



25A-05531

Remediation Closure Report

Red Deer CTB

Facility: fAPP2211037291

NMSLO Lease: BL26150000

Coordinates: 32.976695, -104.096716

NMOCD Incident ID: nAPP2528161742

Prepared for:

Mack Energy Corporation

Prepared by:

Vertex Resource Services Inc.

Date:

April 2026

Mack Energy Corporation

Red Deer CTB

Remediation Closure Report

April 2026

Remediation Closure Report

Red Deer CTB

Facility: fAPP2211037291

NMSLO: BL26150000

Coordinates: 32.976695, -104.096716

NMOCD Incident ID: nAPP2528161742

On behalf of:

Mack Energy Corporation

P.O. Box 960

11344 Lovington Highway

Artesia, New Mexico 88211-0960

Prepared for:

New Mexico State Land Office -ECO

310 Old Santa Fe Trail

Santa Fe, New Mexico 87501

New Mexico Oil Conservation Division

508 West Texas Avenue

Artesia, New Mexico 88210

Prepared by:

Vertex Resource Services Inc.

3101 Boyd Drive

Carlsbad, New Mexico 88220



4/10/2026

Stephanie McCarty, B.Sc.

ENVIRONMENTAL SPECIALIST, REPORTING

Date



April 10, 2026

Sally Carttar, B.Sc.

PROJECT MANAGER, REPORT REVIEW

Date

Executive Summary

Mack Energy Corporation (Mack) retained Vertex Resource Services Inc. (Vertex) to complete an initial site assessment and discussed remediation plan and completed remediation plan and closure report for the Red Deer CTB (hereafter referred to as "site"). A release occurred on October 8, 2025, at the site, Facility ID fAPP2211037291. Mack submitted an initial C-141 Release Notification to New Mexico Oil Conservation Division District 2 on October 15, 2025. Incident ID number nAPP2528161742 was assigned to this incident. The release occurred due to a gasket failure on a heater treater. The incident involved the release of approximately 42 barrels (bbl.) of crude oil both on and off the constructed pad. Approximately 15 bbl. of free fluid was removed during the initial clean-up.

This Remediation Closure Report outlines the basic criteria that were addressed during remediation and reclamation. Vertex performed the initial site assessment on October 8, 2025, and identified the area of interest (AOI) on the former facility site and to the north of the pad, in pasture. Seventeen discrete sample points and 31 soil samples were obtained within and around the AOI, and were submitted for laboratory analysis of chlorides and hydrocarbons. Analytical results indicated that soils within the AOI exceeded Closure Criteria as defined in 19.15.29 New Mexico Administrative Code (NMAC). Excavation of impacted soils within the AOI commenced on December 8, 2025. The excavation extent covered a surface area of 15,839 sq ft with a depth of 0.5 to 3 feet, totaling an excavated volume of approximately 687 cubic yards.

Final surface reclamation will be completed per SLO-ECO guidelines.

Table of Contents

- 1.0 Introduction..... 1**
- 2.0 Background..... 1**
 - 2.1 Access..... 1
 - 2.2 Site Description 1
 - 2.3 Cultural Resources Compliance..... 1
 - 2.4 Ecological Setting..... 2
 - 2.5 Biological Compliance..... 2
 - 2.6 Open Environmental Incident Search..... 3
- 3.0 Site Evaluation 3**
 - 3.1 Assessment of Soil Suitability 3
 - 3.2 Conditions of Approval 4
 - 3.3 Special Soil Conditions 4
 - 3.3.1 Area of Interest #1 5
 - 3.3.2 Area of Interest #2..... 5
- 4.0 Conditions of Approval..... 5**
- 5.0 Remedial Actions Taken 5**
 - 5.1 Area of Interest #1 Remediation 5
- 6.0 Surface Reclamation Work Plan..... 6**
 - 6.1 End Land Use and Capability..... 6
 - 6.2 Infrastructure Decommissioning..... 6
 - 6.3 Site Reclamation..... 6
 - 6.3.1 Soil Placement 7
 - 6.3.2 Contouring..... 7
 - 6.3.3 Fertilization 7
 - 6.3.4 Seeding..... 7
 - 6.4 Reclamation Standards..... 7
 - 6.5 Weed Management..... 8
- 7.0 Monitoring Program..... 8**
 - 7.1 Final Assessment and Closure Request 8
- 8.0 Closure Request 8**
- 9.0 References 9**
- 10.0 Limitations..... 10**

In-text Tables

Table 1. Closure Criteria for Soils to Remediation and Reclamation Standards

List of Figures

- Figure 1. SLO Lease Boundary and Site Features
- Figure 2. Characterization and Area of Interest Schematic
- Figure 3a. Confirmation Schematic with Sample Points (North)
- Figure 3b. Confirmation Schematic with Sample Points (South)
- Figure 4. Reclamation Area

List of Tables

- Table 2. Initial Characterization Sample Field Screen and Laboratory Results – Depth to Groundwater \leq 50 feet bgs
- Table 3. Confirmatory Sample Laboratory Results – Depth to Groundwater \leq 50 feet bgs

List of Appendices

- Appendix A. Closure Criteria Determination
 - Plate 1. Soil Classification
 - Plate 2. Depth-to-Water
 - Plate 3. Watercourse
 - Plate 4. Wetland Playa
 - Plate 5. Occupied residence, school, hospital, etc.
 - Plate 6. Wetlands
 - Plate 7. Mine/Minerals
 - Plate 8. Karst
 - Plate 9. Flood Hazard
- Appendix B. Biological Review
- Appendix C. Well Logs
- Appendix D. Daily Field Reports and Reclamation Inspection Report
- Appendix E. Laboratory Certificates of Analyses

1.0 Introduction

Mack Energy Corporation (Mack) retained Vertex Resource Services Inc. (Vertex) to complete an initial site assessment and discussed the remediation plan for the Red Deer CTB (the "site"; Facility: fAPP2211037291). This Remediation Closure Report provides a description of remedial activities conducted. The information presented demonstrates that the approved closure criteria were met and all applicable regulations were followed. This document is intended to serve as a final report to obtain approval from New Mexico State Land Office (NMSLO) and New Mexico Oil Conservation Division (NMOCD) for closure of the regulatory file. Final surface restoration of the pad will occur when the active facility site is no longer in use for oil and gas operations.

2.0 Background

2.1 Access

The site is located approximately 16 miles east of Lake Arthur, New Mexico, on New Mexico State Trust Lands. Figure 1 shows the site relative to lease boundaries.

Lease Holder: Mack Energy Corporation
NMSLO: BL26150000
Unit Letter A. Section 35, Township 15 South, Range 28 East
Chaves County
Latitude, Longitude: 32.976695, -104.096716

The site can be accessed from Artesia, New Mexico, proceed east on NM 82 for 15 mi. Turn left onto CR 209 Turkey Tract Road and proceed north on Turkey Tract Road for 13.7 mi. The site (Red Deer CTB, 32.977034, -104.097470) will be on your right. There are no locked gates or other access issues.

2.2 Site Description

The site is an active facility pad for oil and gas operations (Figure 1). Surface and subsurface minerals are owned by New Mexico State Land Office. The Site is situated in a mostly flat area surrounded by loam and fine sandy loam plains with grassy mesquite shrublands and bare gypsumland inclusions. Grama grasses and forbs are present on and off the pad.

2.3 Cultural Resources Compliance

After a site assessment evaluation, the work areas were situated within the boundaries of historical disturbance from previous remediation and the construction of the facility pad, which is not subject to the need and applicability of the Cultural Properties Protection (CPP) Rule. The completed work remained confined within areas of historical disturbances.

Should any reclamation activities had required any additional new surface disturbance or any cultural properties encountered during the course of the reclamation activities, appropriate measures would be taken in accordance with State regulations, including immediate cessation of work and notification to NMSLO's ECO division.

2.4 Ecological Setting

The site is situated in the Chihuahuan Basins and Playas level IV 24a Ecoregion (Griffith et al., 2006). This ecoregion is characterized as having the following natural vegetation: grasses with shrubs and half shrubs.

The site is within the Holloman-Gypsum Land Complex and Alama Loam (Plate 1 – Appendix A) and classified as "Not prime farmland".

The Holloman typical soil profile consists of:

- H1 – 0 to 6 inches: loam
- H2 – 6 to 10 inches: gypsiferous material
- Depth to restrictive layer at 2 to 20 inches to paralithic bedrock

The Gypsum typical soil profile consists of:

- H1 – 0 to 60 inches: gypsiferous material
- Depth to a petrocalcic restrictive layer at 0 inches paralithic bedrock

The Alama typical soil profile consists of:

- H1 – 0 to 3 inches: loam
- H2 – 3 to 58 inches: clay loam
- H3 – 58 to 69 inches: silt loam
- Depth to restrictive layer at more than 80 inches

Mean annual air temperature is between 60 and 64 °F. Mean annual precipitation is between 8 to 12 inches and the frost-free period is between 195 and 220 days.

2.5 Biological Compliance

Review of critical habitats identified four potentially affected species and no critical habitats. The biological review is included in Appendix B. Critical habitats reviewed include:

- Birds
- Fishes
- Insects
- Refuge Lands
- Fish Hatcheries
- Wetlands

While no critical habitat was identified, remediation and reclamation activities proceeded with caution in order to avoid potential impacts to threatened or proposed threatened species including, but not limited to, Northern Aplomado Falcon (*Falco femoralis septentrionalis*; experimental population), Piping Plover (*Charadrius melodus*), Monarch Butterfly (*Danaus plexippus*), and Pecos Sunflower (*Helianthus paradoxus*).

In the event that any special status species had been encountered during remediation and reclamation activities, appropriate measures would have been implemented. These measures would include immediate cessation of work in the affected area, consultation with a qualified biologist, and coordination with NMSLO and relevant environmental agencies to determine the necessary protection and mitigation strategies.

2.6 Open Environmental Incident Search

There were no open environmental incidents associated with the site according to a NMOCD Incidents and Spill search. There was one closed incident (nAPP2411337548) that was addressed and resolved on August 12, 2024.

3.0 Site Evaluation

Initial site assessment occurred on October 8, 2025, by Vertex personnel. The source of the release started on the northeast section of the intact caliche facility pad and ran along the west side of the tank battery containment before flowing northeast into the pasture. A potential overspray area was observed on pad to the west of the main release area. The pasture vegetation within the impacted area was dead and dying. Documentation of the site visits are included in the Daily Field Reports (DFRs; Appendix D) and summarized below.

- Release area was along west side of tank battery containment to the northeast end of the pad and into the pasture along the north to northeast area of the pad
- Sampling was conducted to delineate the release area
- Excavation and confirmation sampling was conducted to remediate the impacted areas
- Backfill samples were collected for analytics, impacted area was backfilled and berms were installed to meet corrective actions

The area was reviewed through Google Earth imagery from 2016 through 2023 and shows consistency of vegetation. A closed incident (nAPP2411337548) was addressed and resolved on August 12, 2024, in the general pasture area where remediation was conducted for this release.

3.1 Assessment of Soil Suitability

The site is in a medium karst potential area, therefore the most stringent Closure Criteria per Table 1 of NMAC 19.15.29 applies. Closure Criteria determination is presented in Table 1 and Plates 6 and 8. Closure Criteria is defined as:

Table 1. Closure Criteria for Soils to Remediation and Reclamation Standards		
	Constituent	Limit
<50 ft DTGW bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

bgs – below ground surface

DTGW – depth to ground water

TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics

BTEX – benzene, toluene, ethylbenzene and xylenes

The nearest active well to the site is a New Mexico Office of the State Engineer registered livestock well located approximately 3.1 miles northwest of the site. The well was completed on August 4, 2016, with a recorded depth to groundwater of 125 feet below ground surface (bgs; New Mexico Office of the State Engineer, 2025). The borehole log RA-12428 is presented in Appendix C.

For the purpose of this document, soil suitability is defined as:

- Suitable Soils – soils that meet the above Closure Criteria concentrations and consists of compositions that support vegetative growth (i.e., topsoil)
- Unsuitable Soils – soils that exceed the above Closure Criteria
- Undesirable Soils – soils that meet the above Closure Criteria and consists of caliche, gypsum, limestone or compositions that inhibit vegetation growth

3.2 Conditions of Approval

Conditions of Approval (COA) discussed in the approved remediation plan are addressed in this report. The COAs include, in order as presented:

1. Installation of berm around facility pad (Section 4.0)

3.3 Special Soil Conditions

One area of interest (AOI) was identified during the desktop review and on-site assessment. The AOIs are discussed below.

Soil samples from the select AOIs were collected and submitted for laboratory analysis for the constituents of concern identified in the Closure Criteria. A summary of analytical results is presented in Table 2. Laboratory Certificates of Analyses and Chain of Custody forms are presented in Appendix E.

3.3.1 Area of Interest #1

The AOI is made up of the release on October 8, 2025, near the tank battery containment and into the pasture to the north that was identified during the on-site assessment. Two surface samples and 13 borehole samples were collected during the initial on-site assessment and within the AOI. Figure 2 identifies the AOI relative to the facility pad and soil sample locations. Four samples exceeded Closure Criteria for chlorides and TPH. Benzene and BTEX were below laboratory detection levels.

3.3.2 Area of Interest #2

The AOI is made up of the potential overspray area near the main release area on October 8, 2025, identified during the on-site assessment. One surface soil sample and one borehole sample was collected during the initial on-site assessment and within the AOI. Figure 2 identifies the AOI relative to the facility pad and soil sample locations. No samples exceeded Closure Criteria for chloride, TPH, benzene or BTEX. No remediation was identified as necessary.

4.0 Conditions of Approval

To bring the facility into compliance, a 2-foot berm was installed to the north and south of the pad containing the perimeter facility on all sides, including berms and lined containments.

5.0 Remedial Actions Taken

Remediation efforts began on December 8, 2025, and were finalized on March 27, 2026. Vertex personnel supervised the excavation of impacted soils. Field screening for chlorides and TPH was completed to identify areas requiring additional excavation of impacted soils. Relevant DFRs documenting various phases of the remediation are presented in Appendix D.

Impacted soils were removed to a depth of 0.5 to 3 feet bgs. 687 cubic yards of impacted and unsuitable soils (see Section 3.1 for definition) were excavated and transported by a licensed waste hauler and disposed of at Gandy Marley waste management facility.

Backfill materials (i.e., Caliche and topsoil) for the facility pad and pasture were sampled every 100 cubic yards for chemicals of concern.

Confirmation soil samples were collected from the excavation bases and walls representing an area no greater than 200 sq. ft and submitted for laboratory analysis for chloride, BTEX, benzene, and TPH. Upon laboratory confirmation, the excavation area in pasture was reclaimed as discussed in the following subsections. Pad reclamation as discussed in the following subsections and Section 5, will be deferred until end of land use for oil and gas lease.

Figures 3a and 3b show the remediation areas and sample locations, and Figure 4 shows the reclamation areas.

5.1 Area of Interest #1 Remediation

Remediation efforts began on December 8, 2025, and were finalized on February 7, 2026. Vertex personnel supervised the excavation of impacted soils removed to a depth of 0.5 to 3 feet bgs. Approximately 687 cubic yards

of impacted soil was transported by a licensed waste hauler and disposed of at Gandy Marley waste management facility. Field screening for chlorides and TPH was completed to identify areas requiring additional excavation of impacted soils. Relevant DFRs documenting various phases of the remediation are presented in Appendix D.

Notifications that confirmatory samples were being collected were provided to the NMOCD on December 15, 17, and 22, 2025; and January 6, February 3, 4 and 24, 2026. Each sample location is a 5-point composite within the designated grid.

A total of 101 confirmatory samples and 10 backfill samples, were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Eurofins Albuquerque and Envirotech under chain of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA SM4500CL-B). A summary of laboratory results is presented in Table 3 and the laboratory data reports are included in Appendix E. All confirmatory samples collected and analyzed were below approved closure criteria.

- Figure 3a shows remediation excavation extent and confirmation sample locations – north
- Figure 3b shows remediation excavation extent and confirmation sample locations – south

6.0 Surface Reclamation Work Plan

6.1 End Land Use and Capability

The site is currently an active facility. When all oil and gas activities cease, the site will be reclaimed so that the capability of the land will match that of the areas immediately surrounding the site, which consists of rangeland.

Reclamation areas respective to release incident nAPP2528161742 are shown on Figure 4.

6.2 Infrastructure Decommissioning

All remaining equipment and debris including utility poles, pipeline risers, terminated pipeline at surface, and surface poly flowlines will be properly removed by appropriate vendors per applicable NMOCD and NMSLO standards.

Respective to release incident nAPP2528161742, all debris was removed and active poly flowlines returned in place.

6.3 Site Reclamation

Undesirable materials (See Section 3.1 for definition) will be stockpiled and sampled every 100 cubic yards for chemicals of concern. If stockpiled material meets Closure Criteria, the undesirable material will soil flipped or placed into an encapsulation trench, whichever will be most suitable at that time. If the native soil profile prevents the on-site reuse of undesirable material or there is excess undesirable material, the material will be transported off-site for reuse. If stockpiled soil exceeds Closure Criteria, the unsuitable material will be transported to an approved disposal facility.

Respective to release incident nAPP2528161742, backfill materials (i.e., Caliche and topsoil) for the facility pad and pasture were sampled every 100 cubic yards for chemicals of concern as discussed in Section 5.

6.3.1 Soil Placement

If there is no underlying suitable material, topsoil will be hauled-in to replace the materials removed. Suitable material (i.e., topsoil) will match the native background soil profile with a minimum depth of 18 inches for final seedbed preparation, or as site conditions allow. Topsoil will be placed to match the surface level of surrounding landscape, imitating the original landform as much as possible.

Respective to release incident nAPP2528161742, matching, native background topsoil was backfilled to a depth of 12 inches.

6.3.2 Contouring

The site will be contoured to match the surrounding topography followed by decompaction by cross-ripping to a depth of 18 inches (or as site conditions allow) with a furrow spacing of 2 feet. The area will then be lightly graded to maintain conformity with the surrounding topography.

No erosion control is required at this this time. Erosion control requirements will be re-evaluated during bi-annual inspections

A berm will be placed across the road where it meets the main lease road to prevent vehicular access.

Respective to release incident nAPP2528161742, the site was graded to conform to the natural surrounding topography and ripped to an approximate depth of 2 to 3 inches with furrowing spacing of 3 to 6 inches. No erosion control was required. A berm was installed around the edge of the facility pad to comply with corrective actions as indicated in Section 4.

6.3.3 Fertilization

No fertilization is currently required. Fertilization requirements will be re-evaluated during bi-annual inspections.

6.3.4 Seeding

A seed mix suitable for the site and surrounding area will be used and applied at appropriate rates. Seed establishment and revegetation will be monitored bi-annually to determine success. A NMSLO loamy seed mix will be obtained for the site and administered at an application rate of 18 PLS/acre. Methods of seeding will be completed using broadcast seeded followed by chain-dragging at the double application rate of PLS/acre.

Following seeding operations, the seed tags will be made available to the NMSLO, along with a copy of the materials certification in a "Reclamation Activities Report".

6.4 Reclamation Standards

Reclamation of all disturbed areas is complete when uniform vegetative cover has been established that reflects a life-form ratio of plus or minus 50% of pre-disturbance levels and a total percent plant cover of at least 70% of pre-disturbance levels, excluding noxious weeds.

6.5 Weed Management

The site will be monitored for vegetative growth throughout all phases of the project. Should State classified noxious weeds be identified on-site, a control program will be implemented and managed as required.

Weed management programs will identify weed species of concern and utilize effective control methods. These methods include but are not limited to chemical (herbicide) control, mechanical (mowing) control or biological control as approved by governing regulatory agencies.

7.0 Monitoring Program

Bi-annual inspections will be conducted, during the growing season, to monitor reclamation progression and assess the need for additional best management practices (BMPs). Inspections will include photographs of the site and BMPs implemented.

7.1 Final Assessment and Closure Request

After reclamation activities have been completed, a “Reclamation Activities Report” will be completed and submitted to NMSLO’s ECO. The report will provide a summary of reclamation work performed, site photographs, and suggested corrective actions if applicable. Reclamation will be considered complete when the reclamation standards presented in Section 5.4 are satisfied.

8.0 Closure Request

Confirmatory samples were analyzed by laboratory analysis and results found to be below allowable concentrations per the approved closure criteria. Based on these findings, Mack Energy Corporation respectfully requests that this remediation closure report be approved.

9.0 References

Google Inc. (2026). *Google Earth Pro (Version 7.3.3)* [Software]. Retrieved from <https://earth.google.com>

Griffith, G.E., Omernik, J.M., McGraw, M.M., Jacobi, G.Z., Canavan, C.M., Schrader, T.S., Mercer, D., Hill, R., and Moran, B.C. (2006). *Ecoregions of New Mexico*. Available at: <https://www.epa.gov/eco-research/ecoregion-download-files-state-region-6#pane-29>

Natural Resources Conservation Service. (2012, Reprint 2021). *Field Book for Describing and Sampling Soils Version 3.0*. National Soil Survey Center: Natural Resources Conservation Service. U.S. Department of Agriculture. Pg. 2-89. Retrieved from: <https://www.nrcs.usda.gov/sites/default/files/2022-09/field-book.pdf>

New Mexico Office of the State Engineer. (2025). *Well Log/Meter Information Report - New Mexico Water Rights Reporting System*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html>

New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code – Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.

United States Department of Agriculture, Natural Resources Conservation Service. (2025). *Web Soil Survey*. Retrieved from: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

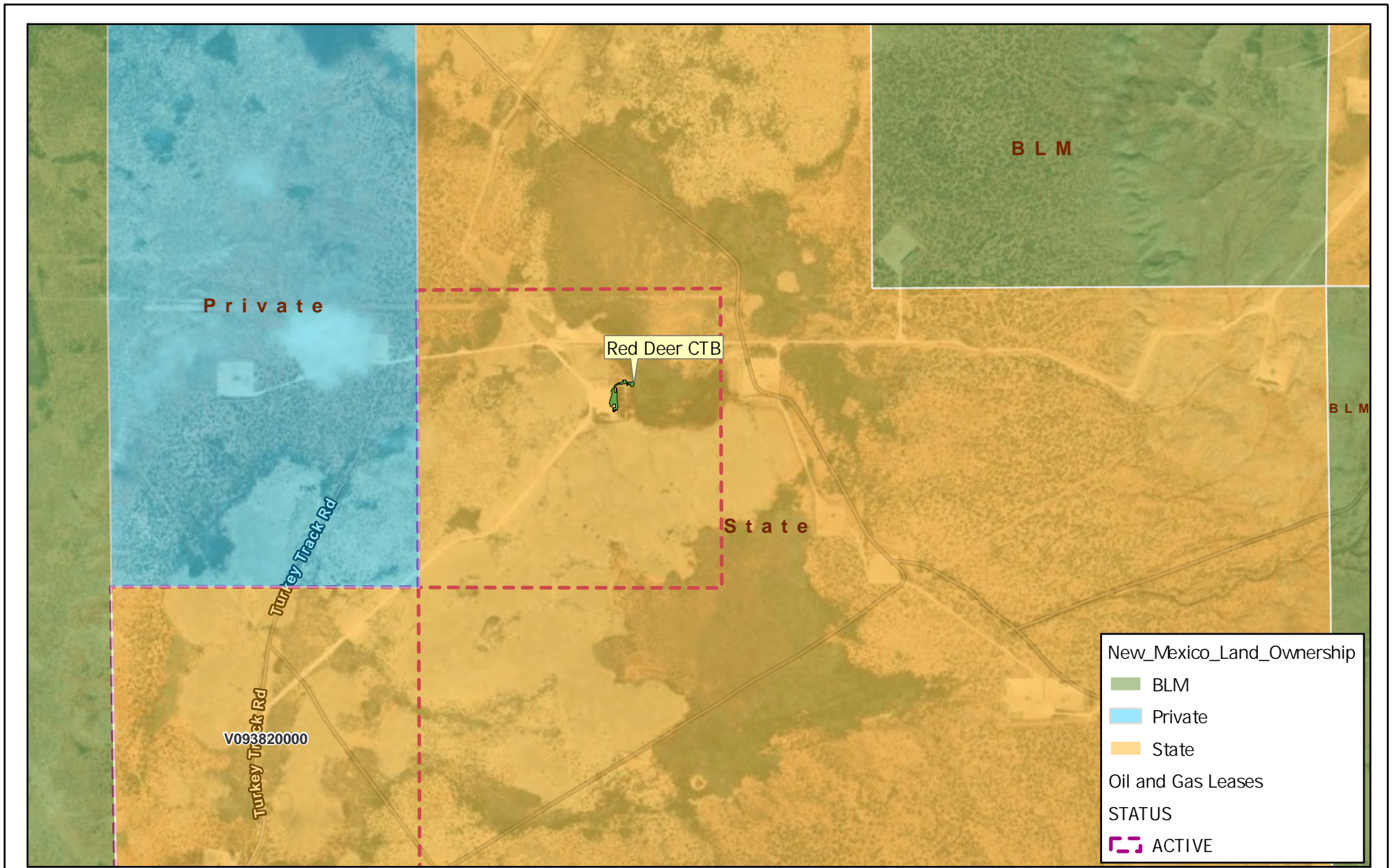
United States Fish and Wildlife Service, Ecological Services Program. (2025). *IPaC: Information for Planning and Consultation*. Retrieved from <https://ipac.ecosphere.fws.gov/location/index>




10.0 Limitations

This report has been prepared for the sole benefit of Mack Energy Corporation. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and the New Mexico State Land Office, without the express written consent of Vertex Resource Services Inc. (Vertex) and Mack Energy Corporation. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

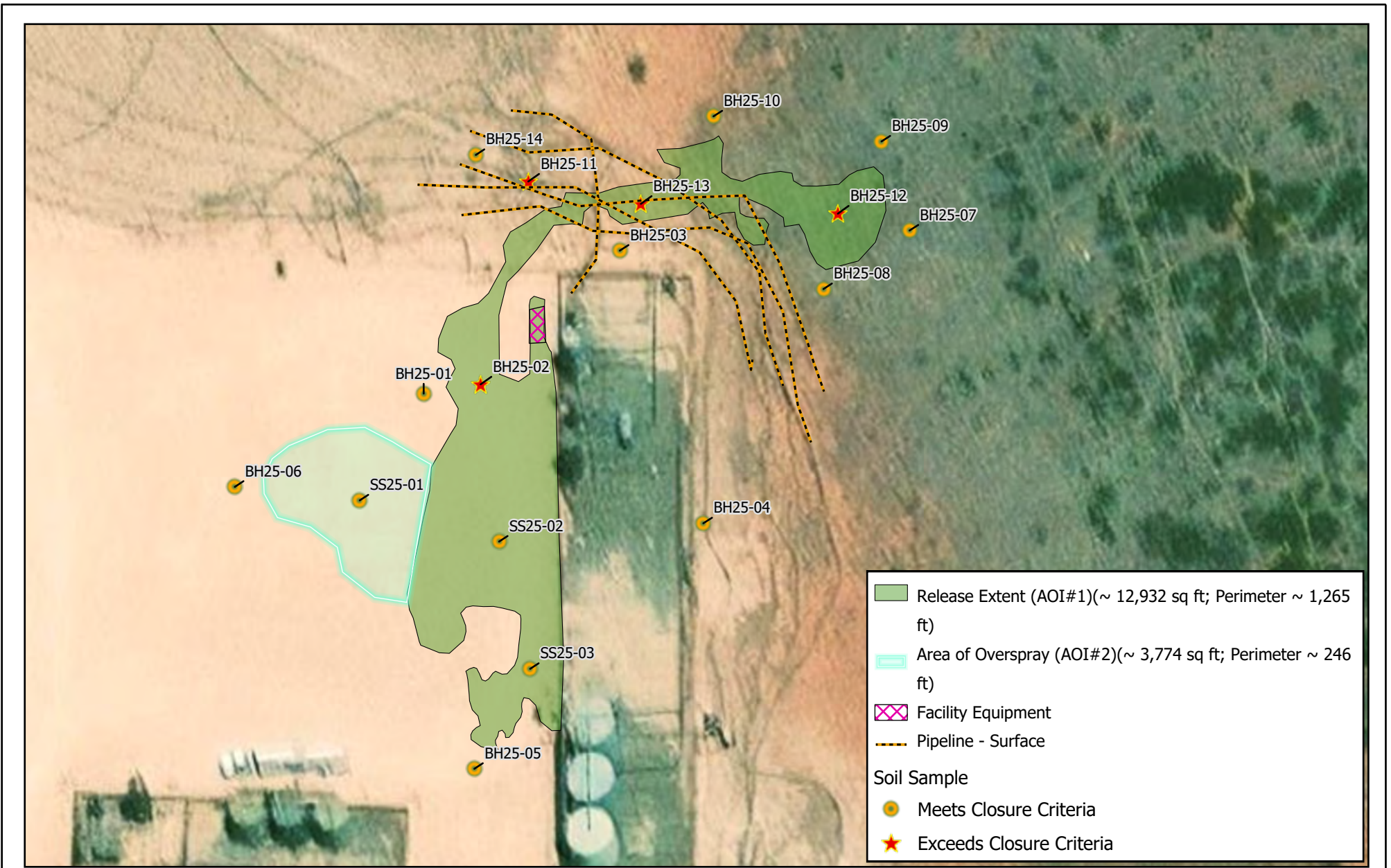
The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

FIGURES



	<p>Map Center: Lat/Long: 32.975972°N, 104.094461°W</p> <p>Date: Apr 01/26</p> <p>NAD 1983 StatePlane New Mexico East FIPS 3001 Feet</p>		<p>SLO Lease Boundary and Site Features Red Deer CTB</p>	<p>FIGURE: 1</p>	
--	---	---	--	----------------------	---

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes. Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.



VERTEX

Map Center:
Lat/Long: 32.97716°N, 104.096566°W
Date: Jan 12/26

0 40 80 ft
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

N

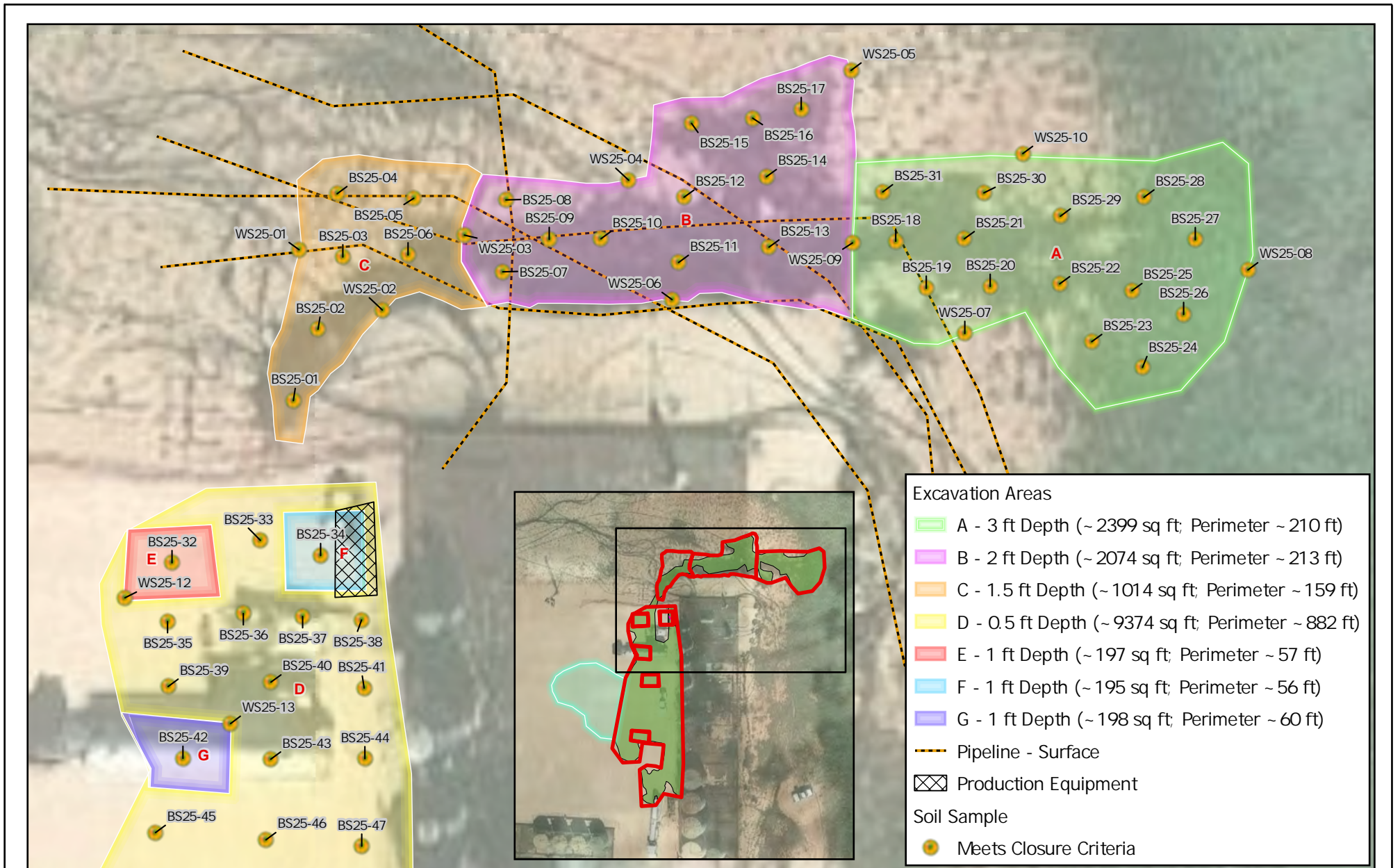
**Characterization and Areas of Interest Schematic
Red Deer CTB**

FIGURE:
2



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.



Map Center:
Lat/Long: 32.977359°N, 104.096602°W

Date: Apr 01/26

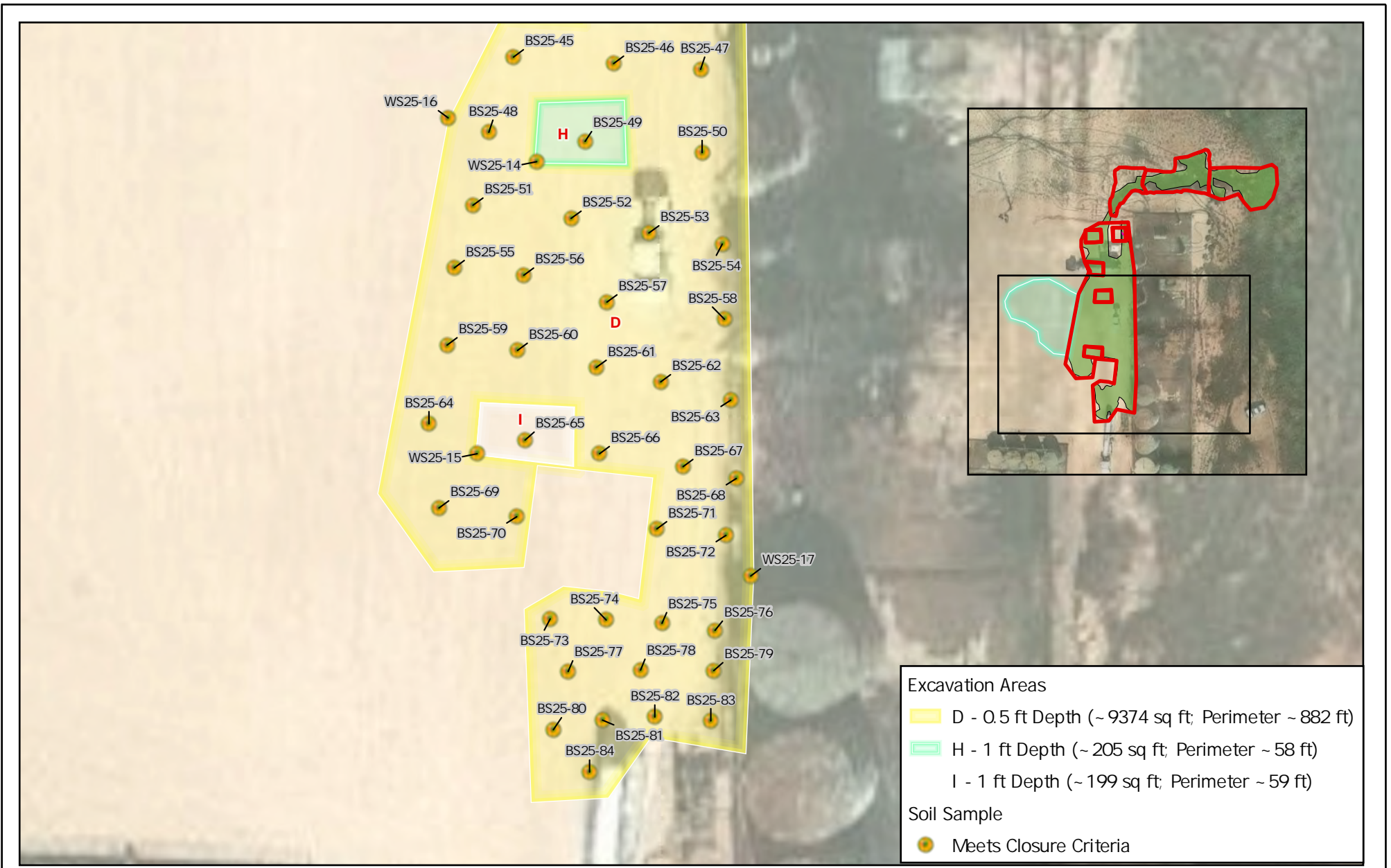
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Contamination Schema with Sample Points (North)

Red Deer CTB

FIGURE:

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes. Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.





Map Center: Lat/Long: 32.976969°N, 104.096803°W
 Date: Apr 01/26
 NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
 0 15 30f
 VERTEX
 Con irmation Schema c with Sample Points (South)
 Red Deer CTB
 FIGURE: 3b
 MACK Energy Corporation

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes. Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

VERSATILITY. EXPERTISE.



	<p>0 15 30 f</p> <p>NAD 1983 StatePlane New Mexico East FIPS 3001 Feet</p>	<p>Map Center: Lat/Long: 32.977439°N, 104.09661°W</p> <p>Date: Apr 01/26</p> <p>N</p>	<p>Reclamat on Area Red Deer CTB</p>	<p>FIGURE: 4</p>	
--	--	---	--	----------------------	---

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

VERSATILITY. EXPERTISE.

TABLES

Client Name: Mack Energy Corporation
 Site Name: Red Deer CTB
 NMOCD Tracking #: nAPP2528161742
 Project #: 25A-05531
 Lab Report: 885-36601 and 885-36171-1

Table 2. Initial Characterization Sample Field Screen and Laboratory Results													
Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (Petroflag)	Chloride Concentration (ppm)	Volatile		Extractable					Chloride Concentration (mg/kg)
						Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
Depth to Groundwater ≤ 50 feet bgs													
Boreholes													
BH25-01	0	October 21, 2025	-	32	590	ND	ND	ND	ND	ND	ND	ND	500
	1	October 21, 2025	-	32	380	ND	ND	ND	ND	ND	ND	ND	190
BH25-02	0	October 21, 2025	-	176	303	ND	ND	ND	66	58	66	132	180
	0.3	October 21, 2025	-	23	418	ND	ND	ND	ND	ND	ND	ND	210
BH25-03	0	October 22, 2025	-	38	210	ND	ND	ND	ND	ND	ND	ND	ND
	1	October 22, 2025	-	28	495	ND	ND	ND	ND	ND	ND	ND	260
BH25-04	0	October 22, 2025	-	49	355	ND	ND	ND	ND	ND	ND	ND	86
	2	October 22, 2025	-	29	93	ND	ND	ND	ND	ND	ND	ND	ND
BH25-05	0	October 22, 2025	-	41	265	ND	ND	ND	ND	ND	ND	ND	190
	2	October 22, 2025	-	48	463	ND	ND	ND	ND	ND	ND	ND	240
BH25-06	0	October 22, 2025	-	44	118	ND	ND	ND	ND	ND	ND	ND	ND
	1	October 22, 2025	-	52	223	ND	ND	ND	ND	ND	ND	ND	81
BH25-07	0	October 29, 2025	-	41	195	ND	ND	ND	ND	ND	ND	ND	130
	4	October 29, 2025	-	30	183	ND	ND	ND	ND	ND	ND	ND	100
BH25-08	0	October 29, 2025	-	18	138	ND	ND	ND	ND	ND	ND	ND	91
	4	October 29, 2025	-	11	118	ND	ND	ND	ND	ND	ND	ND	110
BH25-09	0	October 29, 2025	-	18	140	ND	ND	ND	ND	ND	ND	ND	130
	4	October 29, 2025	-	13	230	ND	ND	ND	ND	ND	ND	ND	160
BH25-10	0	October 28, 2025	-	11	80	ND	ND	ND	ND	ND	ND	ND	99
	2	October 28, 2025	-	14	285	ND	ND	ND	ND	ND	ND	ND	320
BH25-11	0	October 29, 2025	-	36	1,536	-	-	-	-	-	-	-	-
	2	October 29, 2025	-	13	3,855	-	-	-	-	-	-	-	-
BH25-12	1	October 28, 2025	-	991	-	-	-	-	-	-	-	-	-
	2	October 28, 2025	-	777	263	ND	ND	ND	260	ND	260	260	250
	3	October 28, 2025	-	47	253	ND	ND	ND	ND	ND	ND	ND	290
BH25-13	0	October 28, 2025	-	502	-	ND	ND	ND	400	ND	400	400	120
	1	October 28, 2025	-	15	107	ND	ND	ND	96	ND	96	96	97
BH25-14	0	October 29, 2025	-	40	263	ND	ND	ND	ND	ND	ND	ND	87
	2	October 29, 2025	-	39	563	ND	ND	ND	ND	ND	ND	ND	540
Surface Samples													
SS25-01	0	October 21, 2025	-	115	218	ND	ND	ND	36	ND	36	36	120
SS25-02	0	October 21, 2025	-	96	264	ND	ND	ND	31	ND	31	31	220
SS25-03	0	October 21, 2025	-	44	493	ND	ND	ND	ND	ND	ND	ND	340

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)



Client Name: Mack Energy Corporation

Site Name: Red Deer CTB

NM OCD Tracking #: nAPP2528161742

Project #: 25A-05531

Lab Reports: 885-39998-1, 885-40001-1, 885-40206-1, 885-40442-1, 885-40667-1, 885-43079-1, 885-44953-1, E603011, and 855-4624-1

Table 3. Confirmatory Sample Laboratory Results

Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride Concentration
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
Depth to Groundwater ≤ 50 feet bgs										
Base Samples										
BS25-01	1.5	December 17, 2025	ND	ND	ND	18	ND	18	18	82
BS25-02	1.5	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	620
	1.5	February 6, 2026	ND	ND	ND	ND	ND	ND	ND	ND
BS25-03	1.5	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	710
	1.5	February 6, 2026	ND	ND	ND	ND	ND	ND	ND	ND
BS25-04	1.5	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	480
BS25-05	1.5	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	140
BS25-06	1.5	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	140
BS25-07	2	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	280
BS25-08	2	December 17, 2025	ND	ND	ND	21	ND	21	21	340
BS25-09	2	December 17, 2025	ND	ND	ND	47	56	103	103	ND
	2	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	ND
BS25-10	2	December 17, 2025	ND	ND	ND	170	140	310	310	210
	2	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	ND
BS25-11	2	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BS25-12	2	December 17, 2025	ND	ND	ND	49	ND	49	49	260
BS25-13	2	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	330
BS25-14	2	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	190
BS25-15	2	December 18, 2025	ND	ND	ND	91	ND	91	91	290
BS25-16	2	December 18, 2025	ND	ND	ND	13	ND	13	13	290
BS25-17	2	December 18, 2025	ND	ND	ND	11	ND	11	11	300
BS25-18	3	December 18, 2025	ND	ND	ND	30	ND	30	30	180
BS25-19	3	December 18, 2025	ND	ND	ND	ND	ND	ND	ND	170
BS25-20	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	110
BS25-21	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	180
BS25-22	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	100
BS25-23	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	56
BS25-24	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BS25-25	3	December 22, 2025	ND	ND	ND	41	ND	41	41	60
BS25-26	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BS25-27	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BS25-28	3	December 18, 2025	ND	ND	ND	94	94	ND	94	ND



Client Name: Mack Energy Corporation

Site Name: Red Deer CTB

NM OCD Tracking #: nAPP2528161742

Project #: 25A-05531

Lab Reports: 885-39998-1, 885-40001-1, 885-40206-1, 885-40442-1, 885-40667-1, 885-43079-1, 885-44953-1, E603011, and 855-4624-1

Table 3. Confirmatory Sample Laboratory Results

Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride Concentration
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
Depth to Groundwater ≤ 50 feet bgs										
BS25-29	3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	160
BS25-30	3	December 23, 2025	ND	ND	ND	12	ND	12	12	180
BS25-31	3	December 18, 2025	ND	ND	ND	ND	ND	ND	ND	220
BS25-32	0.5	December 22, 2025	ND	ND	ND	500	190	500	690	150
	1	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	300
BS25-33	0.5	December 22, 2025	ND	ND	ND	24	ND	24	24	270
BS25-34	0.5	December 22, 2025	ND	ND	ND	210	82	210	292	210
	1	February 6, 2026	ND	ND	ND	14	ND	14	14	610
	1	February 27, 2026	ND	ND	ND	ND	ND	ND	ND	597
BS25-35	0.5	December 22, 2025	ND	ND	ND	19	ND	19	19	94
BS25-36	0.5	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	ND
BS25-37	0.5	December 22, 2025	ND	ND	ND	45	ND	45	45	200
BS25-38	0.5	December 22, 2025	ND	ND	ND	26	ND	26	26	410
BS25-39	0.5	December 23, 2025	ND	ND	ND	38	ND	38	38	180
BS25-40	0.5	December 23, 2025	ND	ND	ND	100	ND	100	100	150
BS25-41	0.5	December 23, 2025	ND	ND	ND	10	ND	10	10	310
BS25-42	0.5	December 23, 2025	ND	ND	ND	110	ND	110	110	170
	1	February 6, 2026	ND	ND	ND	10	ND	10	10	290
BS25-43	0.5	December 23, 2025	ND	ND	ND	9.4	ND	10	10	450
BS25-44	0.5	December 23, 2025	ND	ND	ND	11	ND	11	11	390
BS25-45	0.5	December 23, 2025	ND	ND	ND	100	ND	100	100	270
BS25-46	0.5	December 23, 2025	ND	ND	ND	100	ND	100	100	170
BS25-47	0.5	December 23, 2025	ND	ND	ND	ND	ND	ND	ND	250
BS25-48	0.5	December 23, 2025	ND	ND	ND	24	ND	24	24	170
BS25-49	0.5	December 23, 2025	ND	ND	ND	290	72	290	362	150
	1	February 6, 2026	ND	ND	ND	ND	ND	ND	ND	440
BS25-50	0.5	December 23, 2025	ND	ND	ND	17	ND	17	17	350
BS25-51	0.5	December 23, 2025	ND	ND	ND	39	ND	39	39	190
BS25-52	0.5	December 23, 2025	ND	ND	ND	13	ND	13	13	460
BS25-53	0.5	December 23, 2025	ND	ND	ND	ND	ND	ND	ND	590
BS25-54	0.5	December 23, 2025	ND	ND	ND	57	ND	57	57	310
BS25-55	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	350
BS25-56	0.5	December 29, 2025	ND	ND	ND	12	ND	12	12	330



Client Name: Mack Energy Corporation

Site Name: Red Deer CTB

NM OCD Tracking #: nAPP2528161742

Project #: 25A-05531

Lab Reports: 885-39998-1, 885-40001-1, 885-40206-1, 885-40442-1, 885-40667-1, 885-43079-1, 885-44953-1, E603011, and 855-4624-1

Table 3. Confirmatory Sample Laboratory Results

Sample Description			Petroleum Hydrocarbons							Inorganic	
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride Concentration	
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)		
											(mg/kg)
Depth to Groundwater ≤ 50 feet bgs											
BS25-57	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	230
BS25-58	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	360
BS25-59	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	300
BS25-60	0.5	December 29, 2025	ND	ND	ND	53	ND	53	53	53	310
BS25-61	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	320
BS25-62	0.5	December 29, 2025	ND	ND	ND	11	ND	11	11	11	200
BS25-63	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	330
BS25-64	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	340
BS25-65	0.5	December 29, 2025	ND	ND	ND	51	91	142	142	142	360
	1	February 6, 2026	ND	ND	ND	ND	ND	ND	ND	ND	140
BS25-66	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	310
BS25-67	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	360
BS25-68	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	190
BS25-69	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	350
BS25-70	0.5	December 29, 2025	ND	ND	ND	ND	ND	ND	ND	ND	330
BS25-71	0.5	December 30, 2025	ND	ND	ND	ND	ND	ND	ND	ND	250
BS25-72	0.5	December 30, 2025	ND	ND	ND	11	ND	11	11	11	230
BS25-73	0.5	December 30, 2025	ND	ND	ND	14	ND	14	14	14	250
BS25-74	0.5	December 30, 2025	ND	ND	ND	ND	ND	ND	ND	ND	240
BS25-75	0.5	December 30, 2025	ND	ND	ND	ND	ND	ND	ND	ND	270
BS25-76	0.5	December 30, 2025	ND	ND	ND	17	ND	17	17	17	210
BS25-77	0.5	December 30, 2025	ND	ND	ND	ND	ND	ND	ND	ND	250
BS25-78	0.5	December 30, 2025	ND	ND	ND	12	ND	12	12	12	220
BS25-79	0.5	December 30, 2025	ND	ND	ND	45	ND	45	45	45	180
BS25-80	0.5	December 30, 2025	ND	ND	ND	ND	ND	ND	ND	ND	210
BS25-81	0.5	December 30, 2025	ND	ND	ND	9.6	ND	9.6	9.6	9.6	190
BS25-82	0.5	December 30, 2025	ND	ND	ND	18	ND	18	18	18	250
BS25-83	0.5	December 30, 2025	ND	ND	ND	21	ND	21	21	21	240
BS25-84	0.5	December 30, 2025	ND	ND	ND	ND	ND	ND	ND	ND	250
Wall Samples											
WS25-01	0-1.5	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	ND	760
	0-1.5	February 6, 2026	ND	ND	ND	ND	ND	ND	ND	ND	110
WS25-02	0-1.5	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	ND	200



Client Name: Mack Energy Corporation

Site Name: Red Deer CTB

NM OCD Tracking #: nAPP2528161742

Project #: 25A-05531

Lab Reports: 885-39998-1, 885-40001-1, 885-40206-1, 885-40442-1, 885-40667-1, 885-43079-1, 885-44953-1, E603011, and 855-4624-1

Table 3. Confirmatory Sample Laboratory Results

Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride Concentration
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
Depth to Groundwater ≤ 50 feet bgs										
WS25-03	0-2	December 22, 2025	ND	ND	ND	37	ND	37	37	260
WS25-04	0-2	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	ND
WS25-05	0-2	December 18, 2025	ND	ND	ND	ND	ND	ND	ND	ND
WS25-06	0-2	December 17, 2025	ND	ND	ND	ND	ND	ND	ND	180
WS25-07	0-3	December 18, 2025	ND	ND	ND	ND	ND	ND	ND	110
WS25-08	0-3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	ND
WS25-09	0-3	December 18, 2025	ND	ND	ND	12	ND	12	12	280
WS25-10	0-3	December 22, 2025	ND	ND	ND	ND	ND	ND	ND	190
WS25-11	0.5-1	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	320
WS25-12	0.5-1	February 7, 2026	ND	ND	ND	18	ND	18	18	180
WS25-13	0.5-1	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	370
WS25-14	0.5-1	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	260
WS25-15	0.5-1	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	72
WS25-16	0-0.5	February 7, 2026	ND	ND	ND	9.5	ND	9.5	9.5	140
WS25-17	0-0.5	February 7, 2026	ND	ND	ND	ND	ND	ND	ND	140
Backfill										
Backfill-01	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	91
Backfill-02	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	110
Backfill-03	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	120
Backfill-04	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	110
Backfill-05	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	97
Backfill-06	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	94
Backfill-07	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	87
Backfill-08	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	99
Backfill-09	-	March 4, 2026	ND	ND	ND	ND	ND	ND	ND	98
Topsoil	-	March 27, 2026	ND	ND	ND	22	ND	22	22	ND

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NM OCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NM OCD Reclamation Criteria (off-pad)



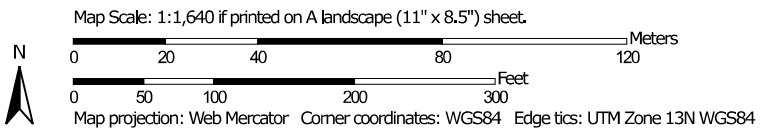
APPENDIX A

Closure Criteria Determination			
Site Name: Red Deer CTB			
Spill Coordinates: 32.97728, -104.09668		X: 584407	Y: 3649130
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	125	feet
	Distance between release and nearest DTGW reference	16,373	feet
		3.10	miles
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	539	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	6,978	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	40,978	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	5,697	feet
	ii) Within 1000 feet of any fresh water well or spring	-	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	0	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	115,503	feet
9	Within an unstable area (Karst Map)	Medium	Critical High Medium Low
	Distance between release and nearest unstable area	0	feet
10	Within a 100-year Floodplain	500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	6,968	feet
11	Soil Type	loamy	
12	Ecological Classification	R070BB006NM and Gyp Upland	
13	Geology	Qp - Piedmont alluvial deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



Chaves County, New Mexico, Southern Part

Aa—Alama loam

Map Unit Setting

National map unit symbol: 1w6g
Elevation: 3,200 to 4,200 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 59 to 65 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Alama and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Alama

Setting

Landform: Swales, flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 3 inches: loam
H2 - 3 to 58 inches: clay loam
H3 - 58 to 69 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 11.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Minor Components

Pajarito

Percent of map unit: 5 percent
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Berino

Percent of map unit: 5 percent
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Pintura

Percent of map unit: 4 percent
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

Playa

Percent of map unit: 1 percent
Landform: Flood-plain playas
Landform position (three-dimensional): Talf, dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R070BC017NM - Bottomland
Hydric soil rating: Yes

HrC—Holloman-Gypsum land complex, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1w7b
Elevation: 2,840 to 4,500 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 195 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Holloman and similar soils: 45 percent
Gypsum land: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holloman

Setting

Landform: Valley floors, basin floors, plains
Landform position (three-dimensional): Riser, rise
Down-slope shape: Convex
Across-slope shape: Convex

Custom Soil Resource Report

Parent material: Mixed alluvium and/or eolian deposits derived from sedimentary rock

Typical profile

H1 - 0 to 6 inches: loam

H2 - 6 to 10 inches: gypsiferous material

Properties and qualities

Slope: 3 to 5 percent

Depth to restrictive feature: 4 to 20 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Gypsum, maximum content: 75 percent

Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 6.0

Available water supply, 0 to 60 inches: Very low (about 0.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: R070BB006NM - Gyp Upland

Hydric soil rating: No

Description of Gypsum Land

Setting

Landform: Valley floors, basin floors, plains

Landform position (three-dimensional): Riser, rise

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Mixed alluvium and/or eolian deposits derived from sedimentary rock

Typical profile

H1 - 0 to 60 inches: gypsiferous material

Properties and qualities

Slope: 3 to 5 percent

Depth to restrictive feature: 0 inches to paralithic bedrock

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Calcium carbonate, maximum content: 25 percent

Gypsum, maximum content: 80 percent

Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 6.0

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: No

Custom Soil Resource Report

Minor Components

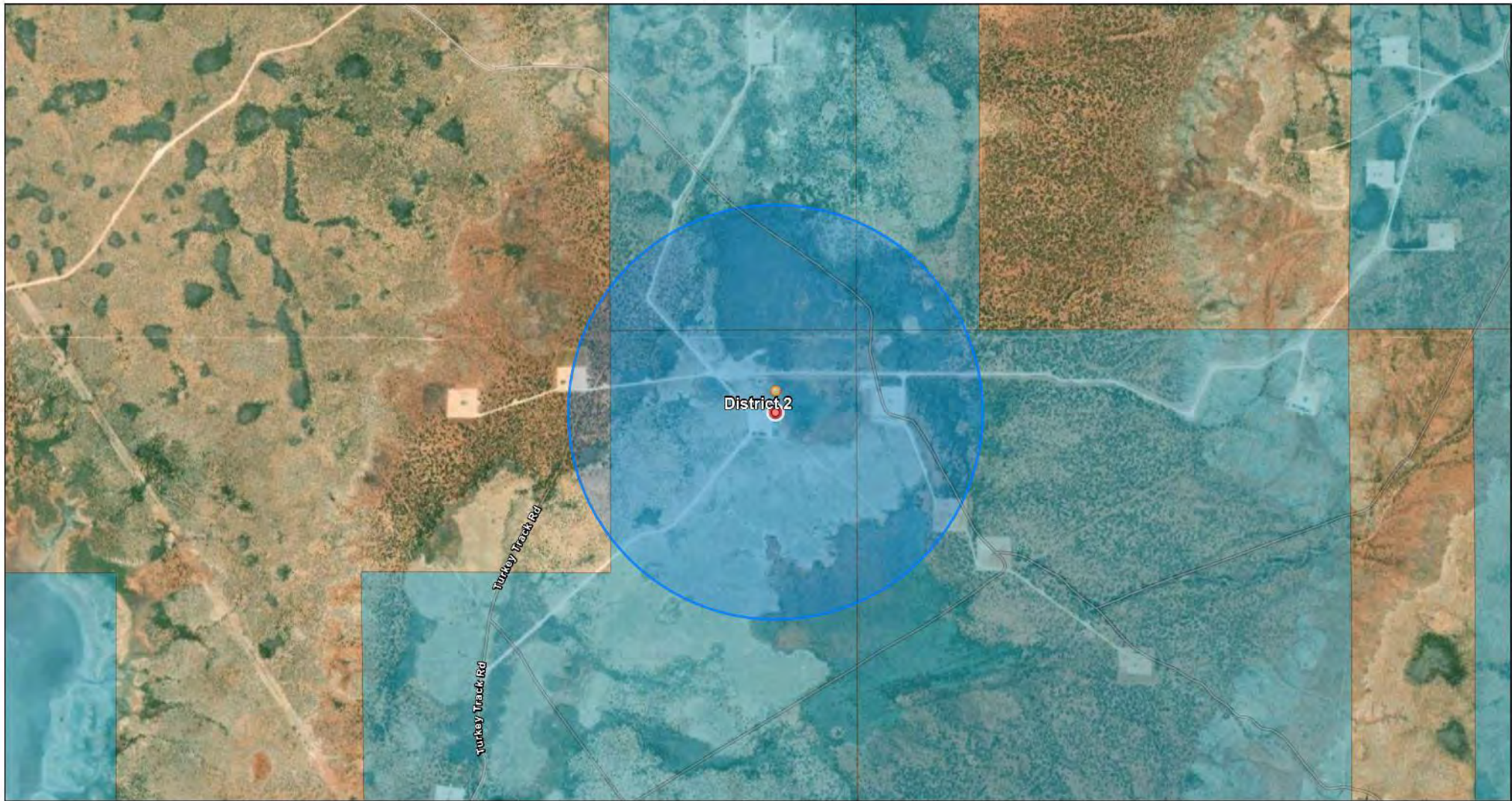
Balmorhea

Percent of map unit: 15 percent

Ecological site: R070BC033NM - Salty Bottomland

Hydric soil rating: No

Plate 2 0.5 Mile OSE POD Locations Map - Red Deer

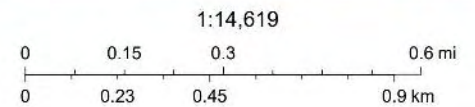


10/9/2025, 11:28:56 AM

- OSE District Boundary
- New Mexico State Trust Lands
- Both Estates

- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery

- High Resolution 30cm Imagery
- Citations



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Maxar

Active & Inactive Points of Diversion (with Ownership Information)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)			(NAD83 UTM in meters)		Map	Distance		
											q64	q16	q4	Sec	Tws			Range	X
RA 08333	RA	STK	1.470	BOGLE FARMS	CH	RA 08333						NW	NE	26	15S	28E	584050.0	3650815.0 *	1,722.4
LWD 03198	RA	PLS	4.950	BOGLE FARMS	CH	LWD 03198 POD1								31	15S	29E	587101.0	3648631.0 *	2,739.8
LWD 03197	RA	PLS	4.950	BOGLE FARMS	CH	LWD 03197 POD1								30	15S	29E	587075.0	3650222.0 *	2,882.8
RA 12007	RA	EXP	0.000	MACK ENERGY	CH	RA 12007 POD1				SE	NE	SW	19	15S	29E	586999.1	3651508.8	3,518.2	
RA 12006	RA	EXP	0.000	MACK ENERGY	CH	RA 12006 POD1				NE	NE	SW	19	15S	29E	587049.3	3651703.3	3,688.3	
LWD 03199	RA	PLS	8.200	BOGLE FARMS	CH	LWD 03199 POD1								32	15S	29E	588712.0	3648646.0 *	4,332.1
RA 08334	RA	STK	1.880	BOGLE FARMS	CH	RA 08334								21	15S	28E	580629.0	3651787.0 *	4,618.8
RA 08226	RA	STK	1.340	BOGLE FARMS	ED	RA 08226						NW	NE	12	16S	28E	581557.0	3645357.0 *	4,728.4
RA 12428	RA	STK	3.000	BOGLE LTD.	CH	RA 12428				Shallow	SE	NE	NW	21	15S	28E	580579.1	3652317.4	4,981.2

Record Count: 9

Filters Applied:

UTM Filters (in meters):

