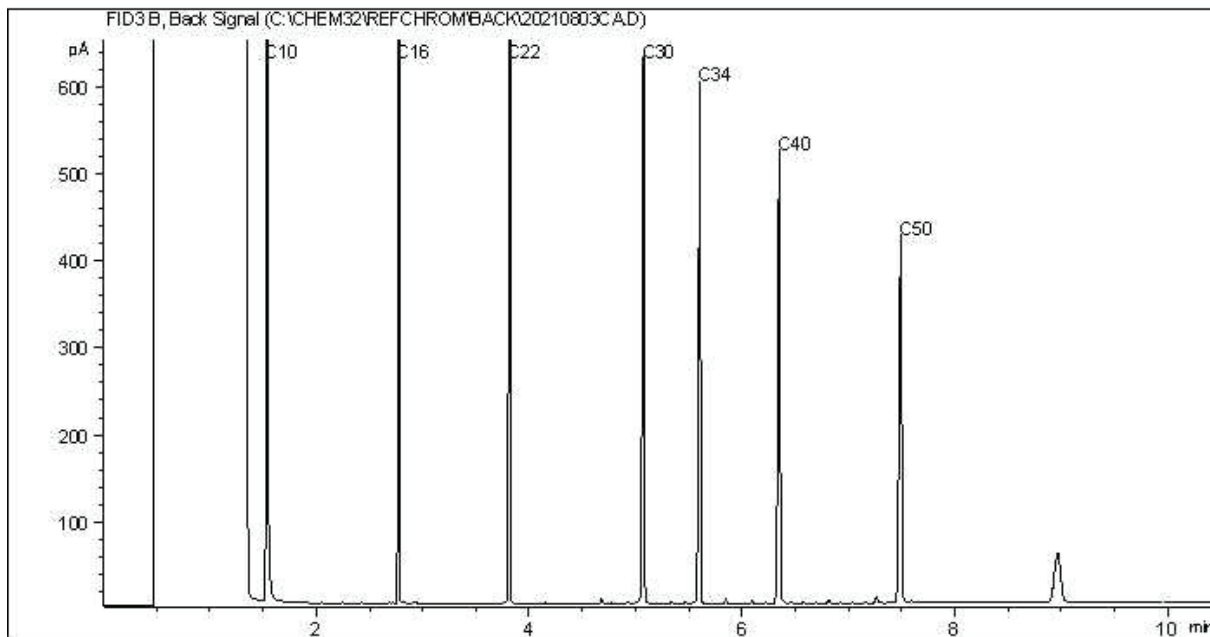
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



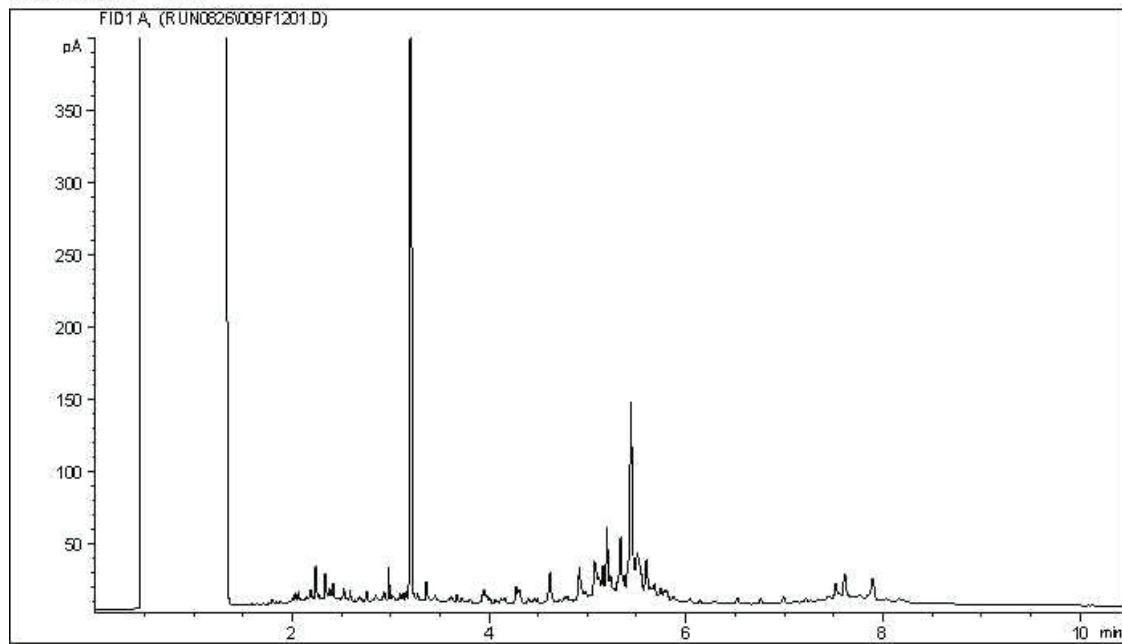
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

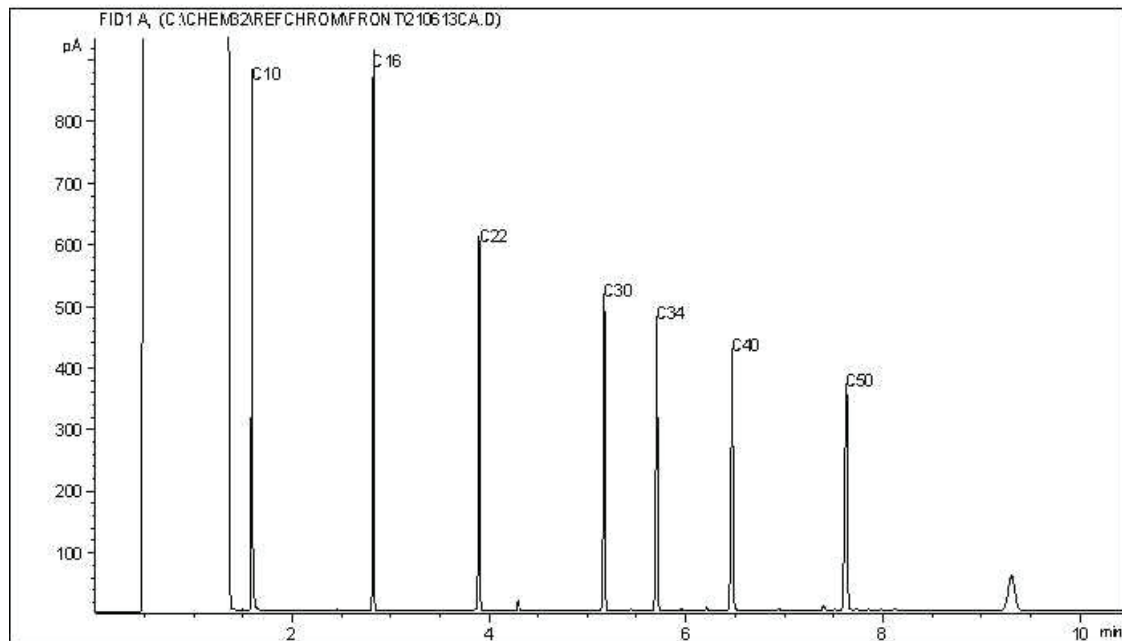
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



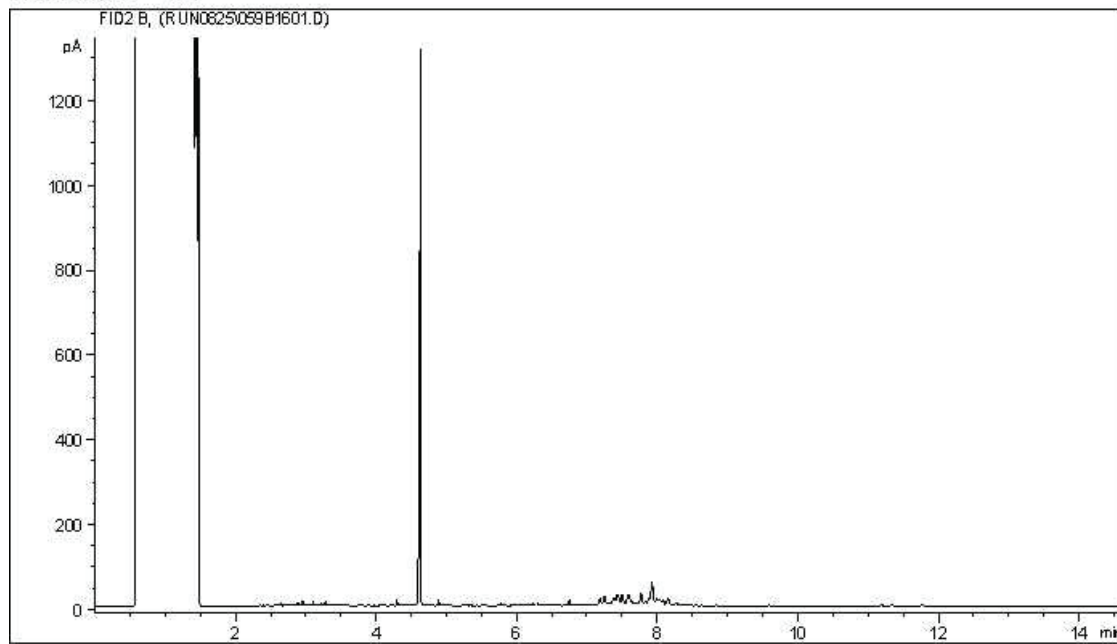
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

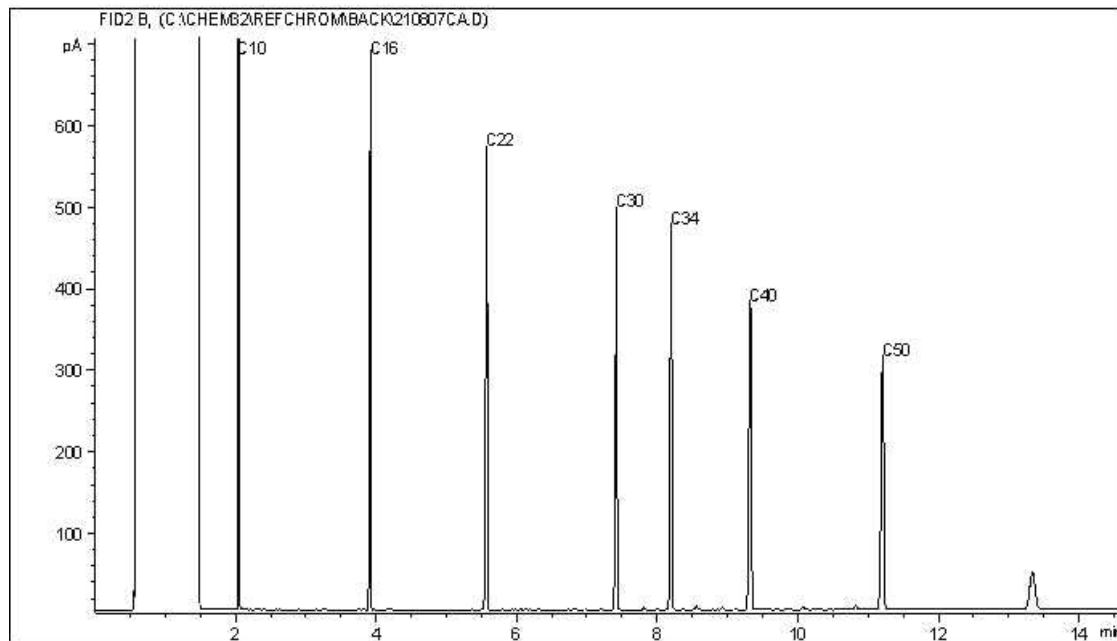
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram

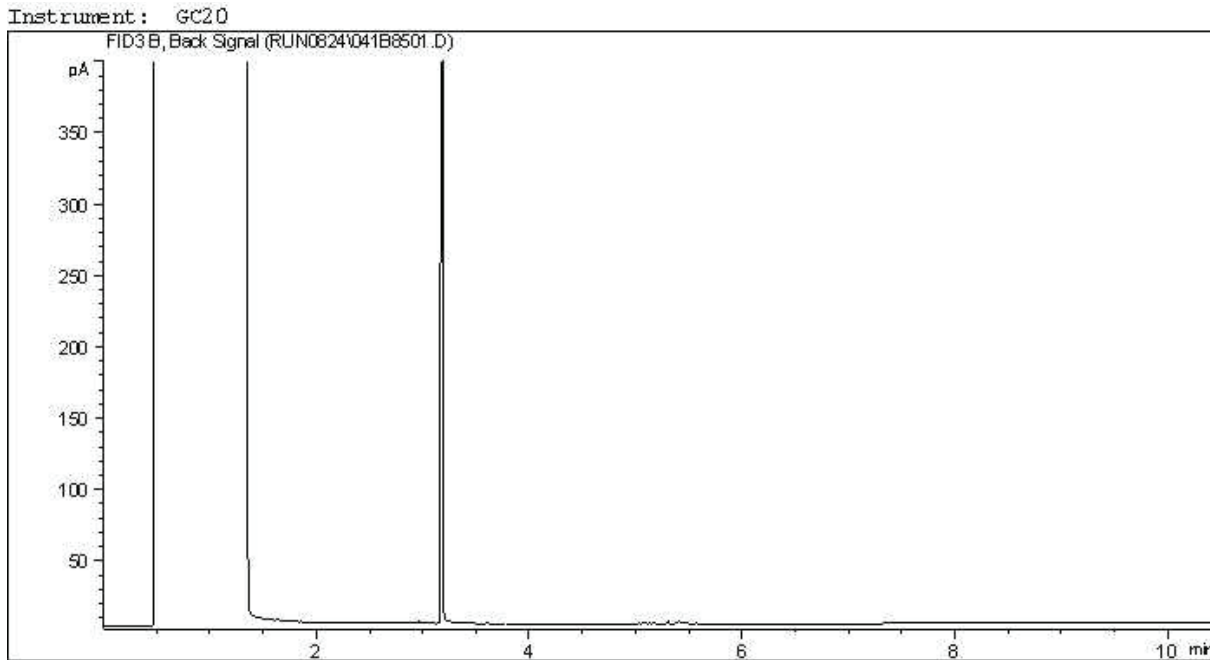


TYPICAL PRODUCT CARBON NUMBER RANGES

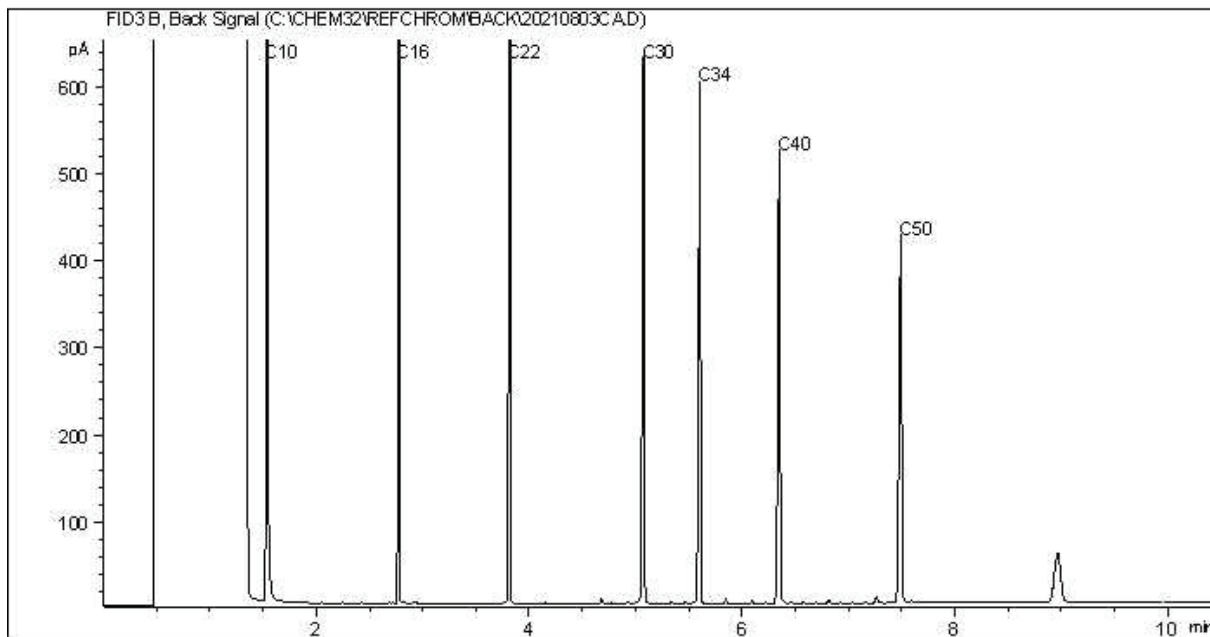
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram

