



Incident Number: nAPP2517841727

Release Assessment and Closure

Big Eddy Unit DI 9 Tank Battery

Unit A Section 28, Township 21 South, Range 30 East

Latitude and Longitude: 32.456906, -103.879339

County: Eddy

Vertex File Number: 25A-03553

Prepared for:

ExxonMobil Upstream Company

Prepared by:

Vertex Resource Services Inc.

Date:

September 2025

ExxonMobil Upstream Company
Big Eddy Unit DI9 Tank Battery

Release Assessment and Closure
September 2025

Release Assessment and Closure
Big Eddy Unit DI 9 Tank Battery

Unit A Section 28, Township 21 South, Range 30 East
Latitude and Longitude: 32.456906, -103.879339
County: Eddy

Prepared for:

ExxonMobil Upstream Company
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September 9, 2025

Date

ExxonMobil Upstream Company
Big Eddy Unit D19 Tank Battery

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1.0 Introduction

ExxonMobil Upstream Company (ExxonMobil) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for a produced water release that occurred on June 21, 2025, at ExxonMobil Big Eddy Unit DI 9 Tank Battery (hereafter referred to as the “site”). ExxonMobil submitted an initial C-141 Release Notification to New Mexico Oil Conservation Division (NMOCD) on July 7, 2025. Incident ID number, nAPP2517841727, 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 were 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 restoration of the release site will be completed following remediation activities as per NMAC 19.15.29.13.

2.0 Incident Description

The release occurred on June 21, 2025, due to corrosion in a pipeline. The incident was reported on June 27, 2025, and involved the release of approximately 7 barrels (bbl.) of produced water and approximately 4 barrels (bbl.) of crude oil off pad with 2 barrels (bbl.) of contaminated free fluid removed during initial clean-up. Additional details relevant to the release are presented in the C-141 Report.

3.0 Site Characteristics

The site is located approximately 20.1 miles northeast of Carlsbad, New Mexico (Google INC., 2025). The legal location for the site is Unit A, Section 28, Township 21 South and Range 30 East in Eddy County, New Mexico. The release area is located on New Mexico State Trust Land. An aerial photograph and site schematic are presented in Figure 1.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2025) indicates the site’s surface geology primarily comprises Qp – Piedmont alluvial deposits (upper and middle Quaternary). The soil texture on the site is Loamy Sand. Additional soil characteristics include a drainage class of well drained to somewhat excessively drained with a runoff class very low. The karst geology potential for the site is high (United States Department of the Interior, Bureau of Land Management, 2018).

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 in proximity to the location (Figure 1).

The surrounding landscape is associated with elevations ranging between 2,800 and 5,000 feet. The climate is semiarid with average annual precipitation ranging between 8 and 13 inches. Using information from the United States Department of Agriculture, the dominant vegetation was not specified. Grasses with shrubs and half-shrubs such as black grama, blue grama, and tobosa dominate the historical plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2025). Limited to no vegetation is allowed to grow on the compacted right-of-way and access road.

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3.1 Vegetation Survey

The vegetation survey was conducted in and around the active remediation site, focusing on surrounding undisturbed and transitional areas to document existing plant communities. The purpose of the survey was to identify and record dominant vegetation types and confirm the absence of any sensitive, threatened, or endangered plant species. Observations included visual identification of species composition, density, and distribution within the survey boundary. The site is characterized by a semi-arid rangeland dominated by native grasses and drought-tolerant mesquite/tarbrush, with scattered evidence of prior disturbance associated with remediation activities. No occurrences of New Mexico State Land Office (NMSLO) -listed sensitive plant species or wildlife were observed during the survey. The vegetation survey associated with the report are included in Appendix D.

4.0 Closure Criteria Determination

The nearest active well to the site is a New Mexico Office of the State Engineer monitoring well located approximately 1.32 miles northwest of the site (United States Geological Survey, 2025). Information pertaining to the depth to ground water determination is included in Appendix A.

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 a Freshwater Emergent Wetland (National Wetlands Inventory) located approximately 0.86 miles northeast 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.