Easting: 584407

Northing: 3649130

Radius: 5000

Sorted By: Distance

* UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/9/25 11:36 AM MST



Active & Inactive Points of Diversion

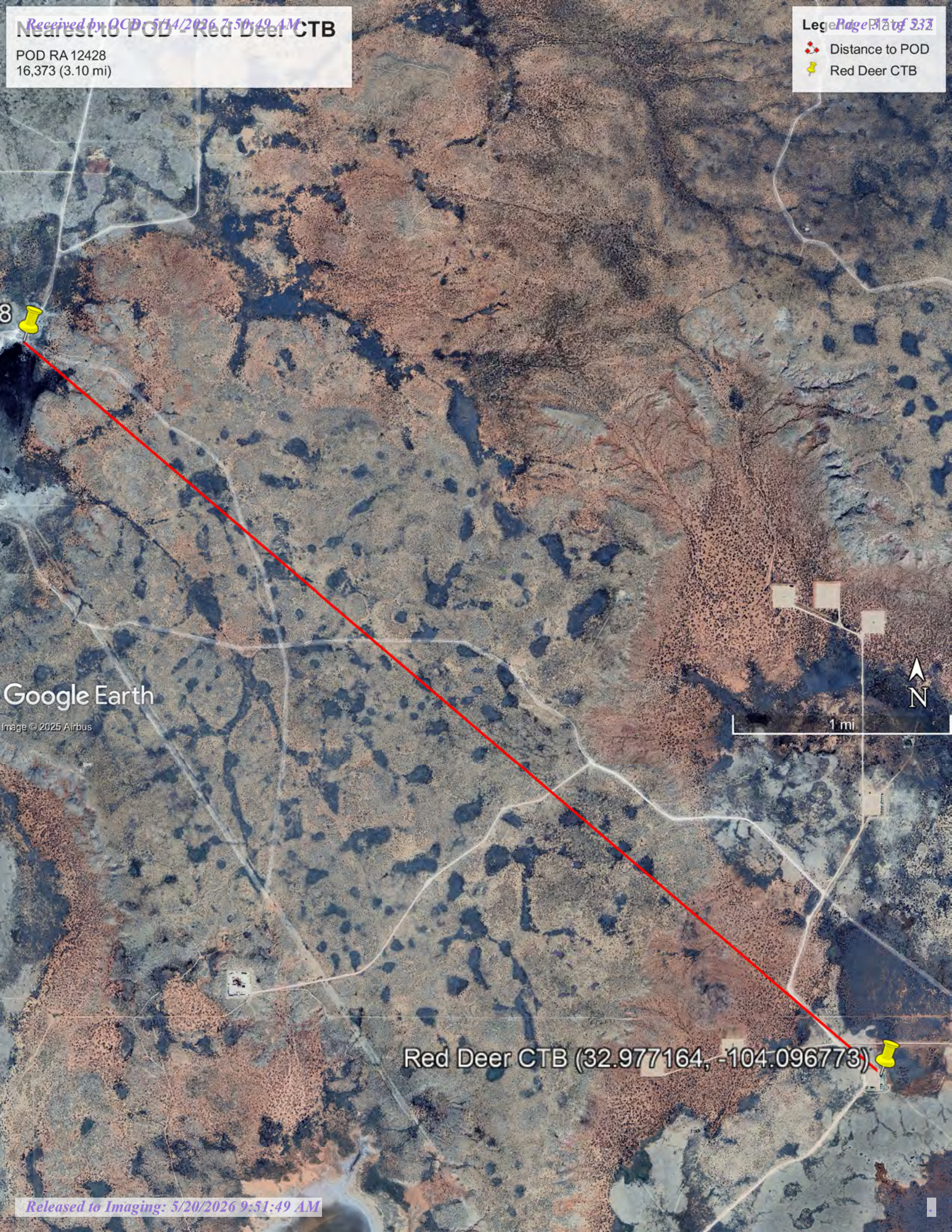
©2024 New Mexico Office of the State Engineer, All Rights Reserved. | [Disclaimer](#) | [Contact Us](#) | [Help](#) | [Home](#) |

Received by POD 5/14/2026 7:50:49 AM
Nearest to POD - Red Deer CTB

POD RA 12428
16,373 (3.10 mi)

Legend

-  Distance to POD
-  Red Deer CTB



Google Earth
Image © 2025 Airbus




1 mi



Red Deer CTB (32.977164, -104.096773)

Livestock Tank
5,697 (1.08 mi)

Legend

-  Distance to Stock Tank
-  RA 08333
-  Red Deer CTB (32.977164, -104.096773)



RA 08333

Red Deer CTB (32.977164, -104.096773)

Google Earth

Image © 2025 Airbus



3000 ft

Water Right Summary



[get image](#)
[list](#)

WR File Number:	RA 08333	Subbasin:	RA	Cross Reference:	
Primary Purpose:	STK 72-12-1 LIVESTOCK WATERING				
Primary Status:	DCL Declaration				
Total Acres:	0.000	Subfile:		Header:	
Total Diversion:	1.470	Cause/Case:			
Owner:	BOGLE FARMS	Owner Class:	Owner		
Contact:	STUART BOGLE				

Documents on File

(acre-feet per annum)

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
	245912	DCL	1991-07-10	DCL	PRC	RA 08333	T	0.000	1.470	

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
RA 08333			NW	NE	26	15S	28E	584050.0	3650815.0 *			

* UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	POD Number	Source
1914-12-31	DCL	0.000	1.470	RA 08333	

Place of Use

Q256	Q64	Q16	Q4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
	NW	NE	26	15S	28E	0.000	1.470			STK	1914-12-31	DCL	

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0.000	1.470		STK	1914-12-31	GW	SHALLOW

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

10/9/25 10:17 AM MST

Water Rights Summary



Plate 2.4

National Water Information System: Map View

Sites

Map Layers

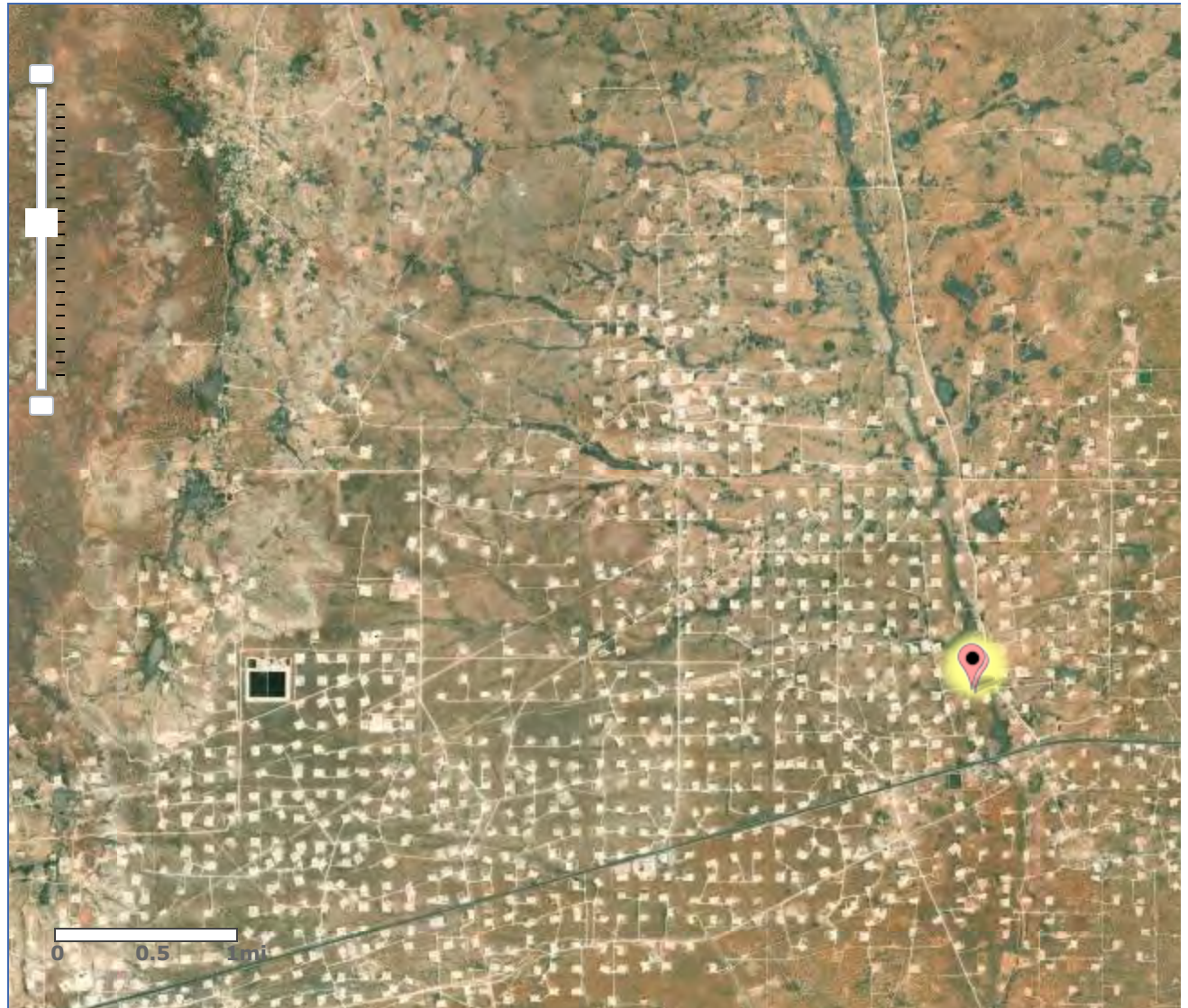
Search Results

Export Sites

Site Number	Site Name
324935104040401	17S.29E.22.112311
324936104040501	17S.29E.22.11124

Search Parameters

Explanation of Symbols





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:


Site Information

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

USGS 324935104040401 17S.29E.22.112311

Available data for this site

SUMMARY OF ALL AVAILABLE DATA

GO

Well Site

DESCRIPTION:

Latitude 32°49'35", Longitude 104°04'04" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,541 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "San Andres Limestone" (313SADR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1948-11-29	1948-11-29	1

Revisions

Unavailable (site:0) (timeseries:0)

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)

- [Questions or Comments](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)



Title: NWIS Site Information for USA: Site Inventory

URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=324935104040401

Page Contact Information: [New Mexico Water Data Support Team](#)

Page Last Modified: 2024-05-06 17:20:38 EDT

0.28 0.26 caww01



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:


Site Information

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

USGS 324936104040501 17S.29E.22.11124

Available data for this site

SUMMARY OF ALL AVAILABLE DATA

GO

Well Site

DESCRIPTION:

Latitude 32°49'36", Longitude 104°04'05" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,541 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "San Andres Limestone" (313SADR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1983-04-14	1983-04-14	1

Revisions

Unavailable (site:0) (timeseries:0)

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)

- [Questions or Comments](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)



Title: NWIS Site Information for USA: Site Inventory

URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=324936104040501

Page Contact Information: [New Mexico Water Data Support Team](#)

Page Last Modified: 2024-05-06 17:35:49 EDT

0.28 0.26 caww01



03- Watercourse-Red Deer 539 ft/0.1 mi



October 9, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

U.S. Fish and Wildlife Service
National Wetlands Inventory

04 - Wetland Playa - Red Deer CTB - 0.0 ft/miles



October 9, 2025

Wetlands

-  Estuarine and Marine Deepwater
-  Freshwater Emergent Wetland
-  Lake
-  Estuarine and Marine Wetland
-  Freshwater Forested/Shrub Wetland
-  Other
-  Freshwater Pond
-  Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Nearest Residence - Red Deer CTB

40,978 (7.76 mi)

Legend

- Distance to Nearest Residence
- Nearest Residence
- Red Deer CTB (32.977164, -104.096773)

Red Deer CTB (32.977164, -104.096773)

Nearest Residence

Google Earth

4 mi





06 - Wetland-Red Deer 0 ft (0.0 mi)



October 9, 2025

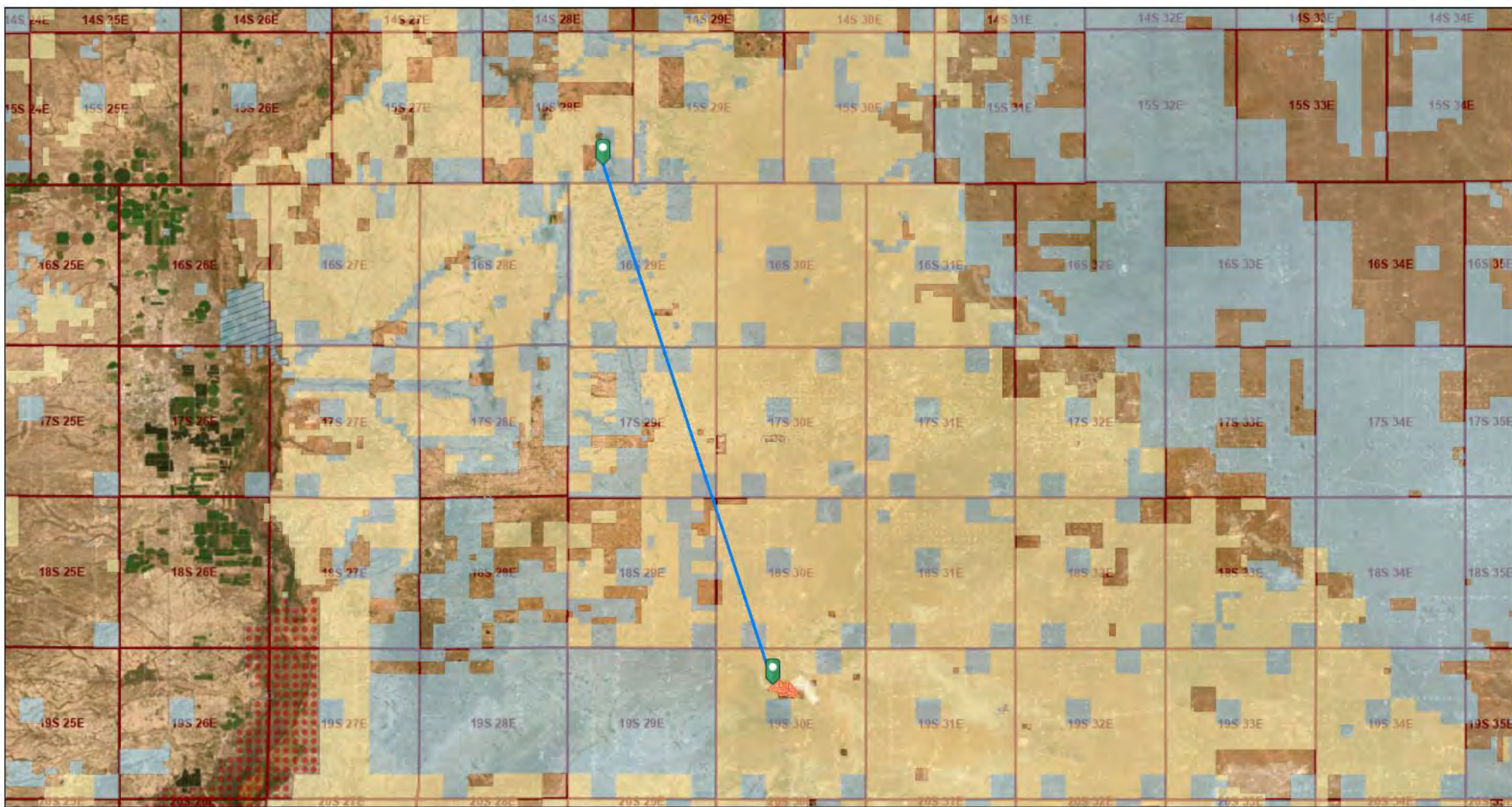
Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Plate 7

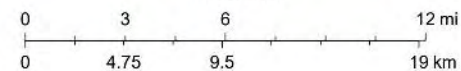
Active Mines in New Mexico - Red Deer - 115,503' (22mi) to Subsurface Mine



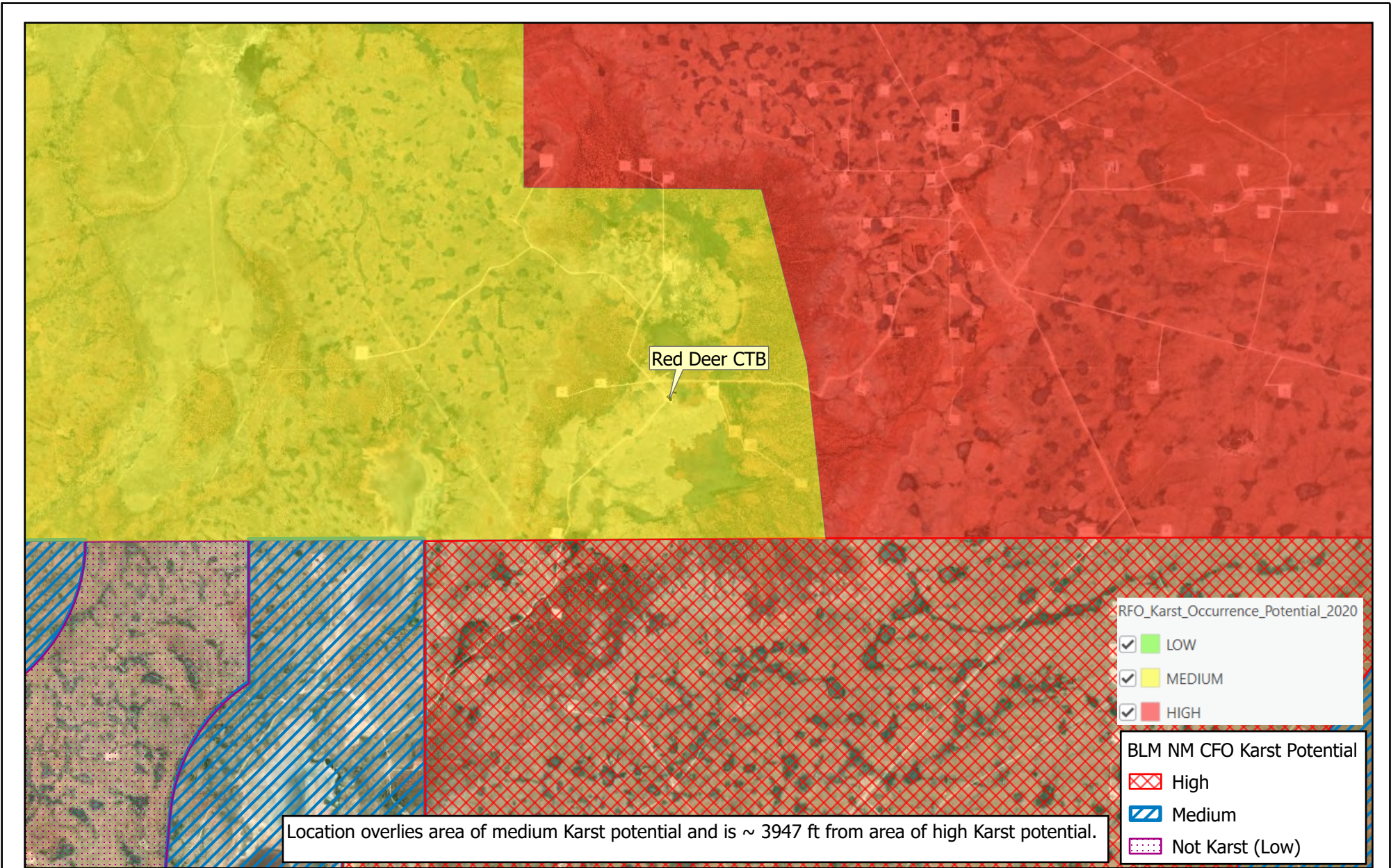
10/9/2025, 11:45:14 AM

1:288,895

- Registered Mines
- × Aggregate, Stone etc.
 - × Aggregate, Stone etc. Land Ownership
 - × Aggregate, Stone etc.
- Aggregate, Stone etc.
 - Potash
 - BLM
- BOR
 - P
 - S
- SGF
 - PLSS Townships



U.S. BLM, Earthstar Geographics, BLM






	Map Center: Lat/Long: 32.973084°N, 104.094099°W		Karst Potential Red Deer CTB	PLATE:	
	0 2,000 4,000 US Feet NAD 1983 StatePlane New Mexico East FIPS 3001 Feet			Date: Nov 04/25	

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

VERSATILITY. EXPERTISE.

6,968 feet (1.32 miles)

-  Distance to FEMA Zone A
-  FEMA Zone A
-  Red Deer CTB

Google Earth

Image © 2025 Airbus

Red Deer CTB (32.97728, -104.09668)



National Flood Hazard Layer FIRMMette



104°5'59"W 32°58'49"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone A, V, A99
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD**
 - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee. See Notes. Zone X
 - Area with Flood Risk due to Levee Zone D
- OTHER AREAS**
 - NO SCREEN Area of Minimal Flood Hazard Zone X
 - Effective LOMRs
 - Area of Undetermined Flood Hazard Zone D
- GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- OTHER FEATURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature
- MAP PANELS**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/9/2025 at 5:48 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Released to Imaging: 5/20/2026 9:31:49 AM

1:6,000

104°5'21"W 32°58'19"N

APPENDIX B

Red Deer CTB
Mack Energy Corporation

Appendix B
Biological Review
SLO-ECO



Printable Reports		
Agency	Report	Result
US Fish & Wildlife	Information for Planning and Consultation (IPaC)	-----
	(Potentially) Endangered Species	4
	Bald & Golden Eagles	0
	Migratory Birds	1
	Facilities	0
	Wetlands	None
Vertex "Habitats" GIS Map		
Agency	Layer	Result
BLM		
	Special Status Plant and Wildlife Habitat	-----
	Potential Habitat (Planning Area Only)	None
	Dunes Sage Brush Lizard	None
	Lesser Prairie Chicken	None
	Lesser Prairie Chicken Timing Restriction	None
	Natl Designated Areas of Critical Environmental Concern	None
NM Game and Fish		
	NM Crucial Habitat Assessment Tool (NM CHAT)	-----
	Crucial Habitat	3
	Species of Concern	3
	Large Natural Areas	2
	Natural Vegetation	0/6
	Terrestrial SERI	0
	Aquatic SERI	0/6
	Fresh Water Integrity	5
	Weland and Riparian Areas	0/6
	NM State Wildlife Action Plan (SWAP) Macrogroups	hihuan Semi-Desert Grasslar
	NM Important Plant Areas	None
	Riparian Corridors	-----
	Upper Rio Grande	None
	Middle Rio Grande	None
	Canadian Upper Pecos	None
	Gila Region San Juan	None
	Lower Pecos Tularosa basin	None
	NM Riparian Corridor	None
US Fish & Wildlife		
	Critical Habitat for Threatened and Endangered Species	None
NM Natural Heritage		
	Federal Threatened and Endangered (Fed T&E)	None
	State Threatened and Endangered (State T&E)	None
NM State Forestry		
	Important Plant Area (IPA)	None



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
Phone: (505) 346-2525 Fax: (505) 346-2542

In Reply Refer To:
Project Code: 2026-0069215
Project Name: Red Deer CTB

03/30/2026 14:51:25 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act as amended (16 USC 668-668(c)). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area, and to recommend some conservation measures that can be included in your project design.

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the ESA is to provide a means whereby threatened and endangered species and

the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (NEPA; 42 USC 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>.

Candidate Species and Other Sensitive Species

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico State agencies. These lists, along with species information, can be found at the following websites.

Biota Information System of New Mexico (BISON-M): www.bison-m.org

New Mexico State Forestry. The New Mexico Endangered Plant Program:
<https://www.emnrd.nm.gov/sfd/rare-plants/>

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: nmrareplants.unm.edu

Natural Heritage New Mexico, online species database: nhnm.unm.edu

WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, www.fws.gov/wetlands/Data/Mapper.html, integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

MIGRATORY BIRDS

In addition to responsibilities to protect threatened and endangered species under the ESA, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 CFR 10.12 and 16 USC 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a Federal nexus) or a Bird/Eagle Conservation Plan (when there is no Federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>. We also recommend review of the Birds of Conservation Concern list (<https://www.fws.gov/media/birds-conservation-concern-2021>) to fully evaluate the effects to the birds at your site. This list identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent top conservation priorities for the Service, and are potentially threatened by disturbance, habitat impacts, or other project development activities.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 thereby provides additional protection for both migratory birds and migratory bird habitat. Please visit <https://www.fws.gov/partner/council-conservation-migratory-birds> for information regarding the implementation of Executive Order 13186.

We suggest you contact the New Mexico Department of Game and Fish, and the New Mexico

Project code: 2026-0069215

03/30/2026 14:51:25 UTC

Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State protected and at-risk species fish, wildlife, and plants.

For further consultation with the Service we recommend submitting inquiries or assessments electronically to our incoming email box at nmesfo@fws.gov, where it will be more promptly routed to the appropriate biologist for review.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New Mexico Ecological Services Field Office

2105 Osuna Road Ne

Albuquerque, NM 87113-1001

(505) 346-2525

Project code: 2026-0069215

03/30/2026 14:51:25 UTC

PROJECT SUMMARY

Project Code: 2026-0069215
Project Name: Red Deer CTB
Project Type: Oil & Gas Well Maintenance
Project Description: Remediation of oil release.
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@32.9774066,-104.09674774999999,14z>



Counties: Chaves County, New Mexico

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Project code: 2026-0069215

03/30/2026 14:51:25 UTC

BIRDS

NAME	STATUS
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> Population: U.S.A (AZ, NM) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1923 General project design guidelines: https://ipac.ecosphere.fws.gov/project/2HRFDGTW2ZBQZKDPMEURUFKRP4/documents/generated/8928.pdf	Experimental Population, Non-Essential
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Pecos (=puzzle, =paradox) Sunflower <i>Helianthus paradoxus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7211 General project design guidelines: https://ipac.ecosphere.fws.gov/project/2HRFDGTW2ZBQZKDPMEURUFKRP4/documents/generated/9168.pdf	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

Project code: 2026-0069215

03/30/2026 14:51:25 UTC

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Stephanie McCarty
Address: 3101 Boyd Dr
City: Carlsbad
State: NM
Zip: 88220
Email: stefy_mccarty@yahoo.com
Phone: 5757255001

APPENDIX C



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

WELL OWNER NAME(S) BOGLE LTD		OSE FILE NUMBER(S) RA 12428	
WELL OWNER MAILING ADDRESS PO BOX 460		CITY DEXTER	STATE NM
		ZIP 88230	
WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS
	LATITUDE	33 00	22.728 N
	LONGITUDE	104 08	14.522 W
* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE			

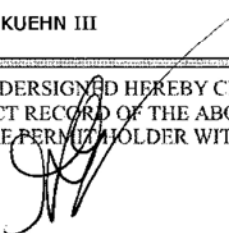
LICENSE NUMBER WD-1058	NAME OF LICENSED DRILLER DONALD KUEHN III		NAME OF WELL DRILLING COMPANY KEYS DRILLING & PUMP SERVICE INC.				
DRILLING STARTED 7/28/16	DRILLING ENDED 8/4/16	DEPTH OF COMPLETED WELL (FT) 170'	BORE HOLE DEPTH (FT) 170'	DEPTH WATER FIRST ENCOUNTERED (FT) 125'			
COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 125'			
DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
FROM	TO						
-1.50	125	8-3/4"	PVC	SPLINE	4-1/2"	SCH40	
125	170	8-3/4"	PVC	SPLINE	4-1/2"	SCH40	.030

DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
FROM	TO				
0	20	8-3/4"	CEMENT		HAND
20	170	8-3/4"	VEALMORE PEA GRAVEL		HAND

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	RA-12428	POD NUMBER	1
LOCATION	15S.28E.21.124	TRN NUMBER	590003
			PAGE 1 OF 2

DEPTH (feet bgl)	THICKNESS (feet)		COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			
0	20	20	TOP SOIL & GRAVEL	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
20	30	10	RED SAND & GRAVEL	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
30	70	40	RED CLAY	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
70	75	5	WHITE SANDY CLAY & COURSE SAND	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
75	90	15	GYPSON	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
90	110	20	RED CLAY	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
110	125	15	RED CLAY & GYPSON	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
125	140	15	COURSE SAND & GYPSON	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
140	160	20	GYPSON & COURSE SAND	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
160	170	10	GYPSON & COURSE SAND	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
				<input type="checkbox"/> Y <input type="checkbox"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="checkbox"/> PUMP				TOTAL ESTIMATED WELL YIELD (gpm): 15+	
<input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					

5. TEST RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: DONALD KUEHN III	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 GARY KEY	08/08/2016
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME	DATE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	RA-12428	POD NUMBER	4
LOCATION	135.28E.21.124	TRN NUMBER	590003
			PAGE 2 OF 2

APPENDIX D



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>10/8/2025</u>		_____

Summary of Times

Arrived at Site	<u>10/8/2025 11:08 AM</u>
Departed Site	<u>10/8/2025 12:16 PM</u>

Field Notes

- 12:00** Safety Paperwork has been filled out by Vertex Resource, Inc. environmental technician
- 12:00** Purpose: to map out release and take site visit photos
- 12:01** Area will be hydrovacked
- 12:01** Crude oil release that did not penetrate ground >0.25'. Puddles areas will be hydrovacked on 10.8.25

Next Steps & Recommendations

1



Daily Site Visit Report

Site Photos

Viewing Direction: Northwest



Release area from the Southeast end of the tank containment area facing the entrance/pad

Viewing Direction: Northwest



Release area from the Southeast end of the tank containment area facing the pad/heater treater area. Point of source can be seen on the left where heater treaters are covered in crude oil



Daily Site Visit Report

Viewing Direction: Southeast

Date & Time: Wed, 05/14/2025 10:01:20 AM
 Position: 31.287527° N, 104.1638° W
 Altitude: 1102 m
 Day: 05/14/2025
 Camera Bearing: 105.540° (306° heading)
 View: 12

Description: Photo 11
 Viewing Direction: Southeast
 Description: Release area from the northeast end of the dirt containment area facing the heater treater/tank containment area
 Orientation: 105.540° (306° heading)
 Lat: 31.287527, Long: 104.1638

Release area from the northeast end of the pad facing the heater treater/tank containment area

Viewing Direction: Southeast

Date & Time: Wed, 05/14/2025 10:01:20 AM
 Position: 31.287527° N, 104.1638° W
 Altitude: 1102 m
 Day: 05/14/2025
 Camera Bearing: 176.510° (209° heading)
 View: 12

Description: Photo 12
 Viewing Direction: Southeast
 Description: Release area from the northeast end of the dirt containment area facing the heater treater/tank containment area
 Orientation: 176.510° (209° heading)
 Lat: 31.287527, Long: 104.1638

Release area from the northeast end where the pad meets pasture facing the middle of the pad

Viewing Direction: Northeast

Date & Time: Wed, 05/14/2025 10:01:20 AM
 Position: 31.287527° N, 104.1638° W
 Altitude: 1102 m
 Day: 05/14/2025
 Camera Bearing: 359.965° (306° heading)
 View: 12

Description: Photo 13
 Viewing Direction: Northeast
 Description: Release area from the northeast end of the pad facing the heater treater/tank containment area
 Orientation: 359.965° (306° heading)
 Lat: 31.287527, Long: 104.1638

Release area from the northeast end of the pad heading towards pasture

Viewing Direction: Northeast

Date & Time: Wed, 05/14/2025 10:01:20 AM
 Position: 31.287527° N, 104.1638° W
 Altitude: 1102 m
 Day: 05/14/2025
 Camera Bearing: 449.510° (306° heading)
 View: 12

Description: Photo 14
 Viewing Direction: Northeast
 Description: Release area from the northeast end of the pad heading towards pasture
 Orientation: 449.510° (306° heading)
 Lat: 31.287527, Long: 104.1638

Release area from the northeast end of the pad heading towards pasture



Daily Site Visit Report

Viewing Direction: Southeast

Release area from the northeast end of the pad and into the pasture

Viewing Direction: Southeast

Release area from the northeast end of the pad heading towards pasture. Facing towards the east direction behind the tank containment area.

Viewing Direction: Southwest

Release area from the northeast end of the pad heading towards pasture facing the heater treater area

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Sharon Minnix

Signature: 
Signature



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>10/21/2025</u>		_____

Summary of Times

Arrived at Site	<u>10/21/2025 9:30 AM</u>
Departed Site	<u>10/21/2025 3:40 PM</u>

Field Notes

- 10:20** Completed safety paperwork upon arrival
- 10:20** Walked the pad investigating the lines to confirm the 811 had been completed and checked the 811's start date
- 10:22** Plotted the proposed points of the on pad delineation and examined the former release area
- 10:27** Points were checked with a secondary sweep device before breaking ground
- 11:55** The on pad release area was scraped and compacted before delineation began
- 15:39** Placed points for an 811 in the pastureland. Pastureland 811 points required careful navigation through brush and unstable ground
- 16:38** Ticket number: 25OC210912

Next Steps & Recommendations

1



Daily Site Visit Report

Site Photos

Viewing Direction: East



Descriptive Photo - 1
Viewing Direction: South
Desc: BH25-01 on the west side of the release. Refusal was hit at about 1ft due to a highly compacted sand layer
Created: 10/21/2025 11:21:53 AM
Lat:32.977255, Long:-104.096833

BH25-01 on the west side of the release. Refusal was hit at about 1ft due to a highly compacted sand layer

Viewing Direction: East



Descriptive Photo - 2
Viewing Direction: East
Desc: SS25-02 taken in the northern area of the on pad section of the release
Created: 10/21/2025 11:54:03 AM
Lat:32.977262, Long:-104.096833

SS25-02 surface taken in the northern area of the on pad section of the release

Viewing Direction: East



Descriptive Photo - 3
Viewing Direction: East
Desc: SS25-04 taken in the southern area of the on pad section of the release
Created: 10/21/2025 12:03:06 PM
Lat:32.976867, Long:-104.096833

SS25-03 taken in the southern area of the on pad section of the release

Viewing Direction: East



Descriptive Photo - 4
Viewing Direction: East
Desc: SS25-03 taken in the central area of the on pad section of the release
Created: 10/21/2025 12:05:06 PM
Lat:32.977070, Long:-104.096833

SS25-02 taken in the central area of the on pad section of the release



Daily Site Visit Report

Viewing Direction: East

A photograph showing several large, cylindrical industrial storage tanks in an open, flat, dusty area under a clear blue sky. The tanks are arranged in a row, with some having ladders and pipes. The ground is light-colored and appears to be a mix of dirt and gravel.

Descriptive Photo - 7
Viewing Direction: East
Desc: BH25-02 to 0.5ft taken in the northern area of the on pad section of the re
Created: 10/21/2025 3:35:02 PM
Lat:32.977212, Long:-104.066845

BH25-02 to 0.5ft taken in the northern area of the on pad section of the release

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>10/22/2025</u>		_____

Summary of Times

Arrived at Site	<u>10/22/2025 9:44 AM</u>
Departed Site	<u>10/22/2025 2:45 PM</u>

Field Notes

9:53 Completed safety paperwork upon arrival
11:04 BH25-03 through BH25-06 was collected.

Next Steps & Recommendations

1



Daily Site Visit Report

Site Photos

Viewing Direction: East



Describe Photo - 1
Viewing Direction: East
Date: 04-08-2025 11:35:01 AM
Created: 10/23/2025 11:35:01 AM
Lvl: 32.77172, Comp: 104.026625

BH25-06 on the western side of the release

Viewing Direction: East



Describe Photo - 2
Viewing Direction: East
Date: 04-08-2025 11:37:00 AM
Created: 10/23/2025 11:37:00 AM
Lvl: 32.771501, Comp: 104.026721

BH25-03, 2ft deep, northern area of the pad

Viewing Direction: West



Describe Photo - 3
Viewing Direction: West
Date: 04-08-2025 11:38:12 AM
Created: 10/23/2025 11:38:12 AM
Lvl: 32.77172, Comp: 104.026625

BH25-04, 2ft deep, east of the containment

Viewing Direction: North



Describe Photo - 4
Viewing Direction: North
Date: 04-08-2025 12:45:07 PM
Created: 10/23/2025 12:45:07 PM
Lvl: 32.77223, Comp: 104.026625

BH25-05, hit refusal at 1ft. South of the release stain

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT', written over a horizontal line.

Signature



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>10/29/2025</u>		_____

Summary of Times

Arrived at Site	<u>10/29/2025 9:10 AM</u>
Departed Site	<u>10/29/2025 5:28 PM</u>

Field Notes

- 9:39** Completed safety paperwork upon arrival
- 11:44** Boreholes were checked with a secondary sweep before beginning
- 17:24** Boreholes 7 through 9 and 14 were collected.
- 17:24** All boreholes' holes were covered before leaving the location

Next Steps & Recommendations

1



Daily Site Visit Report

Site Photos

Viewing Direction: West



BH25-08 a horizontal south of the excavation

Viewing Direction: West



BH25-07 a horizontal east of the excavation. The borehole was advanced to 6ft to confirm no shallow karst features

Viewing Direction: South



BH25-09, a horizontal to the east of the release

Viewing Direction: Southwest



BH25-14, a step out of BH25-11

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

A handwritten signature in black ink, appearing to be 'KT', written over a horizontal line. The signature is stylized and cursive.

Signature



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>12/8/2025</u>		_____

Summary of Times

Arrived at Site	<u>12/8/2025 8:10 AM</u>
Departed Site	<u>12/8/2025 3:19 PM</u>

Field Notes

- 16:19** Safety Paperwork has been filled out by everyone on site
- 16:21** Areas that will be excavated are heavily covered by polylines. This hazard has been discussed and will be approached in a slow manner to execute contaminated material being removed and avoid any ruptures.
- 16:21** Due to the amount of polylines present, work completed will be slow

Next Steps & Recommendations

- 1 Continue excavation



Daily Site Visit Report

Site Photos

Viewing Direction: Northeast



Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking

Viewing Direction: Northeast



Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking



Daily Site Visit Report

Viewing Direction: Northwest

Date & Time: Mon, May 11, 2026 10:51:05 AM
 Position: -102.97771° / -34.09560°
 Altitude: 10657 ft
 Datum: WGS-84
 Azimuth Bearing: 067.1824° 1529 ft 247 ft
 Zoom: 1X

Description: Photo - 1
 Viewing Direction: Northwest
 Desc: Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking
 Created: 5/11/2026 10:51:05 AM
 Latitude: 34.09560, Longitude: -102.97771

Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking

Viewing Direction: Northeast

Date & Time: Mon, May 11, 2026 10:51:05 AM
 Position: -102.97771° / -34.09560°
 Altitude: 10657 ft
 Datum: WGS-84
 Azimuth Bearing: 067.1824° 1529 ft 247 ft
 Zoom: 1X

Description: Photo - 1
 Viewing Direction: Northeast
 Desc: Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking
 Created: 5/11/2026 10:51:05 AM
 Latitude: 34.09560, Longitude: -102.97771

Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking

Viewing Direction: Northeast

Date & Time: Mon, May 11, 2026 10:51:05 AM
 Position: -102.97771° / -34.09560°
 Altitude: 10657 ft
 Datum: WGS-84
 Azimuth Bearing: 067.1824° 1529 ft 247 ft
 Zoom: 1X

Description: Photo - 1
 Viewing Direction: Northeast
 Desc: Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking
 Created: 5/11/2026 10:51:05 AM
 Latitude: 34.09560, Longitude: -102.97771

Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking

Viewing Direction: Northwest

Date & Time: Mon, May 11, 2026 10:51:05 AM
 Position: -102.97771° / -34.09560°
 Altitude: 10657 ft
 Datum: WGS-84
 Azimuth Bearing: 067.1824° 1529 ft 247 ft
 Zoom: 1X


Description: Photo - 1
 Viewing Direction: Northwest
 Desc: Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking
 Created: 5/11/2026 10:51:05 AM
 Latitude: 34.09560, Longitude: -102.97771

Site view of release and area that will be excavated. Can be visibly seen from staining/orange marking



Daily Site Visit Report

Viewing Direction: Northeast



The photograph shows a construction site in a dry, open landscape. In the foreground, there are several parallel metal tracks or rails laid out on the ground. A person's shadow is cast across the tracks, indicating the sun is high in the sky. The background shows a flat, arid plain under a clear blue sky. There is some faint, illegible text overlaid on the top left and bottom left of the image.

Began in the 1ft section. Image shows the progress that has been made.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Sharon Minnix

Signature:

A handwritten signature in black ink, appearing to read 'Sharon Minnix', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>12/22/2025</u>		_____

Summary of Times

Arrived at Site	<u>12/22/2025 9:00 AM</u>
Departed Site	<u>12/22/2025 5:00 PM</u>

Field Notes

- 8:23** Travel to site / safety paperwork
- 10:42** Excavation continued in 3' section

Next Steps & Recommendations

- 1** Continue confirmation sampling
- 2** Backfill and report



Daily Site Visit Report

Site Photos

Viewing Direction: South



Excavation near complete in 3' section

Viewing Direction: North



Describe Photo - 8
Viewing Direction: North
Date: Contaminated material placed in plastic liner
Created: 12/23/2025 10:43:12 AM
Lat: 32.077171, Long: -104.037062

Contaminated material placed in plastic liner



Daily Site Visit Report

Viewing Direction: East

Descriptive Photo - 3
Viewing Direction: East
Desc: BS25-46 @ 6",
BS25-57 @ 6",
BS25-65 @ 6",
Were collected to gather a broad scope
Created: 12/23/2025 10:56:38 AM
Lat: 32.072975, Long: 104.024934

BS25-46 @ 6"
BS25-57 @ 6"
BS25-65 @ 6"
Were collected to gather a broad scope of 6" scrape area

Viewing Direction: East

Descriptive Photo - 4
Viewing Direction: East
Desc: WS25-02 @ 0-1.5
Created: 12/23/2025 11:08:19 AM
Lat: 32.072928, Long: 104.024934

WS25-02 @ 0-1.5

Viewing Direction: West

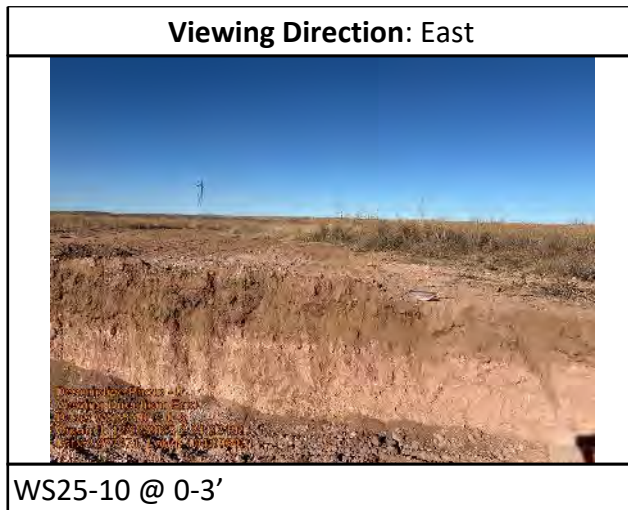
BS25-05 @ 1.5'
BS25-06 @ 1.5'

Viewing Direction: South

BS25-20 through BS25-24 @ 3'

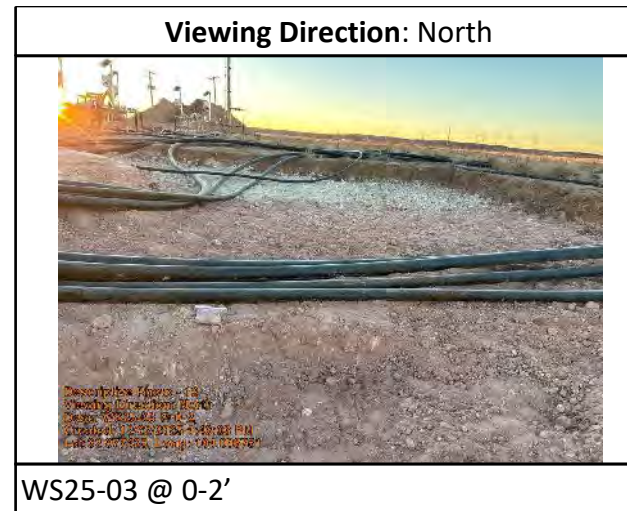


Daily Site Visit Report





Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:


Signature



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>12/23/2025</u>		_____

Summary of Times

Arrived at Site	<u>12/23/2025 8:30 AM</u>
Departed Site	<u>12/23/2025 2:00 PM</u>

Field Notes

- 9:17** Travel to site/ safety paperwork
- 10:33** Confirmation sampling continued
- 10:33** Began hauling contaminated material to disposal
- 16:41** Samples field screened
- 16:41** Samples jarred and labeled

Next Steps & Recommendations

- 1** Complete confirmation sampling
- 2** Report writing/ backfill



Daily Site Visit Report

Site Photos

Viewing Direction: South



BS25-14 @ 2'

Viewing Direction: West



6" scrape area was very compacted so backhoe broke up soil for composite sampling

Viewing Direction: Southeast



BS25-39 through BS25-47 @ 0.5'

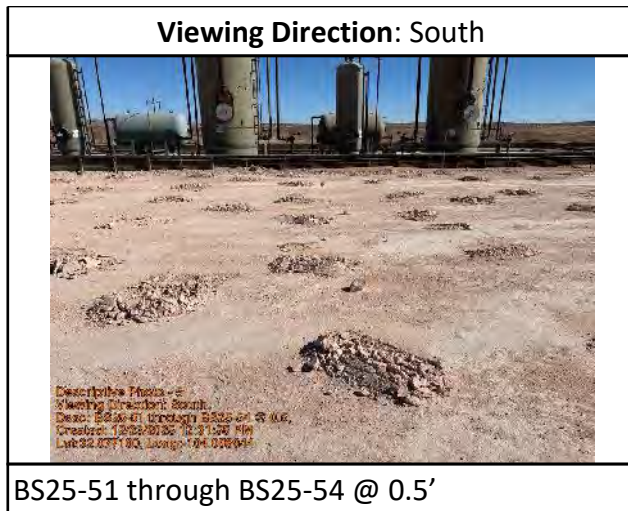
Viewing Direction: South



BS25-48 through BS25-50 @ 0.5'



Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:


Signature



Daily Site Visit Report

Client: Mack Energy Corporation Incident ID #: _____
 Site Location Name: Red Deer CTB API #: _____
 Inspection Date: 12/29/2025 _____

Summary of Times

Arrived at Site 12/29/2025 10:00 AM
 Departed Site _____

Field Notes

- 11:05** Travel to site/ safety paperwork
- 11:06** Confirmation sampling in 6" scrape area continued
- 14:11** Samples were field screened
- 11:06** Samples were jarred and labeled
- 11:06** Coc's were created

Next Steps & Recommendations

- 1** Complete confirmation sampling
- 2** Backfill and report writing
- 3** Haul contaminated material to disposal facility



Daily Site Visit Report

Site Photos

Viewing Direction: Northwest



Describe Photo - 1
Viewing Direction: South
Date: 05/25/2025 through 05/25/2025 @ 0.6
Created: 12/29/2025 11:29:00 AM
Lat:32.278165, Long:104.037763

BS25-55 through BS25-58 @ 0.5'

Viewing Direction: Northwest



Describe Photo - 2
Viewing Direction: Northwest
Date: 05/25/2025 through 05/25/2025 @ 0.6
Created: 12/29/2025 11:30:00 AM
Lat:32.278165, Long:104.037763

BS25-59 through BS25-63 @ 0.5'

Viewing Direction: Southeast



Describe Photo - 3
Viewing Direction: Southeast
Date: 05/25/2025 through 05/25/2025 @ 0.6
Created: 12/29/2025 12:00:00 PM
Lat:32.278165, Long:104.037763

BS25-64 through BS25-70 @ 0.5'

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:

A handwritten signature in black ink, appearing to be 'RA', written over a horizontal line. The word 'Signature' is printed in small text below the line.



Daily Site Visit Report

Client:	<u>Mack Energy Corporation</u>	Incident ID #:	_____
Site Location Name:	<u>Red Deer CTB</u>	API #:	_____
Inspection Date:	<u>12/30/2025</u>		_____

Summary of Times

Arrived at Site	<u>12/30/2025 9:00 AM</u>
Departed Site	<u>12/30/2025 1:00 PM</u>

Field Notes

- 8:51** Travel to site / safety paperwork
- 8:51** Confirmation sampling continued
- 11:50** Samples were field screened
- 13:06** Samples were jarred and labeled
- 13:06** Coc's were created
- 13:06** Site map was updated

Next Steps & Recommendations

- 1** Report writing
- 2** Haul contaminated material to disposal
- 3** Backfill excavation



Daily Site Visit Report

Site Photos

Viewing Direction: East



Describe Photo - 4
Viewing Direction: East
Date: 12/30/2025 8:13:03 AM
Created: 12/30/2025 8:13:03 AM
Lat: 32.770267, Long: 104.036658

BS25-71 through BS25-76 @ 0.5'

Viewing Direction: Southeast



Describe Photo - 4
Viewing Direction: Southeast
Date: 12/30/2025 8:13:03 AM
Created: 12/30/2025 8:13:03 AM
Lat: 32.770267, Long: 104.036658

BS25-77 through BS25-84 @ 0.5'

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:


Signature



Daily Field Log
Site: Red Deer CTB

02/07/2026

Location: Red Deer

By: Andrew Ludvik

Table with 4 columns: Field Name, Value, Contractor, and Incident ID Number. Rows include Weather, Staff On-site, Staff From Time, Tailgate meeting conducted, Contractor, Contractor Crew, Equipment On Site, and Incident ID Number.

Work Summary:

Confirmation Sampling

Time Observations

Table with 2 columns: Time and Observations. Contains 6 rows of site activity logs with timestamps and descriptions of sampling and site work.

Inspector: Andrew Ludvik



Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
 Time: 14:54
 Notes: Northeast side of the excavation facing west.
 Snow is observed along wall.
 Latitude: 32.97736388888889
 Longitude: -104.09630555555555
 Direction: W



Date: 2/7/2026
 Time: 14:55
 Notes: Northeast side of the excavation facing west
 Latitude: 32.97736388888889
 Longitude: -104.09630555555555
 Direction: NW





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
 Time: 14:56
 Notes: North side of excavation facing southeast
 Latitude: 32.97750555555556
 Longitude: -104.09651111111111
 Direction: N



Date: 2/7/2026
 Time: 14:57
 Notes: North side of excavation facing south
 Latitude: 32.97750555555556
 Longitude: -104.09650277777777
 Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
 Time: 14:57
 Notes: North side of excavation facing southwest
 Latitude: 32.97750555555556
 Longitude: -104.09650277777777
 Direction: NE



Date: 2/7/2026
 Time: 14:58
 Notes: Northwest corner of excavation facing east
 Latitude: 32.97750833333333
 Longitude: -104.09688611111111
 Direction: SE





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
 Time: 14:59
 Notes: Northwest corner of excavation facing south
 Latitude: 32.97750833333333
 Longitude: -104.09686944444444
 Direction: E



Date: 2/7/2026
 Time: 15:00
 Notes: Photo of northeast portion of excavation
 Latitude: 0
 Longitude: 0
 Direction: SW





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
 Time: 15:01
 Notes: Photo of north portion of excavation
 Latitude: 32.97735277777778
 Longitude: -104.09643611111111
 Direction: W



Date: 2/7/2026
 Time: 15:02
 Notes: North portion of pad facing south
 Latitude: 32.97736388888889
 Longitude: -104.09686944444444
 Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:02
Notes: North portion of pad facing south
Latitude: 32.97735555555555
Longitude: -104.09690833333333
Direction: N



Red Deer|Lat: 32.97736, Lon: -104.09691|Azimuth: 309.73, Sat, Feb 7, 2026 15:02

Date: 2/7/2026
Time: 15:03
Notes: South portion of pad facing north
Latitude: 32.977383333333336
Longitude: -104.097
Direction: S



Red Deer|Lat: 32.97738, Lon: -104.09700|Azimuth: -1.00, Sat, Feb 7, 2026 15:03



Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
 Time: 15:05
 Notes: Area where BS25-09 and -10 were collected
 Latitude: 0
 Longitude: 0
 Direction: NW



Date: 2/7/2026
 Time: 15:06
 Notes: Area where WS25-11 was collected
 Latitude: 32.97733888888889
 Longitude: -104.09680833333333
 Direction: NE





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
 Time: 15:07
 Notes: Area where BS25-32 and WS25-12 were collected
 Latitude: 32.97734444444445
 Longitude: -104.09680833333333
 Direction: E



Red Deer|Lat: 32.97734, Lon: -104.09681|Accuracy: 4.00, Sat: Feb 7, 2026 15:07

Date: 2/7/2026
 Time: 15:08
 Notes: Area where WS25-13 was collected
 Latitude: 32.97734444444445
 Longitude: -104.09680833333333
 Direction: NE



Red Deer|Lat: 32.97734, Lon: -104.09681|Accuracy: 4.00, Sat: Feb 7, 2026 15:08



Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:08
Notes: Area where WS25-14 was collected
Latitude: 32.97717222222222
Longitude: -104.09683333333332
Direction: N



Date: 2/7/2026
Time: 15:09
Notes: Area where WS25-15 was collected
Latitude: 32.977136111111115
Longitude: -104.09685555555555
Direction: NE





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:09
Notes: Area where WS25-16 was collected
Latitude: 32.977136111111115
Longitude: -104.09685555555555
Direction: N



Red Deer|Lat: 32.97714, Lon: -104.09686|Azimuth: 266.84, Sat, Feb 7, 2026 15:09



Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:09
Notes: Area where WS25-16 was collected
Latitude: 32.97689444444445
Longitude: -104.09701666666666
Direction: NW



Red Deer|Lat: 32.97689, Lon: -104.09702|Azimuth: 273.87, Sat, Feb 7, 2026 15:09



Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:10
Notes: Area where WS25-16 was collected
Latitude: 0
Longitude: 0
Direction: NW





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:11
Notes: Area where WS25-17 was collected
Latitude: 32.97708611111111
Longitude: -104.09706944444444
Direction: N



Red Deer|Lat: 32.97709, Lon: -104.09707|Azimuth: -1.00, Sat, Feb 7, 2026 15:11



Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:11
Notes: Area where WS25-17 was collected
Latitude: 32.97708888888889
Longitude: -104.09709166666666
Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:11
Notes: Area where WS25-17 was collected
Latitude: 32.97709444444445
Longitude: -104.09712222222221
Direction: N

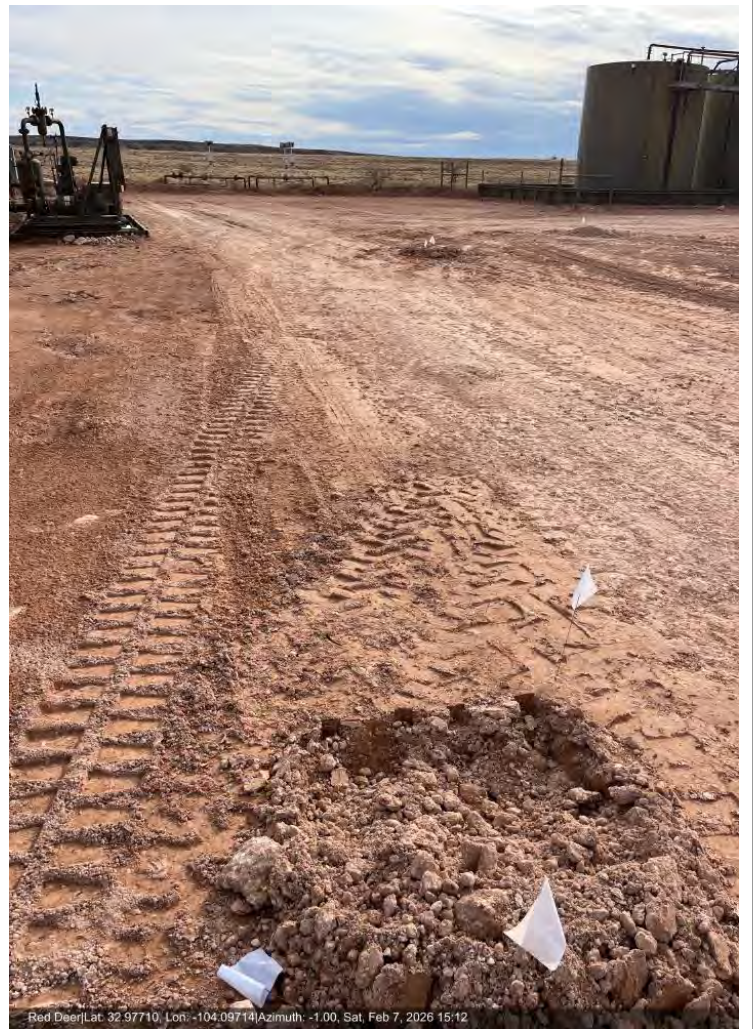




Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:12
Notes: Area where WS25-17 was collected
Latitude: 32.97709722222223
Longitude: -104.09714444444444
Direction: NW





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 2/7/2026
Time: 15:12
Notes: Area where WS25-17 was collected
Latitude: 32.97710555555556
Longitude: -104.097175
Direction: E



02/08/2026

Location: Red Deer

By: Andrew Ludvik



Daily Field Log
Site: Red Deer CTB

03/04/2026

Location: Red Deer

By: Steph McCarty

Weather	Clear Warm	Contractor	
Staff On-site	Steph McCarty	Contractor Crew	
Staff From Time		Equipment On Site	Dump trucks, backhoes
Tailgate meeting conducted	Yes	Incident ID Number	nAPP2528161742

Work Summary:

Sampling backfill

Time	Observations
13:45:09	Completed safety paperwork. Dump trucks were hauling in backfill material. Additional crew was on site working on tank batteries. Prepared for sampling.
14:30:20	Collected samples Backfill-01 through -09 throughout caliche backfill material to satisfy at least 1 sample per 100 cubic yards of material.
15:15:58	Field screened samples and prepared for lab per standards.