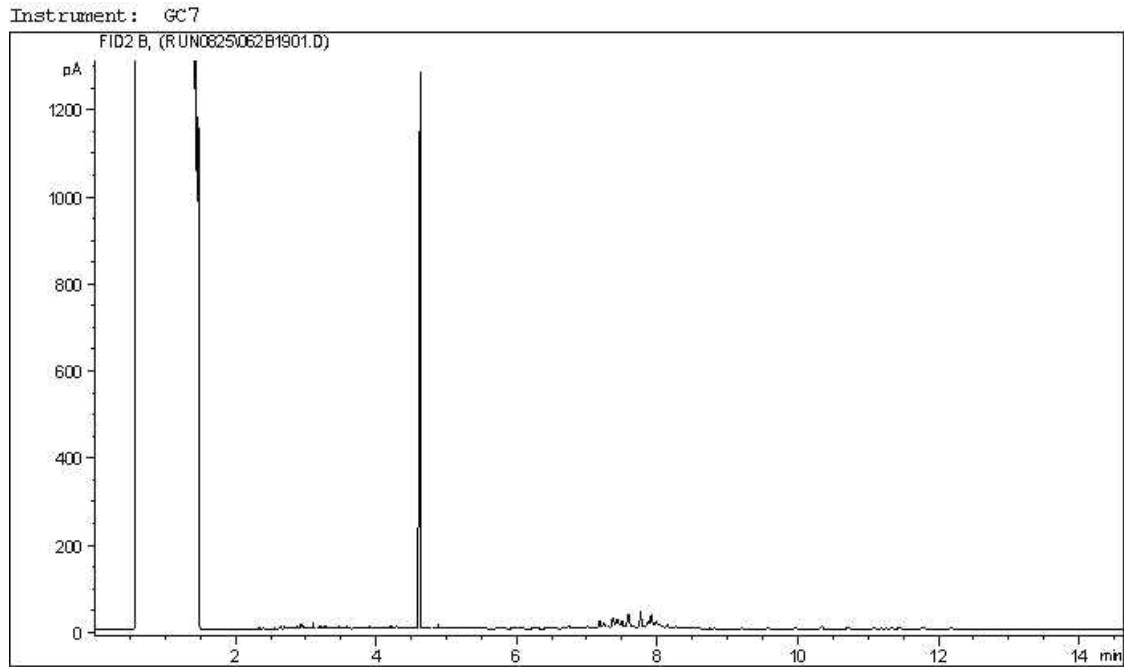


TYPICAL PRODUCT CARBON NUMBER RANGES

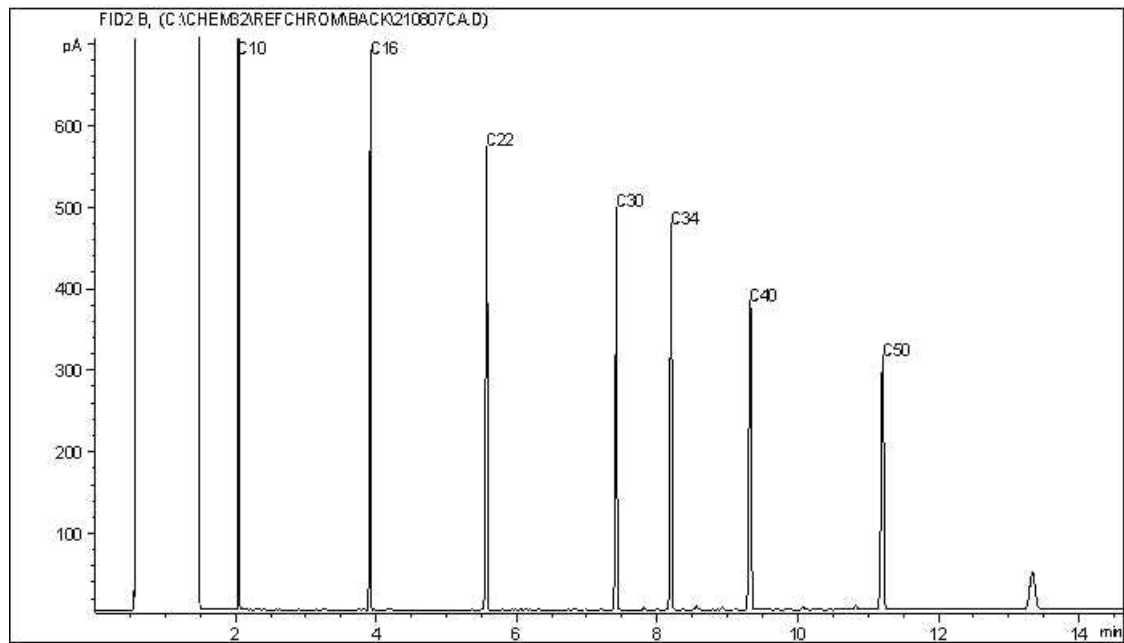
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



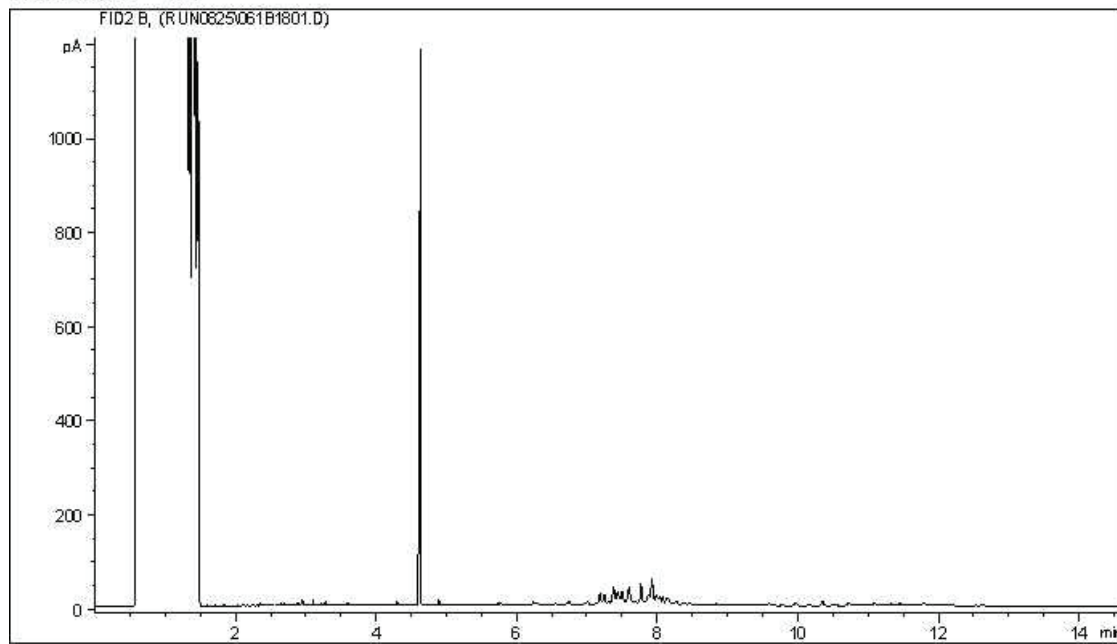
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

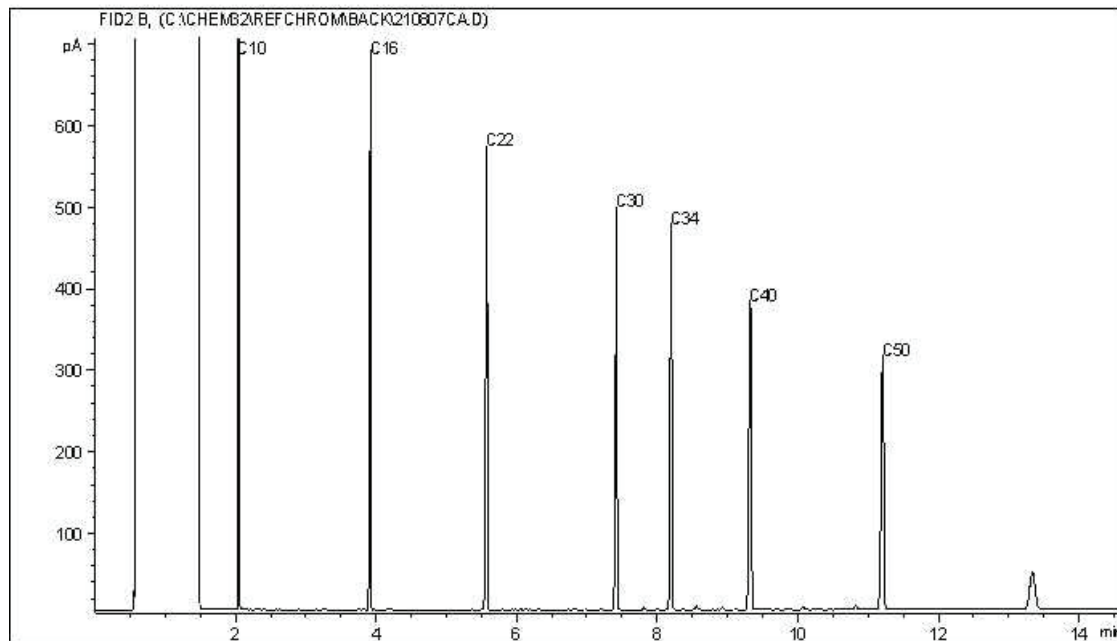
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC7



Carbon Range Distribution - Reference Chromatogram

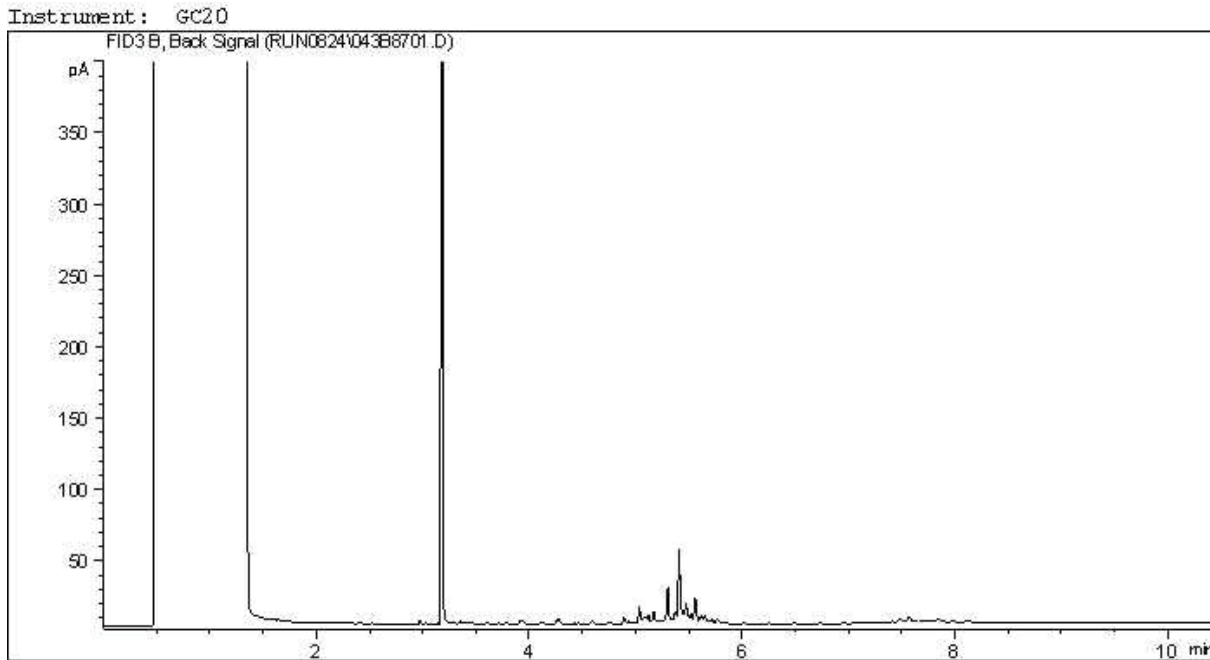


TYPICAL PRODUCT CARBON NUMBER RANGES

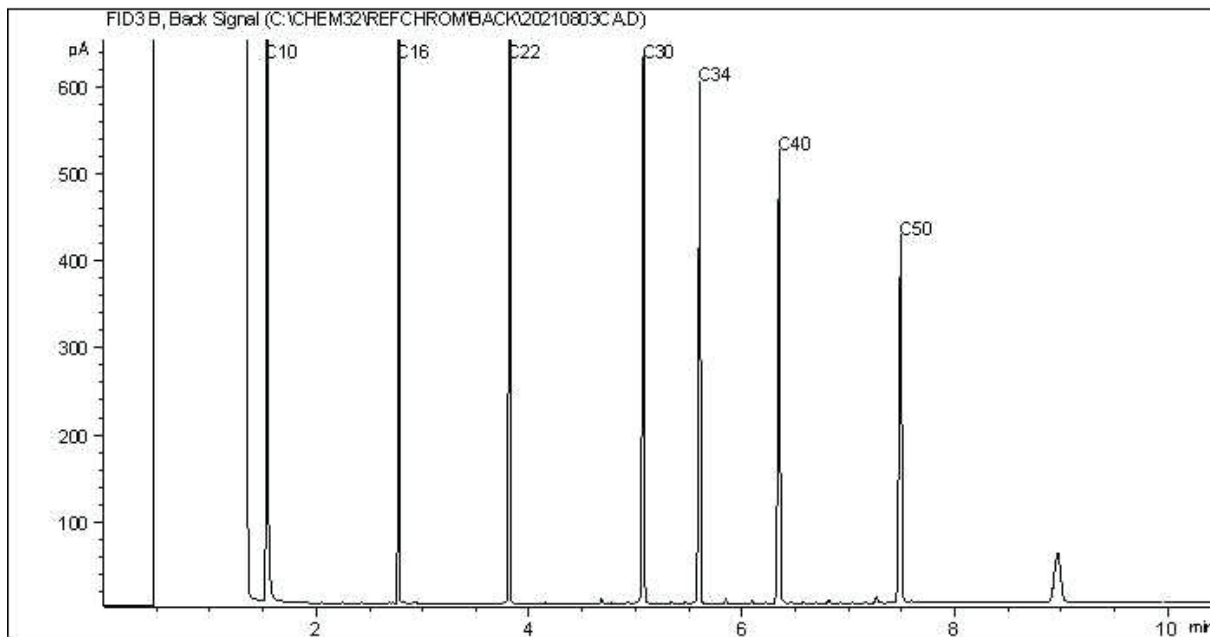
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram

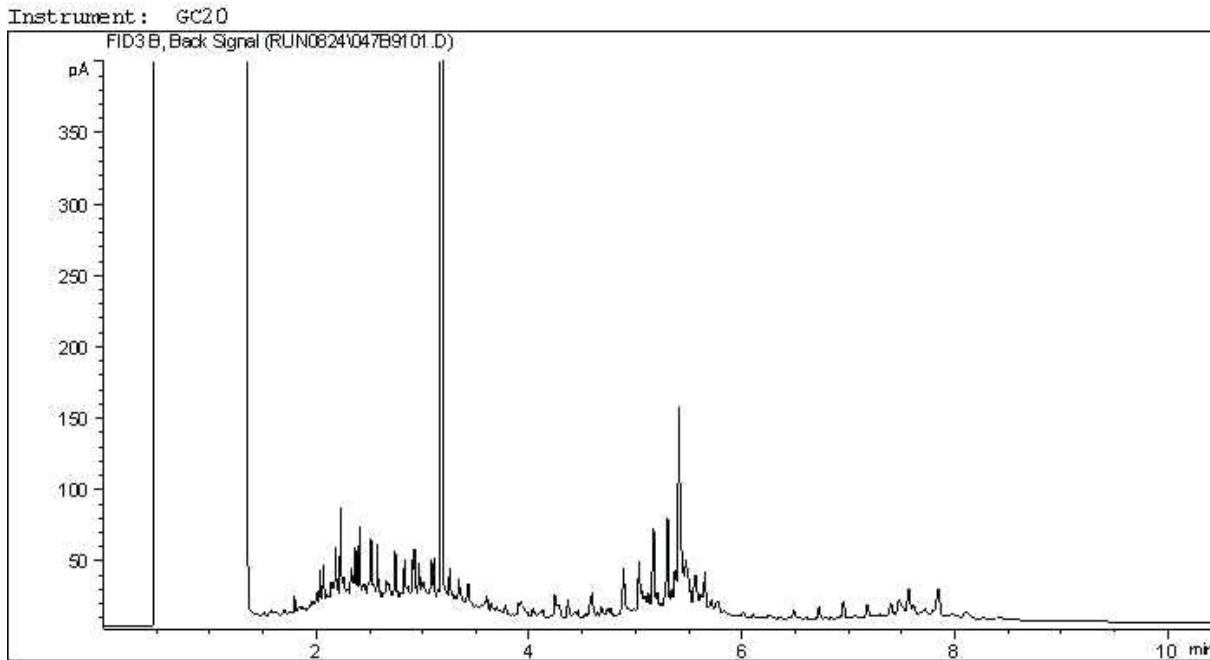


TYPICAL PRODUCT CARBON NUMBER RANGES

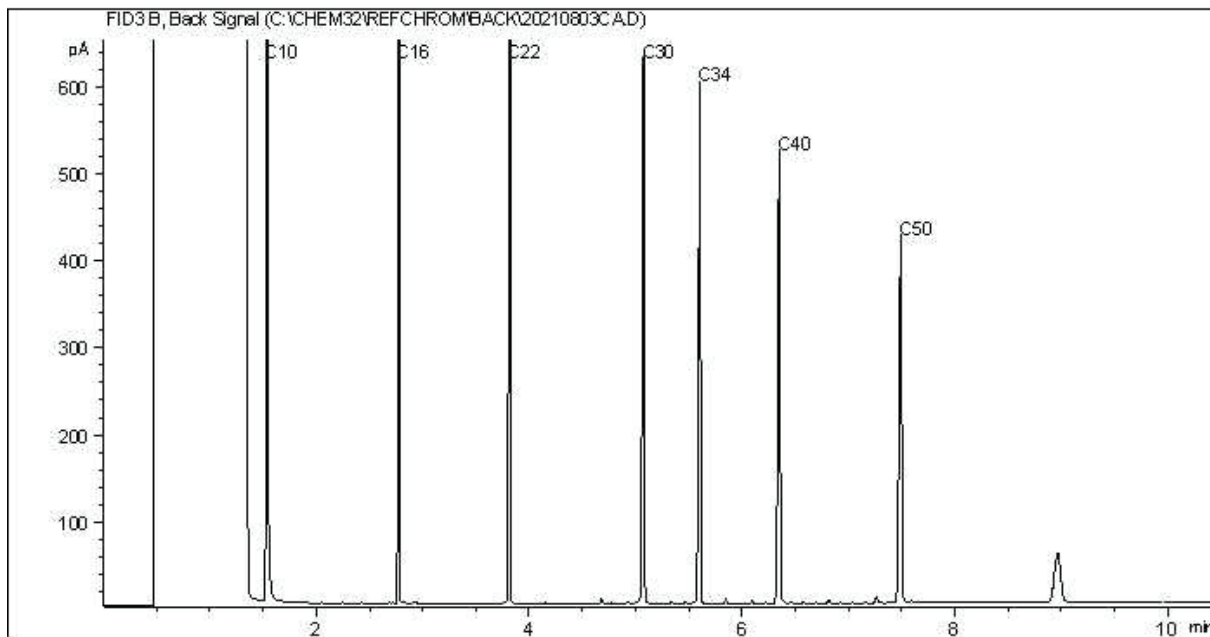
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram

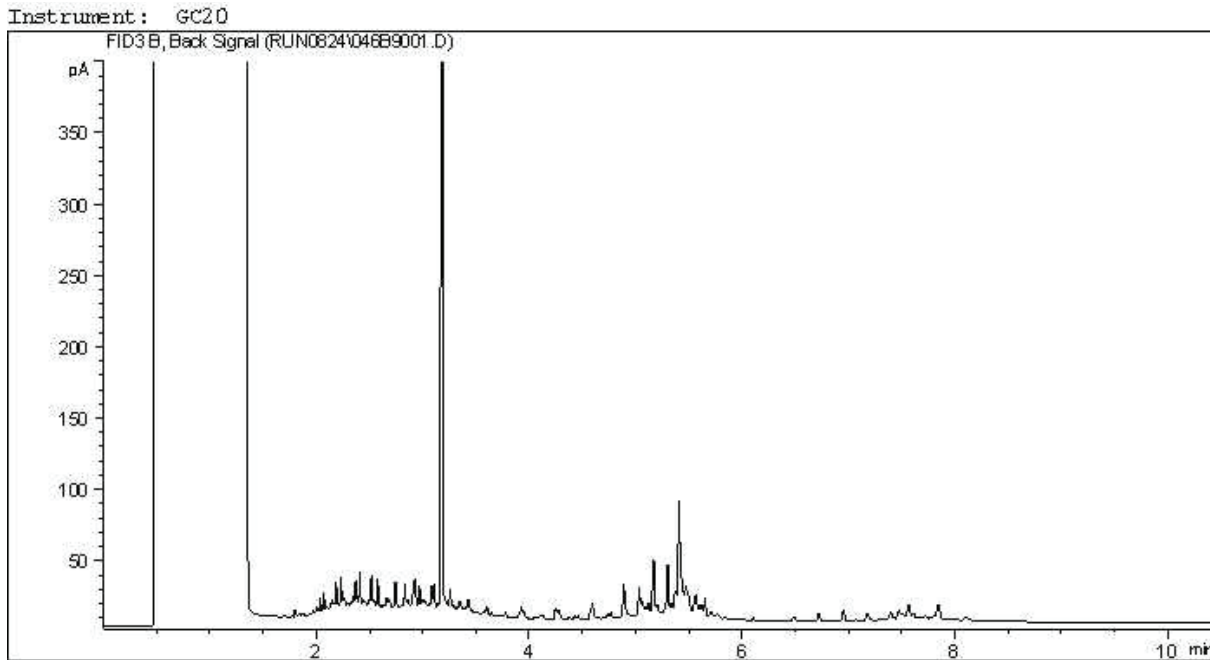


TYPICAL PRODUCT CARBON NUMBER RANGES

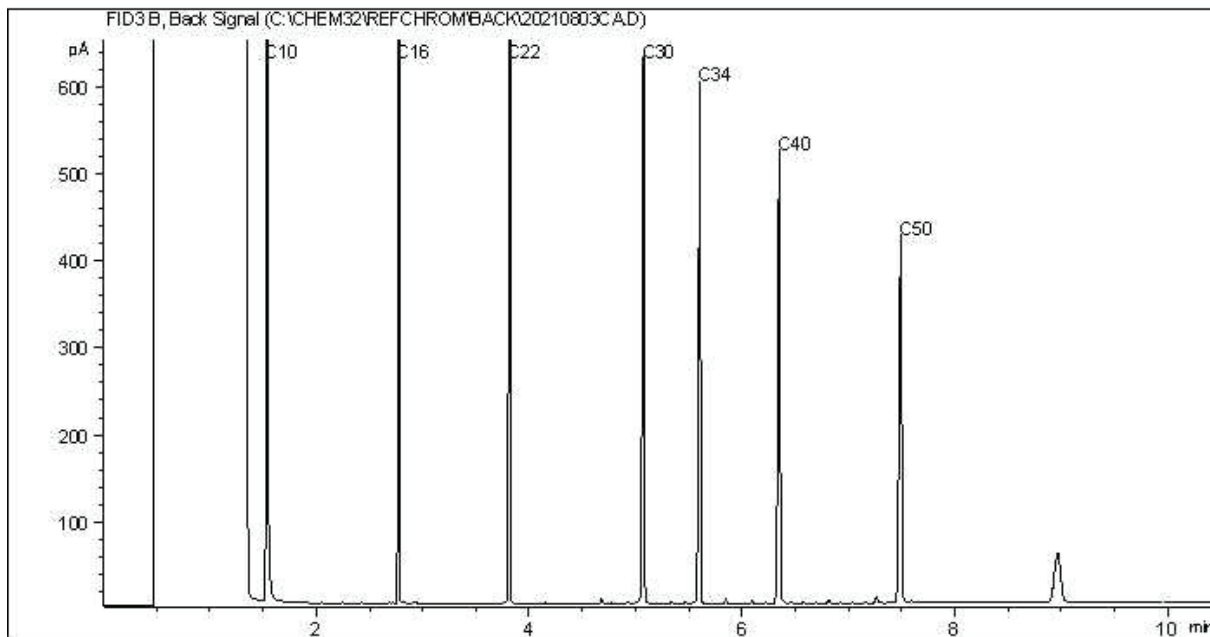
Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram



Carbon Range Distribution - Reference Chromatogram



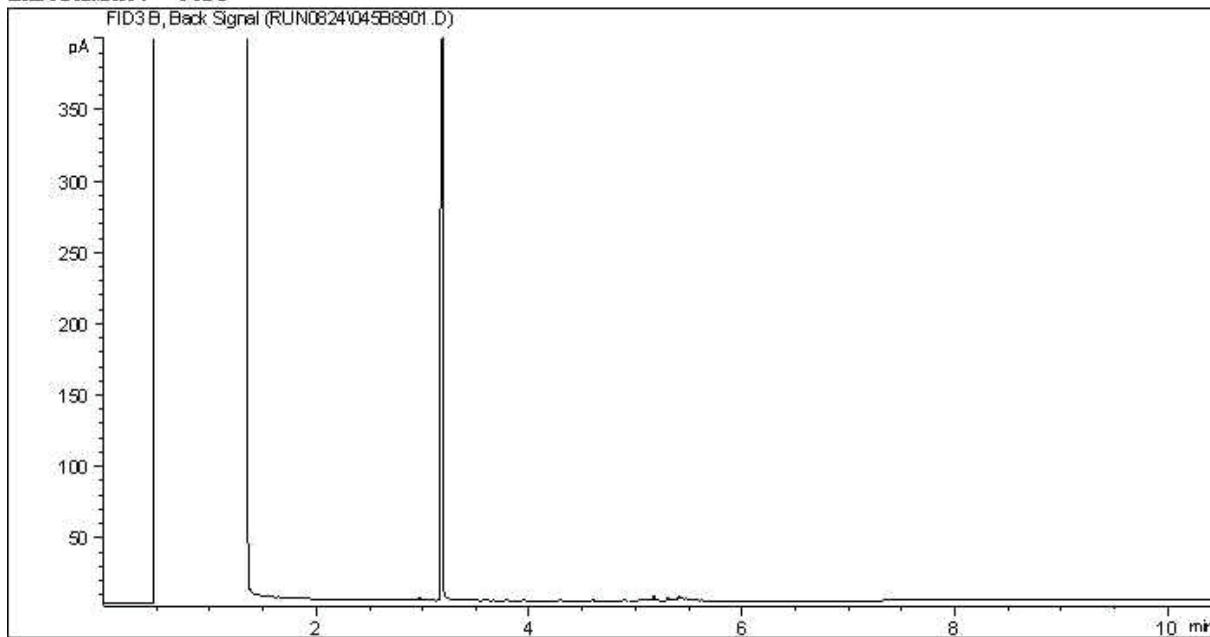
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

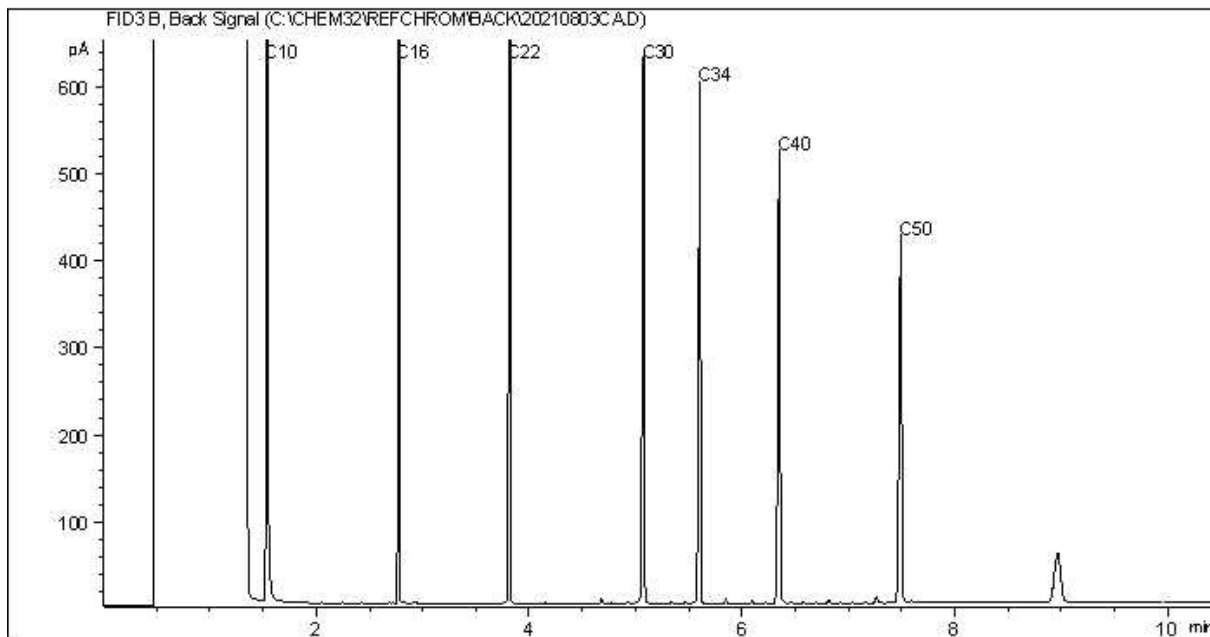
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC20



Carbon Range Distribution - Reference Chromatogram



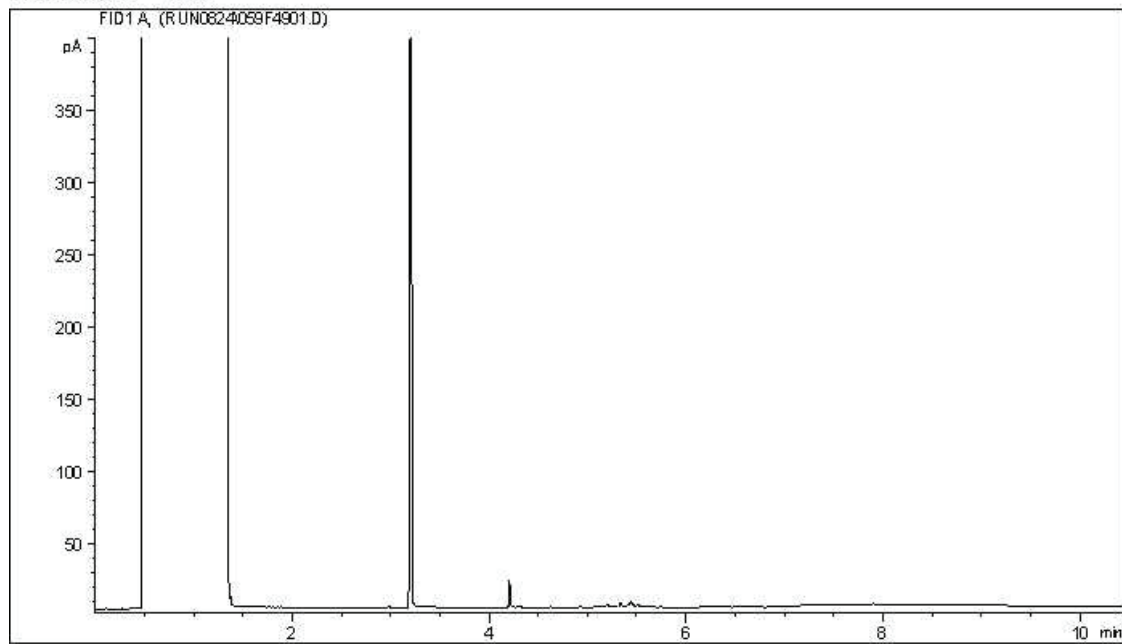
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

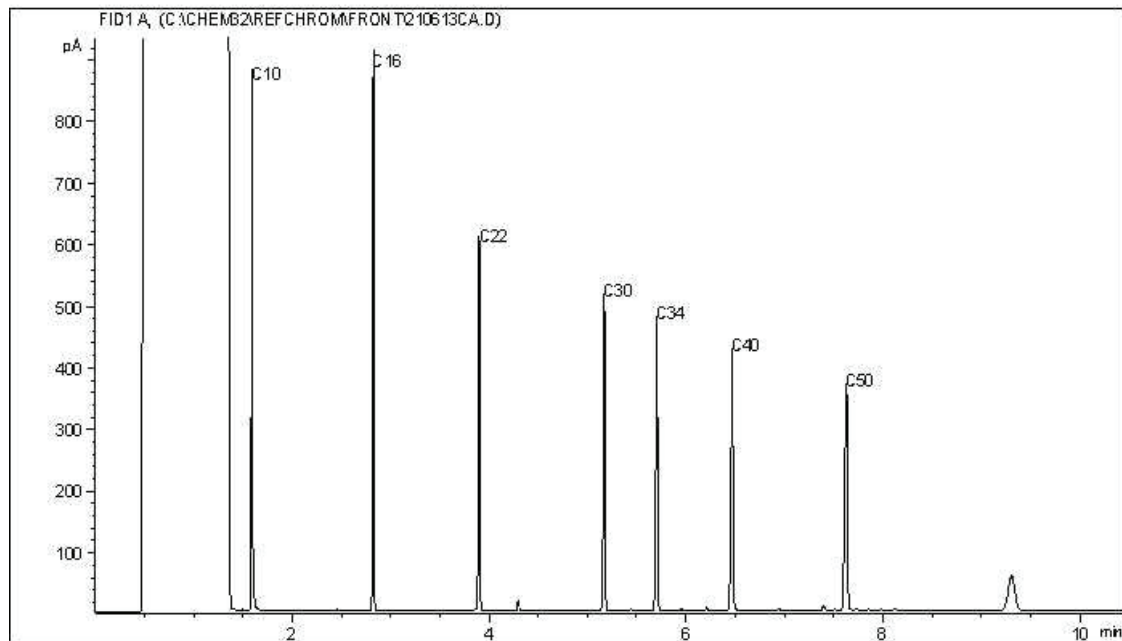
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



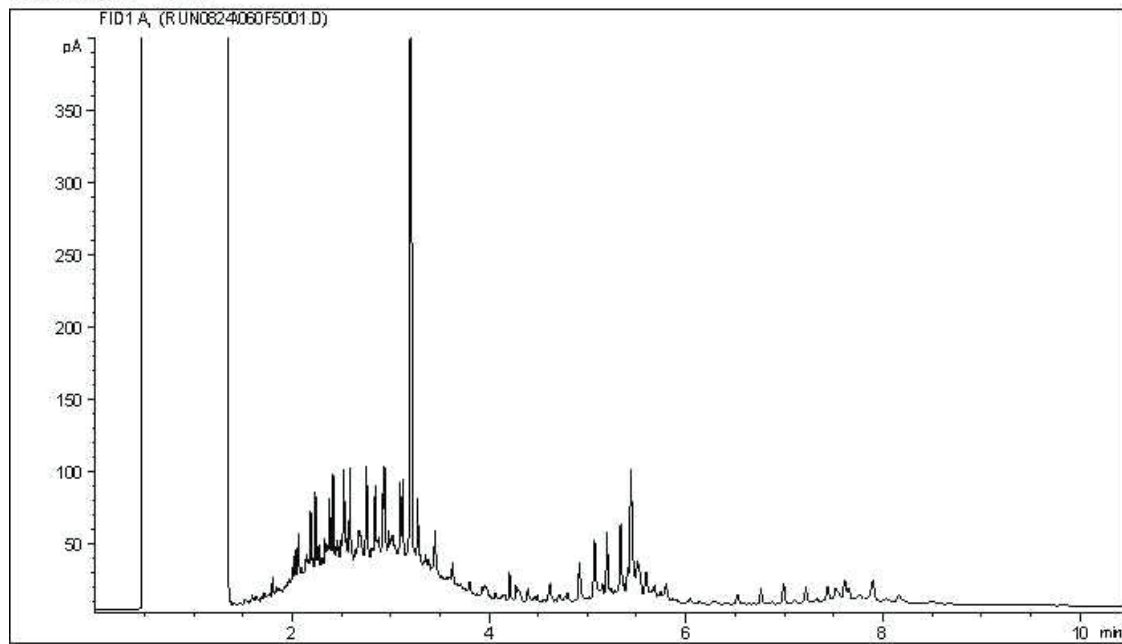
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

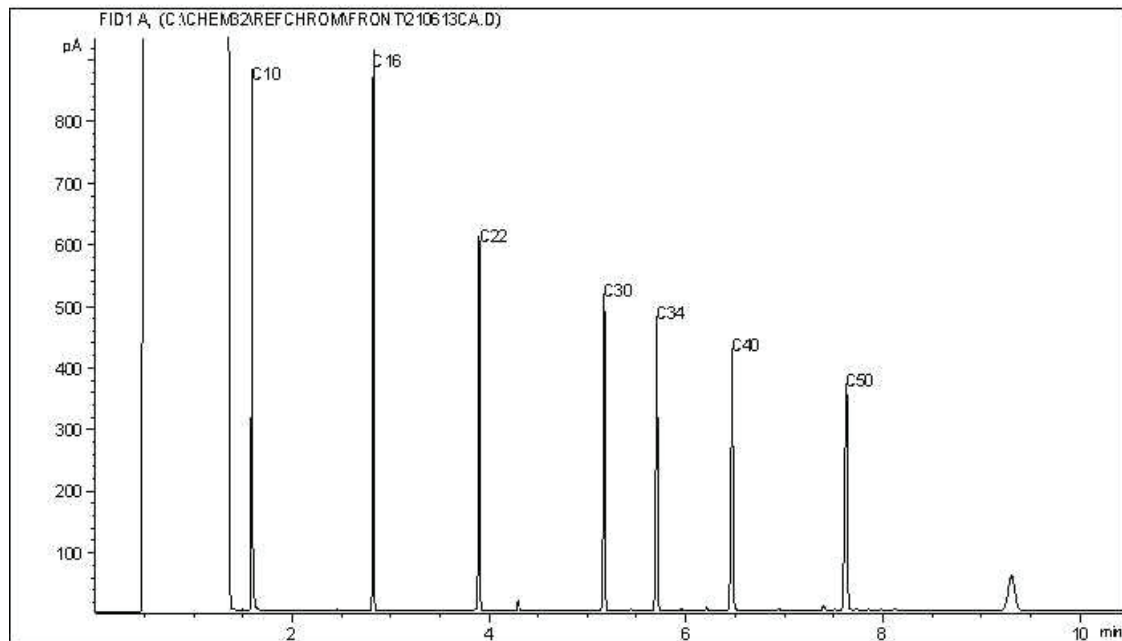
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