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Closure Criteria Determination			
Site Name: Big Eddy Unit DI 9 Battery			
Spill Coordinates: 32.456906,-103.879339			
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	>165	feet
	Distance between release and nearest DTGW reference	6,973	feet
		1.32	miles
	Date of nearest DTGW reference measurement	December 20, 2014	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	1,015	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	17,545	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	34,788	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	105,656	feet
	ii) Within 1000 feet of any fresh water well or spring	105,656	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	4,759	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	20,872	feet
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
	Distance between release and nearest unstable area		feet
10	Within a 100-year Floodplain	500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	5,303	feet
11	Soil Type	Pajarito-Dune land complex	
12	Ecological Classification	Loamy Sand	
13	Geology	Qp – Piedmont alluvial deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

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The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

Table 2. Closure Criteria for Soils Impacted by a Release DTGW <50 feet bgs & High Karst		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
< 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids

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

BTEX – benzene, toluene, ethylbenzene and xylenes

DTGW – depth to groundwater

BGS – below ground surface

5.0 Remedial Actions Taken

An initial site inspection of the release area was completed on June 24, 2025. Characterization of the release area was started July 2, 2025, and completed on July 8, 2025, which identified the area of the release specified in the initial C-141 Reports, estimated the approximate volume of the release and white lined the area required for the One Call request. The impacted area for the Incident was determined to be approximately 3,330 square feet in size or 123 cubic yards. Samples points BH25-01 through BH25-15 were established to characterize the release (Figure 1). The Daily Field Reports (DFRs) associated with the site inspection are included in Appendix B. Characterization field screening and laboratory results are summarized in Table 3.

Remediation efforts began on July 18, 2025, and were finalized on August 7, 2025. Remediation efforts guided by Vertex personnel excavated 4,633 square feet or 172 cubic yards of impacted soil. Soil was removed to a minimum of 1 feet bgs and a maximum depth of 6 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at Lealand an approved waste management facility. Field screening results and DFRs documenting various phases of the remediation are presented in Appendix B.

Notification that confirmatory samples were being collected was provided to the NMOCD for sampling on July 21, 2025. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 52 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Envirotech under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix C. All confirmatory samples collected and analyzed were below closure criteria for the site.

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6.0 Closure Request

Vertex recommends no additional remediation action to address the impacted area at the site. Laboratory analyses of confirmation samples collected show final confirmatory values below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs and in high karst potential. There are no anticipated risks to human, ecological, or hydrological receptors at the site.

The excavation was backfilled with uncontaminated earthen material sourced locally and placed to meet the site's existing grade to prevent water ponding and erosion. Samples were collected from the top-soil material prior to backfill activities. Analytical data pertaining to the backfill samples is included in Table 4. The top layer of the backfill was seeded on September 5, 2025, with the State Land Office (SLO) recommended seed mixture for loamy soils.

Vertex requests that this open incident be approved for reclamation closure as all requirements set forth in 19.15.29 NMAC have been met. ExxonMobil certifies that all information and appendices in this report are correct and that they have complied with all applicable closure requirements and conditions. The site will be monitored bi-annually until it reaches at least a 70% revegetation. A Revegetation Report will be submitted to NMOCD and SLO when the site has been successfully revegetated.

7.0 Land Reclamation

The land reclamation for the site (surface reclamation) is detailed below. This section outlines the principles that were used during the surface reclamation phase for the site. The DFR and site photographs obtained during reclamation procedures are included in Appendix B.

7.1 End Land Use and Capability

The land use surrounding the site is defined as natural; therefore, the end land use would be natural land. A natural area is described as: away from human habitation and activities, where the primary concern is the protection of ecological receptors. The site was reclaimed so that the capability of the land matches that of the areas immediately surrounding the site, which consists of rangeland.

