



Incident Number: nAPP2317136603

Amended Release Assessment and Closure

Hackberry 18 Federal 2 Battery

Unit C, Section 18, Township 19 South, Range 31 East

Facility ID: fAPP2202048047

County: Eddy

Vertex File Number: 23E-03903

Prepared for:

Devon Energy Production Company, LP

Prepared by:

Vertex Resource Services Inc.

Date:

September 2025

Devon Energy Production Company, LP
Hackberry 18 Federal 2 Battery

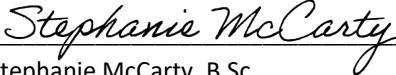
Amended Release Assessment and Closure
September 2025

Release Assessment and Closure
Hackberry 18 Federal 2 Battery
Unit C, Section 18, Township 19 South, Range 31 East
Facility ID: fAPP2202048047
County: Eddy

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September 26, 2025

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September 26, 2025

Date

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1.0 Introduction

Devon Energy Production Company, LP (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for a produced water release that occurred on June 19, 2023, on-site at Hackberry 18 Federal 2 Battery, Facility ID: fAPP2202048047 (hereafter referred to as the “site”). Devon submitted an initial C-141 Release Notification (Appendix A) to New Mexico Oil Conservation Division (NMOCD) District 2 on June 23, 2023. Incident ID number nAPP2317136603 was assigned to this incident.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for closure of this release, with the understanding that complete restoration of the release site will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13.

2.0 Incident Description

The release occurred on June 19, 2023, when a 3-inch poly line developed a pin hole and ruptured, releasing produced water onto the northwest edge of the pad. The incident was reported on June 23, 2023, and involved the release of 8.8 barrels (bbl) of produced water onto the facility pad. During the initial clean-up, 1 bbl of produced water was recovered. Additional details relevant to the release are presented in the C-141 Report (Appendix A).

3.0 Site Characteristics

The site is located approximately 11 miles south-southeast of Loco Hills, New Mexico, at 32.66565861 °N, -103.9104969 °W (Google Inc., 2025). The legal location for the site is Unit C, Section 18, Township 19 South and Range 31 East in Eddy County, New Mexico. The release area is located on federal property. An aerial photograph and characterization sampling site schematic is presented on Figure 1.

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for oil and gas production. The following sections specifically describe the release area at the site or in proximity to the constructed pad (Figure 1).

The *Geological Map of New Mexico* (New Mexico Bureau of Geology and Mineral Resources, 2025) indicates the surface geology at the site primarily comprises Qep – Eolian and piedmont deposits (Holocene to middle Pleistocene). The soil at the site is characterized as Berino loamy fine sand (United States Department of Agriculture, Natural Resources Conservation Service, 2025). Additional soil characteristics include well drained soil with low runoff and moderate available moisture levels in the soil profile. The karst geology potential for the site is medium (United States Department of the Interior, Bureau of Land Management, 2018). The release occurred prior to the December 1, 2023, updated regulations and should be considered stable area.

The surrounding landscape is associated with plains and fan piedmonts, at elevations of 2,000 to 5,700 feet above sea level. The climate is semiarid with average annual precipitation ranging between 6 and 14 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grasses with sparse shrubs. Tobosa (*Pleuraphis mutica*), black grama (*Bouteloua eriopoda*), and blue grama (*Bouteloua gracilis*) were the historically dominant species in this area. Overgrazing and extended drought can reduce the black and blue grama grass cover, transitioning into a bare state with little to no ground cover (United States Department of Agriculture, Natural Resources Conservation Service, 2025). Limited to no vegetation is allowed to grow on the compacted production pad, right-of-way and access road.

4.0 Closure Criteria Determination

The nearest depth to groundwater reference within 0.5 mile of the site is a dry hole, CP-01907 POD 1, that was drilled on July 13, 2022, to 55 feet (New Mexico Office of the State Engineer, 2025). It is located 2,635 feet east of the site; therefore, the closure criteria for the incident assumes depth to groundwater between 51 and 100 feet below ground surface (bgs). The nearest active well to the site is a prospecting well 5,249 feet to the south-southwest (New Mexico Office of the State Engineer, 2025).

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is an intermittent stream located approximately 7,645 feet southwest of the site (United States Fish and Wildlife Service, 2025).

At the site, there are no continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC. Information pertaining to the closure criteria determination is summarized in Table 1 and references are included in Appendix B.

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Table 1. Closure Criteria Determination			
Site Name: Hackberry 18 Federal 2 Battery			
Spill Coordinates: 32.66565861, -103.9104969		X: 602161.56	Y: 3614747.11
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	>55	feet
	Distance between release and nearest DTGW reference	2,635	feet
		0.50	miles
	Date of nearest DTGW reference measurement	July 13, 2022	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	7,645	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	4,772	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	18,007	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	7,953	feet
	ii) Within 1000 feet of any fresh water well or spring	5,249	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	4,936	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	18,608	feet
9	Within an unstable area (Karst Map)	Medium	Critical High Medium Low
	Distance between release and nearest unstable area	1,801	feet
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	11,338 ft	feet
11	Soil Type	Loamy fine sand, sandy clay loam	
12	Ecological Classification	Loamy	
13	Geology	Eolian and piedmont deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	51-100'	<50' 51-100' >100'

The closure criteria for the release area will also adhere to Paragraph (1) of Subsection D of 19.15.29.13 NMAC for reclamation from surface to 4 feet bgs. The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2 for pad and “pasture”.

Table 2. Closure Criteria for Soils to Remediation & Reclamation Standards		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
DTGW 51-100 feet (19.15.29.12)	Chloride	10,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids

bgs – below ground surface

DTGW – depth to groundwater

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

BTEX – benzene, toluene, ethylbenzene and xylenes

5.0 Remedial Actions Taken

5.1 Characterization and Remediation

Characterization of the release and surrounding area was completed by Vertex between August 18, 2023, and August 5, 2025. The characterization scope extended west beyond the immediate edges of the release staining to complete horizontal delineation. The impacted area was determined to cover approximately 6,616 square feet based on final characterization results as shown on Figure 1. Characterization field screening and laboratory results are summarized in Table 3. Daily field reports (DFRs) documenting characterization are included in Appendix C.

Remediation efforts began on December 14, 2023, and were finalized on August 8, 2025. Vertex personnel supervised the excavation of impacted soils. Field screening was conducted and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dextsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and electroconductivity meter (chlorides). Field screening results were used to identify areas requiring further remediation. Based on characterization and field screening results, contaminated material was removed through excavation to 0.5, 1.0, 2 and 4.1 feet bgs over the release area. The DFRs documenting various phases of remediation are included in Appendix C.

Corrections were made to sample nomenclature from CS24-/CWS24- to a more conformed standard of BS24-/WS24- in laboratory data report 885-9078-1, and sample BS24-13 was corrected to BS24-13 0.5' (Appendix C, Pg. 93; Appendix E, Report 885-9078-1).

Notifications that confirmatory samples were being collected were provided to the NMOCD as required 48 hours before each sampling event (Appendix D). Confirmatory composite samples were collected from the walls and samples of the base of the excavation in increments of no greater than 200 square feet. The total areas of the excavation bases and walls were approximately 3,383 and 973 square feet, respectively. A total of 17 excavation base samples and 12 excavation wall samples, and three backfill samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Eurofins or Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chloride (EPA Method 300.0). Confirmation sample locations and corresponding laboratory results are presented on Figure 2 and Table 4, respectively. Laboratory data reports are included in Appendix E.

Laboratory results for chloride (1,090 ppm) for excavation wall sample WES24-11 exceeded NMOCD strictest criterion, as presented in Table 4. Notification that an additional confirmation sample was being collected from the excavation wall was provided to the NMOCD on March 10, 2025, and confirmation sample WES24-11 was re-collected on March 14, 2025. The DFRs describing additional sampling are presented in Appendix C. Laboratory results are presented in Table 4.

5.2 Closure Denial and Additional Sampling

Devon submitted the initial closure report to the NMOCD on April 28, 2025. The initial request was denied on May 9, 2025, with following notations:

“The Remediation Closure Report is Denied. Collect 5-point confirmation samples every 200 ft² throughout the entire release area and not just at delineation sample point locations that show contaminants over closure criteria standards. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please make sure that the edge of the release extent is accurately defined, especially around equipment. All off pad areas must meet reclamation standards in the OCD Spill Rule. The work will need to be completed in 90 days after the report has been reviewed.”

Investigation of remaining impacted soils include reassessment and remediation by excavation, as shown in Figure 3, to closure criteria detailed in Table 2.

Notifications that confirmatory samples were being collected were provided to the NMOCD on August 5, 2025. Confirmation samples BES25-18 through BES25-38 and WES25-13 through WES25-22 were collected on August 7 and 8, 2025, in increments no greater than 200 square feet. The additional samples were collected from the pad surface within the area of impact outside the previously excavated remediation areas. Sample point locations and corresponding laboratory results are presented on Figure 3 and Table 4. The DFRs describing additional confirmation

sampling are presented in Appendix C. All final confirmation samples collected and analyzed were below Table 2 closure criteria for the site.

6.0 Reclamation Compliance

6.1 Backfill Samples

The location was backfilled upon the completion of remediation. Three samples of the backfill were collected on August 20, 2025, and analyzed for contaminants regulated in NMAC 19.15.29.12 Table 1 by Envirotech, Inc. Laboratory analysis of the original backfill material determined that it met the applicable reclamation standards. Laboratory results are presented in Table 4.

6.2 Production Pad Decommission

The production well is plugged and pad will be decommissioned with all oil and gas production related equipment removed from the location and the former caliche production pad ripped. The rip area will cover the incident area and will be contoured to match the surrounding topography. The reclamation plan for the production pad will be submitted in an independent report from this remediation assessment and closure.

7.0 Revegetation Plan and Monitoring Program

The seeding of the incident, per the landowners' guidelines, will occur as a part of the reclamation at the time of decommissioning of the production pad. Post seeding, bi-annual inspections will be conducted during the growing season to monitor site progression and assess the need for any additional best management practices (BMPs). Inspections will include photographs of the site and BMPs implemented.

7.1 Final Assessment

During the bi-annual inspections, if site conditions are at or nearing background conditions, a final revegetation report will be completed. The report will provide a summary of restoration work performed, a summary and interpretation of monitoring data collected, and interpretation of historical monitoring data, if applicable.

8.0 Remediation and Reclamation Closure Request

Vertex recommends no additional remediation or reclamation action to address the release at Hackberry 18 Federal 2 Battery. Additional confirmation sampling of the greater release area was conducted per NMOCD request. Laboratory analyses of the final confirmatory samples showed constituent of concern concentration levels below NMOCD closure criteria for areas where depth to groundwater is between 51 and 100 feet bgs as shown in Table 2. There are no anticipated risks to human, ecological or hydrological receptors associated with the release site. The excavation was backfilled with non-waste-containing, uncontaminated, earthen material, sourced locally, and placed to meet the site's existing grade to prevent ponding of water and erosion.

Vertex requests that the incident (nAPP2317136603) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. Devon certifies that all information in this report and the attachments is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and

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September 2025

directives to meet NMOCD requirements to obtain closure on the June 19, 2023, release at Hackberry 18 Federal 2 Battery.

Should you have any questions or concerns, please do not hesitate to contact Kent Stallings at 346.814.1413 or kstallings@vertexresource.com.

9.0 References

Google Inc. (2025). *Google Earth Pro (Version 7.3.3)* [Software]. Retrieved from <https://earth.google.com>

New Mexico Bureau of Geology and Mineral Resources. (2025). *Interactive Geologic Map*. Retrieved from <https://maps.nmt.edu/>

New Mexico Energy, Minerals and Natural Resources Department. (2025). *OCD Permitting - Spill Search*. Retrieved from <https://wwwapps.emnrd.nm.gov/ocd/ocdpermitting/Data/Spills/Spills.aspx>

New Mexico Office of the State Engineer. (2025). *New Mexico Water Rights Reporting System*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.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 Department of Homeland Security, Federal Emergency Management Agency. (2025). *FEMA Flood Map Service: Search by Address*. Retrieved from <https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor>

United States Department of the Interior, Bureau of Land Management. (2018). *New Mexico Cave/Karst*. Retrieved from https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html

United States Fish and Wildlife Service. (2025). *National Wetland Inventory - Surface Waters and Wetlands*. Retrieved from <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>

United States Geological Survey. (2025). *National Water Information System: Web Interface*. Retrieved from <https://waterdata.usgs.gov/nwis>

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Hackberry 18 Federal 2 Battery

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10.0 Limitations

This report has been prepared for the sole benefit of Devon Energy Production Company, LP. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and Bureau of Land Management, without the express written consent of Vertex Resource Services Inc. (Vertex) and Devon Energy Production Company, LP. 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

Client Name: Devon Energy Production Company, LP

Site Name: Hackberry 18 Federal 2 Battery

NMOCD Tracking #: nAPP2317136603

Project #: 23E-03903

Lab Reports: 2308F22, 2308F19, 2308F20, 885-30424, 885-13299 and 885-21910

Table 3. Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater 51 - 100 feet bgs										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
BH23-01	0	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	320
BH23-02	0	August 18, 2023	ND	ND	ND	21	ND	21	21	880
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	550
BH23-03	0	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	2400
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	430
BH23-04	0	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	1000
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	280
BH23-05	0	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	3500
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	1400
BH23-06	0	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	260
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	250
BH23-07	0	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-08	0	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	August 18, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-09	0	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	110
	2	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	300
BH23-10	0	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	120
	2	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	180
BH23-11	0	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	2300
	2	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	1000
BH23-12	0	August 19, 2023	ND	ND	ND	2700	3500	2700	6200	8200
	2	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	300
	3.5	August 19, 2023	ND	ND	ND	210	220	210	430	830
	4	August 19, 2023	ND	ND	ND	13	ND	ND	ND	540
BH23-13	0	August 19, 2023	ND	ND	ND	4900	3700	4900	8600	9200
	1	August 19, 2023	ND	ND	ND	ND	ND	ND	ND	320
	4	August 19, 2023	ND	ND	ND	12	ND	12	12	330
BH23-14	0	August 19, 2023	ND	ND	ND	230	180	230	410	2100
	2	August 19, 2023	ND	ND	ND	80	62	80	142	2200
BH23-15	0	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	84
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	860

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Site Name: Hackberry 18 Federal 2 Battery

NMOCD Tracking #: nAPP2317136603

Project #: 23E-03903

Lab Reports: 2308F22, 2308F19, 2308F20, 885-30424, 885-13299 and 885-21910

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Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
BH23-16	0	August 20, 2023	ND	ND	ND	100	140	100	240	1300
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	1900
	4.1	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	2100
	5	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	1700
	6	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	2400
	7	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	2200
	8	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	1200
	9	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	1100
	10	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	730
	11	August 5, 2025	ND	ND	ND	ND	ND	ND	ND	230
12	August 5, 2025	ND	ND	ND	9.6	ND	9.6	9.6	110	
BH23-17	0	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-18	0	August 20, 2023	ND	ND	ND	340	250	340	590	5000
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	550
	3	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	180
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	1100
BH23-19	0	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	200
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	860
	3	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	120
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	4400
BH23-20	0	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	5000
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	1600
BH23-21	0	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	540
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	620
BH23-22	0	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	97
	2	August 20, 2023	ND	ND	ND	ND	ND	ND	ND	220
BH24-27	0	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	100
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	800
BH24-28	0	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	140
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	92
BH24-29	0	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	150
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	110
BH24-30	0	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	110
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	130
BH24-31	0	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	130
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	66

Client Name: Devon Energy Production Company, LP

Site Name: Hackberry 18 Federal 2 Battery

NMOCD Tracking #: nAPP2317136603

Project #: 23E-03903

Lab Reports: 2308F22, 2308F19, 2308F20, 885-30424, 885-13299 and 885-21910

Table 3. Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater 51 - 100 feet bgs										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
BH24-32	0	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	96
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	110
BH24-33	0	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	4.1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
BH25-34	0	March 20, 2025	ND	ND	ND	ND	ND	ND	ND	100
	2	March 20, 2025	ND	ND	ND	ND	ND	ND	ND	61
	4	March 20, 2025	ND	ND	ND	ND	ND	ND	ND	83

"ND" Not Detected at the Reporting Limit

"- " indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Closure Criteria

Client Name: Devon Energy Production Company, LP

Site Name: Hackberry 18 Federal 2 Battery

NMOCD Tracking #: nAPP2317136603

Project #: 23E-03903

Lab Reports: 885-9078, E410229, 885-21619, 885-30424, 885-30633 and E508228

Table 4. Confirmation Sample Field Screen and Laboratory Results

Table 4. Confirmation Sample Field Screen and Laboratory Results													
Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic Chloride Concentration
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Depth to Groundwater 51-100 feet bgs													
Base Samples													
BS24-01	2	July 23, 2024	-	-	-	ND	ND	ND	19	ND	19	19	170
BS24-02	2	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	140
BS24-03	2	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	82
BS24-04	2	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	67
BS24-05	2	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND
BS24-06	2	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	160
BS24-07	1	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND
BS24-08	1	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	130
BS24-09	0.5	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	190
BS24-10	0.5	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	84
BS24-11	0.5	July 23, 2024	-	-	-	ND	ND	ND	18	ND	18	18	250
BS24-12	0.5	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND
BS24-13	0.5	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND
BES24-14	4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	298
BES24-15	4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	213
BES24-16	4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	670
BES24-17	4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	133
BES25-18	4.1	August 7, 2025	-	49	2,455	ND	ND	ND	ND	ND	ND	ND	1,300
BES25-19	2	August 7, 2025	-	24	350	ND	ND	ND	ND	ND	ND	ND	94
BES25-20	2	August 7, 2025	-	56	400	ND	ND	ND	ND	ND	ND	ND	170
BES25-21	2	August 7, 2025	-	27	200	ND	ND	ND	ND	ND	ND	ND	ND
BES25-22	2	August 7, 2025	-	33	550	ND	ND	ND	ND	ND	ND	ND	160
BES25-23	2	August 7, 2025	-	34	550	ND	ND	ND	ND	ND	ND	ND	140
BES25-24	4.1	August 7, 2025	-	23	1,003	ND	ND	ND	ND	ND	ND	ND	520
BES25-25	4.1	August 7, 2025	-	54	3,012	ND	ND	ND	ND	ND	ND	ND	1,700
BES25-26	4.1	August 7, 2025	-	34	1,425	ND	ND	ND	ND	ND	ND	ND	720
BES25-27	4.1	August 7, 2025	-	48	685	ND	ND	ND	ND	ND	ND	ND	440
BES25-28	4.1	August 7, 2025	-	56	1,606	ND	ND	ND	ND	ND	ND	ND	930
BES25-29	4.1	August 7, 2025	-	53	3,253	ND	ND	ND	ND	ND	ND	ND	980
BES25-30	4.1	August 8, 2025	-	56	3,306	ND	ND	ND	ND	ND	ND	ND	1,500
BES25-31	4.1	August 8, 2025	-	64	3,244	ND	ND	ND	ND	ND	ND	ND	2,000
BES25-32	4.1	August 8, 2025	-	36	2,423	ND	ND	ND	ND	ND	ND	ND	1,200
BES25-33	4.1	August 8, 2025	-	40	4,155	ND	ND	ND	ND	ND	ND	ND	2,200
BES25-34	4.1	August 8, 2025	-	51	4,136	ND	ND	ND	ND	ND	ND	ND	2,600
BES25-35	4.1	August 8, 2025	-	44	3,559	ND	ND	ND	ND	ND	ND	ND	2,000
BES25-36	4.1	August 8, 2025	-	56	2,571	ND	ND	ND	ND	ND	ND	ND	1,400
BES25-37	4.1	August 8, 2025	-	43	1,871	ND	ND	ND	ND	ND	ND	ND	1,100
BES25-38	4.1	August 8, 2025	-	42	2,234	ND	ND	ND	ND	ND	ND	ND	1,100
BES25-39	4.1	August 8, 2025	-	41	3,572	ND	ND	ND	ND	ND	ND	ND	2,200
BES25-40	4.1	August 8, 2025	-	37	5,379	ND	ND	ND	ND	ND	ND	ND	3,700
BES25-41	4.1	August 8, 2025	-	54	2,931	ND	ND	ND	ND	ND	ND	ND	1,500
BES25-42	4.1	August 8, 2025	-	43	2,947	ND	ND	ND	ND	ND	ND	ND	1,400
BES25-43	4.1	August 8, 2025	-	30	2,499	ND	ND	ND	ND	ND	ND	ND	1,300
BES25-44	4.1	August 8, 2025	-	51	1,545	ND	ND	ND	ND	ND	ND	ND	900
BES25-45	4.1	August 8, 2025	-	52	2,326	ND	ND	ND	ND	ND	ND	ND	1,100
Wall Samples													
WS24-01	0-2	July 23, 2024	-	-	-	ND	ND	ND	19	ND	19	19	130
WS24-02	0-2	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	91
WS24-03	0-0.5	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND
WS24-04	0-1	July 23, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	ND
WES24-05	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	151
WES24-06	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	245
WES24-07	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	102
WES24-08	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	128
WES24-09	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	112
WES24-10	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	293

Client Name: Devon Energy Production Company, LP

Site Name: Hackberry 18 Federal 2 Battery

NMOCD Tracking #: nAPP2317136603

Project #: 23E-03903

Lab Reports: 885-9078, E410229, 885-21619, 885-30424, 885-30633 and E508228

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						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Depth to Groundwater 51-100 feet bgs													
WES24-11	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	1,090
		March 14, 2025	-	9	300	ND	ND	ND	ND	ND	ND	ND	110
WES24-12	1-4.1	October 17, 2024	-	-	-	ND	ND	ND	ND	ND	ND	ND	167
WES25-13	0-4.1	August 7, 2025	-	44	550	ND	ND	ND	ND	ND	ND	ND	300
WES25-14	0-4.1	August 7, 2025	-	36	525	ND	ND	ND	ND	ND	ND	ND	220
WES25-15	0-2	August 7, 2025	-	40	300	ND	ND	ND	ND	ND	ND	ND	76
WES25-16	0-2	August 7, 2025	-	76	400	ND	ND	ND	ND	ND	ND	ND	73
WES25-17	0-4.1	August 7, 2025	-	38	500	ND	ND	ND	ND	ND	ND	ND	130
WES25-18	0-4.1	August 7, 2025	-	42	475	ND	ND	ND	ND	ND	ND	ND	160
WES25-19	0-4.1	August 7, 2025	-	38	550	ND	ND	ND	ND	ND	ND	ND	180
WES25-20	0-4.1	August 7, 2025	-	35	525	ND	ND	ND	ND	ND	ND	ND	170
WES25-21	0-4.1	August 7, 2025	-	30	525	ND	ND	ND	ND	ND	ND	ND	160
WES25-22	0-4.1	August 7, 2025	-	34	500	ND	ND	ND	ND	ND	ND	ND	120
Backfill													
SS25-01	0	August 20, 2025	-	0	0	ND	ND	ND	ND	ND	ND	ND	89
SS25-02	0	August 20, 2025	-	1	0	ND	ND	ND	ND	ND	ND	ND	106
SS25-03	0	August 20, 2025	-	0	1	ND	ND	ND	ND	ND	ND	ND	114

"ND" Not Detected at the Reporting Limit

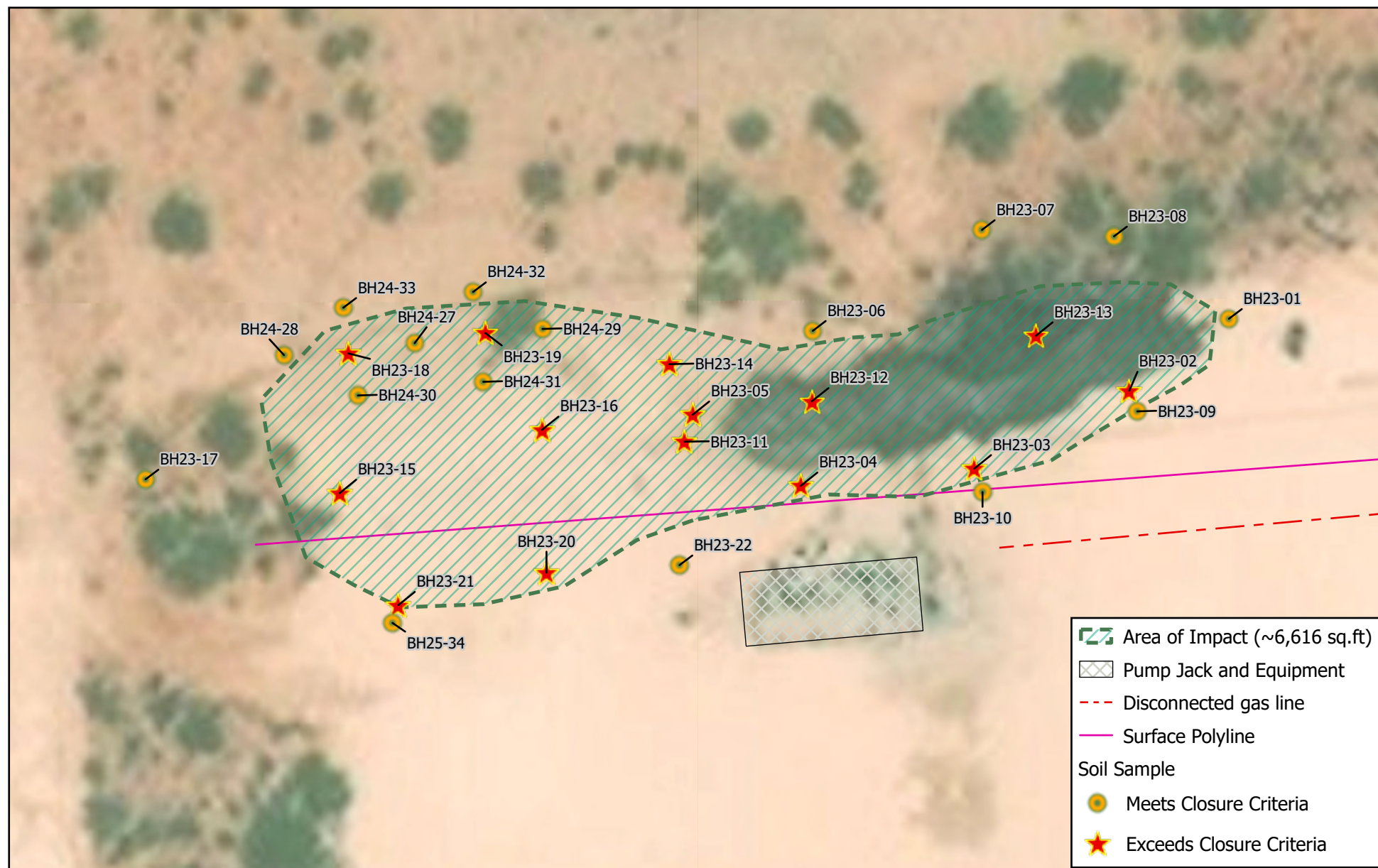
"-." indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Closure Criteria

Bold and blue shaded indicates re-collected sample results inside NMOCD Reclamation Closure Criteria

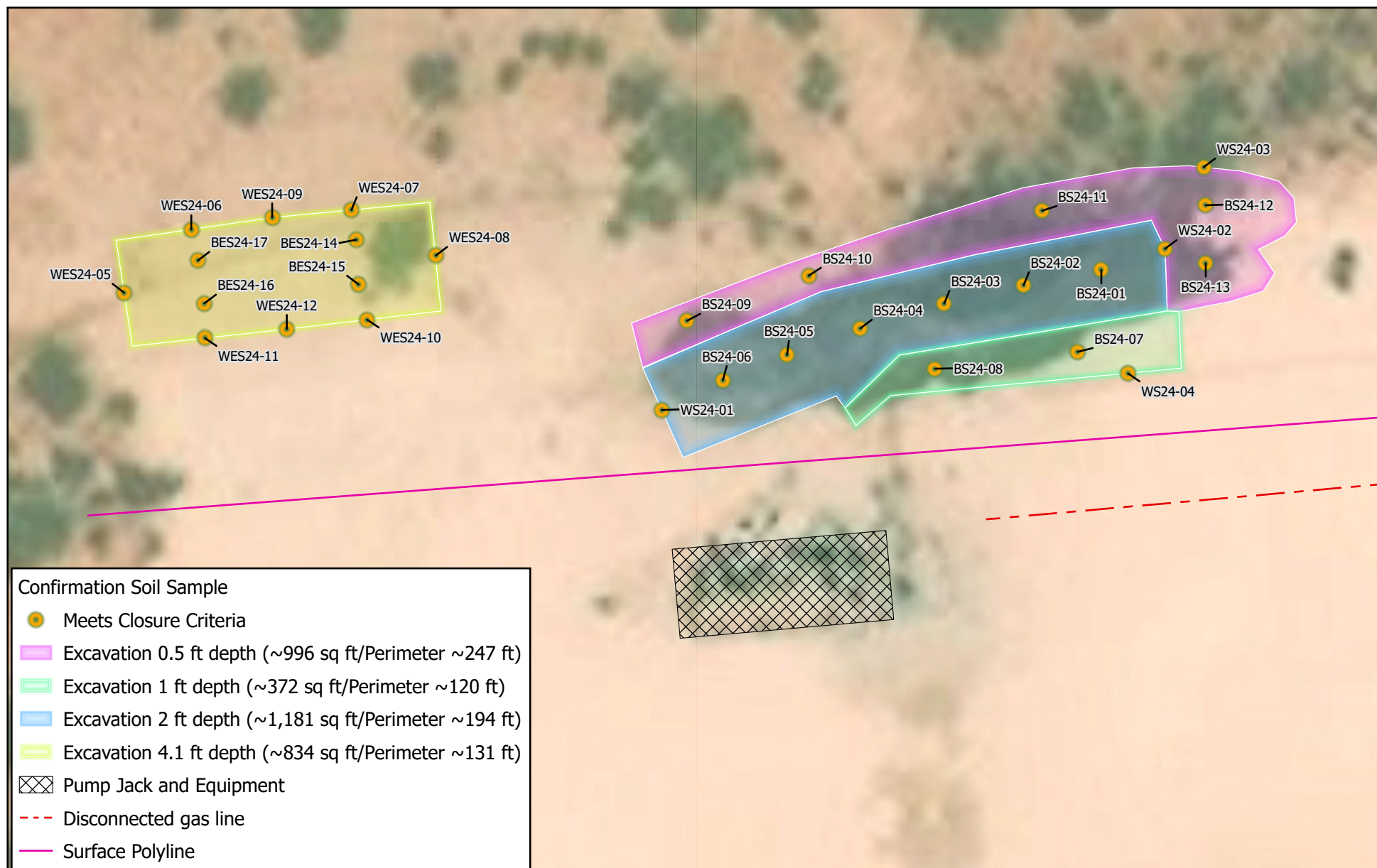
TABLES



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.



0 10 20 ft
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Map Center:
Lat/Long: 32.66587°N, 103.910612°W

Date: Sep 20/25



Confirmation Sampling Site Schematic Hackberry 18 Federal 2 Battery

FIGURE:

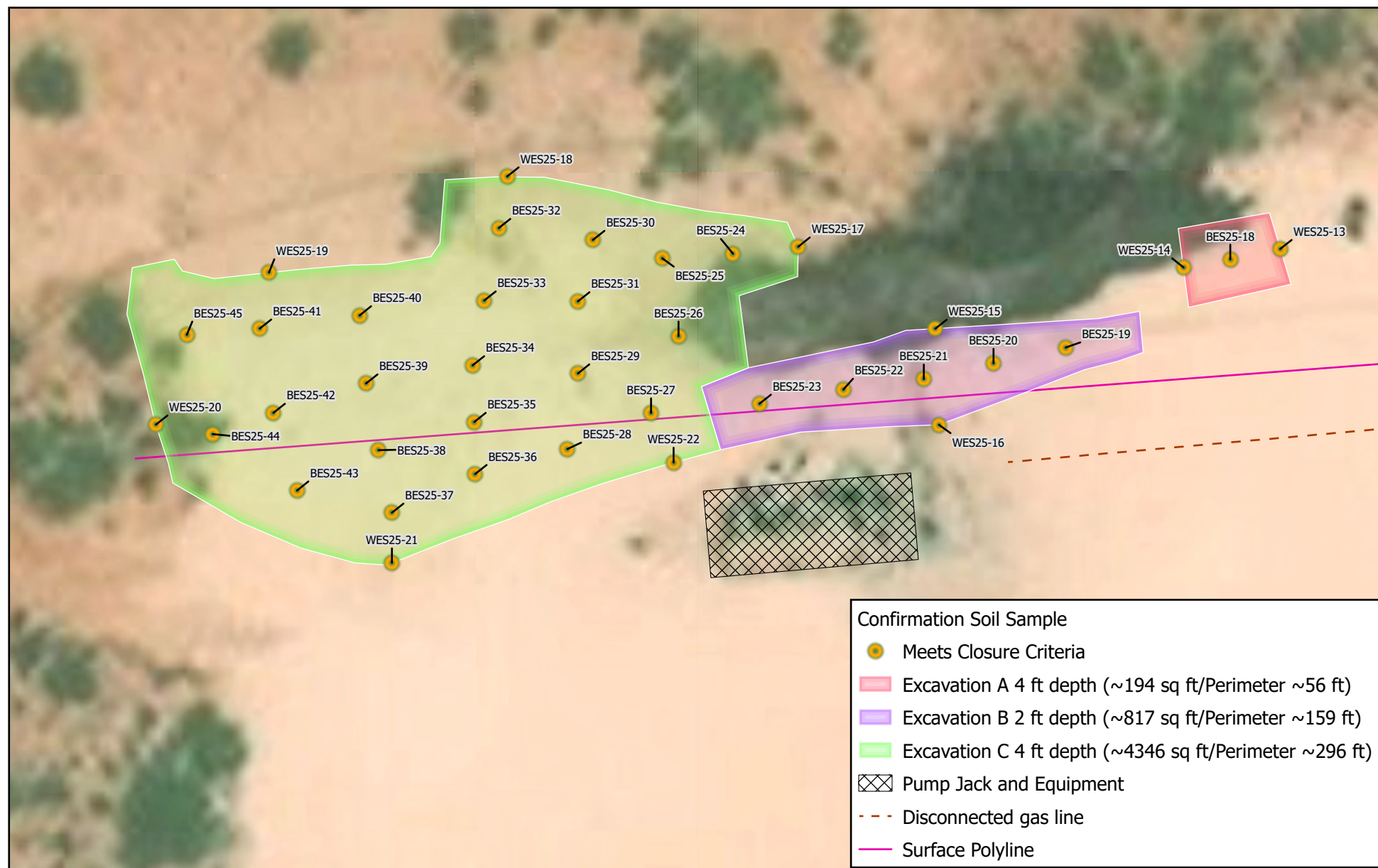
2



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.

VERSATILITY. EXPERTISE.



0 10 20 ft
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet

Map Center:
Lat/Long: 32.665846°N, 103.910627°W

Date: Sep 18/25



Confirmation Sampling Site Schematic Hackberry 18 Federal 2 Battery

FIGURE:

3



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.

APPENDIX A - NMOCD C-141 Report

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

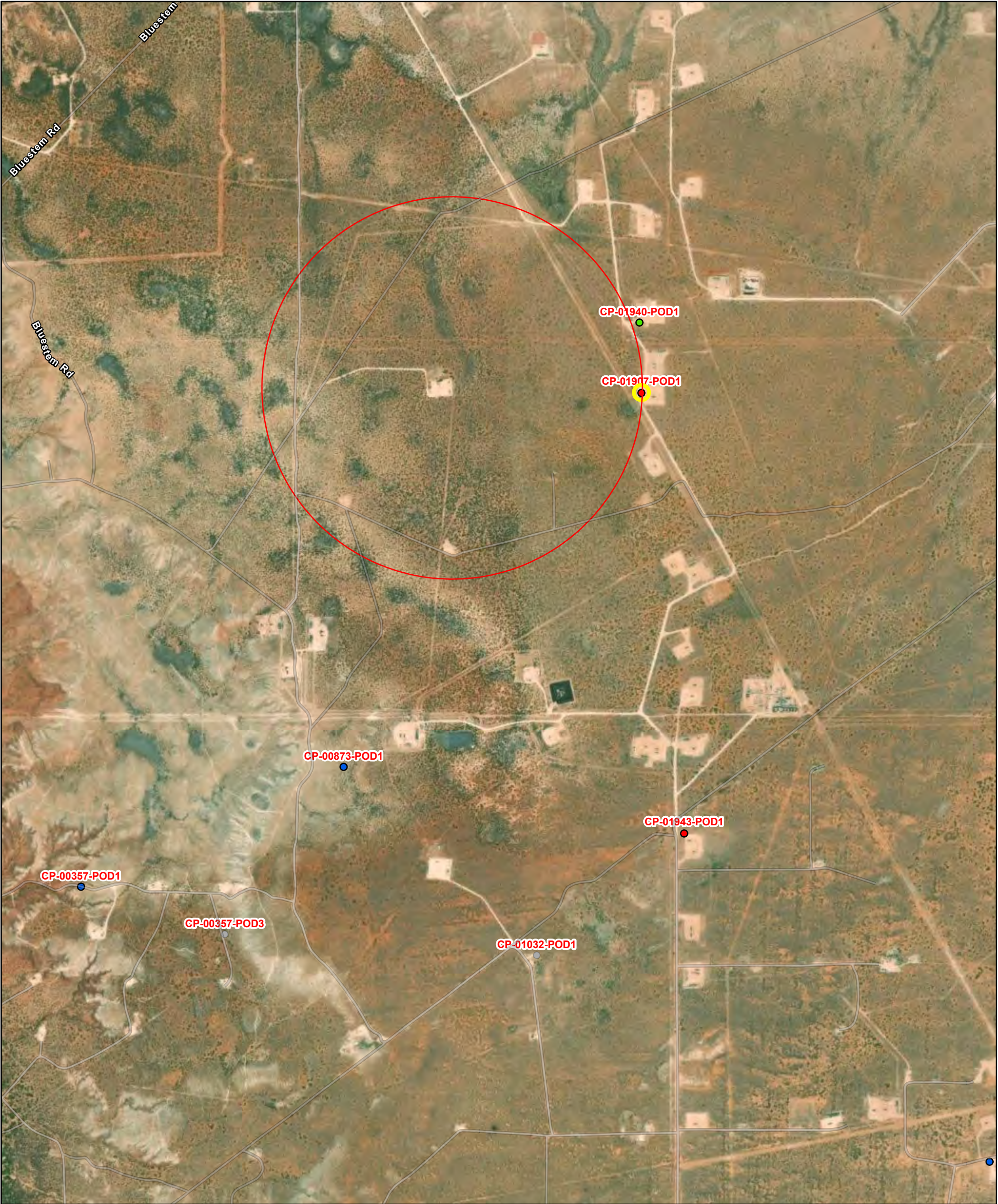
Initial Response

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.	
☐ The impacted area has been secured to protect human health and the environment.	
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☐ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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.	
Printed Name: Dale Woodall	Title: Env. Professional
Signature: <i>Dale Woodall</i>	Date: _____
email: dale.woodall@dv.com	Telephone: 575-748-1838
<u>OCD Only</u>	
Received by: <i>Shelly Wells</i>	Date: 6/23/2023

APPENDIX B – Closure Criteria Research Documentation

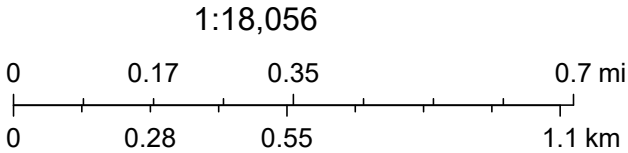
OSE POD 0.5 miles



3/18/2025, 1:33:56 PM

GIS WATERS PODs

- Active
- Pending
- Plugged
- OSE District Boundary



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

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

(In feet)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
CP 01907 POD1		CP	ED	SE	NE	NE	18	19S	31E	603017.2	3614737.1		855			
CP 00873 POD1		CP	LE		NW	NW	19	19S	31E	601772.0	3613147.0 *		1646	340	180	160
CP 01943 POD1		CP	ED	NW	SW	NW	20	19S	31E	603217.4	3612883.9		2141	55		
CP 01985 POD1		CP	ED	NE	SE	NE	17	19S	31E	604666.5	3614438.3		2523	55		
CP 00357 POD1		CP	ED	SE	SE	NW	24	19S	30E	600667.0	3612631.0 *		2590	630		
CP 00357 POD2		CP	ED	SE	SW	NW	24	19S	30E	600265.0	3612627.0 *		2844	630		
CP 00722 POD2		CP	ED	NE	NW	NW	25	19S	30E	600276.0	3611620.0 *		3651	350	65	285
CP 00647 POD1	O	CP	ED	SE	NE	NE	15	19S	30E	598235.0	3614621.0 *		3929	200	92	108
CP 01941 POD1		CP	ED	SW	NE	NE	29	19S	31E	604524.2	3611512.8		4005	55	54	1
CP 00829 POD1		CP	LE		NE	SE	16	19S	31E	606165.0	3614009.0 *		4070	120		
CP 00822 POD1		CP	LE		SE	SE	15	19S	30E	598148.0	3613516.0 *		4198	90		
CP 02011 POD1		CP	ED	SW	SW	SW	10	19S	31E	606373.4	3615144.8		4230	105		

Average Depth to Water: 97 fe

Minimum Depth: 54 feet

Maximum Depth: 180 feet

Record Count: 12

UTM Filters (in meters):

Easting: 602162
Northing: 3614747
Radius: 005000

* 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.



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)						(quarters are smallest to largest)		(NAD83 UTM in meters)		
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y			
NA	CP 01907 POD1	4	2	2	18	19S	31E	603017	3614737			
x												
Driller License:		1249		Driller Company:			ATKINS ENGINEERING ASSOC. INC.					
Driller Name:		JACKIE ATKINS										
Drill Start Date:		07/13/2022		Drill Finish Date:			07/13/2022		Plug Date:			
Log File Date:		08/11/2022		PCW Rcv Date:			Source:					
Pump Type:					Pipe Discharge Size:			Estimated Yield:				
Casing Size:					Depth Well:			Depth Water:				
x												
Casing Perforations:					Top	Bottom						
					0	55						
x												

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.

Water Right Summary



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

WR File Number:	CP 01907	Subbasin:	CP	Cross Reference:
Primary Purpose:	MON MONITORING WELL			
Primary Status:	PMT Permit			
Total Acres:		Subfile:		Header:
Total Diversion:	0.000	Cause/Case:		
Owner:	DEVON ENERGY	Owner Class:	Owner	
Contact:	DALE WOODALL			

Documents on File

(acre-feet per annum)

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
_get images	726167	EXPL	2022-05-23	PMT	LOG	CP 01907 POD1	T	0.000	0.000	

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map	Other Location Desc
CP 01907 POD1	NA		SE	NE	NE	18	19S	31E	603017.2	3614737.1		TW-1

* UTM location was derived from PLSS - see Help

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WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). CP-1907				
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838				
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia		STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES 32		MINUTES 39	SECONDS 55.76	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LATITUDE			N				
	LONGITUDE		103	54	4.95	W * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NE NE Sec.18 T19S R31S NMPM									
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins				NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 7/13/2022		DRILLING ENDED 7/13/2022		DEPTH OF COMPLETED WELL (FT) Temporary Well		BORE HOLE DEPTH (FT) ±55		
	DEPTH WATER FIRST ENCOUNTERED (FT) N/A								
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL N/A		DATE STATIC MEASURED 7/13/2022, 7/1/2022
	DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:								
	DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☒ OTHER – SPECIFY: Hollow Stem Auger							CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐	
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)	
	FROM	TO							
	0	55	±6.5	Boring-HSA	--	--	--	--	
3. ANNULAR MATERIAL	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							

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FOR USE INTERNAL USE		WK-20 WELL RECORD & LOG (Version 01/26/2022)	
FILE NO.	CP-1907-POD1 TW-1	POD NO.	1
LOCATION		TRN NO.	726167
19.31.18.427		WELL TAG ID NO.	—
		PAGE 1 OF 2	

4. HYDROGEOLOGIC LOG OF WELL	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	29	29	Sand, Medium/ Fine grained, poorly graded, Light brown	Y ✓ N	
	29	44	15	Sand, Medium/ Fine grained, poorly graded, with caliche Light brown / white	Y ✓ N	
	44	55	11	Sand, Medium/ Fine grained, poorly graded, Light brown	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
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					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

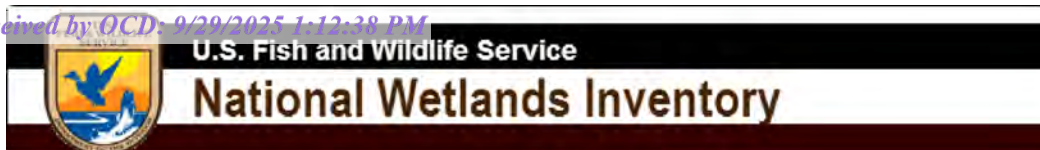
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.	
	OCD 31 AUG 11 2022-2 L PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt	

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 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME <i>Jackie D. Atkins</i> Jackie D. Atkins	DATE 8/4/2022

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. <u>CP-1907-P001 TW-1</u>	POD NO. <u>1</u>	TRN NO. <u>726167</u>
LOCATION <u>19.31.18.422</u>	WELL TAG ID NO. <u> </u>	PAGE 2 OF 2



Hackberry 18 Federal 2 Battery Watercourse 7,645 ft



June 30, 2023

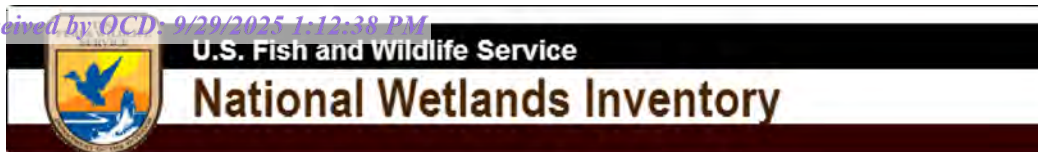
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

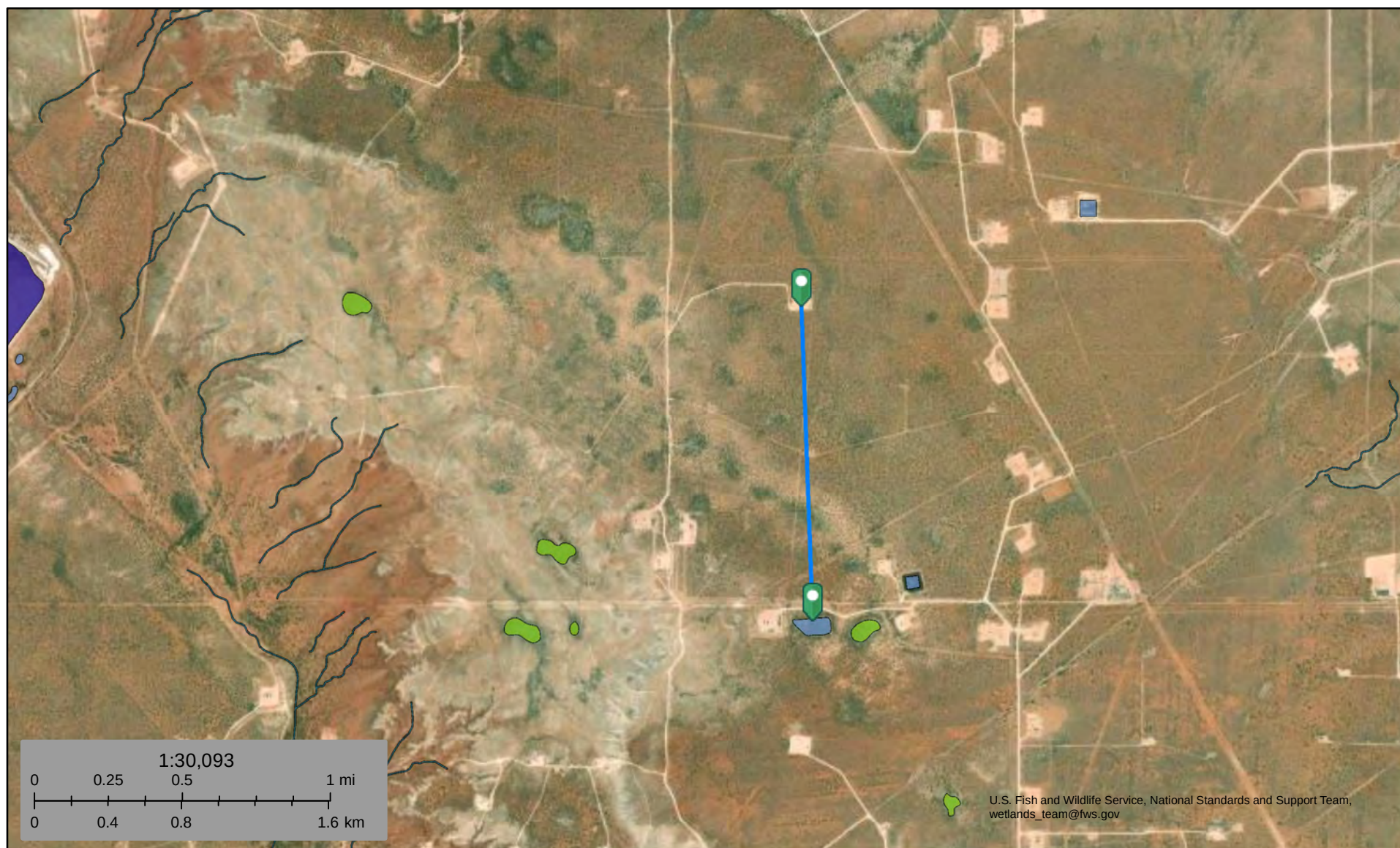
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- 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.



03 - Hackberry 18 Fed 2 Battery - Lakebed: 4,772 feet (0.89 miles)



June 30, 2023

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.

Hackberry 18 Federal 2 Battery

Nearest residence: 18,007 feet away (3.41 miles)

Legend

 Hackberry 18 Fed 2

 Line Measure

 Residence

Hackberry 18 Fed 2



222

248

Residence



222



2 mi

Active & Inactive Points of Diversion
(with Ownership Information)

			(acre ft per annum)					(R=POD has been replaced and no longer serves this file, C=the file is closed)					(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)		(meters)	
WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q64	q16	q4	Sec	Tws	Range	X	Y	Map	Distance
CP 01907	CP	MON	0.000	DEVON ENERGY	ED	CP 01907 POD1	NA			SE	NE	NE	18	19S	31E	603017.2	3614737.1		855.3	
CP 01940	CP	EXP	0.000	DEVON ENERGY	ED	CP 01940 POD1	NA			SE	SE	SE	07	19S	31E	603004.2	3615030.5		888.6	
CP 00873	CP	PRO	0.000	SANTA FE ENERGY	LE	CP 00873 POD1				Shallow		NW	NW	19	19S	31E	601772.0	3613147.0 *		1,646.8
CP 01943	CP	EXP	0.000	DEVON ENERGY	ED	CP 01943 POD1	NA			NW	SW	NW	20	19S	31E	603217.4	3612883.9		2,141.3	
CP 01032	CP	STK	3.000	G & L CATTLE, LLC	ED	CP 01032 POD1				NE	NW	SE	19	19S	31E	602600.1	3612362.6		2,424.3	
CP 00357	CP	SRO	48.000	GULF OIL CORPORATION	ED	CP 00357 POD3				NW	NE	SE	24	19S	30E	601276.0	3612437.0 *		2,474.1	
CP 01985	CP	MON	0.000	DEVON ENERGY RESOURCES	ED	CP 01985 POD1	NA			NE	SE	NE	17	19S	31E	604666.5	3614438.3		2,523.5	
CP 00357	CP	SRO	48.000	GULF OIL CORPORATION	ED	CP 00357 POD1				Shallow	SE	SE	NW	24	19S	30E	600667.0	3612631.0 *		2,590.8
					ED	CP 00357 POD2				Shallow	SE	SW	NW	24	19S	30E	600265.0	3612627.0 *		2,844.8
CP 00722	CP	COM	90.000	G & L CATTLE, LLC	ED	CP 00722 POD2				Shallow	NE	NW	NW	25	19S	30E	600276.0	3611620.0 *		3,651.7
CP 01941	CP	EXP	0.000	DEVON ENERGY	ED	CP 01941 POD1	NA			Shallow	SW	NE	NE	29	19S	31E	604524.2	3611512.8		4,005.0
CP 00829	CP	PLS	3.000	SNYDER RANCHES	LE	CP 00829 POD1				Shallow		NE	SE	16	19S	31E	606165.0	3614009.0 *		4,070.5
CP 02053	CP	SAN	1.000	FRONTIER FIELD SERVICES, LLC	ED	CP 02053 POD1	216DA			SE	NE	NE	16	19S	31E	606328.8	3614710.7		4,167.0	
CP 00822	CP	PLS	3.000	SNYDER RANCHES	LE	CP 00822 POD1				Shallow		SE	SE	15	19S	30E	598148.0	3613516.0 *		4,198.5
CP 02011	CP	EXP	0.000	DEVON ENERGY CO.	ED	CP 02011 POD1	NA			SW	SW	SW	10	19S	31E	606373.4	3615144.8		4,230.1	

Record Count:

15

Filters Applied:

UTM Filters (in meters):

Easting:

602162

Northing:

3614747

Radius:

005000

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.

Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE
quarters are smallest to largest
NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
	CP 00873 POD1		NW	NW	19	19S	31E	601772.0	3613147.0 *	

* UTM location was derived from PLSS - see Help

Driller License:	421	Driller Company:	GLENN'S WATER WELL SERVICE		
Driller Name:	GLENN, CLARK A. "CORKY"				
Drill Start Date:	1998-01-02	Drill Finish Date:	1998-01-05	Plug Date:	
Log File Date:	1998-01-15	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	50
Casing Size:	6.62	Depth Well:	340	Depth Water:	180

Water Bearing Stratifications:

Top	Bottom	Description
240	320	Shallow Alluvium/Basin Fill

Casing Perforations:

Top	Bottom
226	340

Meter Information

Meter Number:	805	Meter Make:	MASTER
Meter Serial Number:	1748543	Meter Multiplier:	100.0000
Number of Dials:	6	Meter Type:	Diversion
Unit of Measure:	Gallons	Reading Frequency:	Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
1999-01-01	1999	37400.000	A	fm		0.000	

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
1999-01-15	1999	43541.000	A	fm		1.885	
2000-04-27	2000	14849.000	R	jw	Meter Rollover	298.083	
2000-07-31	2000	24399.000	A	jw		2.931	

YTD Meter Amounts:

Year	Amount
1999	1.885
2000	301.014

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3/18/25 1:21 PM MST

Point of Diversion Summary

Water Right Summary


[get image list](#)

WR File Number:	CP 00873	Subbasin:	CP	Cross Reference:
Primary Purpose:	PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE			
Primary Status:	PMT Permit			
Total Acres:	0.000	Subfile:	Header:	
Total Diversion:	0.000	Cause/Case:		
Owner:	SANTA FE ENERGY	Owner Class:	Agent	
Contact:	CORKY GLENN			
Owner:	NORTON DRILLING	Owner Class:	Agent	
Contact:	CORKY GLENN			
Owner:	YATES PETROLEUM	Owner Class:	Agent	
Owner:	SANTA FE SNYDER	Owner Class:	Agent	
Contact:	CORKY GLENN			

Documents on File

(acre-feet per a

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Cor
 _get images 550904	72121	2000-08-14	PMT	APR	CP 00873	T		3.000		
 _get images 550830	72121	2000-04-27	PMT	APR	CP 00873	T		3.000		
 _get images 550817	72121	1999-01-15	PMT	APR	CP 00873	T		3.000		
 _get images 550808	72121	1997-11-10	PMT	MTR	CP 00873	T		3.000		

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	TwS	Rng	X	Y	Map	Other Location Desc
CP 00873 POD1		Shallow		NW	NW	19	19S	31E	601772.0	3613147.0 *		
* 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.