Inspector: Steph McCarty



Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/4/2026
 Time: 18:22
 Notes: Backfill pile on west, sample Backfill-01.
 Latitude: 32.9773444444445
 Longitude: 104.09741388888888
 Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/4/2026
 Time: 18:22
 Notes: Backfill pile on west, sample Backfill-01, -02, -03.
 Latitude: 32.977361111111115
 Longitude: 104.09736944444444
 Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/4/2026
 Time: 18:22
 Notes: Backfill pile towards middle, sample Backfill-04, -05, -06.
 Latitude: 32.977333333333334
 Longitude: 104.09732777777778
 Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/4/2026
 Time: 18:22
 Notes: Backfill pile on south, sample Backfill-06 and -07.
 Latitude: 32.97735
 Longitude: 104.09734166666667
 Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/4/2026
 Time: 18:22
 Notes: Backfill pile on east, sample Backfill-08.
 Latitude: 32.97736944444445
 Longitude: 104.09726944444444
 Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/4/2026
 Time: 18:22
 Notes: Backfill pile on north, sample Backfill-09.
 Latitude: 32.97745277777778
 Longitude: 104.09736388888888
 Direction: N



Date: 3/4/2026
 Time: 18:22
 Notes: Backfill pile on north side of pad.
 Latitude: 32.97730833333333
 Longitude: 104.09761666666667
 Direction: N





Daily Field Log
Site: Red Deer CTB

03/27/2026

Location: Red Deer

By: Katrina Taylor

Weather	Cloudy Cold Wind	Contractor	
Staff On-site		Contractor Crew	
Staff From Time	10:45	Equipment On Site	
Tailgate meeting conducted	Yes	Incident ID Number	

Work Summary:

Take backfill photos an collect a backfill sample

Time Observations

11:13:39	Photographs of the completed backfill area were taken
11:15:32	A 5-point composite sample of the backfill was taken from the pasture area
11:18:30	Corrective action of building a berm was made between the pad and pasture area

OK 9

Pictures/Attachments

Date: 3/27/2026
 Time: 11:35
 Notes: Pasture area backfilled
 Latitude: 32.97719444444444
 Longitude: -104.09688611111111
 Direction: W





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:35
Notes: Pasture area backfilled
Latitude: 32.9772
Longitude: -104.09689444444444
Direction: W



Date: 3/27/2026
Time: 11:35
Notes: Pasture area backfilled
Latitude: 32.9772
Longitude: -104.09689444444444
Direction: W





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:35
Notes: Pasture area backfilled
Latitude: 32.97720277777778
Longitude: -104.096925
Direction: W



Date: 3/27/2026
Time: 11:35
Notes: Pasture area backfilled
Latitude: 32.97720277777778
Longitude: -104.096925
Direction: NW





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:35
Notes: Pasture area backfilled
Latitude: 32.97720277777778
Longitude: -104.096925
Direction: NW



Date: 3/27/2026
Time: 11:35
Notes: Pasture area backfilled
Latitude: 32.97723055555556
Longitude: -104.09702222222222
Direction: NW





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:35
Notes: Pasture area backfilled
Latitude: 32.9772305555556
Longitude: -104.09702222222222
Direction: NW



Date: 3/27/2026
Time: 11:33
Notes: Berm created along the pad boundary
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:33
Notes: Berm created along the pad boundary
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: N



Date: 3/27/2026
Time: 11:33
Notes: Berm created along the pad boundary
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:33
Notes: Pad Backfilled
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: N



Date: 3/27/2026
Time: 11:33
Notes: Pad Backfilled
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: N





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:33
Notes: Pad Backfilled
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: E



Date: 3/27/2026
Time: 11:33
Notes: Pad Backfilled
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: E





Daily Field Log
Site: Red Deer CTB

Pictures/Attachments

Date: 3/27/2026
Time: 11:33
Notes: Berm created along the pad boundary
Latitude: 32.977325
Longitude: -104.09745833333334
Direction: E



APPENDIX E



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 11/6/2025 12:58:13 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-36171-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
11/6/2025 12:58:13 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-36171-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	21
QC Association Summary	26
Lab Chronicle	30
Certification Summary	35
Chain of Custody	36
Receipt Checklists	38

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-36171-1

Job ID: 885-36171-1

Eurofins Albuquerque

Job Narrative 885-36171-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 10/24/2025 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 300_OF_28D_PREC: The matrix spike duplicate (MSD) recoveries for preparation batch 885-37474 and analytical batch 885-37540 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-01 0

Lab Sample ID: 885-36171-1

Date Collected: 10/21/25 10:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		10/25/25 10:45	10/30/25 16:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 150			10/25/25 10:45	10/30/25 16:54	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 10:45	10/30/25 16:54	1
Ethylbenzene	ND		0.048	mg/Kg		10/25/25 10:45	10/30/25 16:54	1
Toluene	ND		0.048	mg/Kg		10/25/25 10:45	10/30/25 16:54	1
Xylenes, Total	ND		0.096	mg/Kg		10/25/25 10:45	10/30/25 16:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			10/25/25 10:45	10/30/25 16:54	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		10/27/25 07:05	10/27/25 14:10	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/27/25 07:05	10/27/25 14:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			10/27/25 07:05	10/27/25 14:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	500		51	mg/Kg		10/29/25 13:12	10/30/25 17:41	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-01 1

Lab Sample ID: 885-36171-2

Date Collected: 10/21/25 10:30

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		10/25/25 10:45	10/30/25 17:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 150			10/25/25 10:45	10/30/25 17:15	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 10:45	10/30/25 17:15	1
Ethylbenzene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 17:15	1
Toluene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 17:15	1
Xylenes, Total	ND		0.098	mg/Kg		10/25/25 10:45	10/30/25 17:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			10/25/25 10:45	10/30/25 17:15	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		9.7	mg/Kg		10/27/25 07:05	10/27/25 14:22	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		10/27/25 07:05	10/27/25 14:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			10/27/25 07:05	10/27/25 14:22	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		50	mg/Kg		10/29/25 13:12	10/30/25 17:55	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-02 0

Lab Sample ID: 885-36171-3

Date Collected: 10/21/25 11:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		10/25/25 10:45	10/30/25 17:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 150			10/25/25 10:45	10/30/25 17:37	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 10:45	10/30/25 17:37	1
Ethylbenzene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 17:37	1
Toluene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 17:37	1
Xylenes, Total	ND		0.098	mg/Kg		10/25/25 10:45	10/30/25 17:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			10/25/25 10:45	10/30/25 17:37	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	66		9.7	mg/Kg		10/27/25 07:05	10/27/25 14:34	1
Motor Oil Range Organics [C28-C40]	58		49	mg/Kg		10/27/25 07:05	10/27/25 14:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			10/27/25 07:05	10/27/25 14:34	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		50	mg/Kg		10/29/25 13:12	10/30/25 18:09	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-02 0.3

Lab Sample ID: 885-36171-4

Date Collected: 10/21/25 11:30

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		10/25/25 10:45	10/30/25 17:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 150			10/25/25 10:45	10/30/25 17:58	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 10:45	10/30/25 17:58	1
Ethylbenzene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 17:58	1
Toluene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 17:58	1
Xylenes, Total	ND		0.099	mg/Kg		10/25/25 10:45	10/30/25 17:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			10/25/25 10:45	10/30/25 17:58	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		10/27/25 07:05	10/27/25 14:46	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		10/27/25 07:05	10/27/25 14:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			10/27/25 07:05	10/27/25 14:46	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		51	mg/Kg		10/29/25 13:12	10/30/25 18:23	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-03 0

Lab Sample ID: 885-36171-5

Date Collected: 10/22/25 10:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		10/25/25 10:45	10/30/25 18:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 150			10/25/25 10:45	10/30/25 18:20	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 10:45	10/30/25 18:20	1
Ethylbenzene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 18:20	1
Toluene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 18:20	1
Xylenes, Total	ND		0.099	mg/Kg		10/25/25 10:45	10/30/25 18:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			10/25/25 10:45	10/30/25 18:20	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		10/27/25 07:05	10/27/25 14:58	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		10/27/25 07:05	10/27/25 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			10/27/25 07:05	10/27/25 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		10/29/25 13:12	10/30/25 18:37	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-03 1

Lab Sample ID: 885-36171-6

Date Collected: 10/22/25 10:30

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		10/25/25 10:45	10/30/25 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 150			10/25/25 10:45	10/30/25 19:04	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 10:45	10/30/25 19:04	1
Ethylbenzene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 19:04	1
Toluene	ND		0.049	mg/Kg		10/25/25 10:45	10/30/25 19:04	1
Xylenes, Total	ND		0.097	mg/Kg		10/25/25 10:45	10/30/25 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			10/25/25 10:45	10/30/25 19:04	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		10/27/25 07:05	10/27/25 15:10	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/27/25 07:05	10/27/25 15:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			10/27/25 07:05	10/27/25 15:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		50	mg/Kg		10/29/25 13:12	10/30/25 18:51	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-04 0

Lab Sample ID: 885-36171-7

Date Collected: 10/22/25 11:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		10/25/25 10:45	10/30/25 19:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 150			10/25/25 10:45	10/30/25 19:25	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 10:45	10/30/25 19:25	1
Ethylbenzene	ND		0.050	mg/Kg		10/25/25 10:45	10/30/25 19:25	1
Toluene	ND		0.050	mg/Kg		10/25/25 10:45	10/30/25 19:25	1
Xylenes, Total	ND		0.10	mg/Kg		10/25/25 10:45	10/30/25 19:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			10/25/25 10:45	10/30/25 19:25	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		10/27/25 07:05	10/27/25 15:33	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		10/27/25 07:05	10/27/25 15:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	71		62 - 134			10/27/25 07:05	10/27/25 15:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		51	mg/Kg		10/29/25 13:12	10/30/25 19:06	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-04 2

Lab Sample ID: 885-36171-8

Date Collected: 10/22/25 11:30

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		10/25/25 10:45	10/30/25 19:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 150			10/25/25 10:45	10/30/25 19:47	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 10:45	10/30/25 19:47	1
Ethylbenzene	ND		0.050	mg/Kg		10/25/25 10:45	10/30/25 19:47	1
Toluene	ND		0.050	mg/Kg		10/25/25 10:45	10/30/25 19:47	1
Xylenes, Total	ND		0.10	mg/Kg		10/25/25 10:45	10/30/25 19:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			10/25/25 10:45	10/30/25 19:47	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		10/27/25 07:05	10/27/25 15:45	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		10/27/25 07:05	10/27/25 15:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			10/27/25 07:05	10/27/25 15:45	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		49	mg/Kg		10/29/25 13:12	10/30/25 19:48	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-05 0

Lab Sample ID: 885-36171-9

Date Collected: 10/22/25 12:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		10/25/25 13:07	10/31/25 15:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		15 - 150			10/25/25 13:07	10/31/25 15:48	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 13:07	10/31/25 15:48	1
Ethylbenzene	ND		0.050	mg/Kg		10/25/25 13:07	10/31/25 15:48	1
Toluene	ND		0.050	mg/Kg		10/25/25 13:07	10/31/25 15:48	1
Xylenes, Total	ND		0.099	mg/Kg		10/25/25 13:07	10/31/25 15:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		15 - 150			10/25/25 13:07	10/31/25 15:48	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		10/27/25 11:01	10/27/25 23:12	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/27/25 11:01	10/27/25 23:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			10/27/25 11:01	10/27/25 23:12	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190	F1	50	mg/Kg		10/29/25 14:03	10/30/25 20:02	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-05 1

Lab Sample ID: 885-36171-10

Date Collected: 10/22/25 12:30

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		10/25/25 13:07	10/31/25 16:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		15 - 150			10/25/25 13:07	10/31/25 16:58	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 13:07	10/31/25 16:58	1
Ethylbenzene	ND		0.048	mg/Kg		10/25/25 13:07	10/31/25 16:58	1
Toluene	ND		0.048	mg/Kg		10/25/25 13:07	10/31/25 16:58	1
Xylenes, Total	ND		0.096	mg/Kg		10/25/25 13:07	10/31/25 16:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		15 - 150			10/25/25 13:07	10/31/25 16:58	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		10/27/25 11:01	10/27/25 23:23	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		10/27/25 11:01	10/27/25 23:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			10/27/25 11:01	10/27/25 23:23	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		51	mg/Kg		10/29/25 14:03	10/30/25 20:45	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-06 0

Lab Sample ID: 885-36171-11

Date Collected: 10/22/25 13:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		10/25/25 13:07	10/31/25 17:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		15 - 150			10/25/25 13:07	10/31/25 17:22	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 13:07	10/31/25 17:22	1
Ethylbenzene	ND		0.048	mg/Kg		10/25/25 13:07	10/31/25 17:22	1
Toluene	ND		0.048	mg/Kg		10/25/25 13:07	10/31/25 17:22	1
Xylenes, Total	ND		0.097	mg/Kg		10/25/25 13:07	10/31/25 17:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		15 - 150			10/25/25 13:07	10/31/25 17:22	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		10/27/25 11:01	10/27/25 23:35	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		10/27/25 11:01	10/27/25 23:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			10/27/25 11:01	10/27/25 23:35	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		51	mg/Kg		10/29/25 14:03	10/30/25 20:59	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-06 1

Lab Sample ID: 885-36171-12

Date Collected: 10/22/25 13:30

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		10/25/25 13:07	10/31/25 17:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		15 - 150			10/25/25 13:07	10/31/25 17:46	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 13:07	10/31/25 17:46	1
Ethylbenzene	ND		0.050	mg/Kg		10/25/25 13:07	10/31/25 17:46	1
Toluene	ND		0.050	mg/Kg		10/25/25 13:07	10/31/25 17:46	1
Xylenes, Total	ND		0.099	mg/Kg		10/25/25 13:07	10/31/25 17:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		15 - 150			10/25/25 13:07	10/31/25 17:46	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		10/27/25 11:01	10/27/25 23:47	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		10/27/25 11:01	10/27/25 23:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			10/27/25 11:01	10/27/25 23:47	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81		51	mg/Kg		10/29/25 14:03	10/30/25 21:13	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: SS25-01

Lab Sample ID: 885-36171-13

Date Collected: 10/21/25 12:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		10/25/25 13:07	10/31/25 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		15 - 150			10/25/25 13:07	10/31/25 18:09	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 13:07	10/31/25 18:09	1
Ethylbenzene	ND		0.049	mg/Kg		10/25/25 13:07	10/31/25 18:09	1
Toluene	ND		0.049	mg/Kg		10/25/25 13:07	10/31/25 18:09	1
Xylenes, Total	ND		0.098	mg/Kg		10/25/25 13:07	10/31/25 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		15 - 150			10/25/25 13:07	10/31/25 18:09	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	36		9.9	mg/Kg		10/27/25 11:01	10/27/25 23:58	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/27/25 11:01	10/27/25 23:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			10/27/25 11:01	10/27/25 23:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		51	mg/Kg		10/29/25 14:03	10/30/25 21:27	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: SS25-02

Lab Sample ID: 885-36171-14

Date Collected: 10/21/25 12:30

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		10/25/25 13:07	10/31/25 18:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		15 - 150			10/25/25 13:07	10/31/25 18:33	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 13:07	10/31/25 18:33	1
Ethylbenzene	ND		0.048	mg/Kg		10/25/25 13:07	10/31/25 18:33	1
Toluene	ND		0.048	mg/Kg		10/25/25 13:07	10/31/25 18:33	1
Xylenes, Total	ND		0.096	mg/Kg		10/25/25 13:07	10/31/25 18:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		15 - 150			10/25/25 13:07	10/31/25 18:33	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	31		9.6	mg/Kg		10/27/25 11:01	10/28/25 00:10	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		10/27/25 11:01	10/28/25 00:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			10/27/25 11:01	10/28/25 00:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		51	mg/Kg		10/29/25 14:03	10/30/25 21:41	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: SS25-03

Lab Sample ID: 885-36171-15

Date Collected: 10/21/25 13:00

Matrix: Solid

Date Received: 10/24/25 07:55

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		10/25/25 13:07	10/31/25 18:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		15 - 150			10/25/25 13:07	10/31/25 18:56	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/25/25 13:07	10/31/25 18:56	1
Ethylbenzene	ND		0.049	mg/Kg		10/25/25 13:07	10/31/25 18:56	1
Toluene	ND		0.049	mg/Kg		10/25/25 13:07	10/31/25 18:56	1
Xylenes, Total	ND		0.097	mg/Kg		10/25/25 13:07	10/31/25 18:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		15 - 150			10/25/25 13:07	10/31/25 18:56	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		10/27/25 11:01	10/28/25 00:21	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/27/25 11:01	10/28/25 00:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			10/27/25 11:01	10/28/25 00:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	340		50	mg/Kg		10/29/25 14:03	10/30/25 21:55	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-37228/1-A
Matrix: Solid
Analysis Batch: 37498

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37228

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		10/25/25 10:45	10/30/25 03:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 150			10/25/25 10:45	10/30/25 03:50	1

Lab Sample ID: LCS 885-37228/2-A
Matrix: Solid
Analysis Batch: 37498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics [C6 - C10]	25.0	22.3		mg/Kg		89	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	199	S1+	15 - 150					

Lab Sample ID: MB 885-37229/1-A
Matrix: Solid
Analysis Batch: 37629

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		10/25/25 13:07	10/31/25 14:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		15 - 150			10/25/25 13:07	10/31/25 14:13	1

Lab Sample ID: LCS 885-37229/2-A
Matrix: Solid
Analysis Batch: 37629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics [C6 - C10]	25.0	27.1		mg/Kg		108	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	231		15 - 150					

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-37228/1-A
Matrix: Solid
Analysis Batch: 37497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37228

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 10:45	10/30/25 03:50	1
Ethylbenzene	ND		0.050	mg/Kg		10/25/25 10:45	10/30/25 03:50	1
Toluene	ND		0.050	mg/Kg		10/25/25 10:45	10/30/25 03:50	1
Xylenes, Total	ND		0.10	mg/Kg		10/25/25 10:45	10/30/25 03:50	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-37228/1-A
Matrix: Solid
Analysis Batch: 37497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37228

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150	10/25/25 10:45	10/30/25 03:50	1

Lab Sample ID: LCS 885-37228/3-A
Matrix: Solid
Analysis Batch: 37497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	1.00	0.865		mg/Kg		87	70 - 130	
Ethylbenzene	1.00	0.856		mg/Kg		86	70 - 130	
m,p-Xylene	2.00	1.69		mg/Kg		84	70 - 130	
o-Xylene	1.00	0.836		mg/Kg		84	70 - 130	
Toluene	1.00	0.853		mg/Kg		85	70 - 130	
Xylenes, Total	3.00	2.52		mg/Kg		84	70 - 130	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		15 - 150

Lab Sample ID: MB 885-37229/1-A
Matrix: Solid
Analysis Batch: 37630

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37229

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/25/25 13:07	10/31/25 14:13	1
Ethylbenzene	ND		0.050	mg/Kg		10/25/25 13:07	10/31/25 14:13	1
Toluene	ND		0.050	mg/Kg		10/25/25 13:07	10/31/25 14:13	1
Xylenes, Total	ND		0.10	mg/Kg		10/25/25 13:07	10/31/25 14:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		15 - 150	10/25/25 13:07	10/31/25 14:13	1

Lab Sample ID: LCS 885-37229/3-A
Matrix: Solid
Analysis Batch: 37630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	1.00	0.962		mg/Kg		96	70 - 130	
Ethylbenzene	1.00	0.986		mg/Kg		99	70 - 130	
m,p-Xylene	2.00	1.95		mg/Kg		97	70 - 130	
o-Xylene	1.00	0.983		mg/Kg		98	70 - 130	
Toluene	1.00	0.976		mg/Kg		98	70 - 130	
Xylenes, Total	3.00	2.93		mg/Kg		98	70 - 130	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		15 - 150

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-36171-9 MS
Matrix: Solid
Analysis Batch: 37630

Client Sample ID: BH25-05 0
Prep Type: Total/NA
Prep Batch: 37229

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier						
Benzene	ND		0.982	0.927		mg/Kg		94		70 - 130	
Ethylbenzene	ND		0.982	0.961		mg/Kg		98		70 - 130	
m,p-Xylene	ND		1.96	1.92		mg/Kg		98		70 - 130	
o-Xylene	ND		0.982	0.968		mg/Kg		99		70 - 130	
Toluene	ND		0.982	0.960		mg/Kg		98		70 - 130	
Xylenes, Total	ND		2.95	2.89		mg/Kg		97		70 - 130	
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	118		15 - 150								

Lab Sample ID: 885-36171-9 MSD
Matrix: Solid
Analysis Batch: 37630

Client Sample ID: BH25-05 0
Prep Type: Total/NA
Prep Batch: 37229

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						RPD	
Benzene	ND		0.980	0.935		mg/Kg		95		70 - 130	1	20
Ethylbenzene	ND		0.980	0.973		mg/Kg		99		70 - 130	1	20
m,p-Xylene	ND		1.96	1.95		mg/Kg		100		70 - 130	2	20
o-Xylene	ND		0.980	0.961		mg/Kg		98		70 - 130	1	20
Toluene	ND		0.980	0.956		mg/Kg		98		70 - 130	0	20
Xylenes, Total	ND		2.94	2.91		mg/Kg		98		70 - 130	1	20
		MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	113		15 - 150									

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-37255/1-A
Matrix: Solid
Analysis Batch: 37261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37255

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		10/27/25 07:05	10/27/25 10:25	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/27/25 07:05	10/27/25 10:25	1
		MB	MB					
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
Di-n-octyl phthalate (Surr)	77		62 - 134	10/27/25 07:05	10/27/25 10:25	1		

Lab Sample ID: LCS 885-37255/2-A
Matrix: Solid
Analysis Batch: 37261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37255

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
Diesel Range Organics [C10-C28]	50.0	56.0		mg/Kg		112		51 - 148
		LCS	LCS					
Surrogate	%Recovery	Qualifier	Limits					
Di-n-octyl phthalate (Surr)	80		62 - 134					

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-37283/1-A
Matrix: Solid
Analysis Batch: 37274

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37283

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		10/27/25 11:01	10/27/25 22:37	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/27/25 11:01	10/27/25 22:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			10/27/25 11:01	10/27/25 22:37	1

Lab Sample ID: LCS 885-37283/2-A
Matrix: Solid
Analysis Batch: 37274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	41.9		mg/Kg		84	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	78		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-37466/1-A
Matrix: Solid
Analysis Batch: 37540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37466

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		10/29/25 13:12	10/30/25 11:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits					
Chloride	98		90 - 110					

Lab Sample ID: LCS 885-37466/2-A
Matrix: Solid
Analysis Batch: 37540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.2	49.1		mg/Kg		98	90 - 110
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Chloride	98		90 - 110				

Lab Sample ID: MB 885-37474/1-A
Matrix: Solid
Analysis Batch: 37540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 37474

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.1	mg/Kg		10/29/25 14:03	10/30/25 11:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits					
Chloride	98		90 - 110					

Lab Sample ID: LCS 885-37474/2-A
Matrix: Solid
Analysis Batch: 37540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 37474

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.7	48.8		mg/Kg		98	90 - 110
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Chloride	98		90 - 110				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-36171-9 MS
Matrix: Solid
Analysis Batch: 37540

Client Sample ID: BH25-05 0
Prep Type: Total/NA
Prep Batch: 37474

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	190	F1	50.5	248		mg/Kg		116	50 - 150

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

GC VOA

Prep Batch: 37228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-1	BH25-01 0	Total/NA	Solid	5030C	
885-36171-2	BH25-01 1	Total/NA	Solid	5030C	
885-36171-3	BH25-02 0	Total/NA	Solid	5030C	
885-36171-4	BH25-02 0.3	Total/NA	Solid	5030C	
885-36171-5	BH25-03 0	Total/NA	Solid	5030C	
885-36171-6	BH25-03 1	Total/NA	Solid	5030C	
885-36171-7	BH25-04 0	Total/NA	Solid	5030C	
885-36171-8	BH25-04 2	Total/NA	Solid	5030C	
MB 885-37228/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-37228/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-37228/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 37229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-9	BH25-05 0	Total/NA	Solid	5030C	
885-36171-10	BH25-05 1	Total/NA	Solid	5030C	
885-36171-11	BH25-06 0	Total/NA	Solid	5030C	
885-36171-12	BH25-06 1	Total/NA	Solid	5030C	
885-36171-13	SS25-01	Total/NA	Solid	5030C	
885-36171-14	SS25-02	Total/NA	Solid	5030C	
885-36171-15	SS25-03	Total/NA	Solid	5030C	
MB 885-37229/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-37229/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-37229/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-36171-9 MS	BH25-05 0	Total/NA	Solid	5030C	
885-36171-9 MSD	BH25-05 0	Total/NA	Solid	5030C	

Analysis Batch: 37497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-37228/1-A	Method Blank	Total/NA	Solid	8021B	37228
LCS 885-37228/3-A	Lab Control Sample	Total/NA	Solid	8021B	37228

Analysis Batch: 37498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-37228/1-A	Method Blank	Total/NA	Solid	8015M/D	37228
LCS 885-37228/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	37228

Analysis Batch: 37583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-1	BH25-01 0	Total/NA	Solid	8021B	37228
885-36171-2	BH25-01 1	Total/NA	Solid	8021B	37228
885-36171-3	BH25-02 0	Total/NA	Solid	8021B	37228
885-36171-4	BH25-02 0.3	Total/NA	Solid	8021B	37228
885-36171-5	BH25-03 0	Total/NA	Solid	8021B	37228
885-36171-6	BH25-03 1	Total/NA	Solid	8021B	37228
885-36171-7	BH25-04 0	Total/NA	Solid	8021B	37228
885-36171-8	BH25-04 2	Total/NA	Solid	8021B	37228

Analysis Batch: 37584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-1	BH25-01 0	Total/NA	Solid	8015M/D	37228

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

GC VOA (Continued)

Analysis Batch: 37584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-2	BH25-01 1	Total/NA	Solid	8015M/D	37228
885-36171-3	BH25-02 0	Total/NA	Solid	8015M/D	37228
885-36171-4	BH25-02 0.3	Total/NA	Solid	8015M/D	37228
885-36171-5	BH25-03 0	Total/NA	Solid	8015M/D	37228
885-36171-6	BH25-03 1	Total/NA	Solid	8015M/D	37228
885-36171-7	BH25-04 0	Total/NA	Solid	8015M/D	37228
885-36171-8	BH25-04 2	Total/NA	Solid	8015M/D	37228

Analysis Batch: 37629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-9	BH25-05 0	Total/NA	Solid	8015M/D	37229
885-36171-10	BH25-05 1	Total/NA	Solid	8015M/D	37229
885-36171-11	BH25-06 0	Total/NA	Solid	8015M/D	37229
885-36171-12	BH25-06 1	Total/NA	Solid	8015M/D	37229
885-36171-13	SS25-01	Total/NA	Solid	8015M/D	37229
885-36171-14	SS25-02	Total/NA	Solid	8015M/D	37229
885-36171-15	SS25-03	Total/NA	Solid	8015M/D	37229
MB 885-37229/1-A	Method Blank	Total/NA	Solid	8015M/D	37229
LCS 885-37229/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	37229

Analysis Batch: 37630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-9	BH25-05 0	Total/NA	Solid	8021B	37229
885-36171-10	BH25-05 1	Total/NA	Solid	8021B	37229
885-36171-11	BH25-06 0	Total/NA	Solid	8021B	37229
885-36171-12	BH25-06 1	Total/NA	Solid	8021B	37229
885-36171-13	SS25-01	Total/NA	Solid	8021B	37229
885-36171-14	SS25-02	Total/NA	Solid	8021B	37229
885-36171-15	SS25-03	Total/NA	Solid	8021B	37229
MB 885-37229/1-A	Method Blank	Total/NA	Solid	8021B	37229
LCS 885-37229/3-A	Lab Control Sample	Total/NA	Solid	8021B	37229
885-36171-9 MS	BH25-05 0	Total/NA	Solid	8021B	37229
885-36171-9 MSD	BH25-05 0	Total/NA	Solid	8021B	37229

GC Semi VOA

Prep Batch: 37255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-1	BH25-01 0	Total/NA	Solid	SHAKE	
885-36171-2	BH25-01 1	Total/NA	Solid	SHAKE	
885-36171-3	BH25-02 0	Total/NA	Solid	SHAKE	
885-36171-4	BH25-02 0.3	Total/NA	Solid	SHAKE	
885-36171-5	BH25-03 0	Total/NA	Solid	SHAKE	
885-36171-6	BH25-03 1	Total/NA	Solid	SHAKE	
885-36171-7	BH25-04 0	Total/NA	Solid	SHAKE	
885-36171-8	BH25-04 2	Total/NA	Solid	SHAKE	
MB 885-37255/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-37255/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

GC Semi VOA

Analysis Batch: 37261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-1	BH25-01 0	Total/NA	Solid	8015M/D	37255
885-36171-2	BH25-01 1	Total/NA	Solid	8015M/D	37255
885-36171-3	BH25-02 0	Total/NA	Solid	8015M/D	37255
885-36171-4	BH25-02 0.3	Total/NA	Solid	8015M/D	37255
885-36171-5	BH25-03 0	Total/NA	Solid	8015M/D	37255
885-36171-6	BH25-03 1	Total/NA	Solid	8015M/D	37255
885-36171-7	BH25-04 0	Total/NA	Solid	8015M/D	37255
885-36171-8	BH25-04 2	Total/NA	Solid	8015M/D	37255
MB 885-37255/1-A	Method Blank	Total/NA	Solid	8015M/D	37255
LCS 885-37255/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	37255

Analysis Batch: 37274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-9	BH25-05 0	Total/NA	Solid	8015M/D	37283
885-36171-10	BH25-05 1	Total/NA	Solid	8015M/D	37283
885-36171-11	BH25-06 0	Total/NA	Solid	8015M/D	37283
885-36171-12	BH25-06 1	Total/NA	Solid	8015M/D	37283
885-36171-13	SS25-01	Total/NA	Solid	8015M/D	37283
885-36171-14	SS25-02	Total/NA	Solid	8015M/D	37283
885-36171-15	SS25-03	Total/NA	Solid	8015M/D	37283
MB 885-37283/1-A	Method Blank	Total/NA	Solid	8015M/D	37283
LCS 885-37283/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	37283

Prep Batch: 37283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-9	BH25-05 0	Total/NA	Solid	SHAKE	
885-36171-10	BH25-05 1	Total/NA	Solid	SHAKE	
885-36171-11	BH25-06 0	Total/NA	Solid	SHAKE	
885-36171-12	BH25-06 1	Total/NA	Solid	SHAKE	
885-36171-13	SS25-01	Total/NA	Solid	SHAKE	
885-36171-14	SS25-02	Total/NA	Solid	SHAKE	
885-36171-15	SS25-03	Total/NA	Solid	SHAKE	
MB 885-37283/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-37283/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 37466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-1	BH25-01 0	Total/NA	Solid	300_Prep	
885-36171-2	BH25-01 1	Total/NA	Solid	300_Prep	
885-36171-3	BH25-02 0	Total/NA	Solid	300_Prep	
885-36171-4	BH25-02 0.3	Total/NA	Solid	300_Prep	
885-36171-5	BH25-03 0	Total/NA	Solid	300_Prep	
885-36171-6	BH25-03 1	Total/NA	Solid	300_Prep	
885-36171-7	BH25-04 0	Total/NA	Solid	300_Prep	
885-36171-8	BH25-04 2	Total/NA	Solid	300_Prep	
MB 885-37466/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-37466/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

HPLC/IC

Prep Batch: 37474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-9	BH25-05 0	Total/NA	Solid	300_Prep	
885-36171-10	BH25-05 1	Total/NA	Solid	300_Prep	
885-36171-11	BH25-06 0	Total/NA	Solid	300_Prep	
885-36171-12	BH25-06 1	Total/NA	Solid	300_Prep	
885-36171-13	SS25-01	Total/NA	Solid	300_Prep	
885-36171-14	SS25-02	Total/NA	Solid	300_Prep	
885-36171-15	SS25-03	Total/NA	Solid	300_Prep	
MB 885-37474/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-37474/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-36171-9 MS	BH25-05 0	Total/NA	Solid	300_Prep	

Analysis Batch: 37540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36171-1	BH25-01 0	Total/NA	Solid	300.0	37466
885-36171-2	BH25-01 1	Total/NA	Solid	300.0	37466
885-36171-3	BH25-02 0	Total/NA	Solid	300.0	37466
885-36171-4	BH25-02 0.3	Total/NA	Solid	300.0	37466
885-36171-5	BH25-03 0	Total/NA	Solid	300.0	37466
885-36171-6	BH25-03 1	Total/NA	Solid	300.0	37466
885-36171-7	BH25-04 0	Total/NA	Solid	300.0	37466
885-36171-8	BH25-04 2	Total/NA	Solid	300.0	37466
885-36171-9	BH25-05 0	Total/NA	Solid	300.0	37474
885-36171-10	BH25-05 1	Total/NA	Solid	300.0	37474
885-36171-11	BH25-06 0	Total/NA	Solid	300.0	37474
885-36171-12	BH25-06 1	Total/NA	Solid	300.0	37474
885-36171-13	SS25-01	Total/NA	Solid	300.0	37474
885-36171-14	SS25-02	Total/NA	Solid	300.0	37474
885-36171-15	SS25-03	Total/NA	Solid	300.0	37474
MB 885-37466/1-A	Method Blank	Total/NA	Solid	300.0	37466
MB 885-37474/1-A	Method Blank	Total/NA	Solid	300.0	37474
LCS 885-37466/2-A	Lab Control Sample	Total/NA	Solid	300.0	37466
LCS 885-37474/2-A	Lab Control Sample	Total/NA	Solid	300.0	37474
885-36171-9 MS	BH25-05 0	Total/NA	Solid	300.0	37474

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-01 0

Lab Sample ID: 885-36171-1

Date Collected: 10/21/25 10:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 16:54
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 16:54
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 14:10
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 17:41

Client Sample ID: BH25-01 1

Lab Sample ID: 885-36171-2

Date Collected: 10/21/25 10:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 17:15
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 17:15
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 14:22
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 17:55

Client Sample ID: BH25-02 0

Lab Sample ID: 885-36171-3

Date Collected: 10/21/25 11:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 17:37
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 17:37
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 14:34
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 18:09

Client Sample ID: BH25-02 0.3

Lab Sample ID: 885-36171-4

Date Collected: 10/21/25 11:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 17:58

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-02 0.3

Lab Sample ID: 885-36171-4

Date Collected: 10/21/25 11:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 17:58
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 14:46
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 18:23

Client Sample ID: BH25-03 0

Lab Sample ID: 885-36171-5

Date Collected: 10/22/25 10:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 18:20
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 18:20
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 14:58
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 18:37

Client Sample ID: BH25-03 1

Lab Sample ID: 885-36171-6

Date Collected: 10/22/25 10:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 19:04
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 19:04
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 15:10
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 18:51

Client Sample ID: BH25-04 0

Lab Sample ID: 885-36171-7

Date Collected: 10/22/25 11:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 19:25
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 19:25

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-04 0

Lab Sample ID: 885-36171-7

Date Collected: 10/22/25 11:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 15:33
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 19:06

Client Sample ID: BH25-04 2

Lab Sample ID: 885-36171-8

Date Collected: 10/22/25 11:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8015M/D		1	37584	AT	EET ALB	10/30/25 19:47
Total/NA	Prep	5030C			37228	VP	EET ALB	10/25/25 10:45
Total/NA	Analysis	8021B		1	37583	AT	EET ALB	10/30/25 19:47
Total/NA	Prep	SHAKE			37255	JM	EET ALB	10/27/25 07:05
Total/NA	Analysis	8015M/D		1	37261	JE	EET ALB	10/27/25 15:45
Total/NA	Prep	300_Prep			37466	JR	EET ALB	10/29/25 13:12
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 19:48

Client Sample ID: BH25-05 0

Lab Sample ID: 885-36171-9

Date Collected: 10/22/25 12:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8015M/D		1	37629	VP	EET ALB	10/31/25 15:48
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8021B		1	37630	VP	EET ALB	10/31/25 15:48
Total/NA	Prep	SHAKE			37283	MB	EET ALB	10/27/25 11:01
Total/NA	Analysis	8015M/D		1	37274	JE	EET ALB	10/27/25 23:12
Total/NA	Prep	300_Prep			37474	JR	EET ALB	10/29/25 14:03
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 20:02

Client Sample ID: BH25-05 1

Lab Sample ID: 885-36171-10

Date Collected: 10/22/25 12:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8015M/D		1	37629	VP	EET ALB	10/31/25 16:58
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8021B		1	37630	VP	EET ALB	10/31/25 16:58
Total/NA	Prep	SHAKE			37283	MB	EET ALB	10/27/25 11:01
Total/NA	Analysis	8015M/D		1	37274	JE	EET ALB	10/27/25 23:23

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: BH25-05 1

Lab Sample ID: 885-36171-10

Date Collected: 10/22/25 12:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			37474	JR	EET ALB	10/29/25 14:03
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 20:45

Client Sample ID: BH25-06 0

Lab Sample ID: 885-36171-11

Date Collected: 10/22/25 13:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8015M/D		1	37629	VP	EET ALB	10/31/25 17:22
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8021B		1	37630	VP	EET ALB	10/31/25 17:22
Total/NA	Prep	SHAKE			37283	MB	EET ALB	10/27/25 11:01
Total/NA	Analysis	8015M/D		1	37274	JE	EET ALB	10/27/25 23:35
Total/NA	Prep	300_Prep			37474	JR	EET ALB	10/29/25 14:03
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 20:59

Client Sample ID: BH25-06 1

Lab Sample ID: 885-36171-12

Date Collected: 10/22/25 13:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8015M/D		1	37629	VP	EET ALB	10/31/25 17:46
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8021B		1	37630	VP	EET ALB	10/31/25 17:46
Total/NA	Prep	SHAKE			37283	MB	EET ALB	10/27/25 11:01
Total/NA	Analysis	8015M/D		1	37274	JE	EET ALB	10/27/25 23:47
Total/NA	Prep	300_Prep			37474	JR	EET ALB	10/29/25 14:03
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 21:13

Client Sample ID: SS25-01

Lab Sample ID: 885-36171-13

Date Collected: 10/21/25 12:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8015M/D		1	37629	VP	EET ALB	10/31/25 18:09
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8021B		1	37630	VP	EET ALB	10/31/25 18:09
Total/NA	Prep	SHAKE			37283	MB	EET ALB	10/27/25 11:01
Total/NA	Analysis	8015M/D		1	37274	JE	EET ALB	10/27/25 23:58
Total/NA	Prep	300_Prep			37474	JR	EET ALB	10/29/25 14:03
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 21:27

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Client Sample ID: SS25-02

Lab Sample ID: 885-36171-14

Date Collected: 10/21/25 12:30

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8015M/D		1	37629	VP	EET ALB	10/31/25 18:33
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8021B		1	37630	VP	EET ALB	10/31/25 18:33
Total/NA	Prep	SHAKE			37283	MB	EET ALB	10/27/25 11:01
Total/NA	Analysis	8015M/D		1	37274	JE	EET ALB	10/28/25 00:10
Total/NA	Prep	300_Prep			37474	JR	EET ALB	10/29/25 14:03
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 21:41

Client Sample ID: SS25-03

Lab Sample ID: 885-36171-15

Date Collected: 10/21/25 13:00

Matrix: Solid

Date Received: 10/24/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8015M/D		1	37629	VP	EET ALB	10/31/25 18:56
Total/NA	Prep	5030C			37229	VP	EET ALB	10/25/25 13:07
Total/NA	Analysis	8021B		1	37630	VP	EET ALB	10/31/25 18:56
Total/NA	Prep	SHAKE			37283	MB	EET ALB	10/27/25 11:01
Total/NA	Analysis	8015M/D		1	37274	JE	EET ALB	10/28/25 00:21
Total/NA	Prep	300_Prep			37474	JR	EET ALB	10/29/25 14:03
Total/NA	Analysis	300.0		10	37540	MA	EET ALB	10/30/25 21:55

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36171-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

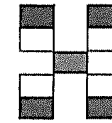
Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-27-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Chain-of-Custody Record

Client: MACK ENERGY VERTEX
 (BILL TO MACK ENERGY)
 Mailing Address: 3101 BOYD DR
CARLSBAD, NM, 88220
 Phone #:
 email or Fax#:
 QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush 5 Day
 Project Name: RED DEER CTB
 Project #: 25A-05531
 Project Manager: SALLY CARTTAR
SCARTTAR@VERTEX.CA
 Sampler: KATRINA TAYLOR
 On Ice: Yes No Joe
 # of Coolers: 1
 Cooler Temp (Including CF): 4.8 + 0.2 = 5.0 (°C)



HALL ENVIRONMENTAL ANALYSIS LABOR

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109 885-36171 COC
 Tel. 505-345-3975 Fax 505-345-4107



Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MIRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	ChF, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/21	10:00	Soil	BH25-01 0	4oz	ICE		X	X					X			
	10:30		BH25-01 1													
	11:00		BH25-02 0													
	11:30		BH25-02 0.3													
10/22	10:00		BH25-03 0													
	10:30		BH25-03 2													
	11:00		BH25-04 0													
	11:30		BH25-04 2													
	12:00		BH25-05 0													
	12:30		BH25-05 1													
	13:00		BH25-06 0													
	13:30		BH25-06 1													

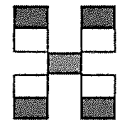
Date	Time	Relinquished by	Received by	Via	Date	Time	Remarks: <u>BILL TO MACK ENERGY</u> <u>ATTN: MATT BUCKLES@MEC.COM</u> <u>CC: KATRINA.TAYLOR@VERTEX.CA & SALLYCARTTAR@</u> <u>SCARTTAR@VERTEX.CA</u> <u>NO: FAPP2211037291</u>
10/23	945	<u>[Signature]</u>	<u>[Signature]</u>		10/23/25	945	
Date	Time	Relinquished by	Received by	Via	Date	Time	
10/23/25	1900	<u>[Signature]</u>	<u>[Signature]</u>	<u>Courier</u>	10/24/25	7:55	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

Chain-of-Custody Record

Turn-Around Time:
 Standard Rush 5/20/25
 Project Name: RED DEER CTB
 Project #: 25A-05531
 Project Manager: SALLY CARTAR
SCARTTAR@VERTX.CA
 Sampler: KATRINA TAYLOR
 On Ice: Yes No Joe
 # of Coolers: 1
 Cooler Temp (including CF): 4.8 + 0.2 = 5.0 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
10/21	12:00	Soil	SS25-01	402	ICB	
	12:30	↓	SS25-02	↓	↓	
	13:00	↓	SS25-03	↓		



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	☉ F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
X	↓					↓													

Received by [Signature] Via Date 10/23/25 Time 945
 Received by [Signature] Via Carrier Date 10/24/25 Time 7:55

Remarks: BILL TO MACK ENERGY
ATTN: MATT BUCKLES@MEC.COM
CC: KATRINA.TAYLOR@VERTX.CA & SCARTTAR@VERTX.CA
WO: FAPP221103791

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-36171-1

Login Number: 36171

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	True	





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
 Vertex
 3101 Boyd Dr
 Carlsbad, New Mexico 88220

Generated 11/5/2025 1:40:12 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-36601-1

Eurofins Albuquerque
 4901 Hawkins NE
 Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
11/5/2025 1:40:12 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-36601-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	20
QC Association Summary	25
Lab Chronicle	28
Certification Summary	32
Chain of Custody	33
Receipt Checklists	37

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-36601-1

Job ID: 885-36601-1

Eurofins Albuquerque

Job Narrative 885-36601-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 10/31/2025 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-122864 and analytical batch 880-122796 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH25-07 0' (885-36601-1), BH25-07 4' (885-36601-2), BH25-08 0' (885-36601-3), BH25-08 4' (885-36601-4), BH25-09 4' (885-36601-6), BH25-10 0' (885-36601-7), BH25-10 2' (885-36601-8), BH25-12 2' (885-36601-10), BH25-13 1' (885-36601-12), BH25-14 0' (885-36601-13) and BH25-14 2' (885-36601-14). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-122643 and analytical batch 880-122884 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-07 0'

Lab Sample ID: 885-36601-1

Date Collected: 10/29/25 10:00

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:30	1
Toluene	ND	F1	0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:30	1
Ethylbenzene	ND	F1	0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:30	1
m-Xylene & p-Xylene	ND	F1	0.0040	mg/Kg		11/04/25 12:47	11/04/25 22:30	1
o-Xylene	ND	F1	0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:30	1
Xylenes, Total	ND	F1	0.0040	mg/Kg		11/04/25 12:47	11/04/25 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	11/04/25 12:47	11/04/25 22:30	1
1,4-Difluorobenzene (Surr)	93		70 - 130	11/04/25 12:47	11/04/25 22:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 17:56	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130	11/04/25 11:58	11/04/25 17:56	1
o-Terphenyl	79		70 - 130	11/04/25 11:58	11/04/25 17:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130	F1	9.9	mg/Kg			11/04/25 23:54	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-07 4'

Lab Sample ID: 885-36601-2

Date Collected: 10/29/25 10:30

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:51	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:51	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:51	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 22:51	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:51	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 22:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	11/04/25 12:47	11/04/25 22:51	1
1,4-Difluorobenzene (Surr)	93		70 - 130	11/04/25 12:47	11/04/25 22:51	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 18:38	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130	11/04/25 11:58	11/04/25 18:38	1
o-Terphenyl	84		70 - 130	11/04/25 11:58	11/04/25 18:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		10	mg/Kg			11/05/25 00:12	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-08 0'

Lab Sample ID: 885-36601-3

Date Collected: 10/29/25 11:00

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:11	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:11	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:11	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 23:11	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:11	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	11/04/25 12:47	11/04/25 23:11	1
1,4-Difluorobenzene (Surr)	95		70 - 130	11/04/25 12:47	11/04/25 23:11	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 18:53	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130	11/04/25 11:58	11/04/25 18:53	1
o-Terphenyl	81		70 - 130	11/04/25 11:58	11/04/25 18:53	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91		10	mg/Kg			11/05/25 00:18	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-08 4'

Lab Sample ID: 885-36601-4

Date Collected: 10/29/25 11:30

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:32	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:32	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:32	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 23:32	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:32	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 23:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	11/04/25 12:47	11/04/25 23:32	1
1,4-Difluorobenzene (Surr)	94		70 - 130	11/04/25 12:47	11/04/25 23:32	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:07	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130	11/04/25 11:58	11/04/25 19:07	1
o-Terphenyl	83		70 - 130	11/04/25 11:58	11/04/25 19:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		10	mg/Kg			11/05/25 00:24	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-09 0'

Lab Sample ID: 885-36601-5

Date Collected: 10/29/25 12:00

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:53	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:53	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:53	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 23:53	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 23:53	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	11/04/25 12:47	11/04/25 23:53	1
1,4-Difluorobenzene (Surr)	92		70 - 130	11/04/25 12:47	11/04/25 23:53	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:22	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 130	11/04/25 11:58	11/04/25 19:22	1
o-Terphenyl	85		70 - 130	11/04/25 11:58	11/04/25 19:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		10	mg/Kg			11/05/25 00:29	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-09 4'

Lab Sample ID: 885-36601-6

Date Collected: 10/29/25 12:30

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:13	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:13	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:13	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 00:13	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:13	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	11/04/25 12:47	11/05/25 00:13	1
1,4-Difluorobenzene (Surr)	96		70 - 130	11/04/25 12:47	11/05/25 00:13	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:36	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130	11/04/25 11:58	11/04/25 19:36	1
o-Terphenyl	81		70 - 130	11/04/25 11:58	11/04/25 19:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		10	mg/Kg			11/05/25 00:47	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-10 0'

Lab Sample ID: 885-36601-7

Date Collected: 10/28/25 10:00

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:33	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:33	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:33	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 00:33	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:33	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	11/04/25 12:47	11/05/25 00:33	1
1,4-Difluorobenzene (Surr)	96		70 - 130	11/04/25 12:47	11/05/25 00:33	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:52	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130	11/04/25 11:58	11/04/25 19:52	1
o-Terphenyl	77		70 - 130	11/04/25 11:58	11/04/25 19:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99		10	mg/Kg			11/05/25 00:53	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-10 2'

Lab Sample ID: 885-36601-8

Date Collected: 10/28/25 10:30

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:54	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:54	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:54	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 00:54	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 00:54	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 00:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	11/04/25 12:47	11/05/25 00:54	1
1,4-Difluorobenzene (Surr)	98		70 - 130	11/04/25 12:47	11/05/25 00:54	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 20:06	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 20:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130	11/04/25 11:58	11/04/25 20:06	1
o-Terphenyl	82		70 - 130	11/04/25 11:58	11/04/25 20:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		10	mg/Kg			11/05/25 00:59	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-12 3'

Lab Sample ID: 885-36601-9

Date Collected: 10/28/25 11:00

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:14	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:14	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:14	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 01:14	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:14	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 01:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	11/04/25 12:47	11/05/25 01:14	1
1,4-Difluorobenzene (Surr)	93		70 - 130	11/04/25 12:47	11/05/25 01:14	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 20:21	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130	11/04/25 11:58	11/04/25 20:21	1
o-Terphenyl	90		70 - 130	11/04/25 11:58	11/04/25 20:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		10	mg/Kg			11/05/25 01:05	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-12 2'

Lab Sample ID: 885-36601-10

Date Collected: 10/28/25 11:30

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:35	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:35	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:35	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 01:35	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 01:35	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 01:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	11/04/25 12:47	11/05/25 01:35	1
1,4-Difluorobenzene (Surr)	92		70 - 130	11/04/25 12:47	11/05/25 01:35	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 20:35	1
Diesel Range Organics (Over C10-C28)	260		50	mg/Kg		11/04/25 11:58	11/04/25 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130	11/04/25 11:58	11/04/25 20:35	1
o-Terphenyl	91		70 - 130	11/04/25 11:58	11/04/25 20:35	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		10	mg/Kg			11/05/25 01:10	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-13 0'

Lab Sample ID: 885-36601-11

Date Collected: 10/28/25 12:00

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:08	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:08	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:08	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 03:08	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:08	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 03:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	11/04/25 12:47	11/05/25 03:08	1
1,4-Difluorobenzene (Surr)	95		70 - 130	11/04/25 12:47	11/05/25 03:08	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 21:04	1
Diesel Range Organics (Over C10-C28)	400		50	mg/Kg		11/04/25 11:58	11/04/25 21:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130	11/04/25 11:58	11/04/25 21:04	1
o-Terphenyl	99		70 - 130	11/04/25 11:58	11/04/25 21:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		9.9	mg/Kg			11/05/25 01:16	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-13 1'

Lab Sample ID: 885-36601-12

Date Collected: 10/28/25 12:30

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:28	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:28	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:28	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 03:28	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:28	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	11/04/25 12:47	11/05/25 03:28	1
1,4-Difluorobenzene (Surr)	94		70 - 130	11/04/25 12:47	11/05/25 03:28	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 21:20	1
Diesel Range Organics (Over C10-C28)	96		50	mg/Kg		11/04/25 11:58	11/04/25 21:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130	11/04/25 11:58	11/04/25 21:20	1
o-Terphenyl	84		70 - 130	11/04/25 11:58	11/04/25 21:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97		10	mg/Kg			11/05/25 01:34	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-14 0'

Lab Sample ID: 885-36601-13

Date Collected: 10/29/25 16:00

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:49	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:49	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:49	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 03:49	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 03:49	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 03:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	11/04/25 12:47	11/05/25 03:49	1
1,4-Difluorobenzene (Surr)	93		70 - 130	11/04/25 12:47	11/05/25 03:49	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 21:34	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130	11/04/25 11:58	11/04/25 21:34	1
o-Terphenyl	82		70 - 130	11/04/25 11:58	11/04/25 21:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		10	mg/Kg			11/05/25 01:40	1

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-14 2'

Lab Sample ID: 885-36601-14

Date Collected: 10/29/25 16:30

Matrix: Solid

Date Received: 10/31/25 07:55

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 04:09	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 04:09	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 04:09	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 04:09	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/05/25 04:09	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/05/25 04:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	11/04/25 12:47	11/05/25 04:09	1
1,4-Difluorobenzene (Surr)	98		70 - 130	11/04/25 12:47	11/05/25 04:09	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:58	11/04/25 21:49	1
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:58	11/04/25 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130	11/04/25 11:58	11/04/25 21:49	1
o-Terphenyl	81		70 - 130	11/04/25 11:58	11/04/25 21:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	540		10	mg/Kg			11/05/25 01:57	1

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-122804/5-A
Matrix: Solid
Analysis Batch: 122796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122804

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 08:37	11/04/25 11:14	1
Toluene	ND		0.0020	mg/Kg		11/04/25 08:37	11/04/25 11:14	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 08:37	11/04/25 11:14	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 08:37	11/04/25 11:14	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 08:37	11/04/25 11:14	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 08:37	11/04/25 11:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	11/04/25 08:37	11/04/25 11:14	1
1,4-Difluorobenzene (Surr)	94		70 - 130	11/04/25 08:37	11/04/25 11:14	1

Lab Sample ID: MB 880-122864/5-A
Matrix: Solid
Analysis Batch: 122796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122864

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:09	1
Toluene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:09	1
Ethylbenzene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:09	1
m-Xylene & p-Xylene	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 22:09	1
o-Xylene	ND		0.0020	mg/Kg		11/04/25 12:47	11/04/25 22:09	1
Xylenes, Total	ND		0.0040	mg/Kg		11/04/25 12:47	11/04/25 22:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	11/04/25 12:47	11/04/25 22:09	1
1,4-Difluorobenzene (Surr)	91		70 - 130	11/04/25 12:47	11/04/25 22:09	1

Lab Sample ID: LCS 880-122864/1-A
Matrix: Solid
Analysis Batch: 122796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122864

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.0945		mg/Kg		95	70 - 130
Toluene	0.100	0.0862		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.0894		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.180		mg/Kg		90	70 - 130
o-Xylene	0.100	0.0888		mg/Kg		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-122864/2-A
Matrix: Solid
Analysis Batch: 122796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 122864

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.0984		mg/Kg		98	70 - 130	4	35

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-122864/2-A
Matrix: Solid
Analysis Batch: 122796

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 122864

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Toluene	0.100	0.0878		mg/Kg		88	70 - 130	2	35	
Ethylbenzene	0.100	0.0916		mg/Kg		92	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.184		mg/Kg		92	70 - 130	2	35	
o-Xylene	0.100	0.0905		mg/Kg		91	70 - 130	2	35	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	101		70 - 130							
1,4-Difluorobenzene (Surr)	103		70 - 130							

Lab Sample ID: 885-36601-1 MS
Matrix: Solid
Analysis Batch: 122796

Client Sample ID: BH25-07 0'
Prep Type: Total/NA
Prep Batch: 122864

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.100	0.0781		mg/Kg		78	70 - 130		
Toluene	ND	F1	0.100	0.0682	F1	mg/Kg		68	70 - 130		
Ethylbenzene	ND	F1	0.100	0.0706		mg/Kg		71	70 - 130		
m-Xylene & p-Xylene	ND	F1	0.200	0.141		mg/Kg		71	70 - 130		
o-Xylene	ND	F1	0.100	0.0665	F1	mg/Kg		66	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	102		70 - 130								
1,4-Difluorobenzene (Surr)	100		70 - 130								

Lab Sample ID: 885-36601-1 MSD
Matrix: Solid
Analysis Batch: 122796

Client Sample ID: BH25-07 0'
Prep Type: Total/NA
Prep Batch: 122864

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.100	0.0741		mg/Kg		74	70 - 130	5	35
Toluene	ND	F1	0.100	0.0638	F1	mg/Kg		64	70 - 130	7	35
Ethylbenzene	ND	F1	0.100	0.0669	F1	mg/Kg		67	70 - 130	5	35
m-Xylene & p-Xylene	ND	F1	0.200	0.132	F1	mg/Kg		66	70 - 130	7	35
o-Xylene	ND	F1	0.100	0.0635	F1	mg/Kg		64	70 - 130	5	35
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	101		70 - 130								
1,4-Difluorobenzene (Surr)	96		70 - 130								

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-122860/1-A
Matrix: Solid
Analysis Batch: 122813

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122860

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Gasoline Range Organics (GRO)-C6-C10	ND		50	mg/Kg		11/04/25 11:57	11/04/25 17:12		1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-122860/1-A
Matrix: Solid
Analysis Batch: 122813

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 122860

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	ND		50	mg/Kg		11/04/25 11:57	11/04/25 17:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	11/04/25 11:57	11/04/25 17:12	1
o-Terphenyl	101		70 - 130	11/04/25 11:57	11/04/25 17:12	1

Lab Sample ID: LCS 880-122860/2-A
Matrix: Solid
Analysis Batch: 122813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 122860

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	907		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	962		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: LCSD 880-122860/3-A
Matrix: Solid
Analysis Batch: 122813

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 122860

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	886		mg/Kg		89	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	949		mg/Kg		95	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 885-36601-1 MS
Matrix: Solid
Analysis Batch: 122813

Client Sample ID: BH25-07 0'
Prep Type: Total/NA
Prep Batch: 122860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		996	710		mg/Kg		71	70 - 130
Diesel Range Organics (Over C10-C28)	ND		996	815		mg/Kg		82	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	87		70 - 130

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 885-36601-1 MSD
Matrix: Solid
Analysis Batch: 122813

Client Sample ID: BH25-07 0'
Prep Type: Total/NA
Prep Batch: 122860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	ND		996	715		mg/Kg		72	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	ND		996	826		mg/Kg		83	70 - 130	1	20
Surrogate	%Recovery	MSD Qualifier							Limits		
1-Chlorooctane	79								70 - 130		
o-Terphenyl	88								70 - 130		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-122643/1-A
Matrix: Solid
Analysis Batch: 122884

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		10	mg/Kg			11/04/25 23:37	1

Lab Sample ID: LCS 880-122643/2-A
Matrix: Solid
Analysis Batch: 122884

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-122643/3-A
Matrix: Solid
Analysis Batch: 122884

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	242		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 885-36601-1 MS
Matrix: Solid
Analysis Batch: 122884

Client Sample ID: BH25-07 0'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	130	F1	248	330	F1	mg/Kg		82	90 - 110

Lab Sample ID: 885-36601-1 MSD
Matrix: Solid
Analysis Batch: 122884

Client Sample ID: BH25-07 0'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	130	F1	248	326	F1	mg/Kg		80	90 - 110	1	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-36601-11 MS
 Matrix: Solid
 Analysis Batch: 122884

Client Sample ID: BH25-13 0'
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	120		249	357		mg/Kg		95	90 - 110

Lab Sample ID: 885-36601-11 MSD
 Matrix: Solid
 Analysis Batch: 122884

Client Sample ID: BH25-13 0'
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	120		249	357		mg/Kg		95	90 - 110	0	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

GC VOA

Analysis Batch: 122796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36601-1	BH25-07 0'	Total/NA	Solid	8021B	122864
885-36601-2	BH25-07 4'	Total/NA	Solid	8021B	122864
885-36601-3	BH25-08 0'	Total/NA	Solid	8021B	122864
885-36601-4	BH25-08 4'	Total/NA	Solid	8021B	122864
885-36601-5	BH25-09 0'	Total/NA	Solid	8021B	122864
885-36601-6	BH25-09 4'	Total/NA	Solid	8021B	122864
885-36601-7	BH25-10 0'	Total/NA	Solid	8021B	122864
885-36601-8	BH25-10 2'	Total/NA	Solid	8021B	122864
885-36601-9	BH25-12 3'	Total/NA	Solid	8021B	122864
885-36601-10	BH25-12 2'	Total/NA	Solid	8021B	122864
885-36601-11	BH25-13 0'	Total/NA	Solid	8021B	122864
885-36601-12	BH25-13 1'	Total/NA	Solid	8021B	122864
885-36601-13	BH25-14 0'	Total/NA	Solid	8021B	122864
885-36601-14	BH25-14 2'	Total/NA	Solid	8021B	122864
MB 880-122804/5-A	Method Blank	Total/NA	Solid	8021B	122804
MB 880-122864/5-A	Method Blank	Total/NA	Solid	8021B	122864
LCS 880-122864/1-A	Lab Control Sample	Total/NA	Solid	8021B	122864
LCSD 880-122864/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	122864
885-36601-1 MS	BH25-07 0'	Total/NA	Solid	8021B	122864
885-36601-1 MSD	BH25-07 0'	Total/NA	Solid	8021B	122864

Prep Batch: 122804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-122804/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 122864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36601-1	BH25-07 0'	Total/NA	Solid	5030B	
885-36601-2	BH25-07 4'	Total/NA	Solid	5030B	
885-36601-3	BH25-08 0'	Total/NA	Solid	5030B	
885-36601-4	BH25-08 4'	Total/NA	Solid	5030B	
885-36601-5	BH25-09 0'	Total/NA	Solid	5030B	
885-36601-6	BH25-09 4'	Total/NA	Solid	5030B	
885-36601-7	BH25-10 0'	Total/NA	Solid	5030B	
885-36601-8	BH25-10 2'	Total/NA	Solid	5030B	
885-36601-9	BH25-12 3'	Total/NA	Solid	5030B	
885-36601-10	BH25-12 2'	Total/NA	Solid	5030B	
885-36601-11	BH25-13 0'	Total/NA	Solid	5030B	
885-36601-12	BH25-13 1'	Total/NA	Solid	5030B	
885-36601-13	BH25-14 0'	Total/NA	Solid	5030B	
885-36601-14	BH25-14 2'	Total/NA	Solid	5030B	
MB 880-122864/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-122864/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-122864/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
885-36601-1 MS	BH25-07 0'	Total/NA	Solid	5030B	
885-36601-1 MSD	BH25-07 0'	Total/NA	Solid	5030B	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

GC Semi VOA

Analysis Batch: 122813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36601-1	BH25-07 0'	Total/NA	Solid	8015B NM	122860
885-36601-2	BH25-07 4'	Total/NA	Solid	8015B NM	122860
885-36601-3	BH25-08 0'	Total/NA	Solid	8015B NM	122860
885-36601-4	BH25-08 4'	Total/NA	Solid	8015B NM	122860
885-36601-5	BH25-09 0'	Total/NA	Solid	8015B NM	122860
885-36601-6	BH25-09 4'	Total/NA	Solid	8015B NM	122860
885-36601-7	BH25-10 0'	Total/NA	Solid	8015B NM	122860
885-36601-8	BH25-10 2'	Total/NA	Solid	8015B NM	122860
885-36601-9	BH25-12 3'	Total/NA	Solid	8015B NM	122860
885-36601-10	BH25-12 2'	Total/NA	Solid	8015B NM	122860
885-36601-11	BH25-13 0'	Total/NA	Solid	8015B NM	122860
885-36601-12	BH25-13 1'	Total/NA	Solid	8015B NM	122860
885-36601-13	BH25-14 0'	Total/NA	Solid	8015B NM	122860
885-36601-14	BH25-14 2'	Total/NA	Solid	8015B NM	122860
MB 880-122860/1-A	Method Blank	Total/NA	Solid	8015B NM	122860
LCS 880-122860/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	122860
LCSD 880-122860/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	122860
885-36601-1 MS	BH25-07 0'	Total/NA	Solid	8015B NM	122860
885-36601-1 MSD	BH25-07 0'	Total/NA	Solid	8015B NM	122860

Prep Batch: 122860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36601-1	BH25-07 0'	Total/NA	Solid	8015NM Prep	
885-36601-2	BH25-07 4'	Total/NA	Solid	8015NM Prep	
885-36601-3	BH25-08 0'	Total/NA	Solid	8015NM Prep	
885-36601-4	BH25-08 4'	Total/NA	Solid	8015NM Prep	
885-36601-5	BH25-09 0'	Total/NA	Solid	8015NM Prep	
885-36601-6	BH25-09 4'	Total/NA	Solid	8015NM Prep	
885-36601-7	BH25-10 0'	Total/NA	Solid	8015NM Prep	
885-36601-8	BH25-10 2'	Total/NA	Solid	8015NM Prep	
885-36601-9	BH25-12 3'	Total/NA	Solid	8015NM Prep	
885-36601-10	BH25-12 2'	Total/NA	Solid	8015NM Prep	
885-36601-11	BH25-13 0'	Total/NA	Solid	8015NM Prep	
885-36601-12	BH25-13 1'	Total/NA	Solid	8015NM Prep	
885-36601-13	BH25-14 0'	Total/NA	Solid	8015NM Prep	
885-36601-14	BH25-14 2'	Total/NA	Solid	8015NM Prep	
MB 880-122860/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-122860/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-122860/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
885-36601-1 MS	BH25-07 0'	Total/NA	Solid	8015NM Prep	
885-36601-1 MSD	BH25-07 0'	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 122643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36601-1	BH25-07 0'	Soluble	Solid	DI Leach	
885-36601-2	BH25-07 4'	Soluble	Solid	DI Leach	
885-36601-3	BH25-08 0'	Soluble	Solid	DI Leach	
885-36601-4	BH25-08 4'	Soluble	Solid	DI Leach	
885-36601-5	BH25-09 0'	Soluble	Solid	DI Leach	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

HPLC/IC (Continued)

Leach Batch: 122643 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36601-6	BH25-09 4'	Soluble	Solid	DI Leach	
885-36601-7	BH25-10 0'	Soluble	Solid	DI Leach	
885-36601-8	BH25-10 2'	Soluble	Solid	DI Leach	
885-36601-9	BH25-12 3'	Soluble	Solid	DI Leach	
885-36601-10	BH25-12 2'	Soluble	Solid	DI Leach	
885-36601-11	BH25-13 0'	Soluble	Solid	DI Leach	
885-36601-12	BH25-13 1'	Soluble	Solid	DI Leach	
885-36601-13	BH25-14 0'	Soluble	Solid	DI Leach	
885-36601-14	BH25-14 2'	Soluble	Solid	DI Leach	
MB 880-122643/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-122643/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-122643/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-36601-1 MS	BH25-07 0'	Soluble	Solid	DI Leach	
885-36601-1 MSD	BH25-07 0'	Soluble	Solid	DI Leach	
885-36601-11 MS	BH25-13 0'	Soluble	Solid	DI Leach	
885-36601-11 MSD	BH25-13 0'	Soluble	Solid	DI Leach	

Analysis Batch: 122884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-36601-1	BH25-07 0'	Soluble	Solid	300.0	122643
885-36601-2	BH25-07 4'	Soluble	Solid	300.0	122643
885-36601-3	BH25-08 0'	Soluble	Solid	300.0	122643
885-36601-4	BH25-08 4'	Soluble	Solid	300.0	122643
885-36601-5	BH25-09 0'	Soluble	Solid	300.0	122643
885-36601-6	BH25-09 4'	Soluble	Solid	300.0	122643
885-36601-7	BH25-10 0'	Soluble	Solid	300.0	122643
885-36601-8	BH25-10 2'	Soluble	Solid	300.0	122643
885-36601-9	BH25-12 3'	Soluble	Solid	300.0	122643
885-36601-10	BH25-12 2'	Soluble	Solid	300.0	122643
885-36601-11	BH25-13 0'	Soluble	Solid	300.0	122643
885-36601-12	BH25-13 1'	Soluble	Solid	300.0	122643
885-36601-13	BH25-14 0'	Soluble	Solid	300.0	122643
885-36601-14	BH25-14 2'	Soluble	Solid	300.0	122643
MB 880-122643/1-A	Method Blank	Soluble	Solid	300.0	122643
LCS 880-122643/2-A	Lab Control Sample	Soluble	Solid	300.0	122643
LCSD 880-122643/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	122643
885-36601-1 MS	BH25-07 0'	Soluble	Solid	300.0	122643
885-36601-1 MSD	BH25-07 0'	Soluble	Solid	300.0	122643
885-36601-11 MS	BH25-13 0'	Soluble	Solid	300.0	122643
885-36601-11 MSD	BH25-13 0'	Soluble	Solid	300.0	122643

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-07 0'

Lab Sample ID: 885-36601-1

Date Collected: 10/29/25 10:00

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/04/25 22:30
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 17:56
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/04/25 23:54

Client Sample ID: BH25-07 4'

Lab Sample ID: 885-36601-2

Date Collected: 10/29/25 10:30

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/04/25 22:51
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 18:38
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 00:12

Client Sample ID: BH25-08 0'

Lab Sample ID: 885-36601-3

Date Collected: 10/29/25 11:00

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/04/25 23:11
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 18:53
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 00:18

Client Sample ID: BH25-08 4'

Lab Sample ID: 885-36601-4

Date Collected: 10/29/25 11:30

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/04/25 23:32
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 19:07
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 00:24

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-09 0'

Lab Sample ID: 885-36601-5

Date Collected: 10/29/25 12:00

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/04/25 23:53
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 19:22
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 00:29

Client Sample ID: BH25-09 4'

Lab Sample ID: 885-36601-6

Date Collected: 10/29/25 12:30

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 00:13
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 19:36
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 00:47

Client Sample ID: BH25-10 0'

Lab Sample ID: 885-36601-7

Date Collected: 10/28/25 10:00

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 00:33
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 19:52
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 00:53

Client Sample ID: BH25-10 2'

Lab Sample ID: 885-36601-8

Date Collected: 10/28/25 10:30

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 00:54
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 20:06
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 00:59

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-12 3'

Lab Sample ID: 885-36601-9

Date Collected: 10/28/25 11:00

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 01:14
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 20:21
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 01:05

Client Sample ID: BH25-12 2'

Lab Sample ID: 885-36601-10

Date Collected: 10/28/25 11:30

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 01:35
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 20:35
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 01:10

Client Sample ID: BH25-13 0'

Lab Sample ID: 885-36601-11

Date Collected: 10/28/25 12:00

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 03:08
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 21:04
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 01:16

Client Sample ID: BH25-13 1'

Lab Sample ID: 885-36601-12

Date Collected: 10/28/25 12:30

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 03:28
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 21:20
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 01:34

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-36601-1

Client Sample ID: BH25-14 0'

Lab Sample ID: 885-36601-13

Date Collected: 10/29/25 16:00

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 03:49
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 21:34
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 01:40

Client Sample ID: BH25-14 2'

Lab Sample ID: 885-36601-14

Date Collected: 10/29/25 16:30

Matrix: Solid

Date Received: 10/31/25 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			122864	MNR	EET MID	11/04/25 12:47
Total/NA	Analysis	8021B		1	122796	MNR	EET MID	11/05/25 04:09
Total/NA	Prep	8015NM Prep			122860	EL	EET MID	11/04/25 11:58
Total/NA	Analysis	8015B NM		1	122813	FC	EET MID	11/04/25 21:49
Soluble	Leach	DI Leach			122643	SMC	EET MID	11/01/25 15:48
Soluble	Analysis	300.0		1	122884	CS	EET MID	11/05/25 01:57

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-36601-1

Laboratory: Eurofins Midland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Chain-of-Custody Record