7.2 Restoration of Drainage

Currently, the site consists of a pasture area that slopes southward along the pipeline right-of-way. The site was contoured to match surrounding topography as near as practicable to restore natural drainage, which was generally in a west-to-east direction. Any compaction on-site was addressed by de-compaction to an approximate depth of 6 inches to avoid caliche material from resurfacing. The decompaction was completed in the direction in which the area is sloped to ensure that future rainfall will be able to drain away from the site. All de-compaction activities were conducted post-backfill procedures and pre-seeding to maximize seed to soil contact and promote vegetation establishment.

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7.3 Soil Replacement

Surface reclamation included determination of background topsoil depth as site conditions are required to meet pre-existing conditions. Reclamation of the location was completed after backfilling operations. Clean, locally sourced topsoil and caliche was imported to the site to backfill the excavation. The pasture areas were fenced with a 4-strand barbed wire fence.

7.4 Erosion Control

There are currently no erosion concerns on-site, and the use of erosion control devices at this location is not anticipated; However, erosion control devices will be installed at the discretion of the on-site environmental inspector.

7.5 Re-vegetation

7.5.1 Seeding

A seed mix suitable for the site and surrounding area was used and applied at appropriate rates. Seed establishment and re-vegetation will be monitored, bi-annually, to determine success. A SLO loamy seed mix consisting of Sideoats grama – 2.0 lb/acre, Blue grama – 2lb/acre, Sand dropseed – 1lb/acre, Galleta grass – 2.5lb/acre, Little bluestem – 2.5lb/acre was obtained for the site and administered by Vertex personnel. Seeding was completed using a drone with rotating discs and broadcasted on all areas under reclamation. Photo documentation of the excavation area after backfilling and seeding is included in Appendix B.

7.6 Weed Management

The site will be monitored for vegetative growth throughout the year. Should noxious vegetation be identified on-site, a control program will be implemented and managed as required.

The vegetation survey was conducted in and around the active remediation site, focusing on surrounding undisturbed and transitional areas to document existing plant communities. The purpose of the survey was to identify and record dominant vegetation types and confirm the absence of any sensitive, threatened, or endangered plant species. Observations included visual identification of species composition, density, and distribution within the survey boundary. The site is characterized by a semi-arid rangeland dominated by native grasses and drought-tolerant mesquite/tarbrush, with scattered evidence of prior disturbance associated with remediation activities. No occurrences of NMSLO-listed sensitive plant species or wildlife were observed during the survey.

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

8.0 Monitoring Program

Bi-annual inspections will be conducted, during the growing season, to monitor site progression and assess the need for additional best management practices (BMPs). Inspections will include photographs of the site and BMPs implemented. Revegetation success will be considered complete when the site reaches 70% coverage.

8.1 Final Assessment and Closure Request

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During the bi-annual inspections, if site conditions are at or nearing background conditions, a final re-vegetation report will be completed. The report will provide a summary of the vegetation establishment, a summary and interpretation of monitoring data collected, interpretation of historical monitoring data, and suggested corrective actions if applicable.

Should you have any questions or concerns, please do not hesitate to contact Chad Hensley at 575.246.0032 or chensley@vertexresource.com.

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9.0 References

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10.0 Limitations

This report has been prepared for the sole benefit of ExxonMobil Upstream Company. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and the Bureau of Land Management, without the express written consent of Vertex Resource Services Inc. (Vertex) and ExxonMobil Upstream Company. 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. The conclusions and recommendations presented in this report should not be considered legal advice.

FIGURES



- ✦ Borehole
- Pipeline (Aboveground)
- Release Extent (~3,327 sq.ft. | 852 ft.)



0510 ft.