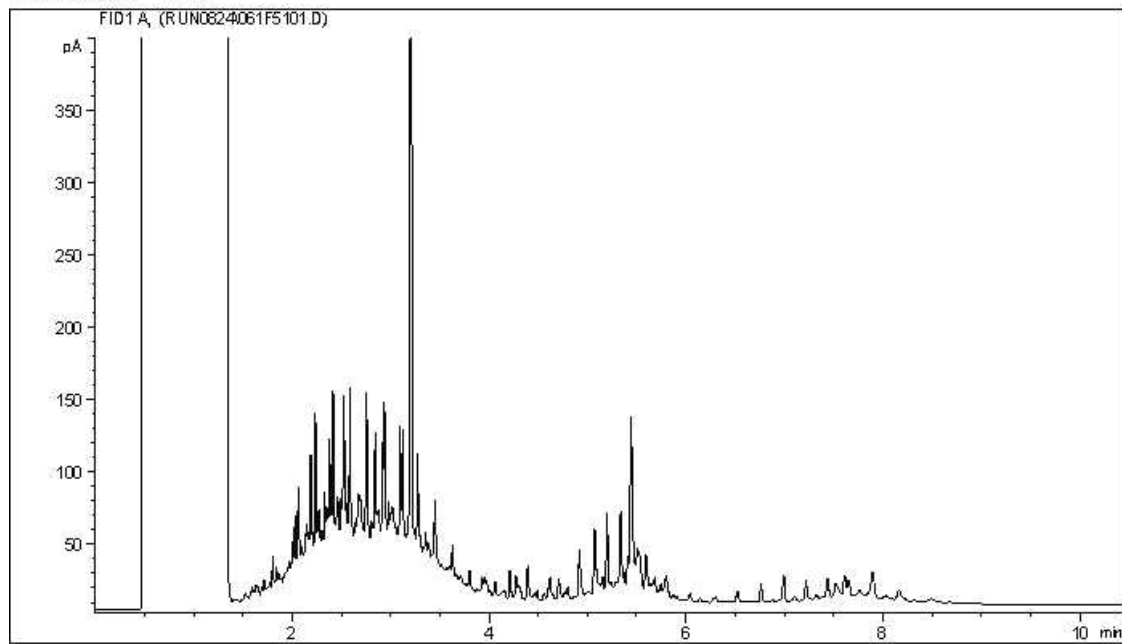
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

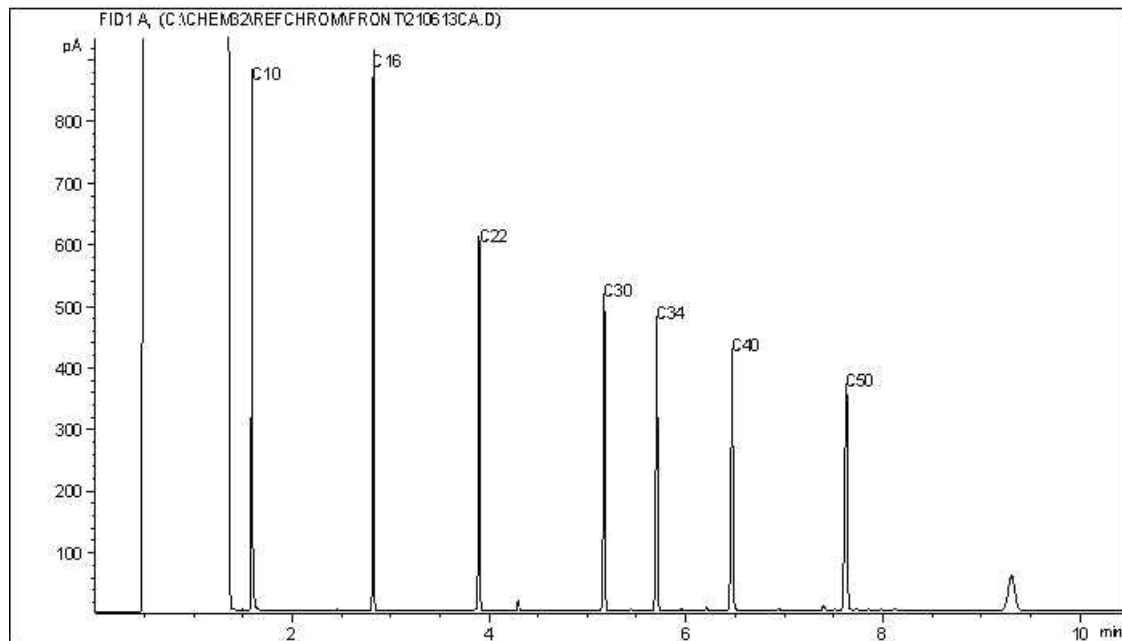
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



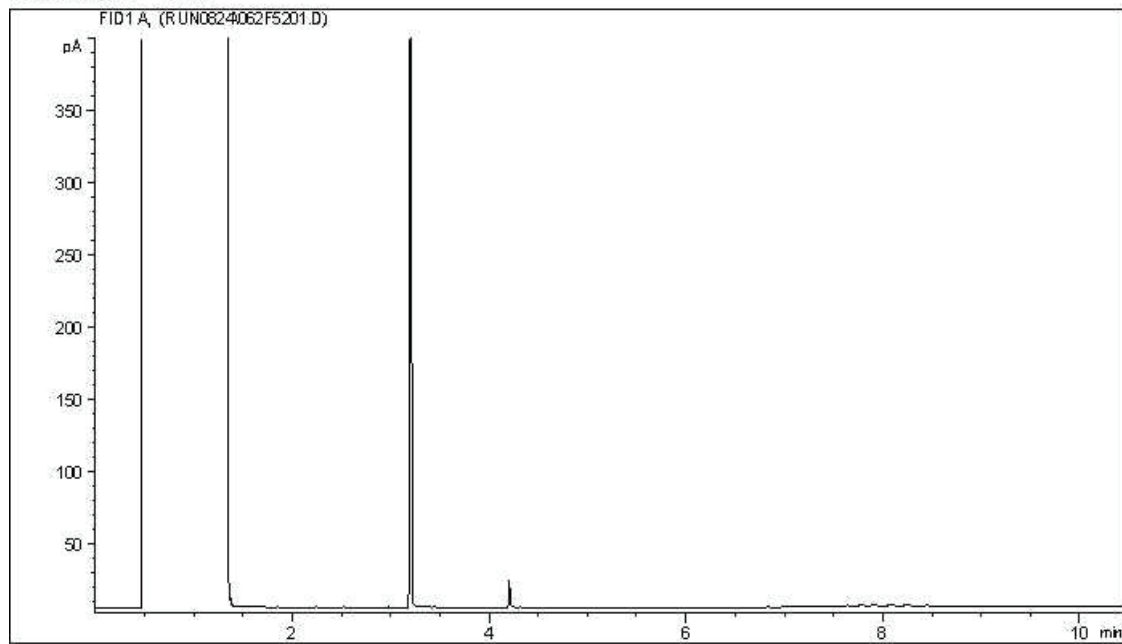
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

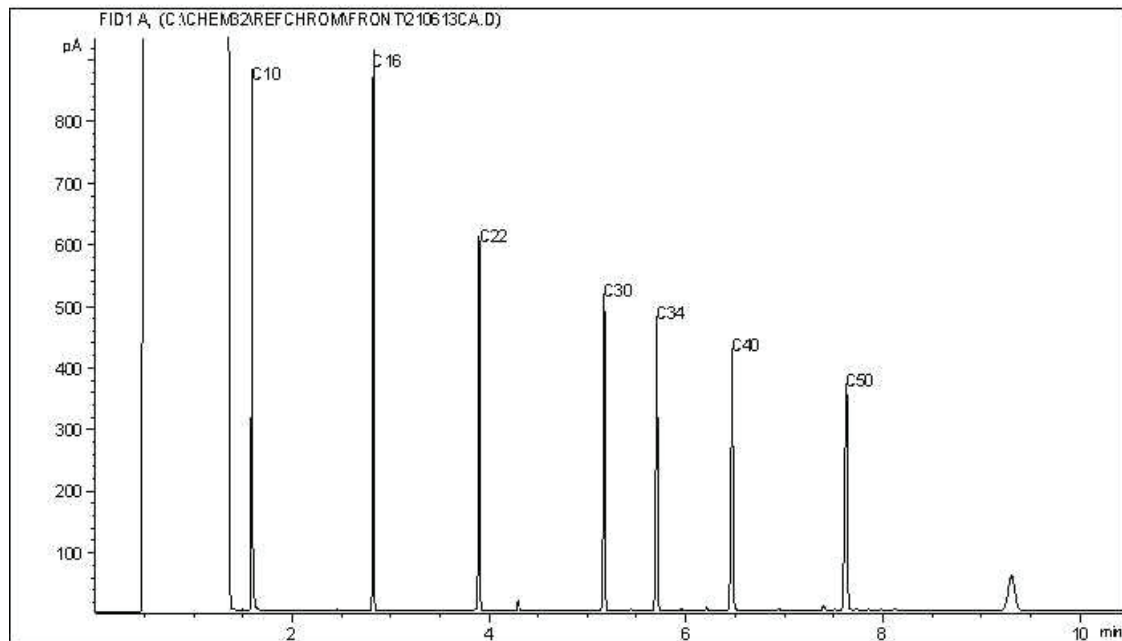
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



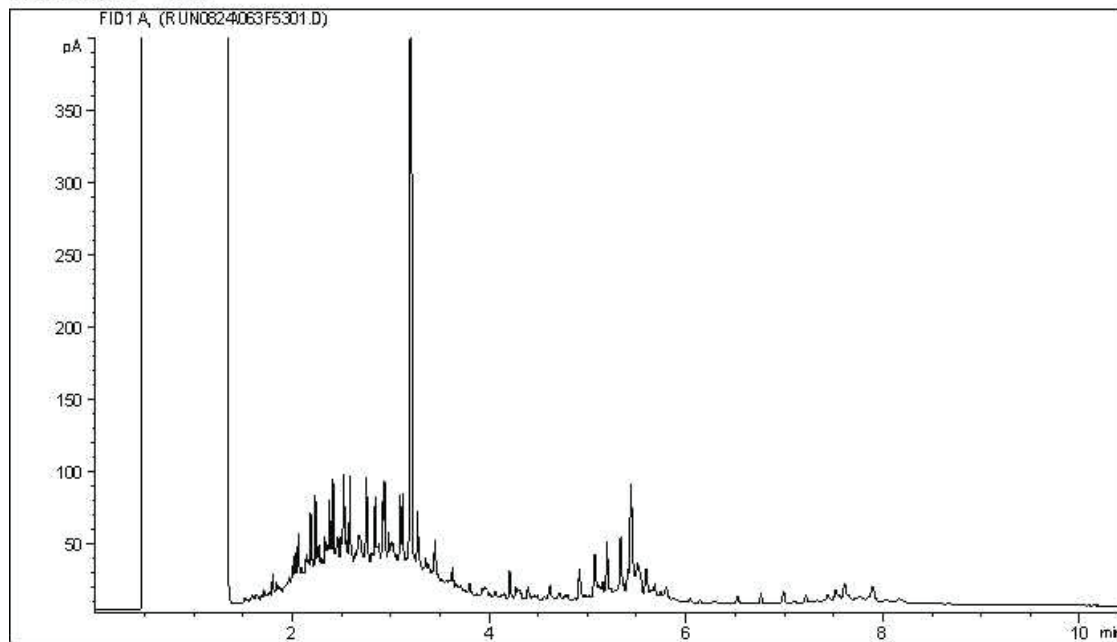
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

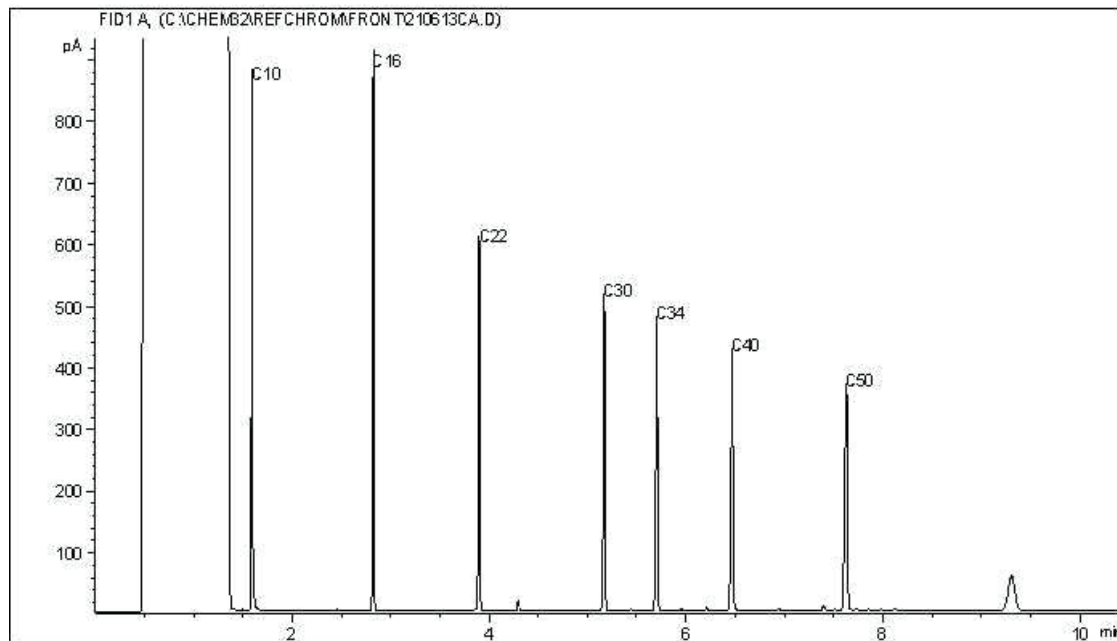
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



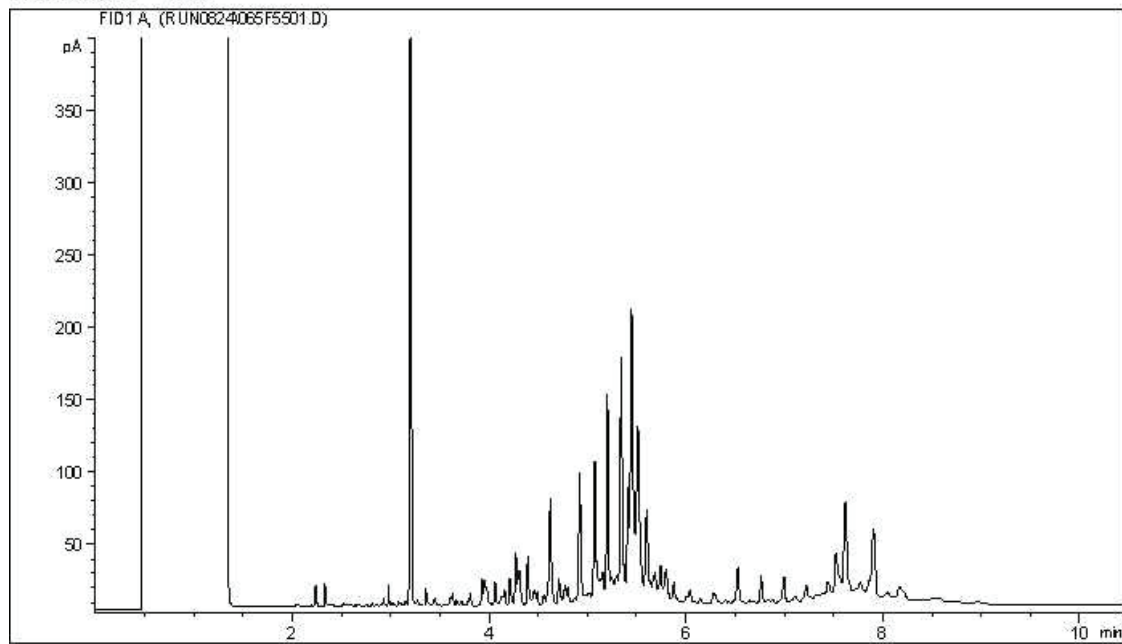
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

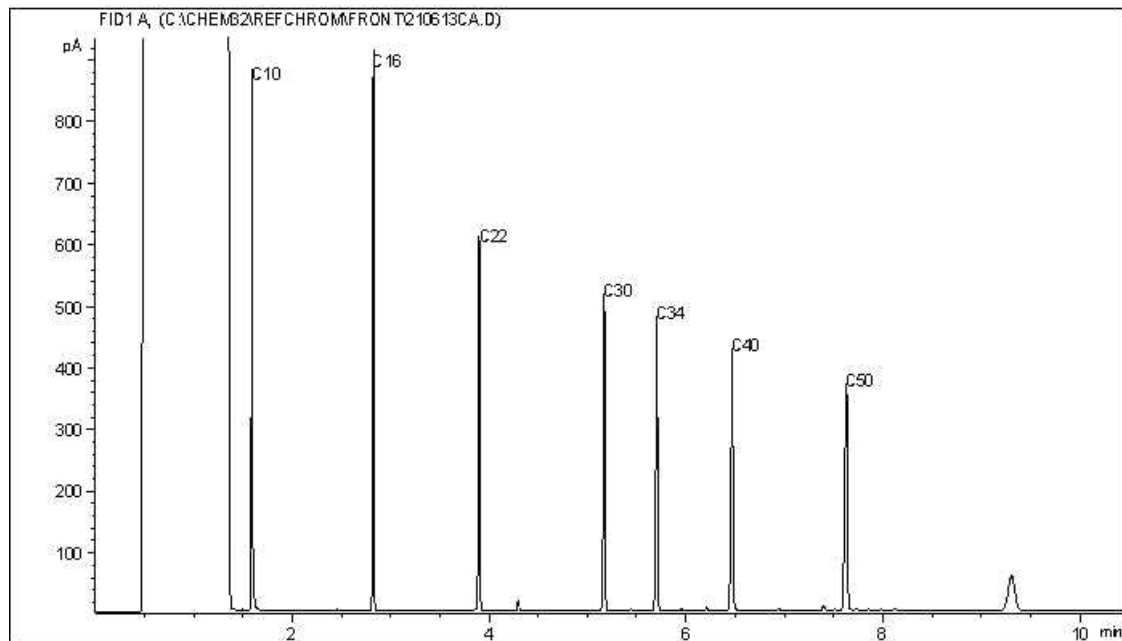
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CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