Client: **VERTEX (BILL TO MACK)**

Mailing Address: **3101 BOYD DR
CARLSBAD NM, 88220**

Phone #:

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____

EDD (Type) _____

Turn-Around Time:
 Standard Rush **5**

Project Name: **RED DEER CTB**

Project #: **25A-05531**

Project Manager: **SALLY CARTTAR
SCARTTAR@VERTEX.CA**

Sampler: **KATRINA TAYLOR**

On Ice: Yes No

of Coolers: **1** **Asby**

Cooler Temp (including CF): **2. HO-3-2.7 (°C)**



HALL ENVIRONMENTAL ANALYSIS LABORATORY



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109 885-36601 COC

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cd, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
10/29	10:00	Soil	BH25-07 0'	4oz, 1	ICE		X	X					X			
	10:30		BH25-07 4'													
	11:00		BH25-08 0'													
	11:30		BH25-08 4'													
	12:00		BH25-09 0'													
	12:30		BH25-09 4'													
10/28	10:00		BH25-10 0'													
	10:30		BH25-10 2'													
	11:00		BH25-12 3'													
	11:30		BH25-12 2'													
	12:00		BH25-13 0'													
	12:30		BH25-13 1'													

Date: 10/30	Time: 1:30	Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Via:	Date: 10/30/25	Time: 9:00	Remarks: ATTN: MATT BUCKLES, matt.buckles@meq.com CC: SCARTTAR@VERTEX.CA & KATRINA.TAYLOR@VERTEX.CA
Date: 10/30/25	Time: 1:00	Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Via:	Date: 10/31/25	Time: 7:55	BILL TO BANACK ENERGY FAPP2211037291

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: VERTEX (BILL TO MALIK)

Mailing Address: 3101 BOYD DR
CARLSBAD NM, 88220

Phone #:

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush 5 Days

Project Name: RED DEER CTR

Project #: 25A-05531

Project Manager: SALLY CARTTAR
SCARTTAR@VERTEX.CA

Sampler: KATRINA TAYLOR

On Ice: Yes No

of Coolers: 1 Abby

Cooler Temp (including CF): 2.140.3 = 7.4 (°C)



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	☉ F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X					X			
↓	↓					↓			

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
10/29	16:00	Soil	BH25-14 0	4oz, 1	Ice	
↓	16:30	↓	BH25-14 2	↓	↓	

Date: 10/29/25 Time: 1900 Relinquished by: [Signature]

Date: 10/30/25 Time: 1900 Relinquished by: [Signature]

Received by: [Signature] Date: 10/29/25 Time: [Blank]

Received by: [Signature] Date: 10/30/25 Time: 7:55

Remarks: ATTN: MATT BUCKLES, MATTBUCKLES@MEL.CA
CC: SCARTTAR@VERTEX.CA & KATRINA.TAYLOR@VERTEX.CA
BILL TO MALIK ENERGY
FAPP2211037291

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

Eurofins Albuquerque

4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record



Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cason, Cheyenne	Carrier Tracking No(s): N/A	COC No: 885-7224.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: cheyenne.cason@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr	Accreditations Required (See note): NELAP - Oregon; State - New Mexico			Job #: 885-36601-1

Address: 1211 W. Florida Ave,	Due Date Requested: 11/6/2025	Analysis Requested						Total Number of Containers	Preservation Codes:
City: Midland	TAT Requested (days): N/A								
State, Zip: TX, 79701									
Phone: 432-704-5440(Tel)	PO #: N/A								
Email: N/A	WO #: N/A	Field Filtered Sample (Yes or No)						Other: N/A	
Project Name: Red Deer CTB	Project #: 88501668	Perform MS/MSD (Yes or No)							
Site: N/A	SSOW#: N/A	8021B/0308_HBTEX							
		390_ORGFM_28D/DI_LEACHchloride 8015MOD_NM/8015NM_S_PrepDRO and GRO							

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/0308_HBTEX	390_ORGFM_28D/DI_LEACHchloride	8015MOD_NM/8015NM_S_PrepDRO and GRO									Special Instructions/Note:
BH25-07 0' (885-36601-1)	10/29/25	10:00 Mountain	G	Solid		X	X	X										1
BH25-07 4' (885-36601-2)	10/29/25	10:30 Mountain	G	Solid		X	X	X										1
BH25-08 0' (885-36601-3)	10/29/25	11:00 Mountain	G	Solid		X	X	X										1
BH25-08 4' (885-36601-4)	10/29/25	11:30 Mountain	G	Solid		X	X	X										1
BH25-09 0' (885-36601-5)	10/29/25	12:00 Mountain	G	Solid		X	X	X										1
BH25-09 4' (885-36601-6)	10/29/25	12:30 Mountain	G	Solid		X	X	X										1
BH25-10 0' (885-36601-7)	10/28/25	10:00 Mountain	G	Solid		X	X	X										1
BH25-10 2' (885-36601-8)	10/28/25	10:30 Mountain	G	Solid		X	X	X										1
BH25-12 3' (885-36601-9)	10/28/25	11:00 Mountain	G	Solid		X	X	X										1

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: 11/3/25 1105	Company:	Received by: <i>[Signature]</i> Lee
Relinquished by:	Date/Time:	Company:	Date/Time: 11/4/25 11:00
Relinquished by:	Date/Time:	Company:	Date/Time:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) and Other Remarks: 3.7/3.6 FR 8	

Eurofins Albuquerque

4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record



Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cason, Cheyenne	Carrier Tracking No(s): N/A	COC No: 885-7224.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: cheyenne.cason@et.eurofins.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr	Accreditations Required (See note): NELAP - Oregon, State - New Mexico			Job #: 885-36601-1

Address: 1211 W. Florida Ave,	Due Date Requested: 11/6/2025	Analysis Requested				Preservation Codes: -
City: Midland	TAT Requested (days): N/A					
State, Zip: TX, 79701	PO #: N/A	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	8021B/6030B_HBTEX	300_ORGFIM_28D/DI_LEACHchloride	8016MOD_NM/8015NM_S_PrepDRO and GRO	Total Number of containers
Phone: 432-704-5440(Tel)	WO #: N/A					
Email: N/A	Project #: 88501668	Other: N/A				
Project Name: Red Deer CTB	SSOW#: N/A	Special Instructions/Note:				
Site: N/A						

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/6030B_HBTEX	300_ORGFIM_28D/DI_LEACHchloride	8016MOD_NM/8015NM_S_PrepDRO and GRO	Total Number of containers	Special Instructions/Note:
Preservation Code: X X X											
BH25-12 2' (885-36601-10)	10/28/25	11:30 Mountain	G	Solid		X	X	X		1	
BH25-13 0' (885-36601-11)	10/28/25	12:00 Mountain	G	Solid		X	X	X		1	
BH25-13 1' (885-36601-12)	10/28/25	12:30 Mountain	G	Solid		X	X	X		1	
BH25-14 0' (885-36601-13)	10/29/25	16:00 Mountain	G	Solid		X	X	X		1	
BH25-14 2' (885-36601-14)	10/29/25	16:30 Mountain	G	Solid		X	X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2
Special Instructions/QC Requirements:	

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time:	Company:	Received by: <i>Teddy Randall</i> Date/Time: 11/4/25 11:00 Company:
Relinquished by:	Date/Time:	Company:	Received by: Company:
Relinquished by:	Date/Time:	Company:	Received by: Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 30/306 FR-8
-------------------------------------	-------------------	--

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-36601-1

Login Number: 36601

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	True	



Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-36601-1

Login Number: 36601

List Number: 2

Creator: Lee, Randall

List Source: Eurofins Midland

List Creation: 11/04/25 11:26 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 1/5/2026 2:22:57 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-39998-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
1/5/2026 2:22:57 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-39998-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	18
QC Association Summary	22
Lab Chronicle	25
Certification Summary	29
Chain of Custody	30
Receipt Checklists	34

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-39998-1

Job ID: 885-39998-1

Eurofins Albuquerque

Job Narrative 885-39998-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/19/2025 7:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

Method 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-40363 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-01 at 1.5ft

Lab Sample ID: 885-39998-1

Date Collected: 12/17/25 12:50

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/22/25 15:37	12/30/25 16:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 16:38	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 00:31	1
Ethylbenzene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 00:31	1
Toluene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 00:31	1
Xylenes, Total	ND		0.099	mg/Kg		12/22/25 15:37	12/30/25 00:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 150			12/22/25 15:37	12/30/25 00:31	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18		8.9	mg/Kg		12/23/25 11:01	12/24/25 11:00	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		12/23/25 11:01	12/24/25 11:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	113		62 - 134			12/23/25 11:01	12/24/25 11:00	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82		50	mg/Kg		12/26/25 10:49	12/26/25 17:31	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-02 at 1.5ft

Lab Sample ID: 885-39998-2

Date Collected: 12/17/25 13:35

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/22/25 15:37	12/30/25 17:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/22/25 15:37	12/30/25 17:49	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 01:40	1
Ethylbenzene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 01:40	1
Toluene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 01:40	1
Xylenes, Total	ND		0.10	mg/Kg		12/22/25 15:37	12/30/25 01:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/22/25 15:37	12/30/25 01:40	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		12/23/25 11:01	12/23/25 15:55	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/23/25 11:01	12/23/25 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			12/23/25 11:01	12/23/25 15:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	620		50	mg/Kg		12/26/25 10:49	12/26/25 17:45	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-04 at 1.5ft

Lab Sample ID: 885-39998-3

Date Collected: 12/17/25 13:45

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/22/25 15:37	12/30/25 18:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/22/25 15:37	12/30/25 18:13	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/22/25 15:37	12/30/25 02:50	1
Ethylbenzene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 02:50	1
Toluene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 02:50	1
Xylenes, Total	ND		0.098	mg/Kg		12/22/25 15:37	12/30/25 02:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 02:50	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		12/23/25 11:01	12/23/25 16:07	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/23/25 11:01	12/23/25 16:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	116		62 - 134			12/23/25 11:01	12/23/25 16:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	480		50	mg/Kg		12/26/25 10:49	12/26/25 17:58	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-07 at 2ft

Lab Sample ID: 885-39998-4

Date Collected: 12/17/25 14:00

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/22/25 15:37	12/30/25 18:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 18:36	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 03:13	1
Ethylbenzene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 03:13	1
Toluene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 03:13	1
Xylenes, Total	ND		0.098	mg/Kg		12/22/25 15:37	12/30/25 03:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 03:13	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		12/23/25 11:01	12/23/25 16:18	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/23/25 11:01	12/23/25 16:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	114		62 - 134			12/23/25 11:01	12/23/25 16:18	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		50	mg/Kg		12/26/25 10:49	12/26/25 18:12	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-08 at 2ft

Lab Sample ID: 885-39998-5

Date Collected: 12/17/25 14:05

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/22/25 15:37	12/30/25 19:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/22/25 15:37	12/30/25 19:00	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 03:36	1
Ethylbenzene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 03:36	1
Toluene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 03:36	1
Xylenes, Total	ND		0.099	mg/Kg		12/22/25 15:37	12/30/25 03:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/22/25 15:37	12/30/25 03:36	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	21		9.3	mg/Kg		12/23/25 11:01	12/24/25 11:11	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/23/25 11:01	12/24/25 11:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	122		62 - 134			12/23/25 11:01	12/24/25 11:11	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	340		50	mg/Kg		12/26/25 10:49	12/26/25 18:25	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-09 at 2ft

Lab Sample ID: 885-39998-6

Date Collected: 12/17/25 14:10

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/22/25 15:37	12/30/25 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/22/25 15:37	12/30/25 19:24	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/22/25 15:37	12/30/25 03:59	1
Ethylbenzene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 03:59	1
Toluene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 03:59	1
Xylenes, Total	ND		0.098	mg/Kg		12/22/25 15:37	12/30/25 03:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 03:59	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	47		8.8	mg/Kg		12/23/25 11:01	12/24/25 11:23	1
Motor Oil Range Organics [C28-C40]	56		44	mg/Kg		12/23/25 11:01	12/24/25 11:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	119		62 - 134			12/23/25 11:01	12/24/25 11:23	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		51	mg/Kg		12/26/25 10:49	12/26/25 18:39	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-10 at 2ft

Lab Sample ID: 885-39998-7

Date Collected: 12/17/25 14:15

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/22/25 15:37	12/30/25 19:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/22/25 15:37	12/30/25 19:47	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 04:23	1
Ethylbenzene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 04:23	1
Toluene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 04:23	1
Xylenes, Total	ND		0.099	mg/Kg		12/22/25 15:37	12/30/25 04:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/22/25 15:37	12/30/25 04:23	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	170		8.6	mg/Kg		12/23/25 11:01	12/24/25 11:35	1
Motor Oil Range Organics [C28-C40]	140		43	mg/Kg		12/23/25 11:01	12/24/25 11:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			12/23/25 11:01	12/24/25 11:35	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		50	mg/Kg		12/29/25 14:04	12/29/25 16:13	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-11 at 2ft

Lab Sample ID: 885-39998-8

Date Collected: 12/17/25 14:20

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/22/25 15:37	12/30/25 20:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/22/25 15:37	12/30/25 20:11	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/22/25 15:37	12/30/25 04:46	1
Ethylbenzene	ND		0.048	mg/Kg		12/22/25 15:37	12/30/25 04:46	1
Toluene	ND		0.048	mg/Kg		12/22/25 15:37	12/30/25 04:46	1
Xylenes, Total	ND		0.096	mg/Kg		12/22/25 15:37	12/30/25 04:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 04:46	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		12/23/25 11:01	12/23/25 17:06	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/23/25 11:01	12/23/25 17:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			12/23/25 11:01	12/23/25 17:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		12/29/25 14:04	12/29/25 16:54	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-12 at 2ft

Lab Sample ID: 885-39998-9

Date Collected: 12/17/25 14:23

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/22/25 15:37	12/30/25 20:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 20:34	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 05:09	1
Ethylbenzene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 05:09	1
Toluene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 05:09	1
Xylenes, Total	ND		0.099	mg/Kg		12/22/25 15:37	12/30/25 05:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/22/25 15:37	12/30/25 05:09	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	49		8.7	mg/Kg		12/23/25 11:01	12/23/25 17:30	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		12/23/25 11:01	12/23/25 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			12/23/25 11:01	12/23/25 17:30	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		50	mg/Kg		12/29/25 14:04	12/29/25 17:35	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: WS25-04 at 0-2ft

Lab Sample ID: 885-39998-10

Date Collected: 12/17/25 13:10

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/22/25 15:37	12/30/25 20:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 20:58	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/22/25 15:37	12/30/25 05:32	1
Ethylbenzene	ND		0.048	mg/Kg		12/22/25 15:37	12/30/25 05:32	1
Toluene	ND		0.048	mg/Kg		12/22/25 15:37	12/30/25 05:32	1
Xylenes, Total	ND		0.095	mg/Kg		12/22/25 15:37	12/30/25 05:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			12/22/25 15:37	12/30/25 05:32	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		12/23/25 11:01	12/23/25 17:42	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/23/25 11:01	12/23/25 17:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			12/23/25 11:01	12/23/25 17:42	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		51	mg/Kg		12/29/25 14:04	12/29/25 17:48	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: WS25-06 at 0-2ft

Lab Sample ID: 885-39998-11

Date Collected: 12/17/25 13:20

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/22/25 15:37	12/30/25 21:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/22/25 15:37	12/30/25 21:22	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 06:18	1
Ethylbenzene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 06:18	1
Toluene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 06:18	1
Xylenes, Total	ND		0.099	mg/Kg		12/22/25 15:37	12/30/25 06:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/22/25 15:37	12/30/25 06:18	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		12/23/25 11:01	12/23/25 17:54	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		12/23/25 11:01	12/23/25 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			12/23/25 11:01	12/23/25 17:54	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		50	mg/Kg		12/29/25 14:04	12/29/25 18:29	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-13 at 2ft

Lab Sample ID: 885-39998-12

Date Collected: 12/17/25 14:25

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/22/25 15:37	12/30/25 21:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/22/25 15:37	12/30/25 21:45	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 06:42	1
Ethylbenzene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 06:42	1
Toluene	ND		0.049	mg/Kg		12/22/25 15:37	12/30/25 06:42	1
Xylenes, Total	ND		0.098	mg/Kg		12/22/25 15:37	12/30/25 06:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/22/25 15:37	12/30/25 06:42	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		12/23/25 11:01	12/23/25 18:06	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/23/25 11:01	12/23/25 18:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			12/23/25 11:01	12/23/25 18:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		50	mg/Kg		12/29/25 14:04	12/29/25 18:43	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-40335/1-A
Matrix: Solid
Analysis Batch: 40642

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40335

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/22/25 15:37	12/30/25 16:15	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/22/25 15:37	12/30/25 16:15	1

Lab Sample ID: LCS 885-40335/2-A
Matrix: Solid
Analysis Batch: 40642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	23.7		mg/Kg		95	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	206		15 - 150				

Lab Sample ID: 885-39998-1 MS
Matrix: Solid
Analysis Batch: 40642

Client Sample ID: BS25-01 at 1.5ft
Prep Type: Total/NA
Prep Batch: 40335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.8	20.6		mg/Kg		83	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	192		15 - 150						

Lab Sample ID: 885-39998-1 MSD
Matrix: Solid
Analysis Batch: 40642

Client Sample ID: BS25-01 at 1.5ft
Prep Type: Total/NA
Prep Batch: 40335

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.9	19.3		mg/Kg		77	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	189		15 - 150								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-40335/1-A
Matrix: Solid
Analysis Batch: 40601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40335

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/22/25 15:37	12/30/25 00:07	1
Ethylbenzene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 00:07	1
Toluene	ND		0.050	mg/Kg		12/22/25 15:37	12/30/25 00:07	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-40335/1-A
Matrix: Solid
Analysis Batch: 40601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40335

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		12/22/25 15:37	12/30/25 00:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150	12/22/25 15:37	12/30/25 00:07	1

Lab Sample ID: LCS 885-40335/3-A
Matrix: Solid
Analysis Batch: 40601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.973		mg/Kg		97	70 - 130
Ethylbenzene	1.00	1.01		mg/Kg		101	70 - 130
m,p-Xylene	2.00	2.03		mg/Kg		102	70 - 130
o-Xylene	1.00	0.996		mg/Kg		100	70 - 130
Toluene	1.00	1.02		mg/Kg		102	70 - 130
Xylenes, Total	3.00	3.03		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		15 - 150

Lab Sample ID: 885-39998-2 MS
Matrix: Solid
Analysis Batch: 40601

Client Sample ID: BS25-02 at 1.5ft
Prep Type: Total/NA
Prep Batch: 40335

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.991	0.920		mg/Kg		93	70 - 130
Ethylbenzene	ND		0.991	0.914		mg/Kg		92	70 - 130
m,p-Xylene	ND		1.98	1.89		mg/Kg		95	70 - 130
o-Xylene	ND		0.991	0.895		mg/Kg		90	70 - 130
Toluene	ND		0.991	0.939		mg/Kg		95	70 - 130
Xylenes, Total	ND		2.97	2.78		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		15 - 150

Lab Sample ID: 885-39998-2 MSD
Matrix: Solid
Analysis Batch: 40601

Client Sample ID: BS25-02 at 1.5ft
Prep Type: Total/NA
Prep Batch: 40335

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.991	0.926		mg/Kg		93	70 - 130	1	20
Ethylbenzene	ND		0.991	0.890		mg/Kg		90	70 - 130	3	20
m,p-Xylene	ND		1.98	1.83		mg/Kg		92	70 - 130	3	20
o-Xylene	ND		0.991	0.896		mg/Kg		90	70 - 130	0	20
Toluene	ND		0.991	0.935		mg/Kg		94	70 - 130	0	20
Xylenes, Total	ND		2.97	2.72		mg/Kg		91	70 - 130	2	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-39998-2 MSD
Matrix: Solid
Analysis Batch: 40601

Client Sample ID: BS25-02 at 1.5ft
Prep Type: Total/NA
Prep Batch: 40335

Surrogate	%Recovery	MSD MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		15 - 150

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-40382/1-A
Matrix: Solid
Analysis Batch: 40363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40382

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/23/25 11:01	12/23/25 15:19	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/23/25 11:01	12/23/25 15:19	1

Surrogate	%Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134	12/23/25 11:01	12/23/25 15:19	1

Lab Sample ID: LCS 885-40382/2-A
Matrix: Solid
Analysis Batch: 40363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	53.8		mg/Kg		108	51 - 148

Surrogate	%Recovery	LCS LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	113		62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-40496/1-A
Matrix: Solid
Analysis Batch: 40501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40496

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		12/26/25 10:49	12/26/25 12:03	1

Lab Sample ID: LCS 885-40496/2-A
Matrix: Solid
Analysis Batch: 40501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40496

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.2		mg/Kg		94	90 - 110

Lab Sample ID: MB 885-40582/1-A
Matrix: Solid
Analysis Batch: 40592

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40582

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		12/29/25 14:04	12/29/25 15:44	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-40582/2-A
Matrix: Solid
Analysis Batch: 40592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40582

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.8	45.9		mg/Kg		92	90 - 110

Lab Sample ID: 885-39998-7 MS
Matrix: Solid
Analysis Batch: 40592

Client Sample ID: BS25-10 at 2ft
Prep Type: Total/NA
Prep Batch: 40582

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	210		49.8	273	4	mg/Kg		121	50 - 150

Lab Sample ID: 885-39998-7 MSD
Matrix: Solid
Analysis Batch: 40592

Client Sample ID: BS25-10 at 2ft
Prep Type: Total/NA
Prep Batch: 40582

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	210		49.8	259	4	mg/Kg		93	50 - 150	5	20

Lab Sample ID: 885-39998-8 MS
Matrix: Solid
Analysis Batch: 40592

Client Sample ID: BS25-11 at 2ft
Prep Type: Total/NA
Prep Batch: 40582

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.7	71.8		mg/Kg		NC	50 - 150

Lab Sample ID: 885-39998-8 MSD
Matrix: Solid
Analysis Batch: 40592

Client Sample ID: BS25-11 at 2ft
Prep Type: Total/NA
Prep Batch: 40582

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	ND		50.2	74.7		mg/Kg		149	50 - 150	4	20

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

GC VOA

Prep Batch: 40335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-1	BS25-01 at 1.5ft	Total/NA	Solid	5030C	
885-39998-2	BS25-02 at 1.5ft	Total/NA	Solid	5030C	
885-39998-3	BS25-04 at 1.5ft	Total/NA	Solid	5030C	
885-39998-4	BS25-07 at 2ft	Total/NA	Solid	5030C	
885-39998-5	BS25-08 at 2ft	Total/NA	Solid	5030C	
885-39998-6	BS25-09 at 2ft	Total/NA	Solid	5030C	
885-39998-7	BS25-10 at 2ft	Total/NA	Solid	5030C	
885-39998-8	BS25-11 at 2ft	Total/NA	Solid	5030C	
885-39998-9	BS25-12 at 2ft	Total/NA	Solid	5030C	
885-39998-10	WS25-04 at 0-2ft	Total/NA	Solid	5030C	
885-39998-11	WS25-06 at 0-2ft	Total/NA	Solid	5030C	
885-39998-12	BS25-13 at 2ft	Total/NA	Solid	5030C	
MB 885-40335/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-40335/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-40335/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-39998-1 MS	BS25-01 at 1.5ft	Total/NA	Solid	5030C	
885-39998-1 MSD	BS25-01 at 1.5ft	Total/NA	Solid	5030C	
885-39998-2 MS	BS25-02 at 1.5ft	Total/NA	Solid	5030C	
885-39998-2 MSD	BS25-02 at 1.5ft	Total/NA	Solid	5030C	

Analysis Batch: 40601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-1	BS25-01 at 1.5ft	Total/NA	Solid	8021B	40335
885-39998-2	BS25-02 at 1.5ft	Total/NA	Solid	8021B	40335
885-39998-3	BS25-04 at 1.5ft	Total/NA	Solid	8021B	40335
885-39998-4	BS25-07 at 2ft	Total/NA	Solid	8021B	40335
885-39998-5	BS25-08 at 2ft	Total/NA	Solid	8021B	40335
885-39998-6	BS25-09 at 2ft	Total/NA	Solid	8021B	40335
885-39998-7	BS25-10 at 2ft	Total/NA	Solid	8021B	40335
885-39998-8	BS25-11 at 2ft	Total/NA	Solid	8021B	40335
885-39998-9	BS25-12 at 2ft	Total/NA	Solid	8021B	40335
885-39998-10	WS25-04 at 0-2ft	Total/NA	Solid	8021B	40335
885-39998-11	WS25-06 at 0-2ft	Total/NA	Solid	8021B	40335
885-39998-12	BS25-13 at 2ft	Total/NA	Solid	8021B	40335
MB 885-40335/1-A	Method Blank	Total/NA	Solid	8021B	40335
LCS 885-40335/3-A	Lab Control Sample	Total/NA	Solid	8021B	40335
885-39998-2 MS	BS25-02 at 1.5ft	Total/NA	Solid	8021B	40335
885-39998-2 MSD	BS25-02 at 1.5ft	Total/NA	Solid	8021B	40335

Analysis Batch: 40642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-1	BS25-01 at 1.5ft	Total/NA	Solid	8015M/D	40335
885-39998-2	BS25-02 at 1.5ft	Total/NA	Solid	8015M/D	40335
885-39998-3	BS25-04 at 1.5ft	Total/NA	Solid	8015M/D	40335
885-39998-4	BS25-07 at 2ft	Total/NA	Solid	8015M/D	40335
885-39998-5	BS25-08 at 2ft	Total/NA	Solid	8015M/D	40335
885-39998-6	BS25-09 at 2ft	Total/NA	Solid	8015M/D	40335
885-39998-7	BS25-10 at 2ft	Total/NA	Solid	8015M/D	40335
885-39998-8	BS25-11 at 2ft	Total/NA	Solid	8015M/D	40335
885-39998-9	BS25-12 at 2ft	Total/NA	Solid	8015M/D	40335
885-39998-10	WS25-04 at 0-2ft	Total/NA	Solid	8015M/D	40335

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

GC VOA (Continued)

Analysis Batch: 40642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-11	WS25-06 at 0-2ft	Total/NA	Solid	8015M/D	40335
885-39998-12	BS25-13 at 2ft	Total/NA	Solid	8015M/D	40335
MB 885-40335/1-A	Method Blank	Total/NA	Solid	8015M/D	40335
LCS 885-40335/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40335
885-39998-1 MS	BS25-01 at 1.5ft	Total/NA	Solid	8015M/D	40335
885-39998-1 MSD	BS25-01 at 1.5ft	Total/NA	Solid	8015M/D	40335

GC Semi VOA

Analysis Batch: 40363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-2	BS25-02 at 1.5ft	Total/NA	Solid	8015M/D	40382
885-39998-3	BS25-04 at 1.5ft	Total/NA	Solid	8015M/D	40382
885-39998-4	BS25-07 at 2ft	Total/NA	Solid	8015M/D	40382
885-39998-8	BS25-11 at 2ft	Total/NA	Solid	8015M/D	40382
885-39998-9	BS25-12 at 2ft	Total/NA	Solid	8015M/D	40382
885-39998-10	WS25-04 at 0-2ft	Total/NA	Solid	8015M/D	40382
885-39998-11	WS25-06 at 0-2ft	Total/NA	Solid	8015M/D	40382
885-39998-12	BS25-13 at 2ft	Total/NA	Solid	8015M/D	40382
MB 885-40382/1-A	Method Blank	Total/NA	Solid	8015M/D	40382
LCS 885-40382/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40382

Prep Batch: 40382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-1	BS25-01 at 1.5ft	Total/NA	Solid	SHAKE	
885-39998-2	BS25-02 at 1.5ft	Total/NA	Solid	SHAKE	
885-39998-3	BS25-04 at 1.5ft	Total/NA	Solid	SHAKE	
885-39998-4	BS25-07 at 2ft	Total/NA	Solid	SHAKE	
885-39998-5	BS25-08 at 2ft	Total/NA	Solid	SHAKE	
885-39998-6	BS25-09 at 2ft	Total/NA	Solid	SHAKE	
885-39998-7	BS25-10 at 2ft	Total/NA	Solid	SHAKE	
885-39998-8	BS25-11 at 2ft	Total/NA	Solid	SHAKE	
885-39998-9	BS25-12 at 2ft	Total/NA	Solid	SHAKE	
885-39998-10	WS25-04 at 0-2ft	Total/NA	Solid	SHAKE	
885-39998-11	WS25-06 at 0-2ft	Total/NA	Solid	SHAKE	
885-39998-12	BS25-13 at 2ft	Total/NA	Solid	SHAKE	
MB 885-40382/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40382/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 40435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-1	BS25-01 at 1.5ft	Total/NA	Solid	8015M/D	40382
885-39998-5	BS25-08 at 2ft	Total/NA	Solid	8015M/D	40382
885-39998-6	BS25-09 at 2ft	Total/NA	Solid	8015M/D	40382
885-39998-7	BS25-10 at 2ft	Total/NA	Solid	8015M/D	40382

HPLC/IC

Prep Batch: 40496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-1	BS25-01 at 1.5ft	Total/NA	Solid	300_Prep	
885-39998-2	BS25-02 at 1.5ft	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

HPLC/IC (Continued)

Prep Batch: 40496 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-3	BS25-04 at 1.5ft	Total/NA	Solid	300_Prep	
885-39998-4	BS25-07 at 2ft	Total/NA	Solid	300_Prep	
885-39998-5	BS25-08 at 2ft	Total/NA	Solid	300_Prep	
885-39998-6	BS25-09 at 2ft	Total/NA	Solid	300_Prep	
MB 885-40496/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-40496/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 40501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-1	BS25-01 at 1.5ft	Total/NA	Solid	300.0	40496
885-39998-2	BS25-02 at 1.5ft	Total/NA	Solid	300.0	40496
885-39998-3	BS25-04 at 1.5ft	Total/NA	Solid	300.0	40496
885-39998-4	BS25-07 at 2ft	Total/NA	Solid	300.0	40496
885-39998-5	BS25-08 at 2ft	Total/NA	Solid	300.0	40496
885-39998-6	BS25-09 at 2ft	Total/NA	Solid	300.0	40496
MB 885-40496/1-A	Method Blank	Total/NA	Solid	300.0	40496
LCS 885-40496/2-A	Lab Control Sample	Total/NA	Solid	300.0	40496

Prep Batch: 40582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-7	BS25-10 at 2ft	Total/NA	Solid	300_Prep	
885-39998-8	BS25-11 at 2ft	Total/NA	Solid	300_Prep	
885-39998-9	BS25-12 at 2ft	Total/NA	Solid	300_Prep	
885-39998-10	WS25-04 at 0-2ft	Total/NA	Solid	300_Prep	
885-39998-11	WS25-06 at 0-2ft	Total/NA	Solid	300_Prep	
885-39998-12	BS25-13 at 2ft	Total/NA	Solid	300_Prep	
MB 885-40582/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-40582/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-39998-7 MS	BS25-10 at 2ft	Total/NA	Solid	300_Prep	
885-39998-7 MSD	BS25-10 at 2ft	Total/NA	Solid	300_Prep	
885-39998-8 MS	BS25-11 at 2ft	Total/NA	Solid	300_Prep	
885-39998-8 MSD	BS25-11 at 2ft	Total/NA	Solid	300_Prep	

Analysis Batch: 40592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-39998-7	BS25-10 at 2ft	Total/NA	Solid	300.0	40582
885-39998-8	BS25-11 at 2ft	Total/NA	Solid	300.0	40582
885-39998-9	BS25-12 at 2ft	Total/NA	Solid	300.0	40582
885-39998-10	WS25-04 at 0-2ft	Total/NA	Solid	300.0	40582
885-39998-11	WS25-06 at 0-2ft	Total/NA	Solid	300.0	40582
885-39998-12	BS25-13 at 2ft	Total/NA	Solid	300.0	40582
MB 885-40582/1-A	Method Blank	Total/NA	Solid	300.0	40582
LCS 885-40582/2-A	Lab Control Sample	Total/NA	Solid	300.0	40582
885-39998-7 MS	BS25-10 at 2ft	Total/NA	Solid	300.0	40582
885-39998-7 MSD	BS25-10 at 2ft	Total/NA	Solid	300.0	40582
885-39998-8 MS	BS25-11 at 2ft	Total/NA	Solid	300.0	40582
885-39998-8 MSD	BS25-11 at 2ft	Total/NA	Solid	300.0	40582

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-01 at 1.5ft

Lab Sample ID: 885-39998-1

Date Collected: 12/17/25 12:50

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 16:38
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 00:31
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40435	EM	EET ALB	12/24/25 11:00
Total/NA	Prep	300_Prep			40496	MA	EET ALB	12/26/25 10:49
Total/NA	Analysis	300.0		10	40501	EH	EET ALB	12/26/25 17:31

Client Sample ID: BS25-02 at 1.5ft

Lab Sample ID: 885-39998-2

Date Collected: 12/17/25 13:35

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 17:49
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 01:40
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 15:55
Total/NA	Prep	300_Prep			40496	MA	EET ALB	12/26/25 10:49
Total/NA	Analysis	300.0		10	40501	EH	EET ALB	12/26/25 17:45

Client Sample ID: BS25-04 at 1.5ft

Lab Sample ID: 885-39998-3

Date Collected: 12/17/25 13:45

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 18:13
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 02:50
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 16:07
Total/NA	Prep	300_Prep			40496	MA	EET ALB	12/26/25 10:49
Total/NA	Analysis	300.0		10	40501	EH	EET ALB	12/26/25 17:58

Client Sample ID: BS25-07 at 2ft

Lab Sample ID: 885-39998-4

Date Collected: 12/17/25 14:00

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 18:36

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-07 at 2ft

Lab Sample ID: 885-39998-4

Date Collected: 12/17/25 14:00

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 03:13
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 16:18
Total/NA	Prep	300_Prep			40496	MA	EET ALB	12/26/25 10:49
Total/NA	Analysis	300.0		10	40501	EH	EET ALB	12/26/25 18:12

Client Sample ID: BS25-08 at 2ft

Lab Sample ID: 885-39998-5

Date Collected: 12/17/25 14:05

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 19:00
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 03:36
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40435	EM	EET ALB	12/24/25 11:11
Total/NA	Prep	300_Prep			40496	MA	EET ALB	12/26/25 10:49
Total/NA	Analysis	300.0		10	40501	EH	EET ALB	12/26/25 18:25

Client Sample ID: BS25-09 at 2ft

Lab Sample ID: 885-39998-6

Date Collected: 12/17/25 14:10

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 19:24
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 03:59
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40435	EM	EET ALB	12/24/25 11:23
Total/NA	Prep	300_Prep			40496	MA	EET ALB	12/26/25 10:49
Total/NA	Analysis	300.0		10	40501	EH	EET ALB	12/26/25 18:39

Client Sample ID: BS25-10 at 2ft

Lab Sample ID: 885-39998-7

Date Collected: 12/17/25 14:15

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 19:47
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 04:23

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: BS25-10 at 2ft

Lab Sample ID: 885-39998-7

Date Collected: 12/17/25 14:15

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40435	EM	EET ALB	12/24/25 11:35
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 16:13

Client Sample ID: BS25-11 at 2ft

Lab Sample ID: 885-39998-8

Date Collected: 12/17/25 14:20

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 20:11
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 04:46
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 17:06
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 16:54

Client Sample ID: BS25-12 at 2ft

Lab Sample ID: 885-39998-9

Date Collected: 12/17/25 14:23

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 20:34
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 05:09
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 17:30
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 17:35

Client Sample ID: WS25-04 at 0-2ft

Lab Sample ID: 885-39998-10

Date Collected: 12/17/25 13:10

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 20:58
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 05:32
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 17:42

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-39998-1

Client Sample ID: WS25-04 at 0-2ft

Lab Sample ID: 885-39998-10

Date Collected: 12/17/25 13:10

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 17:48

Client Sample ID: WS25-06 at 0-2ft

Lab Sample ID: 885-39998-11

Date Collected: 12/17/25 13:20

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 21:22
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 06:18
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 17:54
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 18:29

Client Sample ID: BS25-13 at 2ft

Lab Sample ID: 885-39998-12

Date Collected: 12/17/25 14:25

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8015M/D		1	40642	VP	EET ALB	12/30/25 21:45
Total/NA	Prep	5030C			40335	VP	EET ALB	12/22/25 15:37
Total/NA	Analysis	8021B		1	40601	VP	EET ALB	12/30/25 06:42
Total/NA	Prep	SHAKE			40382	DH	EET ALB	12/23/25 11:01
Total/NA	Analysis	8015M/D		1	40363	BV	EET ALB	12/23/25 18:06
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 18:43

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-39998-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-26



Chain-of-Custody Record

Client: Vertex (bill to Mack Energy, Matt Buckles)

Mailing Address: 3101 Boyd Dr
Carlsbad, New Mexico 88220

Phone #: 575.725.5001
email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time:
Standard TAT

Project Name:
Red Deer CTB

Project #:
25A-05531

Project Manager:
Sally Carttar
SCarttar@vertexresource.com

Sampler: Sharon Minnix
On Ice: Yes No
of Coolers: 1 Joe
Cooler Temp (including CF): 4.3 + 0.2 = 4.5



HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87112 885-39998 COC
Tel. 505-345-3975 Fax 505-345-4107



Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	CF, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)				
12.17.25	1250	Soil	BS25-01 at 1.5ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1335	Soil	BS25-02 at 1.5ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1345	Soil	BS25-04 at 1.5ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1400	Soil	BS25-07 at 2ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1405	Soil	BS25-08 at 2ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1410	Soil	BS25-09 at 2ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1415	Soil	BS25-10 at 2ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1420	Soil	BS25-11 at 2ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1423	Soil	BS25-12 at 2ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1310	Soil	WS25-04 at 0-2ft	1, 4oz jar	ICE		X	X					X							
12.17.25	1320	Soil	WS25-06 at 0-2ft	1, 4oz jar	ICE		X	X					X							

Date: 12/18/25 Time: 0835 Relinquished by: [Signature] Received by: [Signature] Date: 12/18/25 Time: 0835

Date: 12/18/25 Time: 1900 Relinquished by: [Signature] Received by: [Signature] Date: 12/19/25 Time: 7535

Remarks: Direct Bill to Mack Energy ATTN: Matt Buckles CC: Sally Carttar (Scarttar@vertexresource.com), Permian@vertexresource.com, and Sharon Minnix (Sminnix@vertexresource.com) for final report. 182



Chain-of-Custody Record				Turn-Around Time:					
Client: Vertex (bill to Mack Energy, Matt Buckles)				Standard TAT					
Mailing Address: 3101 Boyd Dr Carlsbad, New Mexico 88220				Project Name: Red Deer CTB					
Phone #: 575.725.5001				Project #: 25A-05531					
email or Fax#:				Project Manager: Sally Carttar					
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				SCarttar@vertexresource.com					
Accreditation: <input type="checkbox"/> Az Compliance				Sampler: Sharon Minnix					
<input type="checkbox"/> NELAC <input type="checkbox"/> Other				On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
<input type="checkbox"/> EDD (Type)				# of Coolers: 1 Joe					
				Cooler Temp (including CF): 4.3 + 0.2 = 4.5					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.			
12.17.25	1250	Soil	BS25-01 at 1.5ft	1, 4oz jar	ICE				
12.17.25	1335	Soil	BS25-02 at 1.5ft	1, 4oz jar	ICE				
12.17.25	1345	Soil	BS25-04 at 1.5ft	1, 4oz jar	ICE				
12.17.25	1400	Soil	BS25-07 at 2ft	1, 4oz jar	ICE				
12.17.25	1405	Soil	BS25-08 at 2ft	1, 4oz jar	ICE				
12.17.25	1410	Soil	BS25-09 at 2ft	1, 4oz jar	ICE				
12.17.25	1415	Soil	BS25-10 at 2ft	1, 4oz jar	ICE				
12.17.25	1420	Soil	BS25-11 at 2ft	1, 4oz jar	ICE				
12.17.25	1423	Soil	BS25-12 at 2ft	1, 4oz jar	ICE				
12.17.25	1310	Soil	WS25-04 at 0-2ft	1, 4oz jar	ICE				
12.17.25	1320	Soil	WS25-06 at 0-2ft	1, 4oz jar	ICE				
Date:	Time:	Relinquished by:		Received by:		Via:		Date	Time
12/18/25	0355	<i>[Signature]</i>		<i>[Signature]</i>				12/18/25	0355
Date:	Time:	Relinquished by:		Received by:		Via:		Date	Time
12/18/25	1900	<i>[Signature]</i>		<i>[Signature]</i>				12/19/25	7535



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87111 885-39998 COC

Tel. 505-345-3975 Fax 505-345-4107



RTX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	CF, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)								
X	X					X											
X	X					X											
X	X					X											
X	X					X											
X	X					X											
X	X					X											
X	X					X											
X	X					X											
X	X					X											

Remarks: Direct Bill to Mack Energy ATTN: Matt Buckles CC: Sally Carttar (Scarttar@vertexresource.com), Permian@vertexresource.com, and Sharon Minnix (Sminnix@vertexresource.com) for final report. 182

Chain-of-Custody Record		Turn-Around Time:
Client: Vertex (bill to Mack Energy, Matt Buckles)	Standard TAT	
Mailing Address: 3101 Boyd Dr Carlsbad, New Mexico 88220	Project Name: Red Deer CTB	
Phone #: 575.725.5001	Project #: 25A-05531	
email or Fax#:	Project Manager: Sally Carttar SCarttar@vertexresource.com	
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	Sampler: Sharon Minnix On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____	# of Coolers: 1 <i>for</i>	
<input type="checkbox"/> EDD (Type) _____	Cooler Temp (including CF): $4.3 + 0.2 = 4.5$	



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)																																					
12.17.25	14:25	Soil	BS25-13 at 2ft	1, 4oz jar	ICE		X	X					X																																								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Remarks: Direct Bill to Mack Energy ATTN: Matt Buckles CC: Sally Carttar (Scarttar@vertexresource.com), Permian@vertexresource.com, and Sharon Minnix (Sminnix@vertexresource.com) for final report.
		<i>Sharon Minnix</i>	<i>Sharon Minnix</i>		<i>12/18/25</i>	<i>0835</i>	
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	
<i>1/5/2026</i>	<i>1900</i>	<i>Sharon Minnix</i>	<i>Sharon Minnix</i>		<i>12/19/25</i>	<i>7:35</i>	



Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-39998-1

Login Number: 39998

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	Refer to Job Narrative for details.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	True	





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
 Vertex
 3101 Boyd Dr
 Carlsbad, New Mexico 88220

Generated 12/30/2025 2:07:30 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-40001-1

Eurofins Albuquerque
 4901 Hawkins NE
 Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
12/30/2025 2:07:30 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-40001-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Chain of Custody	15
Receipt Checklists	16

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40001-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-40001-1

Job ID: 885-40001-1

Eurofins Albuquerque

Job Narrative 885-40001-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/19/2025 7:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40001-1

Client Sample ID: WS25-01 AT 0-1.5 FT

Lab Sample ID: 885-40001-1

Date Collected: 12/17/25 12:45

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/19/25 16:29	12/28/25 01:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/19/25 16:29	12/28/25 01:25	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/19/25 16:29	12/28/25 01:25	1
Ethylbenzene	ND		0.050	mg/Kg		12/19/25 16:29	12/28/25 01:25	1
Toluene	ND		0.050	mg/Kg		12/19/25 16:29	12/28/25 01:25	1
Xylenes, Total	ND		0.10	mg/Kg		12/19/25 16:29	12/28/25 01:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/19/25 16:29	12/28/25 01:25	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		12/22/25 11:05	12/23/25 06:55	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/22/25 11:05	12/23/25 06:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			12/22/25 11:05	12/23/25 06:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	760		50	mg/Kg		12/22/25 16:30	12/23/25 12:46	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40001-1

Client Sample ID: BS25-03 AT 1.5 FT

Lab Sample ID: 885-40001-2

Date Collected: 12/17/25 13:40

Matrix: Solid

Date Received: 12/19/25 07:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/19/25 16:29	12/28/25 02:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/19/25 16:29	12/28/25 02:36	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/19/25 16:29	12/28/25 02:36	1
Ethylbenzene	ND		0.050	mg/Kg		12/19/25 16:29	12/28/25 02:36	1
Toluene	ND		0.050	mg/Kg		12/19/25 16:29	12/28/25 02:36	1
Xylenes, Total	ND		0.099	mg/Kg		12/19/25 16:29	12/28/25 02:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/19/25 16:29	12/28/25 02:36	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		12/22/25 11:05	12/23/25 07:41	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/22/25 11:05	12/23/25 07:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			12/22/25 11:05	12/23/25 07:41	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	710		49	mg/Kg		12/22/25 16:30	12/23/25 13:28	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40001-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-40250/1-A
Matrix: Solid
Analysis Batch: 40531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40250

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/19/25 16:28	12/27/25 17:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/19/25 16:28	12/27/25 17:31	1

Lab Sample ID: LCS 885-40250/2-A
Matrix: Solid
Analysis Batch: 40531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40250

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	22.9		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	202		15 - 150				

Lab Sample ID: 885-40001-1 MS
Matrix: Solid
Analysis Batch: 40531

Client Sample ID: WS25-01 AT 0-1.5 FT
Prep Type: Total/NA
Prep Batch: 40250

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.8	20.8		mg/Kg		84	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	202		15 - 150						

Lab Sample ID: 885-40001-1 MSD
Matrix: Solid
Analysis Batch: 40531

Client Sample ID: WS25-01 AT 0-1.5 FT
Prep Type: Total/NA
Prep Batch: 40250

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.8	22.0		mg/Kg		89	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	199		15 - 150								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-40250/1-A
Matrix: Solid
Analysis Batch: 40532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40250

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/19/25 16:28	12/27/25 17:31	1
Ethylbenzene	ND		0.050	mg/Kg		12/19/25 16:28	12/27/25 17:31	1
Toluene	ND		0.050	mg/Kg		12/19/25 16:28	12/27/25 17:31	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40001-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-40250/1-A
Matrix: Solid
Analysis Batch: 40532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40250

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Xylenes, Total	ND		0.10	mg/Kg		12/19/25 16:28	12/27/25 17:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			12/19/25 16:28	12/27/25 17:31	1

Lab Sample ID: LCS 885-40250/3-A
Matrix: Solid
Analysis Batch: 40532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40250

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	1.00	0.923		mg/Kg		92	70 - 130
Ethylbenzene	1.00	0.898		mg/Kg		90	70 - 130
m,p-Xylene	2.00	1.84		mg/Kg		92	70 - 130
o-Xylene	1.00	0.903		mg/Kg		90	70 - 130
Toluene	1.00	0.935		mg/Kg		93	70 - 130
Xylenes, Total	3.00	2.74		mg/Kg		91	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	101		15 - 150				

Lab Sample ID: 885-40001-2 MS
Matrix: Solid
Analysis Batch: 40532

Client Sample ID: BS25-03 AT 1.5 FT
Prep Type: Total/NA
Prep Batch: 40250

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Benzene	ND		0.993	0.856		mg/Kg		86	70 - 130
Ethylbenzene	ND		0.993	0.852		mg/Kg		86	70 - 130
m,p-Xylene	ND		1.99	1.73		mg/Kg		87	70 - 130
o-Xylene	ND		0.993	0.840		mg/Kg		85	70 - 130
Toluene	ND		0.993	0.865		mg/Kg		87	70 - 130
Xylenes, Total	ND		2.98	2.57		mg/Kg		85	70 - 130
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		15 - 150						

Lab Sample ID: 885-40001-2 MSD
Matrix: Solid
Analysis Batch: 40532

Client Sample ID: BS25-03 AT 1.5 FT
Prep Type: Total/NA
Prep Batch: 40250

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	ND		0.993	0.921		mg/Kg		93	70 - 130	7	20
Ethylbenzene	ND		0.993	0.897		mg/Kg		90	70 - 130	5	20
m,p-Xylene	ND		1.99	1.81		mg/Kg		91	70 - 130	4	20
o-Xylene	ND		0.993	0.888		mg/Kg		89	70 - 130	6	20
Toluene	ND		0.993	0.914		mg/Kg		92	70 - 130	6	20
Xylenes, Total	ND		2.98	2.69		mg/Kg		90	70 - 130	5	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40001-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-40001-2 MSD
Matrix: Solid
Analysis Batch: 40532

Client Sample ID: BS25-03 AT 1.5 FT
Prep Type: Total/NA
Prep Batch: 40250

Surrogate	%Recovery	MSD MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		15 - 150

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-40309/1-A
Matrix: Solid
Analysis Batch: 40305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40309

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/22/25 11:04	12/22/25 23:11	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/22/25 11:04	12/22/25 23:11	1

Surrogate	%Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134	12/22/25 11:04	12/22/25 23:11	1

Lab Sample ID: LCS 885-40309/2-A
Matrix: Solid
Analysis Batch: 40305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	42.7		mg/Kg		85	51 - 148

Surrogate	%Recovery	LCS LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	88		62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-40340/1-A
Matrix: Solid
Analysis Batch: 40371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40340

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		12/22/25 16:30	12/23/25 10:38	1

Lab Sample ID: LCS 885-40340/2-A
Matrix: Solid
Analysis Batch: 40371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.3		mg/Kg		97	90 - 110

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40001-1

GC VOA

Prep Batch: 40250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40001-1	WS25-01 AT 0-1.5 FT	Total/NA	Solid	5030C	
885-40001-2	BS25-03 AT 1.5 FT	Total/NA	Solid	5030C	
MB 885-40250/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-40250/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-40250/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-40001-1 MS	WS25-01 AT 0-1.5 FT	Total/NA	Solid	5030C	
885-40001-1 MSD	WS25-01 AT 0-1.5 FT	Total/NA	Solid	5030C	
885-40001-2 MS	BS25-03 AT 1.5 FT	Total/NA	Solid	5030C	
885-40001-2 MSD	BS25-03 AT 1.5 FT	Total/NA	Solid	5030C	

Analysis Batch: 40531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40001-1	WS25-01 AT 0-1.5 FT	Total/NA	Solid	8015M/D	40250
885-40001-2	BS25-03 AT 1.5 FT	Total/NA	Solid	8015M/D	40250
MB 885-40250/1-A	Method Blank	Total/NA	Solid	8015M/D	40250
LCS 885-40250/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40250
885-40001-1 MS	WS25-01 AT 0-1.5 FT	Total/NA	Solid	8015M/D	40250
885-40001-1 MSD	WS25-01 AT 0-1.5 FT	Total/NA	Solid	8015M/D	40250

Analysis Batch: 40532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40001-1	WS25-01 AT 0-1.5 FT	Total/NA	Solid	8021B	40250
885-40001-2	BS25-03 AT 1.5 FT	Total/NA	Solid	8021B	40250
MB 885-40250/1-A	Method Blank	Total/NA	Solid	8021B	40250
LCS 885-40250/3-A	Lab Control Sample	Total/NA	Solid	8021B	40250
885-40001-2 MS	BS25-03 AT 1.5 FT	Total/NA	Solid	8021B	40250
885-40001-2 MSD	BS25-03 AT 1.5 FT	Total/NA	Solid	8021B	40250

GC Semi VOA

Analysis Batch: 40305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40001-1	WS25-01 AT 0-1.5 FT	Total/NA	Solid	8015M/D	40309
885-40001-2	BS25-03 AT 1.5 FT	Total/NA	Solid	8015M/D	40309
MB 885-40309/1-A	Method Blank	Total/NA	Solid	8015M/D	40309
LCS 885-40309/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40309

Prep Batch: 40309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40001-1	WS25-01 AT 0-1.5 FT	Total/NA	Solid	SHAKE	
885-40001-2	BS25-03 AT 1.5 FT	Total/NA	Solid	SHAKE	
MB 885-40309/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40309/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 40340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40001-1	WS25-01 AT 0-1.5 FT	Total/NA	Solid	300_Prep	
885-40001-2	BS25-03 AT 1.5 FT	Total/NA	Solid	300_Prep	
MB 885-40340/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-40340/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40001-1

HPLC/IC

Analysis Batch: 40371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40001-1	WS25-01 AT 0-1.5 FT	Total/NA	Solid	300.0	40340
885-40001-2	BS25-03 AT 1.5 FT	Total/NA	Solid	300.0	40340
MB 885-40340/1-A	Method Blank	Total/NA	Solid	300.0	40340
LCS 885-40340/2-A	Lab Control Sample	Total/NA	Solid	300.0	40340

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40001-1

Client Sample ID: WS25-01 AT 0-1.5 FT

Lab Sample ID: 885-40001-1

Date Collected: 12/17/25 12:45

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40250	VP	EET ALB	12/19/25 16:29
Total/NA	Analysis	8015M/D		1	40531	VP	EET ALB	12/28/25 01:25
Total/NA	Prep	5030C			40250	VP	EET ALB	12/19/25 16:29
Total/NA	Analysis	8021B		1	40532	VP	EET ALB	12/28/25 01:25
Total/NA	Prep	SHAKE			40309	DH	EET ALB	12/22/25 11:05
Total/NA	Analysis	8015M/D		1	40305	EM	EET ALB	12/23/25 06:55
Total/NA	Prep	300_Prep			40340	MA	EET ALB	12/22/25 16:30
Total/NA	Analysis	300.0		10	40371	MA	EET ALB	12/23/25 12:46

Client Sample ID: BS25-03 AT 1.5 FT

Lab Sample ID: 885-40001-2

Date Collected: 12/17/25 13:40

Matrix: Solid

Date Received: 12/19/25 07:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40250	VP	EET ALB	12/19/25 16:29
Total/NA	Analysis	8015M/D		1	40531	VP	EET ALB	12/28/25 02:36
Total/NA	Prep	5030C			40250	VP	EET ALB	12/19/25 16:29
Total/NA	Analysis	8021B		1	40532	VP	EET ALB	12/28/25 02:36
Total/NA	Prep	SHAKE			40309	DH	EET ALB	12/22/25 11:05
Total/NA	Analysis	8015M/D		1	40305	EM	EET ALB	12/23/25 07:41
Total/NA	Prep	300_Prep			40340	MA	EET ALB	12/22/25 16:30
Total/NA	Analysis	300.0		10	40371	MA	EET ALB	12/23/25 13:28

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40001-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date																																				
New Mexico	State	NM9425	02-25-26																																				
<p>The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.</p> <table border="1"> <thead> <tr> <th>Analysis Method</th> <th>Prep Method</th> <th>Matrix</th> <th>Analyte</th> </tr> </thead> <tbody> <tr> <td>300.0</td> <td>300_Prep</td> <td>Solid</td> <td>Chloride</td> </tr> <tr> <td>8015M/D</td> <td>5030C</td> <td>Solid</td> <td>Gasoline Range Organics [C6 - C10]</td> </tr> <tr> <td>8015M/D</td> <td>SHAKE</td> <td>Solid</td> <td>Diesel Range Organics [C10-C28]</td> </tr> <tr> <td>8015M/D</td> <td>SHAKE</td> <td>Solid</td> <td>Motor Oil Range Organics [C28-C40]</td> </tr> <tr> <td>8021B</td> <td>5030C</td> <td>Solid</td> <td>Benzene</td> </tr> <tr> <td>8021B</td> <td>5030C</td> <td>Solid</td> <td>Ethylbenzene</td> </tr> <tr> <td>8021B</td> <td>5030C</td> <td>Solid</td> <td>Toluene</td> </tr> <tr> <td>8021B</td> <td>5030C</td> <td>Solid</td> <td>Xylenes, Total</td> </tr> </tbody> </table>				Analysis Method	Prep Method	Matrix	Analyte	300.0	300_Prep	Solid	Chloride	8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]	8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]	8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]	8021B	5030C	Solid	Benzene	8021B	5030C	Solid	Ethylbenzene	8021B	5030C	Solid	Toluene	8021B	5030C	Solid	Xylenes, Total
Analysis Method	Prep Method	Matrix	Analyte																																				
300.0	300_Prep	Solid	Chloride																																				
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]																																				
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]																																				
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]																																				
8021B	5030C	Solid	Benzene																																				
8021B	5030C	Solid	Ethylbenzene																																				
8021B	5030C	Solid	Toluene																																				
8021B	5030C	Solid	Xylenes, Total																																				
Oregon	NELAP	NM100001	02-25-26																																				

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Chain-of-Custody Record

Client: **Vertex (bill to Mack Energy, Matt Buckles)**

Mailing Address: **3101 Boyd Dr
Carlsbad, New Mexico 88220**

Phone #: **575.725.5001**
email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time:
48hr TAT

Project Name:
Red Deer CTB

Project #:
25A-05531

Project Manager:
Sally Carttar
SCarttar@vertexresource.com

Sampler: **Sharon Minnix**
On Ice: Yes No

of Coolers: **1**

Cooler Temp (including CF): **4.3 to 2 = 4.5**



HALL ENVIRONMENTAL ANALYSIS LABOR

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87106
Tel. 505-345-3975 Fax 505-345-4100



885-40001 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
12.17.25	1245	Soil	WS25-01 at 0-1.5ft	1, 4oz jar	ICE		X	X					X			
12.17.25	1340	Soil	BS25-03 at 1.5ft	1, 4oz jar	ICE		X	X					X			

Date: **12/18/25** Time: **835** Relinquished by: *[Signature]*

Date: **12/18/25** Time: **835** Received by: *[Signature]* Via: _____

Date: **12/18/25** Time: **1900** Relinquished by: *[Signature]*

Date: **12/18/25** Time: **7:35** Received by: *[Signature]* Via: _____

Remarks: Direct Bill to Mack Energy ATTN: Matt Buckles CC: Sally Carttar (Scarttar@vertexresource.com), Permian@vertexresource.com, and Sharon Minnix (Sminnix@vertexresource.com) for final report.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-40001-1

Login Number: 40001

List Number: 1

Creator: McQuiston, Steven

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 1/5/2026 3:32:41 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-40206-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
1/5/2026 3:32:41 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-40206-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	16
QC Association Summary	18
Lab Chronicle	21
Certification Summary	25
Chain of Custody	26
Receipt Checklists	27

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-40206-1

Job ID: 885-40206-1

Eurofins Albuquerque

Job Narrative 885-40206-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/23/2025 7:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.3°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-15 at 2ft

Lab Sample ID: 885-40206-1

Date Collected: 12/18/25 12:00

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/23/25 13:02	01/01/26 13:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 150			12/23/25 13:02	01/01/26 13:33	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/23/25 13:02	01/01/26 13:33	1
Ethylbenzene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 13:33	1
Toluene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 13:33	1
Xylenes, Total	ND		0.096	mg/Kg		12/23/25 13:02	01/01/26 13:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/23/25 13:02	01/01/26 13:33	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	91		9.7	mg/Kg		12/24/25 11:29	12/29/25 17:24	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/24/25 11:29	12/29/25 17:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			12/24/25 11:29	12/29/25 17:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		49	mg/Kg		12/29/25 14:04	12/29/25 19:24	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-16 at 2ft

Lab Sample ID: 885-40206-2

Date Collected: 12/18/25 12:05

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/23/25 13:02	01/01/26 13:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			12/23/25 13:02	01/01/26 13:57	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/23/25 13:02	01/01/26 13:57	1
Ethylbenzene	ND		0.049	mg/Kg		12/23/25 13:02	01/01/26 13:57	1
Toluene	ND		0.049	mg/Kg		12/23/25 13:02	01/01/26 13:57	1
Xylenes, Total	ND		0.098	mg/Kg		12/23/25 13:02	01/01/26 13:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/23/25 13:02	01/01/26 13:57	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		9.9	mg/Kg		12/24/25 11:29	12/29/25 17:47	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/24/25 11:29	12/29/25 17:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	122		62 - 134			12/24/25 11:29	12/29/25 17:47	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		51	mg/Kg		12/29/25 14:04	12/29/25 19:38	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-17 at 2ft

Lab Sample ID: 885-40206-3

Date Collected: 12/18/25 12:10

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/23/25 13:02	01/01/26 14:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/23/25 13:02	01/01/26 14:21	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/23/25 13:02	01/01/26 14:21	1
Ethylbenzene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 14:21	1
Toluene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 14:21	1
Xylenes, Total	ND		0.096	mg/Kg		12/23/25 13:02	01/01/26 14:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/23/25 13:02	01/01/26 14:21	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		9.6	mg/Kg		12/24/25 11:29	12/29/25 18:10	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/24/25 11:29	12/29/25 18:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	120		62 - 134			12/24/25 11:29	12/29/25 18:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		50	mg/Kg		12/29/25 14:04	12/29/25 19:51	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: WS25-07 at 0-3ft

Lab Sample ID: 885-40206-4

Date Collected: 12/18/25 12:20

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/23/25 13:02	01/01/26 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/23/25 13:02	01/01/26 14:44	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/23/25 13:02	01/01/26 14:44	1
Ethylbenzene	ND		0.050	mg/Kg		12/23/25 13:02	01/01/26 14:44	1
Toluene	ND		0.050	mg/Kg		12/23/25 13:02	01/01/26 14:44	1
Xylenes, Total	ND		0.10	mg/Kg		12/23/25 13:02	01/01/26 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/23/25 13:02	01/01/26 14:44	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		12/24/25 11:29	12/29/25 18:33	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/24/25 11:29	12/29/25 18:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	121		62 - 134			12/24/25 11:29	12/29/25 18:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		50	mg/Kg		12/29/25 14:04	12/29/25 20:05	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: WS25-05 at 0-2ft

Lab Sample ID: 885-40206-5

Date Collected: 12/18/25 12:25

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/23/25 13:02	01/01/26 15:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/23/25 13:02	01/01/26 15:08	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/23/25 13:02	01/01/26 15:08	1
Ethylbenzene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 15:08	1
Toluene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 15:08	1
Xylenes, Total	ND		0.097	mg/Kg		12/23/25 13:02	01/01/26 15:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/23/25 13:02	01/01/26 15:08	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		12/24/25 11:29	12/29/25 19:20	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/24/25 11:29	12/29/25 19:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	124		62 - 134			12/24/25 11:29	12/29/25 19:20	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		12/29/25 14:04	12/29/25 20:18	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: WS25-09 at 2-3ft

Lab Sample ID: 885-40206-6

Date Collected: 12/18/25 12:30

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/23/25 13:02	01/01/26 15:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			12/23/25 13:02	01/01/26 15:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/23/25 13:02	01/01/26 15:32	1
Ethylbenzene	ND		0.049	mg/Kg		12/23/25 13:02	01/01/26 15:32	1
Toluene	ND		0.049	mg/Kg		12/23/25 13:02	01/01/26 15:32	1
Xylenes, Total	ND		0.098	mg/Kg		12/23/25 13:02	01/01/26 15:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			12/23/25 13:02	01/01/26 15:32	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		10	mg/Kg		12/24/25 11:29	12/29/25 19:43	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/24/25 11:29	12/29/25 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	118		62 - 134			12/24/25 11:29	12/29/25 19:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		50	mg/Kg		12/29/25 14:04	12/29/25 20:32	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-31 at 3ft

Lab Sample ID: 885-40206-7

Date Collected: 12/18/25 12:35

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/23/25 13:02	01/01/26 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/23/25 13:02	01/01/26 15:55	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/23/25 13:02	01/01/26 15:55	1
Ethylbenzene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 15:55	1
Toluene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 15:55	1
Xylenes, Total	ND		0.097	mg/Kg		12/23/25 13:02	01/01/26 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/23/25 13:02	01/01/26 15:55	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/24/25 11:29	12/29/25 20:06	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/24/25 11:29	12/29/25 20:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	123		62 - 134			12/24/25 11:29	12/29/25 20:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		50	mg/Kg		12/29/25 14:04	12/29/25 21:13	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-19 at 3ft