N

Map Center:
Lat: 32.456647°N,
Long: 103.879603°W

Characterization Schematic
Big Eddy Unit DI 9 Battery

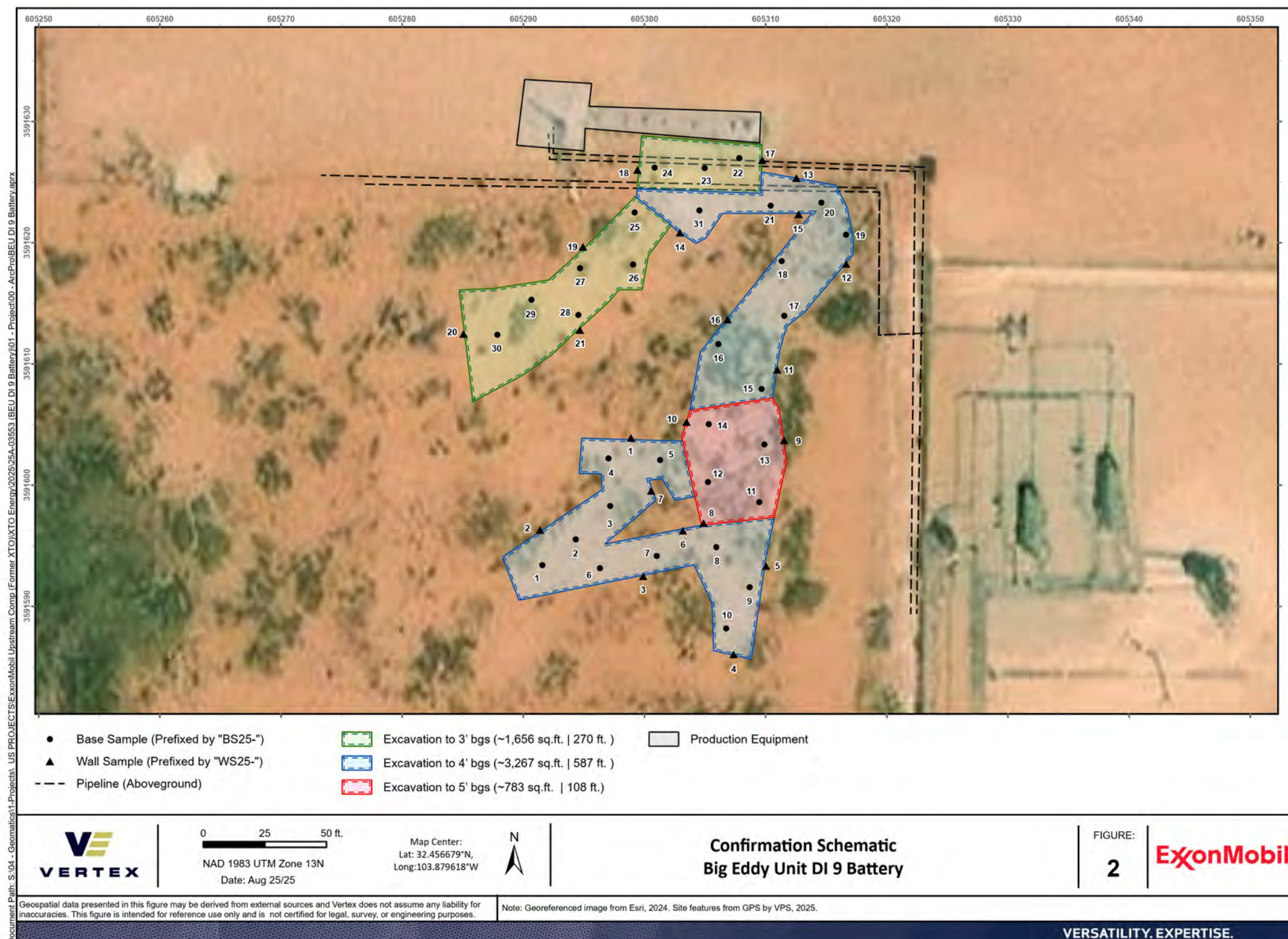
FIGURE:
1



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, 2024. Site features from GPS by Vertex Professional Services Ltd. (VPS), 2025.

VERSATILITY. EXPERTISE.