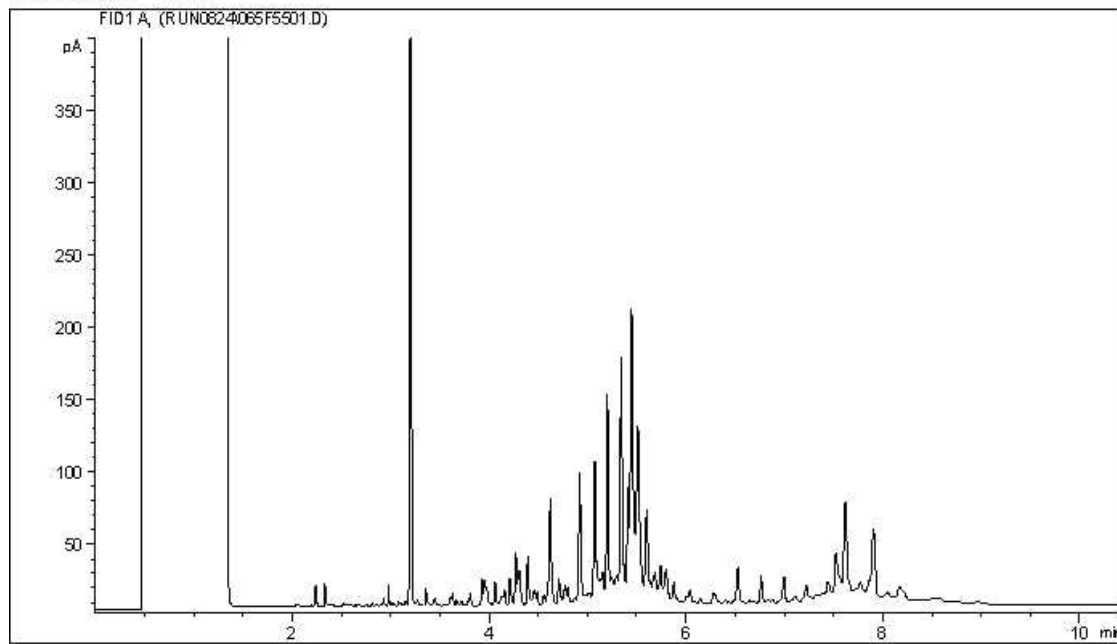
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

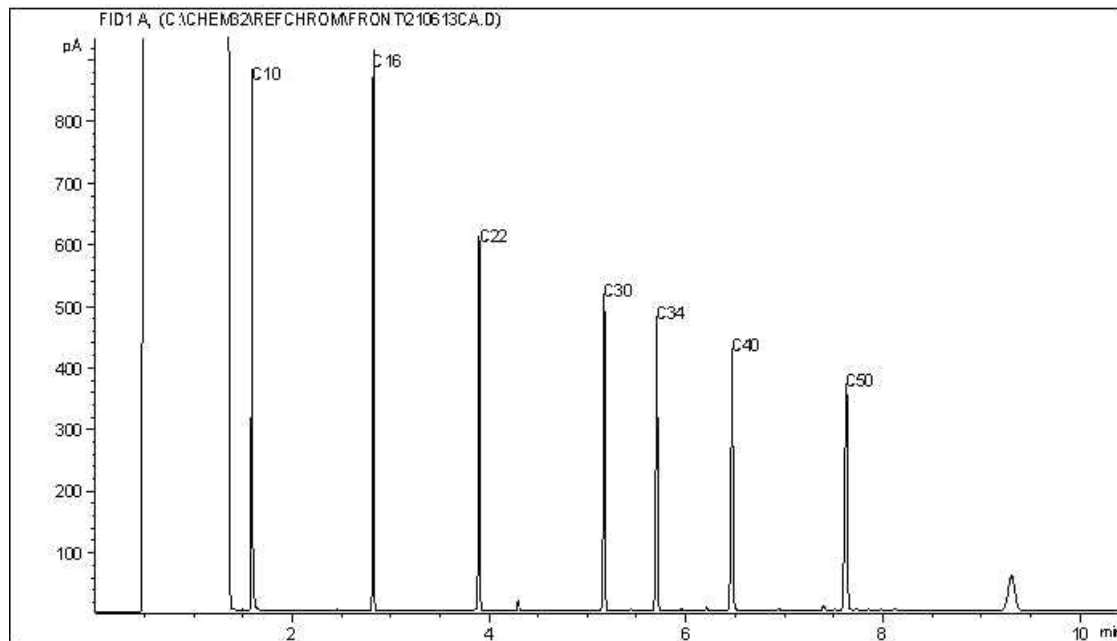
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



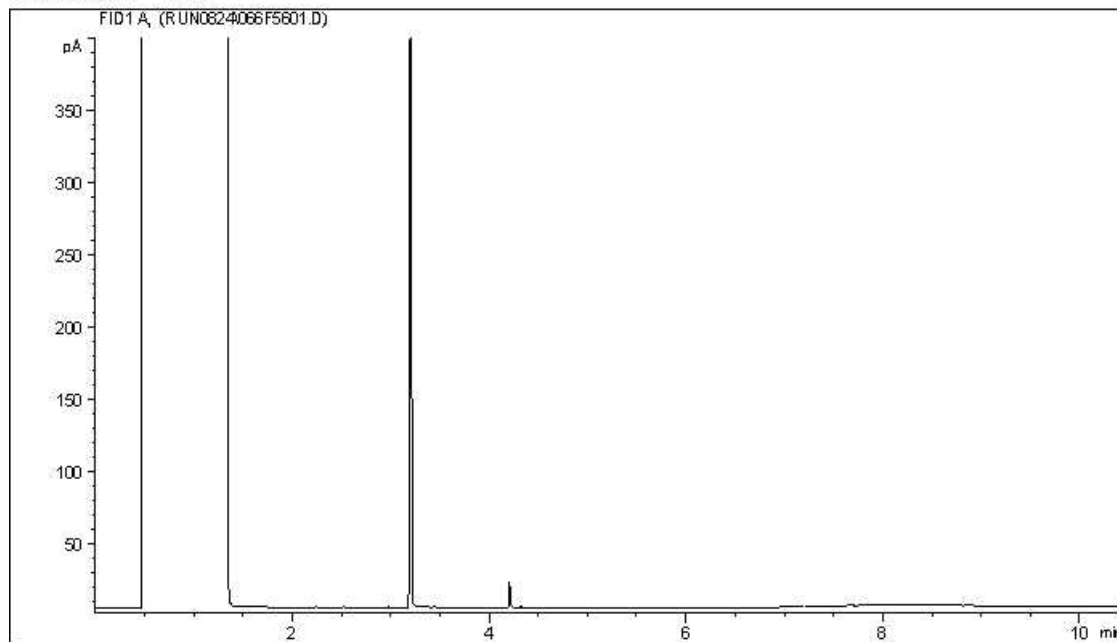
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

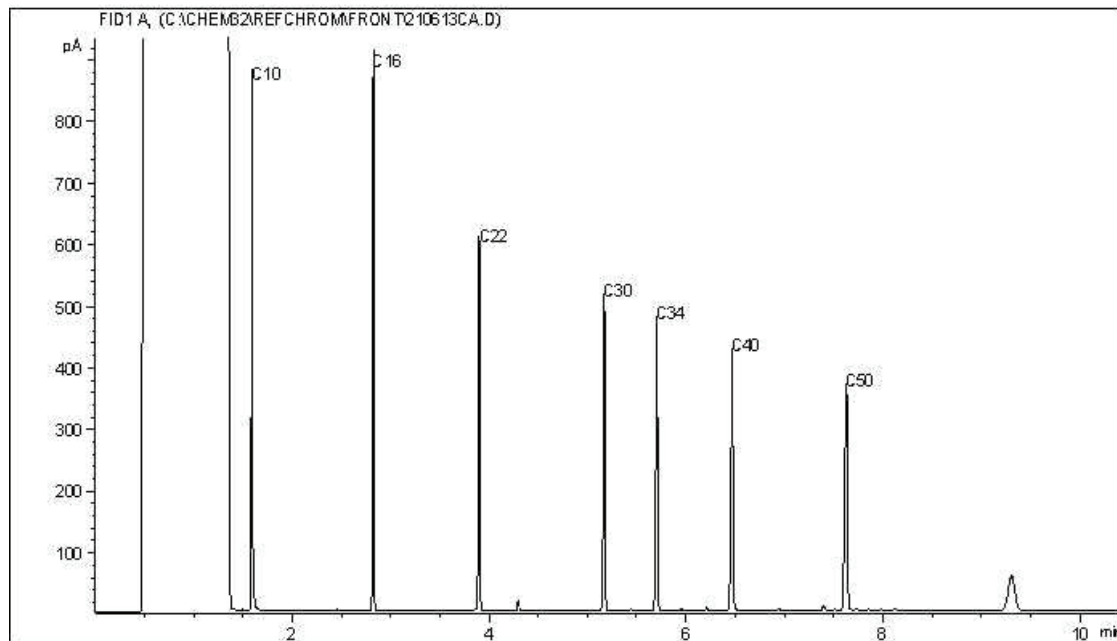
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



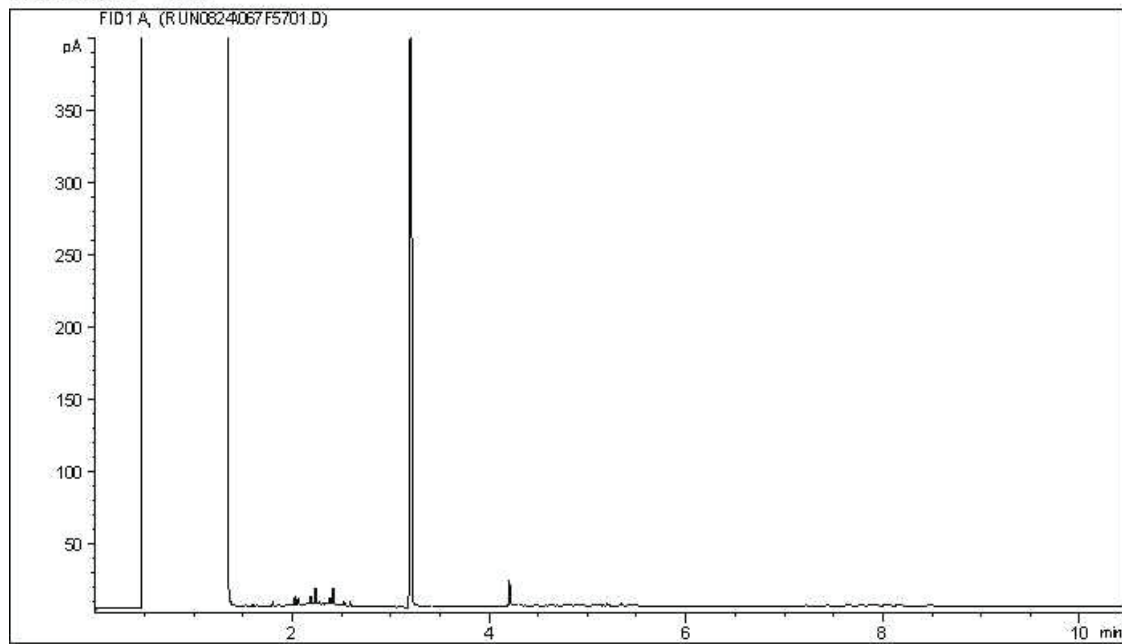
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

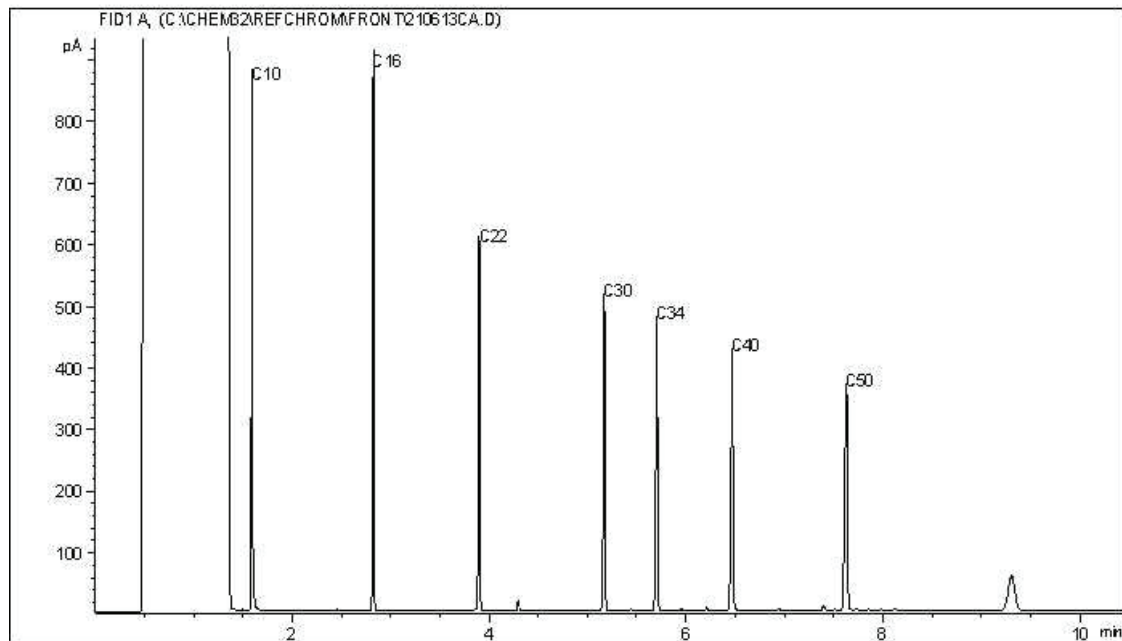
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



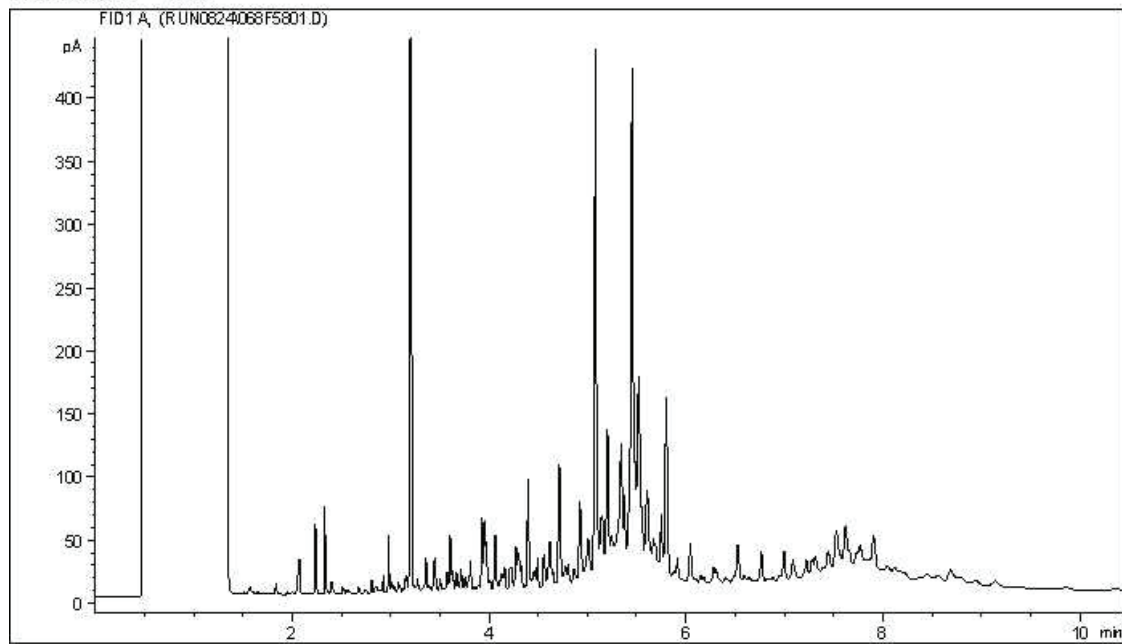
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

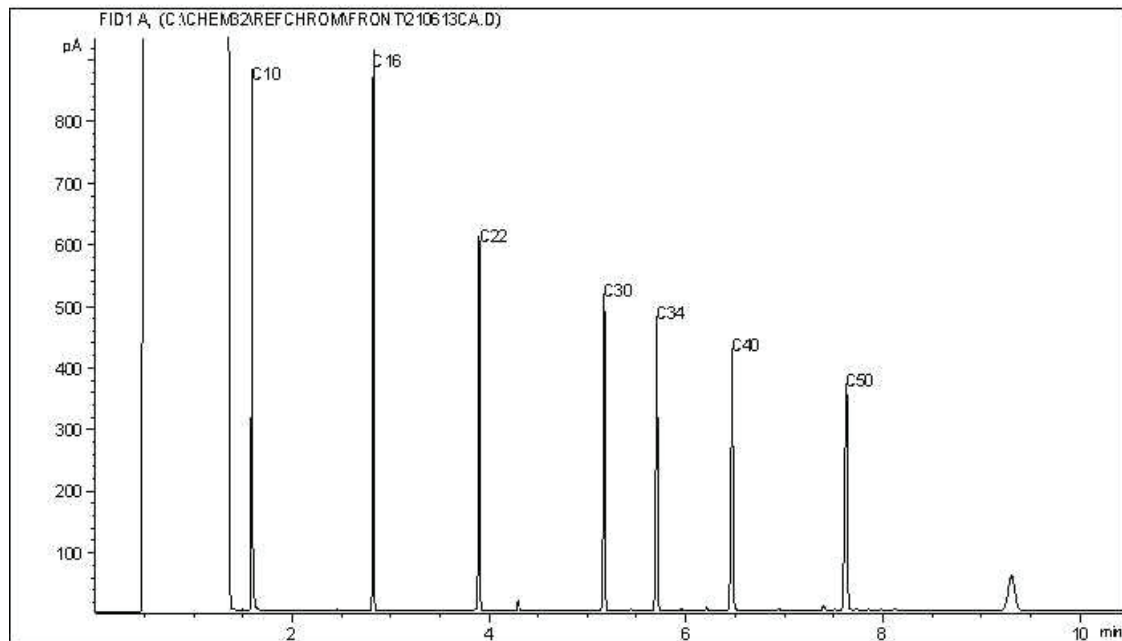
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