Lab Sample ID: 885-40206-8

Date Collected: 12/18/25 12:40

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/23/25 13:02	01/01/26 16:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/23/25 13:02	01/01/26 16:43	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/23/25 13:02	01/01/26 16:43	1
Ethylbenzene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 16:43	1
Toluene	ND		0.048	mg/Kg		12/23/25 13:02	01/01/26 16:43	1
Xylenes, Total	ND		0.096	mg/Kg		12/23/25 13:02	01/01/26 16:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/23/25 13:02	01/01/26 16:43	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/24/25 11:29	12/29/25 20:29	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/24/25 11:29	12/29/25 20:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	121		62 - 134			12/24/25 11:29	12/29/25 20:29	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		50	mg/Kg		12/29/25 14:04	12/29/25 21:27	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-18 at 3ft

Lab Sample ID: 885-40206-9

Date Collected: 12/18/25 12:45

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/23/25 13:02	01/01/26 17:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/23/25 13:02	01/01/26 17:06	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/23/25 13:02	01/01/26 17:06	1
Ethylbenzene	ND		0.050	mg/Kg		12/23/25 13:02	01/01/26 17:06	1
Toluene	ND		0.050	mg/Kg		12/23/25 13:02	01/01/26 17:06	1
Xylenes, Total	ND		0.099	mg/Kg		12/23/25 13:02	01/01/26 17:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/23/25 13:02	01/01/26 17:06	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	30		9.7	mg/Kg		12/24/25 11:29	12/29/25 20:52	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/24/25 11:29	12/29/25 20:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	121		62 - 134			12/24/25 11:29	12/29/25 20:52	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		50	mg/Kg		12/29/25 14:04	12/29/25 21:40	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-28 at 3ft

Lab Sample ID: 885-40206-10

Date Collected: 12/18/25 12:50

Matrix: Solid

Date Received: 12/23/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/23/25 13:02	01/01/26 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/23/25 13:02	01/01/26 17:30	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/23/25 13:02	01/01/26 17:30	1
Ethylbenzene	ND		0.049	mg/Kg		12/23/25 13:02	01/01/26 17:30	1
Toluene	ND		0.049	mg/Kg		12/23/25 13:02	01/01/26 17:30	1
Xylenes, Total	ND		0.098	mg/Kg		12/23/25 13:02	01/01/26 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/23/25 13:02	01/01/26 17:30	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	94		9.9	mg/Kg		12/24/25 11:29	12/29/25 21:15	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/24/25 11:29	12/29/25 21:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	125		62 - 134			12/24/25 11:29	12/29/25 21:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		49	mg/Kg		12/29/25 14:04	12/29/25 21:54	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-40397/1-A
Matrix: Solid
Analysis Batch: 40741

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40397

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/23/25 13:01	01/01/26 10:00	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/23/25 13:01	01/01/26 10:00	1

Lab Sample ID: LCS 885-40397/2-A
Matrix: Solid
Analysis Batch: 40741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	22.2		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	205		15 - 150				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-40397/1-A
Matrix: Solid
Analysis Batch: 40742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40397

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/23/25 13:01	01/01/26 10:00	1
Ethylbenzene	ND		0.050	mg/Kg		12/23/25 13:01	01/01/26 10:00	1
Toluene	ND		0.050	mg/Kg		12/23/25 13:01	01/01/26 10:00	1
Xylenes, Total	ND		0.10	mg/Kg		12/23/25 13:01	01/01/26 10:00	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			12/23/25 13:01	01/01/26 10:00	1

Lab Sample ID: LCS 885-40397/3-A
Matrix: Solid
Analysis Batch: 40742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.911		mg/Kg		91	70 - 130
Ethylbenzene	1.00	0.949		mg/Kg		95	70 - 130
m,p-Xylene	2.00	2.03		mg/Kg		101	70 - 130
o-Xylene	1.00	0.963		mg/Kg		96	70 - 130
Toluene	1.00	1.01		mg/Kg		101	70 - 130
Xylenes, Total	3.00	2.99		mg/Kg		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	93		15 - 150				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-40457/1-A
 Matrix: Solid
 Analysis Batch: 40545

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 40547

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/24/25 11:29	12/29/25 15:05	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/24/25 11:29	12/29/25 15:05	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	90		62 - 134			12/24/25 11:29	12/29/25 15:05	1

Lab Sample ID: LCS 885-40457/2-A
 Matrix: Solid
 Analysis Batch: 40545

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 40547

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	49.7		mg/Kg		99	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	97		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-40582/1-A
 Matrix: Solid
 Analysis Batch: 40592

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 40582

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		12/29/25 14:04	12/29/25 15:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits					
Chloride	92		90 - 110					

Lab Sample ID: LCS 885-40582/2-A
 Matrix: Solid
 Analysis Batch: 40592

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 40582

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.8	45.9		mg/Kg		92	90 - 110

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

GC VOA

Prep Batch: 40397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-1	BS25-15 at 2ft	Total/NA	Solid	5030C	
885-40206-2	BS25-16 at 2ft	Total/NA	Solid	5030C	
885-40206-3	BS25-17 at 2ft	Total/NA	Solid	5030C	
885-40206-4	WS25-07 at 0-3ft	Total/NA	Solid	5030C	
885-40206-5	WS25-05 at 0-2ft	Total/NA	Solid	5030C	
885-40206-6	WS25-09 at 2-3ft	Total/NA	Solid	5030C	
885-40206-7	BS25-31 at 3ft	Total/NA	Solid	5030C	
885-40206-8	BS25-19 at 3ft	Total/NA	Solid	5030C	
885-40206-9	BS25-18 at 3ft	Total/NA	Solid	5030C	
885-40206-10	BS25-28 at 3ft	Total/NA	Solid	5030C	
MB 885-40397/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-40397/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-40397/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 40741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-1	BS25-15 at 2ft	Total/NA	Solid	8015M/D	40397
885-40206-2	BS25-16 at 2ft	Total/NA	Solid	8015M/D	40397
885-40206-3	BS25-17 at 2ft	Total/NA	Solid	8015M/D	40397
885-40206-4	WS25-07 at 0-3ft	Total/NA	Solid	8015M/D	40397
885-40206-5	WS25-05 at 0-2ft	Total/NA	Solid	8015M/D	40397
885-40206-6	WS25-09 at 2-3ft	Total/NA	Solid	8015M/D	40397
885-40206-7	BS25-31 at 3ft	Total/NA	Solid	8015M/D	40397
885-40206-8	BS25-19 at 3ft	Total/NA	Solid	8015M/D	40397
885-40206-9	BS25-18 at 3ft	Total/NA	Solid	8015M/D	40397
885-40206-10	BS25-28 at 3ft	Total/NA	Solid	8015M/D	40397
MB 885-40397/1-A	Method Blank	Total/NA	Solid	8015M/D	40397
LCS 885-40397/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40397

Analysis Batch: 40742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-1	BS25-15 at 2ft	Total/NA	Solid	8021B	40397
885-40206-2	BS25-16 at 2ft	Total/NA	Solid	8021B	40397
885-40206-3	BS25-17 at 2ft	Total/NA	Solid	8021B	40397
885-40206-4	WS25-07 at 0-3ft	Total/NA	Solid	8021B	40397
885-40206-5	WS25-05 at 0-2ft	Total/NA	Solid	8021B	40397
885-40206-6	WS25-09 at 2-3ft	Total/NA	Solid	8021B	40397
885-40206-7	BS25-31 at 3ft	Total/NA	Solid	8021B	40397
885-40206-8	BS25-19 at 3ft	Total/NA	Solid	8021B	40397
885-40206-9	BS25-18 at 3ft	Total/NA	Solid	8021B	40397
885-40206-10	BS25-28 at 3ft	Total/NA	Solid	8021B	40397
MB 885-40397/1-A	Method Blank	Total/NA	Solid	8021B	40397
LCS 885-40397/3-A	Lab Control Sample	Total/NA	Solid	8021B	40397

GC Semi VOA

Prep Batch: 40457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-1	BS25-15 at 2ft	Total/NA	Solid	SHAKE	
885-40206-2	BS25-16 at 2ft	Total/NA	Solid	SHAKE	
885-40206-3	BS25-17 at 2ft	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

GC Semi VOA (Continued)

Prep Batch: 40457 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-4	WS25-07 at 0-3ft	Total/NA	Solid	SHAKE	
885-40206-5	WS25-05 at 0-2ft	Total/NA	Solid	SHAKE	
885-40206-6	WS25-09 at 2-3ft	Total/NA	Solid	SHAKE	
885-40206-7	BS25-31 at 3ft	Total/NA	Solid	SHAKE	
885-40206-8	BS25-19 at 3ft	Total/NA	Solid	SHAKE	
885-40206-9	BS25-18 at 3ft	Total/NA	Solid	SHAKE	
885-40206-10	BS25-28 at 3ft	Total/NA	Solid	SHAKE	
MB 885-40457/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40457/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 40545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-1	BS25-15 at 2ft	Total/NA	Solid	8015M/D	40457
885-40206-2	BS25-16 at 2ft	Total/NA	Solid	8015M/D	40457
885-40206-3	BS25-17 at 2ft	Total/NA	Solid	8015M/D	40457
885-40206-4	WS25-07 at 0-3ft	Total/NA	Solid	8015M/D	40457
885-40206-5	WS25-05 at 0-2ft	Total/NA	Solid	8015M/D	40457
885-40206-6	WS25-09 at 2-3ft	Total/NA	Solid	8015M/D	40457
885-40206-7	BS25-31 at 3ft	Total/NA	Solid	8015M/D	40457
885-40206-8	BS25-19 at 3ft	Total/NA	Solid	8015M/D	40457
885-40206-9	BS25-18 at 3ft	Total/NA	Solid	8015M/D	40457
885-40206-10	BS25-28 at 3ft	Total/NA	Solid	8015M/D	40457
MB 885-40457/1-A	Method Blank	Total/NA	Solid	8015M/D	40457
LCS 885-40457/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40457

HPLC/IC

Prep Batch: 40582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-1	BS25-15 at 2ft	Total/NA	Solid	300_Prep	
885-40206-2	BS25-16 at 2ft	Total/NA	Solid	300_Prep	
885-40206-3	BS25-17 at 2ft	Total/NA	Solid	300_Prep	
885-40206-4	WS25-07 at 0-3ft	Total/NA	Solid	300_Prep	
885-40206-5	WS25-05 at 0-2ft	Total/NA	Solid	300_Prep	
885-40206-6	WS25-09 at 2-3ft	Total/NA	Solid	300_Prep	
885-40206-7	BS25-31 at 3ft	Total/NA	Solid	300_Prep	
885-40206-8	BS25-19 at 3ft	Total/NA	Solid	300_Prep	
885-40206-9	BS25-18 at 3ft	Total/NA	Solid	300_Prep	
885-40206-10	BS25-28 at 3ft	Total/NA	Solid	300_Prep	
MB 885-40582/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-40582/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 40592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-1	BS25-15 at 2ft	Total/NA	Solid	300.0	40582
885-40206-2	BS25-16 at 2ft	Total/NA	Solid	300.0	40582
885-40206-3	BS25-17 at 2ft	Total/NA	Solid	300.0	40582
885-40206-4	WS25-07 at 0-3ft	Total/NA	Solid	300.0	40582
885-40206-5	WS25-05 at 0-2ft	Total/NA	Solid	300.0	40582
885-40206-6	WS25-09 at 2-3ft	Total/NA	Solid	300.0	40582
885-40206-7	BS25-31 at 3ft	Total/NA	Solid	300.0	40582

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

HPLC/IC (Continued)

Analysis Batch: 40592 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40206-8	BS25-19 at 3ft	Total/NA	Solid	300.0	40582
885-40206-9	BS25-18 at 3ft	Total/NA	Solid	300.0	40582
885-40206-10	BS25-28 at 3ft	Total/NA	Solid	300.0	40582
MB 885-40582/1-A	Method Blank	Total/NA	Solid	300.0	40582
LCS 885-40582/2-A	Lab Control Sample	Total/NA	Solid	300.0	40582

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-15 at 2ft

Lab Sample ID: 885-40206-1

Date Collected: 12/18/25 12:00

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 13:33
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 13:33
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 17:24
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 19:24

Client Sample ID: BS25-16 at 2ft

Lab Sample ID: 885-40206-2

Date Collected: 12/18/25 12:05

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 13:57
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 13:57
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 17:47
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 19:38

Client Sample ID: BS25-17 at 2ft

Lab Sample ID: 885-40206-3

Date Collected: 12/18/25 12:10

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 14:21
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 14:21
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 18:10
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 19:51

Client Sample ID: WS25-07 at 0-3ft

Lab Sample ID: 885-40206-4

Date Collected: 12/18/25 12:20

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 14:44

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: WS25-07 at 0-3ft

Lab Sample ID: 885-40206-4

Date Collected: 12/18/25 12:20

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 14:44
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 18:33
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 20:05

Client Sample ID: WS25-05 at 0-2ft

Lab Sample ID: 885-40206-5

Date Collected: 12/18/25 12:25

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 15:08
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 15:08
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 19:20
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 20:18

Client Sample ID: WS25-09 at 2-3ft

Lab Sample ID: 885-40206-6

Date Collected: 12/18/25 12:30

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 15:32
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 15:32
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 19:43
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 20:32

Client Sample ID: BS25-31 at 3ft

Lab Sample ID: 885-40206-7

Date Collected: 12/18/25 12:35

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 15:55
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 15:55

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-31 at 3ft

Lab Sample ID: 885-40206-7

Date Collected: 12/18/25 12:35

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 20:06
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 21:13

Client Sample ID: BS25-19 at 3ft

Lab Sample ID: 885-40206-8

Date Collected: 12/18/25 12:40

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 16:43
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 16:43
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 20:29
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 21:27

Client Sample ID: BS25-18 at 3ft

Lab Sample ID: 885-40206-9

Date Collected: 12/18/25 12:45

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 17:06
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 17:06
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 20:52
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 21:40

Client Sample ID: BS25-28 at 3ft

Lab Sample ID: 885-40206-10

Date Collected: 12/18/25 12:50

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8015M/D		1	40741	VP	EET ALB	01/01/26 17:30
Total/NA	Prep	5030C			40397	VP	EET ALB	12/23/25 13:02
Total/NA	Analysis	8021B		1	40742	VP	EET ALB	01/01/26 17:30
Total/NA	Prep	SHAKE			40457	JM	EET ALB	12/24/25 11:29
Total/NA	Analysis	8015M/D		1	40545	DR	EET ALB	12/29/25 21:15

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40206-1

Client Sample ID: BS25-28 at 3ft

Lab Sample ID: 885-40206-10

Date Collected: 12/18/25 12:50

Matrix: Solid

Date Received: 12/23/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			40582	EH	EET ALB	12/29/25 14:04
Total/NA	Analysis	300.0		10	40592	KB	EET ALB	12/29/25 21:54

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40206-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client: Vertex (bill to Mack Energy, Matt Buckles)

Mailing Address: 3101 Boyd Dr
Carlsbad, New Mexico 88220

Phone #: 575.725.5001

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____

EDD (Type) _____

Standard TAT & Rush 5 Day
Project Name:
Red Deer CTB



HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87111
Tel. 505-345-3975 Fax 505-345-4107



885-40206 COC

Project #: 25A-05531

Project Manager: Sally Carttar
SCarttar@vertexresource.com

Sampler: Sharon Minnix
On Ice: Yes No

of Coolers: 108

Cooler Temp (including CF): 0.1 x 0.2 x 0.3

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	Analytes																	
							BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl ⁻ , Br ⁻ , NO ₃ ⁻ , NO ₂ ⁻ , PO ₄ ⁻ , SO ₄ ⁻	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)								
12.18.25	12:00	Soil	BS25-15 at 2ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:05	Soil	BS25-16 at 2ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:10	Soil	BS25-17 at 2ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:20	Soil	WS25-07 at 0-3ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:25	Soil	WS25-05 at 0-2ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:30	Soil	WS25-09 at 2-3ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:35	Soil	BS25-31 at 3ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:40	Soil	BS25-19 at 3ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:45	Soil	BS25-18 at 3ft	1, 4oz jar	ICE		X	X								X								
12.18.25	12:50	Soil	BS25-28 at 3ft	1, 4oz jar	ICE		X	X								X								

Date: 12/22/25 **Time:** 1100 **Relinquished by:** *[Signature]*

Date: 12/23/25 **Time:** 7:40 **Received by:** *[Signature]* **Via:** carrier

Remarks: Direct Bill to Mack Energy ATTN: Matt Buckles CC: Sally Carttar (Scarttar@vertexresource.com), Permian@vertexresource.com, and Sharon Minnix (Sminnix@vertexresource.com) for final report.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-40206-1

Login Number: 40206

List Source: Eurofins Albuquerque

List Number: 1

Creator: Dominguez, Desiree

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 1/13/2026 1:58:44 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-40442-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
1/13/2026 1:58:44 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-40442-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	46
QC Association Summary	54
Lab Chronicle	62
Certification Summary	75
Chain of Custody	76
Receipt Checklists	80

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-40442-1

Job ID: 885-40442-1

Eurofins Albuquerque

Job Narrative 885-40442-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/30/2025 7:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

Method 8015D_DRO: Surrogate recovery for the following sample was outside the upper control limit: BS25-24 @ 3' (885-40442-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-40836 recovered above the upper control limit for Diesel Range Organics [C10-C28]. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: BS25-05 @ 1.5' (885-40442-1), BS25-06 @ 1.5' (885-40442-2), BS25-14 @ 2' (885-40442-3), BS25-20 @ 3' (885-40442-4), BS25-21 @ 3' (885-40442-5), BS25-22 @ 3' (885-40442-6), BS25-23 @ 3' (885-40442-7), BS25-24 @ 3' (885-40442-8), BS25-26 @ 3' (885-40442-10), BS25-27 @ 3' (885-40442-11), BS25-29 @ 3' (885-40442-12), (LCS 885-40722/2-A) and (MB 885-40722/1-A).

Method 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-40836 recovered above the upper control limit for Diesel Range Organics [C10-C28]. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: BS25-05 @ 1.5' (885-40442-1), BS25-06 @ 1.5' (885-40442-2), BS25-14 @ 2' (885-40442-3), BS25-20 @ 3' (885-40442-4), BS25-21 @ 3' (885-40442-5), BS25-22 @ 3' (885-40442-6), BS25-23 @ 3' (885-40442-7), BS25-24 @ 3' (885-40442-8), BS25-25 @ 3' (885-40442-9), BS25-26 @ 3' (885-40442-10), BS25-27 @ 3' (885-40442-11), BS25-29 @ 3' (885-40442-12), BS25-30 @ 3' (885-40442-13), BS25-32 @ 0.5' (885-40442-14), BS25-54 @ 0.5' (885-40442-40), (CCV 885-40836/24), (CCV 885-40836/35), (CCV 885-40836/54), (LCS 885-40722/2-A) and (MB 885-40722/1-A).

Method 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-40836 recovered above the upper control limit for Diesel Range Organics [C10-C28]. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: BS25-05 @ 1.5' (885-40442-1), BS25-06 @ 1.5' (885-40442-2), BS25-14 @ 2' (885-40442-3), BS25-20 @ 3' (885-40442-4), BS25-21 @ 3' (885-40442-5), BS25-22 @ 3' (885-40442-6), BS25-23 @ 3' (885-40442-7), BS25-24 @ 3' (885-40442-8), BS25-26 @ 3' (885-40442-10), BS25-27 @ 3' (885-40442-11), BS25-29 @ 3' (885-40442-12) and BS25-36 @ 0.5' (885-40442-18).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-05 @ 1.5'

Lab Sample ID: 885-40442-1

Date Collected: 12/22/25 09:00

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 13:01	01/03/26 02:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			12/30/25 13:01	01/03/26 02:57	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 02:57	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 02:57	1
Toluene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 02:57	1
Xylenes, Total	ND		0.095	mg/Kg		12/30/25 13:01	01/03/26 02:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			12/30/25 13:01	01/03/26 02:57	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		12/31/25 15:08	01/06/26 00:16	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/31/25 15:08	01/06/26 00:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			12/31/25 15:08	01/06/26 00:16	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		50	mg/Kg		12/30/25 14:31	12/30/25 21:35	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-06 @ 1.5'

Lab Sample ID: 885-40442-2

Date Collected: 12/22/25 09:15

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 04:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			12/30/25 13:01	01/03/26 04:02	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 04:02	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 04:02	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 04:02	1
Xylenes, Total	ND		0.097	mg/Kg		12/30/25 13:01	01/03/26 04:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 04:02	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		12/31/25 15:08	01/06/26 00:39	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:08	01/06/26 00:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			12/31/25 15:08	01/06/26 00:39	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		50	mg/Kg		12/30/25 14:31	12/30/25 22:06	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-14 @ 2'

Lab Sample ID: 885-40442-3

Date Collected: 12/22/25 09:30

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/30/25 13:01	01/03/26 05:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/30/25 13:01	01/03/26 05:07	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 13:01	01/03/26 05:07	1
Ethylbenzene	ND		0.049	mg/Kg		12/30/25 13:01	01/03/26 05:07	1
Toluene	ND		0.049	mg/Kg		12/30/25 13:01	01/03/26 05:07	1
Xylenes, Total	ND		0.098	mg/Kg		12/30/25 13:01	01/03/26 05:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			12/30/25 13:01	01/03/26 05:07	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		12/31/25 15:08	01/06/26 01:03	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:08	01/06/26 01:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			12/31/25 15:08	01/06/26 01:03	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		50	mg/Kg		12/30/25 14:31	12/30/25 22:37	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-20 @ 3'

Lab Sample ID: 885-40442-4

Date Collected: 12/22/25 09:45

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 05:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			12/30/25 13:01	01/03/26 05:28	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 05:28	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 05:28	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 05:28	1
Xylenes, Total	ND		0.097	mg/Kg		12/30/25 13:01	01/03/26 05:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 05:28	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		12/31/25 15:08	01/06/26 01:26	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:08	01/06/26 01:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			12/31/25 15:08	01/06/26 01:26	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		50	mg/Kg		12/30/25 14:31	12/30/25 22:47	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-21 @ 3'

Lab Sample ID: 885-40442-5

Date Collected: 12/22/25 09:55

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 05:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/30/25 13:01	01/03/26 05:50	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 05:50	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 05:50	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 05:50	1
Xylenes, Total	ND		0.097	mg/Kg		12/30/25 13:01	01/03/26 05:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			12/30/25 13:01	01/03/26 05:50	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		12/31/25 15:08	01/06/26 01:49	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:08	01/06/26 01:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			12/31/25 15:08	01/06/26 01:49	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		50	mg/Kg		12/30/25 14:31	12/30/25 23:18	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-22 @ 3'

Lab Sample ID: 885-40442-6

Date Collected: 12/22/25 10:15

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		12/30/25 13:01	01/03/26 06:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			12/30/25 13:01	01/03/26 06:11	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		12/30/25 13:01	01/03/26 06:11	1
Ethylbenzene	ND		0.046	mg/Kg		12/30/25 13:01	01/03/26 06:11	1
Toluene	ND		0.046	mg/Kg		12/30/25 13:01	01/03/26 06:11	1
Xylenes, Total	ND		0.091	mg/Kg		12/30/25 13:01	01/03/26 06:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			12/30/25 13:01	01/03/26 06:11	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		12/31/25 15:08	01/06/26 02:12	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/31/25 15:08	01/06/26 02:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			12/31/25 15:08	01/06/26 02:12	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		50	mg/Kg		12/30/25 14:31	12/30/25 23:28	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-23 @ 3'

Lab Sample ID: 885-40442-7

Date Collected: 12/22/25 10:30

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		12/30/25 13:01	01/03/26 06:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 13:01	01/03/26 06:33	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		12/30/25 13:01	01/03/26 06:33	1
Ethylbenzene	ND		0.046	mg/Kg		12/30/25 13:01	01/03/26 06:33	1
Toluene	ND		0.046	mg/Kg		12/30/25 13:01	01/03/26 06:33	1
Xylenes, Total	ND		0.092	mg/Kg		12/30/25 13:01	01/03/26 06:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			12/30/25 13:01	01/03/26 06:33	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		12/31/25 15:08	01/06/26 02:35	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:08	01/06/26 02:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			12/31/25 15:08	01/06/26 02:35	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		50	mg/Kg		12/30/25 14:31	12/30/25 23:39	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-24 @ 3'

Lab Sample ID: 885-40442-8

Date Collected: 12/22/25 10:45

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		12/30/25 13:01	01/03/26 06:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			12/30/25 13:01	01/03/26 06:55	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		12/30/25 13:01	01/03/26 06:55	1
Ethylbenzene	ND		0.046	mg/Kg		12/30/25 13:01	01/03/26 06:55	1
Toluene	ND		0.046	mg/Kg		12/30/25 13:01	01/03/26 06:55	1
Xylenes, Total	ND		0.092	mg/Kg		12/30/25 13:01	01/03/26 06:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 06:55	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		12/31/25 15:08	01/06/26 03:21	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:08	01/06/26 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	169	S1+	62 - 134			12/31/25 15:08	01/06/26 03:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		51	mg/Kg		12/30/25 14:31	12/30/25 23:49	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-25 @ 3'

Lab Sample ID: 885-40442-9

Date Collected: 12/22/25 11:00

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/30/25 13:01	01/03/26 07:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			12/30/25 13:01	01/03/26 07:17	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 13:01	01/03/26 07:17	1
Ethylbenzene	ND		0.049	mg/Kg		12/30/25 13:01	01/03/26 07:17	1
Toluene	ND		0.049	mg/Kg		12/30/25 13:01	01/03/26 07:17	1
Xylenes, Total	ND		0.099	mg/Kg		12/30/25 13:01	01/03/26 07:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 07:17	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	41		9.6	mg/Kg		12/31/25 15:08	01/06/26 21:28	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:08	01/06/26 21:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			12/31/25 15:08	01/06/26 21:28	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60		50	mg/Kg		12/30/25 14:31	12/31/25 00:00	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-26 @ 3'

Lab Sample ID: 885-40442-10

Date Collected: 12/22/25 11:15

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 07:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			12/30/25 13:01	01/03/26 07:38	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 07:38	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 07:38	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 07:38	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 13:01	01/03/26 07:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 07:38	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		12/31/25 15:08	01/06/26 04:07	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:08	01/06/26 04:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			12/31/25 15:08	01/06/26 04:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		12/30/25 14:31	12/31/25 00:10	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-27 @ 3'

Lab Sample ID: 885-40442-11

Date Collected: 12/22/25 11:30

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/30/25 13:01	01/03/26 08:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 13:01	01/03/26 08:21	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 13:01	01/03/26 08:21	1
Ethylbenzene	ND		0.050	mg/Kg		12/30/25 13:01	01/03/26 08:21	1
Toluene	ND		0.050	mg/Kg		12/30/25 13:01	01/03/26 08:21	1
Xylenes, Total	ND		0.099	mg/Kg		12/30/25 13:01	01/03/26 08:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			12/30/25 13:01	01/03/26 08:21	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		12/31/25 15:08	01/06/26 04:30	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:08	01/06/26 04:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	77		62 - 134			12/31/25 15:08	01/06/26 04:30	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		49	mg/Kg		12/30/25 14:31	12/31/25 00:20	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-29 @ 3'

Lab Sample ID: 885-40442-12

Date Collected: 12/22/25 11:45

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 13:01	01/03/26 08:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			12/30/25 13:01	01/03/26 08:43	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 08:43	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 08:43	1
Toluene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 08:43	1
Xylenes, Total	ND		0.094	mg/Kg		12/30/25 13:01	01/03/26 08:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			12/30/25 13:01	01/03/26 08:43	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		12/31/25 15:08	01/06/26 04:53	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:08	01/06/26 04:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			12/31/25 15:08	01/06/26 04:53	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		50	mg/Kg		12/30/25 14:31	12/31/25 00:31	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-30 @ 3'

Lab Sample ID: 885-40442-13

Date Collected: 12/22/25 12:00

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 13:01	01/03/26 09:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/30/25 13:01	01/03/26 09:05	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		12/30/25 13:01	01/03/26 09:05	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 09:05	1
Toluene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 09:05	1
Xylenes, Total	ND		0.093	mg/Kg		12/30/25 13:01	01/03/26 09:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			12/30/25 13:01	01/03/26 09:05	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		9.2	mg/Kg		12/31/25 15:08	01/06/26 21:51	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/31/25 15:08	01/06/26 21:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			12/31/25 15:08	01/06/26 21:51	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		50	mg/Kg		12/30/25 14:31	12/31/25 00:41	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-32 @ 0.5'

Lab Sample ID: 885-40442-14

Date Collected: 12/22/25 12:16

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 13:01	01/03/26 09:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			12/30/25 13:01	01/03/26 09:26	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 09:26	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 09:26	1
Toluene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 09:26	1
Xylenes, Total	ND		0.094	mg/Kg		12/30/25 13:01	01/03/26 09:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 09:26	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	500		9.6	mg/Kg		12/31/25 15:08	01/06/26 22:14	1
Motor Oil Range Organics [C28-C40]	190		48	mg/Kg		12/31/25 15:08	01/06/26 22:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			12/31/25 15:08	01/06/26 22:14	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		50	mg/Kg		12/30/25 14:31	12/31/25 00:51	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-33 @ 0.5'

Lab Sample ID: 885-40442-15

Date Collected: 12/22/25 12:29

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 09:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			12/30/25 13:01	01/03/26 09:48	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 09:48	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 09:48	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 09:48	1
Xylenes, Total	ND		0.097	mg/Kg		12/30/25 13:01	01/03/26 09:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 09:48	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24		9.4	mg/Kg		12/31/25 15:08	01/06/26 22:37	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:08	01/06/26 22:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			12/31/25 15:08	01/06/26 22:37	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		49	mg/Kg		12/30/25 14:31	12/31/25 01:22	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-34 @ 0.5'

Lab Sample ID: 885-40442-16

Date Collected: 12/22/25 12:37

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 10:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			12/30/25 13:01	01/03/26 10:10	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 10:10	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 10:10	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 10:10	1
Xylenes, Total	ND		0.097	mg/Kg		12/30/25 13:01	01/03/26 10:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			12/30/25 13:01	01/03/26 10:10	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	210		9.7	mg/Kg		12/31/25 15:08	01/06/26 23:00	1
Motor Oil Range Organics [C28-C40]	82		49	mg/Kg		12/31/25 15:08	01/06/26 23:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			12/31/25 15:08	01/06/26 23:00	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		50	mg/Kg		12/30/25 14:31	12/31/25 01:33	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-35 @ 0.5'

Lab Sample ID: 885-40442-17

Date Collected: 12/22/25 12:56

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/30/25 13:01	01/03/26 10:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			12/30/25 13:01	01/03/26 10:31	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 13:01	01/03/26 10:31	1
Ethylbenzene	ND		0.050	mg/Kg		12/30/25 13:01	01/03/26 10:31	1
Toluene	ND		0.050	mg/Kg		12/30/25 13:01	01/03/26 10:31	1
Xylenes, Total	ND		0.099	mg/Kg		12/30/25 13:01	01/03/26 10:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			12/30/25 13:01	01/03/26 10:31	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	19		9.7	mg/Kg		12/31/25 15:08	01/09/26 15:58	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:08	01/09/26 15:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	117		62 - 134			12/31/25 15:08	01/09/26 15:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94		50	mg/Kg		12/30/25 14:31	12/31/25 01:43	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-36 @ 0.5'

Lab Sample ID: 885-40442-18

Date Collected: 12/22/25 13:00

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 10:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			12/30/25 13:01	01/03/26 10:53	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 10:53	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 10:53	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 10:53	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 13:01	01/03/26 10:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			12/30/25 13:01	01/03/26 10:53	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		12/31/25 15:08	01/06/26 08:20	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:08	01/06/26 08:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			12/31/25 15:08	01/06/26 08:20	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		12/30/25 14:31	12/31/25 01:53	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-37 @ 0.5'

Lab Sample ID: 885-40442-19

Date Collected: 12/22/25 13:13

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 13:01	01/03/26 11:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			12/30/25 13:01	01/03/26 11:15	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 11:15	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 11:15	1
Toluene	ND		0.047	mg/Kg		12/30/25 13:01	01/03/26 11:15	1
Xylenes, Total	ND		0.095	mg/Kg		12/30/25 13:01	01/03/26 11:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			12/30/25 13:01	01/03/26 11:15	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	45		9.6	mg/Kg		12/31/25 15:08	01/07/26 01:19	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:08	01/07/26 01:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			12/31/25 15:08	01/07/26 01:19	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		50	mg/Kg		12/30/25 14:31	12/31/25 02:04	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-38 @ 0.5'

Lab Sample ID: 885-40442-20

Date Collected: 12/22/25 13:30

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 13:01	01/03/26 11:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			12/30/25 13:01	01/03/26 11:36	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 13:01	01/03/26 11:36	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 11:36	1
Toluene	ND		0.048	mg/Kg		12/30/25 13:01	01/03/26 11:36	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 13:01	01/03/26 11:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			12/30/25 13:01	01/03/26 11:36	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	26		9.8	mg/Kg		12/31/25 15:44	01/02/26 14:23	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:44	01/02/26 14:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			12/31/25 15:44	01/02/26 14:23	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	410		51	mg/Kg		12/30/25 14:31	12/31/25 02:14	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: WS25-02 @ 0-1.5'

Lab Sample ID: 885-40442-21

Date Collected: 12/22/25 13:47

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/30/25 15:36	01/04/26 14:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 14:35	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 15:36	01/04/26 14:35	1
Ethylbenzene	ND		0.050	mg/Kg		12/30/25 15:36	01/04/26 14:35	1
Toluene	ND		0.050	mg/Kg		12/30/25 15:36	01/04/26 14:35	1
Xylenes, Total	ND		0.099	mg/Kg		12/30/25 15:36	01/04/26 14:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/30/25 15:36	01/04/26 14:35	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		12/31/25 15:44	01/02/26 14:34	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:44	01/02/26 14:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			12/31/25 15:44	01/02/26 14:34	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		50	mg/Kg		12/31/25 11:18	12/31/25 13:42	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: WS25-03 @ 0-2'

Lab Sample ID: 885-40442-22

Date Collected: 12/22/25 13:58

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/04/26 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 15:46	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 15:46	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 15:46	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 15:46	1
Xylenes, Total	ND		0.095	mg/Kg		12/30/25 15:36	01/04/26 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/30/25 15:36	01/04/26 15:46	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	37		9.9	mg/Kg		12/31/25 15:44	01/02/26 14:46	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/31/25 15:44	01/02/26 14:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			12/31/25 15:44	01/02/26 14:46	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		50	mg/Kg		12/31/25 11:18	12/31/25 14:23	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: WS25-08 @ 0-3'

Lab Sample ID: 885-40442-23

Date Collected: 12/22/25 14:14

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		12/30/25 15:36	01/04/26 16:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 16:58	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		12/30/25 15:36	01/04/26 16:58	1
Ethylbenzene	ND		0.046	mg/Kg		12/30/25 15:36	01/04/26 16:58	1
Toluene	ND		0.046	mg/Kg		12/30/25 15:36	01/04/26 16:58	1
Xylenes, Total	ND		0.092	mg/Kg		12/30/25 15:36	01/04/26 16:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 16:58	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		12/31/25 15:44	01/02/26 14:58	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/31/25 15:44	01/02/26 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			12/31/25 15:44	01/02/26 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		12/31/25 11:18	12/31/25 15:04	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: WS25-10 @ 0-3'

Lab Sample ID: 885-40442-24

Date Collected: 12/22/25 14:27

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/04/26 17:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 17:21	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 17:21	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 17:21	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 17:21	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 15:36	01/04/26 17:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 17:21	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		12/31/25 15:44	01/02/26 15:10	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:44	01/02/26 15:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	66		62 - 134			12/31/25 15:44	01/02/26 15:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		50	mg/Kg		12/31/25 11:18	12/31/25 15:18	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-39 @ 0.5'

Lab Sample ID: 885-40442-25

Date Collected: 12/23/25 09:30

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/30/25 15:36	01/04/26 17:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/30/25 15:36	01/04/26 17:45	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 17:45	1
Ethylbenzene	ND		0.049	mg/Kg		12/30/25 15:36	01/04/26 17:45	1
Toluene	ND		0.049	mg/Kg		12/30/25 15:36	01/04/26 17:45	1
Xylenes, Total	ND		0.098	mg/Kg		12/30/25 15:36	01/04/26 17:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 17:45	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	38		9.7	mg/Kg		12/31/25 15:44	01/02/26 15:21	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:44	01/02/26 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			12/31/25 15:44	01/02/26 15:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		50	mg/Kg		12/31/25 11:18	12/31/25 15:59	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-40 @ 0.5'

Lab Sample ID: 885-40442-26

Date Collected: 12/23/25 09:45

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 15:36	01/04/26 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/30/25 15:36	01/04/26 18:09	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 18:09	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 18:09	1
Toluene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 18:09	1
Xylenes, Total	ND		0.095	mg/Kg		12/30/25 15:36	01/04/26 18:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 18:09	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	100		9.8	mg/Kg		12/31/25 15:44	01/02/26 15:33	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:44	01/02/26 15:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			12/31/25 15:44	01/02/26 15:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		50	mg/Kg		12/31/25 11:18	12/31/25 16:12	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-41 @ 0.5'

Lab Sample ID: 885-40442-27

Date Collected: 12/23/25 10:00

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/04/26 18:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 18:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 18:32	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 18:32	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 18:32	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 15:36	01/04/26 18:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 18:32	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	10		9.5	mg/Kg		12/31/25 15:44	01/02/26 15:45	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:44	01/02/26 15:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	77		62 - 134			12/31/25 15:44	01/02/26 15:45	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	310		50	mg/Kg		12/31/25 11:18	12/31/25 16:26	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-42 @ 0.5'

Lab Sample ID: 885-40442-28

Date Collected: 12/23/25 10:15

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 15:36	01/04/26 18:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 18:56	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 18:56	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 18:56	1
Toluene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 18:56	1
Xylenes, Total	ND		0.094	mg/Kg		12/30/25 15:36	01/04/26 18:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 18:56	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	110		9.3	mg/Kg		12/31/25 15:44	01/02/26 15:56	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		12/31/25 15:44	01/02/26 15:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	63		62 - 134			12/31/25 15:44	01/02/26 15:56	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		50	mg/Kg		12/31/25 11:18	12/31/25 16:40	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-43 @ 0.5'

Lab Sample ID: 885-40442-29

Date Collected: 12/23/25 10:26

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/04/26 19:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 19:20	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 19:20	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 19:20	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 19:20	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 15:36	01/04/26 19:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 19:20	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	9.4		9.4	mg/Kg		12/31/25 15:44	01/02/26 16:08	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:44	01/02/26 16:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	67		62 - 134			12/31/25 15:44	01/02/26 16:08	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	450		51	mg/Kg		12/31/25 11:18	12/31/25 16:53	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-44 @ 0.5'

Lab Sample ID: 885-40442-30

Date Collected: 12/23/25 10:34

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		12/30/25 15:36	01/04/26 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 19:43	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		12/30/25 15:36	01/04/26 19:43	1
Ethylbenzene	ND		0.046	mg/Kg		12/30/25 15:36	01/04/26 19:43	1
Toluene	ND		0.046	mg/Kg		12/30/25 15:36	01/04/26 19:43	1
Xylenes, Total	ND		0.092	mg/Kg		12/30/25 15:36	01/04/26 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 19:43	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		9.7	mg/Kg		12/31/25 15:44	01/02/26 16:32	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:44	01/02/26 16:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			12/31/25 15:44	01/02/26 16:32	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	390		51	mg/Kg		12/31/25 11:18	12/31/25 17:07	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-45 @ 0.5'

Lab Sample ID: 885-40442-31

Date Collected: 12/23/25 10:50

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 15:36	01/04/26 20:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 20:31	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 20:31	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 20:31	1
Toluene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 20:31	1
Xylenes, Total	ND		0.095	mg/Kg		12/30/25 15:36	01/04/26 20:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 20:31	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	100		9.9	mg/Kg		12/31/25 15:44	01/02/26 16:43	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:44	01/02/26 16:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	67		62 - 134			12/31/25 15:44	01/02/26 16:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		51	mg/Kg		12/31/25 11:18	12/31/25 17:20	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-46 @ 0.5'

Lab Sample ID: 885-40442-32

Date Collected: 12/23/25 10:57

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		12/30/25 15:36	01/04/26 20:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			12/30/25 15:36	01/04/26 20:54	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		12/30/25 15:36	01/04/26 20:54	1
Ethylbenzene	ND		0.046	mg/Kg		12/30/25 15:36	01/04/26 20:54	1
Toluene	ND		0.046	mg/Kg		12/30/25 15:36	01/04/26 20:54	1
Xylenes, Total	ND		0.093	mg/Kg		12/30/25 15:36	01/04/26 20:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 20:54	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	100		9.8	mg/Kg		12/31/25 15:44	01/02/26 16:55	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		12/31/25 15:44	01/02/26 16:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	69		62 - 134			12/31/25 15:44	01/02/26 16:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		51	mg/Kg		12/31/25 11:18	12/31/25 17:34	10

Eurofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-47 @ 0.5'

Lab Sample ID: 885-40442-33

Date Collected: 12/23/25 11:12

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/04/26 21:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			12/30/25 15:36	01/04/26 21:18	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 21:18	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 21:18	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 21:18	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 15:36	01/04/26 21:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 21:18	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		12/31/25 15:44	01/02/26 17:07	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:44	01/02/26 17:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			12/31/25 15:44	01/02/26 17:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		50	mg/Kg		12/31/25 11:18	12/31/25 17:48	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-48 @ 0.5'

Lab Sample ID: 885-40442-34

Date Collected: 12/23/25 11:26

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/04/26 21:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/30/25 15:36	01/04/26 21:42	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 21:42	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 21:42	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 21:42	1
Xylenes, Total	ND		0.097	mg/Kg		12/30/25 15:36	01/04/26 21:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 21:42	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24		9.3	mg/Kg		12/31/25 15:44	01/02/26 17:19	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:44	01/02/26 17:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134			12/31/25 15:44	01/02/26 17:19	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		49	mg/Kg		12/31/25 11:18	12/31/25 18:01	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-49 @ 0.5'

Lab Sample ID: 885-40442-35

Date Collected: 12/23/25 11:38

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 15:36	01/04/26 22:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/30/25 15:36	01/04/26 22:05	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 22:05	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 22:05	1
Toluene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 22:05	1
Xylenes, Total	ND		0.095	mg/Kg		12/30/25 15:36	01/04/26 22:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 22:05	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	290		9.4	mg/Kg		12/31/25 15:44	01/02/26 17:30	1
Motor Oil Range Organics [C28-C40]	72		47	mg/Kg		12/31/25 15:44	01/02/26 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			12/31/25 15:44	01/02/26 17:30	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		50	mg/Kg		12/31/25 11:18	12/31/25 18:42	10

Euofins Albuquerque

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-50 @ 0.5'

Lab Sample ID: 885-40442-36

Date Collected: 12/23/25 12:00

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/30/25 15:36	01/04/26 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			12/30/25 15:36	01/04/26 22:29	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 15:36	01/04/26 22:29	1
Ethylbenzene	ND		0.050	mg/Kg		12/30/25 15:36	01/04/26 22:29	1
Toluene	ND		0.050	mg/Kg		12/30/25 15:36	01/04/26 22:29	1
Xylenes, Total	ND		0.099	mg/Kg		12/30/25 15:36	01/04/26 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 22:29	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	17		9.5	mg/Kg		12/31/25 15:44	01/02/26 17:42	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		12/31/25 15:44	01/02/26 17:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	131		62 - 134			12/31/25 15:44	01/02/26 17:42	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	350		51	mg/Kg		12/31/25 11:18	12/31/25 18:56	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-51 @ 0.5'

Lab Sample ID: 885-40442-37

Date Collected: 12/23/25 12:07

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		12/30/25 15:36	01/04/26 22:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/30/25 15:36	01/04/26 22:52	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 15:36	01/04/26 22:52	1
Ethylbenzene	ND		0.049	mg/Kg		12/30/25 15:36	01/04/26 22:52	1
Toluene	ND		0.049	mg/Kg		12/30/25 15:36	01/04/26 22:52	1
Xylenes, Total	ND		0.098	mg/Kg		12/30/25 15:36	01/04/26 22:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 22:52	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	39		9.9	mg/Kg		12/31/25 15:44	01/02/26 17:54	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/31/25 15:44	01/02/26 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	127		62 - 134			12/31/25 15:44	01/02/26 17:54	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		50	mg/Kg		12/31/25 11:18	12/31/25 19:10	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-52 @ 0.5'

Lab Sample ID: 885-40442-38

Date Collected: 12/23/25 12:20

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		12/30/25 15:36	01/04/26 23:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			12/30/25 15:36	01/04/26 23:16	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 23:16	1
Ethylbenzene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 23:16	1
Toluene	ND		0.047	mg/Kg		12/30/25 15:36	01/04/26 23:16	1
Xylenes, Total	ND		0.095	mg/Kg		12/30/25 15:36	01/04/26 23:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			12/30/25 15:36	01/04/26 23:16	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	13		9.6	mg/Kg		12/31/25 15:44	01/02/26 18:05	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		12/31/25 15:44	01/02/26 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			12/31/25 15:44	01/02/26 18:05	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	460		50	mg/Kg		12/31/25 11:18	12/31/25 19:23	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-53 @ 0.5'

Lab Sample ID: 885-40442-39

Date Collected: 12/23/25 12:32

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/04/26 23:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/04/26 23:39	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/04/26 23:39	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 23:39	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/04/26 23:39	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 15:36	01/04/26 23:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			12/30/25 15:36	01/04/26 23:39	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/31/25 15:44	01/02/26 18:17	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/31/25 15:44	01/02/26 18:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			12/31/25 15:44	01/02/26 18:17	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	590		51	mg/Kg		12/31/25 11:18	12/31/25 19:37	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-54 @ 0.5'

Lab Sample ID: 885-40442-40

Date Collected: 12/23/25 12:50

Matrix: Solid

Date Received: 12/30/25 07:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		12/30/25 15:36	01/05/26 00:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			12/30/25 15:36	01/05/26 00:03	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		12/30/25 15:36	01/05/26 00:03	1
Ethylbenzene	ND		0.048	mg/Kg		12/30/25 15:36	01/05/26 00:03	1
Toluene	ND		0.048	mg/Kg		12/30/25 15:36	01/05/26 00:03	1
Xylenes, Total	ND		0.096	mg/Kg		12/30/25 15:36	01/05/26 00:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 15:36	01/05/26 00:03	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	57		10	mg/Kg		01/02/26 12:57	01/06/26 19:09	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		01/02/26 12:57	01/06/26 19:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		62 - 134			01/02/26 12:57	01/06/26 19:09	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	310		50	mg/Kg		12/31/25 11:18	12/31/25 19:51	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-40641/1-A
Matrix: Solid
Analysis Batch: 40805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40641

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/30/25 13:01	01/03/26 02:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			12/30/25 13:01	01/03/26 02:35	1

Lab Sample ID: LCS 885-40641/2-A
Matrix: Solid
Analysis Batch: 40805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	21.5		mg/Kg		86	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	185		15 - 150				

Lab Sample ID: 885-40442-1 MS
Matrix: Solid
Analysis Batch: 40805

Client Sample ID: BS25-05 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		23.9	20.2		mg/Kg		85	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	189		15 - 150						

Lab Sample ID: 885-40442-1 MSD
Matrix: Solid
Analysis Batch: 40805

Client Sample ID: BS25-05 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40641

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		23.8	18.8		mg/Kg		79	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	184		15 - 150								

Lab Sample ID: MB 885-40655/1-A
Matrix: Solid
Analysis Batch: 40822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40655

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		12/30/25 15:36	01/04/26 14:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			12/30/25 15:36	01/04/26 14:11	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: LCS 885-40655/2-A
Matrix: Solid
Analysis Batch: 40822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40655

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	22.1		mg/Kg		88	70 - 130
Surrogate		LCS %Recovery	LCS Qualifier				Limits
4-Bromofluorobenzene (Surr)		193					15 - 150

Lab Sample ID: 885-40442-21 MS
Matrix: Solid
Analysis Batch: 40822

Client Sample ID: WS25-02 @ 0-1.5'
Prep Type: Total/NA
Prep Batch: 40655

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.7	18.9		mg/Kg		77	70 - 130
Surrogate		MS %Recovery	MS Qualifier						Limits
4-Bromofluorobenzene (Surr)		194							15 - 150

Lab Sample ID: 885-40442-21 MSD
Matrix: Solid
Analysis Batch: 40822

Client Sample ID: WS25-02 @ 0-1.5'
Prep Type: Total/NA
Prep Batch: 40655

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics [C6 - C10]	ND		24.6	18.5		mg/Kg		75	70 - 130	2	20
Surrogate		MSD %Recovery	MSD Qualifier						Limits		
4-Bromofluorobenzene (Surr)		193							15 - 150		

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-40641/1-A
Matrix: Solid
Analysis Batch: 40804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40641

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		12/30/25 13:01	01/03/26 02:35	1
Ethylbenzene	ND		0.050	mg/Kg		12/30/25 13:01	01/03/26 02:35	1
Toluene	ND		0.050	mg/Kg		12/30/25 13:01	01/03/26 02:35	1
Xylenes, Total	ND		0.10	mg/Kg		12/30/25 13:01	01/03/26 02:35	1
Surrogate		MB %Recovery	MB Qualifier			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		86				12/30/25 13:01	01/03/26 02:35	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 885-40641/3-A
Matrix: Solid
Analysis Batch: 40804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	1.00	1.01		mg/Kg		101	70 - 130	
Ethylbenzene	1.00	1.02		mg/Kg		102	70 - 130	
m,p-Xylene	2.00	2.02		mg/Kg		101	70 - 130	
o-Xylene	1.00	1.02		mg/Kg		102	70 - 130	
Toluene	1.00	0.996		mg/Kg		100	70 - 130	
Xylenes, Total	3.00	3.04		mg/Kg		101	70 - 130	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		15 - 150

Lab Sample ID: 885-40442-2 MS
Matrix: Solid
Analysis Batch: 40804

Client Sample ID: BS25-06 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	ND		0.966	0.810		mg/Kg		84	70 - 130	
Ethylbenzene	ND		0.966	0.834		mg/Kg		86	70 - 130	
m,p-Xylene	ND		1.93	1.67		mg/Kg		87	70 - 130	
o-Xylene	ND		0.966	0.841		mg/Kg		87	70 - 130	
Toluene	ND		0.966	0.835		mg/Kg		86	70 - 130	
Xylenes, Total	ND		2.90	2.52		mg/Kg		87	70 - 130	

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		15 - 150

Lab Sample ID: 885-40442-2 MSD
Matrix: Solid
Analysis Batch: 40804

Client Sample ID: BS25-06 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40641

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD	
											RPD	Limit
Benzene	ND		0.972	0.814		mg/Kg		84	70 - 130	0	20	
Ethylbenzene	ND		0.972	0.858		mg/Kg		88	70 - 130	3	20	
m,p-Xylene	ND		1.94	1.69		mg/Kg		87	70 - 130	1	20	
o-Xylene	ND		0.972	0.853		mg/Kg		88	70 - 130	1	20	
Toluene	ND		0.972	0.847		mg/Kg		87	70 - 130	1	20	
Xylenes, Total	ND		2.92	2.55		mg/Kg		87	70 - 130	1	20	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		15 - 150

Lab Sample ID: MB 885-40655/1-A
Matrix: Solid
Analysis Batch: 40823

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40655

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.050	mg/Kg		12/30/25 15:36	01/04/26 14:11	1
Toluene	ND		0.050	mg/Kg		12/30/25 15:36	01/04/26 14:11	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-40655/1-A
Matrix: Solid
Analysis Batch: 40823

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40655

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Xylenes, Total	ND		0.10	mg/Kg		12/30/25 15:36	01/04/26 14:11	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	98		15 - 150	12/30/25 15:36	01/04/26 14:11	1

Lab Sample ID: LCS 885-40655/3-A
Matrix: Solid
Analysis Batch: 40823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40655

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	1.00	0.916		mg/Kg		92	70 - 130
Ethylbenzene	1.00	0.876		mg/Kg		88	70 - 130
m,p-Xylene	2.00	1.78		mg/Kg		89	70 - 130
o-Xylene	1.00	0.877		mg/Kg		88	70 - 130
Toluene	1.00	0.910		mg/Kg		91	70 - 130
Xylenes, Total	3.00	2.66		mg/Kg		89	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		15 - 150

Lab Sample ID: 885-40442-22 MS
Matrix: Solid
Analysis Batch: 40823

Client Sample ID: WS25-03 @ 0-2'
Prep Type: Total/NA
Prep Batch: 40655

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Benzene	ND		0.960	0.781		mg/Kg		81	70 - 130
Ethylbenzene	ND		0.960	0.804		mg/Kg		84	70 - 130
m,p-Xylene	ND		1.92	1.65		mg/Kg		86	70 - 130
o-Xylene	ND		0.960	0.805		mg/Kg		84	70 - 130
Toluene	ND		0.960	0.810		mg/Kg		84	70 - 130
Xylenes, Total	ND		2.88	2.45		mg/Kg		84	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		15 - 150

Lab Sample ID: 885-40442-22 MSD
Matrix: Solid
Analysis Batch: 40823

Client Sample ID: WS25-03 @ 0-2'
Prep Type: Total/NA
Prep Batch: 40655

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
Benzene	ND		0.955	0.765		mg/Kg		80	70 - 130	2	20
Ethylbenzene	ND		0.955	0.796		mg/Kg		83	70 - 130	1	20
m,p-Xylene	ND		1.91	1.65		mg/Kg		86	70 - 130	0	20
o-Xylene	ND		0.955	0.798		mg/Kg		84	70 - 130	1	20
Toluene	ND		0.955	0.805		mg/Kg		84	70 - 130	1	20
Xylenes, Total	ND		2.87	2.45		mg/Kg		84	70 - 130	0	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-40442-22 MSD
Matrix: Solid
Analysis Batch: 40823

Client Sample ID: WS25-03 @ 0-2'
Prep Type: Total/NA
Prep Batch: 40655

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		15 - 150

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-40722/1-A
Matrix: Solid
Analysis Batch: 40836

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40722

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/31/25 15:08	01/05/26 22:21	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/31/25 15:08	01/05/26 22:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134	12/31/25 15:08	01/05/26 22:21	1

Lab Sample ID: LCS 885-40722/2-A
Matrix: Solid
Analysis Batch: 40836

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	65.2		mg/Kg		130	51 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	128		62 - 134

Lab Sample ID: 885-40442-18 MS
Matrix: Solid
Analysis Batch: 40836

Client Sample ID: BS25-36 @ 0.5'
Prep Type: Total/NA
Prep Batch: 40722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		46.0	47.0		mg/Kg		102	44 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
Di-n-octyl phthalate (Surr)	90		62 - 134

Lab Sample ID: 885-40442-18 MSD
Matrix: Solid
Analysis Batch: 40836

Client Sample ID: BS25-36 @ 0.5'
Prep Type: Total/NA
Prep Batch: 40722

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Diesel Range Organics [C10-C28]	ND		48.2	61.0		mg/Kg		127	44 - 136	26	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Di-n-octyl phthalate (Surr)	120		62 - 134

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-40726/1-A
Matrix: Solid
Analysis Batch: 40771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40726

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		12/31/25 15:44	01/02/26 13:59	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		12/31/25 15:44	01/02/26 13:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	114		62 - 134			12/31/25 15:44	01/02/26 13:59	1

Lab Sample ID: LCS 885-40726/2-A
Matrix: Solid
Analysis Batch: 40771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	50.6		mg/Kg		101	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	115		62 - 134				

Lab Sample ID: 885-40442-39 MS
Matrix: Solid
Analysis Batch: 40771

Client Sample ID: BS25-53 @ 0.5'
Prep Type: Total/NA
Prep Batch: 40726

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		48.7	34.0		mg/Kg		70	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	74		62 - 134						

Lab Sample ID: 885-40442-39 MSD
Matrix: Solid
Analysis Batch: 40771

Client Sample ID: BS25-53 @ 0.5'
Prep Type: Total/NA
Prep Batch: 40726

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		49.2	35.6		mg/Kg		72	44 - 136	5	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	65		62 - 134								

Lab Sample ID: MB 885-40775/1-A
Matrix: Solid
Analysis Batch: 40770

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40775

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		01/02/26 12:57	01/02/26 21:21	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		01/02/26 12:57	01/02/26 21:21	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-40775/1-A
Matrix: Solid
Analysis Batch: 40770

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40775

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134	01/02/26 12:57	01/02/26 21:21	1

Lab Sample ID: LCS 885-40775/2-A
Matrix: Solid
Analysis Batch: 40770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	48.2		mg/Kg		96	51 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	94		62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MRL 885-40614/3
Matrix: Solid
Analysis Batch: 40614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.508		mg/L		102	50 - 150

Lab Sample ID: MB 885-40651/1-A
Matrix: Solid
Analysis Batch: 40614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40651

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		12/30/25 14:31	12/30/25 21:14	1

Lab Sample ID: LCS 885-40651/2-A
Matrix: Solid
Analysis Batch: 40614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.7	47.8		mg/Kg		96	90 - 110

Lab Sample ID: 885-40442-1 MS
Matrix: Solid
Analysis Batch: 40614

Client Sample ID: BS25-05 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40651

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	140		50.0	188		mg/Kg		91	50 - 150

Lab Sample ID: 885-40442-1 MSD
Matrix: Solid
Analysis Batch: 40614

Client Sample ID: BS25-05 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40651

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	140		49.8	192		mg/Kg		100	50 - 150	2	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-40442-2 MS
Matrix: Solid
Analysis Batch: 40614

Client Sample ID: BS25-06 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40651

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	140		50.5	186		mg/Kg		84	50 - 150

Lab Sample ID: 885-40442-2 MSD
Matrix: Solid
Analysis Batch: 40614

Client Sample ID: BS25-06 @ 1.5'
Prep Type: Total/NA
Prep Batch: 40651

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	140		49.3	189		mg/Kg		93	50 - 150	2	20

Lab Sample ID: MB 885-40693/1-A
Matrix: Solid
Analysis Batch: 40696

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40693

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		12/31/25 11:18	12/31/25 13:15	1

Lab Sample ID: LCS 885-40693/2-A
Matrix: Solid
Analysis Batch: 40696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.5	47.0		mg/Kg		95	90 - 110

Lab Sample ID: 885-40442-21 MS
Matrix: Solid
Analysis Batch: 40696

Client Sample ID: WS25-02 @ 0-1.5'
Prep Type: Total/NA
Prep Batch: 40693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	200		50.3	255		mg/Kg		107	50 - 150

Lab Sample ID: 885-40442-21 MSD
Matrix: Solid
Analysis Batch: 40696

Client Sample ID: WS25-02 @ 0-1.5'
Prep Type: Total/NA
Prep Batch: 40693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	200		49.7	245	4	mg/Kg		90	50 - 150	4	20

Lab Sample ID: 885-40442-22 MS
Matrix: Solid
Analysis Batch: 40696

Client Sample ID: WS25-03 @ 0-2'
Prep Type: Total/NA
Prep Batch: 40693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	260		50.7	304	4	mg/Kg		96	50 - 150

Lab Sample ID: 885-40442-22 MSD
Matrix: Solid
Analysis Batch: 40696

Client Sample ID: WS25-03 @ 0-2'
Prep Type: Total/NA
Prep Batch: 40693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	260		49.8	297	4	mg/Kg		84	50 - 150	2	20

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

GC VOA

Prep Batch: 40641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-1	BS25-05 @ 1.5'	Total/NA	Solid	5030C	
885-40442-2	BS25-06 @ 1.5'	Total/NA	Solid	5030C	
885-40442-3	BS25-14 @ 2'	Total/NA	Solid	5030C	
885-40442-4	BS25-20 @ 3'	Total/NA	Solid	5030C	
885-40442-5	BS25-21 @ 3'	Total/NA	Solid	5030C	
885-40442-6	BS25-22 @ 3'	Total/NA	Solid	5030C	
885-40442-7	BS25-23 @ 3'	Total/NA	Solid	5030C	
885-40442-8	BS25-24 @ 3'	Total/NA	Solid	5030C	
885-40442-9	BS25-25 @ 3'	Total/NA	Solid	5030C	
885-40442-10	BS25-26 @ 3'	Total/NA	Solid	5030C	
885-40442-11	BS25-27 @ 3'	Total/NA	Solid	5030C	
885-40442-12	BS25-29 @ 3'	Total/NA	Solid	5030C	
885-40442-13	BS25-30 @ 3'	Total/NA	Solid	5030C	
885-40442-14	BS25-32 @ 0.5'	Total/NA	Solid	5030C	
885-40442-15	BS25-33 @ 0.5'	Total/NA	Solid	5030C	
885-40442-16	BS25-34 @ 0.5'	Total/NA	Solid	5030C	
885-40442-17	BS25-35 @ 0.5'	Total/NA	Solid	5030C	
885-40442-18	BS25-36 @ 0.5'	Total/NA	Solid	5030C	
885-40442-19	BS25-37 @ 0.5'	Total/NA	Solid	5030C	
885-40442-20	BS25-38 @ 0.5'	Total/NA	Solid	5030C	
MB 885-40641/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-40641/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-40641/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-40442-1 MS	BS25-05 @ 1.5'	Total/NA	Solid	5030C	
885-40442-1 MSD	BS25-05 @ 1.5'	Total/NA	Solid	5030C	
885-40442-2 MS	BS25-06 @ 1.5'	Total/NA	Solid	5030C	
885-40442-2 MSD	BS25-06 @ 1.5'	Total/NA	Solid	5030C	

Prep Batch: 40655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-21	WS25-02 @ 0-1.5'	Total/NA	Solid	5030C	
885-40442-22	WS25-03 @ 0-2'	Total/NA	Solid	5030C	
885-40442-23	WS25-08 @ 0-3'	Total/NA	Solid	5030C	
885-40442-24	WS25-10 @ 0-3'	Total/NA	Solid	5030C	
885-40442-25	BS25-39 @ 0.5'	Total/NA	Solid	5030C	
885-40442-26	BS25-40 @ 0.5'	Total/NA	Solid	5030C	
885-40442-27	BS25-41 @ 0.5'	Total/NA	Solid	5030C	
885-40442-28	BS25-42 @ 0.5'	Total/NA	Solid	5030C	
885-40442-29	BS25-43 @ 0.5'	Total/NA	Solid	5030C	
885-40442-30	BS25-44 @ 0.5'	Total/NA	Solid	5030C	
885-40442-31	BS25-45 @ 0.5'	Total/NA	Solid	5030C	
885-40442-32	BS25-46 @ 0.5'	Total/NA	Solid	5030C	
885-40442-33	BS25-47 @ 0.5'	Total/NA	Solid	5030C	
885-40442-34	BS25-48 @ 0.5'	Total/NA	Solid	5030C	
885-40442-35	BS25-49 @ 0.5'	Total/NA	Solid	5030C	
885-40442-36	BS25-50 @ 0.5'	Total/NA	Solid	5030C	
885-40442-37	BS25-51 @ 0.5'	Total/NA	Solid	5030C	
885-40442-38	BS25-52 @ 0.5'	Total/NA	Solid	5030C	
885-40442-39	BS25-53 @ 0.5'	Total/NA	Solid	5030C	
885-40442-40	BS25-54 @ 0.5'	Total/NA	Solid	5030C	
MB 885-40655/1-A	Method Blank	Total/NA	Solid	5030C	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