TABLES

Client Name: ExxonMobil Upstream Company

Site Name: Big Eddy Unit DI 9

NM OCD Tracking #: nAPP2517841727

Project #: 25A-03553

Lab Reports: H254029, H254106

Table 3. Initial Characterization Sample and Laboratory Results									
Sample Description			Petroleum Hydrocarbons						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable			Chloride Concentration	
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)		Total Petroleum Hydrocarbons (TPH)
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			
Depth to Groundwater < 50 feet bgs									
BH25-01	0	July 2, 2025	ND	ND	ND	ND	ND	ND	64
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	64
BH25-02	0	July 2, 2025	ND	ND	ND	ND	ND	ND	48
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	128
BH25-03	0	July 2, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	32
BH25-04	0	July 2, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	64
BH25-05	0	July 2, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	432
	2	July 7, 2025	ND	ND	ND	ND	ND	ND	624
	3	July 7, 2025	ND	ND	ND	ND	ND	ND	272
	4	July 7, 2025	ND	ND	ND	ND	ND	ND	176
BH25-06	0	July 2, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	144
	2	July 7, 2025	ND	ND	ND	ND	ND	ND	288
	3	July 7, 2025	ND	ND	ND	ND	ND	ND	112
	4	July 7, 2025	ND	ND	ND	10	ND	ND	112
BH25-07	0	July 2, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	64
BH25-08	0	July 2, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	160
BH25-09	0	July 2, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	432
BH25-10	0	July 7, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	80
	2	July 7, 2025	ND	ND	ND	ND	ND	ND	144
	3	July 7, 2025	ND	ND	ND	ND	ND	ND	256
	4	July 7, 2025	ND	ND	ND	ND	ND	ND	208

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)	Total Petroleum Hydrocarbons (TPH)	
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			
Depth to Groundwater < 50 feet bgs									
BH25-11	0	July 7, 2025	ND	ND	ND	ND	ND	ND	ND
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	ND
BH25-12	0	July 2, 2025	11	307	3400	13800	1840	19358	ND
	1	July 7, 2025	2.31	71.7	2100	25400	4460	32034.01	160
BH25-13	0	July 7, 2025	2.31	71.7	2100	25400	4460	31960	1410
	1	July 7, 2025	23.9	588	3470	8730	1130	13330	8000
	2	July 7, 2025	48.1	1350	19700	40600	4670	64970	192
	3	July 7, 2025	ND	1	ND	93	ND	93	128
	4	July 7, 2025	ND	1	ND	12.8	ND	ND	352
BH25-14	0	July 7, 2025	ND	37.1	486	9450	1260	11196	1260
	1	July 7, 2025	ND	ND	ND	ND	ND	ND	1060
	2	July 7, 2025	ND	ND	ND	103	19	122	560
	3	July 7, 2025	ND	ND	ND	ND	ND	ND	240
	4	July 7, 2025	ND	ND	ND	24	ND	ND	208
BH25-15	0	July 7, 2025	ND	14	936	16400	2900	20236	1280
	1	July 7, 2025	ND	37	919	66000	968	67887	432
	2	July 7, 2025	ND	ND	ND	36	ND	ND	512
	3	July 7, 2025	ND	ND	ND	ND	ND	ND	128
	4	July 7, 2025	ND	ND	ND	ND	ND	ND	48

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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