3/18/25 1:23 PM MST

Water Rights Summary

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Water Right Summary



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

WR File Number:	CP 01032	Subbasin:	CP	Cross Reference:
Primary Purpose:	STK 72-12-1 LIVESTOCK WATERING			
Primary Status:	PMT Permit			
Total Acres:		Subfile:	Header:	
Total Diversion:	3.000	Cause/Case:		
Owner:	G & L CATTLE, LLC	Owner Class:	Owner	
Contact:	GRANT SMITH			
Owner:	BLM	Owner Class:	Owner	
Contact:	STEVE DALY			

Documents on File

(acre-feet per annum)

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
_get images 602030		COWNF	2015-01-12	CHG	PRC	CP 01032	T		3.000	
_get images 477302		72121	2009-12-23	PMT	APR	CP 01032	T		3.000	

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location Desc
CP 01032 POD1			NE	NW	SE	19	19S	31E	602600.1	3612362.6		

* 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.

Hackberry 18 Fed 2 Battery

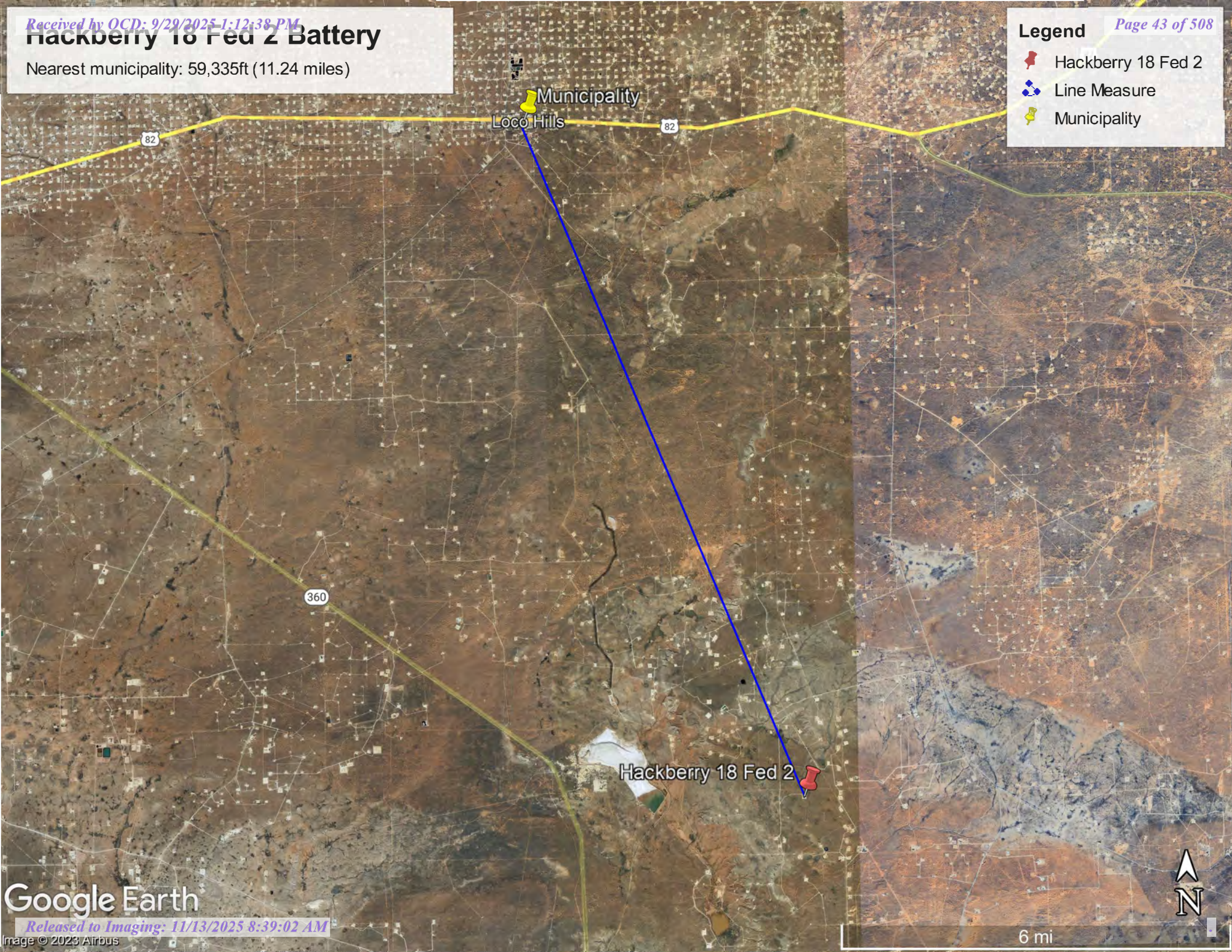
Nearest municipality: 59,335ft (11.24 miles)

Legend

 Hackberry 18 Fed 2

 Line Measure

 Municipality





U.S. Fish and Wildlife Service

National Wetlands Inventory

Hackberry 18 Federal 2 Battery
Wetland 4,936 ft



June 30, 2023

Wetlands

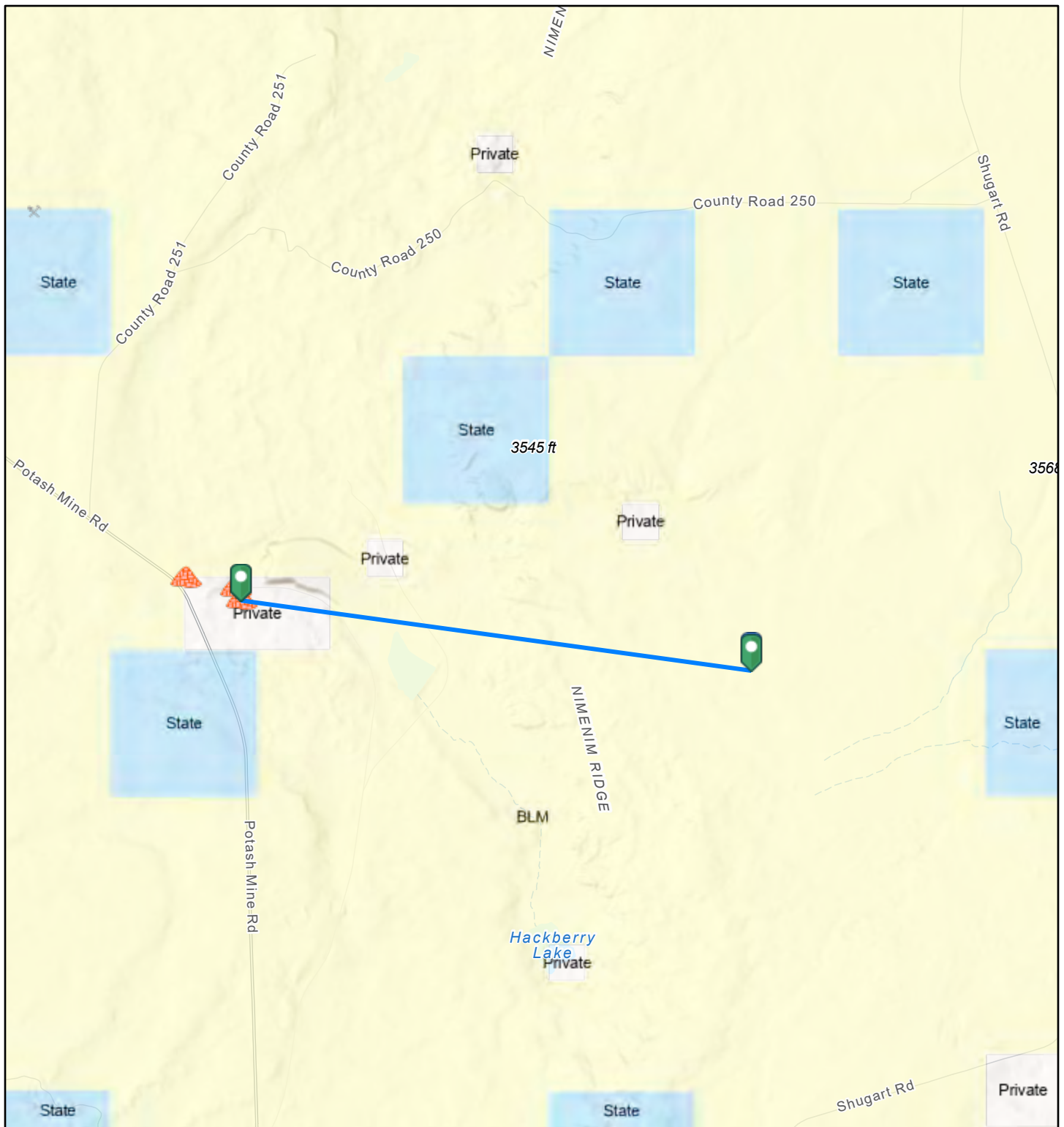
-  Estuarine and Marine Deepwater
 Estuarine and Marine Wetland

-  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.

Hackberry 18 Fed 2 Battery - Mine: 18,608ft

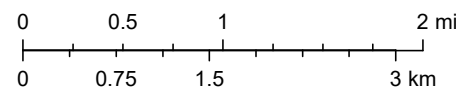


3/4/2024, 11:40:23 AM

1:72,224

Registered Mines

Land Ownership



✕ Aggregate, Stone etc.

BLM

▲ Potash

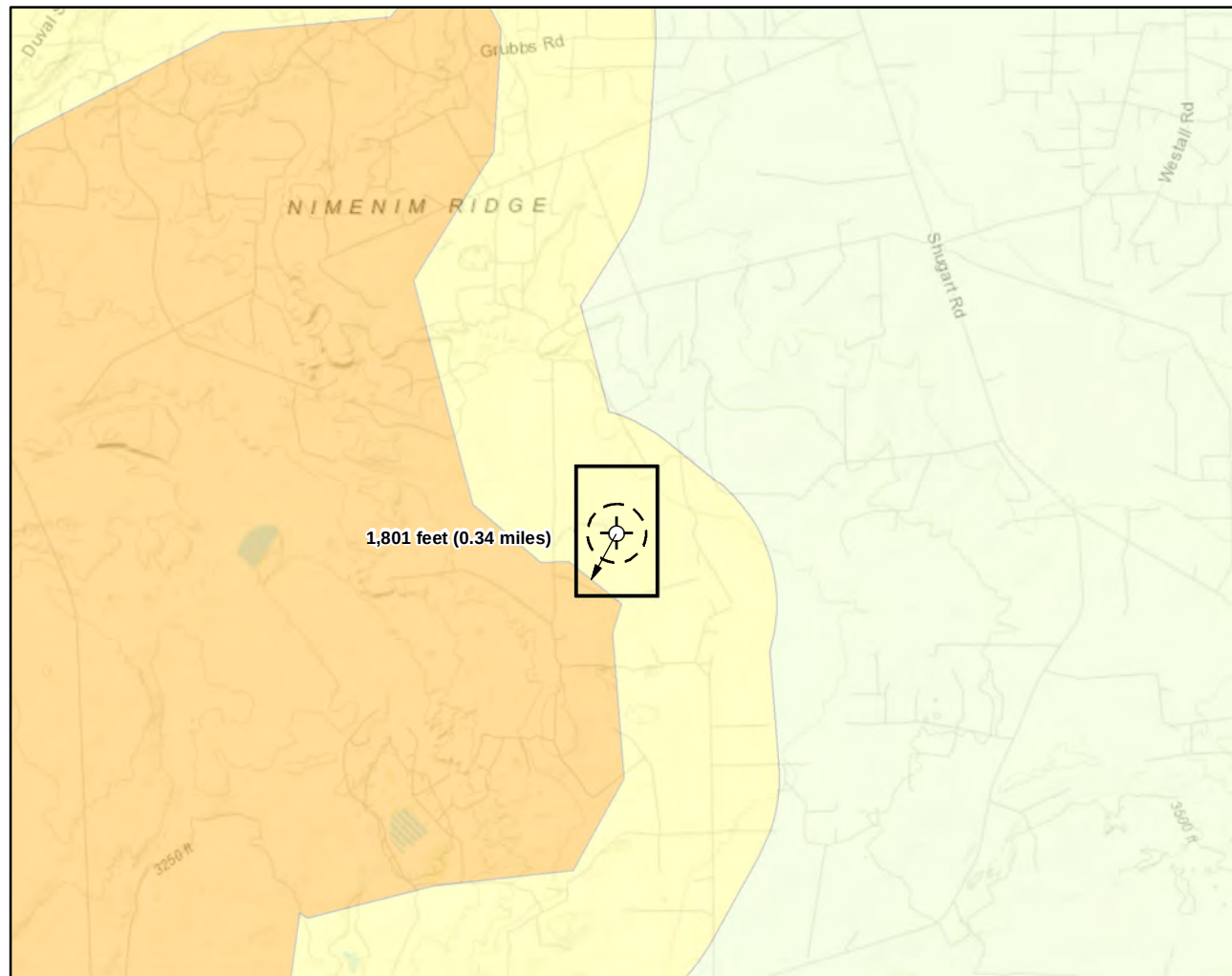
P

S

U.S. BLM, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Esri, NASA, NGA, USGS, FEMA

EMNRD MMD GIS Coordinator

Document Path: G:\Projects\US PROJECTS\Devon Energy Corporation\2023\23E-03903 - Hackberry 18 Fed 2 Battery\Figure X Karst Potential (23E-03903)\D17951.mxd



Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1000 ft.)

Overview Map

0 0.25 0.5 1 mi

Detail Map

0 150 300 600 ft



Map Center:
Lat/Long: 32.665863, -103.909990

NAD 1983 UTM Zone 13N
Date: Mar 06/24



**Karst Potential Map
Hackberry 18 Fed 2 Battery**

FIGURE:

X



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: Inset Map, Esri 2023; Overview Map: Esri World Topographic. Karst potential data sourced from Roswell Field Office, Bureau of Land Management, 2020 or United States Department of the Interior, Bureau of Land Management. (2018). Karst Potential.

VERSATILITY. EXPERTISE.

National Flood Hazard Layer FIRMette

Hackberry 18
Fed 2 Battery



103°54'57"W 32°40'12"N



1:6,000

103°54'19"W 32°39'41"N

Released to Imaging: 11/13/2025 8:39:02 AM

Basemap Imagery Source: USGS National Map 2023

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		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
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 6/30/2023 at 11:20 AM 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.

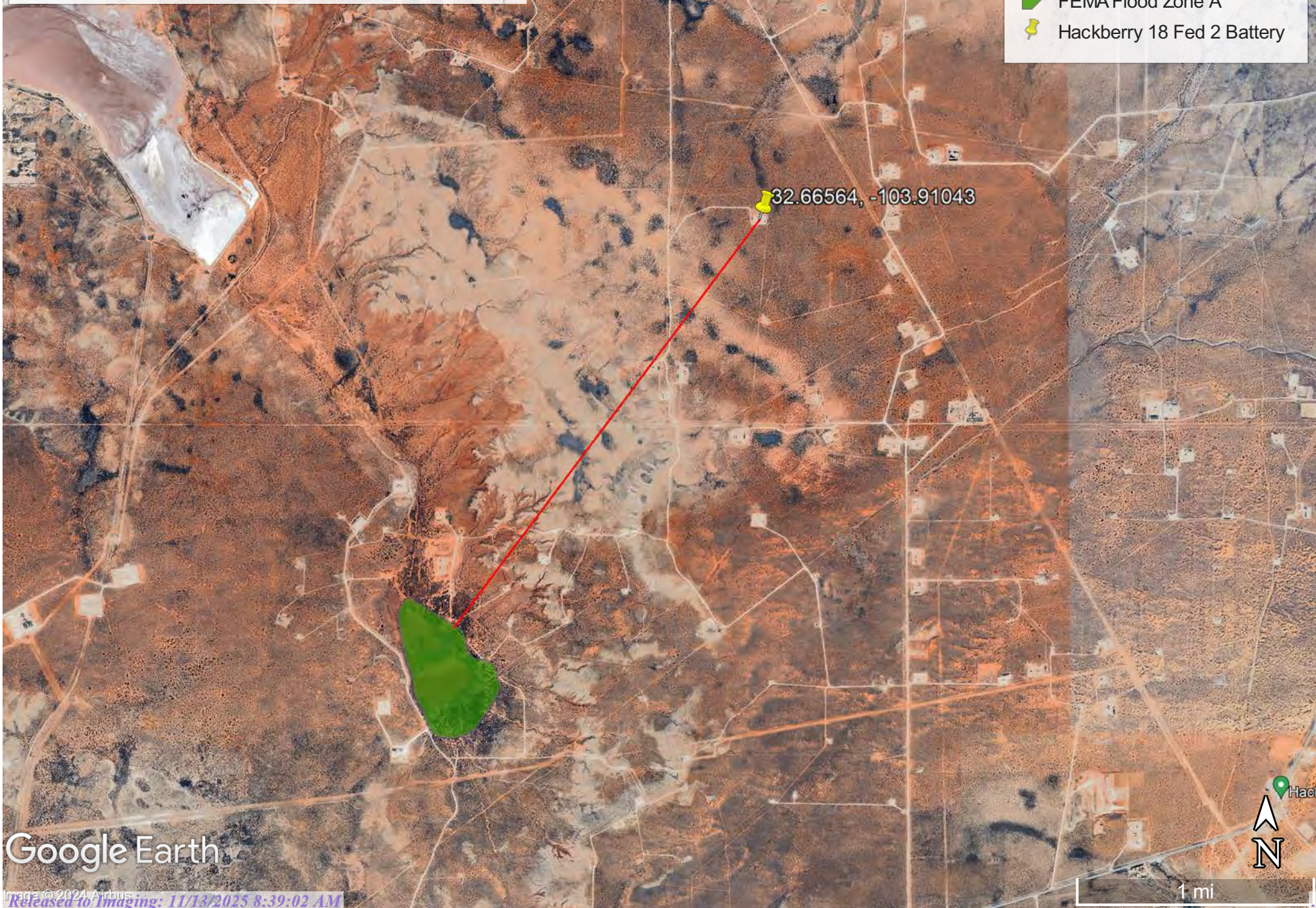
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

Hackberry 18 Federal 2 Battery

11,338 ft to FEMA Flood Zone A

Legend

-  11,338 ft (2.15 miles)
-  FEMA Flood Zone A
-  Hackberry 18 Fed 2 Battery



Google Earth



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Eddy Area, New Mexico



June 30, 2023

Custom Soil Resource Report
Soil Map (11 - Hackberry 18 Fed 2 Battery)



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Map Unit Legend (11 - Hackberry 18 Fed 2 Battery)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BA	Berino loamy fine sand, 0 to 3 percent slopes	29.9	100.0%
Totals for Area of Interest		29.9	100.0%

Map Unit Descriptions (11 - Hackberry 18 Fed 2 Battery)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

Custom Soil Resource Report

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Custom Soil Resource Report

Eddy Area, New Mexico**BA—Berino loamy fine sand, 0 to 3 percent slopes****Map Unit Setting***National map unit symbol:* 1w42*Elevation:* 2,000 to 5,700 feet*Mean annual precipitation:* 6 to 14 inches*Mean annual air temperature:* 57 to 70 degrees F*Frost-free period:* 180 to 260 days*Farmland classification:* Not prime farmland**Map Unit Composition***Berino and similar soils:* 99 percent*Minor components:* 1 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Berino****Setting***Landform:* Plains, fan piedmonts*Landform position (three-dimensional):* Riser*Down-slope shape:* Convex*Across-slope shape:* Linear*Parent material:* Mixed alluvium and/or eolian sands**Typical profile***H1 - 0 to 12 inches:* loamy fine sand*H2 - 12 to 58 inches:* sandy clay loam*H3 - 58 to 60 inches:* clay loam**Properties and qualities***Slope:* 0 to 3 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Well drained*Runoff class:* Low*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:* 40 percent*Maximum salinity:* Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 1.0*Available water supply, 0 to 60 inches:* Moderate (about 8.4 inches)**Interpretive groups***Land capability classification (irrigated):* 3e*Land capability classification (nonirrigated):* 7e*Hydrologic Soil Group:* B*Ecological site:* R070BC007NM - Loamy*Hydric soil rating:* No

Custom Soil Resource Report

Minor Components

Pajarito

Percent of map unit: 1 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No



Ecological site R070BC007NM

Loamy

Accessed: 04/03/2023

General information

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on uplands landforms, mainly on hill slopes, ridges, plains, terraces and some fan remnants. Slopes range from 1 to 5 percent and average about 3 percent. Average annual precipitation is about 8 to 14 inches. Elevations range from 2,842 to 5,000 feet.

Table 2. Representative physiographic features

Landforms	(1) Plain (2) Terrace (3) Fan piedmont
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–5,000 ft
Slope	0–5%
Aspect	E, S, W

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity short duration thunderstorms. Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer. The average frost-free season is 207 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November. Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest in January through June rapidly drying out the soil during a critical time for cool season plant growth.

Climate data was obtained from <http://www.wrcc.sage.dri.edu/summary/climsmnm.html> web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

Table 3. Representative climatic features

Frost-free period (average)	221 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced by wetland or streams.

Soil features

The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches.

Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam, clay loam, silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam. Permeability is moderate to slow and the available water holding capacity is high to moderate. The Atoka, Reeves, Russler, Milner soils may have high amounts of CaCO₃, ranging as high as 40 percent in the subsoil. Rock fragments range from 5 to 50 percent in the subsoil. Reeves, Russler, Milner, Holloman soils will have 40 to 80 percent gypsum in the underlying material.

Maximum and minimum values listed below represent the characteristic soils for this site.

Characteristic Soils:

Atoka (petrocalcic)
 Bigetty
 Reagan
 Reakor
 Reeves (gypsum)
 Russler (gypsum)
 Largo
 Russler (gypsum)
 Largo
 Berino
 Tinney
 Midessa
 Ratliff
 Holloman (gypsum)
 Milner (gypsum)

Table 4. Representative soil features

Surface texture	(1) Loam (2) Very fine sandy loam (3) Silt loam
Family particle size	(1) Loamy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to slow
Soil depth	30–72 in

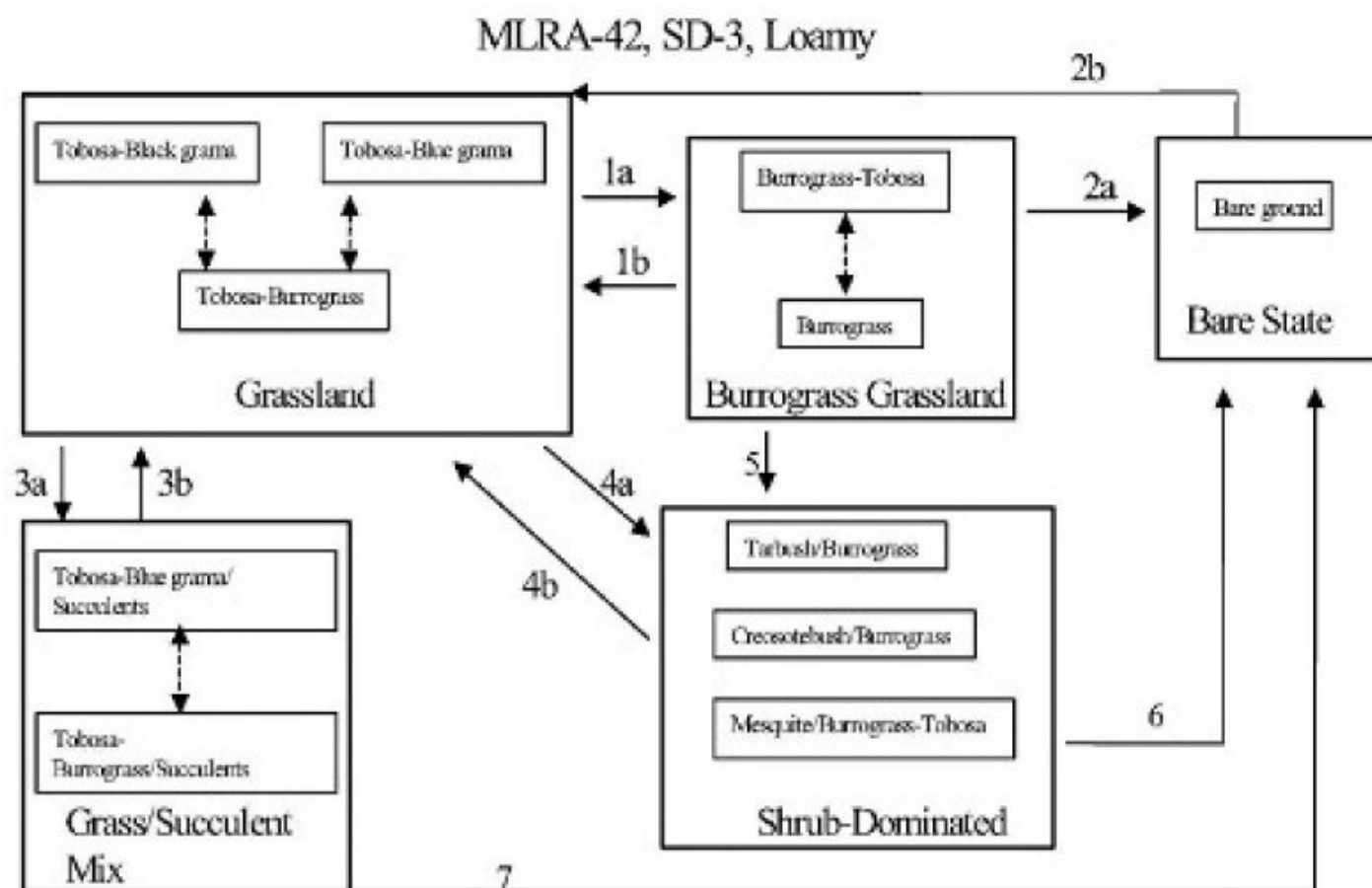
Surface fragment cover <=3"	0–5%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	5–12 in
Calcium carbonate equivalent (0-40in)	0–10%
Electrical conductivity (0-40in)	0–8 mmhos/cm
Sodium adsorption ratio (0-40in)	0–6
Soil reaction (1:1 water) (0-40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	0–5%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

Overview: The Loamy site is associated with the Gyp Upland ecological site with which it intergrades. There is a pronounced increase in alkali sacaton along this interface. The loamy site is also associated with the Gravelly and Shallow ecological sites from which it receives run-on water. The Draw site often dissects Loamy sites and is distinguished from the Loamy site by increased production or greater densities of woody species. The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Tobosa, black grama and blue grama are the dominant species. Retrogression within this state is characterized by a decrease in black and blue grama and an increase in burrograss. Continuous overgrazing and drought can initiate a transition to a Burrograss- Grassland state. Continued reduction in grass cover and resulting infiltration problems may eventually effect a change to a Bare State, with very little or no remaining grass cover. Alternatively, creosotebush, tarbush or mesquite may expand or invade. Transitions back to a Grassland State from a Bare or Shrub-Dominated state are costly and may not be economically feasible. Decreased fire frequency may play a part in the transition to the Grass/Succulent Mix state with increased amounts of cholla and prickly pear.

State and transition model

Plant Communities and Transitional Pathways (diagram)



1a. Soil drying, overgrazing, drought, soil surface sealing. 1b. Restore natural overland flow, increase infiltration, prescribed grazing.

2a. Severe reduction in cover, soil surface sealing, decreased infiltration, erosion. 2b. Restore hydrology, break up physical crust, range seeding, prescribed grazing.

3a. Lack of fire, overgrazing, hail storms or other physical disturbance, drought. 3b. Prescribed fire, brush control, prescribed grazing.

4a. Seed dispersal of shrubs, persistent loss of grass cover, competition by shrubs, lack of fire. 4b. Brush control, range seeding -dependent on amount of grass (seed bank) remaining.

5. Loss of grass cover, seed dispersal of shrubs, competition by shrubs.

6. & 7. Brush control with continued loss of grass cover, soil sealing, erosion.

State 1 Historic Climax Plant Community

Community 1.1 Historic Climax Plant Community

State Containing Historic Climax Plant Community Grassland: The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Black grama, blue grama, and tobosa are the dominant grass species. There are a variety of perennial forbs and their production varies widely by season and year. Globemallow, verbena, groundsels, croton and filaree are forbs commonly found on this site. Fourwing saltbush and winterfat are two of the more palatable shrubs. The Loamy ecological site encompasses a

wide variety of soils, with surface textures ranging from sandy loams to clay loams. Soil depths range from shallow to very deep and can include sub surface features such as calcic, petrocalcic, and gypsic horizons. These variations cause differences in plant community composition and dynamics. Black grama is found at highest densities on coarser textured sandy loams, with blue grama preferring finer textured loam and silt loam, and tobosa favoring lower landscape positions and loam to clay loam surface textures. Burrograss may often be the dominant grass species on silty soils, perhaps in part due to the seedlings ability to auger into and establish on physically crusted soils. Gypsum influenced soils typically have greater amounts of tobosa, burrograss, and ephedra. There is greater representation of sideoats and vine mesquite within the tobosa-blue grama community. Retrogression under continuous heavy grazing results in a decrease of black grama, blue grama, sideoats grama, plains bristlegrass, bush muhly, cane bluestem, vine mesquite, winterfat, and fourwing saltbush. Species such as burrograss, threeawns, sand dropseed, sand muhly, and broom snakeweed increase under continuous heavy grazing or prolonged periods of drought. Under continued retrogression burrograss can completely dominate the site. Creosotebush, tarbush, and mesquite, can also dominate. Cholla and prickly pear can increase on areas that are disturbed or overgrazed. Diagnosis: Tobosa, black grama, and blue grama are the dominant species. Grass cover is uniformly distributed with few large bare areas. Shrubs are sparse and evenly distributed. Slopes range from level to gently sloping and usually display limited evidence of active rills and gully formation if plant cover remains intact. Litter movement associated with overland flow is limited to smaller size class litter and short distances. Other shrubs include: yucca, mesquite, tarbush, cholla and creosote bush. Other forbs include: desert holly, scorpionweed, bladderpod, flax, nama, fleabane, Indianwheat, Indian blanket flower, groundcherry, deerstongue, and rayless goldenrod.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	585	833	1080
Forb	39	55	72
Shrub/Vine	26	37	48
Total	650	925	1200

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-30%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	25-30%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	40-50%

Figure 5. Plant community growth curve (percent production by month).
NM2807, R042XC007NM Loamy HCPC. R042XC007NM Loamy HCPC Warm
Season Plant Community..

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	5	10	10	25	30	15	5	0	0

State 2

Burrograss-Grassland

Community 2.1

Burrograss-Grassland

Burrograss-Grassland: Changes in hydrology resulting in decreased available soil moisture, reduces grass cover and increases bare ground. Burrograss is the dominant grass. Tobosa cover is variable and can range from sizeable areas to small patches occupying only depressions or the lowest and wettest positions within the site. Threeawns, ear muhly, sand muhly, and fluffgrass occur at increased densities compared to the grassland state. Shrub densities may increase especially mesquite, creosotebush or tarbush. Retrogression within this state is characterized by a further decrease in grass cover and increased bare ground. Further deterioration of this site can result in the transition to a bare state or becoming shrub dominated. Diagnosis: Burrograss is the dominant species. Grass cover is no longer uniformly distributed, instead tending to be patchy with large areas of bare ground present. Physical crusts are present in bare areas reducing infiltration and suppressing seedling establishment by any grass species other than burrograss. Transition to Burrograss-Grassland (1a): Transitions from grassland to a burrograss-grassland state may occur due to changes in hydrology. Gullies, roads or obstructions that alter natural water flow patterns may cause this transition. Changes in surface hydrology may also occur due to overgrazing or drought. The reduction in grass cover promotes increased soil physical crusts and reduces infiltration. 5 Key indicators of approach to transition: ? Diversion of overland flow resulting in decreased soil moisture. ? Increase in amount of burrograss cover ? Reduction in grass cover and increase in size and frequency of bare patches. ? Formation of physical crusts—indicating reduced infiltration. ? Evidence of litter movement—indicating loss or redistribution of organic matter. Transition back to Grassland (1b) The natural hydrology of the site must be returned. Culverts, turnouts, or rerouting roads may help re-establish natural overland flow, if roads or trails have altered the hydrology. Erosion control structures or shaping and filling gullies may help regain natural flow patterns and establish vegetation if the flow has been channeled. Breaking up physical crusts by soil disturbance may promote infiltration and seedling emergence. Allow natural revegetation to take place. Prescribed grazing will help ensure proper forage utilization and reduce grass loss due to grazing.

State 3

Bare State

Community 3.1

Bare State

Bare State: Extremely low ground cover, soil degradation and erosion characterize this state. Very little vegetation remains. Burrograss is the dominant grass and cover is extremely patchy. Physical soil crusts are extensive. Erosion and resource depletion increase as site degrades. Diagnosis: Very little cover remains. Erosion is evident by soil sealing, water flow patterns, pedestals or terracettes. Rills and gullies may be present and active. Transition to Bare State (2a): Extended drought, continuous heavy grazing, or other disturbance that severely depletes grass cover can effect this transition. As grass cover decreases, sheet flow and erosion increase, and physical soil crusts form, thereby further reducing infiltration. Key indicators of approach to transition: ? Continued reduction in grass cover. ? Increased soil surface sealing. ? Increased erosion. ? Reduced aggregate stability in bare areas. Transition back to Grassland (2b) Restore the hydrology, see (1a). With the extent of grass loss range seeding may be necessary. Utilizing livestock or mechanical means to break up the physical crusts may increase infiltration and aid seedling establishment. Prescribed grazing will help ensure adequate deferment period following seeding, and proper forage utilization once the grass stand is well established. The degree to which this site is capable of recovery depends on the restoration of hydrology, extent of degradation to soil resources, and adequate rainfall necessary to establish grasses.

State 4

Grass/Succulent Mix

Community 4.1

Grass/Succulent Mix

Grass / Succulent Mix: Increased representations of succulents characterize this site. Increased densities of cholla or pricklypear is recognized as a management concern, but their impact on grass production is unclear. Light to

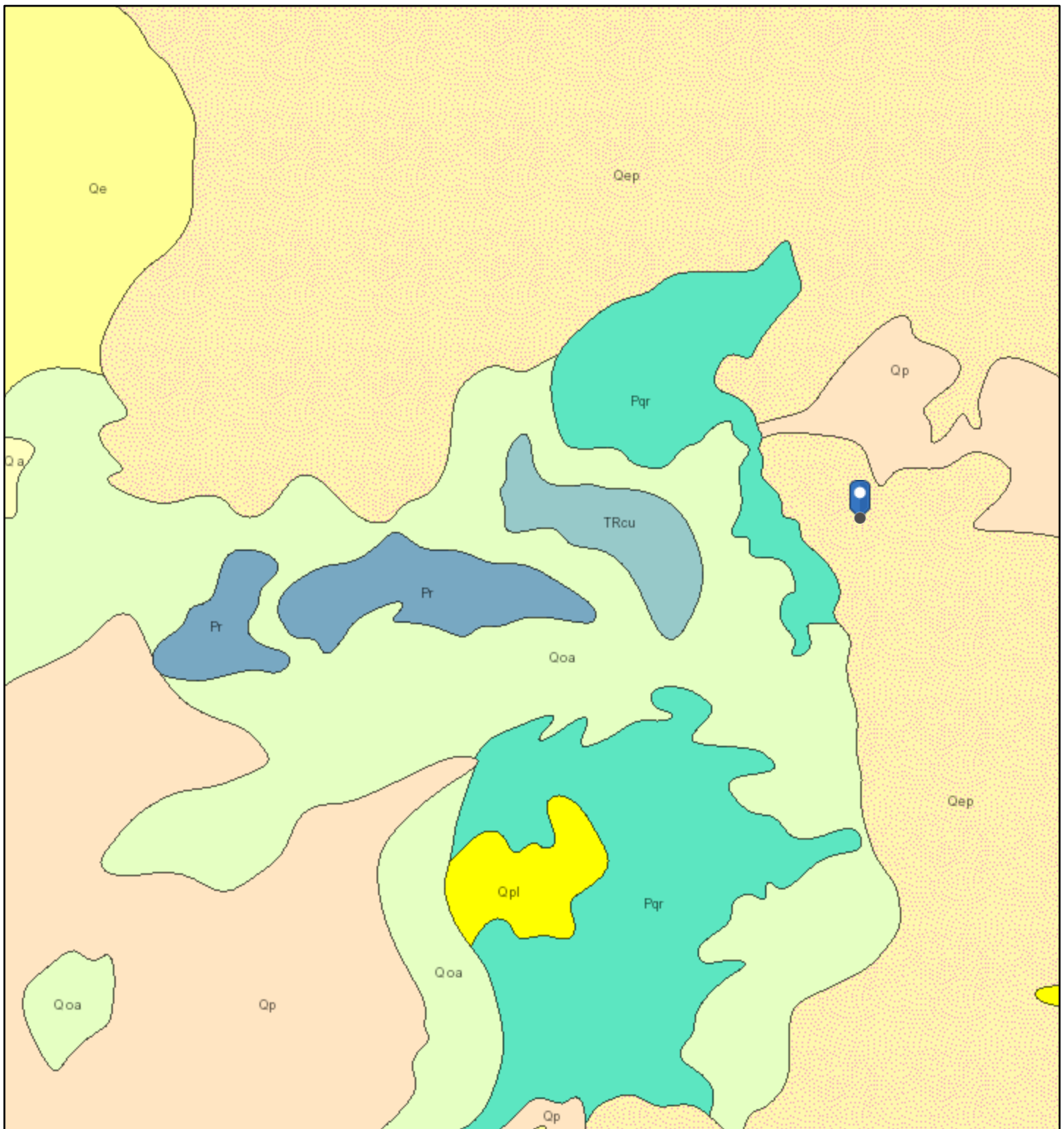
medium cholla or prickly pear infestation doesn't seem to greatly reduce grass production, however it limits access to palatable grasses and interferes with livestock movement and handling. Tobosa and blue grama are the dominant species on this site. Retrogression within this site is characterized by a decrease in blue grama and an increase in succulents, tobosa and burrograss. Diagnosis: Cholla or prickly pear is found at increased densities. Grass cover is variable ranging from uniformly distributed to patchy with frequent areas of bare ground present. Tobosa or blue grama is the dominant grass species. Transition to Grass/Succulent Mix (3a): If fire was historically a part of desert grassland ecosystem and played a role in suppressing seedlings of shrubs and succulents, then fire suppression may favor the increase of succulents.¹ Heavy grazing by livestock or other physical disturbances may help disseminate seed and increase the establishment of succulents. Areas historically overgrazed by sheep are sometimes associated with higher densities of Succulents. Intense hailstorms can spread pricklypear by breaking off joints causing new plants to take root.³ During severe drought perennial grass cover can decline significantly, leaving resources available for use by more drought tolerant succulents. Cholla and pricklypear are both adapted to and favored by drought due to the ability of their shallow, wide spreading root systems to absorb and store water.⁴ Key indicators of approach to transition: ? Decrease or change in distribution of grass cover. ? Increase in amount of succulent seedlings. ? Increased cover of succulents. Transition back to Grassland (3b) Fire is an effective means of controlling cholla and prickly pear if adequate grass cover remains to carry fire.² Cholla greater than two feet tall or pricklypear with a large amount of pads (>15-20) are harder to kill. Chemical control is effective in controlling prickly pear and cholla; apply when growth starts in May. Hand grubbing is also effective if cholla or pricklypear is severed 2-4 inches below ground and care is taken not to let broken joints or pads take root. Stacking and burning piles and grubbing during winter or drought help keeps broken joints and pads from rooting. Prescribed grazing will help ensure proper forage utilization and sustain grass cover.

State 5 Shrub Dominated

Community 5.1 Shrub Dominated

Shrub Dominated: Increased shrub cover characterizes this state. Mesquite, creosotebush, and/or tarbush are the dominant shrub species. Burrograss or tobosa is the dominant grass species. Grass cover is decreased, typically patchy with large bare areas present; however, sometimes grass cover can remain relatively high for extended periods when associated with light to moderate infestations of mesquite. Variations in soil characteristics play a part in determining which shrub species increase. Mesquite is well adapted to a wide range of soil types, but increases more often on deep soils low in carbonates, that have a sandy surface overlying finer textured soils. Tarbush prefers finer textured, calcareous soils, usually in lower positions that receive some extra water. Creosotebush is less tolerant of fine textured soils, preferring sandy, calcareous soils that have some gravel. Creosotebush also does well on soils that are shallow over caliche. Retrogression within this state is characterized by a decrease in tobosa, and an increase in burrograss. As the site continues to degrade shrub cover continues to increase and grass cover is severely reduced. Diagnosis: Mesquite, Creosotebush, and/or tarbush are the dominant shrubs. Blue grama and black grama cover is low or absent. Burrograss or tobosa are the dominant grasses. Typically grass cover is patchy with large interconnected bare areas present. Physical soil crusts are present, especially on silt loam surface soils. Transition to Shrub Dominated (4a): Wildlife and livestock consume and disperse mesquite seeds. Flood events may wash creosote or tarbush seeds off adjacent gravelly sites onto the loamy site and supply adequate moisture for germination. Persistent loss of grass cover due to overgrazing or drought can cause large bare patches, providing competition free areas for shrub seedling establishment. As shrub cover increases, competition for soil resources, especially water, becomes a major factor in further reducing grass cover. Reduction of fire, due to either fire suppression policy or loss of adequate fine fuels may increase the probability of shrub encroachment. Increased soil surface physical crusts and associated decreased infiltration, may prevent the establishment of grass seedlings. Transition to Shrub Dominated (5): The dispersal of creosotebush, tarbush or mesquite seed, combined with loss of grass cover and resource competition by shrubs may cause this transition. Key indicators of approach to transition: ? Decreased grass and litter cover. ? Increased bare patch size. ? Increased physical soil crusts. ? Increased amount of mesquite, creosotebush, or tarbush seedlings. ? Increased shrub cover. Transition back to Grassland (4b) Brush control will be necessary to remove shrubs and eliminate competition for resources necessary for grass establishment or reproduction. Seeding may be necessary on those sites where desired grass species are absent or very limited. Pitting and seeding may increase the chances of successful grass establishment. Prescribed grazing will help ensure adequate time is elapsed before grazing seeded area is allowed and proper forage utilization following seeding establishment. Transition to Bare State (6): If grass cover on the shrub-dominated state is

Hackberry 18 Fed 2 Battery Geology

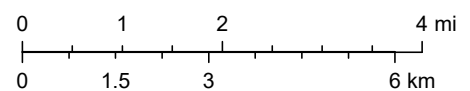


3/16/2024, 12:59:08 PM

1:144,448

Lithologic Units

- Playa—Alluvium and evaporite deposits (Holocene)
- Water—Perennial standing water
- Qa—Alluvium (Holocene to upper Pleistocene)



Esri, NASA, NGA, USGS, NMBGMR, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS

ArcGIS Web AppBuilder

APPENDIX C – Daily Field Reports



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	8/18/2023
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	8/18/2023 10:39 PM
Client Contact Name:	Jim Raley	API #:	
Client Contact Phone #:	575-748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 8/18/2023 7:45 AM

Departed Site 8/18/2023 3:00 PM

Field Notes

8:38 Completed safety paperwork and initial line locate upon arrival to site

8:39 On site to begin delineation efforts of July 2023 release

15:46 Obtained BH23-01 to 08 all horizontal points around stained area.

All samples obtained at 0 and 2' depths.

16:27 BH23-02, 03, and 05 were either high at surface for chloride or TPH, so step outs in this area needed.

Next Steps & Recommendations

1 Continue delineation

Daily Site Visit Report



Site Photos

Viewing Direction: West



Descriptive Photo - 1
Viewing Direction: West
Desc: Far east side of staining looking west
Created: 9/19/2023 8:32:30 AM
Lat:32.985672, Long:-103.910300

Far east side of staining looking west

Viewing Direction: East



Descriptive Photo - 10
Viewing Direction: East
Desc: East toe
Created: 9/19/2023 8:37:40 AM
Lat:32.985672, Long:-103.910300

East toe

Viewing Direction: West



Descriptive Photo - 11
Viewing Direction: West
Desc: BH23-01 on far east toe
Created: 9/19/2023 10:13:27 AM
Lat:32.985672, Long:-103.910300

BH23-01 on far east toe

Viewing Direction: Northwest



Descriptive Photo - 12
Viewing Direction: Northwest
Desc: BH24-02 on eastern end of south side of staining
Created: 9/19/2023 10:16:10 AM
Lat:32.985672, Long:-103.910300

BH24-02 on eastern end of south side of staining



Daily Site Visit Report

Viewing Direction: Northwest



BH23-03 south side of staining in middle

Viewing Direction: Northeast



BH23-04 on south side of staining towards western toe

Viewing Direction: East



BH23-05 on far west toe of staining

Viewing Direction: Southeast



BH23-06 on north side near west toe



Daily Site Visit Report

Viewing Direction: Southeast



BH23-07 on north side of staining in middle

Viewing Direction: Southeast



BH23-08 on north side of staining towards east toe

Viewing Direction: West



Far east side looking northwest

Viewing Direction: West



Mid area of staining looking west



Daily Site Visit Report

Viewing Direction: West



Western area of staining looking at west toe

Viewing Direction: Northeast



West area of staining looking at eastern half

Viewing Direction: East



West toe looking east

Viewing Direction: Southeast



Middle of west area of staining looking east



Daily Site Visit Report

Viewing Direction: Southeast



Staining that has crept off north side of pad

Viewing Direction: West



Staining off pad

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Austin Harris

Signature:

A handwritten signature in black ink, appearing to be 'AH' with a large loop and a horizontal stroke.

Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	10/5/2024 10:42 AM
Client Contact Name:	Dale Woodall	API #:	
Client Contact Phone #:	405-318-4697		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site

Departed Site 10/4/2024 6:27 PM

Field Notes

- 7:55** Completed JSA on arrival. On site to complete delineation of BH23-18 and BH23-19 on northwest corner of pad.
- 11:36** Marked area of interest around BH23-18 and BH24-19. Marked and mapped additional borehole locations around edges of area of interest. Swept work area with magnetic locator prior to ground disturbance.
- 19:48** Advanced boreholes at BH23-18 and BH23-19 and collected samples at 3 and 4.1 feet bgs. Field screening results exceeded NMOCD strictest criteria for chloride at 4.1 feet bgs at both sample points.
- 19:50** Advanced borehole BH24-27 between BH23-18 and BH23-19 and collected samples at 0, 2, and 4.1 feet bgs. Field screening results for samples at BH24-27 were below NMOCD strictest criteria for chloride and TPH.
- 19:52** Advanced boreholes BH24-27 through BH24-33 around edges of area of interest. Samples were collected at 0, 2, and 4.1 feet bgs. Field screening results were below NMOCD strictest criteria for chloride and TPH.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: North



South of pump jack facing north.

Viewing Direction: East



Northwest corner of pad facing east. Advanced BH24-28 west of BH23-18.

Viewing Direction: Southeast

Northwest corner of pad facing southeast.
Advanced BH24-33 north of BH23-18.

Viewing Direction: Northeast

Northwest corner of pad facing northeast.
Advanced BH24-30 south of BH23-18.



Daily Site Visit Report

Viewing Direction: South  Descriptive Photo - 5 Viewing Direction: South Scene: North edge of pad facing south. Advanced BH24-27 between BH23-18 and BH23-19. Created: 10/4/2024 11:42:07 AM Lat: 33.594032, Long: -103.810773 North edge of pad facing south. Advanced BH24-27 between BH23-18 and BH23-19.	Viewing Direction: West  Descriptive Photo - 6 Viewing Direction: West Scene: North edge of pad facing west. Advanced BH24-29 east of BH23-19. Created: 10/4/2024 11:44:03 AM Lat: 33.594032, Long: -103.810773 North edge of pad facing west. Advanced BH24-29 east of BH23-19.
Viewing Direction: Southwest  Descriptive Photo - 7 Viewing Direction: Southwest Scene: North edge of pad facing west. Advanced BH24-31 south of BH23-19. Created: 10/4/2024 11:47:30 AM Lat: 33.594032, Long: -103.810773 North edge of pad facing west. Advanced BH24-32 north of BH23-19.	Viewing Direction: Northwest  Descriptive Photo - 8 Viewing Direction: Northwest Scene: North side of pad facing northwest. Advanced BH24-31 south of BH23-19. Created: 10/4/2024 11:48:54 AM Lat: 33.594032, Long: -103.810773 North side of pad facing northwest. Advanced BH24-31 south of BH23-19.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

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

Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	3/20/2025
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	3/21/2025 1:10 AM
Client Contact Name:	Dale Woodall	API #:	
Client Contact Phone #:	405-318-4697		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 3/20/2025 10:15 AM

Departed Site 3/20/2025 12:52 PM

Field Notes

- 10:21** Completed JSA at previous location. On site to complete horizontal delineation.
- 10:32** Mapped planned borehole location and swept with magnetic locator prior to ground disturbance.
- 12:32** Advanced borehole BH25-34 south of BH25-21 and collected samples at 0, 2, and 4 feet bgs.
- 12:34** Field screening results for all samples were below NMOCD strictest criteria for chloride and TPH. Horizontal delineation tentatively completed pending laboratory results.

Next Steps & Recommendations

- 1 Submit samples to laboratory for analyses.

Daily Site Visit Report



Site Photos

Viewing Direction: North



South of pump jack facing north.

Viewing Direction: South



West side of pad facing south. Advanced BH25-34 south of BH23-21.

Viewing Direction: East



West side of pad facing east. Advanced BH25-34 south of BH23-21.

Viewing Direction: North



West side of pad facing north. Advanced BH25-34 south of BH23-21.



Daily Site Visit Report

Viewing Direction: West



West side of pad facing west. Advanced BH25-34 south of BH23-21.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:


Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	12/18/2023
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	12/19/2023 12:18 AM
Client Contact Name:	Dale Woodall	API #:	
Client Contact Phone #:	405-318-4697		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 12/18/2023 8:03 AM

Departed Site 12/18/2023 3:18 PM

Field Notes

13:06 Completed safety paperwork and safety meeting with dig crew upon arrival.

13:08 Task: west excavation efforts to get BES and WES under 600 cl ppm.

13:18 Step out 2' North, West, and East walls. The South wall is under 600 ppm Cl.

14:36 All samples were field-screened for Cl using EC (all samples).

14:44 North, East, and West walls are under 600 ppm Cl. Base at 4' has Cl under 10,000 ppm for the 55-100 DTGW.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



Site Placard.

Viewing Direction: Northwest



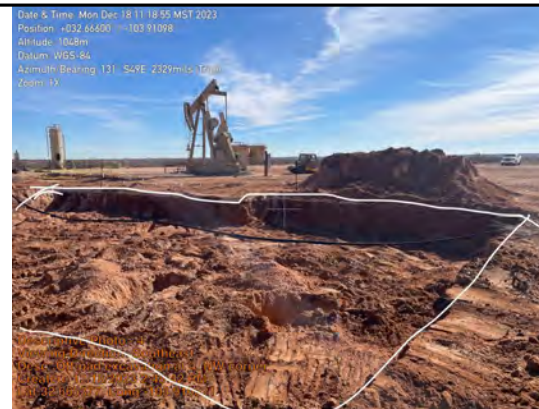
West excavation at 4. SE corner

Viewing Direction: Northeast



West excavation at 4. Sw corner

Viewing Direction: Southeast



West excavation at 4. NW corner



Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: Deusavan Costa Filho

Signature:

Signature 



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	2/6/2024
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	2/6/2024 10:28 PM
Client Contact Name:	Dale Woodall	API #:	
Client Contact Phone #:	405-318-4697		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	2/6/2024 8:00 AM
Departed Site	2/6/2024 2:15 PM

Field Notes

- 9:10** Arrived on site and completed safety assessment for job and documents. Met with Devon contractors, discussing work plan for the day and safety and signing safety documents.
Began hydrovac-ing excavation site.
- 11:50** No lines were located in hydro vac-ing to 4 feet below ground surface(bgs) Site was excavated an additional 1 foot for a total of 2 feet bgs.
Collected base and wall samples a shown in photos below. (BES24-01 through BES24-05 at 2ft and WES24-01 and WES24-02 at 0-2ft)
- 13:34** Field screened all samples for TPH with Dexsil Petroflag and chlorides with EC meter.
Samples screened below closure criteria.
- 13:36** Collected 2 samples at 0.5 feet around 2 feet excavation (1 to the south and 1 to the northwest) for field screening and performed screening with results below closure criteria.
- 13:45** Fencing was erected around excavation for safety and crew loaded equipment for transport off site.

Next Steps & Recommendations

- 1 Collect confirmation samples

Daily Site Visit Report



Daily Site Visit Report



Site Photos

Viewing Direction: East



Site information placard

Viewing Direction: West



Collected samples BES24-01 through BES24-05 at 2ft and WES24-01 and WES24-02 at 0-2ft

Viewing Direction: West



0.5 ft sample area south of 2 foot excavation

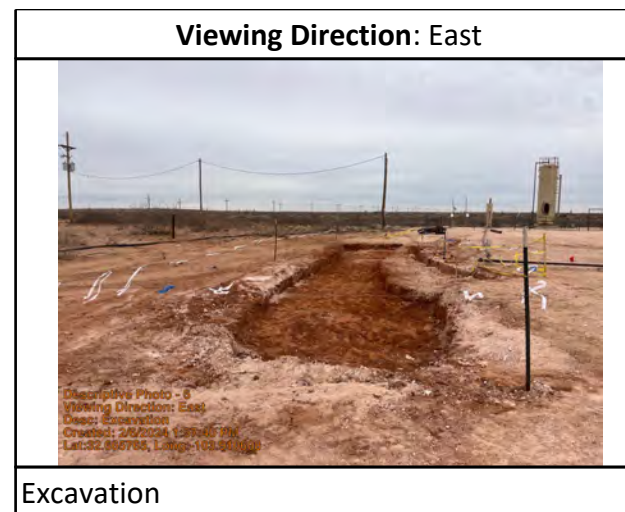
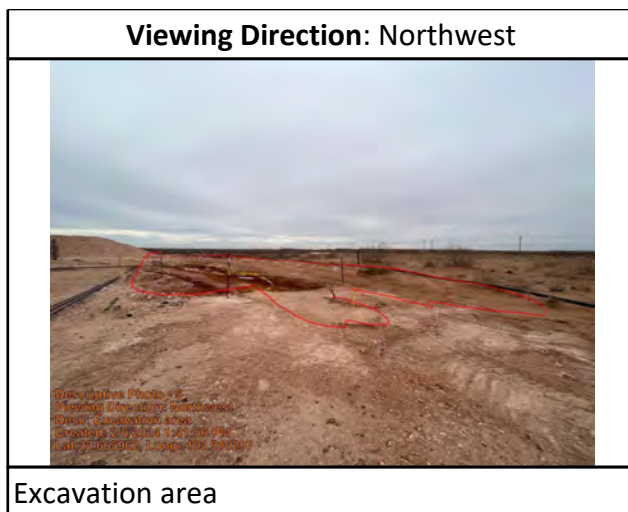
Viewing Direction: West



0.5 ft sample area northwest of 2 foot excavation



Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: Stephanie McCartyM

Signature:

A handwritten signature in black ink, appearing to read 'Steph McCartyM', written over a thin horizontal line. The word 'Signature' is printed in small text below the line on the left.