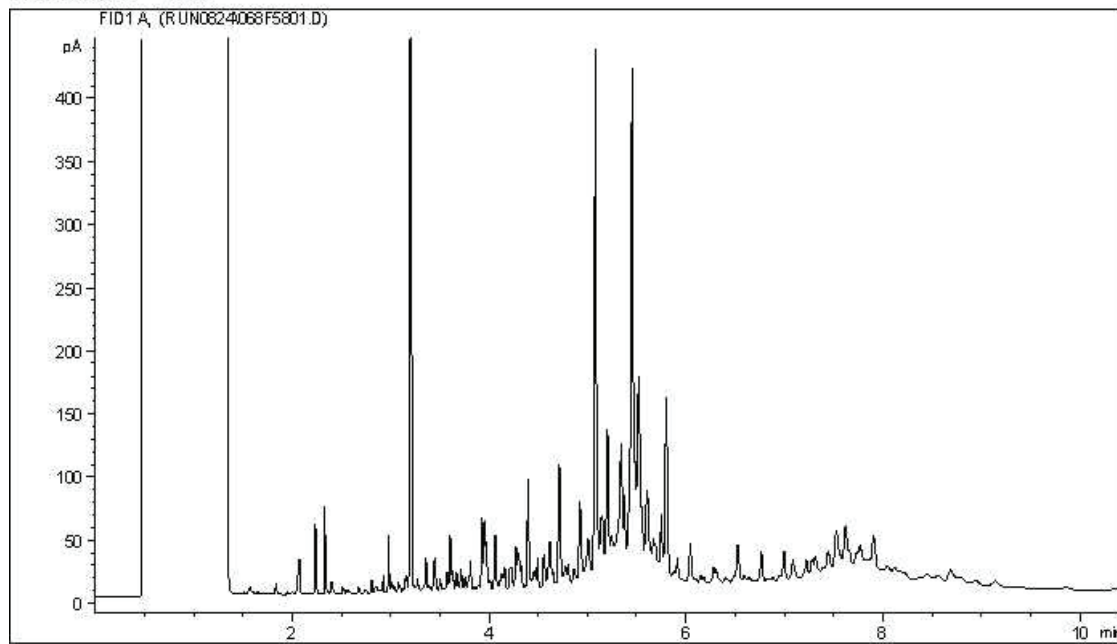
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

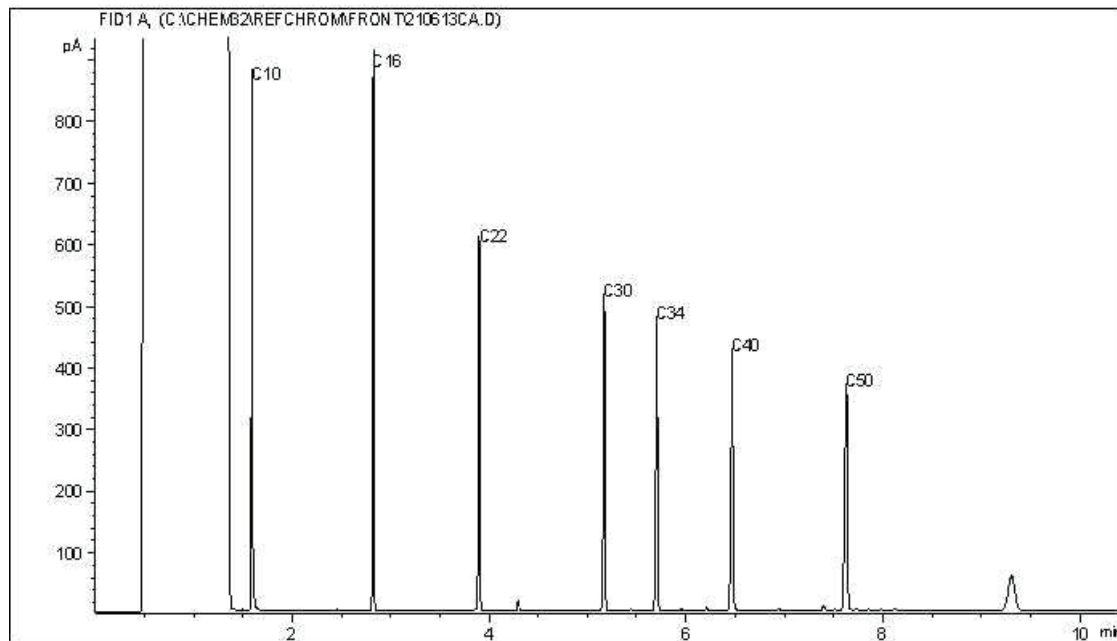
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



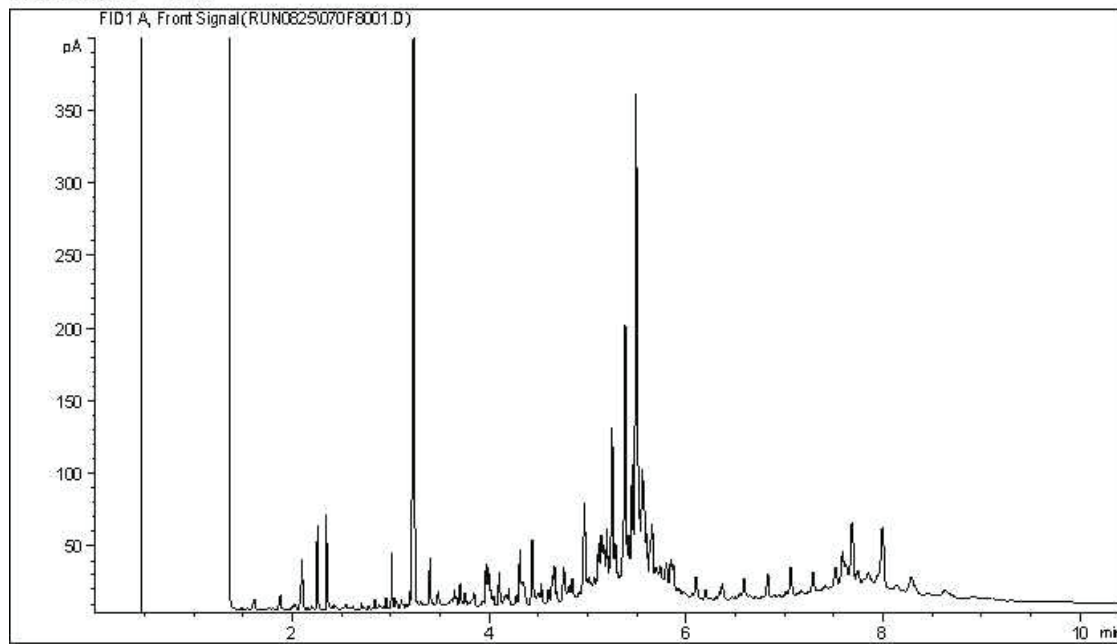
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

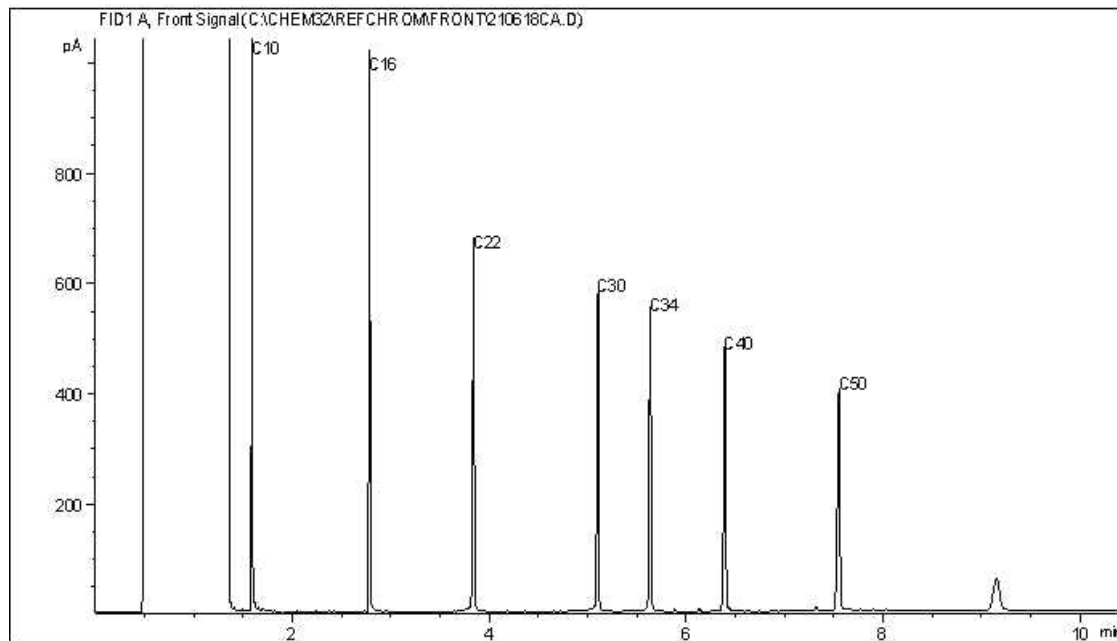
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



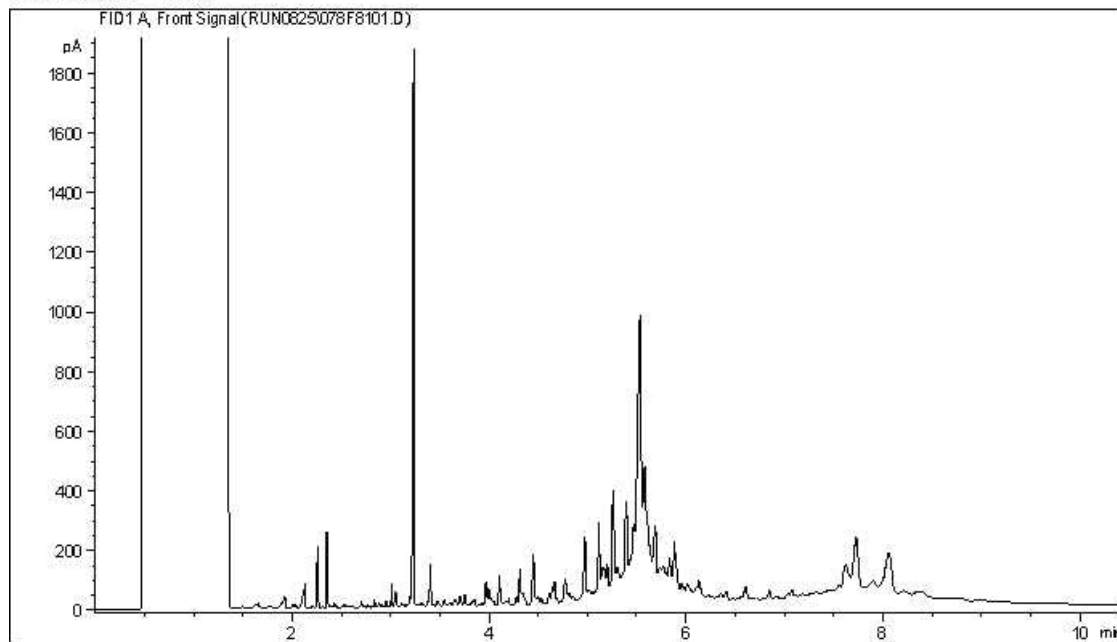
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

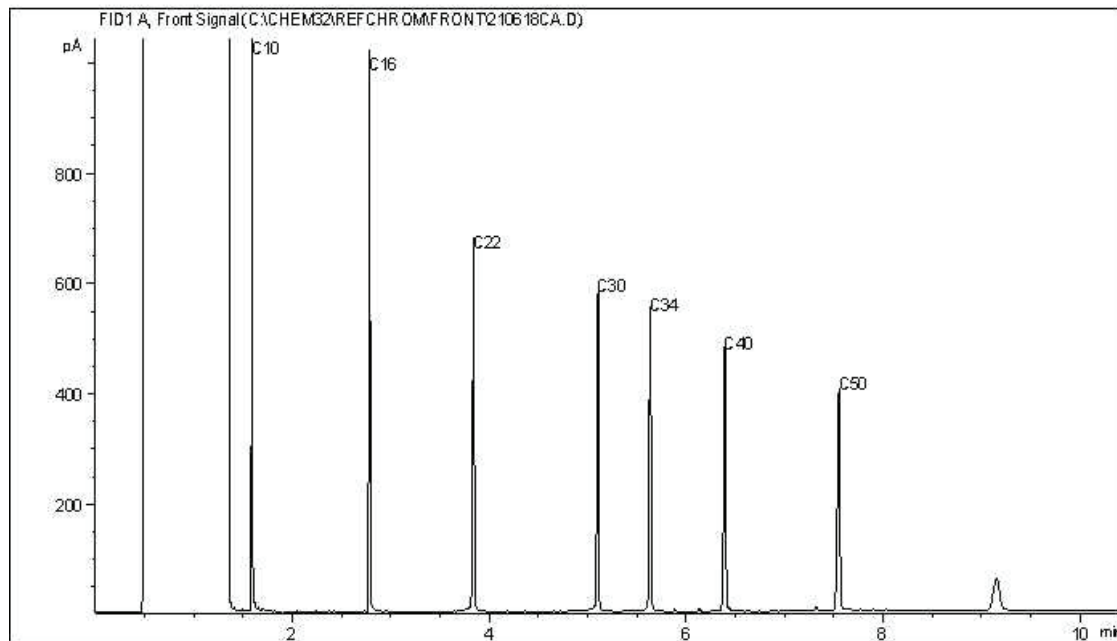
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC13



Carbon Range Distribution - Reference Chromatogram



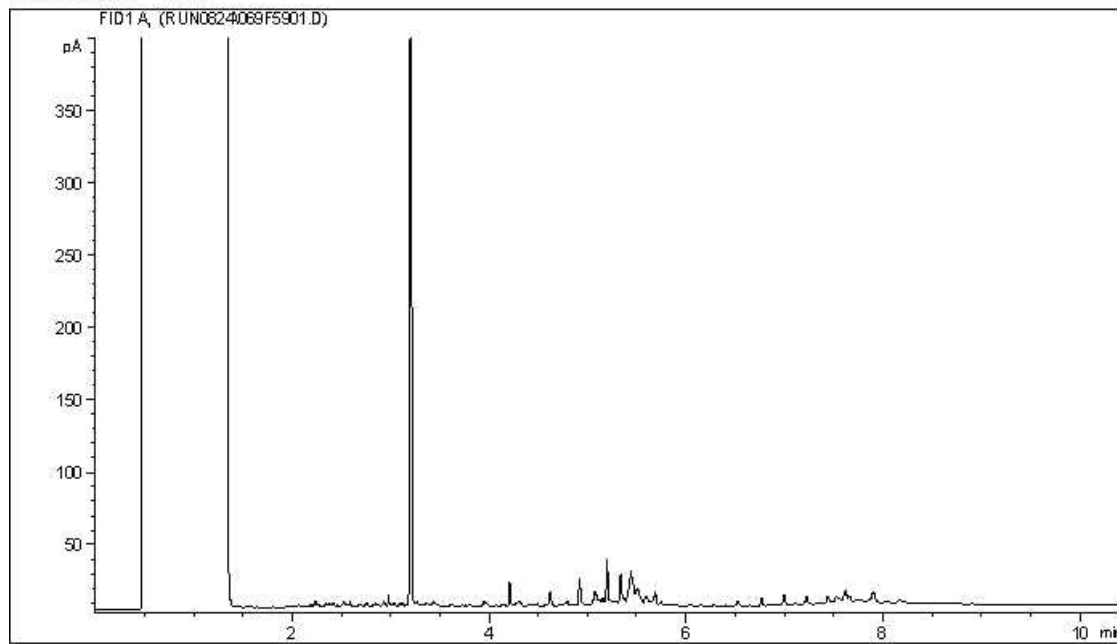
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

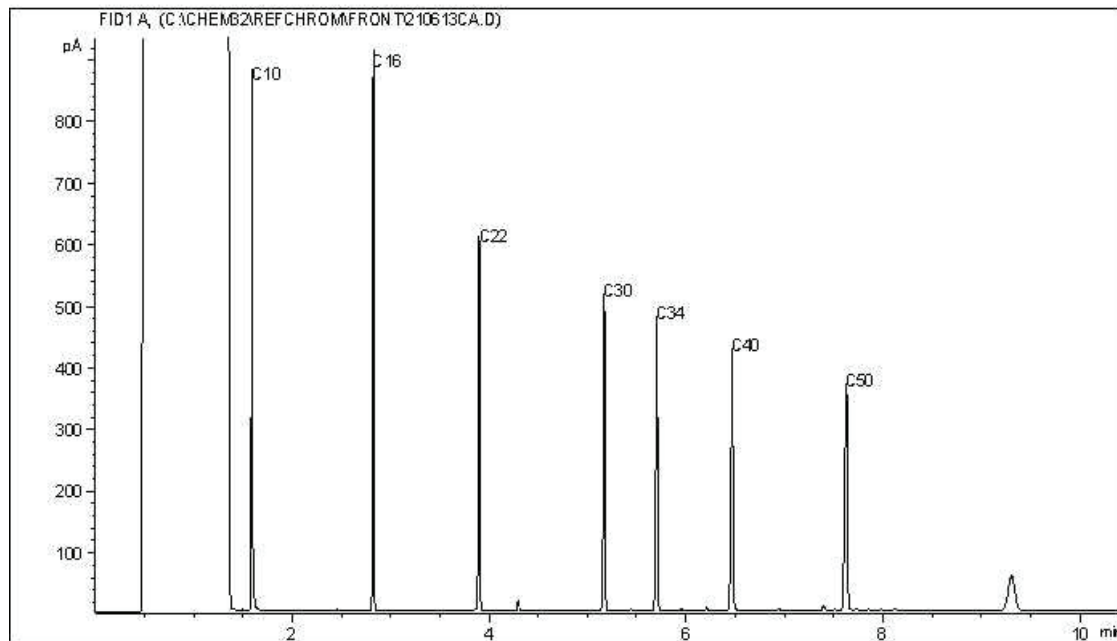
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