GC VOA (Continued)

Prep Batch: 40655 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-40655/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-40655/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-40442-21 MS	WS25-02 @ 0-1.5'	Total/NA	Solid	5030C	
885-40442-21 MSD	WS25-02 @ 0-1.5'	Total/NA	Solid	5030C	
885-40442-22 MS	WS25-03 @ 0-2'	Total/NA	Solid	5030C	
885-40442-22 MSD	WS25-03 @ 0-2'	Total/NA	Solid	5030C	

Analysis Batch: 40804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-1	BS25-05 @ 1.5'	Total/NA	Solid	8021B	40641
885-40442-2	BS25-06 @ 1.5'	Total/NA	Solid	8021B	40641
885-40442-3	BS25-14 @ 2'	Total/NA	Solid	8021B	40641
885-40442-4	BS25-20 @ 3'	Total/NA	Solid	8021B	40641
885-40442-5	BS25-21 @ 3'	Total/NA	Solid	8021B	40641
885-40442-6	BS25-22 @ 3'	Total/NA	Solid	8021B	40641
885-40442-7	BS25-23 @ 3'	Total/NA	Solid	8021B	40641
885-40442-8	BS25-24 @ 3'	Total/NA	Solid	8021B	40641
885-40442-9	BS25-25 @ 3'	Total/NA	Solid	8021B	40641
885-40442-10	BS25-26 @ 3'	Total/NA	Solid	8021B	40641
885-40442-11	BS25-27 @ 3'	Total/NA	Solid	8021B	40641
885-40442-12	BS25-29 @ 3'	Total/NA	Solid	8021B	40641
885-40442-13	BS25-30 @ 3'	Total/NA	Solid	8021B	40641
885-40442-14	BS25-32 @ 0.5'	Total/NA	Solid	8021B	40641
885-40442-15	BS25-33 @ 0.5'	Total/NA	Solid	8021B	40641
885-40442-16	BS25-34 @ 0.5'	Total/NA	Solid	8021B	40641
885-40442-17	BS25-35 @ 0.5'	Total/NA	Solid	8021B	40641
885-40442-18	BS25-36 @ 0.5'	Total/NA	Solid	8021B	40641
885-40442-19	BS25-37 @ 0.5'	Total/NA	Solid	8021B	40641
885-40442-20	BS25-38 @ 0.5'	Total/NA	Solid	8021B	40641
MB 885-40641/1-A	Method Blank	Total/NA	Solid	8021B	40641
LCS 885-40641/3-A	Lab Control Sample	Total/NA	Solid	8021B	40641
885-40442-2 MS	BS25-06 @ 1.5'	Total/NA	Solid	8021B	40641
885-40442-2 MSD	BS25-06 @ 1.5'	Total/NA	Solid	8021B	40641

Analysis Batch: 40805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-1	BS25-05 @ 1.5'	Total/NA	Solid	8015M/D	40641
885-40442-2	BS25-06 @ 1.5'	Total/NA	Solid	8015M/D	40641
885-40442-3	BS25-14 @ 2'	Total/NA	Solid	8015M/D	40641
885-40442-4	BS25-20 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-5	BS25-21 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-6	BS25-22 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-7	BS25-23 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-8	BS25-24 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-9	BS25-25 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-10	BS25-26 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-11	BS25-27 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-12	BS25-29 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-13	BS25-30 @ 3'	Total/NA	Solid	8015M/D	40641
885-40442-14	BS25-32 @ 0.5'	Total/NA	Solid	8015M/D	40641
885-40442-15	BS25-33 @ 0.5'	Total/NA	Solid	8015M/D	40641

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

GC VOA (Continued)

Analysis Batch: 40805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-16	BS25-34 @ 0.5'	Total/NA	Solid	8015M/D	40641
885-40442-17	BS25-35 @ 0.5'	Total/NA	Solid	8015M/D	40641
885-40442-18	BS25-36 @ 0.5'	Total/NA	Solid	8015M/D	40641
885-40442-19	BS25-37 @ 0.5'	Total/NA	Solid	8015M/D	40641
885-40442-20	BS25-38 @ 0.5'	Total/NA	Solid	8015M/D	40641
MB 885-40641/1-A	Method Blank	Total/NA	Solid	8015M/D	40641
LCS 885-40641/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40641
885-40442-1 MS	BS25-05 @ 1.5'	Total/NA	Solid	8015M/D	40641
885-40442-1 MSD	BS25-05 @ 1.5'	Total/NA	Solid	8015M/D	40641

Analysis Batch: 40822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-21	WS25-02 @ 0-1.5'	Total/NA	Solid	8015M/D	40655
885-40442-22	WS25-03 @ 0-2'	Total/NA	Solid	8015M/D	40655
885-40442-23	WS25-08 @ 0-3'	Total/NA	Solid	8015M/D	40655
885-40442-24	WS25-10 @ 0-3'	Total/NA	Solid	8015M/D	40655
885-40442-25	BS25-39 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-26	BS25-40 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-27	BS25-41 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-28	BS25-42 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-29	BS25-43 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-30	BS25-44 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-31	BS25-45 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-32	BS25-46 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-33	BS25-47 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-34	BS25-48 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-35	BS25-49 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-36	BS25-50 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-37	BS25-51 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-38	BS25-52 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-39	BS25-53 @ 0.5'	Total/NA	Solid	8015M/D	40655
885-40442-40	BS25-54 @ 0.5'	Total/NA	Solid	8015M/D	40655
MB 885-40655/1-A	Method Blank	Total/NA	Solid	8015M/D	40655
LCS 885-40655/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40655
885-40442-21 MS	WS25-02 @ 0-1.5'	Total/NA	Solid	8015M/D	40655
885-40442-21 MSD	WS25-02 @ 0-1.5'	Total/NA	Solid	8015M/D	40655

Analysis Batch: 40823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-21	WS25-02 @ 0-1.5'	Total/NA	Solid	8021B	40655
885-40442-22	WS25-03 @ 0-2'	Total/NA	Solid	8021B	40655
885-40442-23	WS25-08 @ 0-3'	Total/NA	Solid	8021B	40655
885-40442-24	WS25-10 @ 0-3'	Total/NA	Solid	8021B	40655
885-40442-25	BS25-39 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-26	BS25-40 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-27	BS25-41 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-28	BS25-42 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-29	BS25-43 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-30	BS25-44 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-31	BS25-45 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-32	BS25-46 @ 0.5'	Total/NA	Solid	8021B	40655

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

GC VOA (Continued)

Analysis Batch: 40823 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-33	BS25-47 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-34	BS25-48 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-35	BS25-49 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-36	BS25-50 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-37	BS25-51 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-38	BS25-52 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-39	BS25-53 @ 0.5'	Total/NA	Solid	8021B	40655
885-40442-40	BS25-54 @ 0.5'	Total/NA	Solid	8021B	40655
MB 885-40655/1-A	Method Blank	Total/NA	Solid	8021B	40655
LCS 885-40655/3-A	Lab Control Sample	Total/NA	Solid	8021B	40655
885-40442-22 MS	WS25-03 @ 0-2'	Total/NA	Solid	8021B	40655
885-40442-22 MSD	WS25-03 @ 0-2'	Total/NA	Solid	8021B	40655

GC Semi VOA

Prep Batch: 40722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-1	BS25-05 @ 1.5'	Total/NA	Solid	SHAKE	
885-40442-2	BS25-06 @ 1.5'	Total/NA	Solid	SHAKE	
885-40442-3	BS25-14 @ 2'	Total/NA	Solid	SHAKE	
885-40442-4	BS25-20 @ 3'	Total/NA	Solid	SHAKE	
885-40442-5	BS25-21 @ 3'	Total/NA	Solid	SHAKE	
885-40442-6	BS25-22 @ 3'	Total/NA	Solid	SHAKE	
885-40442-7	BS25-23 @ 3'	Total/NA	Solid	SHAKE	
885-40442-8	BS25-24 @ 3'	Total/NA	Solid	SHAKE	
885-40442-9	BS25-25 @ 3'	Total/NA	Solid	SHAKE	
885-40442-10	BS25-26 @ 3'	Total/NA	Solid	SHAKE	
885-40442-11	BS25-27 @ 3'	Total/NA	Solid	SHAKE	
885-40442-12	BS25-29 @ 3'	Total/NA	Solid	SHAKE	
885-40442-13	BS25-30 @ 3'	Total/NA	Solid	SHAKE	
885-40442-14	BS25-32 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-15	BS25-33 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-16	BS25-34 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-17	BS25-35 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-18	BS25-36 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-19	BS25-37 @ 0.5'	Total/NA	Solid	SHAKE	
MB 885-40722/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40722/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-40442-18 MS	BS25-36 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-18 MSD	BS25-36 @ 0.5'	Total/NA	Solid	SHAKE	

Prep Batch: 40726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-20	BS25-38 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-21	WS25-02 @ 0-1.5'	Total/NA	Solid	SHAKE	
885-40442-22	WS25-03 @ 0-2'	Total/NA	Solid	SHAKE	
885-40442-23	WS25-08 @ 0-3'	Total/NA	Solid	SHAKE	
885-40442-24	WS25-10 @ 0-3'	Total/NA	Solid	SHAKE	
885-40442-25	BS25-39 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-26	BS25-40 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-27	BS25-41 @ 0.5'	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

GC Semi VOA (Continued)

Prep Batch: 40726 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-28	BS25-42 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-29	BS25-43 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-30	BS25-44 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-31	BS25-45 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-32	BS25-46 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-33	BS25-47 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-34	BS25-48 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-35	BS25-49 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-36	BS25-50 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-37	BS25-51 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-38	BS25-52 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-39	BS25-53 @ 0.5'	Total/NA	Solid	SHAKE	
MB 885-40726/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40726/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-40442-39 MS	BS25-53 @ 0.5'	Total/NA	Solid	SHAKE	
885-40442-39 MSD	BS25-53 @ 0.5'	Total/NA	Solid	SHAKE	

Analysis Batch: 40770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-40775/1-A	Method Blank	Total/NA	Solid	8015M/D	40775
LCS 885-40775/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40775

Analysis Batch: 40771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-20	BS25-38 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-21	WS25-02 @ 0-1.5'	Total/NA	Solid	8015M/D	40726
885-40442-22	WS25-03 @ 0-2'	Total/NA	Solid	8015M/D	40726
885-40442-23	WS25-08 @ 0-3'	Total/NA	Solid	8015M/D	40726
885-40442-24	WS25-10 @ 0-3'	Total/NA	Solid	8015M/D	40726
885-40442-25	BS25-39 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-26	BS25-40 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-27	BS25-41 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-28	BS25-42 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-29	BS25-43 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-30	BS25-44 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-31	BS25-45 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-32	BS25-46 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-33	BS25-47 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-34	BS25-48 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-35	BS25-49 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-36	BS25-50 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-37	BS25-51 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-38	BS25-52 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-39	BS25-53 @ 0.5'	Total/NA	Solid	8015M/D	40726
MB 885-40726/1-A	Method Blank	Total/NA	Solid	8015M/D	40726
LCS 885-40726/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40726
885-40442-39 MS	BS25-53 @ 0.5'	Total/NA	Solid	8015M/D	40726
885-40442-39 MSD	BS25-53 @ 0.5'	Total/NA	Solid	8015M/D	40726

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

GC Semi VOA

Prep Batch: 40775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-40	BS25-54 @ 0.5'	Total/NA	Solid	SHAKE	
MB 885-40775/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40775/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 40836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-1	BS25-05 @ 1.5'	Total/NA	Solid	8015M/D	40722
885-40442-2	BS25-06 @ 1.5'	Total/NA	Solid	8015M/D	40722
885-40442-3	BS25-14 @ 2'	Total/NA	Solid	8015M/D	40722
885-40442-4	BS25-20 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-5	BS25-21 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-6	BS25-22 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-7	BS25-23 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-8	BS25-24 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-9	BS25-25 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-10	BS25-26 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-11	BS25-27 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-12	BS25-29 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-13	BS25-30 @ 3'	Total/NA	Solid	8015M/D	40722
885-40442-14	BS25-32 @ 0.5'	Total/NA	Solid	8015M/D	40722
885-40442-15	BS25-33 @ 0.5'	Total/NA	Solid	8015M/D	40722
885-40442-16	BS25-34 @ 0.5'	Total/NA	Solid	8015M/D	40722
885-40442-18	BS25-36 @ 0.5'	Total/NA	Solid	8015M/D	40722
885-40442-19	BS25-37 @ 0.5'	Total/NA	Solid	8015M/D	40722
885-40442-40	BS25-54 @ 0.5'	Total/NA	Solid	8015M/D	40775
MB 885-40722/1-A	Method Blank	Total/NA	Solid	8015M/D	40722
LCS 885-40722/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40722
885-40442-18 MS	BS25-36 @ 0.5'	Total/NA	Solid	8015M/D	40722
885-40442-18 MSD	BS25-36 @ 0.5'	Total/NA	Solid	8015M/D	40722

Analysis Batch: 41086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-17	BS25-35 @ 0.5'	Total/NA	Solid	8015M/D	40722

HPLC/IC

Analysis Batch: 40614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-1	BS25-05 @ 1.5'	Total/NA	Solid	300.0	40651
885-40442-2	BS25-06 @ 1.5'	Total/NA	Solid	300.0	40651
885-40442-3	BS25-14 @ 2'	Total/NA	Solid	300.0	40651
885-40442-4	BS25-20 @ 3'	Total/NA	Solid	300.0	40651
885-40442-5	BS25-21 @ 3'	Total/NA	Solid	300.0	40651
885-40442-6	BS25-22 @ 3'	Total/NA	Solid	300.0	40651
885-40442-7	BS25-23 @ 3'	Total/NA	Solid	300.0	40651
885-40442-8	BS25-24 @ 3'	Total/NA	Solid	300.0	40651
885-40442-9	BS25-25 @ 3'	Total/NA	Solid	300.0	40651
885-40442-10	BS25-26 @ 3'	Total/NA	Solid	300.0	40651
885-40442-11	BS25-27 @ 3'	Total/NA	Solid	300.0	40651
885-40442-12	BS25-29 @ 3'	Total/NA	Solid	300.0	40651
885-40442-13	BS25-30 @ 3'	Total/NA	Solid	300.0	40651

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

HPLC/IC (Continued)

Analysis Batch: 40614 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-14	BS25-32 @ 0.5'	Total/NA	Solid	300.0	40651
885-40442-15	BS25-33 @ 0.5'	Total/NA	Solid	300.0	40651
885-40442-16	BS25-34 @ 0.5'	Total/NA	Solid	300.0	40651
885-40442-17	BS25-35 @ 0.5'	Total/NA	Solid	300.0	40651
885-40442-18	BS25-36 @ 0.5'	Total/NA	Solid	300.0	40651
885-40442-19	BS25-37 @ 0.5'	Total/NA	Solid	300.0	40651
885-40442-20	BS25-38 @ 0.5'	Total/NA	Solid	300.0	40651
MB 885-40651/1-A	Method Blank	Total/NA	Solid	300.0	40651
LCS 885-40651/2-A	Lab Control Sample	Total/NA	Solid	300.0	40651
MRL 885-40614/3	Lab Control Sample	Total/NA	Solid	300.0	40651
885-40442-1 MS	BS25-05 @ 1.5'	Total/NA	Solid	300.0	40651
885-40442-1 MSD	BS25-05 @ 1.5'	Total/NA	Solid	300.0	40651
885-40442-2 MS	BS25-06 @ 1.5'	Total/NA	Solid	300.0	40651
885-40442-2 MSD	BS25-06 @ 1.5'	Total/NA	Solid	300.0	40651

Prep Batch: 40651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-1	BS25-05 @ 1.5'	Total/NA	Solid	300_Prep	
885-40442-2	BS25-06 @ 1.5'	Total/NA	Solid	300_Prep	
885-40442-3	BS25-14 @ 2'	Total/NA	Solid	300_Prep	
885-40442-4	BS25-20 @ 3'	Total/NA	Solid	300_Prep	
885-40442-5	BS25-21 @ 3'	Total/NA	Solid	300_Prep	
885-40442-6	BS25-22 @ 3'	Total/NA	Solid	300_Prep	
885-40442-7	BS25-23 @ 3'	Total/NA	Solid	300_Prep	
885-40442-8	BS25-24 @ 3'	Total/NA	Solid	300_Prep	
885-40442-9	BS25-25 @ 3'	Total/NA	Solid	300_Prep	
885-40442-10	BS25-26 @ 3'	Total/NA	Solid	300_Prep	
885-40442-11	BS25-27 @ 3'	Total/NA	Solid	300_Prep	
885-40442-12	BS25-29 @ 3'	Total/NA	Solid	300_Prep	
885-40442-13	BS25-30 @ 3'	Total/NA	Solid	300_Prep	
885-40442-14	BS25-32 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-15	BS25-33 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-16	BS25-34 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-17	BS25-35 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-18	BS25-36 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-19	BS25-37 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-20	BS25-38 @ 0.5'	Total/NA	Solid	300_Prep	
MB 885-40651/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-40651/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-40442-1 MS	BS25-05 @ 1.5'	Total/NA	Solid	300_Prep	
885-40442-1 MSD	BS25-05 @ 1.5'	Total/NA	Solid	300_Prep	
885-40442-2 MS	BS25-06 @ 1.5'	Total/NA	Solid	300_Prep	
885-40442-2 MSD	BS25-06 @ 1.5'	Total/NA	Solid	300_Prep	

Prep Batch: 40693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-21	WS25-02 @ 0-1.5'	Total/NA	Solid	300_Prep	
885-40442-22	WS25-03 @ 0-2'	Total/NA	Solid	300_Prep	
885-40442-23	WS25-08 @ 0-3'	Total/NA	Solid	300_Prep	
885-40442-24	WS25-10 @ 0-3'	Total/NA	Solid	300_Prep	
885-40442-25	BS25-39 @ 0.5'	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

HPLC/IC (Continued)

Prep Batch: 40693 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-26	BS25-40 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-27	BS25-41 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-28	BS25-42 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-29	BS25-43 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-30	BS25-44 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-31	BS25-45 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-32	BS25-46 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-33	BS25-47 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-34	BS25-48 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-35	BS25-49 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-36	BS25-50 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-37	BS25-51 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-38	BS25-52 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-39	BS25-53 @ 0.5'	Total/NA	Solid	300_Prep	
885-40442-40	BS25-54 @ 0.5'	Total/NA	Solid	300_Prep	
MB 885-40693/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-40693/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-40442-21 MS	WS25-02 @ 0-1.5'	Total/NA	Solid	300_Prep	
885-40442-21 MSD	WS25-02 @ 0-1.5'	Total/NA	Solid	300_Prep	
885-40442-22 MS	WS25-03 @ 0-2'	Total/NA	Solid	300_Prep	
885-40442-22 MSD	WS25-03 @ 0-2'	Total/NA	Solid	300_Prep	

Analysis Batch: 40696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40442-21	WS25-02 @ 0-1.5'	Total/NA	Solid	300.0	40693
885-40442-22	WS25-03 @ 0-2'	Total/NA	Solid	300.0	40693
885-40442-23	WS25-08 @ 0-3'	Total/NA	Solid	300.0	40693
885-40442-24	WS25-10 @ 0-3'	Total/NA	Solid	300.0	40693
885-40442-25	BS25-39 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-26	BS25-40 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-27	BS25-41 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-28	BS25-42 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-29	BS25-43 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-30	BS25-44 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-31	BS25-45 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-32	BS25-46 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-33	BS25-47 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-34	BS25-48 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-35	BS25-49 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-36	BS25-50 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-37	BS25-51 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-38	BS25-52 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-39	BS25-53 @ 0.5'	Total/NA	Solid	300.0	40693
885-40442-40	BS25-54 @ 0.5'	Total/NA	Solid	300.0	40693
MB 885-40693/1-A	Method Blank	Total/NA	Solid	300.0	40693
LCS 885-40693/2-A	Lab Control Sample	Total/NA	Solid	300.0	40693
885-40442-21 MS	WS25-02 @ 0-1.5'	Total/NA	Solid	300.0	40693
885-40442-21 MSD	WS25-02 @ 0-1.5'	Total/NA	Solid	300.0	40693
885-40442-22 MS	WS25-03 @ 0-2'	Total/NA	Solid	300.0	40693
885-40442-22 MSD	WS25-03 @ 0-2'	Total/NA	Solid	300.0	40693

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-05 @ 1.5'

Lab Sample ID: 885-40442-1

Date Collected: 12/22/25 09:00

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 02:57
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 02:57
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 00:16
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 21:35

Client Sample ID: BS25-06 @ 1.5'

Lab Sample ID: 885-40442-2

Date Collected: 12/22/25 09:15

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 04:02
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 04:02
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 00:39
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 22:06

Client Sample ID: BS25-14 @ 2'

Lab Sample ID: 885-40442-3

Date Collected: 12/22/25 09:30

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 05:07
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 05:07
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 01:03
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 22:37

Client Sample ID: BS25-20 @ 3'

Lab Sample ID: 885-40442-4

Date Collected: 12/22/25 09:45

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 05:28

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-20 @ 3'

Lab Sample ID: 885-40442-4

Date Collected: 12/22/25 09:45

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 05:28
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 01:26
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 22:47

Client Sample ID: BS25-21 @ 3'

Lab Sample ID: 885-40442-5

Date Collected: 12/22/25 09:55

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 05:50
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 05:50
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 01:49
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 23:18

Client Sample ID: BS25-22 @ 3'

Lab Sample ID: 885-40442-6

Date Collected: 12/22/25 10:15

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 06:11
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 06:11
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 02:12
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 23:28

Client Sample ID: BS25-23 @ 3'

Lab Sample ID: 885-40442-7

Date Collected: 12/22/25 10:30

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 06:33
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 06:33

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-23 @ 3'

Lab Sample ID: 885-40442-7

Date Collected: 12/22/25 10:30

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 02:35
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 23:39

Client Sample ID: BS25-24 @ 3'

Lab Sample ID: 885-40442-8

Date Collected: 12/22/25 10:45

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 06:55
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 06:55
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 03:21
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/30/25 23:49

Client Sample ID: BS25-25 @ 3'

Lab Sample ID: 885-40442-9

Date Collected: 12/22/25 11:00

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 07:17
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 07:17
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 21:28
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 00:00

Client Sample ID: BS25-26 @ 3'

Lab Sample ID: 885-40442-10

Date Collected: 12/22/25 11:15

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 07:38
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 07:38
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 04:07

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-26 @ 3'

Lab Sample ID: 885-40442-10

Date Collected: 12/22/25 11:15

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 00:10

Client Sample ID: BS25-27 @ 3'

Lab Sample ID: 885-40442-11

Date Collected: 12/22/25 11:30

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 08:21
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 08:21
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 04:30
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 00:20

Client Sample ID: BS25-29 @ 3'

Lab Sample ID: 885-40442-12

Date Collected: 12/22/25 11:45

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 08:43
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 08:43
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 04:53
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 00:31

Client Sample ID: BS25-30 @ 3'

Lab Sample ID: 885-40442-13

Date Collected: 12/22/25 12:00

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 09:05
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 09:05
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 21:51
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 00:41

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-32 @ 0.5'

Lab Sample ID: 885-40442-14

Date Collected: 12/22/25 12:16

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 09:26
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 09:26
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 22:14
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 00:51

Client Sample ID: BS25-33 @ 0.5'

Lab Sample ID: 885-40442-15

Date Collected: 12/22/25 12:29

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 09:48
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 09:48
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 22:37
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 01:22

Client Sample ID: BS25-34 @ 0.5'

Lab Sample ID: 885-40442-16

Date Collected: 12/22/25 12:37

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 10:10
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 10:10
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 23:00
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 01:33

Client Sample ID: BS25-35 @ 0.5'

Lab Sample ID: 885-40442-17

Date Collected: 12/22/25 12:56

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 10:31

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-35 @ 0.5'

Lab Sample ID: 885-40442-17

Date Collected: 12/22/25 12:56

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 10:31
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	41086	EM	EET ALB	01/09/26 15:58
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 01:43

Client Sample ID: BS25-36 @ 0.5'

Lab Sample ID: 885-40442-18

Date Collected: 12/22/25 13:00

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 10:53
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 10:53
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 08:20
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 01:53

Client Sample ID: BS25-37 @ 0.5'

Lab Sample ID: 885-40442-19

Date Collected: 12/22/25 13:13

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 11:15
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 11:15
Total/NA	Prep	SHAKE			40722	BV	EET ALB	12/31/25 15:08
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/07/26 01:19
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 02:04

Client Sample ID: BS25-38 @ 0.5'

Lab Sample ID: 885-40442-20

Date Collected: 12/22/25 13:30

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8015M/D		1	40805	AT	EET ALB	01/03/26 11:36
Total/NA	Prep	5030C			40641	JP	EET ALB	12/30/25 13:01
Total/NA	Analysis	8021B		1	40804	AT	EET ALB	01/03/26 11:36

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-38 @ 0.5'

Lab Sample ID: 885-40442-20

Date Collected: 12/22/25 13:30

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 14:23
Total/NA	Prep	300_Prep			40651	KB	EET ALB	12/30/25 14:31
Total/NA	Analysis	300.0		10	40614	EH	EET ALB	12/31/25 02:14

Client Sample ID: WS25-02 @ 0-1.5'

Lab Sample ID: 885-40442-21

Date Collected: 12/22/25 13:47

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 14:35
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 14:35
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 14:34
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 13:42

Client Sample ID: WS25-03 @ 0-2'

Lab Sample ID: 885-40442-22

Date Collected: 12/22/25 13:58

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 15:46
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 15:46
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 14:46
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 14:23

Client Sample ID: WS25-08 @ 0-3'

Lab Sample ID: 885-40442-23

Date Collected: 12/22/25 14:14

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 16:58
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 16:58
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 14:58

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: WS25-08 @ 0-3'

Lab Sample ID: 885-40442-23

Date Collected: 12/22/25 14:14

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 15:04

Client Sample ID: WS25-10 @ 0-3'

Lab Sample ID: 885-40442-24

Date Collected: 12/22/25 14:27

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 17:21
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 17:21
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 15:10
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 15:18

Client Sample ID: BS25-39 @ 0.5'

Lab Sample ID: 885-40442-25

Date Collected: 12/23/25 09:30

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 17:45
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 17:45
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 15:21
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 15:59

Client Sample ID: BS25-40 @ 0.5'

Lab Sample ID: 885-40442-26

Date Collected: 12/23/25 09:45

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 18:09
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 18:09
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 15:33
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 16:12

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-41 @ 0.5'

Lab Sample ID: 885-40442-27

Date Collected: 12/23/25 10:00

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 18:32
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 18:32
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 15:45
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 16:26

Client Sample ID: BS25-42 @ 0.5'

Lab Sample ID: 885-40442-28

Date Collected: 12/23/25 10:15

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 18:56
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 18:56
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 15:56
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 16:40

Client Sample ID: BS25-43 @ 0.5'

Lab Sample ID: 885-40442-29

Date Collected: 12/23/25 10:26

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 19:20
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 19:20
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 16:08
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 16:53

Client Sample ID: BS25-44 @ 0.5'

Lab Sample ID: 885-40442-30

Date Collected: 12/23/25 10:34

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 19:43

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-44 @ 0.5'

Lab Sample ID: 885-40442-30

Date Collected: 12/23/25 10:34

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 19:43
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 16:32
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 17:07

Client Sample ID: BS25-45 @ 0.5'

Lab Sample ID: 885-40442-31

Date Collected: 12/23/25 10:50

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 20:31
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 20:31
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 16:43
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 17:20

Client Sample ID: BS25-46 @ 0.5'

Lab Sample ID: 885-40442-32

Date Collected: 12/23/25 10:57

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 20:54
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 20:54
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 16:55
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 17:34

Client Sample ID: BS25-47 @ 0.5'

Lab Sample ID: 885-40442-33

Date Collected: 12/23/25 11:12

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 21:18
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 21:18

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-47 @ 0.5'

Lab Sample ID: 885-40442-33

Date Collected: 12/23/25 11:12

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 17:07
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 17:48

Client Sample ID: BS25-48 @ 0.5'

Lab Sample ID: 885-40442-34

Date Collected: 12/23/25 11:26

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 21:42
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 21:42
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 17:19
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 18:01

Client Sample ID: BS25-49 @ 0.5'

Lab Sample ID: 885-40442-35

Date Collected: 12/23/25 11:38

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 22:05
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 22:05
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 17:30
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 18:42

Client Sample ID: BS25-50 @ 0.5'

Lab Sample ID: 885-40442-36

Date Collected: 12/23/25 12:00

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 22:29
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 22:29
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 17:42

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-50 @ 0.5'

Lab Sample ID: 885-40442-36

Date Collected: 12/23/25 12:00

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 18:56

Client Sample ID: BS25-51 @ 0.5'

Lab Sample ID: 885-40442-37

Date Collected: 12/23/25 12:07

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 22:52
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 22:52
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 17:54
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 19:10

Client Sample ID: BS25-52 @ 0.5'

Lab Sample ID: 885-40442-38

Date Collected: 12/23/25 12:20

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 23:16
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 23:16
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 18:05
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 19:23

Client Sample ID: BS25-53 @ 0.5'

Lab Sample ID: 885-40442-39

Date Collected: 12/23/25 12:32

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/04/26 23:39
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/04/26 23:39
Total/NA	Prep	SHAKE			40726	BV	EET ALB	12/31/25 15:44
Total/NA	Analysis	8015M/D		1	40771	BV	EET ALB	01/02/26 18:17
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 19:37

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Client Sample ID: BS25-54 @ 0.5'

Lab Sample ID: 885-40442-40

Date Collected: 12/23/25 12:50

Matrix: Solid

Date Received: 12/30/25 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8015M/D		1	40822	VP	EET ALB	01/05/26 00:03
Total/NA	Prep	5030C			40655	JP	EET ALB	12/30/25 15:36
Total/NA	Analysis	8021B		1	40823	VP	EET ALB	01/05/26 00:03
Total/NA	Prep	SHAKE			40775	BV	EET ALB	01/02/26 12:57
Total/NA	Analysis	8015M/D		1	40836	EM	EET ALB	01/06/26 19:09
Total/NA	Prep	300_Prep			40693	EH	EET ALB	12/31/25 11:18
Total/NA	Analysis	300.0		10	40696	EH	EET ALB	12/31/25 19:51

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975



Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40442-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Chain-of-Custody Record

Client: Vertex (Bill to Mack)

Mailing Address: 101 Boyd drive
Carlsbad NM 88220

Phone #: _____
email or Fax#: _____

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time: _____

Standard Rush

Project Name: Red Deer CTB

Project #: 25A-05531

Project Manager: Sally casttar
Scasttar@vertex.ca

Sampler: Riley Arnold
On Ice: Yes No

of Coolers: 1
Cooler Temp (including CF): 1.2 + 0.2 = 1.4" Joe



Environment Te



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109 885-40442 COC

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX	MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 8011)	PAHs by 8270SIMS	RCRA 8 Metals	ClF, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12.22.25	09:00	Soil	B525-05 @ 1.5'	4oz, 1	Ice		X	X						X			
	09:15		B525-06 @ 1.5'														
	09:30		B525-14 @ 2'														
	09:45		B525-20 @ 3'														
	09:55		B525-21 @ 3'														
	10:15		B525-22 @ 3'														
	10:30		B525-23 @ 3'														
	10:45		B525-24 @ 3'														
	11:00		B525-25 @ 3'														
	11:15		B525-26 @ 3'														
	11:30		B525-27 @ 3'														
	11:45		B525-29 @ 3'														

Date: _____ Time: _____ Relinquished by: [Signature]

Received by: _____ Via: courier Date: 12/30/25 Time: 7:40

Remarks: ATTN: Matt Buckles
MattBuckles@Mec.com
cc: Scasttar@vertex.ca & Rarnold@vertex.ca
FAPP2211037291

Chain-of-Custody Record

Client: **Vertex (Bill to Mack)**

Mailing Address: **3101 Boyd drive
Carlsbad NM, 88220**

Phone #:

email or Fax#:

QA/QC Package:

Standard Level 4 (Full Validation)

Accreditation: Az Compliance

NELAC Other

EDD (Type)

Turn-Around Time:

Standard Rush

Project Name:

Red Deer CTB

Project #:

25A-05531

Project Manager: **Sally Carttar
Scarttar@vertex.ca**

Sampler: **Riley Arnold**

On Ice: Yes No

of Coolers: **1**

Cooler Temp (including CF): **40.1**

Container Type and #

Preservative Type

HEAL No.



Albuquerque

Environment Testing

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX	MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 8011)	PAHs by 8270SIMS	RCRA 8 Metals	Cl ⁻ , Br ⁻ , NO ₃ ⁻ , NO ₂ ⁻ , PO ₄ ⁻³ , SO ₄ ⁻²	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/22/25	12:00	Soil	B525-30 @ 3'	40z, 1	Ice		X	X						X			
	12:16		B525-32 @ 0.5'														
	12:29		B525-33 @ 0.5'														
	12:37		B525-34 @ 0.5'														
	12:56		B525-35 @ 0.5'														
	13:00		B525-36 @ 0.5'														
	13:13		B525-37 @ 0.5'														
	13:30		B525-38 @ 0.5'														
	13:47		W525-02 @ 0-1.5'														
	13:58		W525-03 @ 0-2'														
	14:14		W525-08 @ 0-3'														
	14:27		W525-10 @ 0-3'														

Date: Time: Relinquished by: *[Signature]*

Received by: Via: *CCWR* Date: Time: *12/30/25 7:40*

Date: Time: Relinquished by:

Received by: Via: Date: Time:

Remarks: **ATTN: Matt Buckles
matt.buckles@mec.com
CC: Scarttar@vertex.ca & Rarnold@vertex.ca
FAPP2211037291**

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Vertex (Bill to Mack)

Mailing Address: 3101 Boyd drive
Carlsbad NM, 88220

Phone #:

email or Fax#:

QA/QC Package:

Standard Level 4 (Full Validation)

Accreditation: Az Compliance

NELAC Other _____

EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name: Red Deer CTB

Project #: 25A-05531

Project Manager: Sally carttar
scattar@vertex.ca

Sampler: Riley Arnold

On Ice: Yes No

of Coolers: 1

Cooler Temp (including CF): ps 1

Container Type and #
Preservative Type
HEAL No.



Albuquerque

Environment Testing

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX	MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 8011)	PAHs by 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12.23.25	9:30	Soil	B525-39 @ 0.5'	40z, 1	ICE		X	X						X			
	9:45		B525-40 @ 0.5'														
	10:00		B525-41 @ 0.5'														
	10:15		B525-42 @ 0.5'														
	10:26		B525-43 @ 0.5'														
	10:34		B525-44 @ 0.5'														
	10:50		B525-45 @ 0.5'														
	10:57		B525-46 @ 0.5'														
	11:12		B525-47 @ 0.5'														
	11:26		B525-48 @ 0.5'														
	11:38		B525-49 @ 0.5'														
	12:00		B525-50 @ 0.5'														

Date: 12/23/25 Time: 9:30 Relinquished by: [Signature]

Received by: [Signature] Via: car Date: 12/23/25 Time: 9:30

Remarks: ATTN: Matt Buckles, mattbuckles@med.com
cc: scattar@vertex.ca ; Rarnold@vertex.ca

Date: 12/29/25 Time: 19:00 Relinquished by: [Signature]

Received by: [Signature] Via: car Date: 12/30/25 Time: 7:00

Bill to Mack Energy
FAPP2211037291

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories This serves as notice of this possibility Any sub-contracted data will be clearly notated on the analytical report.



Chain-of-Custody Record

Client: Vertex (Bill to Mack)

Mailing Address: 3101 Boyd Drive
Carlsbad NM, 88220

Phone #:

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other

EDD (Type)

Turn-Around Time:
 Standard Rush

Project Name: Red Deer CTB

Project #: 25A-05531

Project Manager: Sally Carttar
scarttar@vertex.ca

Sampler: Riley Arnold

On Ice: Yes No

of Coolers: 1

Cooler Temp (including CF): 1.2 + 0.2 = 1.4° Joe



Albuquerque

Environment Testing

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX	MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 8011)	PAHs by 8270SIMS	RCRA 8 Metals	Ci/F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/23/15	12:07	Soil	B525-51 @ 0.5'	4oz, 1	Ice		X	X						X			
	12:20		B525-52 @ 0.5'														
	12:32		B525-53 @ 0.5'														
	12:50		B525-54 @ 0.5'														

Date: 12/30/15 Time: 7:40
Relinquished by: [Signature]

Date: 1/13/2026 Time:
Relinquished by:

Received by: [Signature] Via carrier Date: 12/30/15 Time: 7:40

Received by: Via Date: Time:

Remarks: ATTN: Matt Buckles, matt.buckles@mac.com
cc: scarttar@vertex.ca & rarnold@vertex.ca
Bill to Mack Energy
FAPP2211037291

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-40442-1

Login Number: 40442

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	True	





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
 Vertex
 3101 Boyd Dr
 Carlsbad, New Mexico 88220

Generated 1/12/2026 2:29:40 PM

JOB DESCRIPTION

Red Deer CTB
 25A-05531

JOB NUMBER

885-40667-1

Eurofins Albuquerque
 4901 Hawkins NE
 Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
1/12/2026 2:29:40 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-40667-1
SDG: 25A-05531



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	36
QC Association Summary	43
Lab Chronicle	50
Certification Summary	60
Chain of Custody	61
Receipt Checklists	64

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-40667-1

Job ID: 885-40667-1

Eurofins Albuquerque

Job Narrative 885-40667-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 1/6/2026 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

Method 8015D_DRO: Surrogate recovery for the following samples is outside the lower control limit: (CCV 885-40953/41) and (CCV 885-40953/54). Corresponding CCV shows low surrogate out of range, however, samples show surrogate within range. Therefore, data is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-55 @0.5'

Lab Sample ID: 885-40667-1

Date Collected: 12/29/25 10:05

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		01/06/26 12:16	01/09/26 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			01/06/26 12:16	01/09/26 03:21	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 03:21	1
Ethylbenzene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 03:21	1
Toluene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 03:21	1
Xylenes, Total	ND		0.095	mg/Kg		01/06/26 12:16	01/09/26 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			01/06/26 12:16	01/09/26 03:21	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		01/07/26 10:15	01/07/26 17:01	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 17:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			01/07/26 10:15	01/07/26 17:01	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	350		49	mg/Kg		01/07/26 16:09	01/08/26 20:17	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-56 @0.5'

Lab Sample ID: 885-40667-2

Date Collected: 12/29/25 10:17

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		01/06/26 12:16	01/09/26 04:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			01/06/26 12:16	01/09/26 04:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 04:32	1
Ethylbenzene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 04:32	1
Toluene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 04:32	1
Xylenes, Total	ND		0.096	mg/Kg		01/06/26 12:16	01/09/26 04:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			01/06/26 12:16	01/09/26 04:32	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		9.6	mg/Kg		01/07/26 10:15	01/07/26 17:13	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 17:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			01/07/26 10:15	01/07/26 17:13	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		49	mg/Kg		01/07/26 16:09	01/08/26 20:31	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-57 @0.5'

Lab Sample ID: 885-40667-3

Date Collected: 12/29/25 10:28

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 12:16	01/09/26 05:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			01/06/26 12:16	01/09/26 05:42	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 05:42	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 05:42	1
Toluene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 05:42	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 12:16	01/09/26 05:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			01/06/26 12:16	01/09/26 05:42	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		01/07/26 10:15	01/07/26 17:25	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:15	01/07/26 17:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	101		62 - 134			01/07/26 10:15	01/07/26 17:25	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		50	mg/Kg		01/07/26 16:09	01/08/26 20:44	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-58 @0.5'

Lab Sample ID: 885-40667-4

Date Collected: 12/29/25 10:39

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 12:16	01/09/26 06:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			01/06/26 12:16	01/09/26 06:05	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 12:16	01/09/26 06:05	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 06:05	1
Toluene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 06:05	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 12:16	01/09/26 06:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			01/06/26 12:16	01/09/26 06:05	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		01/07/26 10:15	01/07/26 17:36	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 17:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			01/07/26 10:15	01/07/26 17:36	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		49	mg/Kg		01/07/26 16:09	01/08/26 20:58	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-59 @0.5'

Lab Sample ID: 885-40667-5

Date Collected: 12/29/25 10:50

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 12:16	01/09/26 06:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			01/06/26 12:16	01/09/26 06:29	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 12:16	01/09/26 06:29	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 06:29	1
Toluene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 06:29	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 12:16	01/09/26 06:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			01/06/26 12:16	01/09/26 06:29	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		01/07/26 10:15	01/07/26 17:48	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 17:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			01/07/26 10:15	01/07/26 17:48	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		50	mg/Kg		01/07/26 16:09	01/08/26 21:12	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-60 @0.5'

Lab Sample ID: 885-40667-6

Date Collected: 12/29/25 11:07

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		01/06/26 12:16	01/09/26 06:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		15 - 150			01/06/26 12:16	01/09/26 06:52	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 06:52	1
Ethylbenzene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 06:52	1
Toluene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 06:52	1
Xylenes, Total	ND		0.096	mg/Kg		01/06/26 12:16	01/09/26 06:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			01/06/26 12:16	01/09/26 06:52	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	53		9.6	mg/Kg		01/07/26 10:15	01/07/26 18:00	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 18:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			01/07/26 10:15	01/07/26 18:00	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	310		50	mg/Kg		01/07/26 16:09	01/08/26 21:25	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-61 @0.5'

Lab Sample ID: 885-40667-7

Date Collected: 12/29/25 11:20

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 12:16	01/09/26 07:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			01/06/26 12:16	01/09/26 07:16	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 07:16	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 07:16	1
Toluene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 07:16	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 12:16	01/09/26 07:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			01/06/26 12:16	01/09/26 07:16	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		01/07/26 10:15	01/07/26 18:11	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		01/07/26 10:15	01/07/26 18:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			01/07/26 10:15	01/07/26 18:11	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		50	mg/Kg		01/07/26 16:09	01/08/26 22:06	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-62 @0.5'

Lab Sample ID: 885-40667-8

Date Collected: 12/29/25 11:31

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		01/06/26 12:16	01/09/26 07:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			01/06/26 12:16	01/09/26 07:39	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		01/06/26 12:16	01/09/26 07:39	1
Ethylbenzene	ND		0.046	mg/Kg		01/06/26 12:16	01/09/26 07:39	1
Toluene	ND		0.046	mg/Kg		01/06/26 12:16	01/09/26 07:39	1
Xylenes, Total	ND		0.093	mg/Kg		01/06/26 12:16	01/09/26 07:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			01/06/26 12:16	01/09/26 07:39	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		10	mg/Kg		01/07/26 10:15	01/07/26 18:23	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		01/07/26 10:15	01/07/26 18:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			01/07/26 10:15	01/07/26 18:23	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		50	mg/Kg		01/07/26 16:09	01/08/26 22:20	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-63 @0.5'

Lab Sample ID: 885-40667-9

Date Collected: 12/29/25 11:48

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		01/06/26 12:16	01/09/26 08:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			01/06/26 12:16	01/09/26 08:02	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 08:02	1
Ethylbenzene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 08:02	1
Toluene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 08:02	1
Xylenes, Total	ND		0.094	mg/Kg		01/06/26 12:16	01/09/26 08:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			01/06/26 12:16	01/09/26 08:02	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		01/07/26 10:15	01/07/26 18:35	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		01/07/26 10:15	01/07/26 18:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	71		62 - 134			01/07/26 10:15	01/07/26 18:35	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		50	mg/Kg		01/07/26 16:09	01/08/26 22:34	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-64 @0.5'

Lab Sample ID: 885-40667-10

Date Collected: 12/29/25 12:00

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		01/06/26 12:16	01/09/26 08:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			01/06/26 12:16	01/09/26 08:26	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 08:26	1
Ethylbenzene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 08:26	1
Toluene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 08:26	1
Xylenes, Total	ND		0.095	mg/Kg		01/06/26 12:16	01/09/26 08:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			01/06/26 12:16	01/09/26 08:26	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		01/07/26 10:15	01/07/26 18:47	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:15	01/07/26 18:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	73		62 - 134			01/07/26 10:15	01/07/26 18:47	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	340		50	mg/Kg		01/07/26 16:09	01/08/26 22:47	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-65 @0.5'

Lab Sample ID: 885-40667-11

Date Collected: 12/29/25 12:09

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 12:16	01/09/26 09:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		15 - 150			01/06/26 12:16	01/09/26 09:13	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 12:16	01/09/26 09:13	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 09:13	1
Toluene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 09:13	1
Xylenes, Total	ND		0.099	mg/Kg		01/06/26 12:16	01/09/26 09:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			01/06/26 12:16	01/09/26 09:13	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	51		9.2	mg/Kg		01/07/26 10:15	01/07/26 19:10	1
Motor Oil Range Organics [C28-C40]	91		46	mg/Kg		01/07/26 10:15	01/07/26 19:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			01/07/26 10:15	01/07/26 19:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		49	mg/Kg		01/07/26 16:09	01/08/26 23:01	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-66 @0.5'

Lab Sample ID: 885-40667-12

Date Collected: 12/29/25 12:21

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 12:16	01/09/26 09:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			01/06/26 12:16	01/09/26 09:36	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 09:36	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 09:36	1
Toluene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 09:36	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 12:16	01/09/26 09:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			01/06/26 12:16	01/09/26 09:36	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		01/07/26 10:15	01/07/26 19:22	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 19:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			01/07/26 10:15	01/07/26 19:22	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	310		50	mg/Kg		01/07/26 16:09	01/08/26 23:15	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-67 @0.5'

Lab Sample ID: 885-40667-13

Date Collected: 12/29/25 12:30

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		01/06/26 12:16	01/09/26 09:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		15 - 150			01/06/26 12:16	01/09/26 09:59	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		01/06/26 12:16	01/09/26 09:59	1
Ethylbenzene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 09:59	1
Toluene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 09:59	1
Xylenes, Total	ND		0.093	mg/Kg		01/06/26 12:16	01/09/26 09:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			01/06/26 12:16	01/09/26 09:59	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		01/07/26 10:15	01/07/26 19:33	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:15	01/07/26 19:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			01/07/26 10:15	01/07/26 19:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		50	mg/Kg		01/07/26 16:09	01/08/26 23:28	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-68 @0.5'

Lab Sample ID: 885-40667-14

Date Collected: 12/29/25 12:41

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		01/06/26 12:16	01/09/26 10:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		15 - 150			01/06/26 12:16	01/09/26 10:22	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 10:22	1
Ethylbenzene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 10:22	1
Toluene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 10:22	1
Xylenes, Total	ND		0.094	mg/Kg		01/06/26 12:16	01/09/26 10:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			01/06/26 12:16	01/09/26 10:22	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		01/07/26 10:15	01/07/26 19:45	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		01/07/26 10:15	01/07/26 19:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			01/07/26 10:15	01/07/26 19:45	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		50	mg/Kg		01/07/26 16:09	01/08/26 23:42	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-69 @0.5'

Lab Sample ID: 885-40667-15

Date Collected: 12/29/25 12:56

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		01/06/26 12:16	01/09/26 10:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		15 - 150			01/06/26 12:16	01/09/26 10:46	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		01/06/26 12:16	01/09/26 10:46	1
Ethylbenzene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 10:46	1
Toluene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 10:46	1
Xylenes, Total	ND		0.094	mg/Kg		01/06/26 12:16	01/09/26 10:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			01/06/26 12:16	01/09/26 10:46	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		01/07/26 10:15	01/07/26 19:57	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 19:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			01/07/26 10:15	01/07/26 19:57	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	350		50	mg/Kg		01/07/26 16:09	01/08/26 23:56	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-70 @0.5'

Lab Sample ID: 885-40667-16

Date Collected: 12/29/25 13:11

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		01/06/26 12:16	01/09/26 11:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			01/06/26 12:16	01/09/26 11:09	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 11:09	1
Ethylbenzene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 11:09	1
Toluene	ND		0.047	mg/Kg		01/06/26 12:16	01/09/26 11:09	1
Xylenes, Total	ND		0.095	mg/Kg		01/06/26 12:16	01/09/26 11:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			01/06/26 12:16	01/09/26 11:09	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		01/07/26 10:15	01/07/26 20:08	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:15	01/07/26 20:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	85		62 - 134			01/07/26 10:15	01/07/26 20:08	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		50	mg/Kg		01/07/26 16:09	01/09/26 00:09	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-71 @0.5'

Lab Sample ID: 885-40667-17

Date Collected: 12/30/25 09:45

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		01/06/26 12:16	01/09/26 11:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		15 - 150			01/06/26 12:16	01/09/26 11:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 11:32	1
Ethylbenzene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 11:32	1
Toluene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 11:32	1
Xylenes, Total	ND		0.097	mg/Kg		01/06/26 12:16	01/09/26 11:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			01/06/26 12:16	01/09/26 11:32	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		01/07/26 10:15	01/07/26 20:20	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		01/07/26 10:15	01/07/26 20:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			01/07/26 10:15	01/07/26 20:20	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		50	mg/Kg		01/08/26 09:59	01/08/26 13:00	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-72 @0.5'

Lab Sample ID: 885-40667-18

Date Collected: 12/30/25 10:07

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		01/06/26 12:16	01/09/26 11:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			01/06/26 12:16	01/09/26 11:56	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		01/06/26 12:16	01/09/26 11:56	1
Ethylbenzene	ND		0.046	mg/Kg		01/06/26 12:16	01/09/26 11:56	1
Toluene	ND		0.046	mg/Kg		01/06/26 12:16	01/09/26 11:56	1
Xylenes, Total	ND		0.093	mg/Kg		01/06/26 12:16	01/09/26 11:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			01/06/26 12:16	01/09/26 11:56	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	11		9.5	mg/Kg		01/07/26 10:15	01/07/26 20:32	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:15	01/07/26 20:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			01/07/26 10:15	01/07/26 20:32	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		51	mg/Kg		01/08/26 09:59	01/08/26 13:14	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-73 @0.5'

Lab Sample ID: 885-40667-19

Date Collected: 12/30/25 10:18

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		01/06/26 12:16	01/09/26 12:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		15 - 150			01/06/26 12:16	01/09/26 12:19	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 12:16	01/09/26 12:19	1
Ethylbenzene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 12:19	1
Toluene	ND		0.048	mg/Kg		01/06/26 12:16	01/09/26 12:19	1
Xylenes, Total	ND		0.096	mg/Kg		01/06/26 12:16	01/09/26 12:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			01/06/26 12:16	01/09/26 12:19	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	14		9.6	mg/Kg		01/07/26 10:15	01/07/26 20:43	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:15	01/07/26 20:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			01/07/26 10:15	01/07/26 20:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		50	mg/Kg		01/08/26 09:59	01/08/26 13:55	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-74 @0.5'

Lab Sample ID: 885-40667-20

Date Collected: 12/30/25 10:30

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 12:16	01/09/26 12:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			01/06/26 12:16	01/09/26 12:43	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 12:16	01/09/26 12:43	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 12:43	1
Toluene	ND		0.049	mg/Kg		01/06/26 12:16	01/09/26 12:43	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 12:16	01/09/26 12:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			01/06/26 12:16	01/09/26 12:43	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		01/07/26 10:15	01/07/26 20:55	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:15	01/07/26 20:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			01/07/26 10:15	01/07/26 20:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		51	mg/Kg		01/08/26 09:59	01/08/26 14:09	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-75 @0.5'

Lab Sample ID: 885-40667-21

Date Collected: 12/30/25 10:39

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		01/06/26 14:14	01/09/26 16:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			01/06/26 14:14	01/09/26 16:44	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 14:14	01/09/26 16:44	1
Ethylbenzene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 16:44	1
Toluene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 16:44	1
Xylenes, Total	ND		0.10	mg/Kg		01/06/26 14:14	01/09/26 16:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			01/06/26 14:14	01/09/26 16:44	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		01/07/26 10:49	01/07/26 14:11	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		01/07/26 10:49	01/07/26 14:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			01/07/26 10:49	01/07/26 14:11	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		49	mg/Kg		01/08/26 09:59	01/08/26 14:22	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-76 @0.5'

Lab Sample ID: 885-40667-22

Date Collected: 12/30/25 10:56

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 14:14	01/09/26 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			01/06/26 14:14	01/09/26 17:54	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 14:14	01/09/26 17:54	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 17:54	1
Toluene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 17:54	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 14:14	01/09/26 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			01/06/26 14:14	01/09/26 17:54	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	17		9.6	mg/Kg		01/07/26 10:49	01/07/26 14:34	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:49	01/07/26 14:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			01/07/26 10:49	01/07/26 14:34	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		51	mg/Kg		01/08/26 09:59	01/08/26 14:36	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-77 @0.5'

Lab Sample ID: 885-40667-23

Date Collected: 12/30/25 11:25

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		01/06/26 14:14	01/09/26 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			01/06/26 14:14	01/09/26 19:04	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 14:14	01/09/26 19:04	1
Ethylbenzene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 19:04	1
Toluene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 19:04	1
Xylenes, Total	ND		0.10	mg/Kg		01/06/26 14:14	01/09/26 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			01/06/26 14:14	01/09/26 19:04	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		01/07/26 10:49	01/07/26 14:58	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		01/07/26 10:49	01/07/26 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	77		62 - 134			01/07/26 10:49	01/07/26 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		50	mg/Kg		01/08/26 09:59	01/08/26 14:49	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-78 @0.5'

Lab Sample ID: 885-40667-24

Date Collected: 12/30/25 11:36

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 14:14	01/09/26 19:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		15 - 150			01/06/26 14:14	01/09/26 19:28	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 14:14	01/09/26 19:28	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 19:28	1
Toluene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 19:28	1
Xylenes, Total	ND		0.097	mg/Kg		01/06/26 14:14	01/09/26 19:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			01/06/26 14:14	01/09/26 19:28	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		9.4	mg/Kg		01/07/26 10:49	01/07/26 15:21	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:49	01/07/26 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			01/07/26 10:49	01/07/26 15:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		50	mg/Kg		01/08/26 09:59	01/08/26 15:03	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-79 @0.5'

Lab Sample ID: 885-40667-25

Date Collected: 12/30/25 12:07

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		01/06/26 14:14	01/09/26 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		15 - 150			01/06/26 14:14	01/09/26 19:51	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 14:14	01/09/26 19:51	1
Ethylbenzene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 19:51	1
Toluene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 19:51	1
Xylenes, Total	ND		0.10	mg/Kg		01/06/26 14:14	01/09/26 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			01/06/26 14:14	01/09/26 19:51	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	45		9.8	mg/Kg		01/07/26 10:49	01/07/26 15:44	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		01/07/26 10:49	01/07/26 15:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	85		62 - 134			01/07/26 10:49	01/07/26 15:44	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		50	mg/Kg		01/08/26 09:59	01/08/26 15:17	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-80 @0.5'

Lab Sample ID: 885-40667-26

Date Collected: 12/30/25 12:21

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 14:14	01/09/26 20:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			01/06/26 14:14	01/09/26 20:15	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 14:14	01/09/26 20:15	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 20:15	1
Toluene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 20:15	1
Xylenes, Total	ND		0.099	mg/Kg		01/06/26 14:14	01/09/26 20:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			01/06/26 14:14	01/09/26 20:15	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		01/07/26 10:49	01/07/26 16:08	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		01/07/26 10:49	01/07/26 16:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			01/07/26 10:49	01/07/26 16:08	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		51	mg/Kg		01/08/26 09:59	01/08/26 15:30	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-81 @0.5'

Lab Sample ID: 885-40667-27

Date Collected: 12/30/25 12:36

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 14:14	01/09/26 20:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			01/06/26 14:14	01/09/26 20:38	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 14:14	01/09/26 20:38	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 20:38	1
Toluene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 20:38	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 14:14	01/09/26 20:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			01/06/26 14:14	01/09/26 20:38	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	9.6		9.5	mg/Kg		01/07/26 10:49	01/07/26 16:31	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		01/07/26 10:49	01/07/26 16:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			01/07/26 10:49	01/07/26 16:31	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		50	mg/Kg		01/08/26 09:59	01/08/26 15:44	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-82 @0.5'

Lab Sample ID: 885-40667-28

Date Collected: 12/30/25 12:47

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		01/06/26 14:14	01/09/26 21:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			01/06/26 14:14	01/09/26 21:01	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		01/06/26 14:14	01/09/26 21:01	1
Ethylbenzene	ND		0.046	mg/Kg		01/06/26 14:14	01/09/26 21:01	1
Toluene	ND		0.046	mg/Kg		01/06/26 14:14	01/09/26 21:01	1
Xylenes, Total	ND		0.092	mg/Kg		01/06/26 14:14	01/09/26 21:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			01/06/26 14:14	01/09/26 21:01	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18		9.4	mg/Kg		01/07/26 10:49	01/07/26 16:54	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		01/07/26 10:49	01/07/26 16:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			01/07/26 10:49	01/07/26 16:54	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		51	mg/Kg		01/08/26 09:59	01/08/26 15:58	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-83 @0.5'

Lab Sample ID: 885-40667-29

Date Collected: 12/30/25 12:55

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 14:14	01/09/26 21:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		15 - 150			01/06/26 14:14	01/09/26 21:25	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		01/06/26 14:14	01/09/26 21:25	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 21:25	1
Toluene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 21:25	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 14:14	01/09/26 21:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			01/06/26 14:14	01/09/26 21:25	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	21		9.8	mg/Kg		01/07/26 10:49	01/07/26 17:18	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		01/07/26 10:49	01/07/26 17:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			01/07/26 10:49	01/07/26 17:18	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		50	mg/Kg		01/08/26 09:59	01/08/26 16:39	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-84 @0.5'

Lab Sample ID: 885-40667-30

Date Collected: 12/30/25 13:13

Matrix: Solid

Date Received: 01/06/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		01/06/26 14:14	01/09/26 21:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			01/06/26 14:14	01/09/26 21:48	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 14:14	01/09/26 21:48	1
Ethylbenzene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 21:48	1
Toluene	ND		0.049	mg/Kg		01/06/26 14:14	01/09/26 21:48	1
Xylenes, Total	ND		0.098	mg/Kg		01/06/26 14:14	01/09/26 21:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			01/06/26 14:14	01/09/26 21:48	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		01/07/26 10:49	01/07/26 17:41	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		01/07/26 10:49	01/07/26 17:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			01/07/26 10:49	01/07/26 17:41	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		50	mg/Kg		01/08/26 09:59	01/08/26 17:20	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-40910/1-A
Matrix: Solid
Analysis Batch: 41062

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40910

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		01/06/26 12:16	01/09/26 02:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			01/06/26 12:16	01/09/26 02:58	1

Lab Sample ID: LCS 885-40910/2-A
Matrix: Solid
Analysis Batch: 41062

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	19.7		mg/Kg		79	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	172		15 - 150				

Lab Sample ID: 885-40667-1 MS
Matrix: Solid
Analysis Batch: 41062

Client Sample ID: BS25-55 @0.5'
Prep Type: Total/NA
Prep Batch: 40910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		23.9	19.5		mg/Kg		82	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	181		15 - 150						

Lab Sample ID: 885-40667-1 MSD
Matrix: Solid
Analysis Batch: 41062

Client Sample ID: BS25-55 @0.5'
Prep Type: Total/NA
Prep Batch: 40910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.0	20.5		mg/Kg		85	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	180		15 - 150								

Lab Sample ID: MB 885-40926/1-A
Matrix: Solid
Analysis Batch: 41136

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40926

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		01/06/26 14:14	01/09/26 16:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			01/06/26 14:14	01/09/26 16:20	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: LCS 885-40926/2-A
Matrix: Solid
Analysis Batch: 41136

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	21.7		mg/Kg		87	70 - 130
Surrogate		LCS %Recovery	LCS Qualifier				Limits
4-Bromofluorobenzene (Surr)		172					15 - 150

Lab Sample ID: 885-40667-21 MS
Matrix: Solid
Analysis Batch: 41136

Client Sample ID: BS25-75 @0.5'
Prep Type: Total/NA
Prep Batch: 40926

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.9	21.5		mg/Kg		86	70 - 130
Surrogate		MS %Recovery		MS Qualifier					Limits
4-Bromofluorobenzene (Surr)		175							15 - 150

Lab Sample ID: 885-40667-21 MSD
Matrix: Solid
Analysis Batch: 41136

Client Sample ID: BS25-75 @0.5'
Prep Type: Total/NA
Prep Batch: 40926

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.8	21.3		mg/Kg		86	70 - 130	1	20
Surrogate		MSD %Recovery		MSD Qualifier					Limits		
4-Bromofluorobenzene (Surr)		174							15 - 150		

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-40910/1-A
Matrix: Solid
Analysis Batch: 41063

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40910

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 12:16	01/09/26 02:58	1
Ethylbenzene	ND		0.050	mg/Kg		01/06/26 12:16	01/09/26 02:58	1
Toluene	ND		0.050	mg/Kg		01/06/26 12:16	01/09/26 02:58	1
Xylenes, Total	ND		0.10	mg/Kg		01/06/26 12:16	01/09/26 02:58	1
Surrogate		MB %Recovery	MB Qualifier			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		90				01/06/26 12:16	01/09/26 02:58	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 885-40910/3-A
Matrix: Solid
Analysis Batch: 41063

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.960		mg/Kg		96	70 - 130
Ethylbenzene	1.00	0.966		mg/Kg		97	70 - 130
m,p-Xylene	2.00	1.98		mg/Kg		99	70 - 130
o-Xylene	1.00	0.955		mg/Kg		95	70 - 130
Toluene	1.00	0.973		mg/Kg		97	70 - 130
Xylenes, Total	3.00	2.93		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		15 - 150

Lab Sample ID: 885-40667-2 MS
Matrix: Solid
Analysis Batch: 41063

Client Sample ID: BS25-56 @0.5'
Prep Type: Total/NA
Prep Batch: 40910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.955	0.930		mg/Kg		97	70 - 130
Ethylbenzene	ND		0.955	0.959		mg/Kg		100	70 - 130
m,p-Xylene	ND		1.91	1.91		mg/Kg		100	70 - 130
o-Xylene	ND		0.955	0.934		mg/Kg		98	70 - 130
Toluene	ND		0.955	0.966		mg/Kg		101	70 - 130
Xylenes, Total	ND		2.87	2.85		mg/Kg		99	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		15 - 150

Lab Sample ID: 885-40667-2 MSD
Matrix: Solid
Analysis Batch: 41063

Client Sample ID: BS25-56 @0.5'
Prep Type: Total/NA
Prep Batch: 40910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
										RPD	Limit
Benzene	ND		0.957	0.944		mg/Kg		99	70 - 130	1	20
Ethylbenzene	ND		0.957	0.966		mg/Kg		101	70 - 130	1	20
m,p-Xylene	ND		1.91	2.01		mg/Kg		105	70 - 130	5	20
o-Xylene	ND		0.957	0.972		mg/Kg		102	70 - 130	4	20
Toluene	ND		0.957	0.983		mg/Kg		103	70 - 130	2	20
Xylenes, Total	ND		2.87	2.98		mg/Kg		103	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		15 - 150

Lab Sample ID: MB 885-40926/1-A
Matrix: Solid
Analysis Batch: 41137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40926

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		01/06/26 14:14	01/09/26 16:20	1
Ethylbenzene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 16:20	1
Toluene	ND		0.050	mg/Kg		01/06/26 14:14	01/09/26 16:20	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-40926/1-A
Matrix: Solid
Analysis Batch: 41137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40926