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	7/23/2024
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	7/29/2024 4:10 PM
Client Contact Name:	Dale Woodall	API #:	
Client Contact Phone #:	405-318-4697		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	7/23/2024 8:45 AM
Departed Site	7/23/2024 2:00 PM

Field Notes

13:26 Confirmation sample event
13:48 Auger boreholes from .5-2'
13:48 Field screen samples

Next Steps & Recommendations

1 Make up COC and jar samples to send off to lab for analysis

Daily Site Visit Report



Site Photos

Viewing Direction: West



CS24-01 @ 2'

Viewing Direction: South



CS24-02 @ 2'

Viewing Direction: South



CS24-03 @ 2'

Viewing Direction: South



CS24-04 @ 2'



Daily Site Visit Report

Viewing Direction: South



CS24-05 @ 2'

Viewing Direction: South



CS24-06 @ 2'

Viewing Direction: South



CS24-07 @ 1'

Viewing Direction: South



CS24-08 @ 1'



Daily Site Visit Report

Viewing Direction: North



CS24-09 @ .5'

Viewing Direction: North



CS24-10 @ .5'

Viewing Direction: North



CS24-11 @ .5'

Viewing Direction: North



CS24-12 @ .5'



Daily Site Visit Report

Viewing Direction: North



CWS24-03 @0-.5'

Viewing Direction: East



CS24-13 @ .5'

Viewing Direction: East



CWS24-02 @ 0-2'

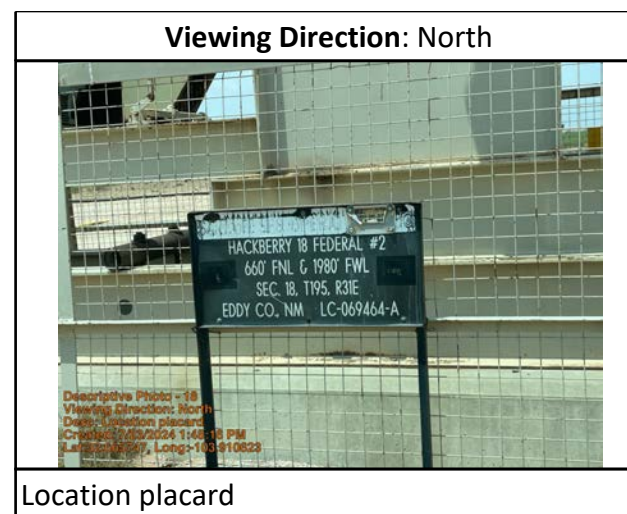
Viewing Direction: South



CWS24-04 @ 0-1'



Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Plogger

Signature: _____



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	10/17/2024
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	10/17/2024 11:06 PM
Client Contact Name:	Dale Woodall	API #:	
Client Contact Phone #:	405-318-4697		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 10/17/2024 8:00 AM

Departed Site 10/17/2024 3:00 PM

Field Notes

10:05 Completed safety paperwork and line locate upon arrival to site

14:24 Conducted confirmation sampling

17:00 Obtained:

BES24-14, 15, 16, and 17

All at 4.1' depth

WES24-05 to 12 all at 1-4.1' depth

17:00 Samples plotted on confirmation collector for todays date

Next Steps & Recommendations

1 Send samples to lab

Daily Site Visit Report



Site Photos

Viewing Direction: North



Descriptive Photo - 1
Viewing Direction: North
Date: 8/24/24 @ 4.1'
Created: 10/17/2024 10:04:23 AM
Lat: 32.865972, Long: -103.910821

BS24-14 @ 4.1'

Viewing Direction: North



Descriptive Photo - 2
Viewing Direction: North
Date: 8/24/24 - 4.1-A0 South of
Created: 10/17/2024 10:07:51 AM
Lat: 32.865972, Long: -103.910813

BS24-15 @ 4.1' South of 14

Viewing Direction: North



Descriptive Photo - 3
Viewing Direction: North
Date: 8/24/24 @ 4.1'
Created: 10/17/2024 10:40:54 AM
Lat: 32.865974, Long: -103.910890

BS24-16 @ 4.1'

Viewing Direction: East



Descriptive Photo - 4
Viewing Direction: East
Date: 8/24/24 @ 4.1-A0 north of
Created: 10/17/2024 11:45:40 AM
Lat: 32.865982, Long: -103.910795

BS24-17 @ 4.1' north of 16



Daily Site Visit Report

Viewing Direction: North



WS24-05 @ 4.1' on west side of excavation

Viewing Direction: East



WS24-06 @ 4.1' northwest corner

Viewing Direction: Southeast



WS24-07 @ 4.1' northeast side of excavation

Viewing Direction: South



WS24-08 @ 4.1' east side of excavation



Daily Site Visit Report

Viewing Direction: North



WS24-09 between 06 and 07 on north side

Viewing Direction: East



WS24-10 in southeast corner of excavation

Viewing Direction: West



WS24-11 in southwest corner of excavation

Viewing Direction: North



WS24-12 in middle wall of excavation



Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: Austin Harris

Signature:


Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	2/14/2025
Site Location Name:	Hackberry 18 Fed 2 Battery	Report Run Date:	3/14/2025 7:00 PM
Client Contact Name:	Dale Woodall	API #:	
Client Contact Phone #:	405-318-4697		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	3/14/2025 6:48 AM
Departed Site	3/14/2025 9:15 AM

Field Notes

- 7:05** Completed JSA on arrival. On site to re-collect confirmation sample WES25-11 from historical excavation.
- 7:10** Swept sampling area with magnetic locator prior to ground disturbance.
- 11:29** Re-collected confirmation sample WES24-11 from historical excavation between 1 and 4.1 feet bgs in northwest corner of pad. Confirmation sample collected from the excavation wall was 5-point composite representing areas no greater than 200 square feet. A hand auger was utilized to advance 5 boreholes immediately outside historical excavation wall. Discrete samples were collected from each borehole and combined as the composite sample.
- 8:59** Field screening results for WES24-11 were below NMOCD strictest criteria for chloride and TPH.

Next Steps & Recommendations

- 1 Submit sample to laboratory for analyses.

Daily Site Visit Report



Site Photos

Viewing Direction: North



South of pump jack facing north.

Viewing Direction: East



West edge of pad facing east. Advanced 5 boreholes along south edge of historical excavation to collect composite WES24-11.



Daily Site Visit Report

Viewing Direction: South



Northwest corner of pad facing south.
Advanced 5 boreholes along south edge of
historical excavation to collect composite
WES24-11.

Viewing Direction: West



Northwest corner of pad facing west.
Advanced 5 boreholes along south edge of
historical excavation to collect composite
WES24-11.



Daily Site Visit Report

Viewing Direction: North



Northwest corner of pad facing north.
Advanced 5 boreholes along south edge of
historical excavation to collect composite
WES24-11.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

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

Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Hackberry 18 Fed 2 Battery	API #:	
Inspection Date:	8/7/2025		

Summary of Times

Arrived at Site	8/7/2025 11:33 AM
Departed Site	8/7/2025 5:12 PM

Field Notes

- 12:12** Started JSA at previous location and completed on arrival. On site to collect confirmation samples from excavation surfaces.
- 12:14** Swept excavation surfaces with magnetic locator prior to sample collection.
- 16:41** Collected confirmation samples surfaces of excavations. Confirmation samples collected from the excavation base and walls were 5-point composites representing areas no greater than 200 square feet.
- 16:49** Collected confirmation sample BES25-18 from base of east excavation to 4.1 feet bgs. Collected confirmation samples WES25-13 and WES25-14 from walls of east excavation to 4.1 feet bgs.
- 16:51** Collected confirmation samples BES25-19 through BES25-23 from base of excavation to 2 feet bgs. Collected confirmation samples WES25-15 and WES25-16 from walls of excavation to feet bgs.
- 16:51** Collected confirmation samples WES25-17 through WES25-22 from walls of west excavation to 4.1 feet bgs.
- 16:51** Collected confirmation samples BES25-24 through WES25-29 from base of west excavation to 4.1 feet bgs.
- 16:52** Field screening results for all excavation wall samples (WES25-13 through WES25-22) below strictest criteria for chloride and TPH. Field screening results for base samples BES25-19 through BES25-23 collected at 2 feet bgs were below NMOCD strictest criteria for chloride and TPH.
- 16:54** Field screening results for all excavation base samples collected at 4.1 feet bgs (BES25-18 and BES25-24 through BES25-29) were within closure threshold for chloride at DTGW between 51 and 100 feet bgs.
- 16:55** Confirmation sampling of excavation base at 4.1 feet bgs incomplete.

Daily Site Visit Report



Next Steps & Recommendations

- 1 Submit collected samples to laboratory for analyses.
- 2 Continue collecting confirmation samples at 4.1 feet bgs.

Daily Site Visit Report



Site Photos

Viewing Direction: North



South of pump jack facing north.

Viewing Direction: West



North side of pad facing west. Collected confirmation samples from east excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: East  Descriptive Photo - 4 Viewing Direction: East Depth: North side of pad facing east. Collected confirmation samples from east excavation to 4.1 feet bgs. Created: 8/7/2025 4:10:40 PM Lat:32.665833, Long:-103.910347 North side of pad facing east. Collected confirmation samples from east excavation to 4.1 feet bgs.	Viewing Direction: West  Descriptive Photo - 6 Viewing Direction: West Depth: North side of pad facing west. Collected confirmation samples from west excavation to 2 feet bgs. Created: 8/7/2025 4:16:55 PM Lat:32.665833, Long:-103.910347 North side of pad facing west. Collected confirmation samples from excavation to 2 feet bgs.
Viewing Direction: Northwest  Descriptive Photo - 8 Viewing Direction: Northwest Depth: North side of pad facing northwest. Collected confirmation samples from excavation to 2 feet bgs. Created: 8/7/2025 4:11:47 PM Lat:32.665833, Long:-103.910347 North side of pad facing northwest. Collected confirmation samples from excavation to 2 feet bgs.	Viewing Direction: Southwest  Descriptive Photo - 9 Viewing Direction: Southwest Depth: North side of pad facing southwest. Collected confirmation samples from excavation to 2 feet bgs. Created: 8/7/2025 4:12:25 PM Lat:32.665833, Long:-103.910347 North side of pad facing southwest. Collected confirmation samples from excavation to 2 feet bgs.



Daily Site Visit Report

Viewing Direction: East  Descriptive Photo - 7 Viewing Direction: East Desc: North side of pad facing east. Collected confirmation samples from excavation to 2 feet bgs. Created: 8/7/2025 4:13:07 PM Lat:32.886833, Long: -103.510347 North side of pad facing east. Collected confirmation samples from excavation to 2 feet bgs.	Viewing Direction: East  Descriptive Photo - 8 Viewing Direction: East Desc: Inside excavation facing east. Collected confirmation samples from excavation to 2 feet bgs. Created: 8/7/2025 4:14:13 PM Lat:32.886833, Long: -103.510347 Inside excavation facing east. Collected confirmation samples from excavation to 2 feet bgs.
Viewing Direction: North  Descriptive Photo - 9 Viewing Direction: North Desc: North side of pad facing north. Collected confirmation samples from west excavation to 4.1 feet bgs. Created: 8/7/2025 4:16:00 PM Lat:32.886833, Long: -103.510347 North side of pad facing north. Collected confirmation samples from west excavation to 4.1 feet bgs.	Viewing Direction: Northwest  Descriptive Photo - 10 Viewing Direction: Northwest Desc: North side of pad facing northwest. Collected confirmation samples from west excavation to 4.1 feet bgs. Created: 8/7/2025 4:16:00 PM Lat:32.886833, Long: -103.510347 North side of pad facing northwest. Collected confirmation samples from west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: West



North side of pad facing west. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: Northeast



West side of pad facing northeast. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: East



West edge of pad facing east. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: Northeast



West edge of pad facing northeast. Collected confirmation samples from west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: Southeast



Northwest corner of pad facing southeast. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: South



Northwest corner of pad facing south. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: Southwest



North edge of pad facing southwest. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: South



North edge of pad facing south. Collected confirmation samples from west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: Southeast



North edge of pad facing southeast. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: East



North edge of pad facing east. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: Southwest



North edge of pad facing southwest. Collected confirmation samples from west excavation to 4.1 feet bgs.

Viewing Direction: West



North edge of pad facing west. Collected confirmation samples from west excavation to 4.1 feet bgs.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

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

Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Hackberry 18 Fed 2 Battery	API #:	
Inspection Date:	8/8/2025		

Summary of Times

Arrived at Site	8/8/2025 6:37 AM
Departed Site	8/8/2025 11:47 AM

Field Notes

- 6:45** Completed JSA on arrival. On site to collect remaining confirmation samples from base of excavation.
- 7:26** Swept excavation surfaces with magnetic locator prior to sample collection.
- 10:45** Collected confirmation samples from surface of excavation base at 4.1 feet bgs. Confirmation samples collected from the excavation base were 5-point composites representing areas no greater than 200 square feet.
- 10:55** Collected confirmation samples BES25-30 through BES25-45 from base of west excavation to 4.1 feet bgs.
- 11:35** Field screening results for confirmation samples BES25-30 through BES25-45 were below NMOCD closure threshold for chloride when DTGW is between 51 and 100 feet bgs.
- 11:44** Confirmation sampling complete pending laboratory results.

Next Steps & Recommendations

- 1 Submit remaining confirmation samples to laboratory for analyses.

Daily Site Visit Report



Site Photos

Viewing Direction: North



South of pump jack facing north.

Viewing Direction: West



North side of pad facing west over east excavation to 4.1 feet bgs.

Viewing Direction: West



North side of pad facing east over east excavation to 4.1 feet bgs.

Viewing Direction: West



North side of pad facing west over excavation to 2 feet bgs.



Daily Site Visit Report

Viewing Direction: Southwest



North side of pad facing southwest over excavation to 2 feet bgs.

Viewing Direction: Southwest



North side of pad facing southwest over excavation to 2 feet bgs.

Viewing Direction: Northwest



North side of pad facing northwest over excavation to 2 feet bgs.

Viewing Direction: Northwest



North side of pad facing northwest over excavation to 2 feet bgs.



Daily Site Visit Report

Viewing Direction: West



North side of pad facing west over excavation to 2 feet bgs.

Viewing Direction: Northeast



North side of pad facing northeast over excavation to 2 feet bgs.

Viewing Direction: Northeast



North side of pad facing northeast over excavation to 2 feet bgs.

Viewing Direction: East



Inside excavation facing east over excavation to 2 feet bgs.



Daily Site Visit Report

Viewing Direction: East



North side of pad facing east over excavation to 2 feet bgs.

Viewing Direction: Southeast



North side of pad facing southeast over excavation to 2 feet bgs.

Viewing Direction: Southeast



North side of pad facing southeast over excavation to 2 feet bgs.

Viewing Direction: West



North side of pad facing west over west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: Northwest



North side of pad facing northwest over west excavation to 4.1 feet bgs.

Viewing Direction: Southwest



North side of pad facing southwest over west excavation to 4.1 feet bgs.

Viewing Direction: North



North side of pad facing north over west excavation to 4.1 feet bgs.

Viewing Direction: Northwest



North side of pad facing northwest over west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: West



North side of pad facing west over west excavation to 4.1 feet bgs.

Viewing Direction: Northeast



North side of pad facing northeast over west excavation to 4.1 feet bgs.

Viewing Direction: North



North side of pad facing north over west excavation to 4.1 feet bgs.

Viewing Direction: Northwest



North side of pad facing northwest over west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: Northeast



North side of pad facing northeast over west excavation to 4.1 feet bgs.

Viewing Direction: North



North side of pad facing north over west excavation to 4.1 feet bgs.

Viewing Direction: East



West edge of pad facing east over west excavation to 4.1 feet bgs.

Viewing Direction: Northeast



West edge of pad facing northeast over west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: Southeast



Northwest corner of pad facing southeast over west excavation to 4.1 feet bgs.

Viewing Direction: South



Northwest corner of pad facing south over west excavation to 4.1 feet bgs.

Viewing Direction: Southwest



North edge of pad facing southwest over west excavation to 4.1 feet bgs.

Viewing Direction: South



North edge of pad facing south over west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: Southeast



North edge of pad facing southeast over west excavation to 4.1 feet bgs.

Viewing Direction: East



North edge of pad facing east over west excavation to 4.1 feet bgs.

Viewing Direction: Southwest



North edge of pad facing southwest over west excavation to 4.1 feet bgs.

Viewing Direction: South



North edge of pad facing south over west excavation to 4.1 feet bgs.



Daily Site Visit Report

Viewing Direction: Southeast



North edge of pad facing south over west excavation to 4.1 feet bgs.

Viewing Direction: West



North side of pad facing west over west excavation to 4.1 feet bgs. Collected confirmation samples from excavation base.

Viewing Direction: East



West edge of pad facing east over west excavation to 4.1 feet bgs. Collected confirmation samples from excavation base.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

A handwritten signature in black ink, consisting of a large, stylized 'L' and 'P' intertwined.

Signature



Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	nAPP2317136603
Site Location Name:	Hackberry 18 Fed 2 Battery	API #:	
Inspection Date:	8/20/2025		

Summary of Times

Arrived at Site	8/20/2025 7:40 AM
Departed Site	8/20/2025 8:35 AM

Field Notes

8:57 Arrived on site and coordinated with Lea Land personnel Geronimo and Crazy Horse. Mobilized to backfill area.

8:58 Collected three 5 point composite samples (SS25-01 through-03 at surface).

8:59 Field screened for chlorides and hydrocarbons.

8:59 Prepared samples for lab per standards.

Next Steps & Recommendations

- 1 Submit samples for lab analysis

Daily Site Visit Report



Site Photos

Viewing Direction: North



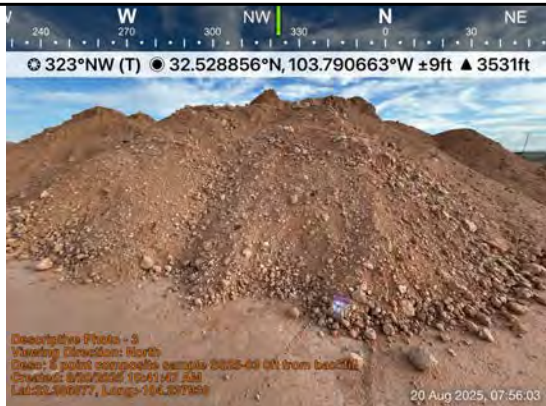
5 point composite sample SS25-01 0ft from backfill

Viewing Direction: North



5 point composite sample SS25-02 0ft from backfill

Viewing Direction: North



5 point composite sample SS25-03 0ft from backfill

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Stephanie McCartyM

Signature:

A handwritten signature in black ink, appearing to read 'Steph M', written over a thin horizontal line. Below the line, the word 'Signature' is faintly visible.



Daily Site Visit Report

Client:	Devon Energy Corporation	Incident ID #:	
Site Location Name:	Hackberry 18 Fed 2 Battery	API #:	
Inspection Date:	9/17/2025		

Summary of Times

Arrived at Site	9/17/2025 1:05 PM
Departed Site	9/17/2025 1:38 PM

Field Notes

- 13:05** Completed after paperwork upon arrival
- 13:08** Reviewed the site before coming to location to ensure the correct actions are taken
- 13:23** Backfill photographs of the location are included in this DFR. While the site is decommissioned, the release was backfilled to match the current pad, which has not been reclaimed

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: North



Southwest corner of the excavation showed caliche was contoured to match the existing pad

Viewing Direction: East



West side of the release area looking east backfilled

Viewing Direction: South



Northeast corner of the release area looking south at the backfilled area

Viewing Direction: South



North-central of the excavation looking south at the backfilled release



Daily Site Visit Report

Viewing Direction: Southwest



Northeast corner of the release area looking at the backfilled release area

Viewing Direction: West



East of the release looking west

Viewing Direction: Northwest



Southwest corner of the release looking at the backfilled area

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Katrina Taylor

Signature:

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

APPENDIX D – Notifications

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 365219

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 365219
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2317136603
Incident Name	NAPP2317136603 HACKBERRY 18 FED 2 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2202048047] HACKBERRY 18 FED 2 BATTERY

Location of Release Source

Site Name	HACKBERRY 18 FED 2 BATTERY
Date Release Discovered	06/19/2023
Surface Owner	Federal

Sampling Event General Information*Please answer all the questions in this group.*

What is the sampling surface area in square feet	2,535
What is the estimated number of samples that will be gathered	17
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/23/2024
Time sampling will commence	10:00 AM
Please provide any information necessary for observers to contact samplers	Riley Plogger 575-361-9639
Please provide any information necessary for navigation to sampling site	C-18-19S-31E, (32.66565861,-103.9104969) From Carlsbad, NM East US-180 15.1 mi Left NM-360 5.7mi Right on Shugart rd 1.8mi Turn left 1.6mi Turn left 0.4 mi Turn left 0.1 mi Turn right 0.1 mi Turn right 0.7 mi Turn right 0.3 mi Turn left 0.8 mi Turn right 0.5 mi Turn right 0.3 mi

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 365219

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 365219
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
wdale	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/18/2024

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 392406

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 392406
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2317136603
Incident Name	NAPP2317136603 HACKBERRY 18 FED 2 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2202048047] HACKBERRY 18 FED 2 BATTERY

Location of Release Source	
Site Name	HACKBERRY 18 FED 2 BATTERY
Date Release Discovered	06/19/2023
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	6,000
What is the estimated number of samples that will be gathered	12
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/17/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Vertex Personnel: Austin Harris 432-250-5003
Please provide any information necessary for navigation to sampling site	From intersection of US-62/180 E and Potash mines Rd/NM 360 N, proceed north for 5.75. Turn right onto Shugart road/222 driving east for 5 miles. Turn left onto lease road heading north for 1 mile. Turn left and head west for 0.33 miles then turn right heading north for 0.5 miles. Turn left heading west for 0.4 miles and then turn right heading north for 1.5 miles. Work area is Northwest corner of battery.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 392406

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 392406
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
wdale	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	10/14/2024

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 440783

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 440783
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2317136603
Incident Name	NAPP2317136603 HACKBERRY 18 FED 2 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2202048047] HACKBERRY 18 FED 2 BATTERY

Location of Release Source	
Site Name	HACKBERRY 18 FED 2 BATTERY
Date Release Discovered	06/19/2023
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	200
What is the estimated number of samples that will be gathered	1
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/14/2025
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Kent Stallings 346-814-1413
Please provide any information necessary for navigation to sampling site	From the intersection of US-62/180 E and Potash Miners Rd/NM-360 N, continue north on NM-360 for 5.75 miles. Turn right onto Shugart/222 driving east for 5 miles. Turn left onto lease road heading north for 1 mile. Turn left and head west for 0.33 miles then turn right heading north for 0.5 miles. Turn left heading west for 0.4 miles and then turn right heading north for 1.5 miles. Turn right heading east for 0.45 miles to site.

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 440783

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 440783
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	3/10/2025

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 460656

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460656
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2317136603
Incident Name	NAPP2317136603 HACKBERRY 18 FED 2 BATTERY @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fAPP2202048047] HACKBERRY 18 FED 2 BATTERY

Location of Release Source	
Site Name	HACKBERRY 18 FED 2 BATTERY
Date Release Discovered	06/19/2023
Surface Owner	Federal

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	4,200
What is the estimated number of samples that will be gathered	21
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/14/2025
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Lakin Pullman 701-495-1722
Please provide any information necessary for navigation to sampling site	From the intersection of US-62/180 E and Potash Miners Rd/NM-360 N, continue north on NM-360 for 5.75 miles. Turn right onto Shugart/222 driving east for 5 miles. Turn left onto lease road heading north for 1 mile. Turn left and head west for 0.33 miles then turn right heading north for 0.5 miles. Turn left heading west for 0.4 miles and then turn right heading north for 1.5 miles. Turn right heading east for 0.45 miles to site.

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 460656

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460656
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/9/2025

APPENDIX E – Laboratory Data Reports and Chain of Custody Forms



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 11, 2023

Kent Stallings

Devon Energy

6488 Seven Rivers Highway

Artesia, NM 88210

TEL: (505) 350-1336

FAX:

RE: Hackberry 18 Fed 2 Battery

OrderNo.: 2308F22

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 8/29/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-01 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 9:00:00 AM

Lab ID: 2308F22-001

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	9/1/2023 1:55:47 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/1/2023 1:55:47 AM
Surr: DNOP	96.8	69-147		%Rec	1	9/1/2023 1:55:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/30/2023 8:40:02 PM
Surr: BFB	94.3	15-244		%Rec	1	8/30/2023 8:40:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/30/2023 8:40:02 PM
Toluene	ND	0.049		mg/Kg	1	8/30/2023 8:40:02 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/30/2023 8:40:02 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/30/2023 8:40:02 PM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	8/30/2023 8:40:02 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	ND	60		mg/Kg	20	8/31/2023 9:19:43 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-01 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 9:10:00 AM

Lab ID: 2308F22-002

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2023 2:06:44 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2023 2:06:44 AM
Surr: DNOP	98.8	69-147		%Rec	1	9/1/2023 2:06:44 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2023 9:50:43 PM
Surr: BFB	96.7	15-244		%Rec	1	8/30/2023 9:50:43 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/30/2023 9:50:43 PM
Toluene	ND	0.047		mg/Kg	1	8/30/2023 9:50:43 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2023 9:50:43 PM
Xylenes, Total	ND	0.094		mg/Kg	1	8/30/2023 9:50:43 PM
Surr: 4-Bromofluorobenzene	108	39.1-146		%Rec	1	8/30/2023 9:50:43 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	320	60		mg/Kg	20	8/31/2023 9:32:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 2 of 21

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-02 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 9:20:00 AM

Lab ID: 2308F22-003

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	21	9.1		mg/Kg	1	9/1/2023 2:17:47 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2023 2:17:47 AM
Surr: DNOP	97.1	69-147		%Rec	1	9/1/2023 2:17:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/30/2023 11:01:07 PM
Surr: BFB	93.0	15-244		%Rec	1	8/30/2023 11:01:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	8/30/2023 11:01:07 PM
Toluene	ND	0.046		mg/Kg	1	8/30/2023 11:01:07 PM
Ethylbenzene	ND	0.046		mg/Kg	1	8/30/2023 11:01:07 PM
Xylenes, Total	ND	0.092		mg/Kg	1	8/30/2023 11:01:07 PM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/30/2023 11:01:07 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	880	60		mg/Kg	20	8/31/2023 9:44:33 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 3 of 21

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-02 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 9:30:00 AM

Lab ID: 2308F22-004

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2023 2:39:33 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2023 2:39:33 AM
Surr: DNOP	99.7	69-147		%Rec	1	9/1/2023 2:39:33 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/30/2023 11:24:32 PM
Surr: BFB	93.4	15-244		%Rec	1	8/30/2023 11:24:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/30/2023 11:24:32 PM
Toluene	ND	0.049		mg/Kg	1	8/30/2023 11:24:32 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/30/2023 11:24:32 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/30/2023 11:24:32 PM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	8/30/2023 11:24:32 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	550	60		mg/Kg	20	8/31/2023 9:56:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-03 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 9:40:00 AM

Lab ID: 2308F22-005

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2023 2:50:27 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2023 2:50:27 AM
Surr: DNOP	97.0	69-147		%Rec	1	9/1/2023 2:50:27 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2023 11:47:55 PM
Surr: BFB	92.2	15-244		%Rec	1	8/30/2023 11:47:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/30/2023 11:47:55 PM
Toluene	ND	0.048		mg/Kg	1	8/30/2023 11:47:55 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2023 11:47:55 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/30/2023 11:47:55 PM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/30/2023 11:47:55 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	2400	150		mg/Kg	50	9/1/2023 7:48:38 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-03 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 9:50:00 AM

Lab ID: 2308F22-006

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/1/2023 3:01:19 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2023 3:01:19 AM
Surr: DNOP	93.4	69-147		%Rec	1	9/1/2023 3:01:19 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 12:11:23 AM
Surr: BFB	92.0	15-244		%Rec	1	8/31/2023 12:11:23 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 12:11:23 AM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 12:11:23 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 12:11:23 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 12:11:23 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 12:11:23 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	430	60		mg/Kg	20	8/31/2023 10:21:46 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-04 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 10:00:00 AM

Lab ID: 2308F22-007

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/1/2023 3:12:11 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2023 3:12:11 AM
Surr: DNOP	93.9	69-147		%Rec	1	9/1/2023 3:12:11 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 12:34:46 AM
Surr: BFB	92.1	15-244		%Rec	1	8/31/2023 12:34:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 12:34:46 AM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 12:34:46 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 12:34:46 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 12:34:46 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 12:34:46 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	1000	60		mg/Kg	20	8/31/2023 10:34:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-04 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 10:10:00 AM

Lab ID: 2308F22-008

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/1/2023 3:23:06 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/1/2023 3:23:06 AM
Surr: DNOP	93.2	69-147		%Rec	1	9/1/2023 3:23:06 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2023 12:58:08 AM
Surr: BFB	90.5	15-244		%Rec	1	8/31/2023 12:58:08 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 12:58:08 AM
Toluene	ND	0.050		mg/Kg	1	8/31/2023 12:58:08 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2023 12:58:08 AM
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2023 12:58:08 AM
Surr: 4-Bromofluorobenzene	102	39.1-146		%Rec	1	8/31/2023 12:58:08 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	280	60		mg/Kg	20	8/31/2023 11:11:24 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-05 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 10:20:00 AM

Lab ID: 2308F22-009

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/1/2023 3:33:55 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2023 3:33:55 AM
Surr: DNOP	96.4	69-147		%Rec	1	9/1/2023 3:33:55 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/31/2023 1:21:34 AM
Surr: BFB	91.9	15-244		%Rec	1	8/31/2023 1:21:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	8/31/2023 1:21:34 AM
Toluene	ND	0.047		mg/Kg	1	8/31/2023 1:21:34 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/31/2023 1:21:34 AM
Xylenes, Total	ND	0.093		mg/Kg	1	8/31/2023 1:21:34 AM
Surr: 4-Bromofluorobenzene	103	39.1-146		%Rec	1	8/31/2023 1:21:34 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	3400	150		mg/Kg	50	9/1/2023 8:01:03 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-05 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 10:30:00 AM

Lab ID: 2308F22-010

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/1/2023 3:44:47 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2023 3:44:47 AM
Surr: DNOP	95.2	69-147		%Rec	1	9/1/2023 3:44:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 1:44:56 AM
Surr: BFB	95.2	15-244		%Rec	1	8/31/2023 1:44:56 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 1:44:56 AM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 1:44:56 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 1:44:56 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 1:44:56 AM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/31/2023 1:44:56 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	1400	60		mg/Kg	20	8/31/2023 11:36:13 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-06 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 10:40:00 AM

Lab ID: 2308F22-011

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	9/1/2023 3:55:36 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2023 3:55:36 AM
Surr: DNOP	98.4	69-147		%Rec	1	9/1/2023 3:55:36 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 2:31:46 AM
Surr: BFB	93.5	15-244		%Rec	1	8/31/2023 2:31:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 2:31:46 AM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 2:31:46 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 2:31:46 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 2:31:46 AM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	8/31/2023 2:31:46 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	260	60		mg/Kg	20	8/31/2023 11:48:38 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-06 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 10:50:00 AM

Lab ID: 2308F22-012

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/1/2023 4:06:21 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2023 4:06:21 AM
Surr: DNOP	99.7	69-147		%Rec	1	9/1/2023 4:06:21 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 2:55:14 AM
Surr: BFB	91.9	15-244		%Rec	1	8/31/2023 2:55:14 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 2:55:14 AM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 2:55:14 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 2:55:14 AM
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2023 2:55:14 AM
Surr: 4-Bromofluorobenzene	103	39.1-146		%Rec	1	8/31/2023 2:55:14 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	250	60		mg/Kg	20	8/31/2023 6:42:41 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-07 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 11:00:00 AM

Lab ID: 2308F22-013

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	9/1/2023 4:17:06 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/1/2023 4:17:06 AM
Surr: DNOP	93.8	69-147		%Rec	1	9/1/2023 4:17:06 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/31/2023 3:18:46 AM
Surr: BFB	93.1	15-244		%Rec	1	8/31/2023 3:18:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	8/31/2023 3:18:46 AM
Toluene	ND	0.047		mg/Kg	1	8/31/2023 3:18:46 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/31/2023 3:18:46 AM
Xylenes, Total	ND	0.094		mg/Kg	1	8/31/2023 3:18:46 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 3:18:46 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	8/31/2023 6:55:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-07 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 11:10:00 AM

Lab ID: 2308F22-014

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/1/2023 4:27:49 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2023 4:27:49 AM
Surr: DNOP	92.7	69-147		%Rec	1	9/1/2023 4:27:49 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 3:42:15 AM
Surr: BFB	90.5	15-244		%Rec	1	8/31/2023 3:42:15 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 3:42:15 AM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 3:42:15 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 3:42:15 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 3:42:15 AM
Surr: 4-Bromofluorobenzene	101	39.1-146		%Rec	1	8/31/2023 3:42:15 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	8/31/2023 8:21:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-08 0.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 11:20:00 AM

Lab ID: 2308F22-015

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/1/2023 4:38:32 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2023 4:38:32 AM
Surr: DNOP	109	69-147		%Rec	1	9/1/2023 4:38:32 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2023 4:05:39 AM
Surr: BFB	92.2	15-244		%Rec	1	8/31/2023 4:05:39 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 4:05:39 AM
Toluene	ND	0.050		mg/Kg	1	8/31/2023 4:05:39 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2023 4:05:39 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/31/2023 4:05:39 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 4:05:39 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	8/31/2023 8:34:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy

Client Sample ID: BH23-08 2.0'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 8/18/2023 11:30:00 AM

Lab ID: 2308F22-016

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2023 4:49:25 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2023 4:49:25 AM
Surr: DNOP	96.9	69-147		%Rec	1	9/1/2023 4:49:25 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 4:29:04 AM
Surr: BFB	93.7	15-244		%Rec	1	8/31/2023 4:29:04 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 4:29:04 AM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 4:29:04 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 4:29:04 AM
Xylenes, Total	ND	0.098		mg/Kg	1	8/31/2023 4:29:04 AM
Surr: 4-Bromofluorobenzene	106	39.1-146		%Rec	1	8/31/2023 4:29:04 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	8/31/2023 8:46:48 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2308F22
11-Sep-23

Client: Devon Energy
Project: Hackberry 18 Fed 2 Battery

Sample ID: MB-77246	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 77246	RunNo: 99401
Prep Date: 8/31/2023	Analysis Date: 8/31/2023	SeqNo: 3627582 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-77246	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 77246	RunNo: 99401
Prep Date: 8/31/2023	Analysis Date: 8/31/2023	SeqNo: 3627583 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.7 90 110

Sample ID: MB-77241	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 77241	RunNo: 99389
Prep Date: 8/31/2023	Analysis Date: 8/31/2023	SeqNo: 3628254 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-77241	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 77241	RunNo: 99389
Prep Date: 8/31/2023	Analysis Date: 8/31/2023	SeqNo: 3628255 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	15	1.5 15.00 0 97.1 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F22

11-Sep-23

Client: Devon Energy**Project:** Hackberry 18 Fed 2 Battery

Sample ID: LCS-77177	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77177		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627016		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		5.000		114	69	147			

Sample ID: MB-77177	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77177		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627018		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		116	69	147			

Sample ID: 2308F22-016AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BH23-08 2.0'	Batch ID: 77175		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 9/1/2023		SeqNo: 3627538		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.1	45.37	0	93.5	54.2	135			
Surr: DNOP	4.1		4.537		89.9	69	147			

Sample ID: 2308F22-016AMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BH23-08 2.0'	Batch ID: 77175		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 9/1/2023		SeqNo: 3627540		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	8.9	44.56	0	91.5	54.2	135	3.87	29.2	
Surr: DNOP	4.0		4.456		89.4	69	147	0	0	

Sample ID: LCS-77175	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77175		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627542		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	87.0	61.9	130			
Surr: DNOP	4.7		5.000		93.3	69	147			

Sample ID: LCS-77176	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77176		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627544		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		109	69	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F22

11-Sep-23

Client: Devon Energy
Project: Hackberry 18 Fed 2 Battery

Sample ID: LCS-77208	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 77208			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627545		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		119	69	147			

Sample ID: LCS-77213	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 77213			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627547		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		105	69	147			

Sample ID: MB-77175	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77175			RunNo: 99380						
Prep Date: 8/29/2023	Analysis Date: 8/31/2023			SeqNo: 3627550		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		114	69	147			

Sample ID: MB-77176	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77176			RunNo: 99380						
Prep Date: 8/29/2023	Analysis Date: 8/31/2023			SeqNo: 3627552		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		126	69	147			

Sample ID: MB-77208	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77208			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627556		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		131	69	147			

Sample ID: MB-77213	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77213			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627557		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F22

11-Sep-23

Client: Devon Energy**Project:** Hackberry 18 Fed 2 Battery

Sample ID: ics-77140	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 77140				RunNo: 99342					
Prep Date: 8/28/2023	Analysis Date: 8/30/2023				SeqNo: 3624717	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		192	15	244			

Sample ID: mb-77140	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 77140				RunNo: 99342					
Prep Date: 8/28/2023	Analysis Date: 8/30/2023				SeqNo: 3624718	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	950		1000		94.7	15	244			

Sample ID: ics-77168	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 77168				RunNo: 99342					
Prep Date: 8/29/2023	Analysis Date: 8/30/2023				SeqNo: 3625866	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.6	70	130			
Surr: BFB	1900		1000		195	15	244			

Sample ID: mb-77168	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 77168				RunNo: 99342					
Prep Date: 8/29/2023	Analysis Date: 8/30/2023				SeqNo: 3625867	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.0	15	244			

Sample ID: 2308f22-001ams	SampType: MS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH23-01 0.0'	Batch ID: 77168				RunNo: 99342					
Prep Date: 8/29/2023	Analysis Date: 8/30/2023				SeqNo: 3625880	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.56	0	96.0	70	130			
Surr: BFB	2000		982.3		203	15	244			

Sample ID: 2308f22-001amsd	SampType: MSD				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH23-01 0.0'	Batch ID: 77168				RunNo: 99342					
Prep Date: 8/29/2023	Analysis Date: 8/30/2023				SeqNo: 3625881	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.39	0	91.9	70	130	5.03	20	
Surr: BFB	1900		975.6		198	15	244	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F22

11-Sep-23

Client: Devon Energy**Project:** Hackberry 18 Fed 2 Battery

Sample ID: LCS-77168	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 77168		RunNo: 99342							
Prep Date: 8/29/2023	Analysis Date: 8/30/2023		SeqNo: 3625922		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.1	0.050	1.000	0	105	70	130			
Xylenes, Total	3.2	0.10	3.000	0	107	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	39.1	146			

Sample ID: mb-77168	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 77168		RunNo: 99342							
Prep Date: 8/29/2023	Analysis Date: 8/30/2023		SeqNo: 3625923		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	39.1	146			

Sample ID: 2308f22-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH23-01 2.0'	Batch ID: 77168		RunNo: 99342							
Prep Date: 8/29/2023	Analysis Date: 8/30/2023		SeqNo: 3625940		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.023	0.9398	0	106	70	130			
Toluene	1.0	0.047	0.9398	0	108	70	130			
Ethylbenzene	1.0	0.047	0.9398	0	109	70	130			
Xylenes, Total	3.1	0.094	2.820	0	110	70	130			
Surr: 4-Bromofluorobenzene	0.99		0.9398		105	39.1	146			

Sample ID: 2308f22-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH23-01 2.0'	Batch ID: 77168		RunNo: 99342							
Prep Date: 8/29/2023	Analysis Date: 8/30/2023		SeqNo: 3625941		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9407	0	104	70	130	2.56	20	
Toluene	0.98	0.047	0.9407	0	104	70	130	2.91	20	
Ethylbenzene	1.0	0.047	0.9407	0	107	70	130	1.91	20	
Xylenes, Total	3.0	0.094	2.822	0	107	70	130	2.92	20	
Surr: 4-Bromofluorobenzene	0.99		0.9407		105	39.1	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Devon Energy

Work Order Number: 2308F22

RcptNo: 1

Received By: Tracy Casarrubias 8/29/2023 7:55:00 AM

Completed By: Tracy Casarrubias 8/29/2023 9:08:29 AM

Reviewed By: *JA 8-29-23*

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH: 2 (<2 or >12 unless noted)
- Adjusted? Yes
- Checked by: ws/29/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address, phone number and Email/Fax are missing on COC- TMC 8/29/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.6	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Devon

Mailing Address: Direct Bill

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard☒ Rush 3 DAY

Project Name:

Hackberry 18
030200 Fed 2 Battery

Project #:

23E-03903

Project Manager:

Kent Stallings

Sampler:

On Ice:

☒ Yes☐ No

of Coolers:

Cooler Temp (including CF): 5.7-0.1=5.6 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
8/18/23	0900	Soil	BH23-01	0.0	402	ICE
	0910		BH23-01	2.0		001
	0920		BH23-02	0.0		002
	0930		BH23-02	2.0		003
	0940		BH23-03	0.0		004
	0950		BH23-03	2.0		005
	1000		BH23-04	0.0		006
	1010		BH23-04	2.0		007
	1020		BH23-05	0.0		008
	1030		BH23-05	2.0		009
	1040		BH23-06	0.0		010
	1050		BH23-06	2.0		011
						012

Date: Time: Relinquished by:

Received by:

Via:

Date

Time

Date: Time: Relinquished by:

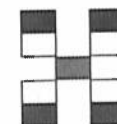
Received by:

Via:

Date

Time

Remarks:

CC: Kstallings@vertex.ca
aham@vertex.caHALL 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/3015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Chain-of-Custody Record

Client: Devon

Direct Bill

Mailing Address: _____

Phone #: _____

email or Fax#: _____

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush 3 DAY

Project Name: Hackberry 18
Fed 2 Buttery

Project #: 23E-03903

Project Manager: Kent Stallings

Sampler: AA

On Ice: ☒ Yes ☐ No *Yogi*

of Coolers: 1

Cooler Temp (including CF): 5.7-0.1: 5.6 (°C)

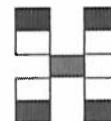
Container Type and #	Preservative Type	HEAL No. 2308F22
-------------------------	----------------------	---------------------

402	ICE	013
↓	↓	014
		015
		016

[illegible]

Received by:	Via:	Date	Time
<i>[Signature]</i>		8/26/23	845

Received by: Via: *Cunning* Date 8/29/23 Time 7:55



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks:	CC: Kstallings@vertex.ca a.harris@vertex.ca
----------	--



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 11, 2023

Kent Stallings

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL:

FAX:

RE: Hackberry 18

OrderNo.: 2308F19

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 15 sample(s) on 8/29/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-09 0'

Project: Hackberry 18

Collection Date: 8/19/2023 9:00:00 AM

Lab ID: 2308F19-001

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	8/31/2023 9:57:59 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	8/31/2023 9:57:59 PM
Surr: DNOP	94.9	69-147		%Rec	1	8/31/2023 9:57:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 4:52:30 AM
Surr: BFB	92.9	15-244		%Rec	1	8/31/2023 4:52:30 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 4:52:30 AM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 4:52:30 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 4:52:30 AM
Xylenes, Total	ND	0.095		mg/Kg	1	8/31/2023 4:52:30 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 4:52:30 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	110	60		mg/Kg	20	8/31/2023 5:03:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-09 2'

Project: Hackberry 18

Collection Date: 8/19/2023 9:15:00 AM

Lab ID: 2308F19-002

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/31/2023 10:09:13 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/31/2023 10:09:13 PM
Surr: DNOP	92.5	69-147		%Rec	1	8/31/2023 10:09:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 5:15:55 AM
Surr: BFB	94.1	15-244		%Rec	1	8/31/2023 5:15:55 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 5:15:55 AM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 5:15:55 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 5:15:55 AM
Xylenes, Total	ND	0.096		mg/Kg	1	8/31/2023 5:15:55 AM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	8/31/2023 5:15:55 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	300	60		mg/Kg	20	8/31/2023 5:15:51 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-10 0'

Project: Hackberry 18

Collection Date: 8/19/2023 9:30:00 AM

Lab ID: 2308F19-003

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2023 10:20:23 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2023 10:20:23 PM
Surr: DNOP	107	69-147		%Rec	1	8/31/2023 10:20:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 5:39:14 AM
Surr: BFB	95.8	15-244		%Rec	1	8/31/2023 5:39:14 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 5:39:14 AM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 5:39:14 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 5:39:14 AM
Xylenes, Total	ND	0.098		mg/Kg	1	8/31/2023 5:39:14 AM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/31/2023 5:39:14 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	120	60		mg/Kg	20	8/31/2023 5:28:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-10 2'

Project: Hackberry 18

Collection Date: 8/19/2023 9:45:00 AM

Lab ID: 2308F19-004

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/31/2023 10:31:40 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2023 10:31:40 PM
Surr: DNOP	94.1	69-147		%Rec	1	8/31/2023 10:31:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 6:02:43 AM
Surr: BFB	94.7	15-244		%Rec	1	8/31/2023 6:02:43 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 6:02:43 AM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 6:02:43 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 6:02:43 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 6:02:43 AM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/31/2023 6:02:43 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	180	60		mg/Kg	20	8/31/2023 5:40:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-11 0'

Project: Hackberry 18

Collection Date: 8/19/2023 10:00:00 AM

Lab ID: 2308F19-005

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/31/2023 10:42:51 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2023 10:42:51 PM
Surr: DNOP	99.5	69-147		%Rec	1	8/31/2023 10:42:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 5:27:32 PM
Surr: BFB	98.9	15-244		%Rec	1	8/31/2023 5:27:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 5:27:32 PM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 5:27:32 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 5:27:32 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 5:27:32 PM
Surr: 4-Bromofluorobenzene	108	39.1-146		%Rec	1	8/31/2023 5:27:32 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	2300	150		mg/Kg	50	9/1/2023 7:36:56 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-11 2'

Project: Hackberry 18

Collection Date: 8/19/2023 10:15:00 AM

Lab ID: 2308F19-006

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2023 10:54:01 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2023 10:54:01 PM
Surr: DNOP	101	69-147		%Rec	1	8/31/2023 10:54:01 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 5:51:29 PM
Surr: BFB	100	15-244		%Rec	1	8/31/2023 5:51:29 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 5:51:29 PM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 5:51:29 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 5:51:29 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/31/2023 5:51:29 PM
Surr: 4-Bromofluorobenzene	110	39.1-146		%Rec	1	8/31/2023 5:51:29 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	1000	60		mg/Kg	20	8/31/2023 6:05:29 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-12 0'

Project: Hackberry 18

Collection Date: 8/19/2023 10:30:00 AM

Lab ID: 2308F19-007

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	2700	100		mg/Kg	10	8/31/2023 11:05:10 PM
Motor Oil Range Organics (MRO)	3500	500		mg/Kg	10	8/31/2023 11:05:10 PM
Surr: DNOP	0	69-147	S	%Rec	10	8/31/2023 11:05:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 6:15:21 PM
Surr: BFB	95.6	15-244		%Rec	1	8/31/2023 6:15:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 6:15:21 PM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 6:15:21 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 6:15:21 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 6:15:21 PM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 6:15:21 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	8200	300		mg/Kg	100	9/1/2023 7:49:21 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-12 2'

Project: Hackberry 18

Collection Date: 8/19/2023 10:45:00 AM

Lab ID: 2308F19-008

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2023 11:46:23 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2023 11:46:23 PM
Surr: DNOP	124	69-147		%Rec	1	8/31/2023 11:46:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2023 6:39:08 PM
Surr: BFB	97.6	15-244		%Rec	1	8/31/2023 6:39:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 6:39:08 PM
Toluene	ND	0.050		mg/Kg	1	8/31/2023 6:39:08 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2023 6:39:08 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/31/2023 6:39:08 PM
Surr: 4-Bromofluorobenzene	108	39.1-146		%Rec	1	8/31/2023 6:39:08 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	300	60		mg/Kg	20	8/31/2023 6:50:48 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-12 3.5'

Project: Hackberry 18

Collection Date: 8/19/2023 11:00:00 AM

Lab ID: 2308F19-009

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	210	9.3		mg/Kg	1	9/1/2023 1:57:19 PM
Motor Oil Range Organics (MRO)	220	46		mg/Kg	1	9/1/2023 1:57:19 PM
Surr: DNOP	117	69-147		%Rec	1	9/1/2023 1:57:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2023 7:02:50 PM
Surr: BFB	97.4	15-244		%Rec	1	8/31/2023 7:02:50 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 7:02:50 PM
Toluene	ND	0.050		mg/Kg	1	8/31/2023 7:02:50 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2023 7:02:50 PM
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2023 7:02:50 PM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/31/2023 7:02:50 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	830	60		mg/Kg	20	8/31/2023 7:28:02 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-12 4'

Project: Hackberry 18

Collection Date: 8/19/2023 11:15:00 AM

Lab ID: 2308F19-010

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	13	9.2		mg/Kg	1	9/1/2023 12:19:34 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/1/2023 12:19:34 AM
Surr: DNOP	126	69-147		%Rec	1	9/1/2023 12:19:34 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 7:26:32 PM
Surr: BFB	96.4	15-244		%Rec	1	8/31/2023 7:26:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 7:26:32 PM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 7:26:32 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 7:26:32 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 7:26:32 PM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/31/2023 7:26:32 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	540	60		mg/Kg	20	8/31/2023 7:40:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-13 0'

Project: Hackberry 18

Collection Date: 8/19/2023 11:30:00 AM

Lab ID: 2308F19-011

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	4900	100		mg/Kg	10	9/1/2023 12:30:37 AM
Motor Oil Range Organics (MRO)	3700	500		mg/Kg	10	9/1/2023 12:30:37 AM
Surr: DNOP	0	69-147	S	%Rec	10	9/1/2023 12:30:37 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2023 7:50:12 PM
Surr: BFB	129	15-244		%Rec	1	8/31/2023 7:50:12 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 7:50:12 PM
Toluene	ND	0.049		mg/Kg	1	8/31/2023 7:50:12 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2023 7:50:12 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 7:50:12 PM
Surr: 4-Bromofluorobenzene	110	39.1-146		%Rec	1	8/31/2023 7:50:12 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	9200	600		mg/Kg	200	9/1/2023 8:01:45 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-13 1'

Project: Hackberry 18

Collection Date: 8/19/2023 11:45:00 AM

Lab ID: 2308F19-012

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/1/2023 1:11:37 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2023 1:11:37 AM
Surr: DNOP	109	69-147		%Rec	1	9/1/2023 1:11:37 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/31/2023 8:37:32 PM
Surr: BFB	95.4	15-244		%Rec	1	8/31/2023 8:37:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	8/31/2023 8:37:32 PM
Toluene	ND	0.047		mg/Kg	1	8/31/2023 8:37:32 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/31/2023 8:37:32 PM
Xylenes, Total	ND	0.093		mg/Kg	1	8/31/2023 8:37:32 PM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 8:37:32 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	320	60		mg/Kg	20	8/31/2023 8:05:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-13 4'

Project: Hackberry 18

Collection Date: 8/19/2023 1:00:00 PM

Lab ID: 2308F19-013

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	12	9.3		mg/Kg	1	9/1/2023 1:22:42 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2023 1:22:42 AM
Surr: DNOP	112	69-147		%Rec	1	9/1/2023 1:22:42 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2023 9:01:05 PM
Surr: BFB	95.1	15-244		%Rec	1	8/31/2023 9:01:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 9:01:05 PM
Toluene	ND	0.050		mg/Kg	1	8/31/2023 9:01:05 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2023 9:01:05 PM
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2023 9:01:05 PM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	8/31/2023 9:01:05 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	330	60		mg/Kg	20	8/31/2023 8:42:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-14 0'

Project: Hackberry 18

Collection Date: 8/19/2023 1:15:00 PM

Lab ID: 2308F19-014

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2023 1:33:45 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2023 1:33:45 AM
Surr: DNOP	127	69-147		%Rec	1	9/1/2023 1:33:45 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2023 9:24:41 PM
Surr: BFB	96.6	15-244		%Rec	1	8/31/2023 9:24:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 9:24:41 PM
Toluene	ND	0.050		mg/Kg	1	8/31/2023 9:24:41 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2023 9:24:41 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/31/2023 9:24:41 PM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	8/31/2023 9:24:41 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	2100	60		mg/Kg	20	8/31/2023 8:54:54 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-14 2'

Project: Hackberry 18

Collection Date: 8/19/2023 1:30:00 PM

Lab ID: 2308F19-015

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/1/2023 1:44:47 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2023 1:44:47 AM
Surr: DNOP	94.0	69-147		%Rec	1	9/1/2023 1:44:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/31/2023 10:11:38 PM
Surr: BFB	92.5	15-244		%Rec	1	8/31/2023 10:11:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	8/31/2023 10:11:38 PM
Toluene	ND	0.050		mg/Kg	1	8/31/2023 10:11:38 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/31/2023 10:11:38 PM
Xylenes, Total	ND	0.099		mg/Kg	1	8/31/2023 10:11:38 PM
Surr: 4-Bromofluorobenzene	102	39.1-146		%Rec	1	8/31/2023 10:11:38 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	2200	150		mg/Kg	50	9/1/2023 8:14:10 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: MB-77235	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 77235		RunNo: 99401							
Prep Date: 8/31/2023	Analysis Date: 8/31/2023		SeqNo: 3627541		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-77235	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 77235		RunNo: 99401							
Prep Date: 8/31/2023	Analysis Date: 8/31/2023		SeqNo: 3627543		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Sample ID: MB-77241	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 77241		RunNo: 99389							
Prep Date: 8/31/2023	Analysis Date: 8/31/2023		SeqNo: 3628254		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-77241	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 77241		RunNo: 99389							
Prep Date: 8/31/2023	Analysis Date: 8/31/2023		SeqNo: 3628255		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: LCS-77177	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77177		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627016		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		5.000		114	69	147			

Sample ID: LCS-77185	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77185		RunNo: 99380							
Prep Date: 8/30/2023	Analysis Date: 8/31/2023		SeqNo: 3627017		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	121	61.9	130			
Surr: DNOP	6.6		5.000		131	69	147			

Sample ID: MB-77177	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77177		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627018		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		116	69	147			

Sample ID: MB-77185	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77185		RunNo: 99380							
Prep Date: 8/30/2023	Analysis Date: 8/31/2023		SeqNo: 3627019		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		126	69	147			

Sample ID: LCS-77175	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77175		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627542		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	87.0	61.9	130			
Surr: DNOP	4.7		5.000		93.3	69	147			

Sample ID: LCS-77176	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77176		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627544		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		109	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: LCS-77208	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 77208			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627545		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		119	69	147			

Sample ID: LCS-77213	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 77213			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627547		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		105	69	147			

Sample ID: MB-77175	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77175			RunNo: 99380						
Prep Date: 8/29/2023	Analysis Date: 8/31/2023			SeqNo: 3627550		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		114	69	147			

Sample ID: MB-77176	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77176			RunNo: 99380						
Prep Date: 8/29/2023	Analysis Date: 8/31/2023			SeqNo: 3627552		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		126	69	147			

Sample ID: MB-77208	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77208			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627556		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		131	69	147			

Sample ID: MB-77213	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 77213			RunNo: 99380						
Prep Date: 8/30/2023	Analysis Date: 8/31/2023			SeqNo: 3627557		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: ics-77140	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 77140				RunNo: 99342					
Prep Date: 8/28/2023	Analysis Date: 8/30/2023				SeqNo: 3624717	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		192	15	244			

Sample ID: mb-77140	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 77140				RunNo: 99342					
Prep Date: 8/28/2023	Analysis Date: 8/30/2023				SeqNo: 3624718	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	950		1000		94.7	15	244			

Sample ID: ics-77168	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 77168				RunNo: 99342					
Prep Date: 8/29/2023	Analysis Date: 8/30/2023				SeqNo: 3625866	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.6	70	130			
Surr: BFB	1900		1000		195	15	244			

Sample ID: mb-77168	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 77168				RunNo: 99342					
Prep Date: 8/29/2023	Analysis Date: 8/30/2023				SeqNo: 3625867	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.0	15	244			

Sample ID: ics-77179	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 77179				RunNo: 99366					
Prep Date: 8/29/2023	Analysis Date: 8/31/2023				SeqNo: 3627634	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.6	70	130			
Surr: BFB	2000		1000		203	15	244			

Sample ID: ics-77198	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 77198				RunNo: 99366					
Prep Date: 8/30/2023	Analysis Date: 9/1/2023				SeqNo: 3627635	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		193	15	244			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: mb-77198	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 77198				RunNo: 99366					
Prep Date: 8/30/2023	Analysis Date: 9/1/2023				SeqNo: 3627636	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.9	15	244			

Sample ID: 2308f19-005ams	SampType: MS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH23-11 0'	Batch ID: 77179				RunNo: 99366					
Prep Date: 8/29/2023	Analysis Date: 8/31/2023				SeqNo: 3627638	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.04	0	95.2	70	130			
Surr: BFB	1900		961.5		200	15	244			

Sample ID: 2308f19-005amsd	SampType: MSD				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BH23-11 0'	Batch ID: 77179				RunNo: 99366					
Prep Date: 8/29/2023	Analysis Date: 8/31/2023				SeqNo: 3627639	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.13	0	93.8	70	130	1.10	20	
Surr: BFB	1900		965.3		200	15	244	0	0	

Sample ID: mb-77179	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 77179				RunNo: 99366					
Prep Date: 8/29/2023	Analysis Date: 8/31/2023				SeqNo: 3627706	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.3	15	244			

Sample ID: lcs-77172	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 77172				RunNo: 99411					
Prep Date: 8/29/2023	Analysis Date: 9/2/2023				SeqNo: 3628857	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		191	15	244			

Sample ID: mb-77172	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 77172				RunNo: 99411					
Prep Date: 8/29/2023	Analysis Date: 9/2/2023				SeqNo: 3628859	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.5	15	244			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: LCS-77168	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 77168			RunNo: 99342						
Prep Date: 8/29/2023	Analysis Date: 8/30/2023			SeqNo: 3625922		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.1	0.050	1.000	0	105	70	130			
Xylenes, Total	3.2	0.10	3.000	0	107	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	39.1	146			

Sample ID: mb-77168	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 77168			RunNo: 99342						
Prep Date: 8/29/2023	Analysis Date: 8/30/2023			SeqNo: 3625923		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	39.1	146			

Sample ID: LCS-77179	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 77179			RunNo: 99366						
Prep Date: 8/29/2023	Analysis Date: 8/31/2023			SeqNo: 3627739		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	108	70	130			
Toluene	1.1	0.050	1.000	0	108	70	130			
Ethylbenzene	1.1	0.050	1.000	0	111	70	130			
Xylenes, Total	3.3	0.10	3.000	0	112	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	39.1	146			

Sample ID: LCS-77198	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 77198			RunNo: 99366						
Prep Date: 8/30/2023	Analysis Date: 9/1/2023			SeqNo: 3627740		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	39.1	146			

Sample ID: mb-77198	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 77198			RunNo: 99366						
Prep Date: 8/30/2023	Analysis Date: 9/1/2023			SeqNo: 3627741		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: mb-77198	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 77198				RunNo: 99366					
Prep Date: 8/30/2023	Analysis Date: 9/1/2023				SeqNo: 3627741	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		106	39.1	146			

Sample ID: mb-77179	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 77179				RunNo: 99366					
Prep Date: 8/29/2023	Analysis Date: 8/31/2023				SeqNo: 3627742	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	39.1	146			

Sample ID: 2308f19-006ams	SampType: MS				TestCode: EPA Method 8021B: Volatiles					
Client ID: BH23-11 2'	Batch ID: 77179				RunNo: 99366					
Prep Date: 8/29/2023	Analysis Date: 8/31/2023				SeqNo: 3627828	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9833	0	108	70	130			
Toluene	1.1	0.049	0.9833	0	109	70	130			
Ethylbenzene	1.1	0.049	0.9833	0	110	70	130			
Xylenes, Total	3.3	0.098	2.950	0	112	70	130			
Surr: 4-Bromofluorobenzene	1.0		0.9833		105	39.1	146			

Sample ID: 2308f19-006amsd	SampType: MSD				TestCode: EPA Method 8021B: Volatiles					
Client ID: BH23-11 2'	Batch ID: 77179				RunNo: 99366					
Prep Date: 8/29/2023	Analysis Date: 8/31/2023				SeqNo: 3627829	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9843	0	112	70	130	3.45	20	
Toluene	1.1	0.049	0.9843	0	112	70	130	3.04	20	
Ethylbenzene	1.1	0.049	0.9843	0	114	70	130	3.30	20	
Xylenes, Total	3.4	0.098	2.953	0	116	70	130	3.72	20	
Surr: 4-Bromofluorobenzene	1.0		0.9843		104	39.1	146	0	0	

Sample ID: LCS-77172	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 77172				RunNo: 99411					
Prep Date: 8/29/2023	Analysis Date: 9/2/2023				SeqNo: 3628971	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2308F19

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18

Sample ID: LCS-77172	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 77172		RunNo: 99411							
Prep Date: 8/29/2023	Analysis Date: 9/2/2023		SeqNo: 3628971		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	39.1	146			

Sample ID: mb-77172	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 77172		RunNo: 99411							
Prep Date: 8/29/2023	Analysis Date: 9/2/2023		SeqNo: 3628973		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	39.1	146			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources
Services, Inc.