Client Name: ExxonMobil Upstream Company

Site Name: Big Eddy Unit DI9 Tank Battery

NMOCD Tracking #: nAPP2517841727

Project #: 25A-03553

Lab Report(sX): H254592, H254663, H254915

Table 4. Confirmatory Sample and Laboratory Results										
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)	
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)				
Depth to Groundwater ≤ 50 feet bgs										
BS25-01	4	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	48
BS25-02	4	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	80
BS25-03	4	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	192
BS25-04	4	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	176
BS25-05	4	July 25, 2025	ND	ND	ND	97	ND	97	97	112
BS25-06	4	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	224
BS25-07	4	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	224
BS25-08	4	July 25, 2025	ND	ND	ND	125	10	125	135	224
	4	August 7, 2025	ND	ND	ND	ND	ND	ND	ND	32
BS25-09	4	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	176
BS25-10	4	July 25, 2025	ND	ND	ND	38	ND	38	38	192
BS25-11	5	July 25, 2025	ND	ND	ND	224	37	224	261	224
	5	August 7, 2025	ND	ND	ND	15	ND	15	15	48
BS25-12	5	July 25, 2025	ND	ND	ND	13	ND	13	13	144
BS25-13	5	July 25, 2025	ND	ND	ND	22	ND	22	22	144
BS25-14	5	July 25, 2025	ND	ND	ND	50	ND	50	50	368
BS25-15	4	July 25, 2025	ND	ND	ND	57	10	ND	67	384
BS25-16	4	July 25, 2025	ND	ND	ND	48	ND	48	48	320
BS25-17	4	July 25, 2025	ND	ND	ND	177	31	177	208	336
	4	August 7, 2025	ND	ND	ND	ND	ND	ND	ND	16
BS25-18	4	July 28, 2025	ND	ND	ND	107	16	107	123	432
	4	August 7, 2025	ND	ND	ND	19	ND	19	19	ND
BS25-19	4	July 28, 2025	ND	ND	ND	135	21	135	156	560
	4	August 7, 2025	ND	ND	ND	14	ND	14	14	48
BS25-20	4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	32
BS25-21	4	July 28, 2025	ND	ND	ND	19	ND	19	19	64
BS25-22	3	July 28, 2025	ND	ND	ND	16	ND	16	16	288
BS25-23	3	July 28, 2025	ND	ND	ND	32	ND	32	32	304
BS25-24	3	July 28, 2025	ND	ND	ND	17	ND	17	17	304
BS25-25	3	July 25, 2025	ND	ND	ND	ND	ND	ND	ND	384
BS25-26	3	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	416
BS25-27	3	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	176
BS25-28	3	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	160
BS25-29	3	July 28, 2025	ND	ND	ND	84	ND	84	84	240
BS25-30	3	July 28, 2025	ND	ND	ND	84	13	84	97	240

BS25-31	4	July 28, 2025	ND	ND	ND	90	15	90	105	256
	4	August 7, 2025	ND	ND	ND	77	15	77	92	240
WS25-01	0-4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	160
WS25-02	0-4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	464
WS25-03	0-4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	400
WS25-04	0-4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	144
WS25-05	0-4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	112
WS25-06	0-4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	144
WS25-07	0-4	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	352
WS25-08	0-5	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	144
WS25-09	0-5	July 28, 2025	ND	ND	ND	ND	ND	ND	ND	416
WS25-10	0-5	July 29, 2025	ND	ND	ND	ND	ND	ND	ND	256
WS25-11	0-4	July 29, 2025	ND	ND	ND	ND	ND	ND	ND	256
WS25-12	0-4	July 29, 2025	ND	ND	ND	31	ND	31	31	352
WS25-13	0-4	July 29, 2025	ND	ND	ND	24	ND	24	24	320
WS25-14	0-4	July 29, 2025	ND	ND	ND	ND	ND	ND	ND	96
WS25-15	0-4	July 29, 2025	ND	ND	ND	80	ND	80	80	256
WS25-16	0-4	July 29, 2025	ND	ND	ND	ND	ND	ND	ND	288
WS25-17	0-3	July 29, 2025	ND	ND	ND	71	12	71	83	320
WS25-18	0-3	July 29, 2025	ND	ND	ND	87	17	87	104	336
	0-3	August 7, 2025	ND	ND	ND	21	ND	21	21	144
WS25-19	0-3	July 29, 2025	ND	ND	ND	77	ND	77	77	208
WS25-20	0-3	July 29, 2025	ND	ND	ND	74	ND	74	74	272
WS25-21	0-3	July 29, 2025	ND	ND	ND	ND	ND	ND	ND	96
BF Sand	0	July 29, 2025	ND	ND	ND	ND	ND	ND	ND	16
BF Caliche	0	July 29, 2025	ND	ND	ND	ND	ND	ND	ND	176