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Xylenes, Total	ND		0.10	mg/Kg		01/06/26 14:14	01/09/26 16:20	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	95		15 - 150	01/06/26 14:14	01/09/26 16:20	1

Lab Sample ID: LCS 885-40926/3-A
Matrix: Solid
Analysis Batch: 41137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40926

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	1.00	0.987		mg/Kg		99	70 - 130
Ethylbenzene	1.00	0.995		mg/Kg		99	70 - 130
m,p-Xylene	2.00	2.02		mg/Kg		101	70 - 130
o-Xylene	1.00	0.987		mg/Kg		99	70 - 130
Toluene	1.00	0.993		mg/Kg		99	70 - 130
Xylenes, Total	3.00	3.01		mg/Kg		100	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		15 - 150

Lab Sample ID: 885-40667-22 MS
Matrix: Solid
Analysis Batch: 41137

Client Sample ID: BS25-76 @0.5'
Prep Type: Total/NA
Prep Batch: 40926

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Benzene	ND		0.977	0.970		mg/Kg		99	70 - 130
Ethylbenzene	ND		0.977	0.999		mg/Kg		102	70 - 130
m,p-Xylene	ND		1.95	2.07		mg/Kg		106	70 - 130
o-Xylene	ND		0.977	0.992		mg/Kg		102	70 - 130
Toluene	ND		0.977	1.00		mg/Kg		102	70 - 130
Xylenes, Total	ND		2.93	3.06		mg/Kg		104	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	94		15 - 150

Lab Sample ID: 885-40667-22 MSD
Matrix: Solid
Analysis Batch: 41137

Client Sample ID: BS25-76 @0.5'
Prep Type: Total/NA
Prep Batch: 40926

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	ND		0.987	1.01		mg/Kg		102	70 - 130	4	20
Ethylbenzene	ND		0.987	1.03		mg/Kg		104	70 - 130	3	20
m,p-Xylene	ND		1.97	2.13		mg/Kg		108	70 - 130	3	20
o-Xylene	ND		0.987	1.03		mg/Kg		105	70 - 130	4	20
Toluene	ND		0.987	1.03		mg/Kg		104	70 - 130	3	20
Xylenes, Total	ND		2.96	3.16		mg/Kg		106	70 - 130	3	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 885-40667-22 MSD
Matrix: Solid
Analysis Batch: 41137

Client Sample ID: BS25-76 @0.5'
Prep Type: Total/NA
Prep Batch: 40926

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		15 - 150

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-40963/1-A
Matrix: Solid
Analysis Batch: 40953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40963

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		01/07/26 10:14	01/07/26 16:37	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		01/07/26 10:14	01/07/26 16:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134	01/07/26 10:14	01/07/26 16:37	1

Lab Sample ID: LCS 885-40963/2-A
Matrix: Solid
Analysis Batch: 40953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40963

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	53.4		mg/Kg		107	51 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	104		62 - 134

Lab Sample ID: 885-40667-20 MS
Matrix: Solid
Analysis Batch: 40953

Client Sample ID: BS25-74 @0.5'
Prep Type: Total/NA
Prep Batch: 40963

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		49.0	46.1		mg/Kg		94	44 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
Di-n-octyl phthalate (Surr)	66		62 - 134

Lab Sample ID: 885-40667-20 MSD
Matrix: Solid
Analysis Batch: 40953

Client Sample ID: BS25-74 @0.5'
Prep Type: Total/NA
Prep Batch: 40963

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		48.8	51.8		mg/Kg		106	44 - 136	12	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Di-n-octyl phthalate (Surr)	62		62 - 134

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-40966/1-A
Matrix: Solid
Analysis Batch: 40954

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40966

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		01/07/26 10:48	01/07/26 13:25	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		01/07/26 10:48	01/07/26 13:25	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	66		62 - 134			01/07/26 10:48	01/07/26 13:25	1

Lab Sample ID: LCS 885-40966/2-A
Matrix: Solid
Analysis Batch: 40954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	51.4		mg/Kg		103	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	51	S1-	62 - 134				

Lab Sample ID: 885-40667-30 MS
Matrix: Solid
Analysis Batch: 40954

Client Sample ID: BS25-84 @0.5'
Prep Type: Total/NA
Prep Batch: 40966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		47.3	43.4		mg/Kg		92	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	85		62 - 134						

Lab Sample ID: 885-40667-30 MSD
Matrix: Solid
Analysis Batch: 40954

Client Sample ID: BS25-84 @0.5'
Prep Type: Total/NA
Prep Batch: 40966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Diesel Range Organics [C10-C28]	ND		48.4	45.8		mg/Kg		95	44 - 136	5	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	87		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-41001/1-A
Matrix: Solid
Analysis Batch: 41026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41001

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		01/07/26 16:09	01/08/26 11:11	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-41001/2-A
 Matrix: Solid
 Analysis Batch: 41026

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 41001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.7	45.7		mg/Kg		92	90 - 110

Lab Sample ID: MB 885-41023/1-A
 Matrix: Solid
 Analysis Batch: 41026

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 41023

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		01/08/26 09:59	01/08/26 11:38	1

Lab Sample ID: LCS 885-41023/2-A
 Matrix: Solid
 Analysis Batch: 41026

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 41023

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	46.0		mg/Kg		92	90 - 110

Lab Sample ID: 885-40667-29 MS
 Matrix: Solid
 Analysis Batch: 41026

Client Sample ID: BS25-83 @0.5'
 Prep Type: Total/NA
 Prep Batch: 41023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	240		50.7	309	4	mg/Kg		128	50 - 150

Lab Sample ID: 885-40667-29 MSD
 Matrix: Solid
 Analysis Batch: 41026

Client Sample ID: BS25-83 @0.5'
 Prep Type: Total/NA
 Prep Batch: 41023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	240		50.3	312	4	mg/Kg		135	50 - 150	1	20

Lab Sample ID: 885-40667-30 MS
 Matrix: Solid
 Analysis Batch: 41026

Client Sample ID: BS25-84 @0.5'
 Prep Type: Total/NA
 Prep Batch: 41023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250		49.5	292	4	mg/Kg		86	50 - 150

Lab Sample ID: 885-40667-30 MSD
 Matrix: Solid
 Analysis Batch: 41026

Client Sample ID: BS25-84 @0.5'
 Prep Type: Total/NA
 Prep Batch: 41023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	250		49.2	280	4	mg/Kg		61	50 - 150	4	20

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

GC VOA

Prep Batch: 40910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-1	BS25-55 @0.5'	Total/NA	Solid	5030C	
885-40667-2	BS25-56 @0.5'	Total/NA	Solid	5030C	
885-40667-3	BS25-57 @0.5'	Total/NA	Solid	5030C	
885-40667-4	BS25-58 @0.5'	Total/NA	Solid	5030C	
885-40667-5	BS25-59 @0.5'	Total/NA	Solid	5030C	
885-40667-6	BS25-60 @0.5'	Total/NA	Solid	5030C	
885-40667-7	BS25-61 @0.5'	Total/NA	Solid	5030C	
885-40667-8	BS25-62 @0.5'	Total/NA	Solid	5030C	
885-40667-9	BS25-63 @0.5'	Total/NA	Solid	5030C	
885-40667-10	BS25-64 @0.5'	Total/NA	Solid	5030C	
885-40667-11	BS25-65 @0.5'	Total/NA	Solid	5030C	
885-40667-12	BS25-66 @0.5'	Total/NA	Solid	5030C	
885-40667-13	BS25-67 @0.5'	Total/NA	Solid	5030C	
885-40667-14	BS25-68 @0.5'	Total/NA	Solid	5030C	
885-40667-15	BS25-69 @0.5'	Total/NA	Solid	5030C	
885-40667-16	BS25-70 @0.5'	Total/NA	Solid	5030C	
885-40667-17	BS25-71 @0.5'	Total/NA	Solid	5030C	
885-40667-18	BS25-72 @0.5'	Total/NA	Solid	5030C	
885-40667-19	BS25-73 @0.5'	Total/NA	Solid	5030C	
885-40667-20	BS25-74 @0.5'	Total/NA	Solid	5030C	
MB 885-40910/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-40910/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-40910/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-40667-1 MS	BS25-55 @0.5'	Total/NA	Solid	5030C	
885-40667-1 MSD	BS25-55 @0.5'	Total/NA	Solid	5030C	
885-40667-2 MS	BS25-56 @0.5'	Total/NA	Solid	5030C	
885-40667-2 MSD	BS25-56 @0.5'	Total/NA	Solid	5030C	

Prep Batch: 40926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-21	BS25-75 @0.5'	Total/NA	Solid	5030C	
885-40667-22	BS25-76 @0.5'	Total/NA	Solid	5030C	
885-40667-23	BS25-77 @0.5'	Total/NA	Solid	5030C	
885-40667-24	BS25-78 @0.5'	Total/NA	Solid	5030C	
885-40667-25	BS25-79 @0.5'	Total/NA	Solid	5030C	
885-40667-26	BS25-80 @0.5'	Total/NA	Solid	5030C	
885-40667-27	BS25-81 @0.5'	Total/NA	Solid	5030C	
885-40667-28	BS25-82 @0.5'	Total/NA	Solid	5030C	
885-40667-29	BS25-83 @0.5'	Total/NA	Solid	5030C	
885-40667-30	BS25-84 @0.5'	Total/NA	Solid	5030C	
MB 885-40926/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-40926/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-40926/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-40667-21 MS	BS25-75 @0.5'	Total/NA	Solid	5030C	
885-40667-21 MSD	BS25-75 @0.5'	Total/NA	Solid	5030C	
885-40667-22 MS	BS25-76 @0.5'	Total/NA	Solid	5030C	
885-40667-22 MSD	BS25-76 @0.5'	Total/NA	Solid	5030C	

Analysis Batch: 41062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-1	BS25-55 @0.5'	Total/NA	Solid	8015M/D	40910

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

GC VOA (Continued)

Analysis Batch: 41062 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-2	BS25-56 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-3	BS25-57 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-4	BS25-58 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-5	BS25-59 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-6	BS25-60 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-7	BS25-61 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-8	BS25-62 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-9	BS25-63 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-10	BS25-64 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-11	BS25-65 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-12	BS25-66 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-13	BS25-67 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-14	BS25-68 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-15	BS25-69 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-16	BS25-70 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-17	BS25-71 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-18	BS25-72 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-19	BS25-73 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-20	BS25-74 @0.5'	Total/NA	Solid	8015M/D	40910
MB 885-40910/1-A	Method Blank	Total/NA	Solid	8015M/D	40910
LCS 885-40910/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40910
885-40667-1 MS	BS25-55 @0.5'	Total/NA	Solid	8015M/D	40910
885-40667-1 MSD	BS25-55 @0.5'	Total/NA	Solid	8015M/D	40910

Analysis Batch: 41063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-1	BS25-55 @0.5'	Total/NA	Solid	8021B	40910
885-40667-2	BS25-56 @0.5'	Total/NA	Solid	8021B	40910
885-40667-3	BS25-57 @0.5'	Total/NA	Solid	8021B	40910
885-40667-4	BS25-58 @0.5'	Total/NA	Solid	8021B	40910
885-40667-5	BS25-59 @0.5'	Total/NA	Solid	8021B	40910
885-40667-6	BS25-60 @0.5'	Total/NA	Solid	8021B	40910
885-40667-7	BS25-61 @0.5'	Total/NA	Solid	8021B	40910
885-40667-8	BS25-62 @0.5'	Total/NA	Solid	8021B	40910
885-40667-9	BS25-63 @0.5'	Total/NA	Solid	8021B	40910
885-40667-10	BS25-64 @0.5'	Total/NA	Solid	8021B	40910
885-40667-11	BS25-65 @0.5'	Total/NA	Solid	8021B	40910
885-40667-12	BS25-66 @0.5'	Total/NA	Solid	8021B	40910
885-40667-13	BS25-67 @0.5'	Total/NA	Solid	8021B	40910
885-40667-14	BS25-68 @0.5'	Total/NA	Solid	8021B	40910
885-40667-15	BS25-69 @0.5'	Total/NA	Solid	8021B	40910
885-40667-16	BS25-70 @0.5'	Total/NA	Solid	8021B	40910
885-40667-17	BS25-71 @0.5'	Total/NA	Solid	8021B	40910
885-40667-18	BS25-72 @0.5'	Total/NA	Solid	8021B	40910
885-40667-19	BS25-73 @0.5'	Total/NA	Solid	8021B	40910
885-40667-20	BS25-74 @0.5'	Total/NA	Solid	8021B	40910
MB 885-40910/1-A	Method Blank	Total/NA	Solid	8021B	40910
LCS 885-40910/3-A	Lab Control Sample	Total/NA	Solid	8021B	40910
885-40667-2 MS	BS25-56 @0.5'	Total/NA	Solid	8021B	40910
885-40667-2 MSD	BS25-56 @0.5'	Total/NA	Solid	8021B	40910

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTBJob ID: 885-40667-1
SDG: 25A-05531

GC VOA

Analysis Batch: 41136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-21	BS25-75 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-22	BS25-76 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-23	BS25-77 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-24	BS25-78 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-25	BS25-79 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-26	BS25-80 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-27	BS25-81 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-28	BS25-82 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-29	BS25-83 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-30	BS25-84 @0.5'	Total/NA	Solid	8015M/D	40926
MB 885-40926/1-A	Method Blank	Total/NA	Solid	8015M/D	40926
LCS 885-40926/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40926
885-40667-21 MS	BS25-75 @0.5'	Total/NA	Solid	8015M/D	40926
885-40667-21 MSD	BS25-75 @0.5'	Total/NA	Solid	8015M/D	40926

Analysis Batch: 41137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-21	BS25-75 @0.5'	Total/NA	Solid	8021B	40926
885-40667-22	BS25-76 @0.5'	Total/NA	Solid	8021B	40926
885-40667-23	BS25-77 @0.5'	Total/NA	Solid	8021B	40926
885-40667-24	BS25-78 @0.5'	Total/NA	Solid	8021B	40926
885-40667-25	BS25-79 @0.5'	Total/NA	Solid	8021B	40926
885-40667-26	BS25-80 @0.5'	Total/NA	Solid	8021B	40926
885-40667-27	BS25-81 @0.5'	Total/NA	Solid	8021B	40926
885-40667-28	BS25-82 @0.5'	Total/NA	Solid	8021B	40926
885-40667-29	BS25-83 @0.5'	Total/NA	Solid	8021B	40926
885-40667-30	BS25-84 @0.5'	Total/NA	Solid	8021B	40926
MB 885-40926/1-A	Method Blank	Total/NA	Solid	8021B	40926
LCS 885-40926/3-A	Lab Control Sample	Total/NA	Solid	8021B	40926
885-40667-22 MS	BS25-76 @0.5'	Total/NA	Solid	8021B	40926
885-40667-22 MSD	BS25-76 @0.5'	Total/NA	Solid	8021B	40926

GC Semi VOA

Analysis Batch: 40953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-1	BS25-55 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-2	BS25-56 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-3	BS25-57 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-4	BS25-58 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-5	BS25-59 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-6	BS25-60 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-7	BS25-61 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-8	BS25-62 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-9	BS25-63 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-10	BS25-64 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-11	BS25-65 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-12	BS25-66 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-13	BS25-67 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-14	BS25-68 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-15	BS25-69 @0.5'	Total/NA	Solid	8015M/D	40963

Eurofins Albuquerque

QC Association Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

GC Semi VOA (Continued)

Analysis Batch: 40953 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-16	BS25-70 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-17	BS25-71 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-18	BS25-72 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-19	BS25-73 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-20	BS25-74 @0.5'	Total/NA	Solid	8015M/D	40963
MB 885-40963/1-A	Method Blank	Total/NA	Solid	8015M/D	40963
LCS 885-40963/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40963
885-40667-20 MS	BS25-74 @0.5'	Total/NA	Solid	8015M/D	40963
885-40667-20 MSD	BS25-74 @0.5'	Total/NA	Solid	8015M/D	40963

Analysis Batch: 40954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-21	BS25-75 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-22	BS25-76 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-23	BS25-77 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-24	BS25-78 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-25	BS25-79 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-26	BS25-80 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-27	BS25-81 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-28	BS25-82 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-29	BS25-83 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-30	BS25-84 @0.5'	Total/NA	Solid	8015M/D	40966
MB 885-40966/1-A	Method Blank	Total/NA	Solid	8015M/D	40966
LCS 885-40966/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	40966
885-40667-30 MS	BS25-84 @0.5'	Total/NA	Solid	8015M/D	40966
885-40667-30 MSD	BS25-84 @0.5'	Total/NA	Solid	8015M/D	40966

Prep Batch: 40963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-1	BS25-55 @0.5'	Total/NA	Solid	SHAKE	
885-40667-2	BS25-56 @0.5'	Total/NA	Solid	SHAKE	
885-40667-3	BS25-57 @0.5'	Total/NA	Solid	SHAKE	
885-40667-4	BS25-58 @0.5'	Total/NA	Solid	SHAKE	
885-40667-5	BS25-59 @0.5'	Total/NA	Solid	SHAKE	
885-40667-6	BS25-60 @0.5'	Total/NA	Solid	SHAKE	
885-40667-7	BS25-61 @0.5'	Total/NA	Solid	SHAKE	
885-40667-8	BS25-62 @0.5'	Total/NA	Solid	SHAKE	
885-40667-9	BS25-63 @0.5'	Total/NA	Solid	SHAKE	
885-40667-10	BS25-64 @0.5'	Total/NA	Solid	SHAKE	
885-40667-11	BS25-65 @0.5'	Total/NA	Solid	SHAKE	
885-40667-12	BS25-66 @0.5'	Total/NA	Solid	SHAKE	
885-40667-13	BS25-67 @0.5'	Total/NA	Solid	SHAKE	
885-40667-14	BS25-68 @0.5'	Total/NA	Solid	SHAKE	
885-40667-15	BS25-69 @0.5'	Total/NA	Solid	SHAKE	
885-40667-16	BS25-70 @0.5'	Total/NA	Solid	SHAKE	
885-40667-17	BS25-71 @0.5'	Total/NA	Solid	SHAKE	
885-40667-18	BS25-72 @0.5'	Total/NA	Solid	SHAKE	
885-40667-19	BS25-73 @0.5'	Total/NA	Solid	SHAKE	
885-40667-20	BS25-74 @0.5'	Total/NA	Solid	SHAKE	
MB 885-40963/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40963/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

GC Semi VOA (Continued)

Prep Batch: 40963 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-20 MS	BS25-74 @0.5'	Total/NA	Solid	SHAKE	
885-40667-20 MSD	BS25-74 @0.5'	Total/NA	Solid	SHAKE	

Prep Batch: 40966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-21	BS25-75 @0.5'	Total/NA	Solid	SHAKE	
885-40667-22	BS25-76 @0.5'	Total/NA	Solid	SHAKE	
885-40667-23	BS25-77 @0.5'	Total/NA	Solid	SHAKE	
885-40667-24	BS25-78 @0.5'	Total/NA	Solid	SHAKE	
885-40667-25	BS25-79 @0.5'	Total/NA	Solid	SHAKE	
885-40667-26	BS25-80 @0.5'	Total/NA	Solid	SHAKE	
885-40667-27	BS25-81 @0.5'	Total/NA	Solid	SHAKE	
885-40667-28	BS25-82 @0.5'	Total/NA	Solid	SHAKE	
885-40667-29	BS25-83 @0.5'	Total/NA	Solid	SHAKE	
885-40667-30	BS25-84 @0.5'	Total/NA	Solid	SHAKE	
MB 885-40966/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-40966/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-40667-30 MS	BS25-84 @0.5'	Total/NA	Solid	SHAKE	
885-40667-30 MSD	BS25-84 @0.5'	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 41001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-1	BS25-55 @0.5'	Total/NA	Solid	300_Prep	
885-40667-2	BS25-56 @0.5'	Total/NA	Solid	300_Prep	
885-40667-3	BS25-57 @0.5'	Total/NA	Solid	300_Prep	
885-40667-4	BS25-58 @0.5'	Total/NA	Solid	300_Prep	
885-40667-5	BS25-59 @0.5'	Total/NA	Solid	300_Prep	
885-40667-6	BS25-60 @0.5'	Total/NA	Solid	300_Prep	
885-40667-7	BS25-61 @0.5'	Total/NA	Solid	300_Prep	
885-40667-8	BS25-62 @0.5'	Total/NA	Solid	300_Prep	
885-40667-9	BS25-63 @0.5'	Total/NA	Solid	300_Prep	
885-40667-10	BS25-64 @0.5'	Total/NA	Solid	300_Prep	
885-40667-11	BS25-65 @0.5'	Total/NA	Solid	300_Prep	
885-40667-12	BS25-66 @0.5'	Total/NA	Solid	300_Prep	
885-40667-13	BS25-67 @0.5'	Total/NA	Solid	300_Prep	
885-40667-14	BS25-68 @0.5'	Total/NA	Solid	300_Prep	
885-40667-15	BS25-69 @0.5'	Total/NA	Solid	300_Prep	
885-40667-16	BS25-70 @0.5'	Total/NA	Solid	300_Prep	
MB 885-41001/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-41001/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 41023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-17	BS25-71 @0.5'	Total/NA	Solid	300_Prep	
885-40667-18	BS25-72 @0.5'	Total/NA	Solid	300_Prep	
885-40667-19	BS25-73 @0.5'	Total/NA	Solid	300_Prep	
885-40667-20	BS25-74 @0.5'	Total/NA	Solid	300_Prep	
885-40667-21	BS25-75 @0.5'	Total/NA	Solid	300_Prep	
885-40667-22	BS25-76 @0.5'	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

HPLC/IC (Continued)

Prep Batch: 41023 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-23	BS25-77 @0.5'	Total/NA	Solid	300_Prep	
885-40667-24	BS25-78 @0.5'	Total/NA	Solid	300_Prep	
885-40667-25	BS25-79 @0.5'	Total/NA	Solid	300_Prep	
885-40667-26	BS25-80 @0.5'	Total/NA	Solid	300_Prep	
885-40667-27	BS25-81 @0.5'	Total/NA	Solid	300_Prep	
885-40667-28	BS25-82 @0.5'	Total/NA	Solid	300_Prep	
885-40667-29	BS25-83 @0.5'	Total/NA	Solid	300_Prep	
885-40667-30	BS25-84 @0.5'	Total/NA	Solid	300_Prep	
MB 885-41023/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-41023/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-40667-29 MS	BS25-83 @0.5'	Total/NA	Solid	300_Prep	
885-40667-29 MSD	BS25-83 @0.5'	Total/NA	Solid	300_Prep	
885-40667-30 MS	BS25-84 @0.5'	Total/NA	Solid	300_Prep	
885-40667-30 MSD	BS25-84 @0.5'	Total/NA	Solid	300_Prep	

Analysis Batch: 41026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-1	BS25-55 @0.5'	Total/NA	Solid	300.0	41001
885-40667-2	BS25-56 @0.5'	Total/NA	Solid	300.0	41001
885-40667-3	BS25-57 @0.5'	Total/NA	Solid	300.0	41001
885-40667-4	BS25-58 @0.5'	Total/NA	Solid	300.0	41001
885-40667-5	BS25-59 @0.5'	Total/NA	Solid	300.0	41001
885-40667-6	BS25-60 @0.5'	Total/NA	Solid	300.0	41001
885-40667-7	BS25-61 @0.5'	Total/NA	Solid	300.0	41001
885-40667-8	BS25-62 @0.5'	Total/NA	Solid	300.0	41001
885-40667-9	BS25-63 @0.5'	Total/NA	Solid	300.0	41001
885-40667-10	BS25-64 @0.5'	Total/NA	Solid	300.0	41001
885-40667-11	BS25-65 @0.5'	Total/NA	Solid	300.0	41001
885-40667-12	BS25-66 @0.5'	Total/NA	Solid	300.0	41001
885-40667-13	BS25-67 @0.5'	Total/NA	Solid	300.0	41001
885-40667-14	BS25-68 @0.5'	Total/NA	Solid	300.0	41001
885-40667-15	BS25-69 @0.5'	Total/NA	Solid	300.0	41001
885-40667-16	BS25-70 @0.5'	Total/NA	Solid	300.0	41001
885-40667-17	BS25-71 @0.5'	Total/NA	Solid	300.0	41023
885-40667-18	BS25-72 @0.5'	Total/NA	Solid	300.0	41023
885-40667-19	BS25-73 @0.5'	Total/NA	Solid	300.0	41023
885-40667-20	BS25-74 @0.5'	Total/NA	Solid	300.0	41023
885-40667-21	BS25-75 @0.5'	Total/NA	Solid	300.0	41023
885-40667-22	BS25-76 @0.5'	Total/NA	Solid	300.0	41023
885-40667-23	BS25-77 @0.5'	Total/NA	Solid	300.0	41023
885-40667-24	BS25-78 @0.5'	Total/NA	Solid	300.0	41023
885-40667-25	BS25-79 @0.5'	Total/NA	Solid	300.0	41023
885-40667-26	BS25-80 @0.5'	Total/NA	Solid	300.0	41023
885-40667-27	BS25-81 @0.5'	Total/NA	Solid	300.0	41023
885-40667-28	BS25-82 @0.5'	Total/NA	Solid	300.0	41023
885-40667-29	BS25-83 @0.5'	Total/NA	Solid	300.0	41023
885-40667-30	BS25-84 @0.5'	Total/NA	Solid	300.0	41023
MB 885-41001/1-A	Method Blank	Total/NA	Solid	300.0	41001
MB 885-41023/1-A	Method Blank	Total/NA	Solid	300.0	41023
LCS 885-41001/2-A	Lab Control Sample	Total/NA	Solid	300.0	41001
LCS 885-41023/2-A	Lab Control Sample	Total/NA	Solid	300.0	41023

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

HPLC/IC (Continued)

Analysis Batch: 41026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-40667-29 MS	BS25-83 @0.5'	Total/NA	Solid	300.0	41023
885-40667-29 MSD	BS25-83 @0.5'	Total/NA	Solid	300.0	41023
885-40667-30 MS	BS25-84 @0.5'	Total/NA	Solid	300.0	41023
885-40667-30 MSD	BS25-84 @0.5'	Total/NA	Solid	300.0	41023

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-55 @0.5'

Lab Sample ID: 885-40667-1

Date Collected: 12/29/25 10:05

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 03:21
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 03:21
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 17:01
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 20:17

Client Sample ID: BS25-56 @0.5'

Lab Sample ID: 885-40667-2

Date Collected: 12/29/25 10:17

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 04:32
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 04:32
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 17:13
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 20:31

Client Sample ID: BS25-57 @0.5'

Lab Sample ID: 885-40667-3

Date Collected: 12/29/25 10:28

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 05:42
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 05:42
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 17:25
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 20:44

Client Sample ID: BS25-58 @0.5'

Lab Sample ID: 885-40667-4

Date Collected: 12/29/25 10:39

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 06:05

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-58 @0.5'

Lab Sample ID: 885-40667-4

Date Collected: 12/29/25 10:39

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 06:05
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 17:36
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 20:58

Client Sample ID: BS25-59 @0.5'

Lab Sample ID: 885-40667-5

Date Collected: 12/29/25 10:50

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 06:29
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 06:29
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 17:48
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 21:12

Client Sample ID: BS25-60 @0.5'

Lab Sample ID: 885-40667-6

Date Collected: 12/29/25 11:07

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 06:52
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 06:52
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 18:00
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 21:25

Client Sample ID: BS25-61 @0.5'

Lab Sample ID: 885-40667-7

Date Collected: 12/29/25 11:20

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 07:16
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 07:16

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-61 @0.5'

Lab Sample ID: 885-40667-7

Date Collected: 12/29/25 11:20

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 18:11
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 22:06

Client Sample ID: BS25-62 @0.5'

Lab Sample ID: 885-40667-8

Date Collected: 12/29/25 11:31

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 07:39
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 07:39
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 18:23
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 22:20

Client Sample ID: BS25-63 @0.5'

Lab Sample ID: 885-40667-9

Date Collected: 12/29/25 11:48

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 08:02
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 08:02
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 18:35
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 22:34

Client Sample ID: BS25-64 @0.5'

Lab Sample ID: 885-40667-10

Date Collected: 12/29/25 12:00

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 08:26
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 08:26
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 18:47

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-64 @0.5'

Lab Sample ID: 885-40667-10

Date Collected: 12/29/25 12:00

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 22:47

Client Sample ID: BS25-65 @0.5'

Lab Sample ID: 885-40667-11

Date Collected: 12/29/25 12:09

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 09:13
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 09:13
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 19:10
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 23:01

Client Sample ID: BS25-66 @0.5'

Lab Sample ID: 885-40667-12

Date Collected: 12/29/25 12:21

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 09:36
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 09:36
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 19:22
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 23:15

Client Sample ID: BS25-67 @0.5'

Lab Sample ID: 885-40667-13

Date Collected: 12/29/25 12:30

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 09:59
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 09:59
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 19:33
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 23:28

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-68 @0.5'

Lab Sample ID: 885-40667-14

Date Collected: 12/29/25 12:41

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 10:22
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 10:22
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 19:45
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 23:42

Client Sample ID: BS25-69 @0.5'

Lab Sample ID: 885-40667-15

Date Collected: 12/29/25 12:56

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 10:46
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 10:46
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 19:57
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 23:56

Client Sample ID: BS25-70 @0.5'

Lab Sample ID: 885-40667-16

Date Collected: 12/29/25 13:11

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 11:09
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 11:09
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 20:08
Total/NA	Prep	300_Prep			41001	KB	EET ALB	01/07/26 16:09
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/09/26 00:09

Client Sample ID: BS25-71 @0.5'

Lab Sample ID: 885-40667-17

Date Collected: 12/30/25 09:45

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 11:32

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Client Sample ID: BS25-71 @0.5'

Lab Sample ID: 885-40667-17

Date Collected: 12/30/25 09:45

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 11:32
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 20:20
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 13:00

Client Sample ID: BS25-72 @0.5'

Lab Sample ID: 885-40667-18

Date Collected: 12/30/25 10:07

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 11:56
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 11:56
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 20:32
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 13:14

Client Sample ID: BS25-73 @0.5'

Lab Sample ID: 885-40667-19

Date Collected: 12/30/25 10:18

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 12:19
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 12:19
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 20:43
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 13:55

Client Sample ID: BS25-74 @0.5'

Lab Sample ID: 885-40667-20

Date Collected: 12/30/25 10:30

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8015M/D		1	41062	VP	EET ALB	01/09/26 12:43
Total/NA	Prep	5030C			40910	JP	EET ALB	01/06/26 12:16
Total/NA	Analysis	8021B		1	41063	VP	EET ALB	01/09/26 12:43

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-74 @0.5'

Lab Sample ID: 885-40667-20

Date Collected: 12/30/25 10:30

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			40963	BV	EET ALB	01/07/26 10:15
Total/NA	Analysis	8015M/D		1	40953	EM	EET ALB	01/07/26 20:55
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 14:09

Client Sample ID: BS25-75 @0.5'

Lab Sample ID: 885-40667-21

Date Collected: 12/30/25 10:39

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 16:44
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 16:44
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 14:11
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 14:22

Client Sample ID: BS25-76 @0.5'

Lab Sample ID: 885-40667-22

Date Collected: 12/30/25 10:56

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 17:54
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 17:54
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 14:34
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 14:36

Client Sample ID: BS25-77 @0.5'

Lab Sample ID: 885-40667-23

Date Collected: 12/30/25 11:25

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 19:04
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 19:04
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 14:58

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-77 @0.5'

Lab Sample ID: 885-40667-23

Date Collected: 12/30/25 11:25

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 14:49

Client Sample ID: BS25-78 @0.5'

Lab Sample ID: 885-40667-24

Date Collected: 12/30/25 11:36

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 19:28
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 19:28
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 15:21
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 15:03

Client Sample ID: BS25-79 @0.5'

Lab Sample ID: 885-40667-25

Date Collected: 12/30/25 12:07

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 19:51
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 19:51
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 15:44
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 15:17

Client Sample ID: BS25-80 @0.5'

Lab Sample ID: 885-40667-26

Date Collected: 12/30/25 12:21

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 20:15
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 20:15
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 16:08
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 15:30

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-81 @0.5'

Lab Sample ID: 885-40667-27

Date Collected: 12/30/25 12:36

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 20:38
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 20:38
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 16:31
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 15:44

Client Sample ID: BS25-82 @0.5'

Lab Sample ID: 885-40667-28

Date Collected: 12/30/25 12:47

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 21:01
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 21:01
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 16:54
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 15:58

Client Sample ID: BS25-83 @0.5'

Lab Sample ID: 885-40667-29

Date Collected: 12/30/25 12:55

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 21:25
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 21:25
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 17:18
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 16:39

Client Sample ID: BS25-84 @0.5'

Lab Sample ID: 885-40667-30

Date Collected: 12/30/25 13:13

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8015M/D		1	41136	VP	EET ALB	01/09/26 21:48

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-40667-1
SDG: 25A-05531

Client Sample ID: BS25-84 @0.5'

Lab Sample ID: 885-40667-30

Date Collected: 12/30/25 13:13

Matrix: Solid

Date Received: 01/06/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			40926	JP	EET ALB	01/06/26 14:14
Total/NA	Analysis	8021B		1	41137	VP	EET ALB	01/09/26 21:48
Total/NA	Prep	SHAKE			40966	BV	EET ALB	01/07/26 10:49
Total/NA	Analysis	8015M/D		1	40954	BV	EET ALB	01/07/26 17:41
Total/NA	Prep	300_Prep			41023	MA	EET ALB	01/08/26 09:59
Total/NA	Analysis	300.0		10	41026	MA	EET ALB	01/08/26 17:20

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975



Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-40667-1
 SDG: 25A-05531

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Chain-of-Custody Record

Client: *Vertex (Bill to Mack)*

Mailing Address: *3101 Boyd drive
Carlsbad NM, 88220*

Phone #:

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush *5 Day*

Project Name:
Red Deer CTB

Project #:
25A-05531

Project Manager: *Sally Carttar
Scarttar@vertex.ca*

Sampler: *Riley Arnold*

On Ice: Yes No

of Coolers: *1* *Joe*

Cooler Temp (including CF): *4.1 + 0.2 = 4.3°C*



Environment



www.hallenvironmental.com 885 40667 COC
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

p.1 of

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 8011)	PAHs by 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
<i>12.29.25</i>	<i>10:05</i>	<i>Soil</i>	<i>B525-55 @ 0.5'</i>	<i>4oz, 1</i>	<i>Ice</i>	<i>-1</i>	<i>X</i>	<i>X</i>					<i>X</i>			
	<i>10:17</i>		<i>B525-56 @ 0.5'</i>			<i>-2</i>										
	<i>10:28</i>		<i>B525-57 @ 0.5'</i>			<i>-3</i>										
	<i>10:39</i>		<i>B525-58 @ 0.5'</i>			<i>-4</i>										
	<i>10:50</i>		<i>B525-59 @ 0.5'</i>			<i>-5</i>										
	<i>11:07</i>		<i>B525-60 @ 0.5'</i>			<i>-6</i>										
	<i>11:20</i>		<i>B525-61 @ 0.5'</i>			<i>-7</i>										
	<i>11:31</i>		<i>B525-62 @ 0.5'</i>			<i>-8</i>										
	<i>11:48</i>		<i>B525-63 @ 0.5'</i>			<i>-9</i>										
	<i>12:00</i>		<i>B525-64 @ 0.5'</i>			<i>-10</i>										
	<i>12:09</i>		<i>B525-65 @ 0.5'</i>			<i>-11</i>										
	<i>12:21</i>		<i>B525-66 @ 0.5'</i>			<i>-12</i>										

Date: _____ Time: _____ Relinquished by: *[Signature]*

Date: *1/5/26* Time: *1900* Relinquished by: *[Signature]*

Received by: *[Signature]* Via: _____ Date: _____ Time: *9:00*

Received by: *[Signature]* Via: *Courier* Date: *1/6/26* Time: *8:00*

Remarks: *ATTN: Matt Buckles
mattbuckles@MEL.COM
CC: Scarttar@vertex.ca & Arnold@vertex.ca
Bill to Mack Energy
FAPP2211037291*

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Vertex (Bill to Mack)
 Mailing Address: 3101 Boyd drive
Carlsbad NM, 88220
 Phone #:
 email or Fax#:
 QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush 5 Dan
 Project Name: Red Deer CTB
 Project #: 25A-05531
 Project Manager: Sally Carttar
scarttar@vertex.ca
 Sampler: Riley Arnold
 On Ice: Yes No
 # of Coolers: 1 Joe

Cooler Temp (including CF): 4.1 + 0.2 = 4.3°C

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
12.29.25	12:30	Soil	B525-67 @ 0.5'	4oz, 1	Ice	-13
	12:41		B525-68 @ 0.5'			-14
	12:56		B525-69 @ 0.5'			-15
	13:11		B525-70 @ 0.5'			-16
12.30.25	9:45		B525-71 @ 0.5'			-17
	10:07		B525-72 @ 0.5'			-18
	10:18		B525-73 @ 0.5'			-19
	10:30		B525-74 @ 0.5'			-20
	10:39		B525-75 @ 0.5'			-21
	10:56		B525-76 @ 0.5'			-22
	11:25		B525-77 @ 0.5'			-23
	11:36		B525-78 @ 0.5'			-24



Albuquerque
 Environment Testing

www.hallenvironmental.com 40667
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107 p 2 of

Analysis Request

MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 8011)	PAHs by 8270SIMS	RCRA 8 Metals	Ch F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X					X			

Date: _____ Time: _____ Relinquished by: [Signature]
 Received by: [Signature] Via: _____ Date: 1/5/26 Time: 9:00
 Date: 1/12/26 Time: 9:00 Relinquished by: [Signature]
 Received by: [Signature] Via: Courier Date: 1/6/26 Time: 8:00

Remarks: ATTN: Matt Buckles
mattbuckles@mel.com
CC: scarttar@vertex.ca ; Rarnold@vertex.ca
Bill to Mack Energy
FaPP221103791

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.

Chain-of-Custody Record

Client: Vertex (Bill to Mack)

Mailing Address: 3101 Boyd drive
Carlsbad NM, 88220

Phone #:

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush 5 DAY

Project Name:
Red Deer CTB

Project #:
25A-05531

Project Manager: Sally Carttar
Scarttar@Vertex.ca

Sampler: Riley Arnold

On Ice: Yes No

of Coolers: 1 Joe

Cooler Temp (including CF): 4.1 + 0.2 = 4.3°C



Albuquerque

Environment Testing

www.hallenvironmental.com 40667
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

p3 of 3

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX	MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 8011)	PAHs by 8270SIMS	RCRA 8 Metals	Cl F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)								
12/30/25	12:07	Soil	B525-79 @ 0.5'	4oz, 1	Ice	-25	X	X						X											
	12:21		B525-80 @ 0.5'			-26																			
	12:36		B525-81 @ 0.5'			-27																			
	12:47		B525-82 @ 0.5'			-28																			
	12:55		B525-83 @ 0.5'			-29																			
	13:13		B525-84 @ 0.5'			-30																			

Date: 1/5/26 Time: 9:00 Relinquished by: [Signature]

Date: 1/5/26 Time: 19:00 Relinquished by: [Signature]

Received by: [Signature] Via: _____ Date: 1/5/25 Time: 9:00

Received by: [Signature] Via: Courier Date: 1/6/26 Time: 8:00

Remarks: ATTN: Matt Buckles
Mattbuckles@me.com
CC: Scarttar@vertex.ca ; Rarnold@vertex.ca
Bill to Mack Energy
FAPP2211037291

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-40667-1

SDG Number: 25A-05531

Login Number: 40667

List Number: 1

Creator: Proctor, Nancy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 3/3/2026 1:33:13 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-43079-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
3/3/2026 1:33:13 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-43079-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	23
QC Association Summary	29
Lab Chronicle	34
Certification Summary	40
Chain of Custody	41
Receipt Checklists	43

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-43079-1

Job ID: 885-43079-1

Eurofins Albuquerque

Job Narrative 885-43079-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 2/11/2026 7:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.5°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

Method 8015M/D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 885-42940 and analytical batch 885-42967 recovered outside control limits for the following analytes: Di-n-octyl phthalate (Surr) and Diesel Range Organics [C10-C28]. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-02 1.5'

Lab Sample ID: 885-43079-1

Date Collected: 02/06/26 12:05

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/11/26 12:33	02/12/26 21:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			02/11/26 12:33	02/12/26 21:27	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/12/26 21:27	1
Ethylbenzene	ND		0.048	mg/Kg		02/11/26 12:33	02/12/26 21:27	1
Toluene	ND		0.048	mg/Kg		02/11/26 12:33	02/12/26 21:27	1
Xylenes, Total	ND		0.096	mg/Kg		02/11/26 12:33	02/12/26 21:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			02/11/26 12:33	02/12/26 21:27	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		02/12/26 14:01	02/13/26 22:59	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		02/12/26 14:01	02/13/26 22:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			02/12/26 14:01	02/13/26 22:59	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		15	mg/Kg		02/11/26 17:25	02/11/26 20:27	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-03 1.5'

Lab Sample ID: 885-43079-2

Date Collected: 02/06/26 12:10

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		02/11/26 12:33	02/13/26 18:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 150			02/11/26 12:33	02/13/26 18:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		02/11/26 12:33	02/13/26 18:32	1
Ethylbenzene	ND		0.050	mg/Kg		02/11/26 12:33	02/13/26 18:32	1
Toluene	ND		0.050	mg/Kg		02/11/26 12:33	02/13/26 18:32	1
Xylenes, Total	ND		0.10	mg/Kg		02/11/26 12:33	02/13/26 18:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			02/11/26 12:33	02/13/26 18:32	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		02/12/26 14:01	02/13/26 23:10	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/12/26 14:01	02/13/26 23:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	128		62 - 134			02/12/26 14:01	02/13/26 23:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		15	mg/Kg		02/11/26 17:25	02/11/26 21:10	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-01 0-1.5'

Lab Sample ID: 885-43079-3

Date Collected: 02/06/26 12:15

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		02/11/26 12:33	02/13/26 18:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			02/11/26 12:33	02/13/26 18:57	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/13/26 18:57	1
Ethylbenzene	ND		0.049	mg/Kg		02/11/26 12:33	02/13/26 18:57	1
Toluene	ND		0.049	mg/Kg		02/11/26 12:33	02/13/26 18:57	1
Xylenes, Total	ND		0.098	mg/Kg		02/11/26 12:33	02/13/26 18:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			02/11/26 12:33	02/13/26 18:57	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		02/12/26 14:01	02/13/26 23:21	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/12/26 14:01	02/13/26 23:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	116		62 - 134			02/12/26 14:01	02/13/26 23:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		15	mg/Kg		02/11/26 17:25	02/11/26 22:20	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-34 1.0'

Lab Sample ID: 885-43079-4

Date Collected: 02/06/26 13:00

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		02/11/26 12:33	02/13/26 19:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 150			02/11/26 12:33	02/13/26 19:21	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/13/26 19:21	1
Ethylbenzene	ND		0.049	mg/Kg		02/11/26 12:33	02/13/26 19:21	1
Toluene	ND		0.049	mg/Kg		02/11/26 12:33	02/13/26 19:21	1
Xylenes, Total	ND		0.097	mg/Kg		02/11/26 12:33	02/13/26 19:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			02/11/26 12:33	02/13/26 19:21	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	14		9.4	mg/Kg		02/12/26 14:01	02/13/26 23:31	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		02/12/26 14:01	02/13/26 23:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			02/12/26 14:01	02/13/26 23:31	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	610		15	mg/Kg		02/11/26 17:25	02/11/26 22:35	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-42 1.0'

Lab Sample ID: 885-43079-5

Date Collected: 02/06/26 13:10

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/11/26 12:33	02/13/26 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			02/11/26 12:33	02/13/26 19:46	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/13/26 19:46	1
Ethylbenzene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 19:46	1
Toluene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 19:46	1
Xylenes, Total	ND		0.096	mg/Kg		02/11/26 12:33	02/13/26 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			02/11/26 12:33	02/13/26 19:46	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	10		9.8	mg/Kg		02/12/26 14:01	02/13/26 23:53	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/12/26 14:01	02/13/26 23:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			02/12/26 14:01	02/13/26 23:53	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		15	mg/Kg		02/11/26 17:25	02/11/26 22:49	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-49 1.0'

Lab Sample ID: 885-43079-6

Date Collected: 02/06/26 13:15

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		02/11/26 12:33	02/13/26 20:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			02/11/26 12:33	02/13/26 20:10	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		02/11/26 12:33	02/13/26 20:10	1
Ethylbenzene	ND		0.047	mg/Kg		02/11/26 12:33	02/13/26 20:10	1
Toluene	ND		0.047	mg/Kg		02/11/26 12:33	02/13/26 20:10	1
Xylenes, Total	ND		0.093	mg/Kg		02/11/26 12:33	02/13/26 20:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			02/11/26 12:33	02/13/26 20:10	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		02/12/26 14:01	02/14/26 00:04	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		02/12/26 14:01	02/14/26 00:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			02/12/26 14:01	02/14/26 00:04	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	440		15	mg/Kg		02/11/26 17:25	02/11/26 23:03	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-65 1.0'

Lab Sample ID: 885-43079-7

Date Collected: 02/06/26 13:20

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/11/26 12:33	02/13/26 20:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			02/11/26 12:33	02/13/26 20:35	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/13/26 20:35	1
Ethylbenzene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 20:35	1
Toluene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 20:35	1
Xylenes, Total	ND		0.096	mg/Kg		02/11/26 12:33	02/13/26 20:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			02/11/26 12:33	02/13/26 20:35	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		02/12/26 14:01	02/14/26 00:15	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/12/26 14:01	02/14/26 00:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	123		62 - 134			02/12/26 14:01	02/14/26 00:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		15	mg/Kg		02/11/26 17:25	02/11/26 23:17	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-09 2.0'

Lab Sample ID: 885-43079-8

Date Collected: 02/07/26 11:00

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		02/11/26 12:33	02/13/26 20:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			02/11/26 12:33	02/13/26 20:59	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/13/26 20:59	1
Ethylbenzene	ND		0.049	mg/Kg		02/11/26 12:33	02/13/26 20:59	1
Toluene	ND		0.049	mg/Kg		02/11/26 12:33	02/13/26 20:59	1
Xylenes, Total	ND		0.098	mg/Kg		02/11/26 12:33	02/13/26 20:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			02/11/26 12:33	02/13/26 20:59	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		02/12/26 14:01	02/14/26 00:26	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		02/12/26 14:01	02/14/26 00:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			02/12/26 14:01	02/14/26 00:26	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		15	mg/Kg		02/11/26 17:25	02/11/26 23:31	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-10 2.0'

Lab Sample ID: 885-43079-9

Date Collected: 02/07/26 11:05

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		02/11/26 12:33	02/13/26 21:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			02/11/26 12:33	02/13/26 21:23	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		02/11/26 12:33	02/13/26 21:23	1
Ethylbenzene	ND		0.047	mg/Kg		02/11/26 12:33	02/13/26 21:23	1
Toluene	ND		0.047	mg/Kg		02/11/26 12:33	02/13/26 21:23	1
Xylenes, Total	ND		0.093	mg/Kg		02/11/26 12:33	02/13/26 21:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			02/11/26 12:33	02/13/26 21:23	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		02/12/26 14:01	02/14/26 00:36	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		02/12/26 14:01	02/14/26 00:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			02/12/26 14:01	02/14/26 00:36	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		15	mg/Kg		02/11/26 17:25	02/11/26 23:45	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-32 1.0'

Lab Sample ID: 885-43079-10

Date Collected: 02/07/26 11:10

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/11/26 12:33	02/13/26 21:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			02/11/26 12:33	02/13/26 21:48	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/13/26 21:48	1
Ethylbenzene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 21:48	1
Toluene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 21:48	1
Xylenes, Total	ND		0.097	mg/Kg		02/11/26 12:33	02/13/26 21:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			02/11/26 12:33	02/13/26 21:48	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		02/12/26 14:01	02/14/26 00:47	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/12/26 14:01	02/14/26 00:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			02/12/26 14:01	02/14/26 00:47	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		15	mg/Kg		02/11/26 17:25	02/11/26 23:59	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-11 0.5-1'

Lab Sample ID: 885-43079-11

Date Collected: 02/07/26 11:15

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/11/26 12:33	02/13/26 22:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			02/11/26 12:33	02/13/26 22:12	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 12:33	02/13/26 22:12	1
Ethylbenzene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 22:12	1
Toluene	ND		0.048	mg/Kg		02/11/26 12:33	02/13/26 22:12	1
Xylenes, Total	ND		0.096	mg/Kg		02/11/26 12:33	02/13/26 22:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			02/11/26 12:33	02/13/26 22:12	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		02/12/26 14:01	02/14/26 00:58	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		02/12/26 14:01	02/14/26 00:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			02/12/26 14:01	02/14/26 00:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		15	mg/Kg		02/11/26 17:25	02/12/26 00:42	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-12 0.5-1'

Lab Sample ID: 885-43079-12

Date Collected: 02/07/26 11:20

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		02/11/26 13:21	02/14/26 00:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			02/11/26 13:21	02/14/26 00:13	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		02/11/26 13:21	02/14/26 00:13	1
Ethylbenzene	ND		0.050	mg/Kg		02/11/26 13:21	02/14/26 00:13	1
Toluene	ND		0.050	mg/Kg		02/11/26 13:21	02/14/26 00:13	1
Xylenes, Total	ND		0.099	mg/Kg		02/11/26 13:21	02/14/26 00:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			02/11/26 13:21	02/14/26 00:13	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18		9.7	mg/Kg		02/13/26 15:30	02/16/26 14:58	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		02/13/26 15:30	02/16/26 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			02/13/26 15:30	02/16/26 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		15	mg/Kg		02/11/26 17:25	02/12/26 00:56	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-13 0.5-1'

Lab Sample ID: 885-43079-13

Date Collected: 02/07/26 13:00

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		02/11/26 13:21	02/14/26 01:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			02/11/26 13:21	02/14/26 01:26	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		02/11/26 13:21	02/14/26 01:26	1
Ethylbenzene	ND		0.049	mg/Kg		02/11/26 13:21	02/14/26 01:26	1
Toluene	ND		0.049	mg/Kg		02/11/26 13:21	02/14/26 01:26	1
Xylenes, Total	ND		0.098	mg/Kg		02/11/26 13:21	02/14/26 01:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			02/11/26 13:21	02/14/26 01:26	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		02/13/26 15:30	02/16/26 14:46	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		02/13/26 15:30	02/16/26 14:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			02/13/26 15:30	02/16/26 14:46	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	370		15	mg/Kg		02/11/26 17:25	02/12/26 01:10	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-14 0.5-1'

Lab Sample ID: 885-43079-14

Date Collected: 02/07/26 13:10

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		02/11/26 13:21	02/14/26 02:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			02/11/26 13:21	02/14/26 02:39	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		02/11/26 13:21	02/14/26 02:39	1
Ethylbenzene	ND		0.047	mg/Kg		02/11/26 13:21	02/14/26 02:39	1
Toluene	ND		0.047	mg/Kg		02/11/26 13:21	02/14/26 02:39	1
Xylenes, Total	ND		0.094	mg/Kg		02/11/26 13:21	02/14/26 02:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			02/11/26 13:21	02/14/26 02:39	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*+	9.3	mg/Kg		02/11/26 15:58	02/12/26 10:54	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		02/11/26 15:58	02/12/26 10:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			02/11/26 15:58	02/12/26 10:54	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		15	mg/Kg		02/11/26 17:25	02/12/26 01:24	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-15 0.5-1'

Lab Sample ID: 885-43079-15

Date Collected: 02/07/26 13:15

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/11/26 13:21	02/14/26 03:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			02/11/26 13:21	02/14/26 03:03	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 13:21	02/14/26 03:03	1
Ethylbenzene	ND		0.048	mg/Kg		02/11/26 13:21	02/14/26 03:03	1
Toluene	ND		0.048	mg/Kg		02/11/26 13:21	02/14/26 03:03	1
Xylenes, Total	ND		0.096	mg/Kg		02/11/26 13:21	02/14/26 03:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		15 - 150			02/11/26 13:21	02/14/26 03:03	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*+	9.8	mg/Kg		02/11/26 15:58	02/12/26 11:06	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/11/26 15:58	02/12/26 11:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			02/11/26 15:58	02/12/26 11:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72		15	mg/Kg		02/11/26 17:25	02/12/26 01:39	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-16 0-0.5'

Lab Sample ID: 885-43079-16

Date Collected: 02/07/26 14:50

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		02/11/26 13:21	02/14/26 03:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			02/11/26 13:21	02/14/26 03:27	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		02/11/26 13:21	02/14/26 03:27	1
Ethylbenzene	ND		0.047	mg/Kg		02/11/26 13:21	02/14/26 03:27	1
Toluene	ND		0.047	mg/Kg		02/11/26 13:21	02/14/26 03:27	1
Xylenes, Total	ND		0.093	mg/Kg		02/11/26 13:21	02/14/26 03:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		15 - 150			02/11/26 13:21	02/14/26 03:27	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	9.5		9.3	mg/Kg		02/13/26 15:30	02/16/26 14:58	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		02/13/26 15:30	02/16/26 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			02/13/26 15:30	02/16/26 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		15	mg/Kg		02/11/26 17:25	02/12/26 01:53	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-17 0-0.5'

Lab Sample ID: 885-43079-17

Date Collected: 02/07/26 14:55

Matrix: Solid

Date Received: 02/11/26 07:45

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		02/11/26 13:21	02/14/26 03:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			02/11/26 13:21	02/14/26 03:51	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		02/11/26 13:21	02/14/26 03:51	1
Ethylbenzene	ND		0.048	mg/Kg		02/11/26 13:21	02/14/26 03:51	1
Toluene	ND		0.048	mg/Kg		02/11/26 13:21	02/14/26 03:51	1
Xylenes, Total	ND		0.095	mg/Kg		02/11/26 13:21	02/14/26 03:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		15 - 150			02/11/26 13:21	02/14/26 03:51	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND	*+	9.8	mg/Kg		02/11/26 15:58	02/12/26 11:28	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		02/11/26 15:58	02/12/26 11:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			02/11/26 15:58	02/12/26 11:28	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		50	mg/Kg		02/11/26 17:59	02/12/26 10:43	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-42924/1-A
Matrix: Solid
Analysis Batch: 43006

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42924

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		02/11/26 12:33	02/12/26 16:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			02/11/26 12:33	02/12/26 16:09	1

Lab Sample ID: LCS 885-42924/2-A
Matrix: Solid
Analysis Batch: 43006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	28.3		mg/Kg		113	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	201		15 - 150				

Lab Sample ID: MB 885-42928/1-A
Matrix: Solid
Analysis Batch: 43095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42928

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		02/11/26 13:21	02/13/26 23:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			02/11/26 13:21	02/13/26 23:49	1

Lab Sample ID: LCS 885-42928/2-A
Matrix: Solid
Analysis Batch: 43095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	25.4		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	196		15 - 150				

Lab Sample ID: 885-43079-12 MS
Matrix: Solid
Analysis Batch: 43095

Client Sample ID: WS25-12 0.5-1'
Prep Type: Total/NA
Prep Batch: 42928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.6	24.8		mg/Kg		101	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	200		15 - 150						

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: 885-43079-12 MSD
Matrix: Solid
Analysis Batch: 43095

Client Sample ID: WS25-12 0.5-1'
Prep Type: Total/NA
Prep Batch: 42928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.7	25.6		mg/Kg		104	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	201		15 - 150								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-42924/1-A
Matrix: Solid
Analysis Batch: 43007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42924

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		02/11/26 12:33	02/12/26 16:09	1
Ethylbenzene	ND		0.050	mg/Kg		02/11/26 12:33	02/12/26 16:09	1
Toluene	ND		0.050	mg/Kg		02/11/26 12:33	02/12/26 16:09	1
Xylenes, Total	ND		0.10	mg/Kg		02/11/26 12:33	02/12/26 16:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
4-Bromofluorobenzene (Surr)	83		15 - 150	02/11/26 12:33	02/12/26 16:09	1		

Lab Sample ID: LCS 885-42924/3-A
Matrix: Solid
Analysis Batch: 43007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.03		mg/Kg		103	70 - 130
Ethylbenzene	1.00	1.01		mg/Kg		101	70 - 130
m,p-Xylene	2.00	2.07		mg/Kg		103	70 - 130
o-Xylene	1.00	1.01		mg/Kg		101	70 - 130
Toluene	1.00	1.04		mg/Kg		104	70 - 130
Xylenes, Total	3.00	3.07		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	86		15 - 150				

Lab Sample ID: MB 885-42928/1-A
Matrix: Solid
Analysis Batch: 43094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42928

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		02/11/26 13:21	02/13/26 23:49	1
Ethylbenzene	ND		0.050	mg/Kg		02/11/26 13:21	02/13/26 23:49	1
Toluene	ND		0.050	mg/Kg		02/11/26 13:21	02/13/26 23:49	1
Xylenes, Total	ND		0.10	mg/Kg		02/11/26 13:21	02/13/26 23:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
4-Bromofluorobenzene (Surr)	91		15 - 150	02/11/26 13:21	02/13/26 23:49	1		

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCS 885-42928/3-A
Matrix: Solid
Analysis Batch: 43094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.934		mg/Kg		93	70 - 130
Ethylbenzene	1.00	0.941		mg/Kg		94	70 - 130
m,p-Xylene	2.00	1.92		mg/Kg		96	70 - 130
o-Xylene	1.00	0.945		mg/Kg		94	70 - 130
Toluene	1.00	0.948		mg/Kg		95	70 - 130
Xylenes, Total	3.00	2.87		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		15 - 150

Lab Sample ID: 885-43079-13 MS
Matrix: Solid
Analysis Batch: 43094

Client Sample ID: WS25-13 0.5-1'
Prep Type: Total/NA
Prep Batch: 42928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.981	0.950		mg/Kg		97	70 - 130
Ethylbenzene	ND		0.981	0.952		mg/Kg		97	70 - 130
m,p-Xylene	ND		1.96	1.95		mg/Kg		99	70 - 130
o-Xylene	ND		0.981	0.955		mg/Kg		97	70 - 130
Toluene	ND		0.981	0.956		mg/Kg		97	70 - 130
Xylenes, Total	ND		2.94	2.90		mg/Kg		98	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		15 - 150

Lab Sample ID: 885-43079-13 MSD
Matrix: Solid
Analysis Batch: 43094

Client Sample ID: WS25-13 0.5-1'
Prep Type: Total/NA
Prep Batch: 42928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
										RPD	Limit
Benzene	ND		0.988	0.908		mg/Kg		92	70 - 130	4	20
Ethylbenzene	ND		0.988	0.890		mg/Kg		90	70 - 130	7	20
m,p-Xylene	ND		1.98	1.86		mg/Kg		94	70 - 130	4	20
o-Xylene	ND		0.988	0.898		mg/Kg		91	70 - 130	6	20
Toluene	ND		0.988	0.906		mg/Kg		92	70 - 130	5	20
Xylenes, Total	ND		2.96	2.76		mg/Kg		92	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		15 - 150

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-42940/1-A
Matrix: Solid
Analysis Batch: 42967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42940

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		02/11/26 15:58	02/12/26 10:09	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-42940/1-A
Matrix: Solid
Analysis Batch: 42967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42940

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		02/11/26 15:58	02/12/26 10:09	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			02/11/26 15:58	02/12/26 10:09	1

Lab Sample ID: LCS 885-42940/2-A
Matrix: Solid
Analysis Batch: 42967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	75.4	*+	mg/Kg		151	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	143	S1+	62 - 134				

Lab Sample ID: MB 885-43015/1-A
Matrix: Solid
Analysis Batch: 43078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43015

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		02/12/26 14:01	02/13/26 14:52	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		02/12/26 14:01	02/13/26 14:52	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	103		62 - 134			02/12/26 14:01	02/13/26 14:52	1

Lab Sample ID: LCS 885-43015/2-A
Matrix: Solid
Analysis Batch: 43078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43015

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	61.0		mg/Kg		122	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	110		62 - 134				

Lab Sample ID: MB 885-43107/1-A
Matrix: Solid
Analysis Batch: 43151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43107

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		02/13/26 15:30	02/16/26 14:35	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		02/13/26 15:30	02/16/26 14:35	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			02/13/26 15:30	02/16/26 14:35	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: LCS 885-43107/2-A
Matrix: Solid
Analysis Batch: 43151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	46.3		mg/Kg		93	51 - 148

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	81		62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-42951/1-A
Matrix: Solid
Analysis Batch: 42955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42951

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		02/11/26 17:25	02/11/26 19:02	1

Lab Sample ID: LCS 885-42951/2-A
Matrix: Solid
Analysis Batch: 42955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.0		mg/Kg		98	90 - 110

Lab Sample ID: 885-43079-1 MS
Matrix: Solid
Analysis Batch: 42955

Client Sample ID: BS25-02 1.5'
Prep Type: Total/NA
Prep Batch: 42951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.5	56.0		mg/Kg		111	50 - 150

Lab Sample ID: 885-43079-1 MSD
Matrix: Solid
Analysis Batch: 42955

Client Sample ID: BS25-02 1.5'
Prep Type: Total/NA
Prep Batch: 42951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	ND		49.2	56.4		mg/Kg		115	50 - 150	1	20

Lab Sample ID: 885-43079-2 MS
Matrix: Solid
Analysis Batch: 42955

Client Sample ID: BS25-03 1.5'
Prep Type: Total/NA
Prep Batch: 42951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	ND		50.3	55.9		mg/Kg		111	50 - 150

Lab Sample ID: 885-43079-2 MSD
Matrix: Solid
Analysis Batch: 42955

Client Sample ID: BS25-03 1.5'
Prep Type: Total/NA
Prep Batch: 42951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	ND		50.0	56.1		mg/Kg		112	50 - 150	0	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-42954/1-A
Matrix: Solid
Analysis Batch: 42980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42954

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		02/11/26 17:59	02/12/26 10:22	1

Lab Sample ID: LCS 885-42954/2-A
Matrix: Solid
Analysis Batch: 42980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.7	47.7		mg/Kg		96	90 - 110

Lab Sample ID: 885-43079-17 MS
Matrix: Solid
Analysis Batch: 42980

Client Sample ID: WS25-17 0-0.5'
Prep Type: Total/NA
Prep Batch: 42954

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	140		50.7	195		mg/Kg		110	50 - 150

Lab Sample ID: 885-43079-17 MSD
Matrix: Solid
Analysis Batch: 42980

Client Sample ID: WS25-17 0-0.5'
Prep Type: Total/NA
Prep Batch: 42954

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	140		49.7	187		mg/Kg		95	50 - 150	5	20

Lab Sample ID: MB 885-43317/1-A
Matrix: Solid
Analysis Batch: 43321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43317

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg		02/18/26 09:20	02/18/26 10:20	1

Lab Sample ID: LCS 885-43317/2-A
Matrix: Solid
Analysis Batch: 43321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.5	49.0		mg/Kg		97	90 - 110