Work Order Number: 2308F19

RcptNo: 1

Received By: Tracy Casarrubias 8/29/2023 7:55:00 AM

Completed By: Tracy Casarrubias 8/29/2023 8:29:12 AM

Reviewed By: *JH* 8-29-23

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by: *ms/29/23*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address, phone number and Email/Fax are missing on COC- TMC 8/29/23

16. Additional remarks:

Client did not relinquish chain of custody

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.6	Good	Yes	Yogi		



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 11, 2023

Kent Stallings

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL:

FAX:

RE: Hackberry 18 Fed 2

OrderNo.: 2308F20

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 8/29/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-15 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 9:00:00 AM

Lab ID: 2308F20-001

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2023 1:32:00 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2023 1:32:00 PM
Surr: DNOP	123	69-147		%Rec	1	8/31/2023 1:32:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/1/2023 11:42:17 AM
Surr: BFB	92.2	15-244		%Rec	1	9/1/2023 11:42:17 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	9/1/2023 11:42:17 AM
Toluene	ND	0.050		mg/Kg	1	9/1/2023 11:42:17 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/1/2023 11:42:17 AM
Xylenes, Total	ND	0.099		mg/Kg	1	9/1/2023 11:42:17 AM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	9/1/2023 11:42:17 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	84	60		mg/Kg	20	8/31/2023 10:50:53 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-15 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 9:15:00 AM

Lab ID: 2308F20-002

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/31/2023 1:55:55 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2023 1:55:55 PM
Surr: DNOP	126	69-147		%Rec	1	8/31/2023 1:55:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2023 12:05:44 PM
Surr: BFB	92.1	15-244		%Rec	1	9/1/2023 12:05:44 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 12:05:44 PM
Toluene	ND	0.049		mg/Kg	1	9/1/2023 12:05:44 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2023 12:05:44 PM
Xylenes, Total	ND	0.097		mg/Kg	1	9/1/2023 12:05:44 PM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	9/1/2023 12:05:44 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	860	60		mg/Kg	20	8/31/2023 11:03:18 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-16 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 9:30:00 AM

Lab ID: 2308F20-003

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	100	9.9		mg/Kg	1	8/31/2023 2:19:49 PM
Motor Oil Range Organics (MRO)	140	50		mg/Kg	1	8/31/2023 2:19:49 PM
Surr: DNOP	84.1	69-147		%Rec	1	8/31/2023 2:19:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2023 1:19:12 AM
Surr: BFB	89.6	15-244		%Rec	1	9/1/2023 1:19:12 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 1:19:12 AM
Toluene	ND	0.048		mg/Kg	1	9/1/2023 1:19:12 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2023 1:19:12 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/1/2023 1:19:12 AM
Surr: 4-Bromofluorobenzene	100	39.1-146		%Rec	1	9/1/2023 1:19:12 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	1300	60		mg/Kg	20	8/31/2023 11:15:42 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-16 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 9:45:00 AM

Lab ID: 2308F20-004

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2023 2:43:46 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2023 2:43:46 PM
Surr: DNOP	101	69-147		%Rec	1	8/31/2023 2:43:46 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2023 1:42:34 AM
Surr: BFB	91.5	15-244		%Rec	1	9/1/2023 1:42:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 1:42:34 AM
Toluene	ND	0.048		mg/Kg	1	9/1/2023 1:42:34 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2023 1:42:34 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/1/2023 1:42:34 AM
Surr: 4-Bromofluorobenzene	103	39.1-146		%Rec	1	9/1/2023 1:42:34 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	1900	60		mg/Kg	20	8/31/2023 11:28:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-17 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 10:00:00 AM

Lab ID: 2308F20-005

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/31/2023 3:07:39 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2023 3:07:39 PM
Surr: DNOP	148	69-147	S	%Rec	1	8/31/2023 3:07:39 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/1/2023 2:06:01 AM
Surr: BFB	93.3	15-244		%Rec	1	9/1/2023 2:06:01 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	9/1/2023 2:06:01 AM
Toluene	ND	0.047		mg/Kg	1	9/1/2023 2:06:01 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/1/2023 2:06:01 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/1/2023 2:06:01 AM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	9/1/2023 2:06:01 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	8/31/2023 11:40:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-17 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 10:15:00 AM

Lab ID: 2308F20-006

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/31/2023 3:31:38 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2023 3:31:38 PM
Surr: DNOP	121	69-147		%Rec	1	8/31/2023 3:31:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/1/2023 2:29:22 AM
Surr: BFB	91.3	15-244		%Rec	1	9/1/2023 2:29:22 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	9/1/2023 2:29:22 AM
Toluene	ND	0.050		mg/Kg	1	9/1/2023 2:29:22 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/1/2023 2:29:22 AM
Xylenes, Total	ND	0.099		mg/Kg	1	9/1/2023 2:29:22 AM
Surr: 4-Bromofluorobenzene	103	39.1-146		%Rec	1	9/1/2023 2:29:22 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	8/31/2023 11:52:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-18 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 10:30:00 AM

Lab ID: 2308F20-007

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2023 3:55:31 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2023 3:55:31 PM
Surr: DNOP	117	69-147		%Rec	1	8/31/2023 3:55:31 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2023 2:52:49 AM
Surr: BFB	93.6	15-244		%Rec	1	9/1/2023 2:52:49 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	9/1/2023 2:52:49 AM
Toluene	ND	0.049		mg/Kg	1	9/1/2023 2:52:49 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2023 2:52:49 AM
Xylenes, Total	ND	0.098		mg/Kg	1	9/1/2023 2:52:49 AM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	9/1/2023 2:52:49 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	5000	150		mg/Kg	50	9/1/2023 7:24:32 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-18 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 10:45:00 AM

Lab ID: 2308F20-008

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/31/2023 4:19:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2023 4:19:22 PM
Surr: DNOP	136	69-147		%Rec	1	8/31/2023 4:19:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/1/2023 3:16:31 AM
Surr: BFB	92.8	15-244		%Rec	1	9/1/2023 3:16:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 3:16:31 AM
Toluene	ND	0.047		mg/Kg	1	9/1/2023 3:16:31 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/1/2023 3:16:31 AM
Xylenes, Total	ND	0.095		mg/Kg	1	9/1/2023 3:16:31 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	9/1/2023 3:16:31 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	550	60		mg/Kg	20	9/1/2023 12:42:33 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-19 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 11:00:00 AM

Lab ID: 2308F20-009

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2023 4:43:15 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2023 4:43:15 PM
Surr: DNOP	136	69-147		%Rec	1	8/31/2023 4:43:15 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2023 3:40:00 AM
Surr: BFB	91.0	15-244		%Rec	1	9/1/2023 3:40:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 3:40:00 AM
Toluene	ND	0.049		mg/Kg	1	9/1/2023 3:40:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2023 3:40:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	9/1/2023 3:40:00 AM
Surr: 4-Bromofluorobenzene	102	39.1-146		%Rec	1	9/1/2023 3:40:00 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	200	60		mg/Kg	20	9/1/2023 12:34:08 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-19 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 11:15:00 AM

Lab ID: 2308F20-010

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/31/2023 5:07:20 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2023 5:07:20 PM
Surr: DNOP	121	69-147		%Rec	1	8/31/2023 5:07:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2023 4:03:23 AM
Surr: BFB	94.4	15-244		%Rec	1	9/1/2023 4:03:23 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 4:03:23 AM
Toluene	ND	0.049		mg/Kg	1	9/1/2023 4:03:23 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2023 4:03:23 AM
Xylenes, Total	ND	0.097		mg/Kg	1	9/1/2023 4:03:23 AM
Surr: 4-Bromofluorobenzene	106	39.1-146		%Rec	1	9/1/2023 4:03:23 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	860	60		mg/Kg	20	9/1/2023 1:11:22 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-20 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 11:30:00 AM

Lab ID: 2308F20-011

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2023 5:31:39 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2023 5:31:39 PM
Surr: DNOP	127	69-147		%Rec	1	8/31/2023 5:31:39 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2023 4:26:46 AM
Surr: BFB	95.0	15-244		%Rec	1	9/1/2023 4:26:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 4:26:46 AM
Toluene	ND	0.048		mg/Kg	1	9/1/2023 4:26:46 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2023 4:26:46 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/1/2023 4:26:46 AM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	9/1/2023 4:26:46 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	5000	150		mg/Kg	50	9/5/2023 9:55:04 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-20 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 11:45:00 AM

Lab ID: 2308F20-012

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2023 5:56:18 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2023 5:56:18 PM
Surr: DNOP	70.3	69-147		%Rec	1	8/31/2023 5:56:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/1/2023 5:13:34 AM
Surr: BFB	92.6	15-244		%Rec	1	9/1/2023 5:13:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 5:13:34 AM
Toluene	ND	0.047		mg/Kg	1	9/1/2023 5:13:34 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/1/2023 5:13:34 AM
Xylenes, Total	ND	0.094		mg/Kg	1	9/1/2023 5:13:34 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	9/1/2023 5:13:34 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	1600	60		mg/Kg	20	9/1/2023 2:01:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-21 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 12:00:00 PM

Lab ID: 2308F20-013

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2023 6:46:17 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2023 6:46:17 PM
Surr: DNOP	83.3	69-147		%Rec	1	8/31/2023 6:46:17 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2023 5:37:03 AM
Surr: BFB	91.8	15-244		%Rec	1	9/1/2023 5:37:03 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 5:37:03 AM
Toluene	ND	0.048		mg/Kg	1	9/1/2023 5:37:03 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2023 5:37:03 AM
Xylenes, Total	ND	0.097		mg/Kg	1	9/1/2023 5:37:03 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	9/1/2023 5:37:03 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	540	60		mg/Kg	20	9/1/2023 2:13:25 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-21 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 12:15:00 PM

Lab ID: 2308F20-014

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2023 7:11:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2023 7:11:12 PM
Surr: DNOP	138	69-147		%Rec	1	8/31/2023 7:11:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2023 6:00:36 AM
Surr: BFB	92.6	15-244		%Rec	1	9/1/2023 6:00:36 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 6:00:36 AM
Toluene	ND	0.048		mg/Kg	1	9/1/2023 6:00:36 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2023 6:00:36 AM
Xylenes, Total	ND	0.095		mg/Kg	1	9/1/2023 6:00:36 AM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	9/1/2023 6:00:36 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	620	60		mg/Kg	20	9/1/2023 2:25:50 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-22 0'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 12:30:00 PM

Lab ID: 2308F20-015

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2023 7:35:58 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2023 7:35:58 PM
Surr: DNOP	74.8	69-147		%Rec	1	8/31/2023 7:35:58 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2023 6:24:03 AM
Surr: BFB	95.4	15-244		%Rec	1	9/1/2023 6:24:03 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	9/1/2023 6:24:03 AM
Toluene	ND	0.048		mg/Kg	1	9/1/2023 6:24:03 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2023 6:24:03 AM
Xylenes, Total	ND	0.095		mg/Kg	1	9/1/2023 6:24:03 AM
Surr: 4-Bromofluorobenzene	107	39.1-146		%Rec	1	9/1/2023 6:24:03 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	97	60		mg/Kg	20	9/1/2023 3:03:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Analytical Report

Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-22 2'

Project: Hackberry 18 Fed 2

Collection Date: 8/20/2023 12:45:00 PM

Lab ID: 2308F20-016

Matrix: SOIL

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2023 8:00:44 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2023 8:00:44 PM
Surr: DNOP	98.0	69-147		%Rec	1	8/31/2023 8:00:44 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/1/2023 6:47:28 AM
Surr: BFB	97.5	15-244		%Rec	1	9/1/2023 6:47:28 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	9/1/2023 6:47:28 AM
Toluene	ND	0.047		mg/Kg	1	9/1/2023 6:47:28 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/1/2023 6:47:28 AM
Xylenes, Total	ND	0.094		mg/Kg	1	9/1/2023 6:47:28 AM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	9/1/2023 6:47:28 AM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	220	60		mg/Kg	20	9/1/2023 3:15:30 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2308F20

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18 Fed 2

Sample ID: MB-77246	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 77246		RunNo: 99401							
Prep Date: 8/31/2023	Analysis Date: 8/31/2023		SeqNo: 3627582		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-77246	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 77246		RunNo: 99401							
Prep Date: 8/31/2023	Analysis Date: 8/31/2023		SeqNo: 3627583		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Sample ID: MB-77256	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 77256		RunNo: 99424							
Prep Date: 9/1/2023	Analysis Date: 9/1/2023		SeqNo: 3629903		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-77256	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 77256		RunNo: 99424							
Prep Date: 9/1/2023	Analysis Date: 9/1/2023		SeqNo: 3629904		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.5	15.00	0	105	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 17 of 22

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F20

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18 Fed 2

Sample ID: LCS-77177	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77177		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627016		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		5.000		114	69	147			

Sample ID: MB-77177	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77177		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627018		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		116	69	147			

Sample ID: LCS-77176	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77176		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627544		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		109	69	147			

Sample ID: LCS-77208	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77208		RunNo: 99380							
Prep Date: 8/30/2023	Analysis Date: 8/31/2023		SeqNo: 3627545		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	61.9	130			
Surr: DNOP	5.9		5.000		119	69	147			

Sample ID: LCS-77213	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 77213		RunNo: 99380							
Prep Date: 8/30/2023	Analysis Date: 8/31/2023		SeqNo: 3627547		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		105	69	147			

Sample ID: MB-77176	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77176		RunNo: 99380							
Prep Date: 8/29/2023	Analysis Date: 8/31/2023		SeqNo: 3627552		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		126	69	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2308F20

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18 Fed 2

Sample ID: MB-77208	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77208		RunNo: 99380							
Prep Date: 8/30/2023	Analysis Date: 8/31/2023		SeqNo: 3627556		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		131	69	147			

Sample ID: MB-77213	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 77213		RunNo: 99380							
Prep Date: 8/30/2023	Analysis Date: 8/31/2023		SeqNo: 3627557		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		108	69	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F20

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18 Fed 2

Sample ID: lcs-77198	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 77198			RunNo: 99366						
Prep Date: 8/30/2023	Analysis Date: 9/1/2023			SeqNo: 3627635		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.2	70	130			
Surr: BFB	1900		1000		193	15	244			

Sample ID: mb-77198	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 77198			RunNo: 99366						
Prep Date: 8/30/2023	Analysis Date: 9/1/2023			SeqNo: 3627636		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		93.9	15	244			

Sample ID: lcs-77172	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 77172			RunNo: 99411						
Prep Date: 8/29/2023	Analysis Date: 9/2/2023			SeqNo: 3628857		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		191	15	244			

Sample ID: mb-77172	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 77172			RunNo: 99411						
Prep Date: 8/29/2023	Analysis Date: 9/2/2023			SeqNo: 3628859		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.5	15	244			

Sample ID: 2308f20-001ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH23-15 0'	Batch ID: 77198			RunNo: 99411						
Prep Date: 8/30/2023	Analysis Date: 9/1/2023			SeqNo: 3628886		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.85	0	92.8	70	130			
Surr: BFB	2000		994.0		203	15	244			

Sample ID: 2308f20-001amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH23-15 0'	Batch ID: 77198			RunNo: 99411						
Prep Date: 8/30/2023	Analysis Date: 9/1/2023			SeqNo: 3628887		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.83	0	89.5	70	130	3.74	20	
Surr: BFB	2000		993.0		201	15	244	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2308F20

11-Sep-23

Client: Vertex Resources Services, Inc.**Project:** Hackberry 18 Fed 2

Sample ID: LCS-77198	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 77198		RunNo: 99366							
Prep Date: 8/30/2023	Analysis Date: 9/1/2023		SeqNo: 3627740		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	106	70	130			
Toluene	1.0	0.050	1.000	0	105	70	130			
Ethylbenzene	1.1	0.050	1.000	0	106	70	130			
Xylenes, Total	3.2	0.10	3.000	0	106	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	39.1	146			

Sample ID: mb-77198	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 77198		RunNo: 99366							
Prep Date: 8/30/2023	Analysis Date: 9/1/2023		SeqNo: 3627741		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	39.1	146			

Sample ID: 2308f20-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH23-15 2'	Batch ID: 77198		RunNo: 99411							
Prep Date: 8/30/2023	Analysis Date: 9/1/2023		SeqNo: 3628941		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9756	0	105	70	130			
Toluene	1.0	0.049	0.9756	0	106	70	130			
Ethylbenzene	1.0	0.049	0.9756	0	107	70	130			
Xylenes, Total	3.2	0.098	2.927	0	109	70	130			
Surr: 4-Bromofluorobenzene	1.0		0.9756		107	39.1	146			

Sample ID: 2308f20-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: BH23-15 2'	Batch ID: 77198		RunNo: 99411							
Prep Date: 8/30/2023	Analysis Date: 9/1/2023		SeqNo: 3628942		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9737	0	105	70	130	0.586	20	
Toluene	1.0	0.049	0.9737	0	107	70	130	0.690	20	
Ethylbenzene	1.1	0.049	0.9737	0	109	70	130	1.15	20	
Xylenes, Total	3.2	0.097	2.921	0	110	70	130	1.32	20	
Surr: 4-Bromofluorobenzene	1.1		0.9737		109	39.1	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2308F20

11-Sep-23

Client: Vertex Resources Services, Inc.
Project: Hackberry 18 Fed 2

Sample ID: LCS-77172	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 77172	RunNo: 99411								
Prep Date: 8/29/2023	Analysis Date: 9/2/2023	SeqNo: 3628971		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	39.1	146			

Sample ID: mb-77172	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 77172	RunNo: 99411								
Prep Date: 8/29/2023	Analysis Date: 9/2/2023	SeqNo: 3628973		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	39.1	146			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources
Services, Inc.

Work Order Number: 2308F20

RcptNo: 1

Received By: Tracy Casarrubias 8/29/2023 7:55:00 AM

Completed By: Tracy Casarrubias 8/29/2023 8:40:51 AM

Reviewed By: *JG* 8-29-23

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by: *JV8/29/23*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address, phone number and Email/Fax are missing on COC- TMC 8/29/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Vertex (Devon)

Mailing Address: on file

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:
Hackberry 18 Fed 2

Project #:
23E-03903

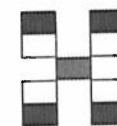
Project Manager:
Kent Stallings

Sampler: Zach Engbert

On Ice: ☒ Yes ☐ No 4000

of Coolers: 1

Cooler Temp (including CF): 0.1 - 0.1 = 0 (°C)

HALL ENVIRONMENTAL
ANALYSIS LABORATORY

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 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)
8-20-23	9:00	soil	BH23-15 0'	Jar	ice	001										
	9:15		BH23-15 2'			002										
	9:30		BH23-16 0'			003										
	9:45		BH23-16 2'			004										
	10:00		BH23-17 0'			005										
	10:15		BH23-17 2'			006										
	10:30		BH23-18 0'			007										
	10:45		BH23-18 2'			008										
	11:00		BH23-19 0'			009										
	11:15		BH23-19 2'			010										
	11:30		BH23-20 0'			011										
	11:45		BH23-20 2'			012										

Date: _____ Time: _____ Relinquished by: _____

Received by: _____ Via: _____ Date: 8/20/23 Time: 8:45

Date: 8/20/23 Time: 1:00 Relinquished by: Amun

Received by: _____ Via: can Date: 8/29/23 Time: 7:55

Remarks:
 CC aharris@vertex.ca
 kstallings@vertex.ca
 Direct Bill to Devon



Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kent Stallings
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 8/13/2025 3:58:34 PM

JOB DESCRIPTION

Hackberry 18 Federal #002 Battery

JOB NUMBER

885-30424-1

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
8/13/2025 3:58:34 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Laboratory Job ID: 885-30424-1

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Definitions/Glossary

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

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: Hackberry 18 Federal #002 Battery

Job ID: 885-30424-1

Job ID: 885-30424-1**Eurofins Albuquerque****Job Narrative
885-30424-1**

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 8/7/2025 8:32 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 5.4°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

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

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 4.1'

Lab Sample ID: 885-30424-1

Date Collected: 08/05/25 09:05

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/07/25 14:15	08/13/25 00:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 00:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 00:02	1
Ethylbenzene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 00:02	1
Toluene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 00:02	1
Xylenes, Total	ND		0.10	mg/Kg		08/07/25 14:15	08/13/25 00:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/07/25 14:15	08/13/25 00:02	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		9.7	mg/Kg		08/08/25 11:43	08/08/25 19:59	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/08/25 11:43	08/08/25 19:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			08/08/25 11:43	08/08/25 19:59	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2100		60	mg/Kg		08/09/25 07:26	08/09/25 08:58	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 5'

Lab Sample ID: 885-30424-2

Date Collected: 08/05/25 09:10

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/07/25 14:15	08/13/25 01:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/07/25 14:15	08/13/25 01:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 01:07	1
Ethylbenzene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 01:07	1
Toluene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 01:07	1
Xylenes, Total	ND		0.099	mg/Kg		08/07/25 14:15	08/13/25 01:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/07/25 14:15	08/13/25 01:07	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		08/08/25 11:43	08/08/25 20:12	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/08/25 11:43	08/08/25 20:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	112		62 - 134			08/08/25 11:43	08/08/25 20:12	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1700		60	mg/Kg		08/09/25 07:26	08/09/25 09:29	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 6'

Lab Sample ID: 885-30424-3

Date Collected: 08/05/25 09:15

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/07/25 14:15	08/13/25 02:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/07/25 14:15	08/13/25 02:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 02:13	1
Ethylbenzene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 02:13	1
Toluene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 02:13	1
Xylenes, Total	ND		0.10	mg/Kg		08/07/25 14:15	08/13/25 02:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 02:13	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		9.7	mg/Kg		08/08/25 11:43	08/08/25 20:24	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/08/25 11:43	08/08/25 20:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			08/08/25 11:43	08/08/25 20:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2400		60	mg/Kg		08/09/25 07:26	08/09/25 09:39	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 7'

Lab Sample ID: 885-30424-4

Date Collected: 08/05/25 09:20

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/07/25 14:15	08/13/25 02:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/07/25 14:15	08/13/25 02:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 02:35	1
Ethylbenzene	ND		0.049	mg/Kg		08/07/25 14:15	08/13/25 02:35	1
Toluene	ND		0.049	mg/Kg		08/07/25 14:15	08/13/25 02:35	1
Xylenes, Total	ND		0.099	mg/Kg		08/07/25 14:15	08/13/25 02:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 02:35	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		9.9	mg/Kg		08/08/25 11:43	08/08/25 20:37	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/08/25 11:43	08/08/25 20:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			08/08/25 11:43	08/08/25 20:37	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2200		60	mg/Kg		08/09/25 07:26	08/09/25 09:49	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 8'

Lab Sample ID: 885-30424-5

Date Collected: 08/05/25 09:25

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/07/25 14:15	08/13/25 02:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/07/25 14:15	08/13/25 02:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 02:56	1
Ethylbenzene	ND		0.049	mg/Kg		08/07/25 14:15	08/13/25 02:56	1
Toluene	ND		0.049	mg/Kg		08/07/25 14:15	08/13/25 02:56	1
Xylenes, Total	ND		0.099	mg/Kg		08/07/25 14:15	08/13/25 02:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/07/25 14:15	08/13/25 02:56	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		9.7	mg/Kg		08/08/25 11:43	08/08/25 20:49	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/08/25 11:43	08/08/25 20:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			08/08/25 11:43	08/08/25 20:49	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		60	mg/Kg		08/09/25 07:26	08/09/25 10:00	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 9'

Lab Sample ID: 885-30424-6

Date Collected: 08/05/25 09:30

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/07/25 14:15	08/13/25 03:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 03:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 03:18	1
Ethylbenzene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 03:18	1
Toluene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 03:18	1
Xylenes, Total	ND		0.10	mg/Kg		08/07/25 14:15	08/13/25 03:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 03:18	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		9.7	mg/Kg		08/08/25 11:43	08/08/25 21:01	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/08/25 11:43	08/08/25 21:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			08/08/25 11:43	08/08/25 21:01	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		60	mg/Kg		08/09/25 07:26	08/09/25 10:10	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 10'

Lab Sample ID: 885-30424-7

Date Collected: 08/05/25 09:35

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/07/25 14:15	08/13/25 03:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 03:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 03:40	1
Ethylbenzene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 03:40	1
Toluene	ND		0.050	mg/Kg		08/07/25 14:15	08/13/25 03:40	1
Xylenes, Total	ND		0.099	mg/Kg		08/07/25 14:15	08/13/25 03:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/07/25 14:15	08/13/25 03:40	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		9.7	mg/Kg		08/08/25 11:43	08/08/25 21:14	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/08/25 11:43	08/08/25 21:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			08/08/25 11:43	08/08/25 21:14	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	730		60	mg/Kg		08/09/25 07:26	08/09/25 10:41	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 11'

Lab Sample ID: 885-30424-8

Date Collected: 08/05/25 09:40

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/07/25 14:15	08/13/25 04:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 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		08/07/25 14:15	08/13/25 04:02	1
Ethylbenzene	ND		0.047	mg/Kg		08/07/25 14:15	08/13/25 04:02	1
Toluene	ND		0.047	mg/Kg		08/07/25 14:15	08/13/25 04:02	1
Xylenes, Total	ND		0.094	mg/Kg		08/07/25 14:15	08/13/25 04:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/07/25 14:15	08/13/25 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		9.6	mg/Kg		08/08/25 11:43	08/08/25 21:26	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/08/25 11:43	08/08/25 21:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			08/08/25 11:43	08/08/25 21:26	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		60	mg/Kg		08/09/25 07:26	08/09/25 10:52	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 12'

Lab Sample ID: 885-30424-9

Date Collected: 08/05/25 09:50

Matrix: Solid

Date Received: 08/07/25 08:32

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/07/25 14:15	08/13/25 04:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/07/25 14:15	08/13/25 04:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/13/25 04:24	1
Ethylbenzene	ND		0.049	mg/Kg		08/07/25 14:15	08/13/25 04:24	1
Toluene	ND		0.049	mg/Kg		08/07/25 14:15	08/13/25 04:24	1
Xylenes, Total	ND		0.099	mg/Kg		08/07/25 14:15	08/13/25 04:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/07/25 14:15	08/13/25 04:24	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]	9.6		9.4	mg/Kg		08/08/25 11:43	08/08/25 21:39	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/08/25 11:43	08/08/25 21:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	67		62 - 134			08/08/25 11:43	08/08/25 21:39	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		08/09/25 07:26	08/09/25 11:02	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-31829/1-A

Matrix: Solid

Analysis Batch: 32170

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31829

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/07/25 14:15	08/12/25 23:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/07/25 14:15	08/12/25 23:40	1

Lab Sample ID: LCS 885-31829/2-A

Matrix: Solid

Analysis Batch: 32170

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	20.1		mg/Kg		80	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	200		15 - 150				

Lab Sample ID: 885-30424-1 MS

Matrix: Solid

Analysis Batch: 32170

Client Sample ID: BH23-16 4.1'

Prep Type: Total/NA

Prep Batch: 31829

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.9	19.1		mg/Kg		77	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	191		15 - 150						

Lab Sample ID: 885-30424-1 MSD

Matrix: Solid

Analysis Batch: 32170

Client Sample ID: BH23-16 4.1'

Prep Type: Total/NA

Prep Batch: 31829

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		24.9	19.3		mg/Kg		77	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	202		15 - 150								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-31829/1-A

Matrix: Solid

Analysis Batch: 32171

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31829

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/07/25 14:15	08/12/25 23:40	1
Ethylbenzene	ND		0.050	mg/Kg		08/07/25 14:15	08/12/25 23:40	1
Toluene	ND		0.050	mg/Kg		08/07/25 14:15	08/12/25 23:40	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-31829/1-A

Matrix: Solid

Analysis Batch: 32171

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31829

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		08/07/25 14:15	08/12/25 23:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/07/25 14:15	08/12/25 23:40	1

Lab Sample ID: LCS 885-31829/3-A

Matrix: Solid

Analysis Batch: 32171

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.990		mg/Kg		99	70 - 130
Ethylbenzene	1.00	0.975		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	2.00	1.93		mg/Kg		97	70 - 130
o-Xylene	1.00	0.983		mg/Kg		98	70 - 130
Toluene	1.00	0.977		mg/Kg		98	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	97		15 - 150				

Lab Sample ID: 885-30424-2 MS

Matrix: Solid

Analysis Batch: 32171

Client Sample ID: BH23-16 5'

Prep Type: Total/NA

Prep Batch: 31829

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.997	0.983		mg/Kg		99	70 - 130
Ethylbenzene	ND		0.997	0.980		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	ND		1.99	1.95		mg/Kg		98	70 - 130
o-Xylene	ND		0.997	0.973		mg/Kg		98	70 - 130
Toluene	ND		0.997	0.963		mg/Kg		97	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		15 - 150						

Lab Sample ID: 885-30424-2 MSD

Matrix: Solid

Analysis Batch: 32171

Client Sample ID: BH23-16 5'

Prep Type: Total/NA

Prep Batch: 31829

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.995	0.973		mg/Kg		98	70 - 130	1	20
Ethylbenzene	ND		0.995	0.945		mg/Kg		95	70 - 130	4	20
m-Xylene & p-Xylene	ND		1.99	1.90		mg/Kg		95	70 - 130	3	20
o-Xylene	ND		0.995	0.942		mg/Kg		95	70 - 130	3	20
Toluene	ND		0.995	0.950		mg/Kg		96	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	99		15 - 150								

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-31889/1-A

Matrix: Solid

Analysis Batch: 31875

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31889

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/08/25 11:42	08/08/25 17:04	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/08/25 11:42	08/08/25 17:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			08/08/25 11:42	08/08/25 17:04	1

Lab Sample ID: LCS 885-31889/2-A

Matrix: Solid

Analysis Batch: 31875

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31889

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	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	89		62 - 134					

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-31933/1-A

Matrix: Solid

Analysis Batch: 31934

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31933

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		08/09/25 07:26	08/09/25 08:33	1

Lab Sample ID: LCS 885-31933/2-A

Matrix: Solid

Analysis Batch: 31934

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31933

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	15.0	15.1		mg/Kg		101	90 - 110	

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA

Prep Batch: 31829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-1	BH23-16 4.1'	Total/NA	Solid	5030C	
885-30424-2	BH23-16 5'	Total/NA	Solid	5030C	
885-30424-3	BH23-16 6'	Total/NA	Solid	5030C	
885-30424-4	BH23-16 7'	Total/NA	Solid	5030C	
885-30424-5	BH23-16 8'	Total/NA	Solid	5030C	
885-30424-6	BH23-16 9'	Total/NA	Solid	5030C	
885-30424-7	BH23-16 10'	Total/NA	Solid	5030C	
885-30424-8	BH23-16 11'	Total/NA	Solid	5030C	
885-30424-9	BH23-16 12'	Total/NA	Solid	5030C	
MB 885-31829/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-31829/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-31829/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-30424-1 MS	BH23-16 4.1'	Total/NA	Solid	5030C	
885-30424-1 MSD	BH23-16 4.1'	Total/NA	Solid	5030C	
885-30424-2 MS	BH23-16 5'	Total/NA	Solid	5030C	
885-30424-2 MSD	BH23-16 5'	Total/NA	Solid	5030C	

Analysis Batch: 32170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-1	BH23-16 4.1'	Total/NA	Solid	8015M/D	31829
885-30424-2	BH23-16 5'	Total/NA	Solid	8015M/D	31829
885-30424-3	BH23-16 6'	Total/NA	Solid	8015M/D	31829
885-30424-4	BH23-16 7'	Total/NA	Solid	8015M/D	31829
885-30424-5	BH23-16 8'	Total/NA	Solid	8015M/D	31829
885-30424-6	BH23-16 9'	Total/NA	Solid	8015M/D	31829
885-30424-7	BH23-16 10'	Total/NA	Solid	8015M/D	31829
885-30424-8	BH23-16 11'	Total/NA	Solid	8015M/D	31829
885-30424-9	BH23-16 12'	Total/NA	Solid	8015M/D	31829
MB 885-31829/1-A	Method Blank	Total/NA	Solid	8015M/D	31829
LCS 885-31829/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	31829
885-30424-1 MS	BH23-16 4.1'	Total/NA	Solid	8015M/D	31829
885-30424-1 MSD	BH23-16 4.1'	Total/NA	Solid	8015M/D	31829

Analysis Batch: 32171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-1	BH23-16 4.1'	Total/NA	Solid	8021B	31829
885-30424-2	BH23-16 5'	Total/NA	Solid	8021B	31829
885-30424-3	BH23-16 6'	Total/NA	Solid	8021B	31829
885-30424-4	BH23-16 7'	Total/NA	Solid	8021B	31829
885-30424-5	BH23-16 8'	Total/NA	Solid	8021B	31829
885-30424-6	BH23-16 9'	Total/NA	Solid	8021B	31829
885-30424-7	BH23-16 10'	Total/NA	Solid	8021B	31829
885-30424-8	BH23-16 11'	Total/NA	Solid	8021B	31829
885-30424-9	BH23-16 12'	Total/NA	Solid	8021B	31829
MB 885-31829/1-A	Method Blank	Total/NA	Solid	8021B	31829
LCS 885-31829/3-A	Lab Control Sample	Total/NA	Solid	8021B	31829
885-30424-2 MS	BH23-16 5'	Total/NA	Solid	8021B	31829
885-30424-2 MSD	BH23-16 5'	Total/NA	Solid	8021B	31829

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

GC Semi VOA

Analysis Batch: 31875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-1	BH23-16 4.1'	Total/NA	Solid	8015M/D	31889
885-30424-2	BH23-16 5'	Total/NA	Solid	8015M/D	31889
885-30424-3	BH23-16 6'	Total/NA	Solid	8015M/D	31889
885-30424-4	BH23-16 7'	Total/NA	Solid	8015M/D	31889
885-30424-5	BH23-16 8'	Total/NA	Solid	8015M/D	31889
885-30424-6	BH23-16 9'	Total/NA	Solid	8015M/D	31889
885-30424-7	BH23-16 10'	Total/NA	Solid	8015M/D	31889
885-30424-8	BH23-16 11'	Total/NA	Solid	8015M/D	31889
885-30424-9	BH23-16 12'	Total/NA	Solid	8015M/D	31889
MB 885-31889/1-A	Method Blank	Total/NA	Solid	8015M/D	31889
LCS 885-31889/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	31889

Prep Batch: 31889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-1	BH23-16 4.1'	Total/NA	Solid	SHAKE	
885-30424-2	BH23-16 5'	Total/NA	Solid	SHAKE	
885-30424-3	BH23-16 6'	Total/NA	Solid	SHAKE	
885-30424-4	BH23-16 7'	Total/NA	Solid	SHAKE	
885-30424-5	BH23-16 8'	Total/NA	Solid	SHAKE	
885-30424-6	BH23-16 9'	Total/NA	Solid	SHAKE	
885-30424-7	BH23-16 10'	Total/NA	Solid	SHAKE	
885-30424-8	BH23-16 11'	Total/NA	Solid	SHAKE	
885-30424-9	BH23-16 12'	Total/NA	Solid	SHAKE	
MB 885-31889/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-31889/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 31933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-1	BH23-16 4.1'	Total/NA	Solid	300_Prep	
885-30424-2	BH23-16 5'	Total/NA	Solid	300_Prep	
885-30424-3	BH23-16 6'	Total/NA	Solid	300_Prep	
885-30424-4	BH23-16 7'	Total/NA	Solid	300_Prep	
885-30424-5	BH23-16 8'	Total/NA	Solid	300_Prep	
885-30424-6	BH23-16 9'	Total/NA	Solid	300_Prep	
885-30424-7	BH23-16 10'	Total/NA	Solid	300_Prep	
885-30424-8	BH23-16 11'	Total/NA	Solid	300_Prep	
885-30424-9	BH23-16 12'	Total/NA	Solid	300_Prep	
MB 885-31933/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-31933/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 31934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-1	BH23-16 4.1'	Total/NA	Solid	300.0	31933
885-30424-2	BH23-16 5'	Total/NA	Solid	300.0	31933
885-30424-3	BH23-16 6'	Total/NA	Solid	300.0	31933
885-30424-4	BH23-16 7'	Total/NA	Solid	300.0	31933
885-30424-5	BH23-16 8'	Total/NA	Solid	300.0	31933
885-30424-6	BH23-16 9'	Total/NA	Solid	300.0	31933
885-30424-7	BH23-16 10'	Total/NA	Solid	300.0	31933

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QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30424-1

HPLC/IC (Continued)

Analysis Batch: 31934 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30424-8	BH23-16 11'	Total/NA	Solid	300.0	31933
885-30424-9	BH23-16 12'	Total/NA	Solid	300.0	31933
MB 885-31933/1-A	Method Blank	Total/NA	Solid	300.0	31933
LCS 885-31933/2-A	Lab Control Sample	Total/NA	Solid	300.0	31933

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

Lab Chronicle

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 4.1'

Lab Sample ID: 885-30424-1

Date Collected: 08/05/25 09:05

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 00:02
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 00:02
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 19:59
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 08:58

Client Sample ID: BH23-16 5'

Lab Sample ID: 885-30424-2

Date Collected: 08/05/25 09:10

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 01:07
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 01:07
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 20:12
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 09:29

Client Sample ID: BH23-16 6'

Lab Sample ID: 885-30424-3

Date Collected: 08/05/25 09:15

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 02:13
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 02:13
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 20:24
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 09:39

Client Sample ID: BH23-16 7'

Lab Sample ID: 885-30424-4

Date Collected: 08/05/25 09:20

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 02:35

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Lab Chronicle

Client: Vertex

Job ID: 885-30424-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH23-16 7'

Lab Sample ID: 885-30424-4

Date Collected: 08/05/25 09:20

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 02:35
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 20:37
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 09:49

Client Sample ID: BH23-16 8'

Lab Sample ID: 885-30424-5

Date Collected: 08/05/25 09:25

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 02:56
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 02:56
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 20:49
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 10:00

Client Sample ID: BH23-16 9'

Lab Sample ID: 885-30424-6

Date Collected: 08/05/25 09:30

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 03:18
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 03:18
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 21:01
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 10:10

Client Sample ID: BH23-16 10'

Lab Sample ID: 885-30424-7

Date Collected: 08/05/25 09:35

Matrix: Solid

Date Received: 08/07/25 08:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 03:40
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 03:40

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Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30424-1

Client Sample ID: BH23-16 10'
Date Collected: 08/05/25 09:35
Date Received: 08/07/25 08:32

Lab Sample ID: 885-30424-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 21:14
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 10:41

Client Sample ID: BH23-16 11'
Date Collected: 08/05/25 09:40
Date Received: 08/07/25 08:32

Lab Sample ID: 885-30424-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 04:02
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 04:02
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 21:26
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 10:52

Client Sample ID: BH23-16 12'
Date Collected: 08/05/25 09:50
Date Received: 08/07/25 08:32

Lab Sample ID: 885-30424-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8015M/D		1	32170	AT	EET ALB	08/13/25 04:24
Total/NA	Prep	5030C			31829	KLS	EET ALB	08/07/25 14:15
Total/NA	Analysis	8021B		1	32171	AT	EET ALB	08/13/25 04:24
Total/NA	Prep	SHAKE			31889	BZR	EET ALB	08/08/25 11:43
Total/NA	Analysis	8015M/D		1	31875	EM	EET ALB	08/08/25 21:39
Total/NA	Prep	300_Prep			31933	RC	EET ALB	08/09/25 07:26
Total/NA	Analysis	300.0		20	31934	RC	EET ALB	08/09/25 11:02

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30424-1

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 (GRO)-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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-30424-1

Login Number: 30424

List Source: Eurofins Albuquerque

List Number: 1

Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 10/18/2024 2:23:01 PM

JOB DESCRIPTION

Hackberry 18 Federal 2 Battery

JOB NUMBER

885-13299-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.
Released to Imaging: 10/13/2025 8:59:02 AM



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



Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Generated
10/18/2024 2:23:01 PM

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Laboratory Job ID: 885-13299-1

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Definitions/Glossary

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

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: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Job ID: 885-13299-1

Eurofins Albuquerque

Job Narrative 885-13299-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/8/2024 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 4.2°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: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH23-18 3'

Lab Sample ID: 885-13299-1

Date Collected: 10/04/24 09:15

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		10/08/24 15:33	10/09/24 18:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			10/08/24 15:33	10/09/24 18:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/09/24 18:01	1
Ethylbenzene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 18:01	1
Toluene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 18:01	1
Xylenes, Total	ND		0.10	mg/Kg		10/08/24 15:33	10/09/24 18:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			10/08/24 15:33	10/09/24 18:01	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]	ND		9.5	mg/Kg		10/09/24 10:49	10/09/24 16:01	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		10/09/24 10:49	10/09/24 16:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			10/09/24 10:49	10/09/24 16:01	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		60	mg/Kg		10/09/24 12:02	10/09/24 16:21	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH23-18 4.1'

Lab Sample ID: 885-13299-2

Date Collected: 10/04/24 09:20

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		10/08/24 15:33	10/09/24 19:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			10/08/24 15:33	10/09/24 19:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/09/24 19:07	1
Ethylbenzene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 19:07	1
Toluene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 19:07	1
Xylenes, Total	ND		0.099	mg/Kg		10/08/24 15:33	10/09/24 19:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		48 - 145			10/08/24 15:33	10/09/24 19:07	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		9.9	mg/Kg		10/09/24 10:49	10/09/24 16:12	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/09/24 10:49	10/09/24 16:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			10/09/24 10:49	10/09/24 16:12	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		60	mg/Kg		10/09/24 12:02	10/09/24 16:34	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-19 3'

Lab Sample ID: 885-13299-3

Date Collected: 10/04/24 09:25

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		10/08/24 15:33	10/09/24 20:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		35 - 166			10/08/24 15:33	10/09/24 20:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/09/24 20:12	1
Ethylbenzene	ND		0.047	mg/Kg		10/08/24 15:33	10/09/24 20:12	1
Toluene	ND		0.047	mg/Kg		10/08/24 15:33	10/09/24 20:12	1
Xylenes, Total	ND		0.095	mg/Kg		10/08/24 15:33	10/09/24 20:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		48 - 145			10/08/24 15:33	10/09/24 20:12	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		9.3	mg/Kg		10/09/24 10:49	10/09/24 16:33	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 10:49	10/09/24 16:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			10/09/24 10:49	10/09/24 16:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		60	mg/Kg		10/09/24 12:02	10/09/24 16:46	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-19 4.1'

Lab Sample ID: 885-13299-4

Date Collected: 10/04/24 09:30

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		10/08/24 15:33	10/09/24 20:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			10/08/24 15:33	10/09/24 20:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/09/24 20:33	1
Ethylbenzene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 20:33	1
Toluene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 20:33	1
Xylenes, Total	ND		0.10	mg/Kg		10/08/24 15:33	10/09/24 20:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			10/08/24 15:33	10/09/24 20:33	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		9.8	mg/Kg		10/09/24 10:49	10/09/24 17:00	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/09/24 10:49	10/09/24 17:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	85		62 - 134			10/09/24 10:49	10/09/24 17:00	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4400		150	mg/Kg		10/09/24 12:02	10/11/24 02:26	50

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-27 0'

Lab Sample ID: 885-13299-5

Date Collected: 10/04/24 09:40

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		10/08/24 15:33	10/09/24 20:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		35 - 166			10/08/24 15:33	10/09/24 20:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/09/24 20:55	1
Ethylbenzene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 20:55	1
Toluene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 20:55	1
Xylenes, Total	ND		0.099	mg/Kg		10/08/24 15:33	10/09/24 20:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		48 - 145			10/08/24 15:33	10/09/24 20:55	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		9.2	mg/Kg		10/09/24 10:49	10/09/24 17:10	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 10:49	10/09/24 17:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			10/09/24 10:49	10/09/24 17:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/09/24 12:02	10/09/24 17:11	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-27 2'

Lab Sample ID: 885-13299-6

Date Collected: 10/04/24 09:45

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/08/24 15:33	10/09/24 21:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		35 - 166			10/08/24 15:33	10/09/24 21:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/09/24 21:17	1
Ethylbenzene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 21:17	1
Toluene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 21:17	1
Xylenes, Total	ND		0.097	mg/Kg		10/08/24 15:33	10/09/24 21:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			10/08/24 15:33	10/09/24 21:17	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]	ND		8.5	mg/Kg		10/09/24 10:49	10/09/24 17:21	1
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		10/09/24 10:49	10/09/24 17:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			10/09/24 10:49	10/09/24 17:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		60	mg/Kg		10/09/24 12:02	10/09/24 17:23	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-27 4.1

Lab Sample ID: 885-13299-7

Date Collected: 10/04/24 09:50

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/08/24 15:33	10/09/24 21:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			10/08/24 15:33	10/09/24 21:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/09/24 21:39	1
Ethylbenzene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 21:39	1
Toluene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 21:39	1
Xylenes, Total	ND		0.098	mg/Kg		10/08/24 15:33	10/09/24 21:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		48 - 145			10/08/24 15:33	10/09/24 21:39	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		8.9	mg/Kg		10/09/24 10:49	10/09/24 17:32	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		10/09/24 10:49	10/09/24 17:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			10/09/24 10:49	10/09/24 17:32	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	800		60	mg/Kg		10/09/24 12:02	10/09/24 17:35	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-28 0'

Lab Sample ID: 885-13299-8

Date Collected: 10/04/24 10:00

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/08/24 15:33	10/09/24 22:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			10/08/24 15:33	10/09/24 22:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/09/24 22:00	1
Ethylbenzene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 22:00	1
Toluene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 22:00	1
Xylenes, Total	ND		0.098	mg/Kg		10/08/24 15:33	10/09/24 22:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			10/08/24 15:33	10/09/24 22:00	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		10/09/24 10:49	10/09/24 17:43	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/09/24 10:49	10/09/24 17:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			10/09/24 10:49	10/09/24 17:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/09/24 12:02	10/09/24 18:12	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-28 2'

Lab Sample ID: 885-13299-9

Date Collected: 10/04/24 10:05

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		10/08/24 15:33	10/09/24 22:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			10/08/24 15:33	10/09/24 22:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		10/08/24 15:33	10/09/24 22:22	1
Ethylbenzene	ND		0.046	mg/Kg		10/08/24 15:33	10/09/24 22:22	1
Toluene	ND		0.046	mg/Kg		10/08/24 15:33	10/09/24 22:22	1
Xylenes, Total	ND		0.092	mg/Kg		10/08/24 15:33	10/09/24 22:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			10/08/24 15:33	10/09/24 22:22	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		9.1	mg/Kg		10/09/24 10:49	10/09/24 17:54	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		10/09/24 10:49	10/09/24 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			10/09/24 10:49	10/09/24 17:54	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		61	mg/Kg		10/09/24 12:02	10/09/24 18:25	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-28 4.1'

Lab Sample ID: 885-13299-10

Date Collected: 10/04/24 10:10

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/08/24 15:33	10/09/24 22:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			10/08/24 15:33	10/09/24 22:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/09/24 22:44	1
Ethylbenzene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 22:44	1
Toluene	ND		0.049	mg/Kg		10/08/24 15:33	10/09/24 22:44	1
Xylenes, Total	ND		0.099	mg/Kg		10/08/24 15:33	10/09/24 22:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		48 - 145			10/08/24 15:33	10/09/24 22:44	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		10/09/24 10:49	10/09/24 18:05	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 10:49	10/09/24 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	82		62 - 134			10/09/24 10:49	10/09/24 18:05	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92		61	mg/Kg		10/09/24 12:02	10/09/24 18:37	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-29 0'