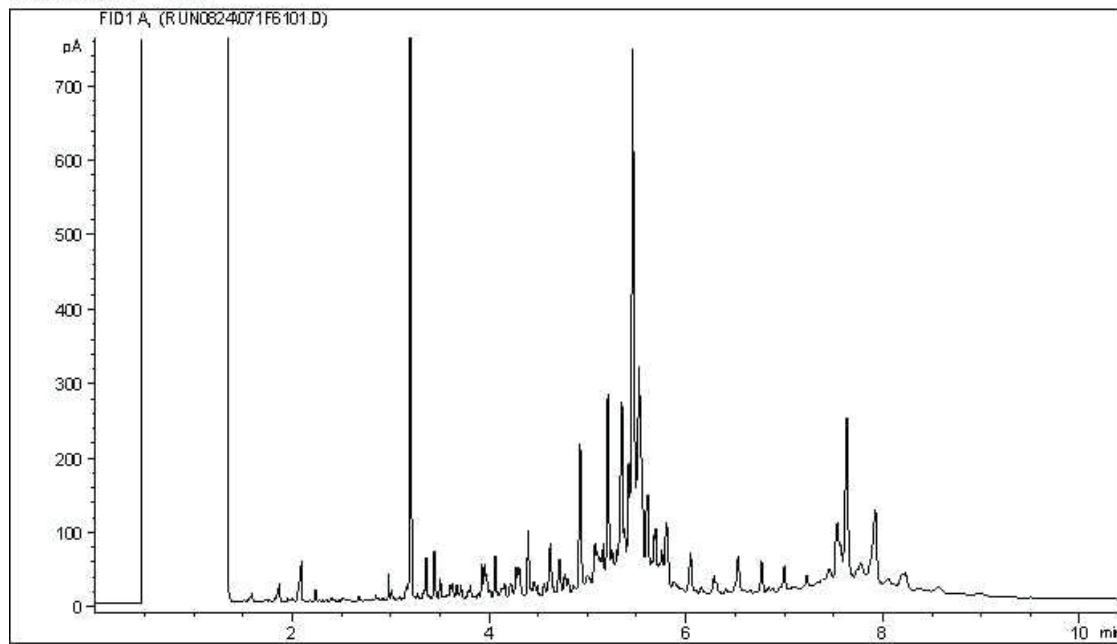
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

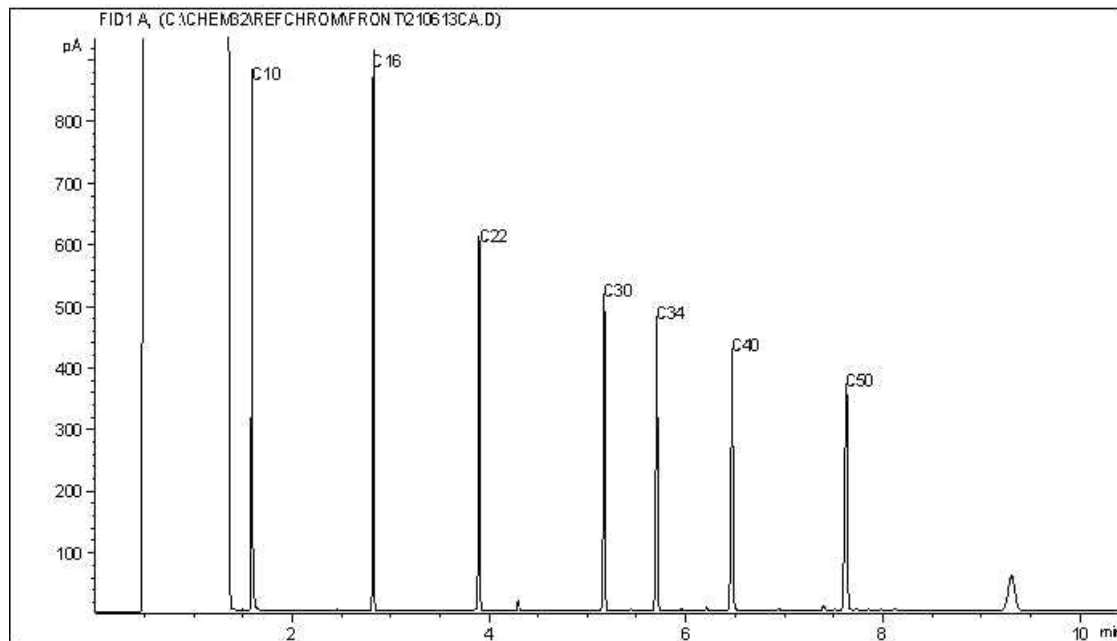
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



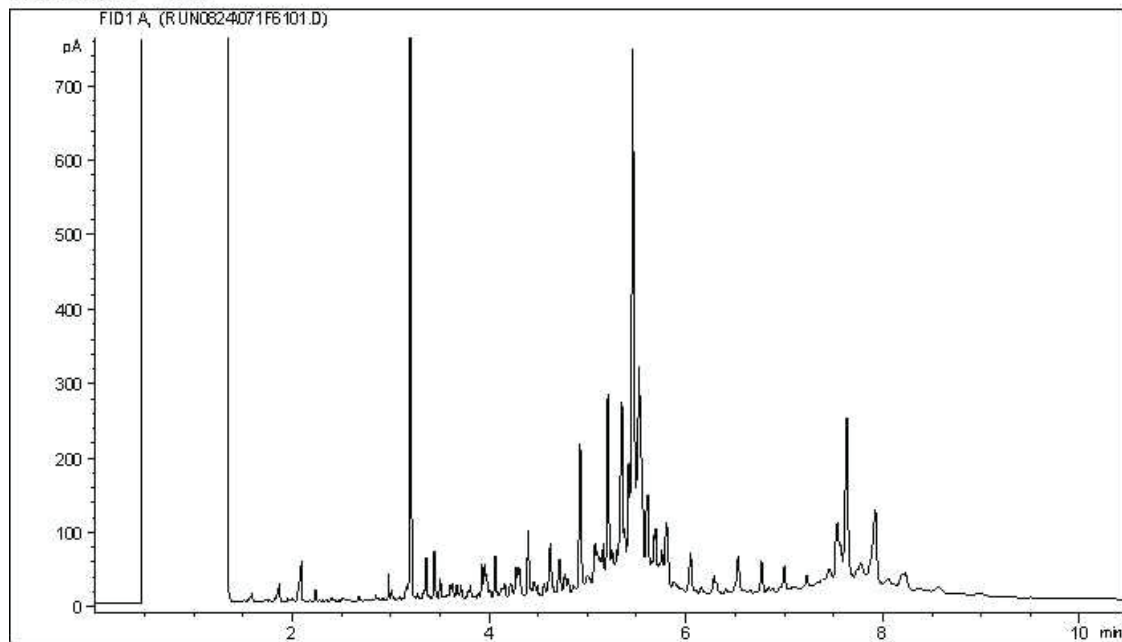
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

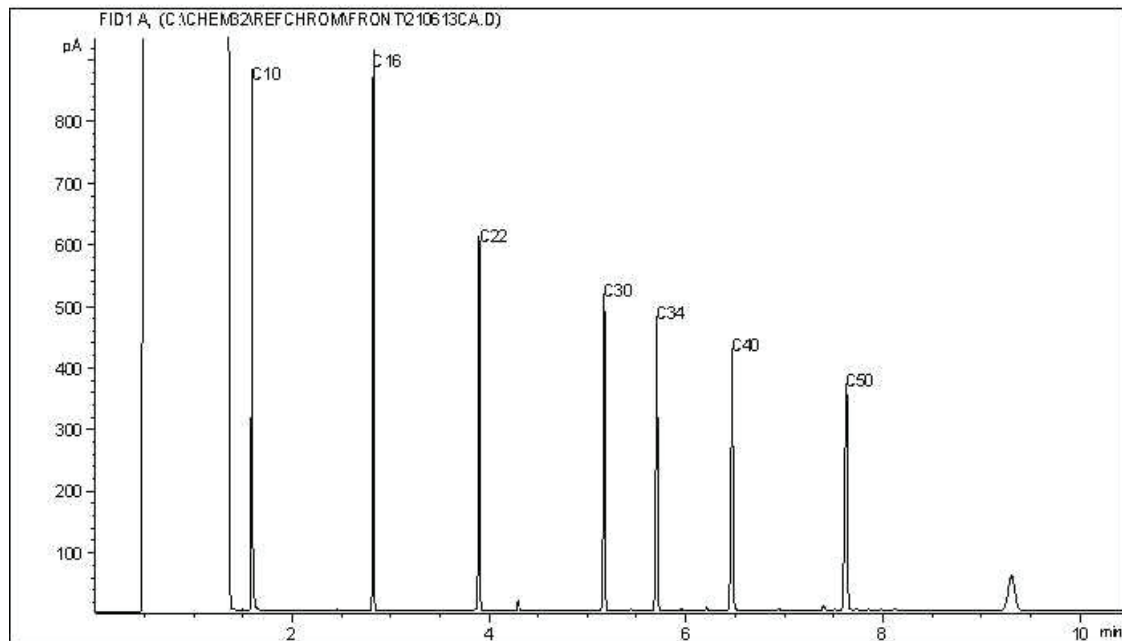
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4)+F3A/B in soil Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



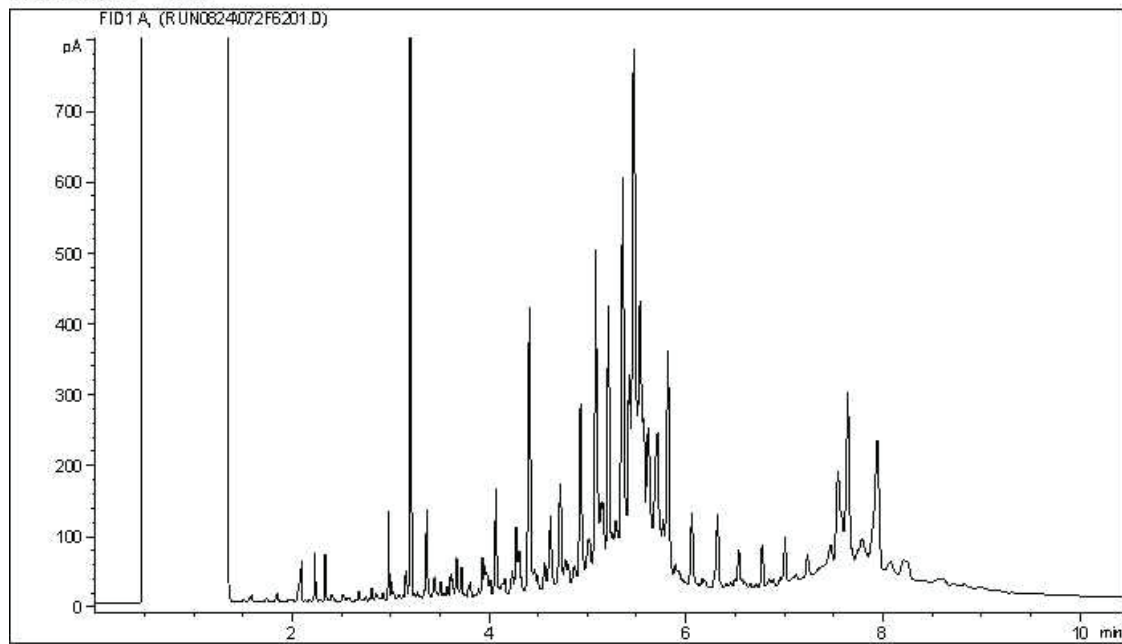
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

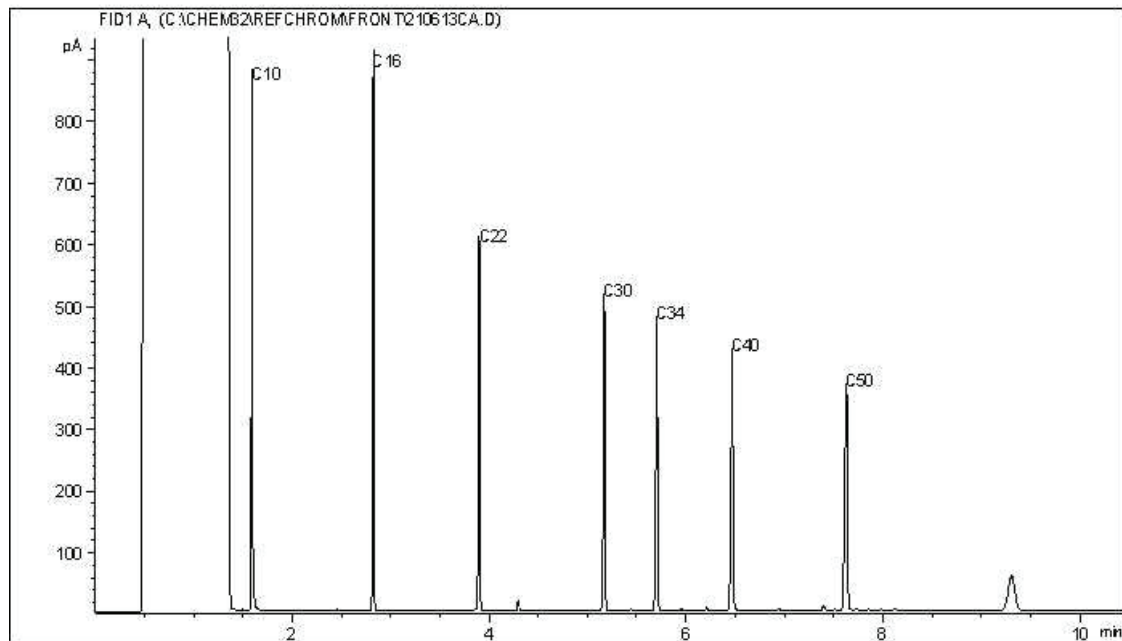
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



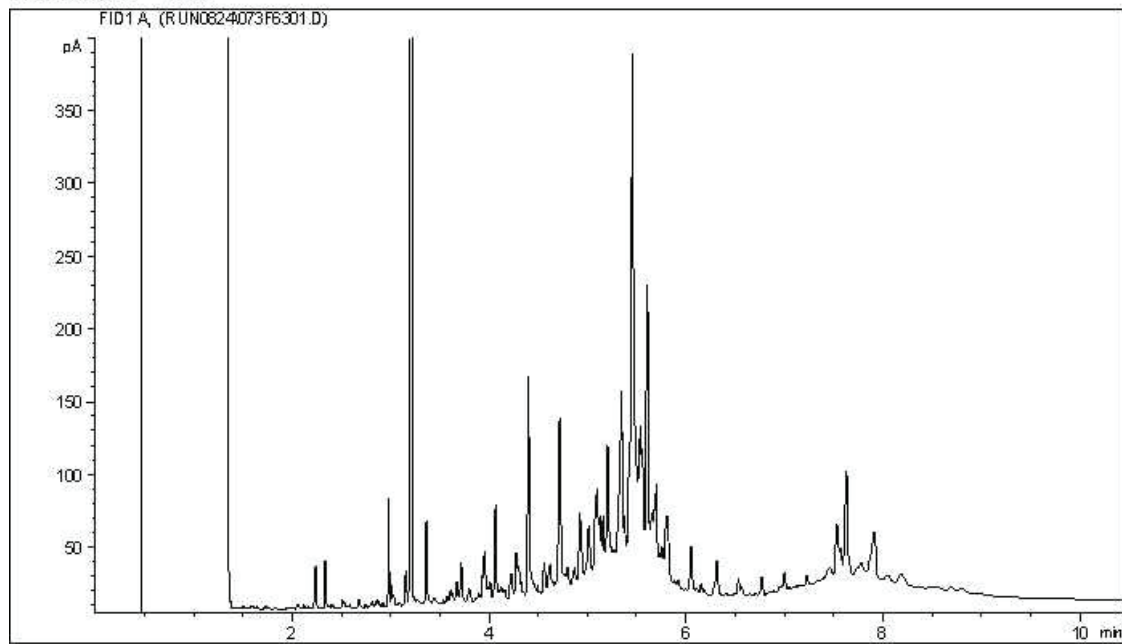
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

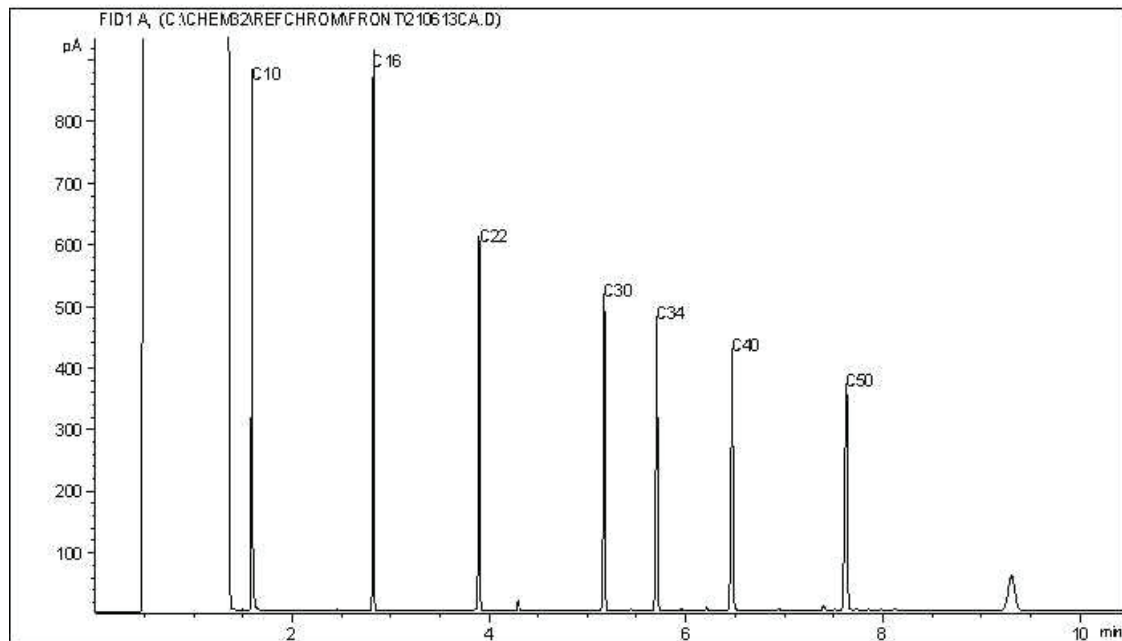
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



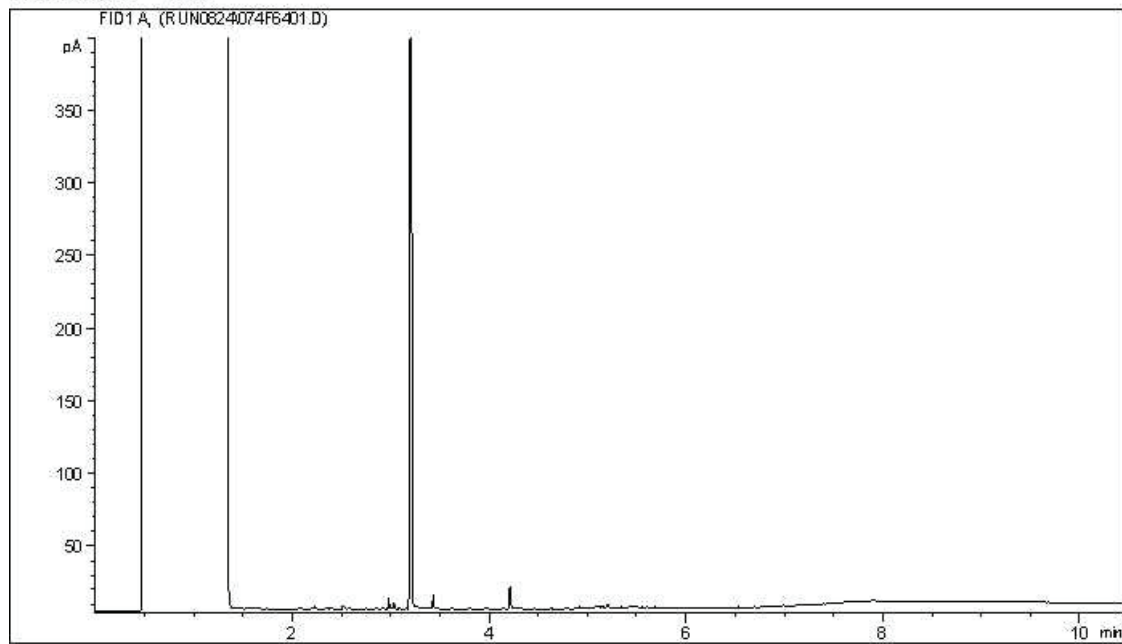
TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