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

GC VOA

Prep Batch: 42924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-1	BS25-02 1.5'	Total/NA	Solid	5030C	
885-43079-2	BS25-03 1.5'	Total/NA	Solid	5030C	
885-43079-3	WS25-01 0-1.5'	Total/NA	Solid	5030C	
885-43079-4	BS25-34 1.0'	Total/NA	Solid	5030C	
885-43079-5	BS25-42 1.0'	Total/NA	Solid	5030C	
885-43079-6	BS25-49 1.0'	Total/NA	Solid	5030C	
885-43079-7	BS25-65 1.0'	Total/NA	Solid	5030C	
885-43079-8	BS25-09 2.0'	Total/NA	Solid	5030C	
885-43079-9	BS25-10 2.0'	Total/NA	Solid	5030C	
885-43079-10	BS25-32 1.0'	Total/NA	Solid	5030C	
885-43079-11	WS25-11 0.5-1'	Total/NA	Solid	5030C	
MB 885-42924/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-42924/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-42924/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 42928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-12	WS25-12 0.5-1'	Total/NA	Solid	5030C	
885-43079-13	WS25-13 0.5-1'	Total/NA	Solid	5030C	
885-43079-14	WS25-14 0.5-1'	Total/NA	Solid	5030C	
885-43079-15	WS25-15 0.5-1'	Total/NA	Solid	5030C	
885-43079-16	WS25-16 0-0.5'	Total/NA	Solid	5030C	
885-43079-17	WS25-17 0-0.5'	Total/NA	Solid	5030C	
MB 885-42928/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-42928/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-42928/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-43079-12 MS	WS25-12 0.5-1'	Total/NA	Solid	5030C	
885-43079-12 MSD	WS25-12 0.5-1'	Total/NA	Solid	5030C	
885-43079-13 MS	WS25-13 0.5-1'	Total/NA	Solid	5030C	
885-43079-13 MSD	WS25-13 0.5-1'	Total/NA	Solid	5030C	

Analysis Batch: 43006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-1	BS25-02 1.5'	Total/NA	Solid	8015M/D	42924
MB 885-42924/1-A	Method Blank	Total/NA	Solid	8015M/D	42924
LCS 885-42924/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	42924

Analysis Batch: 43007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-1	BS25-02 1.5'	Total/NA	Solid	8021B	42924
MB 885-42924/1-A	Method Blank	Total/NA	Solid	8021B	42924
LCS 885-42924/3-A	Lab Control Sample	Total/NA	Solid	8021B	42924

Analysis Batch: 43092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-2	BS25-03 1.5'	Total/NA	Solid	8015M/D	42924
885-43079-3	WS25-01 0-1.5'	Total/NA	Solid	8015M/D	42924
885-43079-4	BS25-34 1.0'	Total/NA	Solid	8015M/D	42924
885-43079-5	BS25-42 1.0'	Total/NA	Solid	8015M/D	42924
885-43079-6	BS25-49 1.0'	Total/NA	Solid	8015M/D	42924
885-43079-7	BS25-65 1.0'	Total/NA	Solid	8015M/D	42924

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

GC VOA (Continued)

Analysis Batch: 43092 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-8	BS25-09 2.0'	Total/NA	Solid	8015M/D	42924
885-43079-9	BS25-10 2.0'	Total/NA	Solid	8015M/D	42924
885-43079-10	BS25-32 1.0'	Total/NA	Solid	8015M/D	42924
885-43079-11	WS25-11 0.5-1'	Total/NA	Solid	8015M/D	42924

Analysis Batch: 43093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-2	BS25-03 1.5'	Total/NA	Solid	8021B	42924
885-43079-3	WS25-01 0-1.5'	Total/NA	Solid	8021B	42924
885-43079-4	BS25-34 1.0'	Total/NA	Solid	8021B	42924
885-43079-5	BS25-42 1.0'	Total/NA	Solid	8021B	42924
885-43079-6	BS25-49 1.0'	Total/NA	Solid	8021B	42924
885-43079-7	BS25-65 1.0'	Total/NA	Solid	8021B	42924
885-43079-8	BS25-09 2.0'	Total/NA	Solid	8021B	42924
885-43079-9	BS25-10 2.0'	Total/NA	Solid	8021B	42924
885-43079-10	BS25-32 1.0'	Total/NA	Solid	8021B	42924
885-43079-11	WS25-11 0.5-1'	Total/NA	Solid	8021B	42924

Analysis Batch: 43094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-12	WS25-12 0.5-1'	Total/NA	Solid	8021B	42928
885-43079-13	WS25-13 0.5-1'	Total/NA	Solid	8021B	42928
885-43079-14	WS25-14 0.5-1'	Total/NA	Solid	8021B	42928
885-43079-15	WS25-15 0.5-1'	Total/NA	Solid	8021B	42928
885-43079-16	WS25-16 0-0.5'	Total/NA	Solid	8021B	42928
885-43079-17	WS25-17 0-0.5'	Total/NA	Solid	8021B	42928
MB 885-42928/1-A	Method Blank	Total/NA	Solid	8021B	42928
LCS 885-42928/3-A	Lab Control Sample	Total/NA	Solid	8021B	42928
885-43079-13 MS	WS25-13 0.5-1'	Total/NA	Solid	8021B	42928
885-43079-13 MSD	WS25-13 0.5-1'	Total/NA	Solid	8021B	42928

Analysis Batch: 43095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-12	WS25-12 0.5-1'	Total/NA	Solid	8015M/D	42928
885-43079-13	WS25-13 0.5-1'	Total/NA	Solid	8015M/D	42928
885-43079-14	WS25-14 0.5-1'	Total/NA	Solid	8015M/D	42928
885-43079-15	WS25-15 0.5-1'	Total/NA	Solid	8015M/D	42928
885-43079-16	WS25-16 0-0.5'	Total/NA	Solid	8015M/D	42928
885-43079-17	WS25-17 0-0.5'	Total/NA	Solid	8015M/D	42928
MB 885-42928/1-A	Method Blank	Total/NA	Solid	8015M/D	42928
LCS 885-42928/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	42928
885-43079-12 MS	WS25-12 0.5-1'	Total/NA	Solid	8015M/D	42928
885-43079-12 MSD	WS25-12 0.5-1'	Total/NA	Solid	8015M/D	42928

GC Semi VOA

Prep Batch: 42940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-14	WS25-14 0.5-1'	Total/NA	Solid	SHAKE	
885-43079-15	WS25-15 0.5-1'	Total/NA	Solid	SHAKE	
885-43079-17	WS25-17 0-0.5'	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

GC Semi VOA (Continued)

Prep Batch: 42940 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-42940/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-42940/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 42967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-14	WS25-14 0.5-1'	Total/NA	Solid	8015M/D	42940
885-43079-15	WS25-15 0.5-1'	Total/NA	Solid	8015M/D	42940
885-43079-17	WS25-17 0-0.5'	Total/NA	Solid	8015M/D	42940
MB 885-42940/1-A	Method Blank	Total/NA	Solid	8015M/D	42940
LCS 885-42940/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	42940

Prep Batch: 43015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-1	BS25-02 1.5'	Total/NA	Solid	SHAKE	
885-43079-2	BS25-03 1.5'	Total/NA	Solid	SHAKE	
885-43079-3	WS25-01 0-1.5'	Total/NA	Solid	SHAKE	
885-43079-4	BS25-34 1.0'	Total/NA	Solid	SHAKE	
885-43079-5	BS25-42 1.0'	Total/NA	Solid	SHAKE	
885-43079-6	BS25-49 1.0'	Total/NA	Solid	SHAKE	
885-43079-7	BS25-65 1.0'	Total/NA	Solid	SHAKE	
885-43079-8	BS25-09 2.0'	Total/NA	Solid	SHAKE	
885-43079-9	BS25-10 2.0'	Total/NA	Solid	SHAKE	
885-43079-10	BS25-32 1.0'	Total/NA	Solid	SHAKE	
885-43079-11	WS25-11 0.5-1'	Total/NA	Solid	SHAKE	
MB 885-43015/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-43015/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 43078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-1	BS25-02 1.5'	Total/NA	Solid	8015M/D	43015
885-43079-2	BS25-03 1.5'	Total/NA	Solid	8015M/D	43015
885-43079-3	WS25-01 0-1.5'	Total/NA	Solid	8015M/D	43015
885-43079-4	BS25-34 1.0'	Total/NA	Solid	8015M/D	43015
885-43079-5	BS25-42 1.0'	Total/NA	Solid	8015M/D	43015
885-43079-6	BS25-49 1.0'	Total/NA	Solid	8015M/D	43015
885-43079-7	BS25-65 1.0'	Total/NA	Solid	8015M/D	43015
885-43079-8	BS25-09 2.0'	Total/NA	Solid	8015M/D	43015
885-43079-9	BS25-10 2.0'	Total/NA	Solid	8015M/D	43015
885-43079-10	BS25-32 1.0'	Total/NA	Solid	8015M/D	43015
885-43079-11	WS25-11 0.5-1'	Total/NA	Solid	8015M/D	43015
MB 885-43015/1-A	Method Blank	Total/NA	Solid	8015M/D	43015
LCS 885-43015/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	43015

Prep Batch: 43107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-12	WS25-12 0.5-1'	Total/NA	Solid	SHAKE	
885-43079-13	WS25-13 0.5-1'	Total/NA	Solid	SHAKE	
885-43079-16	WS25-16 0-0.5'	Total/NA	Solid	SHAKE	
MB 885-43107/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-43107/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

GC Semi VOA

Analysis Batch: 43151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-12	WS25-12 0.5-1'	Total/NA	Solid	8015M/D	43107
MB 885-43107/1-A	Method Blank	Total/NA	Solid	8015M/D	43107
LCS 885-43107/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	43107

Analysis Batch: 43168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-13	WS25-13 0.5-1'	Total/NA	Solid	8015M/D	43107
885-43079-16	WS25-16 0-0.5'	Total/NA	Solid	8015M/D	43107

HPLC/IC

Prep Batch: 42951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-1	BS25-02 1.5'	Total/NA	Solid	300_Prep	
885-43079-2	BS25-03 1.5'	Total/NA	Solid	300_Prep	
885-43079-3	WS25-01 0-1.5'	Total/NA	Solid	300_Prep	
885-43079-4	BS25-34 1.0'	Total/NA	Solid	300_Prep	
885-43079-5	BS25-42 1.0'	Total/NA	Solid	300_Prep	
885-43079-6	BS25-49 1.0'	Total/NA	Solid	300_Prep	
885-43079-7	BS25-65 1.0'	Total/NA	Solid	300_Prep	
885-43079-8	BS25-09 2.0'	Total/NA	Solid	300_Prep	
885-43079-9	BS25-10 2.0'	Total/NA	Solid	300_Prep	
885-43079-10	BS25-32 1.0'	Total/NA	Solid	300_Prep	
885-43079-11	WS25-11 0.5-1'	Total/NA	Solid	300_Prep	
885-43079-12	WS25-12 0.5-1'	Total/NA	Solid	300_Prep	
885-43079-13	WS25-13 0.5-1'	Total/NA	Solid	300_Prep	
885-43079-14	WS25-14 0.5-1'	Total/NA	Solid	300_Prep	
885-43079-15	WS25-15 0.5-1'	Total/NA	Solid	300_Prep	
885-43079-16	WS25-16 0-0.5'	Total/NA	Solid	300_Prep	
MB 885-42951/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-42951/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-43079-1 MS	BS25-02 1.5'	Total/NA	Solid	300_Prep	
885-43079-1 MSD	BS25-02 1.5'	Total/NA	Solid	300_Prep	
885-43079-2 MS	BS25-03 1.5'	Total/NA	Solid	300_Prep	
885-43079-2 MSD	BS25-03 1.5'	Total/NA	Solid	300_Prep	

Prep Batch: 42954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-17	WS25-17 0-0.5'	Total/NA	Solid	300_Prep	
MB 885-42954/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-42954/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-43079-17 MS	WS25-17 0-0.5'	Total/NA	Solid	300_Prep	
885-43079-17 MSD	WS25-17 0-0.5'	Total/NA	Solid	300_Prep	

Analysis Batch: 42955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-1	BS25-02 1.5'	Total/NA	Solid	300.0	42951
885-43079-2	BS25-03 1.5'	Total/NA	Solid	300.0	42951
885-43079-3	WS25-01 0-1.5'	Total/NA	Solid	300.0	42951
885-43079-4	BS25-34 1.0'	Total/NA	Solid	300.0	42951
885-43079-5	BS25-42 1.0'	Total/NA	Solid	300.0	42951

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

HPLC/IC (Continued)

Analysis Batch: 42955 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-6	BS25-49 1.0'	Total/NA	Solid	300.0	42951
885-43079-7	BS25-65 1.0'	Total/NA	Solid	300.0	42951
885-43079-8	BS25-09 2.0'	Total/NA	Solid	300.0	42951
885-43079-9	BS25-10 2.0'	Total/NA	Solid	300.0	42951
885-43079-10	BS25-32 1.0'	Total/NA	Solid	300.0	42951
885-43079-11	WS25-11 0.5-1'	Total/NA	Solid	300.0	42951
885-43079-12	WS25-12 0.5-1'	Total/NA	Solid	300.0	42951
885-43079-13	WS25-13 0.5-1'	Total/NA	Solid	300.0	42951
885-43079-14	WS25-14 0.5-1'	Total/NA	Solid	300.0	42951
885-43079-15	WS25-15 0.5-1'	Total/NA	Solid	300.0	42951
885-43079-16	WS25-16 0-0.5'	Total/NA	Solid	300.0	42951
MB 885-42951/1-A	Method Blank	Total/NA	Solid	300.0	42951
LCS 885-42951/2-A	Lab Control Sample	Total/NA	Solid	300.0	42951
885-43079-1 MS	BS25-02 1.5'	Total/NA	Solid	300.0	42951
885-43079-1 MSD	BS25-02 1.5'	Total/NA	Solid	300.0	42951
885-43079-2 MS	BS25-03 1.5'	Total/NA	Solid	300.0	42951
885-43079-2 MSD	BS25-03 1.5'	Total/NA	Solid	300.0	42951

Analysis Batch: 42980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-43079-17	WS25-17 0-0.5'	Total/NA	Solid	300.0	42954
MB 885-42954/1-A	Method Blank	Total/NA	Solid	300.0	42954
LCS 885-42954/2-A	Lab Control Sample	Total/NA	Solid	300.0	42954
885-43079-17 MS	WS25-17 0-0.5'	Total/NA	Solid	300.0	42954
885-43079-17 MSD	WS25-17 0-0.5'	Total/NA	Solid	300.0	42954

Prep Batch: 43317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-43317/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-43317/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 43321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-43317/1-A	Method Blank	Total/NA	Solid	300.0	43317
LCS 885-43317/2-A	Lab Control Sample	Total/NA	Solid	300.0	43317

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-02 1.5'

Lab Sample ID: 885-43079-1

Date Collected: 02/06/26 12:05

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43006	VP	EET ALB	02/12/26 21:27
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43007	VP	EET ALB	02/12/26 21:27
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/13/26 22:59
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 20:27

Client Sample ID: BS25-03 1.5'

Lab Sample ID: 885-43079-2

Date Collected: 02/06/26 12:10

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 18:32
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 18:32
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/13/26 23:10
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 21:10

Client Sample ID: WS25-01 0-1.5'

Lab Sample ID: 885-43079-3

Date Collected: 02/06/26 12:15

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 18:57
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 18:57
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/13/26 23:21
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 22:20

Client Sample ID: BS25-34 1.0'

Lab Sample ID: 885-43079-4

Date Collected: 02/06/26 13:00

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 19:21

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-34 1.0'

Lab Sample ID: 885-43079-4

Date Collected: 02/06/26 13:00

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 19:21
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/13/26 23:31
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 22:35

Client Sample ID: BS25-42 1.0'

Lab Sample ID: 885-43079-5

Date Collected: 02/06/26 13:10

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 19:46
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 19:46
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/13/26 23:53
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 22:49

Client Sample ID: BS25-49 1.0'

Lab Sample ID: 885-43079-6

Date Collected: 02/06/26 13:15

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 20:10
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 20:10
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/14/26 00:04
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 23:03

Client Sample ID: BS25-65 1.0'

Lab Sample ID: 885-43079-7

Date Collected: 02/06/26 13:20

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 20:35
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 20:35

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-65 1.0'

Lab Sample ID: 885-43079-7

Date Collected: 02/06/26 13:20

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/14/26 00:15
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 23:17

Client Sample ID: BS25-09 2.0'

Lab Sample ID: 885-43079-8

Date Collected: 02/07/26 11:00

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 20:59
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 20:59
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/14/26 00:26
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 23:31

Client Sample ID: BS25-10 2.0'

Lab Sample ID: 885-43079-9

Date Collected: 02/07/26 11:05

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 21:23
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 21:23
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/14/26 00:36
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 23:45

Client Sample ID: BS25-32 1.0'

Lab Sample ID: 885-43079-10

Date Collected: 02/07/26 11:10

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 21:48
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 21:48
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/14/26 00:47

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: BS25-32 1.0'

Lab Sample ID: 885-43079-10

Date Collected: 02/07/26 11:10

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/11/26 23:59

Client Sample ID: WS25-11 0.5-1'

Lab Sample ID: 885-43079-11

Date Collected: 02/07/26 11:15

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8015M/D		1	43092	VP	EET ALB	02/13/26 22:12
Total/NA	Prep	5030C			42924	VP	EET ALB	02/11/26 12:33
Total/NA	Analysis	8021B		1	43093	VP	EET ALB	02/13/26 22:12
Total/NA	Prep	SHAKE			43015	BV	EET ALB	02/12/26 14:01
Total/NA	Analysis	8015M/D		1	43078	BV	EET ALB	02/14/26 00:58
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/12/26 00:42

Client Sample ID: WS25-12 0.5-1'

Lab Sample ID: 885-43079-12

Date Collected: 02/07/26 11:20

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8015M/D		1	43095	VP	EET ALB	02/14/26 00:13
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8021B		1	43094	VP	EET ALB	02/14/26 00:13
Total/NA	Prep	SHAKE			43107	BV	EET ALB	02/13/26 15:30
Total/NA	Analysis	8015M/D		1	43151	EM	EET ALB	02/16/26 14:58
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/12/26 00:56

Client Sample ID: WS25-13 0.5-1'

Lab Sample ID: 885-43079-13

Date Collected: 02/07/26 13:00

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8015M/D		1	43095	VP	EET ALB	02/14/26 01:26
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8021B		1	43094	VP	EET ALB	02/14/26 01:26
Total/NA	Prep	SHAKE			43107	BV	EET ALB	02/13/26 15:30
Total/NA	Analysis	8015M/D		1	43168	EM	EET ALB	02/16/26 14:46
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/12/26 01:10

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-14 0.5-1'

Lab Sample ID: 885-43079-14

Date Collected: 02/07/26 13:10

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8015M/D		1	43095	VP	EET ALB	02/14/26 02:39
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8021B		1	43094	VP	EET ALB	02/14/26 02:39
Total/NA	Prep	SHAKE			42940	DR	EET ALB	02/11/26 15:58
Total/NA	Analysis	8015M/D		1	42967	DH	EET ALB	02/12/26 10:54
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/12/26 01:24

Client Sample ID: WS25-15 0.5-1'

Lab Sample ID: 885-43079-15

Date Collected: 02/07/26 13:15

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8015M/D		1	43095	VP	EET ALB	02/14/26 03:03
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8021B		1	43094	VP	EET ALB	02/14/26 03:03
Total/NA	Prep	SHAKE			42940	DR	EET ALB	02/11/26 15:58
Total/NA	Analysis	8015M/D		1	42967	DH	EET ALB	02/12/26 11:06
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/12/26 01:39

Client Sample ID: WS25-16 0-0.5'

Lab Sample ID: 885-43079-16

Date Collected: 02/07/26 14:50

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8015M/D		1	43095	VP	EET ALB	02/14/26 03:27
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8021B		1	43094	VP	EET ALB	02/14/26 03:27
Total/NA	Prep	SHAKE			43107	BV	EET ALB	02/13/26 15:30
Total/NA	Analysis	8015M/D		1	43168	EM	EET ALB	02/16/26 14:58
Total/NA	Prep	300_Prep			42951	JT	EET ALB	02/11/26 17:25
Total/NA	Analysis	300.0		10	42955	KB	EET ALB	02/12/26 01:53

Client Sample ID: WS25-17 0-0.5'

Lab Sample ID: 885-43079-17

Date Collected: 02/07/26 14:55

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8015M/D		1	43095	VP	EET ALB	02/14/26 03:51

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-43079-1

Client Sample ID: WS25-17 0-0.5'

Lab Sample ID: 885-43079-17

Date Collected: 02/07/26 14:55

Matrix: Solid

Date Received: 02/11/26 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			42928	JP	EET ALB	02/11/26 13:21
Total/NA	Analysis	8021B		1	43094	VP	EET ALB	02/14/26 03:51
Total/NA	Prep	SHAKE			42940	DR	EET ALB	02/11/26 15:58
Total/NA	Analysis	8015M/D		1	42967	DH	EET ALB	02/12/26 11:28
Total/NA	Prep	300_Prep			42954	JT	EET ALB	02/11/26 17:59
Total/NA	Analysis	300.0		10	42980	JT	EET ALB	02/12/26 10:43

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975



Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-43079-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-26



Chain-of-Custody Record

Client: **Vertex**
 (direct bill to Mack, Matt Buckles)
 Mailing Address:
 3101 Boyd Drive Carlsbad NM, 88220
 Phone : 575.725.5001

Turn-Around Time:
 Standard **Rush-2 day**
 Project Name:
Red Deer CTB
 Project #:
25A-05531



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Project Manager:
 Sally Carttar
scarttar@vertexresource.com
 Project Manager:
 Andrew Ludvik
 On Ice: Yes No
 # of Coolers: 1
 Cooler Temp (including CF): $0.3 + 0.2 = 0.5$

Project Manager:
 Andrew Ludvik
 On Ice: Yes No
 # of Coolers: 1
 Cooler Temp (including CF): $0.3 + 0.2 = 0.5$

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
02.07.26	11:00	Soil	BS25-09 2.0'	1, 4oz jar	Ice	
02.07.26	11:05	Soil	BS25-10 2.0'	1, 4oz jar	Ice	
02.07.26	11:10	Soil	BS25-32 1.0'	1, 4oz jar	Ice	
02.07.26	11:15	Soil	WS25-11 0.5-1'	1, 4oz jar	Ice	
02.07.26	11:20	Soil	WS25-12 0.5-1'	1, 4oz jar	Ice	
02.07.26	13:00	Soil	WS25-13 0.5-1'	1, 4oz jar	Ice	
02.07.26	13:10	Soil	WS25-14 0.5-1'	1, 4oz jar	Ice	
02.07.26	13:15	Soil	WS25-15 0.5-1'	1, 4oz jar	Ice	
02.07.26	14:50	Soil	WS25-16 0-0.5'	1, 4oz jar	Ice	
02.07.26	14:55	Soil	WS25-17 0-0.5'	1, 4oz jar	Ice	

BTEX/ MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			
X	X					X			

Date: Time: Relinquished by: *[Signature]*
 Received by: *[Signature]* Via: Date: Time: 2/10/26 745

Date: Time: Relinquished by: *[Signature]*
 Received by: *[Signature]* Via: Date: Time: 2/11/26 7:45

Remarks: ATTN: Matt Buckles (mattbuckles@mec.com)
 cc. permian@vertexresource.com, scarttar@vertexresource.com
 and ktaylor@vertexresource.com, aludvik@vertexresource.com for
 Final Report. Bill to Mack Energy FAPP2211037291

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-43079-1

Login Number: 43079

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	True	





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 3/17/2026 3:28:15 PM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-44953-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
3/17/2026 3:28:15 PM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-44953-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	15
QC Association Summary	17
Lab Chronicle	19
Certification Summary	22
Chain of Custody	23
Receipt Checklists	24

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-44953-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-44953-1

Job ID: 885-44953-1

Eurofins Albuquerque

Job Narrative 885-44953-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 3/10/2026 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-01

Lab Sample ID: 885-44953-1

Date Collected: 03/04/26 14:00

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/10/26 13:23	03/12/26 17:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			03/10/26 13:23	03/12/26 17:36	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/10/26 13:23	03/12/26 17:36	1
Ethylbenzene	ND		0.046	mg/Kg		03/10/26 13:23	03/12/26 17:36	1
Toluene	ND		0.046	mg/Kg		03/10/26 13:23	03/12/26 17:36	1
Xylenes, Total	ND		0.046	mg/Kg		03/10/26 13:23	03/12/26 17:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			03/10/26 13:23	03/12/26 17:36	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		03/11/26 14:18	03/12/26 17:07	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/11/26 14:18	03/12/26 17:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			03/11/26 14:18	03/12/26 17:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91		50	mg/Kg		03/12/26 08:48	03/12/26 15:02	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-02

Lab Sample ID: 885-44953-2

Date Collected: 03/04/26 14:03

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/10/26 13:23	03/12/26 17:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		15 - 150			03/10/26 13:23	03/12/26 17:58	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/10/26 13:23	03/12/26 17:58	1
Ethylbenzene	ND		0.050	mg/Kg		03/10/26 13:23	03/12/26 17:58	1
Toluene	ND		0.050	mg/Kg		03/10/26 13:23	03/12/26 17:58	1
Xylenes, Total	ND		0.050	mg/Kg		03/10/26 13:23	03/12/26 17:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			03/10/26 13:23	03/12/26 17:58	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		03/11/26 14:18	03/12/26 17:18	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		03/11/26 14:18	03/12/26 17:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			03/11/26 14:18	03/12/26 17:18	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		50	mg/Kg		03/12/26 08:48	03/12/26 15:12	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-03

Lab Sample ID: 885-44953-3

Date Collected: 03/04/26 14:06

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		03/10/26 13:23	03/12/26 18:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			03/10/26 13:23	03/12/26 18:41	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/10/26 13:23	03/12/26 18:41	1
Ethylbenzene	ND		0.049	mg/Kg		03/10/26 13:23	03/12/26 18:41	1
Toluene	ND		0.049	mg/Kg		03/10/26 13:23	03/12/26 18:41	1
Xylenes, Total	ND		0.049	mg/Kg		03/10/26 13:23	03/12/26 18:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			03/10/26 13:23	03/12/26 18:41	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		03/11/26 14:18	03/12/26 17:30	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/11/26 14:18	03/12/26 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	75		62 - 134			03/11/26 14:18	03/12/26 17:30	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		51	mg/Kg		03/12/26 08:48	03/12/26 15:22	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-04

Lab Sample ID: 885-44953-4

Date Collected: 03/04/26 14:08

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		03/10/26 13:23	03/12/26 19:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			03/10/26 13:23	03/12/26 19:03	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/10/26 13:23	03/12/26 19:03	1
Ethylbenzene	ND		0.046	mg/Kg		03/10/26 13:23	03/12/26 19:03	1
Toluene	ND		0.046	mg/Kg		03/10/26 13:23	03/12/26 19:03	1
Xylenes, Total	ND		0.046	mg/Kg		03/10/26 13:23	03/12/26 19:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			03/10/26 13:23	03/12/26 19:03	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		03/11/26 14:18	03/12/26 17:41	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/11/26 14:18	03/12/26 17:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	71		62 - 134			03/11/26 14:18	03/12/26 17:41	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		50	mg/Kg		03/12/26 08:48	03/12/26 15:53	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-05

Lab Sample ID: 885-44953-5

Date Collected: 03/04/26 14:10

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/10/26 13:23	03/12/26 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			03/10/26 13:23	03/12/26 19:24	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/10/26 13:23	03/12/26 19:24	1
Ethylbenzene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 19:24	1
Toluene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 19:24	1
Xylenes, Total	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			03/10/26 13:23	03/12/26 19:24	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		03/11/26 14:18	03/12/26 17:53	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/11/26 14:18	03/12/26 17:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			03/11/26 14:18	03/12/26 17:53	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97		50	mg/Kg		03/12/26 08:48	03/12/26 16:04	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-06

Lab Sample ID: 885-44953-6

Date Collected: 03/04/26 14:12

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/10/26 13:23	03/12/26 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		15 - 150			03/10/26 13:23	03/12/26 19:46	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/10/26 13:23	03/12/26 19:46	1
Ethylbenzene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 19:46	1
Toluene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 19:46	1
Xylenes, Total	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			03/10/26 13:23	03/12/26 19:46	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		03/11/26 14:18	03/12/26 18:04	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		03/11/26 14:18	03/12/26 18:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			03/11/26 14:18	03/12/26 18:04	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94		50	mg/Kg		03/12/26 08:48	03/12/26 16:14	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-07

Lab Sample ID: 885-44953-7

Date Collected: 03/04/26 14:15

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/10/26 13:23	03/12/26 20:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		15 - 150			03/10/26 13:23	03/12/26 20:07	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/10/26 13:23	03/12/26 20:07	1
Ethylbenzene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 20:07	1
Toluene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 20:07	1
Xylenes, Total	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 20:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			03/10/26 13:23	03/12/26 20:07	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		03/11/26 14:18	03/12/26 18:16	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/11/26 14:18	03/12/26 18:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			03/11/26 14:18	03/12/26 18:16	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		50	mg/Kg		03/12/26 08:48	03/12/26 16:24	10

Client Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-08

Lab Sample ID: 885-44953-8

Date Collected: 03/04/26 14:18

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		03/10/26 13:23	03/12/26 20:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			03/10/26 13:23	03/12/26 20:29	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		03/10/26 13:23	03/12/26 20:29	1
Ethylbenzene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 20:29	1
Toluene	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 20:29	1
Xylenes, Total	ND		0.047	mg/Kg		03/10/26 13:23	03/12/26 20:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			03/10/26 13:23	03/12/26 20:29	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		03/11/26 14:18	03/12/26 18:27	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/11/26 14:18	03/12/26 18:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	73		62 - 134			03/11/26 14:18	03/12/26 18:27	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99		49	mg/Kg		03/12/26 08:48	03/12/26 16:35	10

Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-09

Lab Sample ID: 885-44953-9

Date Collected: 03/04/26 14:20

Matrix: Solid

Date Received: 03/10/26 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		03/10/26 13:23	03/12/26 20:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		15 - 150			03/10/26 13:23	03/12/26 20:51	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/10/26 13:23	03/12/26 20:51	1
Ethylbenzene	ND		0.048	mg/Kg		03/10/26 13:23	03/12/26 20:51	1
Toluene	ND		0.048	mg/Kg		03/10/26 13:23	03/12/26 20:51	1
Xylenes, Total	ND		0.048	mg/Kg		03/10/26 13:23	03/12/26 20:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			03/10/26 13:23	03/12/26 20:51	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		03/11/26 14:18	03/12/26 18:50	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		03/11/26 14:18	03/12/26 18:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			03/11/26 14:18	03/12/26 18:50	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98		50	mg/Kg		03/12/26 08:48	03/12/26 16:45	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-44953-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-44605/1-A
Matrix: Solid
Analysis Batch: 44781

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44605

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		03/10/26 13:23	03/12/26 13:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		15 - 150			03/10/26 13:23	03/12/26 13:59	1

Lab Sample ID: LCS 885-44605/2-A
Matrix: Solid
Analysis Batch: 44781

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	20.6		mg/Kg		82	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	186		15 - 150				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-44605/1-A
Matrix: Solid
Analysis Batch: 44782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44605

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/10/26 13:23	03/12/26 13:59	1
Ethylbenzene	ND		0.050	mg/Kg		03/10/26 13:23	03/12/26 13:59	1
Toluene	ND		0.050	mg/Kg		03/10/26 13:23	03/12/26 13:59	1
Xylenes, Total	ND		0.050	mg/Kg		03/10/26 13:23	03/12/26 13:59	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			03/10/26 13:23	03/12/26 13:59	1

Lab Sample ID: LCS 885-44605/3-A
Matrix: Solid
Analysis Batch: 44782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.898		mg/Kg		90	70 - 130
Ethylbenzene	1.00	0.901		mg/Kg		90	70 - 130
m,p-Xylene	2.00	1.77		mg/Kg		88	70 - 130
o-Xylene	1.00	0.891		mg/Kg		89	70 - 130
Toluene	1.00	0.905		mg/Kg		90	70 - 130
Xylenes, Total	3.00	2.66		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	97		15 - 150				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-44953-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-44692/1-A
Matrix: Solid
Analysis Batch: 44724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44692

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		03/11/26 14:18	03/12/26 16:44	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/11/26 14:18	03/12/26 16:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			03/11/26 14:18	03/12/26 16:44	1

Lab Sample ID: LCS 885-44692/2-A
Matrix: Solid
Analysis Batch: 44724

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	54.6		mg/Kg		109	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	88		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-44727/1-A
Matrix: Solid
Analysis Batch: 44732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44727

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.1	mg/Kg		03/12/26 08:48	03/12/26 11:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits					
Chloride	98		90 - 110					

Lab Sample ID: LCS 885-44727/2-A
Matrix: Solid
Analysis Batch: 44732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44727

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.7	49.6		mg/Kg		98	90 - 110

Lab Sample ID: MRL 885-44732/51
Matrix: Solid
Analysis Batch: 44732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.506		mg/L		101	50 - 150

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-44953-1

GC VOA

Prep Batch: 44605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-1	Backfill-01	Total/NA	Solid	5030C	
885-44953-2	Backfill-02	Total/NA	Solid	5030C	
885-44953-3	Backfill-03	Total/NA	Solid	5030C	
885-44953-4	Backfill-04	Total/NA	Solid	5030C	
885-44953-5	Backfill-05	Total/NA	Solid	5030C	
885-44953-6	Backfill-06	Total/NA	Solid	5030C	
885-44953-7	Backfill-07	Total/NA	Solid	5030C	
885-44953-8	Backfill-08	Total/NA	Solid	5030C	
885-44953-9	Backfill-09	Total/NA	Solid	5030C	
MB 885-44605/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-44605/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-44605/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 44781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-1	Backfill-01	Total/NA	Solid	8015M/D	44605
885-44953-2	Backfill-02	Total/NA	Solid	8015M/D	44605
885-44953-3	Backfill-03	Total/NA	Solid	8015M/D	44605
885-44953-4	Backfill-04	Total/NA	Solid	8015M/D	44605
885-44953-5	Backfill-05	Total/NA	Solid	8015M/D	44605
885-44953-6	Backfill-06	Total/NA	Solid	8015M/D	44605
885-44953-7	Backfill-07	Total/NA	Solid	8015M/D	44605
885-44953-8	Backfill-08	Total/NA	Solid	8015M/D	44605
885-44953-9	Backfill-09	Total/NA	Solid	8015M/D	44605
MB 885-44605/1-A	Method Blank	Total/NA	Solid	8015M/D	44605
LCS 885-44605/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	44605

Analysis Batch: 44782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-1	Backfill-01	Total/NA	Solid	8021B	44605
885-44953-2	Backfill-02	Total/NA	Solid	8021B	44605
885-44953-3	Backfill-03	Total/NA	Solid	8021B	44605
885-44953-4	Backfill-04	Total/NA	Solid	8021B	44605
885-44953-5	Backfill-05	Total/NA	Solid	8021B	44605
885-44953-6	Backfill-06	Total/NA	Solid	8021B	44605
885-44953-7	Backfill-07	Total/NA	Solid	8021B	44605
885-44953-8	Backfill-08	Total/NA	Solid	8021B	44605
885-44953-9	Backfill-09	Total/NA	Solid	8021B	44605
MB 885-44605/1-A	Method Blank	Total/NA	Solid	8021B	44605
LCS 885-44605/3-A	Lab Control Sample	Total/NA	Solid	8021B	44605

GC Semi VOA

Prep Batch: 44692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-1	Backfill-01	Total/NA	Solid	SHAKE	
885-44953-2	Backfill-02	Total/NA	Solid	SHAKE	
885-44953-3	Backfill-03	Total/NA	Solid	SHAKE	
885-44953-4	Backfill-04	Total/NA	Solid	SHAKE	
885-44953-5	Backfill-05	Total/NA	Solid	SHAKE	
885-44953-6	Backfill-06	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-44953-1

GC Semi VOA (Continued)

Prep Batch: 44692 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-7	Backfill-07	Total/NA	Solid	SHAKE	
885-44953-8	Backfill-08	Total/NA	Solid	SHAKE	
885-44953-9	Backfill-09	Total/NA	Solid	SHAKE	
MB 885-44692/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-44692/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 44724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-1	Backfill-01	Total/NA	Solid	8015M/D	44692
885-44953-2	Backfill-02	Total/NA	Solid	8015M/D	44692
885-44953-3	Backfill-03	Total/NA	Solid	8015M/D	44692
885-44953-4	Backfill-04	Total/NA	Solid	8015M/D	44692
885-44953-5	Backfill-05	Total/NA	Solid	8015M/D	44692
885-44953-6	Backfill-06	Total/NA	Solid	8015M/D	44692
885-44953-7	Backfill-07	Total/NA	Solid	8015M/D	44692
885-44953-8	Backfill-08	Total/NA	Solid	8015M/D	44692
885-44953-9	Backfill-09	Total/NA	Solid	8015M/D	44692
MB 885-44692/1-A	Method Blank	Total/NA	Solid	8015M/D	44692
LCS 885-44692/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	44692

HPLC/IC

Prep Batch: 44727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-1	Backfill-01	Total/NA	Solid	300_Prep	
885-44953-2	Backfill-02	Total/NA	Solid	300_Prep	
885-44953-3	Backfill-03	Total/NA	Solid	300_Prep	
885-44953-4	Backfill-04	Total/NA	Solid	300_Prep	
885-44953-5	Backfill-05	Total/NA	Solid	300_Prep	
885-44953-6	Backfill-06	Total/NA	Solid	300_Prep	
885-44953-7	Backfill-07	Total/NA	Solid	300_Prep	
885-44953-8	Backfill-08	Total/NA	Solid	300_Prep	
885-44953-9	Backfill-09	Total/NA	Solid	300_Prep	
MB 885-44727/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-44727/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 44732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-44953-1	Backfill-01	Total/NA	Solid	300.0	44727
885-44953-2	Backfill-02	Total/NA	Solid	300.0	44727
885-44953-3	Backfill-03	Total/NA	Solid	300.0	44727
885-44953-4	Backfill-04	Total/NA	Solid	300.0	44727
885-44953-5	Backfill-05	Total/NA	Solid	300.0	44727
885-44953-6	Backfill-06	Total/NA	Solid	300.0	44727
885-44953-7	Backfill-07	Total/NA	Solid	300.0	44727
885-44953-8	Backfill-08	Total/NA	Solid	300.0	44727
885-44953-9	Backfill-09	Total/NA	Solid	300.0	44727
MB 885-44727/1-A	Method Blank	Total/NA	Solid	300.0	44727
LCS 885-44727/2-A	Lab Control Sample	Total/NA	Solid	300.0	44727
MRL 885-44732/51	Lab Control Sample	Total/NA	Solid	300.0	

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-01

Lab Sample ID: 885-44953-1

Date Collected: 03/04/26 14:00

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 17:36
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 17:36
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 17:07
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 15:02

Client Sample ID: Backfill-02

Lab Sample ID: 885-44953-2

Date Collected: 03/04/26 14:03

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 17:58
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 17:58
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 17:18
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 15:12

Client Sample ID: Backfill-03

Lab Sample ID: 885-44953-3

Date Collected: 03/04/26 14:06

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 18:41
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 18:41
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 17:30
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 15:22

Client Sample ID: Backfill-04

Lab Sample ID: 885-44953-4

Date Collected: 03/04/26 14:08

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 19:03

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-04

Lab Sample ID: 885-44953-4

Date Collected: 03/04/26 14:08

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 19:03
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 17:41
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 15:53

Client Sample ID: Backfill-05

Lab Sample ID: 885-44953-5

Date Collected: 03/04/26 14:10

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 19:24
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 19:24
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 17:53
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 16:04

Client Sample ID: Backfill-06

Lab Sample ID: 885-44953-6

Date Collected: 03/04/26 14:12

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 19:46
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 19:46
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 18:04
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 16:14

Client Sample ID: Backfill-07

Lab Sample ID: 885-44953-7

Date Collected: 03/04/26 14:15

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 20:07
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 20:07

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Client Sample ID: Backfill-07

Lab Sample ID: 885-44953-7

Date Collected: 03/04/26 14:15

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 18:16
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 16:24

Client Sample ID: Backfill-08

Lab Sample ID: 885-44953-8

Date Collected: 03/04/26 14:18

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 20:29
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 20:29
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 18:27
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 16:35

Client Sample ID: Backfill-09

Lab Sample ID: 885-44953-9

Date Collected: 03/04/26 14:20

Matrix: Solid

Date Received: 03/10/26 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8015M/D		1	44781	AT	EET ALB	03/12/26 20:51
Total/NA	Prep	5030C			44605	JP	EET ALB	03/10/26 13:23
Total/NA	Analysis	8021B		1	44782	AT	EET ALB	03/12/26 20:51
Total/NA	Prep	SHAKE			44692	EM	EET ALB	03/11/26 14:18
Total/NA	Analysis	8015M/D		1	44724	EM	EET ALB	03/12/26 18:50
Total/NA	Prep	300_Prep			44727	MS	EET ALB	03/12/26 08:48
Total/NA	Analysis	300.0		10	44732	EH	EET ALB	03/12/26 16:45

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-44953-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-26 *
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-27

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-44953-1

Login Number: 44953

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	



Report to:
Sally Carttar



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name: Red Deer CTB

Work Order: E603011

Job Number: 19031-0001

Received: 3/3/2026

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/5/26



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 3/5/26



Sally Carttar
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Red Deer CTB
Workorder: E603011
Date Received: 3/3/2026 8:15:00AM

Sally Carttar,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/3/2026 8:15:00AM, under the Project Name: Red Deer CTB.

The analytical test results summarized in this report with the Project Name: Red Deer CTB apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
BS26-34 1'	5
QC Summary Data	6
QC - Volatile Organics by EPA 8021B	6
QC - Nonhalogenated Organics by EPA 8015D - GRO	7
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	8
QC - Anions by EPA 300.0/9056A	9
Definitions and Notes	10
Chain of Custody etc.	11

Sample Summary

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Red Deer CTB Project Number: 19031-0001 Project Manager: Sally Carttar	Reported: 03/05/26 11:08
--	--	------------------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BS26-34 1'	E603011-01A	Soil	02/27/26	03/03/26	Glass Jar, 4 oz.



Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Red Deer CTB Project Number: 19031-0001 Project Manager: Sally Carttar	Reported: 3/5/2026 11:08:33AM
--	--	----------------------------------

BS26-34 1'

E603011-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2610033
Benzene	ND	0.0250	1	03/03/26	03/03/26	
Ethylbenzene	ND	0.0250	1	03/03/26	03/03/26	
Toluene	ND	0.0250	1	03/03/26	03/03/26	
o-Xylene	ND	0.0250	1	03/03/26	03/03/26	
p,m-Xylene	ND	0.0500	1	03/03/26	03/03/26	
Total Xylenes	ND	0.0250	1	03/03/26	03/03/26	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		105 %	70-130	03/03/26	03/03/26	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2610033
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/03/26	03/03/26	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.0 %	70-130	03/03/26	03/03/26	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2610055
Diesel Range Organics (C10-C28)	ND	25.0	1	03/04/26	03/04/26	
Oil Range Organics (C28-C36)	ND	50.0	1	03/04/26	03/04/26	
<i>Surrogate: n-Nonane</i>						
		93.6 %	61-141	03/04/26	03/04/26	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: TP		Batch: 2610035
Chloride	597	20.0	1	03/03/26	03/03/26	



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Red Deer CTB Project Number: 19031-0001 Project Manager: Sally Carttar	Reported: 3/5/2026 11:08:33AM
--	--	---

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2610033-BLK1)

Prepared: 03/03/26 Analyzed: 03/03/26

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.50		8.00		106	70-130			

LCS (2610033-BS1)

Prepared: 03/03/26 Analyzed: 03/03/26

Benzene	3.75	0.0250	5.00		75.0	70-130			
Ethylbenzene	3.53	0.0250	5.00		70.5	70-130			
Toluene	3.66	0.0250	5.00		73.2	70-130			
o-Xylene	3.60	0.0250	5.00		72.0	70-130			
p,m-Xylene	7.21	0.0500	10.0		72.1	70-130			
Total Xylenes	10.8	0.0250	15.0		72.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.32		8.00		104	70-130			

Matrix Spike (2610033-MS1)

Source: E603005-11

Prepared: 03/03/26 Analyzed: 03/03/26

Benzene	4.70	0.0250	5.00	ND	94.1	70-130			
Ethylbenzene	4.51	0.0250	5.00	ND	90.1	70-130			
Toluene	4.64	0.0250	5.00	ND	92.7	70-130			
o-Xylene	4.60	0.0250	5.00	ND	92.0	70-130			
p,m-Xylene	9.19	0.0500	10.0	ND	91.9	70-130			
Total Xylenes	13.8	0.0250	15.0	ND	91.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.43		8.00		105	70-130			

Matrix Spike Dup (2610033-MSD1)

Source: E603005-11

Prepared: 03/03/26 Analyzed: 03/03/26

Benzene	4.85	0.0250	5.00	ND	97.0	70-130	3.13	27	
Ethylbenzene	4.66	0.0250	5.00	ND	93.2	70-130	3.38	26	
Toluene	4.77	0.0250	5.00	ND	95.5	70-130	2.93	20	
o-Xylene	4.78	0.0250	5.00	ND	95.5	70-130	3.70	25	
p,m-Xylene	9.50	0.0500	10.0	ND	95.0	70-130	3.32	23	
Total Xylenes	14.3	0.0250	15.0	ND	95.1	70-130	3.45	26	
Surrogate: 4-Bromochlorobenzene-PID	8.40		8.00		105	70-130			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Red Deer CTB Project Number: 19031-0001 Project Manager: Sally Carttar	Reported: 3/5/2026 11:08:33AM
--	--	---

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2610033-BLK1)

Prepared: 03/03/26 Analyzed: 03/03/26

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.61		8.00		95.1	70-130			

LCS (2610033-BS2)

Prepared: 03/03/26 Analyzed: 03/03/26

Gasoline Range Organics (C6-C10)	56.1	20.0	50.0		112	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.65		8.00		95.6	70-130			

Matrix Spike (2610033-MS2)

Source: E603005-11

Prepared: 03/03/26 Analyzed: 03/03/26

Gasoline Range Organics (C6-C10)	55.4	20.0	50.0	ND	111	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.56		8.00		94.5	70-130			

Matrix Spike Dup (2610033-MSD2)

Source: E603005-11

Prepared: 03/03/26 Analyzed: 03/03/26

Gasoline Range Organics (C6-C10)	56.6	20.0	50.0	ND	113	70-130	2.19	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.7	70-130			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Red Deer CTB Project Number: 19031-0001 Project Manager: Sally Carttar	Reported: 3/5/2026 11:08:33AM
--	--	---

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2610055-BLK1)

Prepared: 03/04/26 Analyzed: 03/04/26

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	45.2		50.0		90.3	61-141			

LCS (2610055-BS1)

Prepared: 03/04/26 Analyzed: 03/05/26

Diesel Range Organics (C10-C28)	233	25.0	250		93.3	66-144			
Surrogate: <i>n</i> -Nonane	43.3		50.0		86.7	61-141			

Matrix Spike (2610055-MS1)

Source: E603008-03

Prepared: 03/04/26 Analyzed: 03/04/26

Diesel Range Organics (C10-C28)	250	25.0	250	ND	100	56-156			
Surrogate: <i>n</i> -Nonane	47.0		50.0		94.0	61-141			

Matrix Spike Dup (2610055-MSD1)

Source: E603008-03

Prepared: 03/04/26 Analyzed: 03/04/26

Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	56-156	1.06	20	
Surrogate: <i>n</i> -Nonane	46.9		50.0		93.8	61-141			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Red Deer CTB Project Number: 19031-0001 Project Manager: Sally Carttar	Reported: 3/5/2026 11:08:33AM
--	--	---

Anions by EPA 300.0/9056A

Analyst: TP

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2610035-BLK1)

Prepared: 03/03/26 Analyzed: 03/03/26

Chloride ND 20.0

LCS (2610035-BS1)

Prepared: 03/03/26 Analyzed: 03/03/26

Chloride 259 20.0 250 104 90-110

Matrix Spike (2610035-MS1)

Source: E603005-07

Prepared: 03/03/26 Analyzed: 03/03/26

Chloride 268 40.0 250 ND 107 80-120

Matrix Spike Dup (2610035-MSD1)

Source: E603005-07

Prepared: 03/03/26 Analyzed: 03/03/26

Chloride 274 40.0 250 ND 110 80-120 2.23 20

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Red Deer CTB Project Number: 19031-0001 Project Manager: Sally Carttar	Reported: 03/05/26 11:08
--	--	------------------------------------

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Chain of Custody

Released to Imaging: 5/20/2026 9:51:49 AM

Received by OCD: 5/14/2026 7:50:49 AM

Client Information Client: MR VERTEX (BILL TO MACIA) Project Name: REP DEER CTB Project Manager: SALLY CARTAR Address: 3601 Boyd dr City, State, Zip: CARISBAD, NM 87220 Phone: Email:		Invoice Information Company: M&M MACK ENERGY Address: City, State, Zip: Phone: Email: MATT.BUCKLES@MEC.COM Miscellaneous:		Lab Use Only Lab WO# EC03011 Job Number 19031-0001		TAT 1D <input type="checkbox"/> 2D <input checked="" type="checkbox"/> 3D <input type="checkbox"/> Std <input type="checkbox"/>		State NM <input checked="" type="checkbox"/> CO <input type="checkbox"/> UT <input type="checkbox"/> TX <input type="checkbox"/>			
---	--	--	--	--	--	---	--	--	--	--	--

Sample Information							Analysis and Method							EPA Program			Remarks				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field	Filter	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCFH 1005 - TX	RCRA 8 Metals	Leach/Ammon Pkg		SDWA	CWA	RCRA	
12:00	2/27	Soil	1,4oz	BS26-34 1'			1														

Additional Instructions: WO: FAPP22110372 91 CC: SCARTAR@VERTEX.CA & LATRINA.TAYLOR@VERTEX.CA

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: SHARON MINX				Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on			
Relinquished by: (Signature) Sam Robaek	Date 3/2/26	Time 11:00	Received by: (Signature) Michelle Gonzales	Date 3-2-26	Time 11:00	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C _____	
Relinquished by: (Signature) Michelle Gonzales	Date 3-2-26	Time 1330	Received by: (Signature) Marissa Gonzales	Date 3-2-26	Time 1330		
Relinquished by: (Signature) Marissa Gonzales	Date 3-2-26	Time 1730	Received by: (Signature) Johnny Archuleta	Date 3-2-26	Time 1730		
Relinquished by: (Signature) Johnny Archuleta	Date 3-2-26	Time 2115	Received by: (Signature) Cathy Man	Date 3-3-26	Time 8:15		

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Page 11 of 13

Page 512 of 535



Envirotech Analytical Laboratory

Printed: 3/3/2026 9:08:29AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: Vertex Resource Services Inc. Date Received: 03/03/26 08:15 Work Order ID: E603011
Phone: (575) 748-0176 Date Logged In: 03/02/26 16:35 Logged In By: Noe Soto
Email: scarttar@vertex.ca Due Date: 03/04/26 17:00 (1 day TAT)

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Carrier: Courier

Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

- 7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

- 13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

- 14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

- 20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? Yes
Collectors name? Yes

Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Empty box for client instruction.

Comments/Resolution

Comments/Resolution box containing L-CM and R-DT.

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Chain of Custody

Client Information				Invoice Information			Lab Use Only		TAT			State																																																
Client: MR VERTEX (BILL TO MACIG)				Company: MR MACY ENERGY			Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX																																												
Project Name: RGP DEER CTB				Address: Vertex			EL03011	19031-0001		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>																																															
Project Manager: SALLY CARTAR				City, State, Zip:			<table border="1"> <thead> <tr> <th colspan="10">Analysis and Method</th> <th colspan="3">EPA Program</th> </tr> <tr> <td rowspan="2">DRO/DRO by RO15</td> <td rowspan="2">SRO/DRO by RO15</td> <td rowspan="2">BTEX by 8011</td> <td rowspan="2">VOC by 8210</td> <td rowspan="2">Chloride 300.0</td> <td rowspan="2">BOD5 - NM</td> <td rowspan="2">TSS 1005 - 19</td> <td rowspan="2">REBAR Metals</td> <td rowspan="2">Cadmium/Asst. Pkg</td> <td>SDWA</td> <td>CWA</td> <td>RCRA</td> </tr> <tr> <td>Compliance</td> <td>Y</td> <td>or</td> <td>N</td> </tr> <tr> <td colspan="12">PWSID #</td> <td colspan="3">Remarks</td> </tr> </thead> </table>										Analysis and Method										EPA Program			DRO/DRO by RO15	SRO/DRO by RO15	BTEX by 8011	VOC by 8210	Chloride 300.0	BOD5 - NM	TSS 1005 - 19	REBAR Metals	Cadmium/Asst. Pkg	SDWA	CWA	RCRA	Compliance	Y	or	N	PWSID #												Remarks		
Analysis and Method																	EPA Program																																											
DRO/DRO by RO15	SRO/DRO by RO15	BTEX by 8011	VOC by 8210	Chloride 300.0	BOD5 - NM	TSS 1005 - 19											REBAR Metals	Cadmium/Asst. Pkg	SDWA	CWA	RCRA																																							
																			Compliance	Y	or	N																																						
PWSID #												Remarks																																																
Address: 3601 Boyd dr				Phone:																																																								
City, State, Zip: CARLSBAD, NM 88220				Email: MATT.BUCKLES@MEC.COM																																																								
Miscellaneous:																																																												
Sample Information																																																												
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/DRO by RO15	SRO/DRO by RO15	BTEX by 8011	VOC by 8210	Chloride 300.0	BOD5 - NM	TSS 1005 - 19	REBAR Metals	Cadmium/Asst. Pkg																																													
12:00	2/27	Soil	1, 4oz	BS26-34 1'		1						<input checked="" type="checkbox"/>																																																
															4.0 Changed invoice to per client. 3/3/26 CM																																													
Additional Instructions: WO: FAPP22110372 91 CC: SCARTAR@VERTEX.CA & LATRINA.TAYLOR@VERTEX.CA																																																												
<small>(Field sampler, attest to the validity and authenticity of the sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.)</small>																																																												
Sampled by SHARON MINX																																																												
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 50°F with four 50°F or higher dry ice packs. Lab Use Only Received on ice <input checked="" type="checkbox"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C _____ Container type: g - glass, p - poly plastic, ag - amber glass, v - VOA																																																						
Tom Robaele	3/2/26	11:00	Michelle Gonzales	3-2-26	11:00																																																							
Michelle Gonzales	3-2-26	1330	Marissa Gonzales	3-2-26	1330																																																							
Marissa Gonzales	3-2-26	1730	Johnny Archuleta	3-2-26	1730																																																							
Johnny Archuleta	3-2-26	2115	Carth Man	3-3-26	8:15																																																							
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																																																												





Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/7/2026 11:24:19 AM

JOB DESCRIPTION

Red Deer CTB

JOB NUMBER

885-46241-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
4/7/2026 11:24:19 AM

Authorized for release by
Cheyenne Cason, Project Manager
cheyenne.cason@et.eurofinsus.com
(505)338-8812

Client: Vertex
Project/Site: Red Deer CTB

Laboratory Job ID: 885-46241-1



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Sample Results	7
QC Association Summary	9
Lab Chronicle	10
Certification Summary	11
Chain of Custody	12
Receipt Checklists	13

Definitions/Glossary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-46241-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Red Deer CTB

Job ID: 885-46241-1

Job ID: 885-46241-1

Eurofins Albuquerque

Job Narrative 885-46241-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 3/31/2026 7:50 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque



Client Sample Results

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-46241-1

Client Sample ID: TopSoil

Lab Sample ID: 885-46241-1

Date Collected: 03/27/26 12:00

Matrix: Solid

Date Received: 03/31/26 07:50

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/02/26 10:31	04/06/26 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			04/02/26 10:31	04/06/26 16:29	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/02/26 10:31	04/06/26 16:29	1
Ethylbenzene	ND		0.049	mg/Kg		04/02/26 10:31	04/06/26 16:29	1
Toluene	ND		0.049	mg/Kg		04/02/26 10:31	04/06/26 16:29	1
Xylenes, Total	ND		0.049	mg/Kg		04/02/26 10:31	04/06/26 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			04/02/26 10:31	04/06/26 16:29	1

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	22		8.6	mg/Kg		04/03/26 09:17	04/06/26 16:24	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/03/26 09:17	04/06/26 16:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	69		62 - 134			04/03/26 09:17	04/06/26 16:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		50	mg/Kg		04/02/26 12:50	04/05/26 13:21	10

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-46241-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-45970/1-A
Matrix: Solid
Analysis Batch: 46140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45970

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/02/26 10:31	04/06/26 08:58	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 150			04/02/26 10:31	04/06/26 08:58	1

Lab Sample ID: LCS 885-45970/2-A
Matrix: Solid
Analysis Batch: 46140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	24.3		mg/Kg		97	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	202		15 - 150				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-45970/1-A
Matrix: Solid
Analysis Batch: 46141

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45970

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/02/26 10:31	04/06/26 08:58	1
Ethylbenzene	ND		0.050	mg/Kg		04/02/26 10:31	04/06/26 08:58	1
Toluene	ND		0.050	mg/Kg		04/02/26 10:31	04/06/26 08:58	1
Xylenes, Total	ND		0.050	mg/Kg		04/02/26 10:31	04/06/26 08:58	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			04/02/26 10:31	04/06/26 08:58	1

Lab Sample ID: LCS 885-45970/3-A
Matrix: Solid
Analysis Batch: 46141

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.961		mg/Kg		96	70 - 130
Ethylbenzene	1.00	0.982		mg/Kg		98	70 - 130
m,p-Xylene	2.00	1.86		mg/Kg		93	70 - 130
o-Xylene	1.00	0.898		mg/Kg		90	70 - 130
Toluene	1.00	1.02		mg/Kg		102	70 - 130
Xylenes, Total	3.00	2.76		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		15 - 150				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-46241-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-46050/1-A
Matrix: Solid
Analysis Batch: 46148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46050

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/03/26 09:17	04/06/26 11:34	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/03/26 09:17	04/06/26 11:34	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			04/03/26 09:17	04/06/26 11:34	1

Lab Sample ID: LCS 885-46050/2-A
Matrix: Solid
Analysis Batch: 46148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	43.3		mg/Kg		87	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	86		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-45990/1-A
Matrix: Solid
Analysis Batch: 46078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45990

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.1	mg/Kg		04/02/26 12:50	04/03/26 13:18	1
Surrogate	MB %Recovery	MB Qualifier	Limits					
Chloride	99		90 - 110					

Lab Sample ID: LCS 885-45990/2-A
Matrix: Solid
Analysis Batch: 46078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.5	49.0		mg/Kg		99	90 - 110

QC Association Summary

Client: Vertex
Project/Site: Red Deer CTB

Job ID: 885-46241-1

GC VOA

Prep Batch: 45970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-46241-1	TopSoil	Total/NA	Solid	5030C	
MB 885-45970/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-45970/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-45970/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 46140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-46241-1	TopSoil	Total/NA	Solid	8015M/D	45970
MB 885-45970/1-A	Method Blank	Total/NA	Solid	8015M/D	45970
LCS 885-45970/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	45970

Analysis Batch: 46141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-46241-1	TopSoil	Total/NA	Solid	8021B	45970
MB 885-45970/1-A	Method Blank	Total/NA	Solid	8021B	45970
LCS 885-45970/3-A	Lab Control Sample	Total/NA	Solid	8021B	45970

GC Semi VOA

Prep Batch: 46050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-46241-1	TopSoil	Total/NA	Solid	SHAKE	
MB 885-46050/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-46050/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 46148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-46241-1	TopSoil	Total/NA	Solid	8015M/D	46050
MB 885-46050/1-A	Method Blank	Total/NA	Solid	8015M/D	46050
LCS 885-46050/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	46050

HPLC/IC

Prep Batch: 45990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-46241-1	TopSoil	Total/NA	Solid	300_Prep	
MB 885-45990/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-45990/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 46078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-45990/1-A	Method Blank	Total/NA	Solid	300.0	45990
LCS 885-45990/2-A	Lab Control Sample	Total/NA	Solid	300.0	45990

Analysis Batch: 46126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-46241-1	TopSoil	Total/NA	Solid	300.0	45990

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-46241-1

Client Sample ID: TopSoil

Lab Sample ID: 885-46241-1

Date Collected: 03/27/26 12:00

Matrix: Solid

Date Received: 03/31/26 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			45970	VP	EET ALB	04/02/26 10:31
Total/NA	Analysis	8015M/D		1	46140	VP	EET ALB	04/06/26 16:29
Total/NA	Prep	5030C			45970	VP	EET ALB	04/02/26 10:31
Total/NA	Analysis	8021B		1	46141	VP	EET ALB	04/06/26 16:29
Total/NA	Prep	SHAKE			46050	JE	EET ALB	04/03/26 09:17
Total/NA	Analysis	8015M/D		1	46148	EM	EET ALB	04/06/26 16:24
Total/NA	Prep	300_Prep			45990	MS	EET ALB	04/02/26 12:50
Total/NA	Analysis	300.0		10	46126	MA	EET ALB	04/05/26 13:21

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975



Accreditation/Certification Summary

Client: Vertex
 Project/Site: Red Deer CTB

Job ID: 885-46241-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425	02-25-27
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-25-27

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-46241-1

Login Number: 46241

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	True	



Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 579579

QUESTIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2528161742
Incident Name	NAPP2528161742 RED DEER CTB @ FAPP2211037291
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2211037291] Red Deer Federal Com Battery

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	RED DEER CTB
Date Release Discovered	10/08/2025
Surface Owner	State

Incident Details	
<i>Please answer all the questions in this group.</i>	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: Other Gasket Crude Oil Released: 42 BBL Recovered: 15 BBL Lost: 27 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 2

Action 579579

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Sally Carttar Title: Consultant Email: scarttar@vertex.ca Date: 05/14/2026
--	---

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 3

Action 579579

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Zero feet, overlying, or within area
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	760
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	690
GRO+DRO (EPA SW-846 Method 8015M)	500
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	12/08/2025
On what date will (or did) the final sampling or liner inspection occur	02/07/2026
On what date will (or was) the remediation complete(d)	02/07/2026
What is the estimated surface area (in square feet) that will be reclaimed	5491
What is the estimated volume (in cubic yards) that will be reclaimed	475
What is the estimated surface area (in square feet) that will be remediated	15855
What is the estimated volume (in cubic yards) that will be remediated	683

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505**

QUESTIONS, Page 4

Action 579579

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	FEEM0112338393 GANDY MARLEY LANDFARM/LANDFILL
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Sally Carttar Title: Consultant Email: scarttar@vertex.ca Date: 05/14/2026
--	---

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 5

Action 579579

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 6

Action 579579

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	557074
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	02/27/2026
What was the (estimated) number of samples that were to be gathered	1
What was the sampling surface area in square feet	200

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	15855
What was the total volume (cubic yards) remediated	683
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	5491
What was the total volume (in cubic yards) reclaimed	475
Summarize any additional remediation activities not included by answers (above)	As detailed in attached report.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Sally Carttar Title: Consultant Email: scarttar@vertex.ca Date: 05/14/2026
--	---

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 7

Action 579579

QUESTIONS (continued)

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	No

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 579579

CONDITIONS

Operator: MACK ENERGY CORP P.O. Box 960 Artesia, NM 882110960	OGRID: 13837
	Action Number: 579579
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Remediation closure approved.	5/20/2026
michael.buchanan	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	5/20/2026
michael.buchanan	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. The OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	5/20/2026
michael.buchanan	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	5/20/2026
michael.buchanan	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	5/20/2026
michael.buchanan	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	5/20/2026