Lab Sample ID: 885-13299-11

Date Collected: 10/04/24 10:15

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		10/08/24 15:33	10/09/24 23:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			10/08/24 15:33	10/09/24 23:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/09/24 23:27	1
Ethylbenzene	ND		0.047	mg/Kg		10/08/24 15:33	10/09/24 23:27	1
Toluene	ND		0.047	mg/Kg		10/08/24 15:33	10/09/24 23:27	1
Xylenes, Total	ND		0.094	mg/Kg		10/08/24 15:33	10/09/24 23:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		48 - 145			10/08/24 15:33	10/09/24 23:27	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		9.4	mg/Kg		10/09/24 10:49	10/09/24 18:17	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		10/09/24 10:49	10/09/24 18:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			10/09/24 10:49	10/09/24 18:17	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/09/24 12:02	10/09/24 18:49	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-29 2'

Lab Sample ID: 885-13299-12

Date Collected: 10/04/24 10:20

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		10/08/24 15:33	10/09/24 23:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		35 - 166			10/08/24 15:33	10/09/24 23:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/09/24 23:49	1
Ethylbenzene	ND		0.048	mg/Kg		10/08/24 15:33	10/09/24 23:49	1
Toluene	ND		0.048	mg/Kg		10/08/24 15:33	10/09/24 23:49	1
Xylenes, Total	ND		0.097	mg/Kg		10/08/24 15:33	10/09/24 23:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		48 - 145			10/08/24 15:33	10/09/24 23:49	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		10/09/24 10:49	10/09/24 18:28	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 10:49	10/09/24 18:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			10/09/24 10:49	10/09/24 18:28	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		60	mg/Kg		10/09/24 12:02	10/09/24 19:02	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-29 4.1'

Lab Sample ID: 885-13299-13

Date Collected: 10/04/24 10:25

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		10/08/24 15:33	10/10/24 00:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		35 - 166			10/08/24 15:33	10/10/24 00:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/10/24 00:10	1
Ethylbenzene	ND		0.047	mg/Kg		10/08/24 15:33	10/10/24 00:10	1
Toluene	ND		0.047	mg/Kg		10/08/24 15:33	10/10/24 00:10	1
Xylenes, Total	ND		0.095	mg/Kg		10/08/24 15:33	10/10/24 00:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		48 - 145			10/08/24 15:33	10/10/24 00:10	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		9.0	mg/Kg		10/09/24 10:49	10/09/24 18:39	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		10/09/24 10:49	10/09/24 18:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			10/09/24 10:49	10/09/24 18:39	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		10/09/24 12:02	10/09/24 19:14	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-30 0'

Lab Sample ID: 885-13299-14

Date Collected: 10/04/24 10:30

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/08/24 15:33	10/10/24 00:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		35 - 166			10/08/24 15:33	10/10/24 00:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/10/24 00:32	1
Ethylbenzene	ND		0.049	mg/Kg		10/08/24 15:33	10/10/24 00:32	1
Toluene	ND		0.049	mg/Kg		10/08/24 15:33	10/10/24 00:32	1
Xylenes, Total	ND		0.098	mg/Kg		10/08/24 15:33	10/10/24 00:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		48 - 145			10/08/24 15:33	10/10/24 00:32	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		10/09/24 14:31	10/09/24 20:09	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 14:31	10/09/24 20:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	72		62 - 134			10/09/24 14:31	10/09/24 20:09	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/10/24 11:20	10/10/24 12:39	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-30 2'

Lab Sample ID: 885-13299-15

Date Collected: 10/04/24 10:35

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/08/24 15:33	10/10/24 00:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		35 - 166			10/08/24 15:33	10/10/24 00:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/10/24 00:54	1
Ethylbenzene	ND		0.049	mg/Kg		10/08/24 15:33	10/10/24 00:54	1
Toluene	ND		0.049	mg/Kg		10/08/24 15:33	10/10/24 00:54	1
Xylenes, Total	ND		0.098	mg/Kg		10/08/24 15:33	10/10/24 00:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		48 - 145			10/08/24 15:33	10/10/24 00:54	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		9.2	mg/Kg		10/09/24 14:31	10/09/24 20:20	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 14:31	10/09/24 20:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			10/09/24 14:31	10/09/24 20:20	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		10/10/24 11:20	10/10/24 13:16	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-30 4.1'

Lab Sample ID: 885-13299-16

Date Collected: 10/04/24 10:40

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		10/08/24 15:33	10/10/24 01:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		35 - 166			10/08/24 15:33	10/10/24 01:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/10/24 01:16	1
Ethylbenzene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 01:16	1
Toluene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 01:16	1
Xylenes, Total	ND		0.096	mg/Kg		10/08/24 15:33	10/10/24 01:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		48 - 145			10/08/24 15:33	10/10/24 01:16	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		9.5	mg/Kg		10/09/24 14:31	10/09/24 20:31	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		10/09/24 14:31	10/09/24 20:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			10/09/24 14:31	10/09/24 20:31	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		10/10/24 11:20	10/10/24 13:29	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-31 0'

Lab Sample ID: 885-13299-17

Date Collected: 10/04/24 10:50

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		10/08/24 15:33	10/10/24 01:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		35 - 166			10/08/24 15:33	10/10/24 01:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/10/24 01:37	1
Ethylbenzene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 01:37	1
Toluene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 01:37	1
Xylenes, Total	ND		0.096	mg/Kg		10/08/24 15:33	10/10/24 01:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			10/08/24 15:33	10/10/24 01:37	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]	ND		9.3	mg/Kg		10/09/24 14:31	10/09/24 20:42	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 14:31	10/09/24 20:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			10/09/24 14:31	10/09/24 20:42	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/10/24 11:20	10/10/24 13:41	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-31 2'

Lab Sample ID: 885-13299-18

Date Collected: 10/04/24 10:55

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		10/08/24 15:33	10/10/24 01:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		35 - 166			10/08/24 15:33	10/10/24 01:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/10/24 01:59	1
Ethylbenzene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 01:59	1
Toluene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 01:59	1
Xylenes, Total	ND		0.096	mg/Kg		10/08/24 15:33	10/10/24 01:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			10/08/24 15:33	10/10/24 01:59	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		10/09/24 14:31	10/09/24 20:53	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		10/09/24 14:31	10/09/24 20:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			10/09/24 14:31	10/09/24 20:53	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		10/10/24 11:20	10/10/24 13:53	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-31 4.1'

Lab Sample ID: 885-13299-19

Date Collected: 10/04/24 11:00

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/08/24 15:33	10/10/24 02:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		35 - 166			10/08/24 15:33	10/10/24 02:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/10/24 02:21	1
Ethylbenzene	ND		0.049	mg/Kg		10/08/24 15:33	10/10/24 02:21	1
Toluene	ND		0.049	mg/Kg		10/08/24 15:33	10/10/24 02:21	1
Xylenes, Total	ND		0.099	mg/Kg		10/08/24 15:33	10/10/24 02:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		48 - 145			10/08/24 15:33	10/10/24 02:21	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		10	mg/Kg		10/09/24 14:31	10/09/24 21:04	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/09/24 14:31	10/09/24 21:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			10/09/24 14:31	10/09/24 21:04	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66		61	mg/Kg		10/10/24 11:20	10/10/24 14:06	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-32 0'

Lab Sample ID: 885-13299-20

Date Collected: 10/04/24 11:05

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		10/08/24 15:33	10/10/24 02:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		35 - 166			10/08/24 15:33	10/10/24 02:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/08/24 15:33	10/10/24 02:43	1
Ethylbenzene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 02:43	1
Toluene	ND		0.048	mg/Kg		10/08/24 15:33	10/10/24 02:43	1
Xylenes, Total	ND		0.096	mg/Kg		10/08/24 15:33	10/10/24 02:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		48 - 145			10/08/24 15:33	10/10/24 02:43	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		9.9	mg/Kg		10/09/24 14:31	10/09/24 21:15	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/09/24 14:31	10/09/24 21:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			10/09/24 14:31	10/09/24 21:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/10/24 11:20	10/10/24 14:43	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-32 2'

Lab Sample ID: 885-13299-21

Date Collected: 10/04/24 11:10

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		10/09/24 09:45	10/10/24 16:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		35 - 166			10/09/24 09:45	10/10/24 16:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		10/09/24 09:45	10/10/24 16:28	1
Ethylbenzene	ND		0.047	mg/Kg		10/09/24 09:45	10/10/24 16:28	1
Toluene	ND		0.047	mg/Kg		10/09/24 09:45	10/10/24 16:28	1
Xylenes, Total	ND		0.094	mg/Kg		10/09/24 09:45	10/10/24 16:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		48 - 145			10/09/24 09:45	10/10/24 16:28	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		8.7	mg/Kg		10/09/24 14:31	10/09/24 21:26	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		10/09/24 14:31	10/09/24 21:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			10/09/24 14:31	10/09/24 21:26	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96		60	mg/Kg		10/10/24 11:20	10/10/24 14:55	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-32 4.1'

Lab Sample ID: 885-13299-22

Date Collected: 10/04/24 11:15

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		10/09/24 09:45	10/10/24 16:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		35 - 166			10/09/24 09:45	10/10/24 16:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/09/24 09:45	10/10/24 16:49	1
Ethylbenzene	ND		0.048	mg/Kg		10/09/24 09:45	10/10/24 16:49	1
Toluene	ND		0.048	mg/Kg		10/09/24 09:45	10/10/24 16:49	1
Xylenes, Total	ND		0.096	mg/Kg		10/09/24 09:45	10/10/24 16:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		48 - 145			10/09/24 09:45	10/10/24 16:49	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		10/09/24 14:31	10/09/24 21:37	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		10/09/24 14:31	10/09/24 21:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			10/09/24 14:31	10/09/24 21:37	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		10/10/24 11:20	10/10/24 15:07	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-33 0'

Lab Sample ID: 885-13299-23

Date Collected: 10/04/24 11:20

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		10/09/24 09:45	10/10/24 17:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		35 - 166			10/09/24 09:45	10/10/24 17:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/09/24 09:45	10/10/24 17:33	1
Ethylbenzene	ND		0.049	mg/Kg		10/09/24 09:45	10/10/24 17:33	1
Toluene	ND		0.049	mg/Kg		10/09/24 09:45	10/10/24 17:33	1
Xylenes, Total	ND		0.098	mg/Kg		10/09/24 09:45	10/10/24 17:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		48 - 145			10/09/24 09:45	10/10/24 17:33	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		10	mg/Kg		10/09/24 14:31	10/09/24 21:59	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/09/24 14:31	10/09/24 21:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	78		62 - 134			10/09/24 14:31	10/09/24 21:59	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/10/24 11:20	10/10/24 15:20	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-33 2'

Lab Sample ID: 885-13299-24

Date Collected: 10/04/24 11:25

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		10/09/24 09:45	10/10/24 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		35 - 166			10/09/24 09:45	10/10/24 17:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/09/24 09:45	10/10/24 17:54	1
Ethylbenzene	ND		0.047	mg/Kg		10/09/24 09:45	10/10/24 17:54	1
Toluene	ND		0.047	mg/Kg		10/09/24 09:45	10/10/24 17:54	1
Xylenes, Total	ND		0.095	mg/Kg		10/09/24 09:45	10/10/24 17:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		48 - 145			10/09/24 09:45	10/10/24 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]	ND		9.3	mg/Kg		10/09/24 14:31	10/09/24 22:10	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		10/09/24 14:31	10/09/24 22:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	76		62 - 134			10/09/24 14:31	10/09/24 22:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/10/24 11:20	10/10/24 15:32	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-33 4.1'

Lab Sample ID: 885-13299-25

Date Collected: 10/04/24 11:30

Matrix: Solid

Date Received: 10/08/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		10/09/24 09:45	10/10/24 18:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			10/09/24 09:45	10/10/24 18:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		10/09/24 09:45	10/10/24 18:16	1
Ethylbenzene	ND		0.048	mg/Kg		10/09/24 09:45	10/10/24 18:16	1
Toluene	ND		0.048	mg/Kg		10/09/24 09:45	10/10/24 18:16	1
Xylenes, Total	ND		0.097	mg/Kg		10/09/24 09:45	10/10/24 18:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		48 - 145			10/09/24 09:45	10/10/24 18:16	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		9.8	mg/Kg		10/09/24 14:31	10/09/24 22:21	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		10/09/24 14:31	10/09/24 22:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	79		62 - 134			10/09/24 14:31	10/09/24 22:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		10/10/24 11:20	10/10/24 16:09	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

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

Lab Sample ID: MB 885-13913/1-A

Matrix: Solid

Analysis Batch: 14039

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13913

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		10/08/24 15:33	10/09/24 17:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		35 - 166			10/08/24 15:33	10/09/24 17:40	1

Lab Sample ID: LCS 885-13913/2-A

Matrix: Solid

Analysis Batch: 14039

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13913

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	27.8		mg/Kg		111	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	224		35 - 166				

Lab Sample ID: 885-13299-1 MS

Matrix: Solid

Analysis Batch: 14039

Client Sample ID: BH23-18 3'

Prep Type: Total/NA

Prep Batch: 13913

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		25.0	29.1		mg/Kg		117	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	226		35 - 166						

Lab Sample ID: 885-13299-1 MSD

Matrix: Solid

Analysis Batch: 14039

Client Sample ID: BH23-18 3'

Prep Type: Total/NA

Prep Batch: 13913

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		25.0	29.4		mg/Kg		118	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	232		35 - 166								

Lab Sample ID: MB 885-13947/1-A

Matrix: Solid

Analysis Batch: 14112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13947

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		10/09/24 09:45	10/10/24 11:45	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

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

Lab Sample ID: MB 885-13947/1-A

Matrix: Solid

Analysis Batch: 14112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13947

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		35 - 166	10/09/24 09:45	10/10/24 11:45	1

Lab Sample ID: LCS 885-13947/2-A

Matrix: Solid

Analysis Batch: 14112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	27.8		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	227		35 - 166

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-13913/1-A

Matrix: Solid

Analysis Batch: 14040

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13913

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/08/24 15:33	10/09/24 17:40	1
Ethylbenzene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 17:40	1
Toluene	ND		0.050	mg/Kg		10/08/24 15:33	10/09/24 17:40	1
Xylenes, Total	ND		0.10	mg/Kg		10/08/24 15:33	10/09/24 17:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		48 - 145	10/08/24 15:33	10/09/24 17:40	1

Lab Sample ID: LCS 885-13913/3-A

Matrix: Solid

Analysis Batch: 14040

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13913

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	1.03		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	2.00	2.03		mg/Kg		102	70 - 130
o-Xylene	1.00	1.02		mg/Kg		102	70 - 130
Toluene	1.00	1.03		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		48 - 145

Lab Sample ID: 885-13299-2 MS

Matrix: Solid

Analysis Batch: 14040

Client Sample ID: BH23-18 4.1'

Prep Type: Total/NA

Prep Batch: 13913

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.996	1.09		mg/Kg		110	70 - 130

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QC Sample Results

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

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

Lab Sample ID: 885-13299-2 MS

Matrix: Solid

Analysis Batch: 14040

Client Sample ID: BH23-18 4.1'

Prep Type: Total/NA

Prep Batch: 13913

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	ND		0.996	1.12		mg/Kg		113	70 - 130
m-Xylene & p-Xylene	ND		1.99	2.23		mg/Kg		112	70 - 130
o-Xylene	ND		0.996	1.11		mg/Kg		112	70 - 130
Toluene	ND		0.996	1.12		mg/Kg		112	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		48 - 145

Lab Sample ID: 885-13299-2 MSD

Matrix: Solid

Analysis Batch: 14040

Client Sample ID: BH23-18 4.1'

Prep Type: Total/NA

Prep Batch: 13913

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.998	1.05		mg/Kg		105	70 - 130	4	20
Ethylbenzene	ND		0.998	1.09		mg/Kg		109	70 - 130	3	20
m-Xylene & p-Xylene	ND		2.00	2.17		mg/Kg		108	70 - 130	3	20
o-Xylene	ND		0.998	1.07		mg/Kg		108	70 - 130	4	20
Toluene	ND		0.998	1.08		mg/Kg		108	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		48 - 145

Lab Sample ID: MB 885-13947/1-A

Matrix: Solid

Analysis Batch: 14113

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13947

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		10/09/24 09:45	10/10/24 11:45	1
Ethylbenzene	ND		0.050	mg/Kg		10/09/24 09:45	10/10/24 11:45	1
Toluene	ND		0.050	mg/Kg		10/09/24 09:45	10/10/24 11:45	1
Xylenes, Total	ND		0.10	mg/Kg		10/09/24 09:45	10/10/24 11:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		48 - 145	10/09/24 09:45	10/10/24 11:45	1

Lab Sample ID: LCS 885-13947/3-A

Matrix: Solid

Analysis Batch: 14113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.980		mg/Kg		98	70 - 130
Ethylbenzene	1.00	1.00		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	2.00	1.98		mg/Kg		99	70 - 130
o-Xylene	1.00	0.979		mg/Kg		98	70 - 130
Toluene	1.00	0.991		mg/Kg		99	70 - 130

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QC Sample Results

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

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

Lab Sample ID: LCS 885-13947/3-A

Matrix: Solid

Analysis Batch: 14113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13947

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		48 - 145

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

Lab Sample ID: MB 885-13964/1-A

Matrix: Solid

Analysis Batch: 13961

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13964

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		10/09/24 10:49	10/09/24 14:14	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/09/24 10:49	10/09/24 14:14	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			10/09/24 10:49	10/09/24 14:14	1

Lab Sample ID: LCS 885-13964/2-A

Matrix: Solid

Analysis Batch: 13961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13964

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]		50.0	43.5		mg/Kg		87	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	83		62 - 134					

Lab Sample ID: 885-13299-13 MS

Matrix: Solid

Analysis Batch: 13961

Client Sample ID: BH24-29 4.1'

Prep Type: Total/NA

Prep Batch: 13964

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		49.1	45.8		mg/Kg		93	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	87		62 - 134						

Lab Sample ID: 885-13299-13 MSD

Matrix: Solid

Analysis Batch: 13961

Client Sample ID: BH24-29 4.1'

Prep Type: Total/NA

Prep Batch: 13964

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		47.1	42.9		mg/Kg		91	44 - 136	6	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	86		62 - 134								

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QC Sample Results

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

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

Lab Sample ID: MB 885-13990/1-A

Matrix: Solid

Analysis Batch: 13961

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13990

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		10/09/24 14:31	10/09/24 19:47	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		10/09/24 14:31	10/09/24 19:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			10/09/24 14:31	10/09/24 19:47	1

Lab Sample ID: LCS 885-13990/2-A

Matrix: Solid

Analysis Batch: 13961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Diesel Range Organics [C10-C28]	50.0	42.6		mg/Kg		85	60 - 135	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	81		62 - 134					

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-13973/1-A

Matrix: Solid

Analysis Batch: 13984

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13973

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		10/09/24 12:02	10/09/24 13:41	1

Lab Sample ID: LCS 885-13973/2-A

Matrix: Solid

Analysis Batch: 13984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	30.0	28.9		mg/Kg		96	90 - 110	

Lab Sample ID: MRL 885-13984/61

Matrix: Solid

Analysis Batch: 13984

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	0.530		mg/L		106	50 - 150	

Lab Sample ID: MB 885-14063/1-A

Matrix: Solid

Analysis Batch: 14104

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14063

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		10/10/24 11:20	10/10/24 12:14	1

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QC Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-14063/2-A				Client Sample ID: Lab Control Sample			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 14104				Prep Batch: 14063			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	29.2		mg/Kg		97	90 - 110

- 1
- 2
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- 8
- 9
- 10
- 11

QC Association Summary

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

GC VOA

Prep Batch: 13913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-1	BH23-18 3'	Total/NA	Solid	5030C	
885-13299-2	BH23-18 4.1'	Total/NA	Solid	5030C	
885-13299-3	BH24-19 3'	Total/NA	Solid	5030C	
885-13299-4	BH24-19 4.1'	Total/NA	Solid	5030C	
885-13299-5	BH24-27 0'	Total/NA	Solid	5030C	
885-13299-6	BH24-27 2'	Total/NA	Solid	5030C	
885-13299-7	BH24-27 4.1	Total/NA	Solid	5030C	
885-13299-8	BH24-28 0'	Total/NA	Solid	5030C	
885-13299-9	BH24-28 2'	Total/NA	Solid	5030C	
885-13299-10	BH24-28 4.1'	Total/NA	Solid	5030C	
885-13299-11	BH24-29 0'	Total/NA	Solid	5030C	
885-13299-12	BH24-29 2'	Total/NA	Solid	5030C	
885-13299-13	BH24-29 4.1'	Total/NA	Solid	5030C	
885-13299-14	BH24-30 0'	Total/NA	Solid	5030C	
885-13299-15	BH24-30 2'	Total/NA	Solid	5030C	
885-13299-16	BH24-30 4.1'	Total/NA	Solid	5030C	
885-13299-17	BH24-31 0'	Total/NA	Solid	5030C	
885-13299-18	BH24-31 2'	Total/NA	Solid	5030C	
885-13299-19	BH24-31 4.1'	Total/NA	Solid	5030C	
885-13299-20	BH24-32 0'	Total/NA	Solid	5030C	
MB 885-13913/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-13913/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-13913/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-13299-1 MS	BH23-18 3'	Total/NA	Solid	5030C	
885-13299-1 MSD	BH23-18 3'	Total/NA	Solid	5030C	
885-13299-2 MS	BH23-18 4.1'	Total/NA	Solid	5030C	
885-13299-2 MSD	BH23-18 4.1'	Total/NA	Solid	5030C	

Prep Batch: 13947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-21	BH24-32 2'	Total/NA	Solid	5030C	
885-13299-22	BH24-32 4.1'	Total/NA	Solid	5030C	
885-13299-23	BH24-33 0'	Total/NA	Solid	5030C	
885-13299-24	BH24-33 2'	Total/NA	Solid	5030C	
885-13299-25	BH24-33 4.1'	Total/NA	Solid	5030C	
MB 885-13947/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-13947/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-13947/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 14039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-1	BH23-18 3'	Total/NA	Solid	8015M/D	13913
885-13299-2	BH23-18 4.1'	Total/NA	Solid	8015M/D	13913
885-13299-3	BH24-19 3'	Total/NA	Solid	8015M/D	13913
885-13299-4	BH24-19 4.1'	Total/NA	Solid	8015M/D	13913
885-13299-5	BH24-27 0'	Total/NA	Solid	8015M/D	13913
885-13299-6	BH24-27 2'	Total/NA	Solid	8015M/D	13913
885-13299-7	BH24-27 4.1	Total/NA	Solid	8015M/D	13913
885-13299-8	BH24-28 0'	Total/NA	Solid	8015M/D	13913
885-13299-9	BH24-28 2'	Total/NA	Solid	8015M/D	13913
885-13299-10	BH24-28 4.1'	Total/NA	Solid	8015M/D	13913

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QC Association Summary

Client: Vertex

Job ID: 885-13299-1

GC VOA (Continued)

Analysis Batch: 14039 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-11	BH24-29 0'	Total/NA	Solid	8015M/D	13913
885-13299-12	BH24-29 2'	Total/NA	Solid	8015M/D	13913
885-13299-13	BH24-29 4.1'	Total/NA	Solid	8015M/D	13913
885-13299-14	BH24-30 0'	Total/NA	Solid	8015M/D	13913
885-13299-15	BH24-30 2'	Total/NA	Solid	8015M/D	13913
885-13299-16	BH24-30 4.1'	Total/NA	Solid	8015M/D	13913
885-13299-17	BH24-31 0'	Total/NA	Solid	8015M/D	13913
885-13299-18	BH24-31 2'	Total/NA	Solid	8015M/D	13913
885-13299-19	BH24-31 4.1'	Total/NA	Solid	8015M/D	13913
885-13299-20	BH24-32 0'	Total/NA	Solid	8015M/D	13913
MB 885-13913/1-A	Method Blank	Total/NA	Solid	8015M/D	13913
LCS 885-13913/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	13913
885-13299-1 MS	BH23-18 3'	Total/NA	Solid	8015M/D	13913
885-13299-1 MSD	BH23-18 3'	Total/NA	Solid	8015M/D	13913

Analysis Batch: 14040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-1	BH23-18 3'	Total/NA	Solid	8021B	13913
885-13299-2	BH23-18 4.1'	Total/NA	Solid	8021B	13913
885-13299-3	BH24-19 3'	Total/NA	Solid	8021B	13913
885-13299-4	BH24-19 4.1'	Total/NA	Solid	8021B	13913
885-13299-5	BH24-27 0'	Total/NA	Solid	8021B	13913
885-13299-6	BH24-27 2'	Total/NA	Solid	8021B	13913
885-13299-7	BH24-27 4.1	Total/NA	Solid	8021B	13913
885-13299-8	BH24-28 0'	Total/NA	Solid	8021B	13913
885-13299-9	BH24-28 2'	Total/NA	Solid	8021B	13913
885-13299-10	BH24-28 4.1'	Total/NA	Solid	8021B	13913
885-13299-11	BH24-29 0'	Total/NA	Solid	8021B	13913
885-13299-12	BH24-29 2'	Total/NA	Solid	8021B	13913
885-13299-13	BH24-29 4.1'	Total/NA	Solid	8021B	13913
885-13299-14	BH24-30 0'	Total/NA	Solid	8021B	13913
885-13299-15	BH24-30 2'	Total/NA	Solid	8021B	13913
885-13299-16	BH24-30 4.1'	Total/NA	Solid	8021B	13913
885-13299-17	BH24-31 0'	Total/NA	Solid	8021B	13913
885-13299-18	BH24-31 2'	Total/NA	Solid	8021B	13913
885-13299-19	BH24-31 4.1'	Total/NA	Solid	8021B	13913
885-13299-20	BH24-32 0'	Total/NA	Solid	8021B	13913
MB 885-13913/1-A	Method Blank	Total/NA	Solid	8021B	13913
LCS 885-13913/3-A	Lab Control Sample	Total/NA	Solid	8021B	13913
885-13299-2 MS	BH23-18 4.1'	Total/NA	Solid	8021B	13913
885-13299-2 MSD	BH23-18 4.1'	Total/NA	Solid	8021B	13913

Analysis Batch: 14112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-21	BH24-32 2'	Total/NA	Solid	8015M/D	13947
885-13299-22	BH24-32 4.1'	Total/NA	Solid	8015M/D	13947
885-13299-23	BH24-33 0'	Total/NA	Solid	8015M/D	13947
885-13299-24	BH24-33 2'	Total/NA	Solid	8015M/D	13947
885-13299-25	BH24-33 4.1'	Total/NA	Solid	8015M/D	13947
MB 885-13947/1-A	Method Blank	Total/NA	Solid	8015M/D	13947
LCS 885-13947/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	13947

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

GC VOA

Analysis Batch: 14113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-21	BH24-32 2'	Total/NA	Solid	8021B	13947
885-13299-22	BH24-32 4.1'	Total/NA	Solid	8021B	13947
885-13299-23	BH24-33 0'	Total/NA	Solid	8021B	13947
885-13299-24	BH24-33 2'	Total/NA	Solid	8021B	13947
885-13299-25	BH24-33 4.1'	Total/NA	Solid	8021B	13947
MB 885-13947/1-A	Method Blank	Total/NA	Solid	8021B	13947
LCS 885-13947/3-A	Lab Control Sample	Total/NA	Solid	8021B	13947

GC Semi VOA

Analysis Batch: 13961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-1	BH23-18 3'	Total/NA	Solid	8015M/D	13964
885-13299-2	BH23-18 4.1'	Total/NA	Solid	8015M/D	13964
885-13299-3	BH24-19 3'	Total/NA	Solid	8015M/D	13964
885-13299-4	BH24-19 4.1'	Total/NA	Solid	8015M/D	13964
885-13299-5	BH24-27 0'	Total/NA	Solid	8015M/D	13964
885-13299-6	BH24-27 2'	Total/NA	Solid	8015M/D	13964
885-13299-7	BH24-27 4.1	Total/NA	Solid	8015M/D	13964
885-13299-8	BH24-28 0'	Total/NA	Solid	8015M/D	13964
885-13299-9	BH24-28 2'	Total/NA	Solid	8015M/D	13964
885-13299-10	BH24-28 4.1'	Total/NA	Solid	8015M/D	13964
885-13299-11	BH24-29 0'	Total/NA	Solid	8015M/D	13964
885-13299-12	BH24-29 2'	Total/NA	Solid	8015M/D	13964
885-13299-13	BH24-29 4.1'	Total/NA	Solid	8015M/D	13964
885-13299-14	BH24-30 0'	Total/NA	Solid	8015M/D	13990
885-13299-15	BH24-30 2'	Total/NA	Solid	8015M/D	13990
885-13299-16	BH24-30 4.1'	Total/NA	Solid	8015M/D	13990
885-13299-17	BH24-31 0'	Total/NA	Solid	8015M/D	13990
885-13299-18	BH24-31 2'	Total/NA	Solid	8015M/D	13990
885-13299-19	BH24-31 4.1'	Total/NA	Solid	8015M/D	13990
885-13299-20	BH24-32 0'	Total/NA	Solid	8015M/D	13990
885-13299-21	BH24-32 2'	Total/NA	Solid	8015M/D	13990
885-13299-22	BH24-32 4.1'	Total/NA	Solid	8015M/D	13990
885-13299-23	BH24-33 0'	Total/NA	Solid	8015M/D	13990
885-13299-24	BH24-33 2'	Total/NA	Solid	8015M/D	13990
885-13299-25	BH24-33 4.1'	Total/NA	Solid	8015M/D	13990
MB 885-13964/1-A	Method Blank	Total/NA	Solid	8015M/D	13964
MB 885-13990/1-A	Method Blank	Total/NA	Solid	8015M/D	13990
LCS 885-13964/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	13964
LCS 885-13990/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	13990
885-13299-13 MS	BH24-29 4.1'	Total/NA	Solid	8015M/D	13964
885-13299-13 MSD	BH24-29 4.1'	Total/NA	Solid	8015M/D	13964

Prep Batch: 13964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-1	BH23-18 3'	Total/NA	Solid	SHAKE	
885-13299-2	BH23-18 4.1'	Total/NA	Solid	SHAKE	
885-13299-3	BH24-19 3'	Total/NA	Solid	SHAKE	
885-13299-4	BH24-19 4.1'	Total/NA	Solid	SHAKE	
885-13299-5	BH24-27 0'	Total/NA	Solid	SHAKE	

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QC Association Summary

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

GC Semi VOA (Continued)

Prep Batch: 13964 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-6	BH24-27 2'	Total/NA	Solid	SHAKE	
885-13299-7	BH24-27 4.1	Total/NA	Solid	SHAKE	
885-13299-8	BH24-28 0'	Total/NA	Solid	SHAKE	
885-13299-9	BH24-28 2'	Total/NA	Solid	SHAKE	
885-13299-10	BH24-28 4.1'	Total/NA	Solid	SHAKE	
885-13299-11	BH24-29 0'	Total/NA	Solid	SHAKE	
885-13299-12	BH24-29 2'	Total/NA	Solid	SHAKE	
885-13299-13	BH24-29 4.1'	Total/NA	Solid	SHAKE	
MB 885-13964/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-13964/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-13299-13 MS	BH24-29 4.1'	Total/NA	Solid	SHAKE	
885-13299-13 MSD	BH24-29 4.1'	Total/NA	Solid	SHAKE	

Prep Batch: 13990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-14	BH24-30 0'	Total/NA	Solid	SHAKE	
885-13299-15	BH24-30 2'	Total/NA	Solid	SHAKE	
885-13299-16	BH24-30 4.1'	Total/NA	Solid	SHAKE	
885-13299-17	BH24-31 0'	Total/NA	Solid	SHAKE	
885-13299-18	BH24-31 2'	Total/NA	Solid	SHAKE	
885-13299-19	BH24-31 4.1'	Total/NA	Solid	SHAKE	
885-13299-20	BH24-32 0'	Total/NA	Solid	SHAKE	
885-13299-21	BH24-32 2'	Total/NA	Solid	SHAKE	
885-13299-22	BH24-32 4.1'	Total/NA	Solid	SHAKE	
885-13299-23	BH24-33 0'	Total/NA	Solid	SHAKE	
885-13299-24	BH24-33 2'	Total/NA	Solid	SHAKE	
885-13299-25	BH24-33 4.1'	Total/NA	Solid	SHAKE	
MB 885-13990/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-13990/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 13973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-1	BH23-18 3'	Total/NA	Solid	300_Prep	
885-13299-2	BH23-18 4.1'	Total/NA	Solid	300_Prep	
885-13299-3	BH24-19 3'	Total/NA	Solid	300_Prep	
885-13299-4	BH24-19 4.1'	Total/NA	Solid	300_Prep	
885-13299-5	BH24-27 0'	Total/NA	Solid	300_Prep	
885-13299-6	BH24-27 2'	Total/NA	Solid	300_Prep	
885-13299-7	BH24-27 4.1	Total/NA	Solid	300_Prep	
885-13299-8	BH24-28 0'	Total/NA	Solid	300_Prep	
885-13299-9	BH24-28 2'	Total/NA	Solid	300_Prep	
885-13299-10	BH24-28 4.1'	Total/NA	Solid	300_Prep	
885-13299-11	BH24-29 0'	Total/NA	Solid	300_Prep	
885-13299-12	BH24-29 2'	Total/NA	Solid	300_Prep	
885-13299-13	BH24-29 4.1'	Total/NA	Solid	300_Prep	
MB 885-13973/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-13973/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-13299-1

Project/Site: Hackberry 18 Federal 2 Battery

HPLC/IC

Analysis Batch: 13984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-1	BH23-18 3'	Total/NA	Solid	300.0	13973
885-13299-2	BH23-18 4.1'	Total/NA	Solid	300.0	13973
885-13299-3	BH24-19 3'	Total/NA	Solid	300.0	13973
885-13299-5	BH24-27 0'	Total/NA	Solid	300.0	13973
885-13299-6	BH24-27 2'	Total/NA	Solid	300.0	13973
885-13299-7	BH24-27 4.1	Total/NA	Solid	300.0	13973
885-13299-8	BH24-28 0'	Total/NA	Solid	300.0	13973
885-13299-9	BH24-28 2'	Total/NA	Solid	300.0	13973
885-13299-10	BH24-28 4.1'	Total/NA	Solid	300.0	13973
885-13299-11	BH24-29 0'	Total/NA	Solid	300.0	13973
885-13299-12	BH24-29 2'	Total/NA	Solid	300.0	13973
885-13299-13	BH24-29 4.1'	Total/NA	Solid	300.0	13973
MB 885-13973/1-A	Method Blank	Total/NA	Solid	300.0	13973
LCS 885-13973/2-A	Lab Control Sample	Total/NA	Solid	300.0	13973
MRL 885-13984/61	Lab Control Sample	Total/NA	Solid	300.0	

Prep Batch: 14063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-14	BH24-30 0'	Total/NA	Solid	300_Prep	
885-13299-15	BH24-30 2'	Total/NA	Solid	300_Prep	
885-13299-16	BH24-30 4.1'	Total/NA	Solid	300_Prep	
885-13299-17	BH24-31 0'	Total/NA	Solid	300_Prep	
885-13299-18	BH24-31 2'	Total/NA	Solid	300_Prep	
885-13299-19	BH24-31 4.1'	Total/NA	Solid	300_Prep	
885-13299-20	BH24-32 0'	Total/NA	Solid	300_Prep	
885-13299-21	BH24-32 2'	Total/NA	Solid	300_Prep	
885-13299-22	BH24-32 4.1'	Total/NA	Solid	300_Prep	
885-13299-23	BH24-33 0'	Total/NA	Solid	300_Prep	
885-13299-24	BH24-33 2'	Total/NA	Solid	300_Prep	
885-13299-25	BH24-33 4.1'	Total/NA	Solid	300_Prep	
MB 885-14063/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-14063/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 14104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-13299-4	BH24-19 4.1'	Total/NA	Solid	300.0	13973
885-13299-14	BH24-30 0'	Total/NA	Solid	300.0	14063
885-13299-15	BH24-30 2'	Total/NA	Solid	300.0	14063
885-13299-16	BH24-30 4.1'	Total/NA	Solid	300.0	14063
885-13299-17	BH24-31 0'	Total/NA	Solid	300.0	14063
885-13299-18	BH24-31 2'	Total/NA	Solid	300.0	14063
885-13299-19	BH24-31 4.1'	Total/NA	Solid	300.0	14063
885-13299-20	BH24-32 0'	Total/NA	Solid	300.0	14063
885-13299-21	BH24-32 2'	Total/NA	Solid	300.0	14063
885-13299-22	BH24-32 4.1'	Total/NA	Solid	300.0	14063
885-13299-23	BH24-33 0'	Total/NA	Solid	300.0	14063
885-13299-24	BH24-33 2'	Total/NA	Solid	300.0	14063
885-13299-25	BH24-33 4.1'	Total/NA	Solid	300.0	14063
MB 885-14063/1-A	Method Blank	Total/NA	Solid	300.0	14063
LCS 885-14063/2-A	Lab Control Sample	Total/NA	Solid	300.0	14063

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH23-18 3'
Date Collected: 10/04/24 09:15
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 18:01
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 18:01
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 16:01
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 16:21

Client Sample ID: BH23-18 4.1'
Date Collected: 10/04/24 09:20
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 19:07
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 19:07
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 16:12
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 16:34

Client Sample ID: BH24-19 3'
Date Collected: 10/04/24 09:25
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 20:12
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 20:12
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 16:33
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 16:46

Client Sample ID: BH24-19 4.1'
Date Collected: 10/04/24 09:30
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 20:33

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-19 4.1'
Date Collected: 10/04/24 09:30
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 20:33
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 17:00
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		50	14104	MA	EET ALB	10/11/24 02:26

Client Sample ID: BH24-27 0'
Date Collected: 10/04/24 09:40
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 20:55
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 20:55
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 17:10
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 17:11

Client Sample ID: BH24-27 2'
Date Collected: 10/04/24 09:45
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 21:17
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 21:17
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 17:21
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 17:23

Client Sample ID: BH24-27 4.1
Date Collected: 10/04/24 09:50
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 21:39
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 21:39

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Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-27 4.1

Lab Sample ID: 885-13299-7

Date Collected: 10/04/24 09:50

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 17:32
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 17:35

Client Sample ID: BH24-28 0'

Lab Sample ID: 885-13299-8

Date Collected: 10/04/24 10:00

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 22:00
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 22:00
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 17:43
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 18:12

Client Sample ID: BH24-28 2'

Lab Sample ID: 885-13299-9

Date Collected: 10/04/24 10:05

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 22:22
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 22:22
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 17:54
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 18:25

Client Sample ID: BH24-28 4.1'

Lab Sample ID: 885-13299-10

Date Collected: 10/04/24 10:10

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 22:44
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 22:44
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 18:05

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Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-28 4.1'

Lab Sample ID: 885-13299-10

Date Collected: 10/04/24 10:10

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 18:37

Client Sample ID: BH24-29 0'

Lab Sample ID: 885-13299-11

Date Collected: 10/04/24 10:15

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 23:27
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 23:27
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 18:17
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 18:49

Client Sample ID: BH24-29 2'

Lab Sample ID: 885-13299-12

Date Collected: 10/04/24 10:20

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/09/24 23:49
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/09/24 23:49
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 18:28
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 19:02

Client Sample ID: BH24-29 4.1'

Lab Sample ID: 885-13299-13

Date Collected: 10/04/24 10:25

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 00:10
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 00:10
Total/NA	Prep	SHAKE			13964	KR	EET ALB	10/09/24 10:49
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 18:39
Total/NA	Prep	300_Prep			13973	EH	EET ALB	10/09/24 12:02
Total/NA	Analysis	300.0		20	13984	EH	EET ALB	10/09/24 19:14

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Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-30 0'

Lab Sample ID: 885-13299-14

Date Collected: 10/04/24 10:30

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 00:32
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 00:32
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 20:09
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 12:39

Client Sample ID: BH24-30 2'

Lab Sample ID: 885-13299-15

Date Collected: 10/04/24 10:35

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 00:54
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 00:54
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 20:20
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 13:16

Client Sample ID: BH24-30 4.1'

Lab Sample ID: 885-13299-16

Date Collected: 10/04/24 10:40

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 01:16
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 01:16
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 20:31
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 13:29

Client Sample ID: BH24-31 0'

Lab Sample ID: 885-13299-17

Date Collected: 10/04/24 10:50

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 01:37

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-31 0'

Date Collected: 10/04/24 10:50

Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 01:37
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 20:42
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 13:41

Client Sample ID: BH24-31 2'

Date Collected: 10/04/24 10:55

Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 01:59
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 01:59
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 20:53
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 13:53

Client Sample ID: BH24-31 4.1'

Date Collected: 10/04/24 11:00

Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 02:21
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 02:21
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 21:04
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 14:06

Client Sample ID: BH24-32 0'

Date Collected: 10/04/24 11:05

Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8015M/D		1	14039	AT	EET ALB	10/10/24 02:43
Total/NA	Prep	5030C			13913	AT	EET ALB	10/08/24 15:33
Total/NA	Analysis	8021B		1	14040	AT	EET ALB	10/10/24 02:43

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-32 0'

Lab Sample ID: 885-13299-20

Date Collected: 10/04/24 11:05

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 21:15
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 14:43

Client Sample ID: BH24-32 2'

Lab Sample ID: 885-13299-21

Date Collected: 10/04/24 11:10

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8015M/D		1	14112	AT	EET ALB	10/10/24 16:28
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8021B		1	14113	AT	EET ALB	10/10/24 16:28
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 21:26
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 14:55

Client Sample ID: BH24-32 4.1'

Lab Sample ID: 885-13299-22

Date Collected: 10/04/24 11:15

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8015M/D		1	14112	AT	EET ALB	10/10/24 16:49
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8021B		1	14113	AT	EET ALB	10/10/24 16:49
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 21:37
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 15:07

Client Sample ID: BH24-33 0'

Lab Sample ID: 885-13299-23

Date Collected: 10/04/24 11:20

Matrix: Solid

Date Received: 10/08/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8015M/D		1	14112	AT	EET ALB	10/10/24 17:33
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8021B		1	14113	AT	EET ALB	10/10/24 17:33
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 21:59

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

Client Sample ID: BH24-33 0'
Date Collected: 10/04/24 11:20
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 15:20

Client Sample ID: BH24-33 2'
Date Collected: 10/04/24 11:25
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8015M/D		1	14112	AT	EET ALB	10/10/24 17:54
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8021B		1	14113	AT	EET ALB	10/10/24 17:54
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 22:10
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 15:32

Client Sample ID: BH24-33 4.1'
Date Collected: 10/04/24 11:30
Date Received: 10/08/24 07:55

Lab Sample ID: 885-13299-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8015M/D		1	14112	AT	EET ALB	10/10/24 18:16
Total/NA	Prep	5030C			13947	AT	EET ALB	10/09/24 09:45
Total/NA	Analysis	8021B		1	14113	AT	EET ALB	10/10/24 18:16
Total/NA	Prep	SHAKE			13990	KR	EET ALB	10/09/24 14:31
Total/NA	Analysis	8015M/D		1	13961	KR	EET ALB	10/09/24 22:21
Total/NA	Prep	300_Prep			14063	EH	EET ALB	10/10/24 11:20
Total/NA	Analysis	300.0		20	14104	MA	EET ALB	10/10/24 16:09

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Hackberry 18 Federal 2 Battery

Job ID: 885-13299-1

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	02-26-25
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 (GRO)-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	02-26-25

Chain-of-Custody Record

Client: **Vertex**
(direct bill to Devon, work order 21185142)
Mailing Address:
Phone #:
email or Fax#:
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush_72-hr rush
Project Name:
Hackberry 18 Federal 2 Battery
Project #:
23E-03903
Project Manager:
Chad Hensley
CHensley@vertexresource.com
Sampler: L. Pullman
On Ice: ☒ Yes ☐ No
of Coolers: 1

Cooler Temp (including CF): $3.9 + 0.3 = 4.2^{\circ}\text{C}$

Container Type and #	Preservative Type	HEAL No.
----------------------	-------------------	----------

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
10.04.24	9:15	Soil	BH23-18 3'	1, 4oz jar		1
10.04.24	9:20	Soil	BH24-18 4.1'	1, 4oz jar		2
10.04.24	9:25	Soil	BH23-19 3'	1, 4oz jar		3
10.04.24	9:30	Soil	BH24-19 4.1'	1, 4oz jar		4
10.04.24	9:40	Soil	BH24-27 0'	1, 4oz jar		5
10.04.24	9:45	Soil	BH24-27 2'	1, 4oz jar		6
10.04.24	9:50	Soil	BH24-27 4.1'	1, 4oz jar		7
10.04.24	10:00	Soil	BH24-28 0'	1, 4oz jar		8
10.04.24	10:05	Soil	BH24-28 2'	1, 4oz jar		9
10.04.24	10:10	Soil	BH24-28 4.1'	1, 4oz jar		10
10.04.24	10:15	Soil	BH24-29 0'	1, 4oz jar		11
10.04.24	10:20	Soil	BH24-29 2'	1, 4oz jar		12

Date: 10-7-2024	Time: 07:00	Relinquished by: [Signature]
Date: 10/1/24	Time: 1900	Relinquished by: [Signature]

Received by: [Signature]	Via:	Date: 10/1/24	Time: 0700
Received by: [Signature]	Via: SCN COURIER	Date: 10/1/24	Time: 0755

**HALL ENVIRONMENTAL ANALYSIS LABOR**
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 8710
Tel. 505-345-3975 Fax 505-345-4107 885-13299 Coc

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	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				X	X			
X	X				X	X			
X	X				X	X			
X	X				X	X			

Remarks:
Direct bill to Devon work order 21185142 Dale Woodall
cc. CHensley@vertexresource.com, permain@vertexresource.com,
LPullman@vertexresource.com, and RPlogger@vertexresource.com
for Final Report

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: 885-13299-1

Login Number: 13299

List Number: 1

Creator: McQuiston, Steven

List Source: Eurofins Albuquerque

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kent Stallings
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/1/2025 2:53:44 PM

JOB DESCRIPTION

Hackberry 18 Federal #002 Battery

JOB NUMBER

885-21910-1

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



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Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Laboratory Job ID: 885-21910-1

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Definitions/Glossary

Client: Vertex

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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: Hackberry 18 Federal #002 Battery

Job ID: 885-21910-1

Job ID: 885-21910-1

Eurofins Albuquerque

Job Narrative 885-21910-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/22/2025 8:06 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 3.3°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

Method 8021B: The matrix spike duplicate (MSD) recovery and precision for preparation batch 885-22951 and analytical batch 885-23147 were outside control limits. A mis-spike by half of the intended spike by the analyst is suspected because the associated laboratory control sample (LCS) precision was 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 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-22915 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 impacted: BH25-34 0' (885-21910-1) and BH25-34 2' (885-21910-2).

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

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH25-34 0'

Lab Sample ID: 885-21910-1

Date Collected: 03/20/25 10:40

Matrix: Solid

Date Received: 03/22/25 08:06

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		03/24/25 11:37	03/26/25 21:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			03/24/25 11:37	03/26/25 21:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/24/25 11:37	03/26/25 21:53	1
Ethylbenzene	ND		0.050	mg/Kg		03/24/25 11:37	03/26/25 21:53	1
Toluene	ND		0.050	mg/Kg		03/24/25 11:37	03/26/25 21:53	1
Xylenes, Total	ND		0.10	mg/Kg		03/24/25 11:37	03/26/25 21:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		48 - 145			03/24/25 11:37	03/26/25 21:53	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		9.9	mg/Kg		03/24/25 13:15	03/24/25 17:29	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/24/25 13:15	03/24/25 17:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	105		62 - 134			03/24/25 13:15	03/24/25 17:29	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		61	mg/Kg		03/24/25 12:31	03/24/25 19:32	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH25-34 2'

Lab Sample ID: 885-21910-2

Date Collected: 03/20/25 10:45

Matrix: Solid

Date Received: 03/22/25 08:06

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		03/24/25 11:37	03/26/25 23:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			03/24/25 11:37	03/26/25 23:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	F1 F2	0.025	mg/Kg		03/24/25 11:37	03/26/25 23:05	1
Ethylbenzene	ND	F1 F2	0.050	mg/Kg		03/24/25 11:37	03/26/25 23:05	1
Toluene	ND	F1 F2	0.050	mg/Kg		03/24/25 11:37	03/26/25 23:05	1
Xylenes, Total	ND	F1 F2	0.10	mg/Kg		03/24/25 11:37	03/26/25 23:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		48 - 145			03/24/25 11:37	03/26/25 23:05	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		9.7	mg/Kg		03/24/25 13:15	03/24/25 17:40	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		03/24/25 13:15	03/24/25 17:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			03/24/25 13:15	03/24/25 17:40	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61		61	mg/Kg		03/24/25 12:31	03/24/25 19:42	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BH25-34 4'

Lab Sample ID: 885-21910-3

Date Collected: 03/20/25 10:50

Matrix: Solid

Date Received: 03/22/25 08:06

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		03/24/25 11:37	03/27/25 00:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			03/24/25 11:37	03/27/25 00:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/24/25 11:37	03/27/25 00:17	1
Ethylbenzene	ND		0.049	mg/Kg		03/24/25 11:37	03/27/25 00:17	1
Toluene	ND		0.049	mg/Kg		03/24/25 11:37	03/27/25 00:17	1
Xylenes, Total	ND		0.098	mg/Kg		03/24/25 11:37	03/27/25 00:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		48 - 145			03/24/25 11:37	03/27/25 00:17	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]	ND		9.2	mg/Kg		03/24/25 13:15	03/25/25 22:10	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		03/24/25 13:15	03/25/25 22:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	131		62 - 134			03/24/25 13:15	03/25/25 22:10	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		60	mg/Kg		03/24/25 12:31	03/24/25 19:52	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-22951/1-A

Matrix: Solid

Analysis Batch: 23146

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22951

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		03/24/25 11:37	03/26/25 21:29	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			03/24/25 11:37	03/26/25 21:29	1

Lab Sample ID: LCS 885-22951/2-A

Matrix: Solid

Analysis Batch: 23146

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	23.0		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	191		35 - 166				

Lab Sample ID: 885-21910-1 MS

Matrix: Solid

Analysis Batch: 23146

Client Sample ID: BH25-34 0'

Prep Type: Total/NA

Prep Batch: 22951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		25.0	22.6		mg/Kg		91	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	195		35 - 166						

Lab Sample ID: 885-21910-1 MSD

Matrix: Solid

Analysis Batch: 23146

Client Sample ID: BH25-34 0'

Prep Type: Total/NA

Prep Batch: 22951

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		24.8	22.6		mg/Kg		91	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	195		35 - 166								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-22951/1-A

Matrix: Solid

Analysis Batch: 23147

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22951

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/24/25 11:37	03/26/25 21:29	1
Ethylbenzene	ND		0.050	mg/Kg		03/24/25 11:37	03/26/25 21:29	1
Toluene	ND		0.050	mg/Kg		03/24/25 11:37	03/26/25 21:29	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-22951/1-A

Matrix: Solid

Analysis Batch: 23147

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22951

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		03/24/25 11:37	03/26/25 21:29	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		48 - 145			03/24/25 11:37	03/26/25 21:29	1

Lab Sample ID: LCS 885-22951/3-A

Matrix: Solid

Analysis Batch: 23147

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22951

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	0.964		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	2.00	2.11		mg/Kg		105	70 - 130
o-Xylene	1.00	1.04		mg/Kg		104	70 - 130
Toluene	1.00	1.00		mg/Kg		100	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	95		48 - 145				

Lab Sample ID: 885-21910-2 MS

Matrix: Solid

Analysis Batch: 23147

Client Sample ID: BH25-34 2'

Prep Type: Total/NA

Prep Batch: 22951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND	F1 F2	0.994	1.01		mg/Kg		102	70 - 130
Ethylbenzene	ND	F1 F2	0.994	1.02		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	ND	F1 F2	1.99	2.12		mg/Kg		107	70 - 130
o-Xylene	ND	F1 F2	0.994	0.953		mg/Kg		96	70 - 130
Toluene	ND	F1 F2	0.994	0.966		mg/Kg		97	70 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	113		48 - 145						

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

Lab Sample ID: MB 885-22961/1-A

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22961

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		03/24/25 13:15	03/24/25 14:47	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/24/25 13:15	03/24/25 14:47	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			03/24/25 13:15	03/24/25 14:47	1

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QC Sample Results

Client: Vertex

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: LCS 885-22961/2-A

Matrix: Solid

Analysis Batch: 22915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22961

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits		
			Added	Result	Qualifier							
Diesel Range Organics [C10-C28]			50.0	54.8		mg/Kg		110		60 - 135		
Surrogate	LCS	LCS										
	%Recovery	Qualifier	Limits									
Di-n-octyl phthalate (Surr)	84		62 - 134									

Lab Sample ID: 885-21910-3 MS

Matrix: Solid

Analysis Batch: 22986

Client Sample ID: BH25-34 4'

Prep Type: Total/NA

Prep Batch: 22961

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier			Limits			
Diesel Range Organics [C10-C28]	ND		46.3	52.2		mg/Kg		113	44 - 136		
Surrogate	MS	MS									
	%Recovery	Qualifier	Limits								
Di-n-octyl phthalate (Surr)	133		62 - 134								

Lab Sample ID: 885-21910-3 MSD

Matrix: Solid

Analysis Batch: 22986

Client Sample ID: BH25-34 4'

Prep Type: Total/NA

Prep Batch: 22961

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Diesel Range Organics [C10-C28]	ND		46.9	49.4		mg/Kg		105	44 - 136	6	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	112		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-22954/1-A

Matrix: Solid

Analysis Batch: 22943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22954

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		03/24/25 12:31	03/24/25 15:56	1

Lab Sample ID: LCS 885-22954/2-A

Matrix: Solid

Analysis Batch: 22943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.6		mg/Kg		97	90 - 110

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QC Association Summary

Client: Vertex

Job ID: 885-21910-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA

Prep Batch: 22951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-1	BH25-34 0'	Total/NA	Solid	5030C	
885-21910-2	BH25-34 2'	Total/NA	Solid	5030C	
885-21910-3	BH25-34 4'	Total/NA	Solid	5030C	
MB 885-22951/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-22951/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-22951/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-21910-1 MS	BH25-34 0'	Total/NA	Solid	5030C	
885-21910-1 MSD	BH25-34 0'	Total/NA	Solid	5030C	
885-21910-2 MS	BH25-34 2'	Total/NA	Solid	5030C	

Analysis Batch: 23146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-1	BH25-34 0'	Total/NA	Solid	8015M/D	22951
885-21910-2	BH25-34 2'	Total/NA	Solid	8015M/D	22951
885-21910-3	BH25-34 4'	Total/NA	Solid	8015M/D	22951
MB 885-22951/1-A	Method Blank	Total/NA	Solid	8015M/D	22951
LCS 885-22951/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22951
885-21910-1 MS	BH25-34 0'	Total/NA	Solid	8015M/D	22951
885-21910-1 MSD	BH25-34 0'	Total/NA	Solid	8015M/D	22951

Analysis Batch: 23147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-1	BH25-34 0'	Total/NA	Solid	8021B	22951
885-21910-2	BH25-34 2'	Total/NA	Solid	8021B	22951
885-21910-3	BH25-34 4'	Total/NA	Solid	8021B	22951
MB 885-22951/1-A	Method Blank	Total/NA	Solid	8021B	22951
LCS 885-22951/3-A	Lab Control Sample	Total/NA	Solid	8021B	22951
885-21910-2 MS	BH25-34 2'	Total/NA	Solid	8021B	22951

GC Semi VOA

Analysis Batch: 22915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-1	BH25-34 0'	Total/NA	Solid	8015M/D	22961
885-21910-2	BH25-34 2'	Total/NA	Solid	8015M/D	22961
MB 885-22961/1-A	Method Blank	Total/NA	Solid	8015M/D	22961
LCS 885-22961/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22961

Prep Batch: 22961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-1	BH25-34 0'	Total/NA	Solid	SHAKE	
885-21910-2	BH25-34 2'	Total/NA	Solid	SHAKE	
885-21910-3	BH25-34 4'	Total/NA	Solid	SHAKE	
MB 885-22961/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-22961/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-21910-3 MS	BH25-34 4'	Total/NA	Solid	SHAKE	
885-21910-3 MSD	BH25-34 4'	Total/NA	Solid	SHAKE	

Analysis Batch: 22986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-3	BH25-34 4'	Total/NA	Solid	8015M/D	22961

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-21910-1

GC Semi VOA (Continued)

Analysis Batch: 22986 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-3 MS	BH25-34 4'	Total/NA	Solid	8015M/D	22961
885-21910-3 MSD	BH25-34 4'	Total/NA	Solid	8015M/D	22961

HPLC/IC

Analysis Batch: 22943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-1	BH25-34 0'	Total/NA	Solid	300.0	22954
885-21910-2	BH25-34 2'	Total/NA	Solid	300.0	22954
885-21910-3	BH25-34 4'	Total/NA	Solid	300.0	22954
MB 885-22954/1-A	Method Blank	Total/NA	Solid	300.0	22954
LCS 885-22954/2-A	Lab Control Sample	Total/NA	Solid	300.0	22954

Prep Batch: 22954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21910-1	BH25-34 0'	Total/NA	Solid	300_Prep	
885-21910-2	BH25-34 2'	Total/NA	Solid	300_Prep	
885-21910-3	BH25-34 4'	Total/NA	Solid	300_Prep	
MB 885-22954/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-22954/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-21910-1

Client Sample ID: BH25-34 0'
Date Collected: 03/20/25 10:40
Date Received: 03/22/25 08:06

Lab Sample ID: 885-21910-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			22951	AT	EET ALB	03/24/25 11:37
Total/NA	Analysis	8015M/D		1	23146	JP	EET ALB	03/26/25 21:53
Total/NA	Prep	5030C			22951	AT	EET ALB	03/24/25 11:37
Total/NA	Analysis	8021B		1	23147	JP	EET ALB	03/26/25 21:53
Total/NA	Prep	SHAKE			22961	MI	EET ALB	03/24/25 13:15
Total/NA	Analysis	8015M/D		1	22915	MI	EET ALB	03/24/25 17:29
Total/NA	Prep	300_Prep			22954	DL	EET ALB	03/24/25 12:31
Total/NA	Analysis	300.0		20	22943	DL	EET ALB	03/24/25 19:32

Client Sample ID: BH25-34 2'
Date Collected: 03/20/25 10:45
Date Received: 03/22/25 08:06

Lab Sample ID: 885-21910-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			22951	AT	EET ALB	03/24/25 11:37
Total/NA	Analysis	8015M/D		1	23146	JP	EET ALB	03/26/25 23:05
Total/NA	Prep	5030C			22951	AT	EET ALB	03/24/25 11:37
Total/NA	Analysis	8021B		1	23147	JP	EET ALB	03/26/25 23:05
Total/NA	Prep	SHAKE			22961	MI	EET ALB	03/24/25 13:15
Total/NA	Analysis	8015M/D		1	22915	MI	EET ALB	03/24/25 17:40
Total/NA	Prep	300_Prep			22954	DL	EET ALB	03/24/25 12:31
Total/NA	Analysis	300.0		20	22943	DL	EET ALB	03/24/25 19:42

Client Sample ID: BH25-34 4'
Date Collected: 03/20/25 10:50
Date Received: 03/22/25 08:06

Lab Sample ID: 885-21910-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			22951	AT	EET ALB	03/24/25 11:37
Total/NA	Analysis	8015M/D		1	23146	JP	EET ALB	03/27/25 00:17
Total/NA	Prep	5030C			22951	AT	EET ALB	03/24/25 11:37
Total/NA	Analysis	8021B		1	23147	JP	EET ALB	03/27/25 00:17
Total/NA	Prep	SHAKE			22961	MI	EET ALB	03/24/25 13:15
Total/NA	Analysis	8015M/D		1	22986	EM	EET ALB	03/25/25 22:10
Total/NA	Prep	300_Prep			22954	DL	EET ALB	03/24/25 12:31
Total/NA	Analysis	300.0		20	22943	DL	EET ALB	03/24/25 19:52

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-21910-1

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 (GRO)-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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 8710

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



885-21910 COC

Analysis Request

[illegible]

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: 885-21910-1

Login Number: 21910

List Source: Eurofins Albuquerque

List Number: 1

Creator: Proctor, Nancy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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	No sample date and/or time on COC, logged in per container labels.
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Vertex

3101 Boyd Dr

Carlsbad, New Mexico 88220

Generated 9/19/2025 2:00:25 PM Revision 1

JOB DESCRIPTION

Hackberry 18 Federal 2

JOB NUMBER

885-9078-1

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



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Revision 1

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Laboratory Job ID: 885-9078-1

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Definitions/Glossary

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Qualifiers

GC 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: Hackberry 18 Federal 2

Job ID: 885-9078-1

Job ID: 885-9078-1

Eurofins Albuquerque

Job Narrative 885-9078-1

REVISION

The report being provided is a revision of the original report sent on 8/12/2024. The report (revision 1) is being revised due to sample WS24-13, from WS24-13 1' to WS24-13 0.5'.