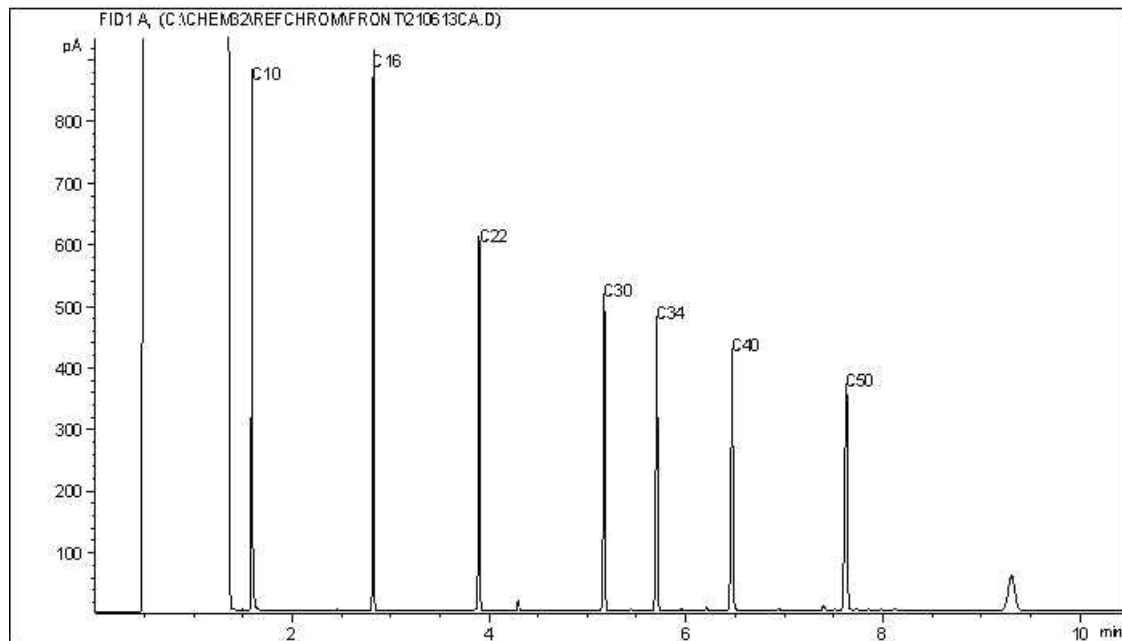
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

CCME Hydrocarbons (F2-F4 in soil) Chromatogram

Instrument: GC10



Carbon Range Distribution - Reference Chromatogram



TYPICAL PRODUCT CARBON NUMBER RANGES

Gasoline:	C4 - C12	Diesel:	C8 - C22
Varsol:	C8 - C12	Lubricating Oils:	C20 - C40
Kerosene:	C7 - C16	Crude Oils:	C3 - C60+

Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

GOLDER DATA QUALITY REVIEW CHECKLIST

Site Location: Camp Farewell

Sampling Date: August 15, 2021

Golder Project Number: 20368099-6000-1001

Laboratory: Bureau Veritas Edmonton

Lab Submission Number: C161010

Was the Cooler Received at the lab under a sealed and intact custody seal? Yes
 Was proper chain of custody of the samples documented and kept? Yes
 Were sample temperatures acceptable when they reached lab?: Yes
 Were all samples analyzed and extracted within hold times?: Yes
 Has lab warranted all tests were in statistical control in CoA?: Yes
 Was sufficient sample provided for the requested analysis? Yes
 Has lab warranted all samples were analyzed with limited headspace present?: Yes

Are All Laboratory QC Within Acceptance Criteria (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Surrogate Recovery	X			Matrix spike recovery for F3B (C22-C34) (58%) below the acceptance criteria of (60-140%). Matrix spike recovery for chromium (142%), nickel (132%) and vanadium (177%) exceeded the acceptance criteria of (75-125%). Spiked blank recovery for zinc (121%) exceeded the acceptance criteria of (80-120%).
Method Blank Concentration	X			
Laboratory Duplicate RPD	X			
Matrix Spike Recovery		X		
Blank Spike Recovery		X		

Are All Field QC Samples Within Alert Limits (Yes, No, Not Applicable)?

	Yes	No	NA	Comments
Field Blank Concentration			X	All field QC samples are within alert limits.
Trip Blank Concentration			X	
Field Duplicate RPD	X			

Is data considered reliable (Yes/No/Suspect)?: Yes
 If answer is "No" or "Suspect", describe and provide rationale:

Data Reviewed by (Print): Anita Colbert

Data Reviewed by (Signature): Anita Colbert

Date: August 31, 2021



Your P.O. #: 20368099-7000-1001
 Your Project #: 20368099-6000-1001

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
 2800, 700 -2nd Street SW
 CALGARY, AB
 CANADA T2P 2W2

Your C.O.C. #: 644511-01, 644511-27-01, 644511-24-01, 644511-25-01,
 644511-26-01, 644511-28-01

Report Date: 2021/12/24
 Report #: R3113752
 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C162508

Received: 2021/08/23, 08:30

Sample Matrix: Soil
 # Samples Received: 41

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1)	2	2021/08/30	2021/08/30	AB SOP-00039	CCME CWS/EPA 8260d m
BTEX/F1 by HS GC/MS/FID (MeOH extract) (1, 2)	39	N/A	2021/08/30	AB SOP-00039	CCME CWS/EPA 8260d m
F1-BTEX (1)	1	N/A	2021/08/30		Auto Calc
F1-BTEX (1)	40	N/A	2021/08/31		Auto Calc
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 3)	1	2021/08/28	2021/08/30	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 3)	1	2021/08/28	2021/08/31	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 3)	3	2021/08/29	2021/08/30	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4)+F3A/B in soil (1, 3)	1	2021/08/29	2021/08/31	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 4)	10	2021/08/28	2021/08/30	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 4)	10	2021/08/28	2021/08/31	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 4)	14	2021/08/29	2021/08/30	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2-F4 in soil) (1, 4)	7	2021/08/29	2021/08/31	AB SOP-00036	CCME PHC-CWS m
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 5)	1	N/A	2021/08/29		Auto Calc
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 5)	3	N/A	2021/08/30		Auto Calc
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 5)	1	N/A	2021/12/23		Auto Calc
CCME Hydrocarbons (F2/F2+F3B) in soil (1, 5)	1	N/A	2021/12/24		Auto Calc
CCME Hydrocarbons (F4G in soil) (1, 4)	1	2021/08/29	2021/08/31	AB SOP-00036 AB SOP-00040	CCME PHC-CWS m
Moisture (1)	20	N/A	2021/08/29	AB SOP-00002	CCME PHC-CWS m
Moisture (1)	21	N/A	2021/08/30	AB SOP-00002	CCME PHC-CWS m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement



Your P.O. #: 20368099-7000-1001
Your Project #: 20368099-6000-1001

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
2800, 700 -2nd Street SW
CALGARY, AB
CANADA T2P 2W2

Your C.O.C. #: 644511-01, 644511-27-01, 644511-24-01, 644511-25-01,
644511-26-01, 644511-28-01

Report Date: 2021/12/24
Report #: R3113752
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C162508

Received: 2021/08/23, 08:30

Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is date sampled unless otherwise stated.

(3) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(4) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(5) All CCME results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil, Validation of Performance-Based Alternative Methods September 2003. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.



Your P.O. #: 20368099-7000-1001
Your Project #: 20368099-6000-1001

Attention: Aurelie Belavance

GOLDER ASSOCIATES LTD.
2800, 700 -2nd Street SW
CALGARY, AB
CANADA T2P 2W2

Your C.O.C. #: 644511-01, 644511-27-01, 644511-24-01, 644511-25-01,
644511-26-01, 644511-28-01

Report Date: 2021/12/24
Report #: R3113752
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C162508

Received: 2021/08/23, 08:30

Encryption Key



**AUTHORIZED REPORT
RAPPORT AUTORISÉ**

Bureau Veritas

24 Dec 2021 12:50:48

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Cynny Hagen, Key Account Specialist
Email: Cynny.HAGEN@bureauveritas.com
Phone# (403)735-2273

=====

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
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Bureau Veritas Job #: C162508
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AE0129		AE0130	AE0130	AE0131	AE0132		
Sampling Date		2021/08/19 15:35		2021/08/19 15:38	2021/08/19 15:38	2021/08/19 15:10	2021/08/19 11:19		
COC Number		644511-27-01		644511-27-01	644511-27-01	644511-27-01	644511-27-01		
	UNITS	TP21-147-01	QC Batch	TP21-147-03	TP21-147-03 Lab-Dup	TP21-147-05	TP21-TP19-24-01	RDL	QC Batch

Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	A335207	<10	N/A	<10	58	10	A335207
F3 (C16-C34 Hydrocarbons)	mg/kg	420	A335207	<50	N/A	210	240	50	A335207
F4 (C34-C50 Hydrocarbons)	mg/kg	110	A335207	<50	N/A	84	59	50	A335207
Reached Baseline at C50	mg/kg	Yes	A335207	Yes	N/A	Yes	Yes	N/A	A335207

Physical Properties									
Moisture	%	4.6	A335214	3.7	N/A	8.7	11	0.30	A335214

Volatiles									
Xylenes (Total)	mg/kg	<0.045	A333349	<0.045	N/A	<0.045	0.25	0.045	A333349
F1 (C6-C10) - BTEX	mg/kg	<10	A333349	<10	N/A	<10	<10	10	A333349

Field Preserved Volatiles									
Benzene	mg/kg	<0.0050	A334567	<0.0050	<0.0050	N/A	0.0068	0.0050	A334575
Toluene	mg/kg	<0.050	A334567	<0.050	<0.050	N/A	0.16	0.050	A334575
Ethylbenzene	mg/kg	<0.010	A334567	<0.010	<0.010	N/A	0.035	0.010	A334575
m & p-Xylene	mg/kg	<0.040	A334567	<0.040	<0.040	N/A	0.18	0.040	A334575
o-Xylene	mg/kg	<0.020	A334567	<0.020	<0.020	N/A	0.068	0.020	A334575
F1 (C6-C10)	mg/kg	<10	A334567	<10	<10	N/A	<10	10	A334575

Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	94	A334567	97	94	N/A	95	N/A	A334575
4-Bromofluorobenzene (sur.)	%	101	A334567	99	98	N/A	96	N/A	A334575
D10-o-Xylene (sur.)	%	98	A334567	117	119	N/A	96	N/A	A334575
D4-1,2-Dichloroethane (sur.)	%	106	A334567	105	102	N/A	102	N/A	A334575
O-TERPHENYL (sur.)	%	84	A335207	85	N/A	91	97	N/A	A335207

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable



BUREAU
VERITAS

Bureau Veritas Job #: C162508
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEO133	AEO133		AEO134	AEO134		
Sampling Date		2021/08/19 11:20	2021/08/19 11:20		2021/08/19 11:25	2021/08/19 11:25		
COC Number		644511-27-01	644511-27-01		644511-27-01	644511-27-01		
	UNITS	TP21-TP19-24-03	TP21-TP19-24-03 Lab-Dup	QC Batch	TP21-TP19-24-05	TP21-TP19-24-05 Lab-Dup	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	140	N/A	A335207	<10	<10	10	A335207
F3 (C16-C34 Hydrocarbons)	mg/kg	290	N/A	A335207	<50	<50	50	A335207
F4 (C34-C50 Hydrocarbons)	mg/kg	63	N/A	A335207	<50	<50	50	A335207
Reached Baseline at C50	mg/kg	Yes	N/A	A335207	Yes	Yes	N/A	A335207
Physical Properties								
Moisture	%	11	12	A335210	15	N/A	0.30	A335214
Volatiles								
Xylenes (Total)	mg/kg	<0.045	N/A	A333349	<0.045	N/A	0.045	A333349
F1 (C6-C10) - BTEX	mg/kg	<10	N/A	A333349	<10	N/A	10	A333349
Field Preserved Volatiles								
Benzene	mg/kg	<0.0050	N/A	A334575	<0.0050	N/A	0.0050	A334575
Toluene	mg/kg	0.22	N/A	A334575	0.22	N/A	0.050	A334575
Ethylbenzene	mg/kg	<0.010	N/A	A334575	<0.010	N/A	0.010	A334575
m & p-Xylene	mg/kg	<0.040	N/A	A334575	<0.040	N/A	0.040	A334575
o-Xylene	mg/kg	<0.020	N/A	A334575	<0.020	N/A	0.020	A334575
F1 (C6-C10)	mg/kg	<10	N/A	A334575	<10	N/A	10	A334575
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	96	N/A	A334575	96	N/A	N/A	A334575
4-Bromofluorobenzene (sur.)	%	97	N/A	A334575	98	N/A	N/A	A334575
D10-o-Xylene (sur.)	%	100	N/A	A334575	95	N/A	N/A	A334575
D4-1,2-Dichloroethane (sur.)	%	101	N/A	A334575	103	N/A	N/A	A334575
O-TERPHENYL (sur.)	%	91	N/A	A335207	81	92	N/A	A335207
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable								



AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEO135	AEO136	AEO137		AEO138		
Sampling Date		2021/08/19 15:25	2021/08/19 15:26	2021/08/19 15:27		2021/08/19 10:02		
COC Number		644511-27-01	644511-27-01	644511-27-01		644511-27-01		
	UNITS	TP21-TP19-21-02	TP21-TP19-21-04	TP21-TP19-21-06	QC Batch	DUPI	RDL	QC Batch
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	32	12	<10	A335207	450	10	A335207
F3 (C16-C34 Hydrocarbons)	mg/kg	280	170	<50	A335207	280	50	A335207
F4 (C34-C50 Hydrocarbons)	mg/kg	100	58	<50	A335207	100	50	A335207
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	A335207	Yes	N/A	A335207
Physical Properties								
Moisture	%	4.9	14	6.1	A335214	29	0.30	A335210
Volatiles								
Xylenes (Total)	mg/kg	<0.045	0.11	0.33	A333349	120	0.045	A333395
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	A333349	2200	10	A333395
Field Preserved Volatiles								
Benzene	mg/kg	<0.0050	<0.0050	0.018	A334575	0.48 (1)	0.0050	A334575
Toluene	mg/kg	<0.050	<0.050	0.064	A334575	5.3	0.050	A334575
Ethylbenzene	mg/kg	<0.010	0.018	0.048	A334575	22	0.010	A334575
m & p-Xylene	mg/kg	<0.040	0.079	0.18	A334575	67	0.040	A334575
o-Xylene	mg/kg	<0.020	0.032	0.15	A334575	55	0.020	A334575
F1 (C6-C10)	mg/kg	<10	<10	<10	A334575	2300	10	A334575
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	94	96	96	A334575	93	N/A	A334575
4-Bromofluorobenzene (sur.)	%	96	99	95	A334575	140	N/A	A334575
D10-o-Xylene (sur.)	%	103	99	126	A334575	121	N/A	A334575
D4-1,2-Dichloroethane (sur.)	%	102	104	103	A334575	122	N/A	A334575
O-TERPHENYL (sur.)	%	91	94	93	A335207	95	N/A	A335207
RDL = Reportable Detection Limit N/A = Not Applicable (1) Qualifying ion outside of acceptance criteria. Results are tentatively identified and potentially biased high.								



BUREAU
VERITAS

Bureau Veritas Job #: C162508
Report Date: 2021/12/24

GOLDER ASSOCIATES LTD.
Client Project #: 20368099-6000-1001
Your P.O. #: 20368099-7000-1001
Sampler Initials: PT

AT1 BTEX AND F1-F4 IN SOIL (VIALS)

Bureau Veritas ID		AEO144	AEO145	AEO146	AEO147	AEO148	AEO149		
Sampling Date		2021/08/19 13:47	2021/08/19 13:48	2021/08/19 13:49	2021/08/19 13:59	2021/08/19 13:59	2021/08/19 14:09		
COC Number		644511-24-01	644511-24-01	644511-24-01	644511-24-01	644511-24-01	644511-24-01		
	UNITS	TP21-136-01	TP21-136-03	TP21-136-06	TP21-137-02	TP21-137-03	TP21-137-05	RDL	QC Batch
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	23	<10	10	A335207
F3 (C16-C34 Hydrocarbons)	mg/kg	56	59	110	<50	<50	<50	50	A335207
F4 (C34-C50 Hydrocarbons)	mg/kg	<50	<50	<50	<50	<50	<50	50	A335207
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	A335207
Physical Properties									
Moisture	%	11	22	11	10	4.7	5.1	0.30	A335214
Volatiles									
Xylenes (Total)	mg/kg	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.045	A333395
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	<10	<10	10	A333395
Field Preserved Volatiles									
Benzene	mg/kg	N/A	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	A334575
Toluene	mg/kg	N/A	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	A334575
Ethylbenzene	mg/kg	N/A	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	A334575
m & p-Xylene	mg/kg	N/A	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	A334575
o-Xylene	mg/kg	N/A	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A334575
F1 (C6-C10)	mg/kg	N/A	<10	<10	<10	<10	<10	10	A334575
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	N/A	95	94	92	95	96	N/A	A334575
4-Bromofluorobenzene (sur.)	%	N/A	98	98	96	97	97	N/A	A334575
D10-o-Xylene (sur.)	%	N/A	109	105	101	96	113	N/A	A334575
D4-1,2-Dichloroethane (sur.)	%	N/A	103	105	102	103	105	N/A	A334575
O-TERPHENYL (sur.)	%	90	93	95	99	102	91	N/A	A335207
RDL = Reportable Detection Limit N/A = Not Applicable									