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 8/2/2024 7:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.8°C and 5.0°C.

Receipt Exceptions

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): BS24-01 @ 2' (885-9078-1), BS24-02 @ 2' (885-9078-2), BS24-03 @ 2' (885-9078-3), BS24-04 @ 2' (885-9078-4), BS24-05 @ 2' (885-9078-5), BS24-06 @ 2' (885-9078-6), BS24-07 @ 1' (885-9078-7), BS24-08 @ 1' (885-9078-8), BS24-09 @ .5' (885-9078-9), BS24-10 @ .5' (885-9078-10), BS24-11 @ .5' (885-9078-11), BS24-12 @ .5' (885-9078-12), BS24-13 @ 0.5' (885-9078-13), WS-01 @ 0-2' (885-9078-14), WS-02 @ 0-2' (885-9078-15), WS-03 @ 0-.5' (885-9078-16) and WS-04 @ 0-1' (885-9078-17). The container labels list a depth of .5' while the COC lists a depth of 1'. The client was contacted, and the lab was instructed to go with COC depth of 1'.

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: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-01 @ 2'

Lab Sample ID: 885-9078-1

Date Collected: 07/23/24 10:03

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 09:38	08/04/24 23:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			08/02/24 09:38	08/04/24 23:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 09:38	08/06/24 05:03	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 05:03	1
Toluene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 05:03	1
Xylenes, Total	ND		0.095	mg/Kg		08/02/24 09:38	08/06/24 05:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		48 - 145			08/02/24 09:38	08/06/24 05:03	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]	19		8.9	mg/Kg		08/05/24 08:32	08/05/24 11:14	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		08/05/24 08:32	08/05/24 11:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			08/05/24 08:32	08/05/24 11:14	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		60	mg/Kg		08/05/24 09:25	08/05/24 13:01	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-02 @ 2'

Lab Sample ID: 885-9078-2

Date Collected: 07/23/24 10:14

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/02/24 09:38	08/04/24 23:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			08/02/24 09:38	08/04/24 23:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 09:38	08/06/24 05:27	1
Ethylbenzene	ND		0.048	mg/Kg		08/02/24 09:38	08/06/24 05:27	1
Toluene	ND		0.048	mg/Kg		08/02/24 09:38	08/06/24 05:27	1
Xylenes, Total	ND		0.097	mg/Kg		08/02/24 09:38	08/06/24 05:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		48 - 145			08/02/24 09:38	08/06/24 05:27	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		9.8	mg/Kg		08/05/24 08:32	08/05/24 11:27	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/05/24 08:32	08/05/24 11:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	88		62 - 134			08/05/24 08:32	08/05/24 11:27	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		60	mg/Kg		08/05/24 09:25	08/05/24 13:39	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-03 @ 2'

Lab Sample ID: 885-9078-3

Date Collected: 07/23/24 10:20

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 09:38	08/04/24 23:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		35 - 166			08/02/24 09:38	08/04/24 23:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 09:38	08/06/24 05:50	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 05:50	1
Toluene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 05:50	1
Xylenes, Total	ND		0.094	mg/Kg		08/02/24 09:38	08/06/24 05:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		48 - 145			08/02/24 09:38	08/06/24 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		9.3	mg/Kg		08/05/24 08:32	08/05/24 11:40	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/05/24 08:32	08/05/24 11:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			08/05/24 08:32	08/05/24 11:40	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82		60	mg/Kg		08/05/24 09:25	08/05/24 13:52	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-04 @ 2'

Lab Sample ID: 885-9078-4

Date Collected: 07/23/24 10:29

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/02/24 09:38	08/05/24 00:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		35 - 166			08/02/24 09:38	08/05/24 00:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 09:38	08/06/24 06:14	1
Ethylbenzene	ND		0.048	mg/Kg		08/02/24 09:38	08/06/24 06:14	1
Toluene	ND		0.048	mg/Kg		08/02/24 09:38	08/06/24 06:14	1
Xylenes, Total	ND		0.096	mg/Kg		08/02/24 09:38	08/06/24 06:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		48 - 145			08/02/24 09:38	08/06/24 06:14	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		08/05/24 08:32	08/05/24 11:53	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/05/24 08:32	08/05/24 11:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			08/05/24 08:32	08/05/24 11:53	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67		60	mg/Kg		08/05/24 09:25	08/06/24 23:46	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-05 @ 2'

Lab Sample ID: 885-9078-5

Date Collected: 07/23/24 10:38

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/02/24 09:38	08/05/24 00:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			08/02/24 09:38	08/05/24 00:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 09:38	08/06/24 06:37	1
Ethylbenzene	ND		0.048	mg/Kg		08/02/24 09:38	08/06/24 06:37	1
Toluene	ND		0.048	mg/Kg		08/02/24 09:38	08/06/24 06:37	1
Xylenes, Total	ND		0.097	mg/Kg		08/02/24 09:38	08/06/24 06:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		48 - 145			08/02/24 09:38	08/06/24 06:37	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]	ND		9.7	mg/Kg		08/05/24 08:32	08/05/24 12:06	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/05/24 08:32	08/05/24 12:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			08/05/24 08:32	08/05/24 12:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/05/24 09:25	08/06/24 23:58	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-06 @ 2'

Lab Sample ID: 885-9078-6

Date Collected: 07/23/24 10:51

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.6	mg/Kg		08/02/24 09:38	08/05/24 01:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		35 - 166			08/02/24 09:38	08/05/24 01:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/02/24 09:38	08/06/24 07:01	1
Ethylbenzene	ND		0.046	mg/Kg		08/02/24 09:38	08/06/24 07:01	1
Toluene	ND		0.046	mg/Kg		08/02/24 09:38	08/06/24 07:01	1
Xylenes, Total	ND		0.092	mg/Kg		08/02/24 09:38	08/06/24 07:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		48 - 145			08/02/24 09:38	08/06/24 07:01	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]	ND		9.5	mg/Kg		08/05/24 08:32	08/05/24 12:19	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/05/24 08:32	08/05/24 12:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			08/05/24 08:32	08/05/24 12:19	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		60	mg/Kg		08/05/24 09:25	08/05/24 19:14	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-07 @ 1'

Lab Sample ID: 885-9078-7

Date Collected: 07/23/24 11:02

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 09:38	08/05/24 01:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		35 - 166			08/02/24 09:38	08/05/24 01:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 09:38	08/06/24 07:24	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 07:24	1
Toluene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 07:24	1
Xylenes, Total	ND		0.094	mg/Kg		08/02/24 09:38	08/06/24 07:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		48 - 145			08/02/24 09:38	08/06/24 07:24	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		9.8	mg/Kg		08/05/24 08:32	08/05/24 12:32	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/05/24 08:32	08/05/24 12:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			08/05/24 08:32	08/05/24 12:32	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/05/24 09:25	08/05/24 19:27	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-08 @ 1'

Lab Sample ID: 885-9078-8

Date Collected: 07/23/24 11:18

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 09:38	08/05/24 01:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		35 - 166			08/02/24 09:38	08/05/24 01:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 09:38	08/06/24 07:48	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 07:48	1
Toluene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 07:48	1
Xylenes, Total	ND		0.095	mg/Kg		08/02/24 09:38	08/06/24 07:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		48 - 145			08/02/24 09:38	08/06/24 07:48	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		9.5	mg/Kg		08/05/24 08:32	08/05/24 12:45	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/05/24 08:32	08/05/24 12:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			08/05/24 08:32	08/05/24 12:45	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		08/05/24 09:25	08/05/24 20:05	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-09 @ .5'

Lab Sample ID: 885-9078-9

Date Collected: 07/23/24 11:29

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 09:38	08/05/24 02:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		35 - 166			08/02/24 09:38	08/05/24 02:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/02/24 09:38	08/06/24 08:11	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 08:11	1
Toluene	ND		0.047	mg/Kg		08/02/24 09:38	08/06/24 08:11	1
Xylenes, Total	ND		0.094	mg/Kg		08/02/24 09:38	08/06/24 08:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		48 - 145			08/02/24 09:38	08/06/24 08:11	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		9.7	mg/Kg		08/05/24 08:32	08/05/24 12:58	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/05/24 08:32	08/05/24 12:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			08/05/24 08:32	08/05/24 12:58	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		60	mg/Kg		08/05/24 09:25	08/05/24 20:18	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-10 @ .5'

Lab Sample ID: 885-9078-10

Date Collected: 07/23/24 11:47

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/02/24 10:33	08/05/24 16:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		35 - 166			08/02/24 10:33	08/05/24 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		08/02/24 10:33	08/05/24 16:54	1
Ethylbenzene	ND		0.048	mg/Kg		08/02/24 10:33	08/05/24 16:54	1
Toluene	ND		0.048	mg/Kg		08/02/24 10:33	08/05/24 16:54	1
Xylenes, Total	ND		0.096	mg/Kg		08/02/24 10:33	08/05/24 16:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			08/02/24 10:33	08/05/24 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		8.5	mg/Kg		08/05/24 08:32	08/05/24 13:24	1
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		08/05/24 08:32	08/05/24 13:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	84		62 - 134			08/05/24 08:32	08/05/24 13:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84		60	mg/Kg		08/05/24 09:25	08/05/24 20:31	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-11 @ .5'

Lab Sample ID: 885-9078-11

Date Collected: 07/23/24 11:59

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 10:33	08/05/24 17:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		35 - 166			08/02/24 10:33	08/05/24 17:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 10:33	08/05/24 17:18	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 10:33	08/05/24 17:18	1
Toluene	ND		0.047	mg/Kg		08/02/24 10:33	08/05/24 17:18	1
Xylenes, Total	ND		0.094	mg/Kg		08/02/24 10:33	08/05/24 17:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			08/02/24 10:33	08/05/24 17:18	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]	18		8.8	mg/Kg		08/05/24 08:32	08/05/24 13:36	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		08/05/24 08:32	08/05/24 13:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			08/05/24 08:32	08/05/24 13:36	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		60	mg/Kg		08/05/24 09:25	08/05/24 20:44	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-12 @ .5'

Lab Sample ID: 885-9078-12

Date Collected: 07/23/24 12:09

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/02/24 10:33	08/05/24 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		35 - 166			08/02/24 10:33	08/05/24 18:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/02/24 10:33	08/05/24 18:05	1
Ethylbenzene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 18:05	1
Toluene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 18:05	1
Xylenes, Total	ND		0.099	mg/Kg		08/02/24 10:33	08/05/24 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			08/02/24 10:33	08/05/24 18:05	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		9.2	mg/Kg		08/05/24 08:32	08/05/24 14:02	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/05/24 08:32	08/05/24 14:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			08/05/24 08:32	08/05/24 14:02	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/05/24 09:25	08/05/24 21:22	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-13 @ 0.5'

Lab Sample ID: 885-9078-13

Date Collected: 07/23/24 12:21

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/02/24 10:33	08/05/24 18:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		35 - 166			08/02/24 10:33	08/05/24 18:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/02/24 10:33	08/05/24 18:29	1
Ethylbenzene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 18:29	1
Toluene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 18:29	1
Xylenes, Total	ND		0.10	mg/Kg		08/02/24 10:33	08/05/24 18:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			08/02/24 10:33	08/05/24 18:29	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		08/05/24 08:32	08/05/24 14:16	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/05/24 08:32	08/05/24 14:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			08/05/24 08:32	08/05/24 14:16	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/05/24 09:25	08/05/24 22:02	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: WS-01 @ 0-2'

Lab Sample ID: 885-9078-14

Date Collected: 07/23/24 12:34

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 10:33	08/05/24 18:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		35 - 166			08/02/24 10:33	08/05/24 18:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 10:33	08/05/24 18:52	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 10:33	08/05/24 18:52	1
Toluene	ND		0.047	mg/Kg		08/02/24 10:33	08/05/24 18:52	1
Xylenes, Total	ND		0.095	mg/Kg		08/02/24 10:33	08/05/24 18:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			08/02/24 10:33	08/05/24 18:52	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]	19		9.6	mg/Kg		08/05/24 08:32	08/05/24 14:29	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/05/24 08:32	08/05/24 14:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			08/05/24 08:32	08/05/24 14:29	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		08/05/24 09:25	08/05/24 22:14	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: WS-02 @ 0-2'

Lab Sample ID: 885-9078-15

Date Collected: 07/23/24 12:39

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/02/24 10:33	08/05/24 19:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		35 - 166			08/02/24 10:33	08/05/24 19:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/02/24 10:33	08/05/24 19:16	1
Ethylbenzene	ND		0.047	mg/Kg		08/02/24 10:33	08/05/24 19:16	1
Toluene	ND		0.047	mg/Kg		08/02/24 10:33	08/05/24 19:16	1
Xylenes, Total	ND		0.093	mg/Kg		08/02/24 10:33	08/05/24 19:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		48 - 145			08/02/24 10:33	08/05/24 19:16	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		9.6	mg/Kg		08/05/24 08:32	08/05/24 14:42	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/05/24 08:32	08/05/24 14:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			08/05/24 08:32	08/05/24 14:42	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91		60	mg/Kg		08/05/24 09:25	08/05/24 22:27	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: WS-03 @ 0-.5'

Lab Sample ID: 885-9078-16

Date Collected: 07/23/24 12:47

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/02/24 10:33	08/05/24 19:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		35 - 166			08/02/24 10:33	08/05/24 19:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/02/24 10:33	08/05/24 19:40	1
Ethylbenzene	ND		0.048	mg/Kg		08/02/24 10:33	08/05/24 19:40	1
Toluene	ND		0.048	mg/Kg		08/02/24 10:33	08/05/24 19:40	1
Xylenes, Total	ND		0.096	mg/Kg		08/02/24 10:33	08/05/24 19:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			08/02/24 10:33	08/05/24 19:40	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		9.5	mg/Kg		08/05/24 08:32	08/05/24 14:55	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/05/24 08:32	08/05/24 14:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			08/05/24 08:32	08/05/24 14:55	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/05/24 09:25	08/05/24 22:40	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: WS-04 @ 0-1'

Lab Sample ID: 885-9078-17

Date Collected: 07/23/24 12:58

Matrix: Solid

Date Received: 08/02/24 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/02/24 10:33	08/05/24 20:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		35 - 166			08/02/24 10:33	08/05/24 20:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/02/24 10:33	08/05/24 20:03	1
Ethylbenzene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 20:03	1
Toluene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 20:03	1
Xylenes, Total	ND		0.099	mg/Kg		08/02/24 10:33	08/05/24 20:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		48 - 145			08/02/24 10:33	08/05/24 20:03	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		9.6	mg/Kg		08/05/24 08:32	08/05/24 15:09	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/05/24 08:32	08/05/24 15:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			08/05/24 08:32	08/05/24 15:09	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/05/24 09:25	08/05/24 22:53	20

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QC Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

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

Lab Sample ID: MB 885-9626/1-A

Matrix: Solid

Analysis Batch: 9729

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9626

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/02/24 09:38	08/04/24 16:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		35 - 166			08/02/24 09:38	08/04/24 16:24	1

Lab Sample ID: LCS 885-9626/2-A

Matrix: Solid

Analysis Batch: 9729

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9626

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	25.5		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	206	S1+	35 - 166				

Lab Sample ID: MB 885-9643/1-A

Matrix: Solid

Analysis Batch: 9779

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9643

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/02/24 10:33	08/05/24 11:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		35 - 166			08/02/24 10:33	08/05/24 11:46	1

Lab Sample ID: LCS 885-9643/2-A

Matrix: Solid

Analysis Batch: 9779

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	23.9		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	198		35 - 166				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-9626/1-A

Matrix: Solid

Analysis Batch: 9780

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9626

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/02/24 09:38	08/05/24 23:12	1
Ethylbenzene	ND		0.050	mg/Kg		08/02/24 09:38	08/05/24 23:12	1
Toluene	ND		0.050	mg/Kg		08/02/24 09:38	08/05/24 23:12	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

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

Lab Sample ID: MB 885-9626/1-A

Matrix: Solid

Analysis Batch: 9780

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9626

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		08/02/24 09:38	08/05/24 23:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		48 - 145			08/02/24 09:38	08/05/24 23:12	1

Lab Sample ID: LCS 885-9626/3-A

Matrix: Solid

Analysis Batch: 9780

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9626

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.976		mg/Kg		98	70 - 130
Ethylbenzene	1.00	0.896		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	2.00	1.79		mg/Kg		89	70 - 130
o-Xylene	1.00	0.876		mg/Kg		88	70 - 130
Toluene	1.00	0.923		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	91		48 - 145				

Lab Sample ID: MB 885-9643/1-A

Matrix: Solid

Analysis Batch: 9780

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9643

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/02/24 10:33	08/05/24 11:46	1
Ethylbenzene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 11:46	1
Toluene	ND		0.050	mg/Kg		08/02/24 10:33	08/05/24 11:46	1
Xylenes, Total	ND		0.10	mg/Kg		08/02/24 10:33	08/05/24 11:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		48 - 145			08/02/24 10:33	08/05/24 11:46	1

Lab Sample ID: LCS 885-9643/3-A

Matrix: Solid

Analysis Batch: 9780

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.929		mg/Kg		93	70 - 130
Ethylbenzene	1.00	0.866		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	2.00	1.72		mg/Kg		86	70 - 130
o-Xylene	1.00	0.827		mg/Kg		83	70 - 130
Toluene	1.00	0.870		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	91		48 - 145				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

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

Lab Sample ID: MB 885-9705/1-A

Matrix: Solid

Analysis Batch: 9733

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9705

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/05/24 08:32	08/05/24 10:49	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/05/24 08:32	08/05/24 10:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			08/05/24 08:32	08/05/24 10:49	1

Lab Sample ID: LCS 885-9705/2-A

Matrix: Solid

Analysis Batch: 9733

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	46.0		mg/Kg		92	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	96		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-9714/1-A

Matrix: Solid

Analysis Batch: 9776

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9714

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		08/05/24 09:25	08/05/24 12:09	1

Lab Sample ID: LCS 885-9714/2-A

Matrix: Solid

Analysis Batch: 9776

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9714

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	30.7		mg/Kg		102	90 - 110

Lab Sample ID: 885-9078-1 MS

Matrix: Solid

Analysis Batch: 9776

Client Sample ID: BS24-01 @ 2'

Prep Type: Total/NA

Prep Batch: 9714

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	170		30.1	202	4	mg/Kg		93	50 - 150

Lab Sample ID: 885-9078-1 MSD

Matrix: Solid

Analysis Batch: 9776

Client Sample ID: BS24-01 @ 2'

Prep Type: Total/NA

Prep Batch: 9714

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
Chloride	170		30.0	205	4	mg/Kg		106	50 - 150	2 20

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QC Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-9078-11 MS

Matrix: Solid

Analysis Batch: 9776

Client Sample ID: BS24-11 @ .5'

Prep Type: Total/NA

Prep Batch: 9714

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250		29.9	298	4	mg/Kg		148	50 - 150

Lab Sample ID: 885-9078-11 MSD

Matrix: Solid

Analysis Batch: 9776

Client Sample ID: BS24-11 @ .5'

Prep Type: Total/NA

Prep Batch: 9714

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250		29.9	293	4	mg/Kg		128	50 - 150	2	20

Lab Sample ID: MB 885-9908/4

Matrix: Solid

Analysis Batch: 9908

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			08/06/24 10:36	1

Lab Sample ID: MRL 885-9908/3

Matrix: Solid

Analysis Batch: 9908

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	0.525		mg/L		105	50 - 150

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QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

GC VOA

Prep Batch: 9626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-1	BS24-01 @ 2'	Total/NA	Solid	5030C	
885-9078-2	BS24-02 @ 2'	Total/NA	Solid	5030C	
885-9078-3	BS24-03 @ 2'	Total/NA	Solid	5030C	
885-9078-4	BS24-04 @ 2'	Total/NA	Solid	5030C	
885-9078-5	BS24-05 @ 2'	Total/NA	Solid	5030C	
885-9078-6	BS24-06 @ 2'	Total/NA	Solid	5030C	
885-9078-7	BS24-07 @ 1'	Total/NA	Solid	5030C	
885-9078-8	BS24-08 @ 1'	Total/NA	Solid	5030C	
885-9078-9	BS24-09 @ .5'	Total/NA	Solid	5030C	
MB 885-9626/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-9626/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-9626/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 9643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-10	BS24-10 @ .5'	Total/NA	Solid	5030C	
885-9078-11	BS24-11 @ .5'	Total/NA	Solid	5030C	
885-9078-12	BS24-12 @ .5'	Total/NA	Solid	5030C	
885-9078-13	BS24-13 @ 0.5'	Total/NA	Solid	5030C	
885-9078-14	WS-01 @ 0-2'	Total/NA	Solid	5030C	
885-9078-15	WS-02 @ 0-2'	Total/NA	Solid	5030C	
885-9078-16	WS-03 @ 0-.5'	Total/NA	Solid	5030C	
885-9078-17	WS-04 @ 0-1'	Total/NA	Solid	5030C	
MB 885-9643/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-9643/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-9643/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 9729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-1	BS24-01 @ 2'	Total/NA	Solid	8015M/D	9626
885-9078-2	BS24-02 @ 2'	Total/NA	Solid	8015M/D	9626
885-9078-3	BS24-03 @ 2'	Total/NA	Solid	8015M/D	9626
885-9078-4	BS24-04 @ 2'	Total/NA	Solid	8015M/D	9626
885-9078-5	BS24-05 @ 2'	Total/NA	Solid	8015M/D	9626
885-9078-6	BS24-06 @ 2'	Total/NA	Solid	8015M/D	9626
885-9078-7	BS24-07 @ 1'	Total/NA	Solid	8015M/D	9626
885-9078-8	BS24-08 @ 1'	Total/NA	Solid	8015M/D	9626
885-9078-9	BS24-09 @ .5'	Total/NA	Solid	8015M/D	9626
MB 885-9626/1-A	Method Blank	Total/NA	Solid	8015M/D	9626
LCS 885-9626/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	9626

Analysis Batch: 9779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-10	BS24-10 @ .5'	Total/NA	Solid	8015M/D	9643
885-9078-11	BS24-11 @ .5'	Total/NA	Solid	8015M/D	9643
885-9078-12	BS24-12 @ .5'	Total/NA	Solid	8015M/D	9643
885-9078-13	BS24-13 @ 0.5'	Total/NA	Solid	8015M/D	9643
885-9078-14	WS-01 @ 0-2'	Total/NA	Solid	8015M/D	9643
885-9078-15	WS-02 @ 0-2'	Total/NA	Solid	8015M/D	9643
885-9078-16	WS-03 @ 0-.5'	Total/NA	Solid	8015M/D	9643
885-9078-17	WS-04 @ 0-1'	Total/NA	Solid	8015M/D	9643

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QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

GC VOA (Continued)

Analysis Batch: 9779 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-9643/1-A	Method Blank	Total/NA	Solid	8015M/D	9643
LCS 885-9643/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	9643

Analysis Batch: 9780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-1	BS24-01 @ 2'	Total/NA	Solid	8021B	9626
885-9078-2	BS24-02 @ 2'	Total/NA	Solid	8021B	9626
885-9078-3	BS24-03 @ 2'	Total/NA	Solid	8021B	9626
885-9078-4	BS24-04 @ 2'	Total/NA	Solid	8021B	9626
885-9078-5	BS24-05 @ 2'	Total/NA	Solid	8021B	9626
885-9078-6	BS24-06 @ 2'	Total/NA	Solid	8021B	9626
885-9078-7	BS24-07 @ 1'	Total/NA	Solid	8021B	9626
885-9078-8	BS24-08 @ 1'	Total/NA	Solid	8021B	9626
885-9078-9	BS24-09 @ .5'	Total/NA	Solid	8021B	9626
885-9078-10	BS24-10 @ .5'	Total/NA	Solid	8021B	9643
885-9078-11	BS24-11 @ .5'	Total/NA	Solid	8021B	9643
885-9078-12	BS24-12 @ .5'	Total/NA	Solid	8021B	9643
885-9078-13	BS24-13 @ 0.5'	Total/NA	Solid	8021B	9643
885-9078-14	WS-01 @ 0-2'	Total/NA	Solid	8021B	9643
885-9078-15	WS-02 @ 0-2'	Total/NA	Solid	8021B	9643
885-9078-16	WS-03 @ 0-.5'	Total/NA	Solid	8021B	9643
885-9078-17	WS-04 @ 0-1'	Total/NA	Solid	8021B	9643
MB 885-9626/1-A	Method Blank	Total/NA	Solid	8021B	9626
MB 885-9643/1-A	Method Blank	Total/NA	Solid	8021B	9643
LCS 885-9626/3-A	Lab Control Sample	Total/NA	Solid	8021B	9626
LCS 885-9643/3-A	Lab Control Sample	Total/NA	Solid	8021B	9643

GC Semi VOA

Prep Batch: 9705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-1	BS24-01 @ 2'	Total/NA	Solid	SHAKE	
885-9078-2	BS24-02 @ 2'	Total/NA	Solid	SHAKE	
885-9078-3	BS24-03 @ 2'	Total/NA	Solid	SHAKE	
885-9078-4	BS24-04 @ 2'	Total/NA	Solid	SHAKE	
885-9078-5	BS24-05 @ 2'	Total/NA	Solid	SHAKE	
885-9078-6	BS24-06 @ 2'	Total/NA	Solid	SHAKE	
885-9078-7	BS24-07 @ 1'	Total/NA	Solid	SHAKE	
885-9078-8	BS24-08 @ 1'	Total/NA	Solid	SHAKE	
885-9078-9	BS24-09 @ .5'	Total/NA	Solid	SHAKE	
885-9078-10	BS24-10 @ .5'	Total/NA	Solid	SHAKE	
885-9078-11	BS24-11 @ .5'	Total/NA	Solid	SHAKE	
885-9078-12	BS24-12 @ .5'	Total/NA	Solid	SHAKE	
885-9078-13	BS24-13 @ 0.5'	Total/NA	Solid	SHAKE	
885-9078-14	WS-01 @ 0-2'	Total/NA	Solid	SHAKE	
885-9078-15	WS-02 @ 0-2'	Total/NA	Solid	SHAKE	
885-9078-16	WS-03 @ 0-.5'	Total/NA	Solid	SHAKE	
885-9078-17	WS-04 @ 0-1'	Total/NA	Solid	SHAKE	
MB 885-9705/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-9705/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

GC Semi VOA

Analysis Batch: 9733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-1	BS24-01 @ 2'	Total/NA	Solid	8015M/D	9705
885-9078-2	BS24-02 @ 2'	Total/NA	Solid	8015M/D	9705
885-9078-3	BS24-03 @ 2'	Total/NA	Solid	8015M/D	9705
885-9078-4	BS24-04 @ 2'	Total/NA	Solid	8015M/D	9705
885-9078-5	BS24-05 @ 2'	Total/NA	Solid	8015M/D	9705
885-9078-6	BS24-06 @ 2'	Total/NA	Solid	8015M/D	9705
885-9078-7	BS24-07 @ 1'	Total/NA	Solid	8015M/D	9705
885-9078-8	BS24-08 @ 1'	Total/NA	Solid	8015M/D	9705
885-9078-9	BS24-09 @ .5'	Total/NA	Solid	8015M/D	9705
885-9078-10	BS24-10 @ .5'	Total/NA	Solid	8015M/D	9705
885-9078-11	BS24-11 @ .5'	Total/NA	Solid	8015M/D	9705
885-9078-12	BS24-12 @ .5'	Total/NA	Solid	8015M/D	9705
885-9078-13	BS24-13 @ 0.5'	Total/NA	Solid	8015M/D	9705
885-9078-14	WS-01 @ 0-2'	Total/NA	Solid	8015M/D	9705
885-9078-15	WS-02 @ 0-2'	Total/NA	Solid	8015M/D	9705
885-9078-16	WS-03 @ 0-.5'	Total/NA	Solid	8015M/D	9705
885-9078-17	WS-04 @ 0-1'	Total/NA	Solid	8015M/D	9705
MB 885-9705/1-A	Method Blank	Total/NA	Solid	8015M/D	9705
LCS 885-9705/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	9705

HPLC/IC

Prep Batch: 9714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-1	BS24-01 @ 2'	Total/NA	Solid	300_Prep	
885-9078-2	BS24-02 @ 2'	Total/NA	Solid	300_Prep	
885-9078-3	BS24-03 @ 2'	Total/NA	Solid	300_Prep	
885-9078-4	BS24-04 @ 2'	Total/NA	Solid	300_Prep	
885-9078-5	BS24-05 @ 2'	Total/NA	Solid	300_Prep	
885-9078-6	BS24-06 @ 2'	Total/NA	Solid	300_Prep	
885-9078-7	BS24-07 @ 1'	Total/NA	Solid	300_Prep	
885-9078-8	BS24-08 @ 1'	Total/NA	Solid	300_Prep	
885-9078-9	BS24-09 @ .5'	Total/NA	Solid	300_Prep	
885-9078-10	BS24-10 @ .5'	Total/NA	Solid	300_Prep	
885-9078-11	BS24-11 @ .5'	Total/NA	Solid	300_Prep	
885-9078-12	BS24-12 @ .5'	Total/NA	Solid	300_Prep	
885-9078-13	BS24-13 @ 0.5'	Total/NA	Solid	300_Prep	
885-9078-14	WS-01 @ 0-2'	Total/NA	Solid	300_Prep	
885-9078-15	WS-02 @ 0-2'	Total/NA	Solid	300_Prep	
885-9078-16	WS-03 @ 0-.5'	Total/NA	Solid	300_Prep	
885-9078-17	WS-04 @ 0-1'	Total/NA	Solid	300_Prep	
MB 885-9714/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-9714/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-9078-1 MS	BS24-01 @ 2'	Total/NA	Solid	300_Prep	
885-9078-1 MSD	BS24-01 @ 2'	Total/NA	Solid	300_Prep	
885-9078-11 MS	BS24-11 @ .5'	Total/NA	Solid	300_Prep	
885-9078-11 MSD	BS24-11 @ .5'	Total/NA	Solid	300_Prep	

Analysis Batch: 9776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-1	BS24-01 @ 2'	Total/NA	Solid	300.0	9714

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

HPLC/IC (Continued)

Analysis Batch: 9776 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-2	BS24-02 @ 2'	Total/NA	Solid	300.0	9714
885-9078-3	BS24-03 @ 2'	Total/NA	Solid	300.0	9714
885-9078-6	BS24-06 @ 2'	Total/NA	Solid	300.0	9714
885-9078-7	BS24-07 @ 1'	Total/NA	Solid	300.0	9714
885-9078-8	BS24-08 @ 1'	Total/NA	Solid	300.0	9714
885-9078-9	BS24-09 @ .5'	Total/NA	Solid	300.0	9714
885-9078-10	BS24-10 @ .5'	Total/NA	Solid	300.0	9714
885-9078-11	BS24-11 @ .5'	Total/NA	Solid	300.0	9714
885-9078-12	BS24-12 @ .5'	Total/NA	Solid	300.0	9714
885-9078-13	BS24-13 @ 0.5'	Total/NA	Solid	300.0	9714
885-9078-14	WS-01 @ 0-2'	Total/NA	Solid	300.0	9714
885-9078-15	WS-02 @ 0-2'	Total/NA	Solid	300.0	9714
885-9078-16	WS-03 @ 0-.5'	Total/NA	Solid	300.0	9714
885-9078-17	WS-04 @ 0-1'	Total/NA	Solid	300.0	9714
MB 885-9714/1-A	Method Blank	Total/NA	Solid	300.0	9714
LCS 885-9714/2-A	Lab Control Sample	Total/NA	Solid	300.0	9714
885-9078-1 MS	BS24-01 @ 2'	Total/NA	Solid	300.0	9714
885-9078-1 MSD	BS24-01 @ 2'	Total/NA	Solid	300.0	9714
885-9078-11 MS	BS24-11 @ .5'	Total/NA	Solid	300.0	9714
885-9078-11 MSD	BS24-11 @ .5'	Total/NA	Solid	300.0	9714

Analysis Batch: 9908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9078-4	BS24-04 @ 2'	Total/NA	Solid	300.0	9714
885-9078-5	BS24-05 @ 2'	Total/NA	Solid	300.0	9714
MB 885-9908/4	Method Blank	Total/NA	Solid	300.0	
MRL 885-9908/3	Lab Control Sample	Total/NA	Solid	300.0	

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-01 @ 2'
Date Collected: 07/23/24 10:03
Date Received: 08/02/24 07:30

Lab Sample ID: 885-9078-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/04/24 23:04
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 05:03
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 11:14
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 13:01

Client Sample ID: BS24-02 @ 2'
Date Collected: 07/23/24 10:14
Date Received: 08/02/24 07:30

Lab Sample ID: 885-9078-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/04/24 23:27
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 05:27
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 11:27
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 13:39

Client Sample ID: BS24-03 @ 2'
Date Collected: 07/23/24 10:20
Date Received: 08/02/24 07:30

Lab Sample ID: 885-9078-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/04/24 23:50
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 05:50
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 11:40
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 13:52

Client Sample ID: BS24-04 @ 2'
Date Collected: 07/23/24 10:29
Date Received: 08/02/24 07:30

Lab Sample ID: 885-9078-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/05/24 00:14

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-04 @ 2'

Lab Sample ID: 885-9078-4

Date Collected: 07/23/24 10:29

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 06:14
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 11:53
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9908	JT	EET ALB	08/06/24 23:46

Client Sample ID: BS24-05 @ 2'

Lab Sample ID: 885-9078-5

Date Collected: 07/23/24 10:38

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/05/24 00:37
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 06:37
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 12:06
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9908	JT	EET ALB	08/06/24 23:58

Client Sample ID: BS24-06 @ 2'

Lab Sample ID: 885-9078-6

Date Collected: 07/23/24 10:51

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/05/24 01:01
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 07:01
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 12:19
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 19:14

Client Sample ID: BS24-07 @ 1'

Lab Sample ID: 885-9078-7

Date Collected: 07/23/24 11:02

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/05/24 01:24
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 07:24

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-07 @ 1'

Lab Sample ID: 885-9078-7

Date Collected: 07/23/24 11:02

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 12:32
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 19:27

Client Sample ID: BS24-08 @ 1'

Lab Sample ID: 885-9078-8

Date Collected: 07/23/24 11:18

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/05/24 01:48
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 07:48
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 12:45
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 20:05

Client Sample ID: BS24-09 @ .5'

Lab Sample ID: 885-9078-9

Date Collected: 07/23/24 11:29

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8015M/D		1	9729	RA	EET ALB	08/05/24 02:11
Total/NA	Prep	5030C			9626	JP	EET ALB	08/02/24 09:38
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/06/24 08:11
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 12:58
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 20:18

Client Sample ID: BS24-10 @ .5'

Lab Sample ID: 885-9078-10

Date Collected: 07/23/24 11:47

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 16:54
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 16:54
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 13:24

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Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: BS24-10 @ .5'

Lab Sample ID: 885-9078-10

Date Collected: 07/23/24 11:47

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 20:31

Client Sample ID: BS24-11 @ .5'

Lab Sample ID: 885-9078-11

Date Collected: 07/23/24 11:59

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 17:18
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 17:18
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 13:36
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 20:44

Client Sample ID: BS24-12 @ .5'

Lab Sample ID: 885-9078-12

Date Collected: 07/23/24 12:09

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 18:05
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 18:05
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 14:02
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 21:22

Client Sample ID: BS24-13 @ 0.5'

Lab Sample ID: 885-9078-13

Date Collected: 07/23/24 12:21

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 18:29
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 18:29
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 14:16
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 22:02

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: WS-01 @ 0-2'

Lab Sample ID: 885-9078-14

Date Collected: 07/23/24 12:34

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 18:52
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 18:52
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 14:29
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 22:14

Client Sample ID: WS-02 @ 0-2'

Lab Sample ID: 885-9078-15

Date Collected: 07/23/24 12:39

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 19:16
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 19:16
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 14:42
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 22:27

Client Sample ID: WS-03 @ 0-.5'

Lab Sample ID: 885-9078-16

Date Collected: 07/23/24 12:47

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 19:40
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 19:40
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 14:55
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 22:40

Client Sample ID: WS-04 @ 0-1'

Lab Sample ID: 885-9078-17

Date Collected: 07/23/24 12:58

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8015M/D		1	9779	JP	EET ALB	08/05/24 20:03

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

Client Sample ID: WS-04 @ 0-1'

Lab Sample ID: 885-9078-17

Date Collected: 07/23/24 12:58

Matrix: Solid

Date Received: 08/02/24 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			9643	AT	EET ALB	08/02/24 10:33
Total/NA	Analysis	8021B		1	9780	JP	EET ALB	08/05/24 20:03
Total/NA	Prep	SHAKE			9705	KR	EET ALB	08/05/24 08:32
Total/NA	Analysis	8015M/D		1	9733	KR	EET ALB	08/05/24 15:09
Total/NA	Prep	300_Prep			9714	EH	EET ALB	08/05/24 09:25
Total/NA	Analysis	300.0		20	9776	EH	EET ALB	08/05/24 22:53

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

- 1
- 2
- 3
- 4
- 5
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- 10
- 11

Accreditation/Certification Summary

Client: Vertex
Project/Site: Hackberry 18 Federal 2

Job ID: 885-9078-1

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	02-26-25
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 (GRO)-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	02-25-25

Released to Imaging: 11/13/2025 8:39:02 AM

WO: 2185142

Webbs NM 88240

Phone #: 875-748-1838

email or Fax#: Dale.Woodall@crn.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type)

☒ Standard ☒ Rush 48 hour

Project Name:

Hackberry 18 federal 2

Project #:

23E-03903

Project Manager: Chad Hensley

Chensley@vertexresource.com

Rplogger@vertexresource.com

Sampler: Riley Plogger

On Ice: ☒ Yes ☐ No

of Coolers: 2 ~~1-134~~ Boo Boo

Cooler Temp (including CF): $4.1 - 1.3 = 2.8$

Container	6.3-1.3 = 5.00C Preservative	HEAL No.
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Date:	Time:	Relinquished by:
8-1-24	07:00	

Date:	Time:	Relinquished by:
8.1.74	1900	C. Williams

Received by:	Via:	Date	Time
C. M. ...		8/1/94	07:00

Received by:	Via:	Date	Time
SCM COURIER		8/10/04	0730

Remarks: WO# 21185142
Dale Woodall

2 of 2

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.

SCM 8/2/24



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Received by OCD: 9/29/2025 1:12:38 PM

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Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-9078-1

Login Number: 9078

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kent Stallings
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 3/26/2025 12:53:45 PM

JOB DESCRIPTION

Hackberry 18 Federal #002 Battery

JOB NUMBER

885-21619-1

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
3/26/2025 12:53:45 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Laboratory Job ID: 885-21619-1

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Definitions/Glossary

Client: Vertex

Job ID: 885-21619-1

Project/Site: Hackberry 18 Federal #002 Battery

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: Hackberry 18 Federal #002 Battery

Job ID: 885-21619-1

Job ID: 885-21619-1**Eurofins Albuquerque****Job Narrative
885-21619-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 3/18/2025 7:30 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 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

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

Job ID: 885-21619-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES24-11 1-4.1'

Lab Sample ID: 885-21619-1

Date Collected: 03/14/25 08:20

Matrix: Solid

Date Received: 03/18/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		03/20/25 11:45	03/21/25 19:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			03/20/25 11:45	03/21/25 19:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		03/20/25 11:45	03/21/25 19:06	1
Ethylbenzene	ND		0.048	mg/Kg		03/20/25 11:45	03/21/25 19:06	1
Toluene	ND		0.048	mg/Kg		03/20/25 11:45	03/21/25 19:06	1
Xylenes, Total	ND		0.097	mg/Kg		03/20/25 11:45	03/21/25 19:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		48 - 145			03/20/25 11:45	03/21/25 19:06	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]	ND		9.3	mg/Kg		03/20/25 14:12	03/20/25 19:24	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		03/20/25 14:12	03/20/25 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			03/20/25 14:12	03/20/25 19:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		60	mg/Kg		03/20/25 09:44	03/20/25 12:58	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-21619-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-22810/1-A

Matrix: Solid

Analysis Batch: 22868

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22810

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		03/20/25 11:45	03/21/25 12:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		35 - 166			03/20/25 11:45	03/21/25 12:24	1

Lab Sample ID: LCS 885-22810/2-A

Matrix: Solid

Analysis Batch: 22868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	27.6		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	210		35 - 166				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-22810/1-A

Matrix: Solid

Analysis Batch: 22869

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22810

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		03/20/25 11:45	03/21/25 12:24	1
Ethylbenzene	ND		0.050	mg/Kg		03/20/25 11:45	03/21/25 12:24	1
Toluene	ND		0.050	mg/Kg		03/20/25 11:45	03/21/25 12:24	1
Xylenes, Total	ND		0.10	mg/Kg		03/20/25 11:45	03/21/25 12:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		48 - 145			03/20/25 11:45	03/21/25 12:24	1

Lab Sample ID: LCS 885-22810/4-A

Matrix: Solid

Analysis Batch: 22869

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.09		mg/Kg		109	70 - 130
Ethylbenzene	1.00	1.09		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	2.00	2.30		mg/Kg		115	70 - 130
o-Xylene	1.00	1.12		mg/Kg		112	70 - 130
Toluene	1.00	1.10		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	113		48 - 145				

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-21619-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-22829/1-A

Matrix: Solid

Analysis Batch: 22780

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22829

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		03/20/25 14:12	03/20/25 16:22	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		03/20/25 14:12	03/20/25 16:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			03/20/25 14:12	03/20/25 16:22	1

Lab Sample ID: LCS 885-22829/2-A

Matrix: Solid

Analysis Batch: 22780

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22829

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	61.3		mg/Kg		123	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	99		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-22791/1-A

Matrix: Solid

Analysis Batch: 22795

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 22791

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		03/20/25 09:44	03/20/25 10:59	1
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Chloride	96		90 - 110					

Lab Sample ID: LCS 885-22791/2-A

Matrix: Solid

Analysis Batch: 22795

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 22791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.4		mg/Kg		96	90 - 110

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-21619-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA

Prep Batch: 22810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21619-1	WES24-11 1-4.1'	Total/NA	Solid	5030C	
MB 885-22810/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-22810/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-22810/4-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 22868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21619-1	WES24-11 1-4.1'	Total/NA	Solid	8015M/D	22810
MB 885-22810/1-A	Method Blank	Total/NA	Solid	8015M/D	22810
LCS 885-22810/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22810

Analysis Batch: 22869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21619-1	WES24-11 1-4.1'	Total/NA	Solid	8021B	22810
MB 885-22810/1-A	Method Blank	Total/NA	Solid	8021B	22810
LCS 885-22810/4-A	Lab Control Sample	Total/NA	Solid	8021B	22810

GC Semi VOA

Analysis Batch: 22780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21619-1	WES24-11 1-4.1'	Total/NA	Solid	8015M/D	22829
MB 885-22829/1-A	Method Blank	Total/NA	Solid	8015M/D	22829
LCS 885-22829/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22829

Prep Batch: 22829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21619-1	WES24-11 1-4.1'	Total/NA	Solid	SHAKE	
MB 885-22829/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-22829/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 22791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21619-1	WES24-11 1-4.1'	Total/NA	Solid	300_Prep	
MB 885-22791/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-22791/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 22795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21619-1	WES24-11 1-4.1'	Total/NA	Solid	300.0	22791
MB 885-22791/1-A	Method Blank	Total/NA	Solid	300.0	22791
LCS 885-22791/2-A	Lab Control Sample	Total/NA	Solid	300.0	22791

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-21619-1

Client Sample ID: WES24-11 1-4.1'

Lab Sample ID: 885-21619-1

Date Collected: 03/14/25 08:20

Matrix: Solid

Date Received: 03/18/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			22810	AT	EET ALB	03/20/25 11:45
Total/NA	Analysis	8015M/D		1	22868	AT	EET ALB	03/21/25 19:06
Total/NA	Prep	5030C			22810	AT	EET ALB	03/20/25 11:45
Total/NA	Analysis	8021B		1	22869	AT	EET ALB	03/21/25 19:06
Total/NA	Prep	SHAKE			22829	MI	EET ALB	03/20/25 14:12
Total/NA	Analysis	8015M/D		1	22780	MI	EET ALB	03/20/25 19:24
Total/NA	Prep	300_Prep			22791	DL	EET ALB	03/20/25 09:44
Total/NA	Analysis	300.0		20	22795	DL	EET ALB	03/20/25 12:58

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-21619-1

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 (GRO)-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

Chain-of-Custody Record

Client: **Vertex**

(direct bill to Devon, work order 21185142)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Category	Count
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-21619-1

Login Number: 21619

List Source: Eurofins Albuquerque

List Number: 1

Creator: Alderette, Joseph

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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	N/A	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Report to:
Chad Hensley



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name: Hackberry 18 Federal #002

Work Order: E410229

Job Number: 01058-0007

Received: 10/21/2024

Revision: 3

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/24/24

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: 10/24/24

Chad Hensley
3101 Boyd Drive
Carlsbad, NM 88220



Project Name: Hackberry 18 Federal #002
Workorder: E410229
Date Received: 10/21/2024 7:15:00AM

Chad Hensley,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/21/2024 7:15:00AM, under the Project Name: Hackberry 18 Federal #002.

The analytical test results summarized in this report with the Project Name: Hackberry 18 Federal #002 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
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Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

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mgonzaless@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Chad Hensley	Reported: 10/24/24 10:18
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BES24-14 4.1'	E410229-01A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
BES24-15 4.1'	E410229-02A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
BES24-16 4.1'	E410229-03A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
BES24-17 4.1'	E410229-04A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-05 1-4.1'	E410229-05A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-06 1-4.1'	E410229-06A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-07 1-4.1'	E410229-07A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-08 1-4.1'	E410229-08A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-09 1-4.1'	E410229-09A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-10 1-4.1'	E410229-10A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-11 1-4.1'	E410229-11A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.
WES24-12 1-4.1'	E410229-12A	Soil	10/17/24	10/21/24	Glass Jar, 2 oz.



Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Chad Hensley	Reported: 10/24/2024 10:18:49AM
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BES24-14 4.1'

E410229-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2443020	
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.4 %	70-130	10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2443020	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.7 %	70-130	10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2443011	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>		96.3 %	50-200	10/21/24	10/22/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2443018	
Chloride	298	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

BES24-15 4.1'

E410229-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		91.3 %	70-130	10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.2 %	70-130	10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
		97.1 %	50-200	10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	213	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

BES24-16 4.1'

E410229-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.1 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	94.7 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	670	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

BES24-17 4.1'

E410229-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.5 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	133	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

WES24-05 1-4.1'

E410229-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.4 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	96.6 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	151	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

WES24-06 1-4.1'

E410229-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.6 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.7 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	96.1 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	245	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

WES24-07 1-4.1'

E410229-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.0 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.8 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	102	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

WES24-08 1-4.1'

E410229-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.5 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	98.8 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	128	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

WES24-09 1-4.1'

E410229-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.5 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	98.7 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	112	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Chad Hensley

Reported:
10/24/2024 10:18:49AM

WES24-10 1-4.1'

E410229-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.2 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: CG		Batch: 2443020
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.0 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2443011
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2443018
Chloride	293	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Chad Hensley	Reported: 10/24/2024 10:18:49AM
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WES24-11 1-4.1'
E410229-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2443020	
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
Surrogate: 4-Bromochlorobenzene-PID	92.4 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2443020	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.2 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2443011	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
Surrogate: n-Nonane	98.9 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2443018	
Chloride	1090	20.0	1	10/21/24	10/21/24	



Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Chad Hensley	Reported: 10/24/2024 10:18:49AM
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WES24-12 1-4.1'
E410229-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2443020	
Benzene	ND	0.0250	1	10/21/24	10/22/24	
Ethylbenzene	ND	0.0250	1	10/21/24	10/22/24	
Toluene	ND	0.0250	1	10/21/24	10/22/24	
o-Xylene	ND	0.0250	1	10/21/24	10/22/24	
p,m-Xylene	ND	0.0500	1	10/21/24	10/22/24	
Total Xylenes	ND	0.0250	1	10/21/24	10/22/24	
Surrogate: 4-Bromochlorobenzene-PID	92.0 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2443020	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/21/24	10/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.4 %	70-130		10/21/24	10/22/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2443011	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/21/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/21/24	10/22/24	
Surrogate: n-Nonane	98.1 %	50-200		10/21/24	10/22/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2443018	
Chloride	167	20.0	1	10/21/24	10/21/24	



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Chad Hensley	Reported: 10/24/2024 10:18:49AM
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Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2443020-BLK1) Prepared: 10/21/24 Analyzed: 10/22/24

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	7.34		8.00		91.8	70-130			

LCS (2443020-BS1) Prepared: 10/21/24 Analyzed: 10/22/24

Benzene	4.68	0.0250	5.00		93.5	70-130			
Ethylbenzene	4.47	0.0250	5.00		89.3	70-130			
Toluene	4.59	0.0250	5.00		91.8	70-130			
o-Xylene	4.48	0.0250	5.00		89.7	70-130			
p,m-Xylene	9.05	0.0500	10.0		90.5	70-130			
Total Xylenes	13.5	0.0250	15.0		90.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.44		8.00		93.0	70-130			

Matrix Spike (2443020-MS1) Source: E410229-06 Prepared: 10/21/24 Analyzed: 10/22/24

Benzene	4.93	0.0250	5.00	ND	98.7	54-133			
Ethylbenzene	4.75	0.0250	5.00	ND	95.0	61-133			
Toluene	4.85	0.0250	5.00	ND	97.1	61-130			
o-Xylene	4.76	0.0250	5.00	ND	95.3	63-131			
p,m-Xylene	9.64	0.0500	10.0	ND	96.4	63-131			
Total Xylenes	14.4	0.0250	15.0	ND	96.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.42		8.00		92.7	70-130			

Matrix Spike Dup (2443020-MSD1) Source: E410229-06 Prepared: 10/21/24 Analyzed: 10/22/24

Benzene	5.22	0.0250	5.00	ND	104	54-133	5.58	20	
Ethylbenzene	5.01	0.0250	5.00	ND	100	61-133	5.38	20	
Toluene	5.13	0.0250	5.00	ND	103	61-130	5.52	20	
o-Xylene	5.02	0.0250	5.00	ND	100	63-131	5.25	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	5.24	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	5.24	20	
Surrogate: 4-Bromochlorobenzene-PID	7.38		8.00		92.3	70-130			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Chad Hensley	Reported: 10/24/2024 10:18:49AM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2443020-BLK1) Prepared: 10/21/24 Analyzed: 10/22/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.46		8.00		93.3	70-130			

LCS (2443020-BS2) Prepared: 10/21/24 Analyzed: 10/22/24

Gasoline Range Organics (C6-C10)	44.6	20.0	50.0		89.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.60		8.00		95.0	70-130			

Matrix Spike (2443020-MS2) Source: E410229-06 Prepared: 10/21/24 Analyzed: 10/22/24

Gasoline Range Organics (C6-C10)	40.7	20.0	50.0	ND	81.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.4	70-130			

Matrix Spike Dup (2443020-MSD2) Source: E410229-06 Prepared: 10/21/24 Analyzed: 10/22/24

Gasoline Range Organics (C6-C10)	40.8	20.0	50.0	ND	81.5	70-130	0.0811	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.46		8.00		93.3	70-130			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Chad Hensley	Reported: 10/24/2024 10:18:49AM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2443011-BLK1) Prepared: 10/21/24 Analyzed: 10/22/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.6		50.0		93.1	50-200			

LCS (2443011-BS1) Prepared: 10/21/24 Analyzed: 10/22/24

Diesel Range Organics (C10-C28)	260	25.0	250		104	38-132			
Surrogate: n-Nonane	48.1		50.0		96.1	50-200			

Matrix Spike (2443011-MS1) Source: E410229-09 Prepared: 10/21/24 Analyzed: 10/22/24

Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

Matrix Spike Dup (2443011-MSD1) Source: E410229-09 Prepared: 10/21/24 Analyzed: 10/22/24

Diesel Range Organics (C10-C28)	256	25.0	250	ND	102	38-132	1.27	20	
Surrogate: n-Nonane	48.7		50.0		97.5	50-200			



QC Summary Data

Vertex Resource Services Inc.	Project Name:	Hackberry 18 Federal #002	Reported:
3101 Boyd Drive	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Chad Hensley	10/24/2024 10:18:49AM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2443018-BLK1)					Prepared: 10/21/24 Analyzed: 10/21/24				
Chloride	ND	20.0							
LCS (2443018-BS1)					Prepared: 10/21/24 Analyzed: 10/21/24				
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2443018-MS1)					Source: E410229-05		Prepared: 10/21/24 Analyzed: 10/21/24		
Chloride	403	20.0	250	151	101	80-120			
Matrix Spike Dup (2443018-MSD1)					Source: E410229-05		Prepared: 10/21/24 Analyzed: 10/21/24		
Chloride	403	20.0	250	151	101	80-120	0.0315	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.	Project Name:	Hackberry 18 Federal #002	
3101 Boyd Drive	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Chad Hensley	10/24/24 10:18

- 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

Page 1 of 2

Client Information				Invoice Information		Lab Use Only		TAT		State							
Client: VERTEX				Company: Duron		Lab WO# E410229		Job Number 010580007		1D	2D	3D	Std	NM	EO	UT	TX
Project Name: Hickory 18 Federal #002				Address:													
Project Manager: Chad Mensley				City, State, Zip: On FILE													
Address:				Phone:													
City, State, Zip:				Email:													
Phone:				Miscellaneous:													
Email: chensley@vertexresource.com																	
Sample Information							Analysis and Method							EPA Program			
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	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA
0900	10-17-24	Soil	one 4oz	BES24-14 4.1'		1	X	X	X		X						
0910				BES24-15 4.1'		2											
0920				BES24-16 4.1'		3											
0930				BES24-17 4.1'		4											
1000				WES24-05 1-4.1'		5											
1010				WES24-06 1-4.1'		6											
1020				WES24-07 1-4.1'		7											
1030				WES24-08 1-4.1'		8											
1100				WES24-09 1-4.1'		9											
1110				WES24-10 1-4.1'		10											
Additional Instructions: WO: 21185142																	
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: Austin Harris																	
Relinquished by: (Signature) AH		Date	Time	Received by: (Signature) Michelle Gonzales		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 0 but less than 6C on subsequent day. Lab Use Only Received on ice: ☒ N T1 _____ T2 _____ T3 _____ AVG Temp °C 4									
Relinquished by: (Signature) Michelle Gonzales		Date	Time	Received by: (Signature) J.H.		Date	Time										
Relinquished by: (Signature) J.H.		Date	Time	Received by: (Signature) Keith Mann		Date	Time										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA							
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.																	


envirotech

envirotech

Envirotech Analytical Laboratory

Printed: 10/21/2024 8:40:29AM

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:	10/21/24 07:15	Work Order ID:	E410229
Phone:	(575) 748-0176	Date Logged In:	10/18/24 15:57	Logged In By:	Caitlin Mars
Email:	chensley@vertexresources.com	Due Date:	10/25/24 17:00 (4 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

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

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

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kent Stallings
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 8/14/2025 5:23:50 PM

JOB DESCRIPTION

Hackberry 18 Federal #002 Battery

JOB NUMBER

885-30633-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.
Released to Imaging: 10/13/2025 8:59:02 AM



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
8/14/2025 5:23:50 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Laboratory Job ID: 885-30633-1

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Definitions/Glossary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

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: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

Job ID: 885-30633-1

Eurofins Albuquerque

Job Narrative 885-30633-1

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 8/9/2025 7:50 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 1.5°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 following samples required a dilution due to the nature of the sample matrix: BES25-19 2' (885-30633-2), BES25-20 2' (885-30633-3) and BES25-24 4.1' (885-30633-7). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-18 4.1'

Lab Sample ID: 885-30633-1

Date Collected: 08/07/25 12:20

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/11/25 11:48	08/13/25 19:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/13/25 19:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/13/25 19:03	1
Ethylbenzene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 19:03	1
Toluene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 19:03	1
Xylenes, Total	ND		0.10	mg/Kg		08/11/25 11:48	08/13/25 19:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/13/25 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		9.6	mg/Kg		08/11/25 13:52	08/12/25 19:50	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/11/25 13:52	08/12/25 19:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			08/11/25 13:52	08/12/25 19:50	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		60	mg/Kg		08/11/25 14:48	08/11/25 15:34	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-19 2'

Lab Sample ID: 885-30633-2

Date Collected: 08/07/25 12:45

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/11/25 11:48	08/13/25 20:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/11/25 11:48	08/13/25 20:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/13/25 20:08	1
Ethylbenzene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 20:08	1
Toluene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 20:08	1
Xylenes, Total	ND		0.10	mg/Kg		08/11/25 11:48	08/13/25 20:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/11/25 11:48	08/13/25 20:08	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		9.9	mg/Kg		08/11/25 13:52	08/12/25 20:02	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 20:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	153	S1+	62 - 134			08/11/25 13:52	08/12/25 20:02	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94		60	mg/Kg		08/11/25 14:48	08/11/25 16:05	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-20 2'

Lab Sample ID: 885-30633-3

Date Collected: 08/07/25 12:50

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/11/25 11:48	08/13/25 21:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/13/25 21:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/13/25 21:14	1
Ethylbenzene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 21:14	1
Toluene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 21:14	1
Xylenes, Total	ND		0.10	mg/Kg		08/11/25 11:48	08/13/25 21:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/13/25 21:14	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		08/11/25 13:52	08/12/25 20:15	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 20:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	145	S1+	62 - 134			08/11/25 13:52	08/12/25 20:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		60	mg/Kg		08/11/25 14:48	08/11/25 16:15	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-21 2'

Lab Sample ID: 885-30633-4

Date Collected: 08/07/25 12:55

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/11/25 11:48	08/13/25 21:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/13/25 21:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/13/25 21:35	1
Ethylbenzene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 21:35	1
Toluene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 21:35	1
Xylenes, Total	ND		0.099	mg/Kg		08/11/25 11:48	08/13/25 21:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/13/25 21:35	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		9.9	mg/Kg		08/11/25 13:52	08/12/25 20:27	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/11/25 13:52	08/12/25 20:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	123		62 - 134			08/11/25 13:52	08/12/25 20:27	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60	mg/Kg		08/11/25 14:48	08/11/25 16:26	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-22 2'

Lab Sample ID: 885-30633-5

Date Collected: 08/07/25 13:00

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/11/25 11:48	08/13/25 21:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/13/25 21:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/13/25 21:57	1
Ethylbenzene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 21:57	1
Toluene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 21:57	1
Xylenes, Total	ND		0.10	mg/Kg		08/11/25 11:48	08/13/25 21:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/13/25 21:57	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		10	mg/Kg		08/11/25 13:52	08/12/25 20:39	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 20:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			08/11/25 13:52	08/12/25 20:39	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		60	mg/Kg		08/11/25 14:48	08/11/25 16:36	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-23 2'

Lab Sample ID: 885-30633-6

Date Collected: 08/07/25 13:05

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/11/25 11:48	08/13/25 22:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/13/25 22:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/11/25 11:48	08/13/25 22:19	1
Ethylbenzene	ND		0.047	mg/Kg		08/11/25 11:48	08/13/25 22:19	1
Toluene	ND		0.047	mg/Kg		08/11/25 11:48	08/13/25 22:19	1
Xylenes, Total	ND		0.093	mg/Kg		08/11/25 11:48	08/13/25 22:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/13/25 22:19	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]	ND		10	mg/Kg		08/11/25 13:52	08/12/25 20:52	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 20:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	116		62 - 134			08/11/25 13:52	08/12/25 20:52	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		60	mg/Kg		08/11/25 14:48	08/11/25 16:46	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-24 4.1'

Lab Sample ID: 885-30633-7

Date Collected: 08/07/25 13:50

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/11/25 11:48	08/13/25 22:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			08/11/25 11:48	08/13/25 22:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/13/25 22:40	1
Ethylbenzene	ND		0.048	mg/Kg		08/11/25 11:48	08/13/25 22:40	1
Toluene	ND		0.048	mg/Kg		08/11/25 11:48	08/13/25 22:40	1
Xylenes, Total	ND		0.097	mg/Kg		08/11/25 11:48	08/13/25 22:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/13/25 22:40	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		9.8	mg/Kg		08/11/25 13:52	08/12/25 21:04	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/11/25 13:52	08/12/25 21:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	140	S1+	62 - 134			08/11/25 13:52	08/12/25 21:04	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	520		59	mg/Kg		08/11/25 14:48	08/11/25 17:17	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-25 4.1'

Lab Sample ID: 885-30633-8

Date Collected: 08/07/25 13:55

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/11/25 11:48	08/13/25 23:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/13/25 23:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/13/25 23:02	1
Ethylbenzene	ND		0.048	mg/Kg		08/11/25 11:48	08/13/25 23:02	1
Toluene	ND		0.048	mg/Kg		08/11/25 11:48	08/13/25 23:02	1
Xylenes, Total	ND		0.096	mg/Kg		08/11/25 11:48	08/13/25 23:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/13/25 23:02	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		08/11/25 13:52	08/12/25 21:16	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/11/25 13:52	08/12/25 21:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	130		62 - 134			08/11/25 13:52	08/12/25 21:16	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1700		60	mg/Kg		08/11/25 14:48	08/11/25 17:28	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-26 4.1'

Lab Sample ID: 885-30633-9

Date Collected: 08/07/25 14:00

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/11/25 11:48	08/13/25 23:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/11/25 11:48	08/13/25 23:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/13/25 23:24	1
Ethylbenzene	ND		0.047	mg/Kg		08/11/25 11:48	08/13/25 23:24	1
Toluene	ND		0.047	mg/Kg		08/11/25 11:48	08/13/25 23:24	1
Xylenes, Total	ND		0.094	mg/Kg		08/11/25 11:48	08/13/25 23:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/11/25 11:48	08/13/25 23:24	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		9.5	mg/Kg		08/11/25 13:52	08/12/25 14:40	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/11/25 13:52	08/12/25 14:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			08/11/25 13:52	08/12/25 14:40	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	720		59	mg/Kg		08/11/25 14:48	08/11/25 17:38	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-27 4.1'

Lab Sample ID: 885-30633-10

Date Collected: 08/07/25 14:05

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/11/25 11:48	08/13/25 23:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/13/25 23:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/13/25 23:45	1
Ethylbenzene	ND		0.047	mg/Kg		08/11/25 11:48	08/13/25 23:45	1
Toluene	ND		0.047	mg/Kg		08/11/25 11:48	08/13/25 23:45	1
Xylenes, Total	ND		0.095	mg/Kg		08/11/25 11:48	08/13/25 23:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/13/25 23:45	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]	ND		9.9	mg/Kg		08/11/25 13:52	08/12/25 15:04	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/11/25 13:52	08/12/25 15:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	111		62 - 134			08/11/25 13:52	08/12/25 15:04	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	440		60	mg/Kg		08/11/25 14:48	08/11/25 17:48	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-28 4.1'

Lab Sample ID: 885-30633-11

Date Collected: 08/07/25 14:10

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/11/25 11:48	08/14/25 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/11/25 11:48	08/14/25 00:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/14/25 00:29	1
Ethylbenzene	ND		0.050	mg/Kg		08/11/25 11:48	08/14/25 00:29	1
Toluene	ND		0.050	mg/Kg		08/11/25 11:48	08/14/25 00:29	1
Xylenes, Total	ND		0.10	mg/Kg		08/11/25 11:48	08/14/25 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/11/25 11:48	08/14/25 00:29	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		10	mg/Kg		08/11/25 13:52	08/12/25 15:27	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 15:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			08/11/25 13:52	08/12/25 15:27	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	930		60	mg/Kg		08/11/25 14:48	08/11/25 17:59	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-29 4.1'

Lab Sample ID: 885-30633-12

Date Collected: 08/07/25 14:15

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/11/25 11:48	08/14/25 00:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 150			08/11/25 11:48	08/14/25 00:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/14/25 00:51	1
Ethylbenzene	ND		0.049	mg/Kg		08/11/25 11:48	08/14/25 00:51	1
Toluene	ND		0.049	mg/Kg		08/11/25 11:48	08/14/25 00:51	1
Xylenes, Total	ND		0.097	mg/Kg		08/11/25 11:48	08/14/25 00:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 150			08/11/25 11:48	08/14/25 00:51	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		9.9	mg/Kg		08/11/25 13:52	08/12/25 17:49	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 17:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	121		62 - 134			08/11/25 13:52	08/12/25 17:49	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	980		60	mg/Kg		08/11/25 14:48	08/11/25 18:09	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-13 0-4.1'

Lab Sample ID: 885-30633-13

Date Collected: 08/07/25 12:25

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/11/25 11:48	08/14/25 01:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			08/11/25 11:48	08/14/25 01:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/14/25 01:13	1
Ethylbenzene	ND		0.049	mg/Kg		08/11/25 11:48	08/14/25 01:13	1
Toluene	ND		0.049	mg/Kg		08/11/25 11:48	08/14/25 01:13	1
Xylenes, Total	ND		0.098	mg/Kg		08/11/25 11:48	08/14/25 01:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		15 - 150			08/11/25 11:48	08/14/25 01:13	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		9.6	mg/Kg		08/11/25 13:52	08/12/25 18:12	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/11/25 13:52	08/12/25 18:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	119		62 - 134			08/11/25 13:52	08/12/25 18:12	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		60	mg/Kg		08/11/25 15:31	08/11/25 16:34	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-14 0-4.1'

Lab Sample ID: 885-30633-14

Date Collected: 08/07/25 12:30

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/11/25 11:48	08/14/25 01:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/14/25 01:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/14/25 01:35	1
Ethylbenzene	ND		0.049	mg/Kg		08/11/25 11:48	08/14/25 01:35	1
Toluene	ND		0.049	mg/Kg		08/11/25 11:48	08/14/25 01:35	1
Xylenes, Total	ND		0.098	mg/Kg		08/11/25 11:48	08/14/25 01:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/14/25 01:35	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		10	mg/Kg		08/11/25 13:52	08/12/25 15:40	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 15:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	118		62 - 134			08/11/25 13:52	08/12/25 15:40	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		60	mg/Kg		08/11/25 15:31	08/11/25 16:48	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-15 0-2'

Lab Sample ID: 885-30633-15

Date Collected: 08/07/25 12:35

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/11/25 11:48	08/14/25 01:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/14/25 01:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/14/25 01:56	1
Ethylbenzene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 01:56	1
Toluene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 01:56	1
Xylenes, Total	ND		0.095	mg/Kg		08/11/25 11:48	08/14/25 01:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/14/25 01:56	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		9.7	mg/Kg		08/11/25 13:52	08/12/25 15:51	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/11/25 13:52	08/12/25 15:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			08/11/25 13:52	08/12/25 15:51	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76		60	mg/Kg		08/11/25 15:31	08/12/25 16:38	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-16 0-2'

Lab Sample ID: 885-30633-16

Date Collected: 08/07/25 12:40

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/11/25 11:48	08/14/25 02:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/14/25 02:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/14/25 02:18	1
Ethylbenzene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 02:18	1
Toluene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 02:18	1
Xylenes, Total	ND		0.096	mg/Kg		08/11/25 11:48	08/14/25 02:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/14/25 02:18	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		9.9	mg/Kg		08/11/25 13:52	08/12/25 16:02	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 16:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	133		62 - 134			08/11/25 13:52	08/12/25 16:02	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73		60	mg/Kg		08/11/25 15:31	08/11/25 17:15	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-17 0-4.1'

Lab Sample ID: 885-30633-17

Date Collected: 08/07/25 13:15

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/11/25 11:48	08/14/25 02:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/14/25 02:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/14/25 02:40	1
Ethylbenzene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 02:40	1
Toluene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 02:40	1
Xylenes, Total	ND		0.097	mg/Kg		08/11/25 11:48	08/14/25 02:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/14/25 02:40	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		9.8	mg/Kg		08/11/25 13:52	08/12/25 16:13	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/11/25 13:52	08/12/25 16:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			08/11/25 13:52	08/12/25 16:13	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		60	mg/Kg		08/11/25 15:31	08/11/25 17:29	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-18 0-4.1'

Lab Sample ID: 885-30633-18

Date Collected: 08/07/25 13:20

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/11/25 11:48	08/14/25 03:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/11/25 11:48	08/14/25 03:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/11/25 11:48	08/14/25 03:02	1
Ethylbenzene	ND		0.047	mg/Kg		08/11/25 11:48	08/14/25 03:02	1
Toluene	ND		0.047	mg/Kg		08/11/25 11:48	08/14/25 03:02	1
Xylenes, Total	ND		0.093	mg/Kg		08/11/25 11:48	08/14/25 03:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/14/25 03:02	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		10	mg/Kg		08/11/25 13:52	08/12/25 16:24	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 16:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	68		62 - 134			08/11/25 13:52	08/12/25 16:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		60	mg/Kg		08/11/25 15:31	08/11/25 17:42	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-19 0-4.1'

Lab Sample ID: 885-30633-19

Date Collected: 08/07/25 13:25

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/11/25 11:48	08/14/25 03:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			08/11/25 11:48	08/14/25 03:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/11/25 11:48	08/14/25 03:24	1
Ethylbenzene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 03:24	1
Toluene	ND		0.048	mg/Kg		08/11/25 11:48	08/14/25 03:24	1
Xylenes, Total	ND		0.097	mg/Kg		08/11/25 11:48	08/14/25 03:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/11/25 11:48	08/14/25 03:24	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		10	mg/Kg		08/11/25 13:52	08/12/25 16:35	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 16:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	83		62 - 134			08/11/25 13:52	08/12/25 16:35	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		60	mg/Kg		08/12/25 11:13	08/12/25 15:16	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-20 0-4.1'

Lab Sample ID: 885-30633-20

Date Collected: 08/07/25 13:30

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/11/25 11:48	08/14/25 03:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/14/25 03:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/11/25 11:48	08/14/25 03:45	1
Ethylbenzene	ND		0.047	mg/Kg		08/11/25 11:48	08/14/25 03:45	1
Toluene	ND		0.047	mg/Kg		08/11/25 11:48	08/14/25 03:45	1
Xylenes, Total	ND		0.094	mg/Kg		08/11/25 11:48	08/14/25 03:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/11/25 11:48	08/14/25 03:45	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]	ND		10	mg/Kg		08/11/25 13:52	08/12/25 16:46	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 16:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	120		62 - 134			08/11/25 13:52	08/12/25 16:46	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		60	mg/Kg		08/12/25 11:13	08/12/25 15:30	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-21 0-4.1'

Lab Sample ID: 885-30633-21

Date Collected: 08/07/25 13:35

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/12/25 10:30	08/13/25 15:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/12/25 10:30	08/13/25 15:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/12/25 10:30	08/13/25 15:03	1
Ethylbenzene	ND		0.050	mg/Kg		08/12/25 10:30	08/13/25 15:03	1
Toluene	ND		0.050	mg/Kg		08/12/25 10:30	08/13/25 15:03	1
Xylenes, Total	ND		0.10	mg/Kg		08/12/25 10:30	08/13/25 15:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/12/25 10:30	08/13/25 15:03	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		10	mg/Kg		08/12/25 12:26	08/13/25 13:43	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/25 12:26	08/13/25 13:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			08/12/25 12:26	08/13/25 13:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		60	mg/Kg		08/13/25 09:16	08/13/25 11:50	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-22 0-4.1'

Lab Sample ID: 885-30633-22

Date Collected: 08/07/25 13:40

Matrix: Solid

Date Received: 08/09/25 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/12/25 10:30	08/13/25 15:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/12/25 10:30	08/13/25 15:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/12/25 10:30	08/13/25 15:24	1
Ethylbenzene	ND		0.050	mg/Kg		08/12/25 10:30	08/13/25 15:24	1
Toluene	ND		0.050	mg/Kg		08/12/25 10:30	08/13/25 15:24	1
Xylenes, Total	ND		0.10	mg/Kg		08/12/25 10:30	08/13/25 15:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/12/25 10:30	08/13/25 15:24	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		9.9	mg/Kg		08/12/25 12:26	08/13/25 14:07	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/12/25 12:26	08/13/25 14:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			08/12/25 12:26	08/13/25 14:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		60	mg/Kg		08/13/25 09:16	08/13/25 12:19	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-31978/1-A

Matrix: Solid

Analysis Batch: 32258

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31978

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/11/25 11:48	08/13/25 18:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			08/11/25 11:48	08/13/25 18:41	1

Lab Sample ID: LCS 885-31978/2-A

Matrix: Solid

Analysis Batch: 32258

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31978

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	21.2		mg/Kg		85	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	207		15 - 150				

Lab Sample ID: 885-30633-1 MS

Matrix: Solid

Analysis Batch: 32258

Client Sample ID: BES25-18 4.1'

Prep Type: Total/NA

Prep Batch: 31978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		25.0	22.2		mg/Kg		89	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	211		15 - 150						

Lab Sample ID: 885-30633-1 MSD

Matrix: Solid

Analysis Batch: 32258

Client Sample ID: BES25-18 4.1'

Prep Type: Total/NA

Prep Batch: 31978

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		24.9	22.3		mg/Kg		90	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	210		15 - 150								

Lab Sample ID: MB 885-32094/1-A

Matrix: Solid

Analysis Batch: 32249

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32094

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/12/25 10:30	08/13/25 14:19	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-32094/1-A

Matrix: Solid

Analysis Batch: 32249

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32094

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
4-Bromofluorobenzene (Surr)	101		15 - 150	08/12/25 10:30	08/13/25 14:19	1				

Lab Sample ID: LCS 885-32094/2-A

Matrix: Solid

Analysis Batch: 32249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32094

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			25.0	22.2		mg/Kg		89	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits								
4-Bromofluorobenzene (Surr)	214		15 - 150								

Lab Sample ID: 885-30633-21 MS

Matrix: Solid

Analysis Batch: 32249

Client Sample ID: WES25-21 0-4.1'

Prep Type: Total/NA

Prep Batch: 32094

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	ND		24.9	23.1		mg/Kg		93	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
4-Bromofluorobenzene (Surr)	223		15 - 150								

Lab Sample ID: 885-30633-21 MSD

Matrix: Solid

Analysis Batch: 32249

Client Sample ID: WES25-21 0-4.1'

Prep Type: Total/NA

Prep Batch: 32094

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		24.9	22.1		mg/Kg		89	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	214		15 - 150								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-31978/1-A

Matrix: Solid

Analysis Batch: 32257

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31978

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/11/25 11:48	08/13/25 18:41	1
Ethylbenzene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 18:41	1
Toluene	ND		0.050	mg/Kg		08/11/25 11:48	08/13/25 18:41	1
Xylenes, Total	ND		0.10	mg/Kg		08/11/25 11:48	08/13/25 18:41	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-31978/1-A

Matrix: Solid

Analysis Batch: 32257

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31978

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac		
4-Bromofluorobenzene (Surr)	97		15 - 150	08/11/25 11:48	08/13/25 18:41	1			

Lab Sample ID: LCS 885-31978/3-A

Matrix: Solid

Analysis Batch: 32257

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31978

	Spike	LCS	LCS						%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	1.00	1.03		mg/Kg		103	70 - 130		
Ethylbenzene	1.00	1.03		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene	2.00	2.05		mg/Kg		103	70 - 130		
o-Xylene	1.00	1.03		mg/Kg		103	70 - 130		
Toluene	1.00	1.01		mg/Kg		101	70 - 130		

	LCS	LCS		
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	99		15 - 150	

Lab Sample ID: 885-30633-2 MS

Matrix: Solid

Analysis Batch: 32257

Client Sample ID: BES25-19 2'

Prep Type: Total/NA

Prep Batch: 31978

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ND		0.994	1.05		mg/Kg		106	70 - 130
Ethylbenzene	ND		0.994	1.05		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	ND		1.99	2.11		mg/Kg		106	70 - 130
o-Xylene	ND		0.994	1.06		mg/Kg		106	70 - 130
Toluene	ND		0.994	1.04		mg/Kg		104	70 - 130

	MS	MS		
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	98		15 - 150	

Lab Sample ID: 885-30633-2 MSD

Matrix: Solid

Analysis Batch: 32257

Client Sample ID: BES25-19 2'

Prep Type: Total/NA

Prep Batch: 31978

	Sample	Sample	Spike	MSD	MSD				%Rec	RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.998	1.10		mg/Kg		110	70 - 130	4	20
Ethylbenzene	ND		0.998	1.09		mg/Kg		109	70 - 130	4	20
m-Xylene & p-Xylene	ND		2.00	2.19		mg/Kg		110	70 - 130	3	20
o-Xylene	ND		0.998	1.09		mg/Kg		109	70 - 130	3	20
Toluene	ND		0.998	1.07		mg/Kg		107	70 - 130	3	20

	MSD	MSD		
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	97		15 - 150	

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QC Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-32094/1-A

Matrix: Solid

Analysis Batch: 32256

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32094

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/12/25 10:30	08/13/25 14:19	1
Ethylbenzene	ND		0.050	mg/Kg		08/12/25 10:30	08/13/25 14:19	1
Toluene	ND		0.050	mg/Kg		08/12/25 10:30	08/13/25 14:19	1
Xylenes, Total	ND		0.10	mg/Kg		08/12/25 10:30	08/13/25 14:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150	08/12/25 10:30	08/13/25 14:19	1

Lab Sample ID: LCS 885-32094/3-A

Matrix: Solid

Analysis Batch: 32256

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.990		mg/Kg		99	70 - 130
Ethylbenzene	1.00	0.981		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	2.00	1.95		mg/Kg		98	70 - 130
o-Xylene	1.00	0.969		mg/Kg		97	70 - 130
Toluene	1.00	0.973		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		15 - 150

Lab Sample ID: 885-30633-22 MS

Matrix: Solid

Analysis Batch: 32256

Client Sample ID: WES25-22 0-4.1'

Prep Type: Total/NA

Prep Batch: 32094

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.994	0.971		mg/Kg		98	70 - 130
Ethylbenzene	ND		0.994	0.982		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	ND		1.99	1.96		mg/Kg		99	70 - 130
o-Xylene	ND		0.994	0.978		mg/Kg		98	70 - 130
Toluene	ND		0.994	0.969		mg/Kg		97	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		15 - 150

Lab Sample ID: 885-30633-22 MSD

Matrix: Solid

Analysis Batch: 32256

Client Sample ID: WES25-22 0-4.1'

Prep Type: Total/NA

Prep Batch: 32094

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.995	1.09		mg/Kg		110	70 - 130	12	20
Ethylbenzene	ND		0.995	1.09		mg/Kg		110	70 - 130	10	20
m-Xylene & p-Xylene	ND		1.99	2.20		mg/Kg		111	70 - 130	12	20
o-Xylene	ND		0.995	1.08		mg/Kg		109	70 - 130	10	20
Toluene	ND		0.995	1.08		mg/Kg		109	70 - 130	11	20

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QC Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: 885-30633-22 MSD

Matrix: Solid

Analysis Batch: 32256

Client Sample ID: WES25-22 0-4.1'

Prep Type: Total/NA

Prep Batch: 32094

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		15 - 150

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

Lab Sample ID: MB 885-32008/1-A

Matrix: Solid

Analysis Batch: 32066

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32008

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/11/25 13:52	08/12/25 14:56	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/11/25 13:52	08/12/25 14:56	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	115		62 - 134			08/11/25 13:52	08/12/25 14:56	1

Lab Sample ID: LCS 885-32008/2-A

Matrix: Solid

Analysis Batch: 32066

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	53.5		mg/Kg		107	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	117		62 - 134				

Lab Sample ID: 885-30633-20 MS

Matrix: Solid

Analysis Batch: 32065

Client Sample ID: WES25-20 0-4.1'

Prep Type: Total/NA

Prep Batch: 32008

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		49.7	45.6		mg/Kg		92	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	97		62 - 134						

Lab Sample ID: 885-30633-20 MSD

Matrix: Solid

Analysis Batch: 32065

Client Sample ID: WES25-20 0-4.1'

Prep Type: Total/NA

Prep Batch: 32008

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		49.4	56.6		mg/Kg		115	44 - 136	22	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	121		62 - 134								

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-32115/1-A

Matrix: Solid

Analysis Batch: 32208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32115

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/12/25 12:26	08/13/25 10:35	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/12/25 12:26	08/13/25 10:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	86		62 - 134			08/12/25 12:26	08/13/25 10:35	1

Lab Sample ID: LCS 885-32115/2-A

Matrix: Solid

Analysis Batch: 32208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	44.7		mg/Kg		89	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	84		62 - 134				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-31961/1-A

Matrix: Solid

Analysis Batch: 31965

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31961

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		08/11/25 10:05	08/11/25 11:07	1

Lab Sample ID: LCS 885-31961/2-A

Matrix: Solid

Analysis Batch: 31965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.4		mg/Kg		96	90 - 110

Lab Sample ID: MB 885-31973/1-A

Matrix: Solid

Analysis Batch: 31980

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31973

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		08/11/25 11:14	08/11/25 12:11	1

Lab Sample ID: LCS 885-31973/2-A

Matrix: Solid

Analysis Batch: 31980

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	15.2		mg/Kg		101	90 - 110

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QC Sample Results

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-32104/1-A

Matrix: Solid

Analysis Batch: 32102

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32104

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		08/12/25 11:13	08/12/25 11:48	1

Lab Sample ID: LCS 885-32104/2-A

Matrix: Solid

Analysis Batch: 32102

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32104

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.6		mg/Kg		97	90 - 110

Lab Sample ID: MB 885-32198/1-A

Matrix: Solid

Analysis Batch: 32211

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32198

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		08/13/25 09:16	08/13/25 10:40	1

Lab Sample ID: LCS 885-32198/2-A

Matrix: Solid

Analysis Batch: 32211

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.7		mg/Kg		98	90 - 110

Lab Sample ID: 885-30633-21 MS

Matrix: Solid

Analysis Batch: 32211

Client Sample ID: WES25-21 0-4.1'

Prep Type: Total/NA

Prep Batch: 32198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	160		29.8	187	4	mg/Kg		96	50 - 150

Lab Sample ID: 885-30633-21 MSD

Matrix: Solid

Analysis Batch: 32211

Client Sample ID: WES25-21 0-4.1'

Prep Type: Total/NA

Prep Batch: 32198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	160		30.1	192	4	mg/Kg		110	50 - 150	2	20

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA

Prep Batch: 31978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-1	BES25-18 4.1'	Total/NA	Solid	5030C	
885-30633-2	BES25-19 2'	Total/NA	Solid	5030C	
885-30633-3	BES25-20 2'	Total/NA	Solid	5030C	
885-30633-4	BES25-21 2'	Total/NA	Solid	5030C	
885-30633-5	BES25-22 2'	Total/NA	Solid	5030C	
885-30633-6	BES25-23 2'	Total/NA	Solid	5030C	
885-30633-7	BES25-24 4.1'	Total/NA	Solid	5030C	
885-30633-8	BES25-25 4.1'	Total/NA	Solid	5030C	
885-30633-9	BES25-26 4.1'	Total/NA	Solid	5030C	
885-30633-10	BES25-27 4.1'	Total/NA	Solid	5030C	
885-30633-11	BES25-28 4.1'	Total/NA	Solid	5030C	
885-30633-12	BES25-29 4.1'	Total/NA	Solid	5030C	
885-30633-13	WES25-13 0-4.1'	Total/NA	Solid	5030C	
885-30633-14	WES25-14 0-4.1'	Total/NA	Solid	5030C	
885-30633-15	WES25-15 0-2'	Total/NA	Solid	5030C	
885-30633-16	WES25-16 0-2'	Total/NA	Solid	5030C	
885-30633-17	WES25-17 0-4.1'	Total/NA	Solid	5030C	
885-30633-18	WES25-18 0-4.1'	Total/NA	Solid	5030C	
885-30633-19	WES25-19 0-4.1'	Total/NA	Solid	5030C	
885-30633-20	WES25-20 0-4.1'	Total/NA	Solid	5030C	
MB 885-31978/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-31978/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-31978/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-30633-1 MS	BES25-18 4.1'	Total/NA	Solid	5030C	
885-30633-1 MSD	BES25-18 4.1'	Total/NA	Solid	5030C	
885-30633-2 MS	BES25-19 2'	Total/NA	Solid	5030C	
885-30633-2 MSD	BES25-19 2'	Total/NA	Solid	5030C	

Prep Batch: 32094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-21	WES25-21 0-4.1'	Total/NA	Solid	5030C	
885-30633-22	WES25-22 0-4.1'	Total/NA	Solid	5030C	
MB 885-32094/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-32094/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-32094/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-30633-21 MS	WES25-21 0-4.1'	Total/NA	Solid	5030C	
885-30633-21 MSD	WES25-21 0-4.1'	Total/NA	Solid	5030C	
885-30633-22 MS	WES25-22 0-4.1'	Total/NA	Solid	5030C	
885-30633-22 MSD	WES25-22 0-4.1'	Total/NA	Solid	5030C	

Analysis Batch: 32249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-21	WES25-21 0-4.1'	Total/NA	Solid	8015M/D	32094
885-30633-22	WES25-22 0-4.1'	Total/NA	Solid	8015M/D	32094
MB 885-32094/1-A	Method Blank	Total/NA	Solid	8015M/D	32094
LCS 885-32094/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32094
885-30633-21 MS	WES25-21 0-4.1'	Total/NA	Solid	8015M/D	32094
885-30633-21 MSD	WES25-21 0-4.1'	Total/NA	Solid	8015M/D	32094

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA

Analysis Batch: 32256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-21	WES25-21 0-4.1'	Total/NA	Solid	8021B	32094
885-30633-22	WES25-22 0-4.1'	Total/NA	Solid	8021B	32094
MB 885-32094/1-A	Method Blank	Total/NA	Solid	8021B	32094
LCS 885-32094/3-A	Lab Control Sample	Total/NA	Solid	8021B	32094
885-30633-22 MS	WES25-22 0-4.1'	Total/NA	Solid	8021B	32094
885-30633-22 MSD	WES25-22 0-4.1'	Total/NA	Solid	8021B	32094

Analysis Batch: 32257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-1	BES25-18 4.1'	Total/NA	Solid	8021B	31978
885-30633-2	BES25-19 2'	Total/NA	Solid	8021B	31978
885-30633-3	BES25-20 2'	Total/NA	Solid	8021B	31978
885-30633-4	BES25-21 2'	Total/NA	Solid	8021B	31978
885-30633-5	BES25-22 2'	Total/NA	Solid	8021B	31978
885-30633-6	BES25-23 2'	Total/NA	Solid	8021B	31978
885-30633-7	BES25-24 4.1'	Total/NA	Solid	8021B	31978
885-30633-8	BES25-25 4.1'	Total/NA	Solid	8021B	31978
885-30633-9	BES25-26 4.1'	Total/NA	Solid	8021B	31978
885-30633-10	BES25-27 4.1'	Total/NA	Solid	8021B	31978
885-30633-11	BES25-28 4.1'	Total/NA	Solid	8021B	31978
885-30633-12	BES25-29 4.1'	Total/NA	Solid	8021B	31978
885-30633-13	WES25-13 0-4.1'	Total/NA	Solid	8021B	31978
885-30633-14	WES25-14 0-4.1'	Total/NA	Solid	8021B	31978
885-30633-15	WES25-15 0-2'	Total/NA	Solid	8021B	31978
885-30633-16	WES25-16 0-2'	Total/NA	Solid	8021B	31978
885-30633-17	WES25-17 0-4.1'	Total/NA	Solid	8021B	31978
885-30633-18	WES25-18 0-4.1'	Total/NA	Solid	8021B	31978
885-30633-19	WES25-19 0-4.1'	Total/NA	Solid	8021B	31978
885-30633-20	WES25-20 0-4.1'	Total/NA	Solid	8021B	31978
MB 885-31978/1-A	Method Blank	Total/NA	Solid	8021B	31978
LCS 885-31978/3-A	Lab Control Sample	Total/NA	Solid	8021B	31978
885-30633-2 MS	BES25-19 2'	Total/NA	Solid	8021B	31978
885-30633-2 MSD	BES25-19 2'	Total/NA	Solid	8021B	31978

Analysis Batch: 32258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-1	BES25-18 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-2	BES25-19 2'	Total/NA	Solid	8015M/D	31978
885-30633-3	BES25-20 2'	Total/NA	Solid	8015M/D	31978
885-30633-4	BES25-21 2'	Total/NA	Solid	8015M/D	31978
885-30633-5	BES25-22 2'	Total/NA	Solid	8015M/D	31978
885-30633-6	BES25-23 2'	Total/NA	Solid	8015M/D	31978
885-30633-7	BES25-24 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-8	BES25-25 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-9	BES25-26 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-10	BES25-27 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-11	BES25-28 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-12	BES25-29 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-13	WES25-13 0-4.1'	Total/NA	Solid	8015M/D	31978
885-30633-14	WES25-14 0-4.1'	Total/NA	Solid	8015M/D	31978
885-30633-15	WES25-15 0-2'	Total/NA	Solid	8015M/D	31978

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA (Continued)

Analysis Batch: 32258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-16	WES25-16 0-2'	Total/NA	Solid	8015M/D	31978
885-30633-17	WES25-17 0-4.1'	Total/NA	Solid	8015M/D	31978
885-30633-18	WES25-18 0-4.1'	Total/NA	Solid	8015M/D	31978
885-30633-19	WES25-19 0-4.1'	Total/NA	Solid	8015M/D	31978
885-30633-20	WES25-20 0-4.1'	Total/NA	Solid	8015M/D	31978
MB 885-31978/1-A	Method Blank	Total/NA	Solid	8015M/D	31978
LCS 885-31978/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	31978
885-30633-1 MS	BES25-18 4.1'	Total/NA	Solid	8015M/D	31978
885-30633-1 MSD	BES25-18 4.1'	Total/NA	Solid	8015M/D	31978

GC Semi VOA

Prep Batch: 32008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-1	BES25-18 4.1'	Total/NA	Solid	SHAKE	
885-30633-2	BES25-19 2'	Total/NA	Solid	SHAKE	
885-30633-3	BES25-20 2'	Total/NA	Solid	SHAKE	
885-30633-4	BES25-21 2'	Total/NA	Solid	SHAKE	
885-30633-5	BES25-22 2'	Total/NA	Solid	SHAKE	
885-30633-6	BES25-23 2'	Total/NA	Solid	SHAKE	
885-30633-7	BES25-24 4.1'	Total/NA	Solid	SHAKE	
885-30633-8	BES25-25 4.1'	Total/NA	Solid	SHAKE	
885-30633-9	BES25-26 4.1'	Total/NA	Solid	SHAKE	
885-30633-10	BES25-27 4.1'	Total/NA	Solid	SHAKE	
885-30633-11	BES25-28 4.1'	Total/NA	Solid	SHAKE	
885-30633-12	BES25-29 4.1'	Total/NA	Solid	SHAKE	
885-30633-13	WES25-13 0-4.1'	Total/NA	Solid	SHAKE	
885-30633-14	WES25-14 0-4.1'	Total/NA	Solid	SHAKE	
885-30633-15	WES25-15 0-2'	Total/NA	Solid	SHAKE	
885-30633-16	WES25-16 0-2'	Total/NA	Solid	SHAKE	
885-30633-17	WES25-17 0-4.1'	Total/NA	Solid	SHAKE	
885-30633-18	WES25-18 0-4.1'	Total/NA	Solid	SHAKE	
885-30633-19	WES25-19 0-4.1'	Total/NA	Solid	SHAKE	
885-30633-20	WES25-20 0-4.1'	Total/NA	Solid	SHAKE	
MB 885-32008/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-32008/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-30633-20 MS	WES25-20 0-4.1'	Total/NA	Solid	SHAKE	
885-30633-20 MSD	WES25-20 0-4.1'	Total/NA	Solid	SHAKE	

Analysis Batch: 32065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-14	WES25-14 0-4.1'	Total/NA	Solid	8015M/D	32008
885-30633-15	WES25-15 0-2'	Total/NA	Solid	8015M/D	32008
885-30633-16	WES25-16 0-2'	Total/NA	Solid	8015M/D	32008
885-30633-17	WES25-17 0-4.1'	Total/NA	Solid	8015M/D	32008
885-30633-18	WES25-18 0-4.1'	Total/NA	Solid	8015M/D	32008
885-30633-19	WES25-19 0-4.1'	Total/NA	Solid	8015M/D	32008
885-30633-20	WES25-20 0-4.1'	Total/NA	Solid	8015M/D	32008
885-30633-20 MS	WES25-20 0-4.1'	Total/NA	Solid	8015M/D	32008
885-30633-20 MSD	WES25-20 0-4.1'	Total/NA	Solid	8015M/D	32008

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

GC Semi VOA

Analysis Batch: 32066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-1	BES25-18 4.1'	Total/NA	Solid	8015M/D	32008
885-30633-2	BES25-19 2'	Total/NA	Solid	8015M/D	32008
885-30633-3	BES25-20 2'	Total/NA	Solid	8015M/D	32008
885-30633-4	BES25-21 2'	Total/NA	Solid	8015M/D	32008
885-30633-5	BES25-22 2'	Total/NA	Solid	8015M/D	32008
885-30633-6	BES25-23 2'	Total/NA	Solid	8015M/D	32008
885-30633-7	BES25-24 4.1'	Total/NA	Solid	8015M/D	32008
885-30633-8	BES25-25 4.1'	Total/NA	Solid	8015M/D	32008
MB 885-32008/1-A	Method Blank	Total/NA	Solid	8015M/D	32008
LCS 885-32008/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32008

Analysis Batch: 32099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-9	BES25-26 4.1'	Total/NA	Solid	8015M/D	32008
885-30633-10	BES25-27 4.1'	Total/NA	Solid	8015M/D	32008
885-30633-11	BES25-28 4.1'	Total/NA	Solid	8015M/D	32008
885-30633-12	BES25-29 4.1'	Total/NA	Solid	8015M/D	32008
885-30633-13	WES25-13 0-4.1'	Total/NA	Solid	8015M/D	32008

Prep Batch: 32115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-21	WES25-21 0-4.1'	Total/NA	Solid	SHAKE	
885-30633-22	WES25-22 0-4.1'	Total/NA	Solid	SHAKE	
MB 885-32115/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-32115/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 32208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-21	WES25-21 0-4.1'	Total/NA	Solid	8015M/D	32115
885-30633-22	WES25-22 0-4.1'	Total/NA	Solid	8015M/D	32115
MB 885-32115/1-A	Method Blank	Total/NA	Solid	8015M/D	32115
LCS 885-32115/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32115

HPLC/IC

Prep Batch: 31961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-13	WES25-13 0-4.1'	Total/NA	Solid	300_Prep	
885-30633-14	WES25-14 0-4.1'	Total/NA	Solid	300_Prep	
885-30633-15	WES25-15 0-2'	Total/NA	Solid	300_Prep	
885-30633-16	WES25-16 0-2'	Total/NA	Solid	300_Prep	
885-30633-17	WES25-17 0-4.1'	Total/NA	Solid	300_Prep	
885-30633-18	WES25-18 0-4.1'	Total/NA	Solid	300_Prep	
MB 885-31961/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-31961/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 31965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-13	WES25-13 0-4.1'	Total/NA	Solid	300.0	31961
885-30633-14	WES25-14 0-4.1'	Total/NA	Solid	300.0	31961
885-30633-16	WES25-16 0-2'	Total/NA	Solid	300.0	31961

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

HPLC/IC (Continued)

Analysis Batch: 31965 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-17	WES25-17 0-4.1'	Total/NA	Solid	300.0	31961
885-30633-18	WES25-18 0-4.1'	Total/NA	Solid	300.0	31961
MB 885-31961/1-A	Method Blank	Total/NA	Solid	300.0	31961
LCS 885-31961/2-A	Lab Control Sample	Total/NA	Solid	300.0	31961

Prep Batch: 31973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-1	BES25-18 4.1'	Total/NA	Solid	300_Prep	
885-30633-2	BES25-19 2'	Total/NA	Solid	300_Prep	
885-30633-3	BES25-20 2'	Total/NA	Solid	300_Prep	
885-30633-4	BES25-21 2'	Total/NA	Solid	300_Prep	
885-30633-5	BES25-22 2'	Total/NA	Solid	300_Prep	
885-30633-6	BES25-23 2'	Total/NA	Solid	300_Prep	
885-30633-7	BES25-24 4.1'	Total/NA	Solid	300_Prep	
885-30633-8	BES25-25 4.1'	Total/NA	Solid	300_Prep	
885-30633-9	BES25-26 4.1'	Total/NA	Solid	300_Prep	
885-30633-10	BES25-27 4.1'	Total/NA	Solid	300_Prep	
885-30633-11	BES25-28 4.1'	Total/NA	Solid	300_Prep	
885-30633-12	BES25-29 4.1'	Total/NA	Solid	300_Prep	
MB 885-31973/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-31973/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 31980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-1	BES25-18 4.1'	Total/NA	Solid	300.0	31973
885-30633-2	BES25-19 2'	Total/NA	Solid	300.0	31973
885-30633-3	BES25-20 2'	Total/NA	Solid	300.0	31973
885-30633-4	BES25-21 2'	Total/NA	Solid	300.0	31973
885-30633-5	BES25-22 2'	Total/NA	Solid	300.0	31973
885-30633-6	BES25-23 2'	Total/NA	Solid	300.0	31973
885-30633-7	BES25-24 4.1'	Total/NA	Solid	300.0	31973
885-30633-8	BES25-25 4.1'	Total/NA	Solid	300.0	31973
885-30633-9	BES25-26 4.1'	Total/NA	Solid	300.0	31973
885-30633-10	BES25-27 4.1'	Total/NA	Solid	300.0	31973
885-30633-11	BES25-28 4.1'	Total/NA	Solid	300.0	31973
885-30633-12	BES25-29 4.1'	Total/NA	Solid	300.0	31973
MB 885-31973/1-A	Method Blank	Total/NA	Solid	300.0	31973
LCS 885-31973/2-A	Lab Control Sample	Total/NA	Solid	300.0	31973

Analysis Batch: 32102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-15	WES25-15 0-2'	Total/NA	Solid	300.0	31961
885-30633-19	WES25-19 0-4.1'	Total/NA	Solid	300.0	32104
885-30633-20	WES25-20 0-4.1'	Total/NA	Solid	300.0	32104
MB 885-32104/1-A	Method Blank	Total/NA	Solid	300.0	32104
LCS 885-32104/2-A	Lab Control Sample	Total/NA	Solid	300.0	32104

Prep Batch: 32104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-19	WES25-19 0-4.1'	Total/NA	Solid	300_Prep	
885-30633-20	WES25-20 0-4.1'	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

HPLC/IC (Continued)

Prep Batch: 32104 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-32104/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-32104/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 32198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-21	WES25-21 0-4.1'	Total/NA	Solid	300_Prep	
885-30633-22	WES25-22 0-4.1'	Total/NA	Solid	300_Prep	
MB 885-32198/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-32198/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-30633-21 MS	WES25-21 0-4.1'	Total/NA	Solid	300_Prep	
885-30633-21 MSD	WES25-21 0-4.1'	Total/NA	Solid	300_Prep	

Analysis Batch: 32211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30633-21	WES25-21 0-4.1'	Total/NA	Solid	300.0	32198
885-30633-22	WES25-22 0-4.1'	Total/NA	Solid	300.0	32198
MB 885-32198/1-A	Method Blank	Total/NA	Solid	300.0	32198
LCS 885-32198/2-A	Lab Control Sample	Total/NA	Solid	300.0	32198
885-30633-21 MS	WES25-21 0-4.1'	Total/NA	Solid	300.0	32198
885-30633-21 MSD	WES25-21 0-4.1'	Total/NA	Solid	300.0	32198

Lab Chronicle

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-18 4.1'

Lab Sample ID: 885-30633-1

Date Collected: 08/07/25 12:20

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 19:03
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 19:03
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 19:50
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 15:34

Client Sample ID: BES25-19 2'

Lab Sample ID: 885-30633-2

Date Collected: 08/07/25 12:45

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 20:08
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 20:08
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 20:02
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 16:05

Client Sample ID: BES25-20 2'

Lab Sample ID: 885-30633-3

Date Collected: 08/07/25 12:50

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 21:14
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 21:14
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 20:15
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 16:15

Client Sample ID: BES25-21 2'

Lab Sample ID: 885-30633-4

Date Collected: 08/07/25 12:55

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 21:35

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

Client Sample ID: BES25-21 2'
Date Collected: 08/07/25 12:55
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 21:35
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 20:27
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 16:26

Client Sample ID: BES25-22 2'
Date Collected: 08/07/25 13:00
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 21:57
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 21:57
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 20:39
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 16:36

Client Sample ID: BES25-23 2'
Date Collected: 08/07/25 13:05
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 22:19
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 22:19
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 20:52
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 16:46

Client Sample ID: BES25-24 4.1'
Date Collected: 08/07/25 13:50
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 22:40
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 22:40

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

Client Sample ID: BES25-24 4.1'
Date Collected: 08/07/25 13:50
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 21:04
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 17:17

Client Sample ID: BES25-25 4.1'
Date Collected: 08/07/25 13:55
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 23:02
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 23:02
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32066	EM	EET ALB	08/12/25 21:16
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 17:28

Client Sample ID: BES25-26 4.1'
Date Collected: 08/07/25 14:00
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 23:24
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 23:24
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32099	EM	EET ALB	08/12/25 14:40
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 17:38

Client Sample ID: BES25-27 4.1'
Date Collected: 08/07/25 14:05
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/13/25 23:45
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/13/25 23:45
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32099	EM	EET ALB	08/12/25 15:04

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

Client Sample ID: BES25-27 4.1'
Date Collected: 08/07/25 14:05
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 17:48

Client Sample ID: BES25-28 4.1'
Date Collected: 08/07/25 14:10
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 00:29
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 00:29
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32099	EM	EET ALB	08/12/25 15:27
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 17:59

Client Sample ID: BES25-29 4.1'
Date Collected: 08/07/25 14:15
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 00:51
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 00:51
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32099	EM	EET ALB	08/12/25 17:49
Total/NA	Prep	300_Prep			31973	MA	EET ALB	08/11/25 14:48
Total/NA	Analysis	300.0		20	31980	MA	EET ALB	08/11/25 18:09

Client Sample ID: WES25-13 0-4.1'
Date Collected: 08/07/25 12:25
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 01:13
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 01:13
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32099	EM	EET ALB	08/12/25 18:12
Total/NA	Prep	300_Prep			31961	MA	EET ALB	08/11/25 15:31
Total/NA	Analysis	300.0		20	31965	MA	EET ALB	08/11/25 16:34

Eurofins Albuquerque

Lab Chronicle

Client: Vertex

Job ID: 885-30633-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: WES25-14 0-4.1'

Lab Sample ID: 885-30633-14

Date Collected: 08/07/25 12:30

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 01:35
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 01:35
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32065	EM	EET ALB	08/12/25 15:40
Total/NA	Prep	300_Prep			31961	MA	EET ALB	08/11/25 15:31
Total/NA	Analysis	300.0		20	31965	MA	EET ALB	08/11/25 16:48

Client Sample ID: WES25-15 0-2'

Lab Sample ID: 885-30633-15

Date Collected: 08/07/25 12:35

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 01:56
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 01:56
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32065	EM	EET ALB	08/12/25 15:51
Total/NA	Prep	300_Prep			31961	MA	EET ALB	08/11/25 15:31
Total/NA	Analysis	300.0		20	32102	RC	EET ALB	08/12/25 16:38

Client Sample ID: WES25-16 0-2'

Lab Sample ID: 885-30633-16

Date Collected: 08/07/25 12:40

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 02:18
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 02:18
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32065	EM	EET ALB	08/12/25 16:02
Total/NA	Prep	300_Prep			31961	MA	EET ALB	08/11/25 15:31
Total/NA	Analysis	300.0		20	31965	MA	EET ALB	08/11/25 17:15

Client Sample ID: WES25-17 0-4.1'

Lab Sample ID: 885-30633-17

Date Collected: 08/07/25 13:15

Matrix: Solid

Date Received: 08/09/25 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 02:40

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

Client Sample ID: WES25-17 0-4.1'
Date Collected: 08/07/25 13:15
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 02:40
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32065	EM	EET ALB	08/12/25 16:13
Total/NA	Prep	300_Prep			31961	MA	EET ALB	08/11/25 15:31
Total/NA	Analysis	300.0		20	31965	MA	EET ALB	08/11/25 17:29

Client Sample ID: WES25-18 0-4.1'
Date Collected: 08/07/25 13:20
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 03:02
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 03:02
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32065	EM	EET ALB	08/12/25 16:24
Total/NA	Prep	300_Prep			31961	MA	EET ALB	08/11/25 15:31
Total/NA	Analysis	300.0		20	31965	MA	EET ALB	08/11/25 17:42

Client Sample ID: WES25-19 0-4.1'
Date Collected: 08/07/25 13:25
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 03:24
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 03:24
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32065	EM	EET ALB	08/12/25 16:35
Total/NA	Prep	300_Prep			32104	RC	EET ALB	08/12/25 11:13
Total/NA	Analysis	300.0		20	32102	RC	EET ALB	08/12/25 15:16

Client Sample ID: WES25-20 0-4.1'
Date Collected: 08/07/25 13:30
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8015M/D		1	32258	AT	EET ALB	08/14/25 03:45
Total/NA	Prep	5030C			31978	KLS	EET ALB	08/11/25 11:48
Total/NA	Analysis	8021B		1	32257	AT	EET ALB	08/14/25 03:45

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

Client Sample ID: WES25-20 0-4.1'
Date Collected: 08/07/25 13:30
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			32008	DR	EET ALB	08/11/25 13:52
Total/NA	Analysis	8015M/D		1	32065	EM	EET ALB	08/12/25 16:46
Total/NA	Prep	300_Prep			32104	RC	EET ALB	08/12/25 11:13
Total/NA	Analysis	300.0		20	32102	RC	EET ALB	08/12/25 15:30

Client Sample ID: WES25-21 0-4.1'
Date Collected: 08/07/25 13:35
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32094	KLS	EET ALB	08/12/25 10:30
Total/NA	Analysis	8015M/D		1	32249	AT	EET ALB	08/13/25 15:03
Total/NA	Prep	5030C			32094	KLS	EET ALB	08/12/25 10:30
Total/NA	Analysis	8021B		1	32256	AT	EET ALB	08/13/25 15:03
Total/NA	Prep	SHAKE			32115	JM	EET ALB	08/12/25 12:26
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/13/25 13:43
Total/NA	Prep	300_Prep			32198	RC	EET ALB	08/13/25 09:16
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 11:50

Client Sample ID: WES25-22 0-4.1'
Date Collected: 08/07/25 13:40
Date Received: 08/09/25 07:50

Lab Sample ID: 885-30633-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32094	KLS	EET ALB	08/12/25 10:30
Total/NA	Analysis	8015M/D		1	32249	AT	EET ALB	08/13/25 15:24
Total/NA	Prep	5030C			32094	KLS	EET ALB	08/12/25 10:30
Total/NA	Analysis	8021B		1	32256	AT	EET ALB	08/13/25 15:24
Total/NA	Prep	SHAKE			32115	JM	EET ALB	08/12/25 12:26
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/13/25 14:07
Total/NA	Prep	300_Prep			32198	RC	EET ALB	08/13/25 09:16
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 12:19

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30633-1

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 (GRO)-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

Chain-of-Custody Record

Client: **Vertex**

(direct bill to Devon, work order 21185142)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type)

Turn-Around Time:	
72-hour Rush	
Project Name:	
Hackberry 18 Federal #002 Battery	
Project #:	
23E-03903	
Project Manager:	
Kent Stallings	
kstallings@vertexresource.com	
Sampler:	L. Pullman
On Ice:	☒ Yes ☐ No <i>Chucky</i>
# of Coolers:	1



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4901 Hawkins NE - Albuquerque, NM 87185-3063 coc

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



Analysis Request

email or Fax#:				Project Manager:			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)															
QA/QC Package:				Kent Stallings																											
☐ Standard ☐ Level 4 (Full Validation)				kstallings@vertexresource.com																											
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other _____				Sampler: L. Pullman																											
☐ EDD (Type) _____				On Ice: ☒ Yes ☐ No CHUCKY			# of Coolers: 1			Cooler Temp (Including CF): 1.3+0.2=1.5°C			Container Type and #			Preservative Type			HEAL No.												
Date	Time	Matrix	Sample Name																												
08.07.25	12:20	Soil	BES25-18 4.1'	1, 4oz jar			1	X	X				X																		
08.07.25	12:45	Soil	BES25-19 2'	1, 4oz jar			2	X	X				X																		
08.07.25	12:50	Soil	BES25-20 2'	1, 4oz jar			3	X	X				X																		
08.07.25	12:55	Soil	BES25-21 2'	1, 4oz jar			4	X	X				X																		
08.07.25	13:00	Soil	BES25-22 2'	1, 4oz jar			5	X	X				X																		
08.07.25	13:05	Soil	BES25-23 2'	1, 4oz jar			6	X	X				X																		
08.07.25	13:50	Soil	BES25-24 4.1'	1, 4oz jar			7	X	X				X																		
08.07.25	13:55	Soil	BES25-25 4.1'	1, 4oz jar			8	X	X				X																		
08.07.25	14:00	Soil	BES25-26 4.1'	1, 4oz jar			9	X	X				X																		
08.07.25	14:05	Soil	BES25-27 4.1'	1, 4oz jar			10	X	X				X																		
08.07.25	14:10	Soil	BES25-28 4.1'	1, 4oz jar			11	X	X				X																		
08.07.25	14:15	Soil	BES25-29 4.1'	1, 4oz jar			12	X	X				X																		
Date:	Time:	Relinquished by:			Received by:		Via:		Date		Time		Remarks: ATTN Jim Raley Direct bill to Devon work order 21185142 Jim Raley cc. permian@vertexresource.com, SCarttar@vertexresource.com, kstallings@vertexresource.com, and LPullman@vertexresource.com for Final Report																		
8/8/25	07:00	L. Pullman			M. Stallings				8/8/25		700																				
Date:	Time:	Relinquished by:			Received by:		Via:		Date		Time																				
8/8/25	1900	M. Stallings			SCM		COURIER		8/9/25		0750																				

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**

(direct bill to Devon, work order 21185142)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type)

Turn-Around Time:	72-hour Rush
Project Name:	Hackberry 18 Federal #002 Battery
Project #:	23E-03903
Project Manager:	Kent Stallings kstallings@vertexresource.com



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

Analysis Request

[illegible]

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Remarks: ATTN Jim Raley Direct bill to Devon work order 21185142 Jim Raley cc. permian@vertexresource.com, SCarttar@vertexresource.com, kstallings@vertexresource.com, and LPullman@vertexresource.com for Final Report
8/8/25	07:00	[Signature]	[Signature]		8/8/25	7:00	
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	
8/8/25	19:00	[Signature]	SCM	COURIER	8/9/25	0750	

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: 885-30633-1

Login Number: 30633

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Kent Stallings
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 8/15/2025 3:09:00 PM

JOB DESCRIPTION

Hackberry 18 Federal #002 Battery

JOB NUMBER

885-30756-1

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
8/15/2025 3:09:00 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Laboratory Job ID: 885-30756-1

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Definitions/Glossary

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

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: Hackberry 18 Federal #002 Battery

Job ID: 885-30756-1

Job ID: 885-30756-1

Eurofins Albuquerque

Job Narrative 885-30756-1

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 8/12/2025 7:30 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 0.1°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

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-30 4.1"

Lab Sample ID: 885-30756-1

Date Collected: 08/08/25 08:00

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/13/25 10:32	08/14/25 23:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/14/25 23:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/14/25 23:41	1
Ethylbenzene	ND		0.050	mg/Kg		08/13/25 10:32	08/14/25 23:41	1
Toluene	ND		0.050	mg/Kg		08/13/25 10:32	08/14/25 23:41	1
Xylenes, Total	ND		0.099	mg/Kg		08/13/25 10:32	08/14/25 23:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/13/25 10:32	08/14/25 23:41	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		9.3	mg/Kg		08/13/25 12:18	08/14/25 09:56	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/13/25 12:18	08/14/25 09:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			08/13/25 12:18	08/14/25 09:56	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1500		60	mg/Kg		08/13/25 12:04	08/13/25 16:06	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-31 4.1"

Lab Sample ID: 885-30756-2

Date Collected: 08/08/25 08:05

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/13/25 10:32	08/15/25 00:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		15 - 150			08/13/25 10:32	08/15/25 00:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/15/25 00:46	1
Ethylbenzene	ND		0.050	mg/Kg		08/13/25 10:32	08/15/25 00:46	1
Toluene	ND		0.050	mg/Kg		08/13/25 10:32	08/15/25 00:46	1
Xylenes, Total	ND		0.10	mg/Kg		08/13/25 10:32	08/15/25 00:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/13/25 10:32	08/15/25 00:46	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		08/13/25 12:18	08/14/25 11:06	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/13/25 12:18	08/14/25 11:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			08/13/25 12:18	08/14/25 11:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2000		60	mg/Kg		08/13/25 12:04	08/13/25 16:15	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-32 4.1"

Lab Sample ID: 885-30756-3

Date Collected: 08/08/25 08:10

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 01:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/13/25 10:32	08/15/25 01:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/13/25 10:32	08/15/25 01:52	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 01:52	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 01:52	1
Xylenes, Total	ND		0.098	mg/Kg		08/13/25 10:32	08/15/25 01:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/15/25 01:52	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]	ND		9.3	mg/Kg		08/13/25 12:18	08/14/25 11:30	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		08/13/25 12:18	08/14/25 11:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			08/13/25 12:18	08/14/25 11:30	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		60	mg/Kg		08/13/25 12:04	08/13/25 17:24	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-33 4.1"

Lab Sample ID: 885-30756-4

Date Collected: 08/08/25 08:15

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 02:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/13/25 10:32	08/15/25 02:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/15/25 02:14	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 02:14	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 02:14	1
Xylenes, Total	ND		0.098	mg/Kg		08/13/25 10:32	08/15/25 02:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/15/25 02:14	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		8.7	mg/Kg		08/13/25 12:18	08/14/25 11:53	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		08/13/25 12:18	08/14/25 11:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			08/13/25 12:18	08/14/25 11:53	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2200		60	mg/Kg		08/13/25 12:04	08/13/25 17:34	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-34 4.1"

Lab Sample ID: 885-30756-5

Date Collected: 08/08/25 08:20

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/13/25 10:32	08/15/25 02:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 02:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/13/25 10:32	08/15/25 02:36	1
Ethylbenzene	ND		0.047	mg/Kg		08/13/25 10:32	08/15/25 02:36	1
Toluene	ND		0.047	mg/Kg		08/13/25 10:32	08/15/25 02:36	1
Xylenes, Total	ND		0.095	mg/Kg		08/13/25 10:32	08/15/25 02:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 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		9.8	mg/Kg		08/13/25 12:18	08/14/25 12:17	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/13/25 12:18	08/14/25 12:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	103		62 - 134			08/13/25 12:18	08/14/25 12:17	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2600		60	mg/Kg		08/13/25 12:04	08/13/25 17:44	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-35 4.1"

Lab Sample ID: 885-30756-6

Date Collected: 08/08/25 08:25

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 02:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 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		08/13/25 10:32	08/15/25 02:57	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 02:57	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 02:57	1
Xylenes, Total	ND		0.098	mg/Kg		08/13/25 10:32	08/15/25 02:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 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		9.4	mg/Kg		08/13/25 12:18	08/14/25 12:40	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/25 12:18	08/14/25 12:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	106		62 - 134			08/13/25 12:18	08/14/25 12:40	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2000		60	mg/Kg		08/13/25 12:04	08/13/25 17:54	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-36 4.1"

Lab Sample ID: 885-30756-7

Date Collected: 08/08/25 08:30

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 03:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/15/25 03:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/15/25 03:19	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 03:19	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 03:19	1
Xylenes, Total	ND		0.098	mg/Kg		08/13/25 10:32	08/15/25 03:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 03:19	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]	ND		9.5	mg/Kg		08/13/25 12:18	08/14/25 13:28	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/25 12:18	08/14/25 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			08/13/25 12:18	08/14/25 13:28	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		60	mg/Kg		08/13/25 12:04	08/13/25 18:04	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-37 4.1"

Lab Sample ID: 885-30756-8

Date Collected: 08/08/25 08:35

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/13/25 10:32	08/15/25 03:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/15/25 03:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/13/25 10:32	08/15/25 03:41	1
Ethylbenzene	ND		0.048	mg/Kg		08/13/25 10:32	08/15/25 03:41	1
Toluene	ND		0.048	mg/Kg		08/13/25 10:32	08/15/25 03:41	1
Xylenes, Total	ND		0.095	mg/Kg		08/13/25 10:32	08/15/25 03:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/13/25 10:32	08/15/25 03:41	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		8.8	mg/Kg		08/13/25 12:18	08/14/25 13:52	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		08/13/25 12:18	08/14/25 13:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			08/13/25 12:18	08/14/25 13:52	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		60	mg/Kg		08/13/25 12:04	08/13/25 18:14	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-38 4.1"

Lab Sample ID: 885-30756-9

Date Collected: 08/08/25 08:40

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.7	mg/Kg		08/13/25 10:32	08/15/25 04:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/15/25 04:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		08/13/25 10:32	08/15/25 04:03	1
Ethylbenzene	ND		0.047	mg/Kg		08/13/25 10:32	08/15/25 04:03	1
Toluene	ND		0.047	mg/Kg		08/13/25 10:32	08/15/25 04:03	1
Xylenes, Total	ND		0.094	mg/Kg		08/13/25 10:32	08/15/25 04:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/13/25 10:32	08/15/25 04:03	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		8.7	mg/Kg		08/13/25 12:18	08/14/25 14:15	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		08/13/25 12:18	08/14/25 14:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			08/13/25 12:18	08/14/25 14:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		60	mg/Kg		08/13/25 12:04	08/13/25 18:43	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-39 4.1"

Lab Sample ID: 885-30756-10

Date Collected: 08/08/25 08:45

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/13/25 10:32	08/15/25 04:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 04:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/13/25 10:32	08/15/25 04:24	1
Ethylbenzene	ND		0.048	mg/Kg		08/13/25 10:32	08/15/25 04:24	1
Toluene	ND		0.048	mg/Kg		08/13/25 10:32	08/15/25 04:24	1
Xylenes, Total	ND		0.096	mg/Kg		08/13/25 10:32	08/15/25 04:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 04:24	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		9.7	mg/Kg		08/13/25 12:18	08/14/25 15:51	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/13/25 12:18	08/14/25 15:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			08/13/25 12:18	08/14/25 15:51	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2200		60	mg/Kg		08/13/25 12:04	08/13/25 18:53	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-40 4.1"

Lab Sample ID: 885-30756-11

Date Collected: 08/08/25 08:50

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 05:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/15/25 05:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/13/25 10:32	08/15/25 05:08	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 05:08	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 05:08	1
Xylenes, Total	ND		0.098	mg/Kg		08/13/25 10:32	08/15/25 05:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		15 - 150			08/13/25 10:32	08/15/25 05:08	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		08/13/25 12:18	08/14/25 16:15	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/13/25 12:18	08/14/25 16:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			08/13/25 12:18	08/14/25 16:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3700		60	mg/Kg		08/13/25 12:04	08/13/25 19:03	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-41 4.1"

Lab Sample ID: 885-30756-12

Date Collected: 08/08/25 08:55

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 05:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 05:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/15/25 05:30	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 05:30	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 05:30	1
Xylenes, Total	ND		0.098	mg/Kg		08/13/25 10:32	08/15/25 05:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			08/13/25 10:32	08/15/25 05:30	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]	ND		9.6	mg/Kg		08/13/25 12:18	08/14/25 16:39	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		08/13/25 12:18	08/14/25 16:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	93		62 - 134			08/13/25 12:18	08/14/25 16:39	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1500		60	mg/Kg		08/13/25 12:04	08/13/25 19:13	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-42 4.1"

Lab Sample ID: 885-30756-13

Date Collected: 08/08/25 09:00

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 05:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 150			08/13/25 10:32	08/15/25 05:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/13/25 10:32	08/15/25 05:52	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 05:52	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 05:52	1
Xylenes, Total	ND		0.097	mg/Kg		08/13/25 10:32	08/15/25 05:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/15/25 05:52	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]	ND		9.8	mg/Kg		08/13/25 12:18	08/14/25 17:02	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		08/13/25 12:18	08/14/25 17:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			08/13/25 12:18	08/14/25 17:02	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1400		60	mg/Kg		08/13/25 12:04	08/13/25 19:22	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-43 4.1"

Lab Sample ID: 885-30756-14

Date Collected: 08/08/25 09:05

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.8	mg/Kg		08/13/25 10:32	08/15/25 06:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/13/25 10:32	08/15/25 06:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		08/13/25 10:32	08/15/25 06:13	1
Ethylbenzene	ND		0.048	mg/Kg		08/13/25 10:32	08/15/25 06:13	1
Toluene	ND		0.048	mg/Kg		08/13/25 10:32	08/15/25 06:13	1
Xylenes, Total	ND		0.095	mg/Kg		08/13/25 10:32	08/15/25 06:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/13/25 10:32	08/15/25 06:13	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		9.3	mg/Kg		08/13/25 12:18	08/14/25 17:26	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/25 12:18	08/14/25 17:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			08/13/25 12:18	08/14/25 17:26	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		60	mg/Kg		08/13/25 12:04	08/13/25 19:32	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-44 4.1"

Lab Sample ID: 885-30756-15

Date Collected: 08/08/25 09:10

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		4.9	mg/Kg		08/13/25 10:32	08/15/25 06:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		15 - 150			08/13/25 10:32	08/15/25 06:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/15/25 06:35	1
Ethylbenzene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 06:35	1
Toluene	ND		0.049	mg/Kg		08/13/25 10:32	08/15/25 06:35	1
Xylenes, Total	ND		0.098	mg/Kg		08/13/25 10:32	08/15/25 06:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		15 - 150			08/13/25 10:32	08/15/25 06:35	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		9.3	mg/Kg		08/13/25 12:18	08/14/25 17:50	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/25 12:18	08/14/25 17:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			08/13/25 12:18	08/14/25 17:50	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	900		60	mg/Kg		08/13/25 12:04	08/13/25 19:42	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-45 4.1"

Lab Sample ID: 885-30756-16

Date Collected: 08/08/25 09:15

Matrix: Solid

Date Received: 08/12/25 07:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/13/25 10:32	08/15/25 06:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/13/25 10:32	08/15/25 06:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/15/25 06:57	1
Ethylbenzene	ND		0.050	mg/Kg		08/13/25 10:32	08/15/25 06:57	1
Toluene	ND		0.050	mg/Kg		08/13/25 10:32	08/15/25 06:57	1
Xylenes, Total	ND		0.10	mg/Kg		08/13/25 10:32	08/15/25 06:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		15 - 150			08/13/25 10:32	08/15/25 06:57	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		9.4	mg/Kg		08/13/25 12:18	08/14/25 18:14	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		08/13/25 12:18	08/14/25 18:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134			08/13/25 12:18	08/14/25 18:14	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		60	mg/Kg		08/13/25 12:04	08/13/25 19:52	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-32222/1-A

Matrix: Solid

Analysis Batch: 32383

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32222

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	ND		5.0	mg/Kg		08/13/25 10:32	08/14/25 23:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		15 - 150			08/13/25 10:32	08/14/25 23:19	1

Lab Sample ID: LCS 885-32222/2-A

Matrix: Solid

Analysis Batch: 32383

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	25.0	21.0		mg/Kg		84	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	205		15 - 150				

Lab Sample ID: 885-30756-1 MS

Matrix: Solid

Analysis Batch: 32383

Client Sample ID: BES25-30 4.1"

Prep Type: Total/NA

Prep Batch: 32222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	ND		24.9	22.3		mg/Kg		90	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	216		15 - 150						

Lab Sample ID: 885-30756-1 MSD

Matrix: Solid

Analysis Batch: 32383

Client Sample ID: BES25-30 4.1"

Prep Type: Total/NA

Prep Batch: 32222

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		24.9	22.2		mg/Kg		89	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	213		15 - 150								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-32222/1-A

Matrix: Solid

Analysis Batch: 32382

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32222

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		08/13/25 10:32	08/14/25 23:19	1
Ethylbenzene	ND		0.050	mg/Kg		08/13/25 10:32	08/14/25 23:19	1
Toluene	ND		0.050	mg/Kg		08/13/25 10:32	08/14/25 23:19	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-32222/1-A

Matrix: Solid

Analysis Batch: 32382

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32222

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		08/13/25 10:32	08/14/25 23:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 150			08/13/25 10:32	08/14/25 23:19	1

Lab Sample ID: LCS 885-32222/3-A

Matrix: Solid

Analysis Batch: 32382

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.07		mg/Kg		107	70 - 130
Ethylbenzene	1.00	1.05		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	2.00	2.09		mg/Kg		104	70 - 130
o-Xylene	1.00	1.06		mg/Kg		106	70 - 130
Toluene	1.00	1.05		mg/Kg		105	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		15 - 150				

Lab Sample ID: 885-30756-2 MS

Matrix: Solid

Analysis Batch: 32382

Client Sample ID: BES25-31 4.1"

Prep Type: Total/NA

Prep Batch: 32222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.998	1.15		mg/Kg		115	70 - 130
Ethylbenzene	ND		0.998	1.14		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	ND		2.00	2.30		mg/Kg		115	70 - 130
o-Xylene	ND		0.998	1.14		mg/Kg		114	70 - 130
Toluene	ND		0.998	1.14		mg/Kg		114	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	102		15 - 150						

Lab Sample ID: 885-30756-2 MSD

Matrix: Solid

Analysis Batch: 32382

Client Sample ID: BES25-31 4.1"

Prep Type: Total/NA

Prep Batch: 32222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.999	1.06		mg/Kg		107	70 - 130	8	20
Ethylbenzene	ND		0.999	1.07		mg/Kg		107	70 - 130	7	20
m-Xylene & p-Xylene	ND		2.00	2.12		mg/Kg		106	70 - 130	8	20
o-Xylene	ND		0.999	1.07		mg/Kg		107	70 - 130	6	20
Toluene	ND		0.999	1.06		mg/Kg		106	70 - 130	8	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	101		15 - 150								

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QC Sample Results

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

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

Lab Sample ID: MB 885-32240/1-A

Matrix: Solid

Analysis Batch: 32208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32240

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		08/13/25 12:18	08/14/25 09:09	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		08/13/25 12:18	08/14/25 09:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			08/13/25 12:18	08/14/25 09:09	1

Lab Sample ID: LCS 885-32240/2-A

Matrix: Solid

Analysis Batch: 32208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	43.5		mg/Kg		87	51 - 148
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	86		62 - 134				

Lab Sample ID: 885-30756-1 MS

Matrix: Solid

Analysis Batch: 32208

Client Sample ID: BES25-30 4.1"

Prep Type: Total/NA

Prep Batch: 32240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		49.6	42.5		mg/Kg		86	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	88		62 - 134						

Lab Sample ID: 885-30756-1 MSD

Matrix: Solid

Analysis Batch: 32208

Client Sample ID: BES25-30 4.1"

Prep Type: Total/NA

Prep Batch: 32240

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		50.0	43.5		mg/Kg		87	44 - 136	2	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	88		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-32237/1-A

Matrix: Solid

Analysis Batch: 32211

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32237

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		08/13/25 12:04	08/13/25 14:47	1

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QC Sample Results

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30756-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-32237/2-A				Client Sample ID: Lab Control Sample			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 32211				Prep Batch: 32237			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.8		mg/Kg		98	90 - 110

QC Association Summary

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA

Prep Batch: 32222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-1	BES25-30 4.1"	Total/NA	Solid	5030C	
885-30756-2	BES25-31 4.1"	Total/NA	Solid	5030C	
885-30756-3	BES25-32 4.1"	Total/NA	Solid	5030C	
885-30756-4	BES25-33 4.1"	Total/NA	Solid	5030C	
885-30756-5	BES25-34 4.1"	Total/NA	Solid	5030C	
885-30756-6	BES25-35 4.1"	Total/NA	Solid	5030C	
885-30756-7	BES25-36 4.1"	Total/NA	Solid	5030C	
885-30756-8	BES25-37 4.1"	Total/NA	Solid	5030C	
885-30756-9	BES25-38 4.1"	Total/NA	Solid	5030C	
885-30756-10	BES25-39 4.1"	Total/NA	Solid	5030C	
885-30756-11	BES25-40 4.1"	Total/NA	Solid	5030C	
885-30756-12	BES25-41 4.1"	Total/NA	Solid	5030C	
885-30756-13	BES25-42 4.1"	Total/NA	Solid	5030C	
885-30756-14	BES25-43 4.1"	Total/NA	Solid	5030C	
885-30756-15	BES25-44 4.1"	Total/NA	Solid	5030C	
885-30756-16	BES25-45 4.1"	Total/NA	Solid	5030C	
MB 885-32222/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-32222/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-32222/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-30756-1 MS	BES25-30 4.1"	Total/NA	Solid	5030C	
885-30756-1 MSD	BES25-30 4.1"	Total/NA	Solid	5030C	
885-30756-2 MS	BES25-31 4.1"	Total/NA	Solid	5030C	
885-30756-2 MSD	BES25-31 4.1"	Total/NA	Solid	5030C	

Analysis Batch: 32382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-1	BES25-30 4.1"	Total/NA	Solid	8021B	32222
885-30756-2	BES25-31 4.1"	Total/NA	Solid	8021B	32222
885-30756-3	BES25-32 4.1"	Total/NA	Solid	8021B	32222
885-30756-4	BES25-33 4.1"	Total/NA	Solid	8021B	32222
885-30756-5	BES25-34 4.1"	Total/NA	Solid	8021B	32222
885-30756-6	BES25-35 4.1"	Total/NA	Solid	8021B	32222
885-30756-7	BES25-36 4.1"	Total/NA	Solid	8021B	32222
885-30756-8	BES25-37 4.1"	Total/NA	Solid	8021B	32222
885-30756-9	BES25-38 4.1"	Total/NA	Solid	8021B	32222
885-30756-10	BES25-39 4.1"	Total/NA	Solid	8021B	32222
885-30756-11	BES25-40 4.1"	Total/NA	Solid	8021B	32222
885-30756-12	BES25-41 4.1"	Total/NA	Solid	8021B	32222
885-30756-13	BES25-42 4.1"	Total/NA	Solid	8021B	32222
885-30756-14	BES25-43 4.1"	Total/NA	Solid	8021B	32222
885-30756-15	BES25-44 4.1"	Total/NA	Solid	8021B	32222
885-30756-16	BES25-45 4.1"	Total/NA	Solid	8021B	32222
MB 885-32222/1-A	Method Blank	Total/NA	Solid	8021B	32222
LCS 885-32222/3-A	Lab Control Sample	Total/NA	Solid	8021B	32222
885-30756-2 MS	BES25-31 4.1"	Total/NA	Solid	8021B	32222
885-30756-2 MSD	BES25-31 4.1"	Total/NA	Solid	8021B	32222

Analysis Batch: 32383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-1	BES25-30 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-2	BES25-31 4.1"	Total/NA	Solid	8015M/D	32222

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

GC VOA (Continued)

Analysis Batch: 32383 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-3	BES25-32 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-4	BES25-33 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-5	BES25-34 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-6	BES25-35 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-7	BES25-36 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-8	BES25-37 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-9	BES25-38 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-10	BES25-39 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-11	BES25-40 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-12	BES25-41 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-13	BES25-42 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-14	BES25-43 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-15	BES25-44 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-16	BES25-45 4.1"	Total/NA	Solid	8015M/D	32222
MB 885-32222/1-A	Method Blank	Total/NA	Solid	8015M/D	32222
LCS 885-32222/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32222
885-30756-1 MS	BES25-30 4.1"	Total/NA	Solid	8015M/D	32222
885-30756-1 MSD	BES25-30 4.1"	Total/NA	Solid	8015M/D	32222

GC Semi VOA

Analysis Batch: 32208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-1	BES25-30 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-2	BES25-31 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-3	BES25-32 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-4	BES25-33 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-5	BES25-34 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-6	BES25-35 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-7	BES25-36 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-8	BES25-37 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-9	BES25-38 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-10	BES25-39 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-11	BES25-40 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-12	BES25-41 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-13	BES25-42 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-14	BES25-43 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-15	BES25-44 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-16	BES25-45 4.1"	Total/NA	Solid	8015M/D	32240
MB 885-32240/1-A	Method Blank	Total/NA	Solid	8015M/D	32240
LCS 885-32240/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	32240
885-30756-1 MS	BES25-30 4.1"	Total/NA	Solid	8015M/D	32240
885-30756-1 MSD	BES25-30 4.1"	Total/NA	Solid	8015M/D	32240

Prep Batch: 32240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-1	BES25-30 4.1"	Total/NA	Solid	SHAKE	
885-30756-2	BES25-31 4.1"	Total/NA	Solid	SHAKE	
885-30756-3	BES25-32 4.1"	Total/NA	Solid	SHAKE	
885-30756-4	BES25-33 4.1"	Total/NA	Solid	SHAKE	
885-30756-5	BES25-34 4.1"	Total/NA	Solid	SHAKE	

Eurofins Albuquerque

QC Association Summary

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

GC Semi VOA (Continued)

Prep Batch: 32240 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-6	BES25-35 4.1"	Total/NA	Solid	SHAKE	
885-30756-7	BES25-36 4.1"	Total/NA	Solid	SHAKE	
885-30756-8	BES25-37 4.1"	Total/NA	Solid	SHAKE	
885-30756-9	BES25-38 4.1"	Total/NA	Solid	SHAKE	
885-30756-10	BES25-39 4.1"	Total/NA	Solid	SHAKE	
885-30756-11	BES25-40 4.1"	Total/NA	Solid	SHAKE	
885-30756-12	BES25-41 4.1"	Total/NA	Solid	SHAKE	
885-30756-13	BES25-42 4.1"	Total/NA	Solid	SHAKE	
885-30756-14	BES25-43 4.1"	Total/NA	Solid	SHAKE	
885-30756-15	BES25-44 4.1"	Total/NA	Solid	SHAKE	
885-30756-16	BES25-45 4.1"	Total/NA	Solid	SHAKE	
MB 885-32240/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-32240/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-30756-1 MS	BES25-30 4.1"	Total/NA	Solid	SHAKE	
885-30756-1 MSD	BES25-30 4.1"	Total/NA	Solid	SHAKE	

HPLC/IC

Analysis Batch: 32211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-1	BES25-30 4.1"	Total/NA	Solid	300.0	32237
885-30756-2	BES25-31 4.1"	Total/NA	Solid	300.0	32237
885-30756-3	BES25-32 4.1"	Total/NA	Solid	300.0	32237
885-30756-4	BES25-33 4.1"	Total/NA	Solid	300.0	32237
885-30756-5	BES25-34 4.1"	Total/NA	Solid	300.0	32237
885-30756-6	BES25-35 4.1"	Total/NA	Solid	300.0	32237
885-30756-7	BES25-36 4.1"	Total/NA	Solid	300.0	32237
885-30756-8	BES25-37 4.1"	Total/NA	Solid	300.0	32237
885-30756-9	BES25-38 4.1"	Total/NA	Solid	300.0	32237
885-30756-10	BES25-39 4.1"	Total/NA	Solid	300.0	32237
885-30756-11	BES25-40 4.1"	Total/NA	Solid	300.0	32237
885-30756-12	BES25-41 4.1"	Total/NA	Solid	300.0	32237
885-30756-13	BES25-42 4.1"	Total/NA	Solid	300.0	32237
885-30756-14	BES25-43 4.1"	Total/NA	Solid	300.0	32237
885-30756-15	BES25-44 4.1"	Total/NA	Solid	300.0	32237
885-30756-16	BES25-45 4.1"	Total/NA	Solid	300.0	32237
MB 885-32237/1-A	Method Blank	Total/NA	Solid	300.0	32237
LCS 885-32237/2-A	Lab Control Sample	Total/NA	Solid	300.0	32237

Prep Batch: 32237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-1	BES25-30 4.1"	Total/NA	Solid	300_Prep	
885-30756-2	BES25-31 4.1"	Total/NA	Solid	300_Prep	
885-30756-3	BES25-32 4.1"	Total/NA	Solid	300_Prep	
885-30756-4	BES25-33 4.1"	Total/NA	Solid	300_Prep	
885-30756-5	BES25-34 4.1"	Total/NA	Solid	300_Prep	
885-30756-6	BES25-35 4.1"	Total/NA	Solid	300_Prep	
885-30756-7	BES25-36 4.1"	Total/NA	Solid	300_Prep	
885-30756-8	BES25-37 4.1"	Total/NA	Solid	300_Prep	
885-30756-9	BES25-38 4.1"	Total/NA	Solid	300_Prep	
885-30756-10	BES25-39 4.1"	Total/NA	Solid	300_Prep	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30756-1

HPLC/IC (Continued)

Prep Batch: 32237 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-30756-11	BES25-40 4.1"	Total/NA	Solid	300_Prep	
885-30756-12	BES25-41 4.1"	Total/NA	Solid	300_Prep	
885-30756-13	BES25-42 4.1"	Total/NA	Solid	300_Prep	
885-30756-14	BES25-43 4.1"	Total/NA	Solid	300_Prep	
885-30756-15	BES25-44 4.1"	Total/NA	Solid	300_Prep	
885-30756-16	BES25-45 4.1"	Total/NA	Solid	300_Prep	
MB 885-32237/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-32237/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30756-1

Client Sample ID: BES25-30 4.1"
Date Collected: 08/08/25 08:00
Date Received: 08/12/25 07:30

Lab Sample ID: 885-30756-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/14/25 23:41
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/14/25 23:41
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 09:56
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 16:06

Client Sample ID: BES25-31 4.1"
Date Collected: 08/08/25 08:05
Date Received: 08/12/25 07:30

Lab Sample ID: 885-30756-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 00:46
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 00:46
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 11:06
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 16:15

Client Sample ID: BES25-32 4.1"
Date Collected: 08/08/25 08:10
Date Received: 08/12/25 07:30

Lab Sample ID: 885-30756-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 01:52
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 01:52
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 11:30
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 17:24

Client Sample ID: BES25-33 4.1"
Date Collected: 08/08/25 08:15
Date Received: 08/12/25 07:30

Lab Sample ID: 885-30756-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 02:14

Eurofins Albuquerque

Lab Chronicle

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-33 4.1"

Lab Sample ID: 885-30756-4

Date Collected: 08/08/25 08:15

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 02:14
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 11:53
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 17:34

Client Sample ID: BES25-34 4.1"

Lab Sample ID: 885-30756-5

Date Collected: 08/08/25 08:20

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 02:36
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 02:36
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 12:17
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 17:44

Client Sample ID: BES25-35 4.1"

Lab Sample ID: 885-30756-6

Date Collected: 08/08/25 08:25

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 02:57
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 02:57
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 12:40
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 17:54

Client Sample ID: BES25-36 4.1"

Lab Sample ID: 885-30756-7

Date Collected: 08/08/25 08:30

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 03:19
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 03:19

Eurofins Albuquerque

Lab Chronicle

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-36 4.1"

Lab Sample ID: 885-30756-7

Date Collected: 08/08/25 08:30

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 13:28
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 18:04

Client Sample ID: BES25-37 4.1"

Lab Sample ID: 885-30756-8

Date Collected: 08/08/25 08:35

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 03:41
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 03:41
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 13:52
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 18:14

Client Sample ID: BES25-38 4.1"

Lab Sample ID: 885-30756-9

Date Collected: 08/08/25 08:40

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 04:03
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 04:03
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 14:15
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 18:43

Client Sample ID: BES25-39 4.1"

Lab Sample ID: 885-30756-10

Date Collected: 08/08/25 08:45

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 04:24
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 04:24
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 15:51

Eurofins Albuquerque

Lab Chronicle

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-39 4.1"

Lab Sample ID: 885-30756-10

Date Collected: 08/08/25 08:45

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 18:53

Client Sample ID: BES25-40 4.1"

Lab Sample ID: 885-30756-11

Date Collected: 08/08/25 08:50

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 05:08
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 05:08
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 16:15
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 19:03

Client Sample ID: BES25-41 4.1"

Lab Sample ID: 885-30756-12

Date Collected: 08/08/25 08:55

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 05:30
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 05:30
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 16:39
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 19:13

Client Sample ID: BES25-42 4.1"

Lab Sample ID: 885-30756-13

Date Collected: 08/08/25 09:00

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 05:52
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 05:52
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 17:02
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 19:22

Eurofins Albuquerque

Lab Chronicle

Client: Vertex

Job ID: 885-30756-1

Project/Site: Hackberry 18 Federal #002 Battery

Client Sample ID: BES25-43 4.1"

Lab Sample ID: 885-30756-14

Date Collected: 08/08/25 09:05

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 06:13
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 06:13
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 17:26
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 19:32

Client Sample ID: BES25-44 4.1"

Lab Sample ID: 885-30756-15

Date Collected: 08/08/25 09:10

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 06:35
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 06:35
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 17:50
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 19:42

Client Sample ID: BES25-45 4.1"

Lab Sample ID: 885-30756-16

Date Collected: 08/08/25 09:15

Matrix: Solid

Date Received: 08/12/25 07:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8015M/D		1	32383	JP	EET ALB	08/15/25 06:57
Total/NA	Prep	5030C			32222	KLS	EET ALB	08/13/25 10:32
Total/NA	Analysis	8021B		1	32382	JP	EET ALB	08/15/25 06:57
Total/NA	Prep	SHAKE			32240	JM	EET ALB	08/13/25 12:18
Total/NA	Analysis	8015M/D		1	32208	EM	EET ALB	08/14/25 18:14
Total/NA	Prep	300_Prep			32237	RC	EET ALB	08/13/25 12:04
Total/NA	Analysis	300.0		20	32211	RC	EET ALB	08/13/25 19:52

Laboratory References:

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

Eurofins Albuquerque

Accreditation/Certification Summary

Client: Vertex
Project/Site: Hackberry 18 Federal #002 Battery

Job ID: 885-30756-1

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 (GRO)-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

Chain-of-Custody Record

Client: **Vertex**

(direct bill to Devon, work order 21185142)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

72-hour Rush

Project Name:

Hackberry 18 Federal #002 Battery

Project #:

23E-03903

Project Manager:

Kent Stallings

kstallings@vertexresource.com

Sampler: **L. Pullman**

On Ice: ☐ Yes ☐ No

of Coolers: **1**

Cooler Temp (including CF): **0-30.2 = 0.1**

Container Type and #	Preservative Type	HEAL No.
----------------------	-------------------	----------

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
08.08.25	8:00	Soil	BES25-30 4.1'	1, 4oz jar		-1
08.08.25	8:05	Soil	BES25-31 4.1'	1, 4oz jar		-2
08.08.25	8:10	Soil	BES25-32 4.1'	1, 4oz jar		-3
08.08.25	8:15	Soil	BES25-33 4.1'	1, 4oz jar		-4
08.08.25	8:20	Soil	BES25-34 4.1'	1, 4oz jar		-5
08.08.25	8:25	Soil	BES25-35 4.1'	1, 4oz jar		-6
08.08.25	8:30	Soil	BES25-36 4.1'	1, 4oz jar		-7
08.08.25	8:35	Soil	BES25-37 4.1'	1, 4oz jar		-8
08.08.25	8:40	Soil	BES25-38 4.1'	1, 4oz jar		-9
08.08.25	8:45	Soil	BES25-39 4.1'	1, 4oz jar		-10
08.08.25	8:50	Soil	BES25-40 4.1'	1, 4oz jar		-11
08.08.25	8:55	Soil	BES25-41 4.1'	1, 4oz jar		-12

Date: 8-11-25	Time: 0700	Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Via: <i>[Signature]</i>	Date: 8/11/25	Time: 7:00
Date: 8/11/25	Time: 1900	Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Via: <i>[Signature]</i>	Date: 8/12/25	Time: 7:30



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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



885-30756 COC

p. 1 of 2

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	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													
X	X					X													

Remarks: **ATTN Jim Raley**

Direct bill to Devon work order 21185142 Jim Raley

cc. permian@vertexresource.com, SCarttar@vertexresource.com, kstallings@vertexresource.com, and LPullman@vertexresource.com for Final Report

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**

(direct bill to Devon, work order 21185142)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other _____

☐ EDD (Type)

Turn-Around Time:	72-hour Rush
Project Name:	Hackberry 18 Federal #002 Battery
Project #:	23E-03903
Project Manager:	Kent Stallings kstallings@vertexresource.com
Sampler:	L. Pullman
On Ice:	☒ Yes ☐ No
# of Coolers:	1 Abby



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

30750

p. 2 of 2

Analysis Request

[illegible]

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Remarks: ATTN Jim Raley Direct bill to Devon work order 21185142 Jim Raley cc. permian@vertexresource.com, SCarttar@vertexresource.com, kstallings@vertexresource.com, and LPullman@vertexresource.com for Final Report
8-11-25	0700				8/11/25	700	
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	
8/11/25	1900				8/12/25	7:30	

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: 885-30756-1

Login Number: 30756

List Source: Eurofins Albuquerque

List Number: 1

Creator: Proctor, Nancy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Report to:
Kent Stallings



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name: Hackberry 18 Federal #002

Work Order: E508228

Job Number: 01058-0007

Received: 8/21/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/22/25

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: 8/22/25



Kent Stallings
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Hackberry 18 Federal #002
Workorder: E508228
Date Received: 8/21/2025 7:30:00AM

Kent Stallings,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/21/2025 7:30:00AM, under the Project Name: Hackberry 18 Federal #002.

The analytical test results summarized in this report with the Project Name: Hackberry 18 Federal #002 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
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rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

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Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
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Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Kent Stallings	Reported: 08/22/25 14:42
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS25-01 0'	E508228-01A	Soil	08/20/25	08/21/25	Glass Jar, 4 oz.
SS25-02 0'	E508228-02A	Soil	08/20/25	08/21/25	Glass Jar, 4 oz.
SS25-03 0'	E508228-03A	Soil	08/20/25	08/21/25	Glass Jar, 4 oz.



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Kent Stallings

Reported:
8/22/2025 2:42:54PM

SS25-01 0'

E508228-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2534091	
Benzene	ND	0.0250	1	08/21/25	08/21/25	
Ethylbenzene	ND	0.0250	1	08/21/25	08/21/25	
Toluene	ND	0.0250	1	08/21/25	08/21/25	
o-Xylene	ND	0.0250	1	08/21/25	08/21/25	
p,m-Xylene	ND	0.0500	1	08/21/25	08/21/25	
Total Xylenes	ND	0.0250	1	08/21/25	08/21/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		96.3 %	70-130	08/21/25	08/21/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2534091	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/25	08/21/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		115 %	70-130	08/21/25	08/21/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH		Batch: 2534088	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/25	08/21/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/25	08/21/25	
<i>Surrogate: n-Nonane</i>		113 %	61-141	08/21/25	08/21/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2534079	
Chloride	89.0	20.0	1	08/21/25	08/21/25	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Kent Stallings

Reported:
8/22/2025 2:42:54PM

SS25-02 0'

E508228-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2534091
Benzene	ND	0.0250	1	08/21/25	08/21/25	
Ethylbenzene	ND	0.0250	1	08/21/25	08/21/25	
Toluene	ND	0.0250	1	08/21/25	08/21/25	
o-Xylene	ND	0.0250	1	08/21/25	08/21/25	
p,m-Xylene	ND	0.0500	1	08/21/25	08/21/25	
Total Xylenes	ND	0.0250	1	08/21/25	08/21/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.8 %	70-130		08/21/25	08/21/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2534091
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/25	08/21/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	113 %	70-130		08/21/25	08/21/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KH		Batch: 2534088
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/25	08/21/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/25	08/21/25	
<i>Surrogate: n-Nonane</i>						
	112 %	61-141		08/21/25	08/21/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2534079
Chloride	106	20.0	1	08/21/25	08/21/25	



Sample Data

Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad NM, 88220

Project Name: Hackberry 18 Federal #002
Project Number: 01058-0007
Project Manager: Kent Stallings

Reported:
8/22/2025 2:42:54PM

SS25-03 0'

E508228-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2534091	
Benzene	ND	0.0250	1	08/21/25	08/21/25	
Ethylbenzene	ND	0.0250	1	08/21/25	08/21/25	
Toluene	ND	0.0250	1	08/21/25	08/21/25	
o-Xylene	ND	0.0250	1	08/21/25	08/21/25	
p,m-Xylene	ND	0.0500	1	08/21/25	08/21/25	
Total Xylenes	ND	0.0250	1	08/21/25	08/21/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		95.8 %	70-130	08/21/25	08/21/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2534091	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/25	08/21/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		113 %	70-130	08/21/25	08/21/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH		Batch: 2534088	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/25	08/21/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/25	08/21/25	
<i>Surrogate: n-Nonane</i>		106 %	61-141	08/21/25	08/21/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2534079	
Chloride	114	20.0	1	08/21/25	08/21/25	



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Kent Stallings	Reported: 8/22/2025 2:42:54PM
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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
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Blank (2534091-BLK1)

Prepared: 08/21/25 Analyzed: 08/22/25

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	7.96		8.00		99.6	70-130			

LCS (2534091-BS1)

Prepared: 08/21/25 Analyzed: 08/21/25

Benzene	5.14	0.0250	5.00		103	70-130			
Ethylbenzene	5.07	0.0250	5.00		101	70-130			
Toluene	5.12	0.0250	5.00		102	70-130			
o-Xylene	5.10	0.0250	5.00		102	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.4	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.98		8.00		99.7	70-130			

Matrix Spike (2534091-MS1)

Source: E508229-02

Prepared: 08/21/25 Analyzed: 08/21/25

Benzene	4.74	0.0250	5.00	ND	94.8	70-130			
Ethylbenzene	4.66	0.0250	5.00	ND	93.2	70-130			
Toluene	4.72	0.0250	5.00	ND	94.3	70-130			
o-Xylene	4.72	0.0250	5.00	ND	94.5	70-130			
p,m-Xylene	9.49	0.0500	10.0	ND	94.9	70-130			
Total Xylenes	14.2	0.0250	15.0	ND	94.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.89		8.00		98.6	70-130			

Matrix Spike Dup (2534091-MSD1)

Source: E508229-02

Prepared: 08/21/25 Analyzed: 08/21/25

Benzene	5.04	0.0250	5.00	ND	101	70-130	6.16	27	
Ethylbenzene	4.95	0.0250	5.00	ND	99.0	70-130	5.99	26	
Toluene	5.01	0.0250	5.00	ND	100	70-130	6.07	20	
o-Xylene	4.99	0.0250	5.00	ND	99.9	70-130	5.58	25	
p,m-Xylene	10.1	0.0500	10.0	ND	101	70-130	5.90	23	
Total Xylenes	15.1	0.0250	15.0	ND	100	70-130	5.79	26	
Surrogate: 4-Bromochlorobenzene-PID	8.03		8.00		100	70-130			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Kent Stallings	Reported: 8/22/2025 2:42:54PM
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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
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Blank (2534091-BLK1)					Prepared: 08/21/25 Analyzed: 08/22/25				
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.53		8.00		107	70-130			

LCS (2534091-BS2)					Prepared: 08/21/25 Analyzed: 08/21/25				
Gasoline Range Organics (C6-C10)	49.2	20.0	50.0		98.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.75		8.00		109	70-130			

Matrix Spike (2534091-MS2)					Source: E508229-02		Prepared: 08/21/25 Analyzed: 08/21/25		
Gasoline Range Organics (C6-C10)	50.7	20.0	50.0	ND	101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.75		8.00		109	70-130			

Matrix Spike Dup (2534091-MSD2)					Source: E508229-02		Prepared: 08/21/25 Analyzed: 08/21/25		
Gasoline Range Organics (C6-C10)	50.5	20.0	50.0	ND	101	70-130	0.333	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.68		8.00		108	70-130			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Kent Stallings	Reported: 8/22/2025 2:42:54PM
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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
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Blank (2534088-BLK1)					Prepared: 08/21/25 Analyzed: 08/21/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.0		50.0		108	61-141			

LCS (2534088-BS1)					Prepared: 08/21/25 Analyzed: 08/21/25				
Diesel Range Organics (C10-C28)	309	25.0	250		124	66-144			
Surrogate: n-Nonane	51.8		50.0		104	61-141			

Matrix Spike (2534088-MS1)					Source: E508227-01		Prepared: 08/21/25 Analyzed: 08/21/25		
Diesel Range Organics (C10-C28)	327	25.0	250	ND	131	56-156			
Surrogate: n-Nonane	52.3		50.0		105	61-141			

Matrix Spike Dup (2534088-MSD1)					Source: E508227-01		Prepared: 08/21/25 Analyzed: 08/21/25		
Diesel Range Organics (C10-C28)	349	25.0	250	ND	140	56-156	6.35	20	
Surrogate: n-Nonane	59.0		50.0		118	61-141			



QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Kent Stallings	Reported: 8/22/2025 2:42:54PM
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Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2534079-BLK1)					Prepared: 08/20/25 Analyzed: 08/20/25				
Chloride	ND	20.0							
LCS (2534079-BS1)					Prepared: 08/20/25 Analyzed: 08/20/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2534079-MS1)					Source: E508220-24		Prepared: 08/20/25 Analyzed: 08/20/25		
Chloride	2390	200	250	2190	79.5	80-120			M4
Matrix Spike Dup (2534079-MSD1)					Source: E508220-24		Prepared: 08/20/25 Analyzed: 08/20/25		
Chloride	2200	200	250	2190	3.40	80-120	8.29	20	M4

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: Hackberry 18 Federal #002 Project Number: 01058-0007 Project Manager: Kent Stallings	Reported: 08/22/25 14:42
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M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.

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

Page 1 of 1

Client Information				Invoice Information		Lab Use Only		TAT				State					
Client: <u>Vertex / Devon</u>				Company: <u>Devon</u>		Lab WO# <u>E508228</u>		Job Number <u>00580007</u>		1D2D3DStd				NMCOUTTX			
Project Name: <u>Hackberry 18 Fed 2</u>				Address:													
Project Manager: <u>Kent Stallings</u>				City, State, Zip: <u>on file</u>													
Address:				Phone:													
City, State, Zip:				Email:													
Phone:				Miscellaneous:													
Email: <u>Kstallings@vertexresource.com</u>																	

Sample Information							Analysis and Method										EPA Program			Remarks
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Cation/Anion Pkg	SDWA	CWA	RCRA		
7:50	8/20/25	Soil	one 4 oz	SS25-01 0'		1	X	X	X		X								2.6	
7:55	↓	↓	↓	SS25-02 0'		2	↓	↓	↓		↓								2.4	
7:58	↓	↓	↓	SS25-03 0'		3	↓	↓	↓		↓								2.0	

Additional Instructions: WO # 21520470, cc: permian@vertexresource.com

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: Stephanie McCarty

Relinquished by: (Signature) <u>Steph Mccarty</u>	Date <u>8-20-25</u>	Time <u>1245</u>	Received by: (Signature) <u>Michelle Gonzalez</u>	Date <u>8-20-25</u>	Time <u>1245</u>	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 subsequent day. Received on ice: ☒ Y ☐ N T1 _____ T2 _____ T3 _____ AVG Temp °C _____
Relinquished by: (Signature) <u>Michelle Gonzalez</u>	Date <u>8-20-25</u>	Time <u>1245</u>	Received by: (Signature) <u>Marissa Gonzalez</u>	Date <u>8-20-25</u>	Time <u>1245</u>	
Relinquished by: (Signature) <u>Marissa Gonzalez</u>	Date <u>8-20-25</u>	Time <u>1615</u>	Received by: (Signature) <u>Andrew Musso</u>	Date <u>8-20-25</u>	Time <u>1615</u>	
Relinquished by: (Signature) <u>Andrew Musso</u>	Date <u>8-20-25</u>	Time <u>2045</u>	Received by: (Signature) <u>Caitlynn</u>	Date <u>8-21-25</u>	Time <u>730</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA _____

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.



envirotech

Envirotech Analytical Laboratory

Printed: 8/21/2025 9:27:06AM

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:	08/21/25 07:30	Work Order ID:	E508228
Phone:	(575) 748-0176	Date Logged In:	08/20/25 14:37	Logged In By:	Noe Soto
Email:	kstallings@vertexresource.com	Due Date:	08/22/25 07:00 (0 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

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

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State of New Mexico
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Santa Fe, NM 87505

QUESTIONS

Action 510028

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2317136603
Incident Name	NAPP2317136603 HACKBERRY 18 FED 2 BATTERY @ FAPP2202048047
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received
Incident Facility	[fAPP2202048047] HACKBERRY 18 FED 2 BATTERY

Location of Release Source

Please answer all the questions in this group.

Site Name	HACKBERRY 18 FED 2 BATTERY
Date Release Discovered	06/19/2023
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.

Incident Type	Produced Water 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

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.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pipeline (Any) Produced Water Released: 9 BBL Recovered: 1 BBL Lost: 8 BBL.
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)	3" POLY LINE GOT A PIN HOLE DUE TO HIGH TEMPERATURES AND BURST. LINE WAS ISOLATED TO STOP THE LEAK. FLUIDS DID GO OFFSITE. 1 BBL RECOVERED. 8.8 BBLs ESTIMATED RELEASED ONTO PAD.

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QUESTIONS, Page 2

Action 510028

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>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.</i>	

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	<i>Not answered.</i>

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: James Raley Title: EHS Professional Email: jim.raley@dv.com Date: 09/29/2025
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QUESTIONS, Page 3

Action 510028

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Site Characterization	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (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 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 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 ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between 1000 (ft.) and ½ (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
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	
<i>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.</i>	
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)	9200
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	8600
GRO+DRO (EPA SW-846 Method 8015M)	4900
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>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>	
On what estimated date will the remediation commence	12/14/2023
On what date will (or did) the final sampling or liner inspection occur	03/14/2025
On what date will (or was) the remediation complete(d)	02/16/2024
What is the estimated surface area (in square feet) that will be reclaimed	7318
What is the estimated volume (in cubic yards) that will be reclaimed	827
What is the estimated surface area (in square feet) that will be remediated	7318
What is the estimated volume (in cubic yards) that will be remediated	827
<i>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.</i>	
<i>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.</i>	

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Action 510028

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(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	fEEM0112334510 HALFWAY DISPOSAL AND 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.
<i>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>	
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: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 09/29/2025
<i>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.</i>	

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QUESTIONS, Page 5

Action 510028

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
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.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 510028

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	492040
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/08/2025
What was the (estimated) number of samples that were to be gathered	38
What was the sampling surface area in square feet	4412

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	8740
What was the total volume (cubic yards) remediated	980
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	8740
What was the total volume (in cubic yards) reclaimed	980
Summarize any additional remediation activities not included by answers (above)	As detailed in attached report.
<i>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>	
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: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 09/29/2025

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QUESTIONS, Page 7

Action 510028

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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	Yes
What was the total reclamation surface area (in square feet) for this site	8740
What was the total volume of replacement material (in cubic yards) for this site	980
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a 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.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseedling commence(d)	10/30/2025
Summarize any additional reclamation activities not included by answers (above)	As detailed in attached report.
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseedling plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
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: James Raley Title: EHS Professional Email: jim.ralej@dmv.com Date: 09/29/2025

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QUESTIONS, Page 8

Action 510028

QUESTIONS (continued)

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	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 510028

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 510028
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your reclamation/remediation closure report for Incident #NAPP2317136603 HACKBERRY 18 FED 2 BATTERY, thank you. The reclamation/remediation closure report is approved.	11/13/2025