"ND" Not Detected at the Reporting Limit

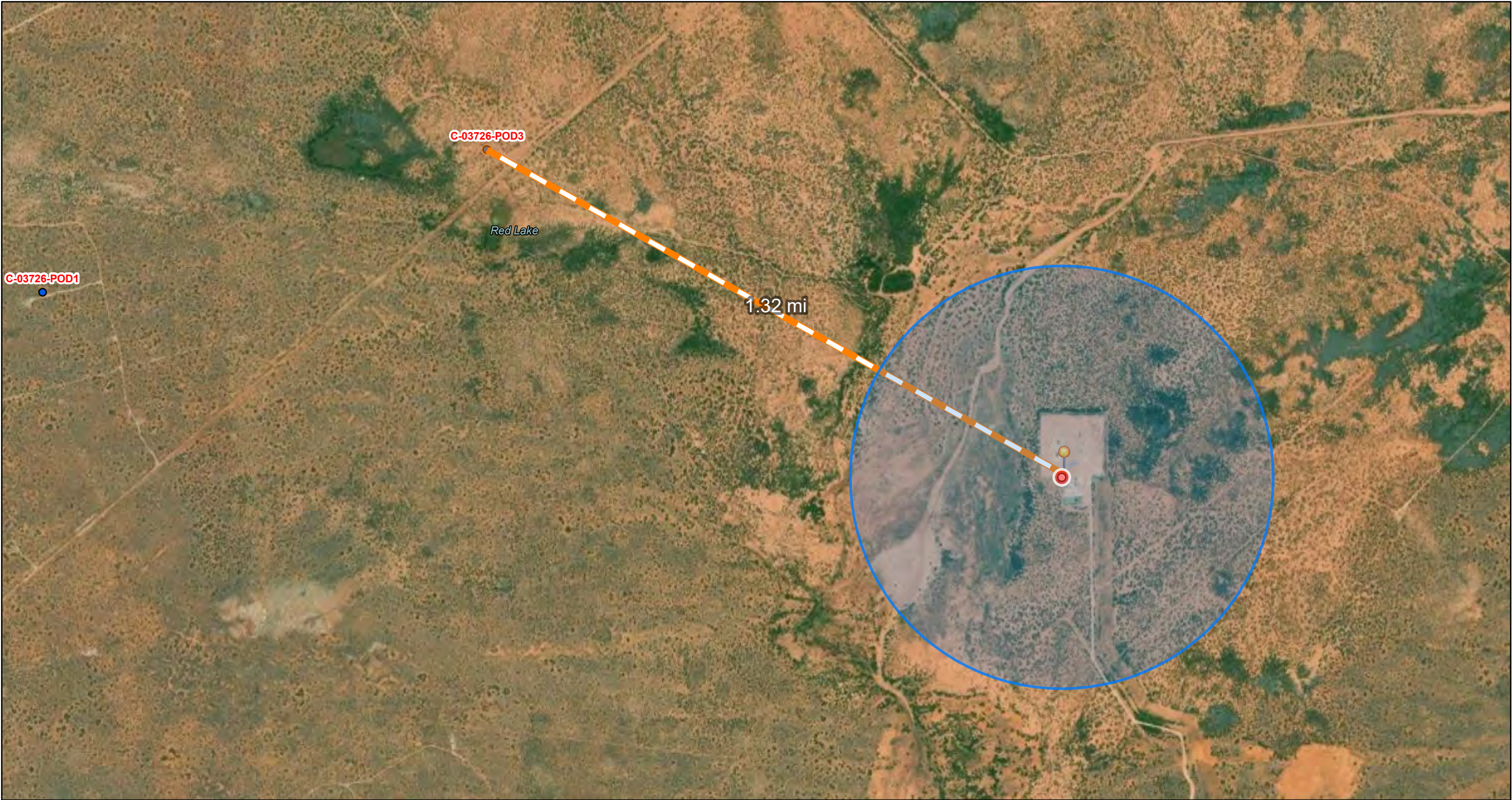
"BF" Indicates Backfill

"-" indicates not analyzed/assessed

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

APPENDIX A - Closure Criteria Research Documentation

OSE POD Locations Map

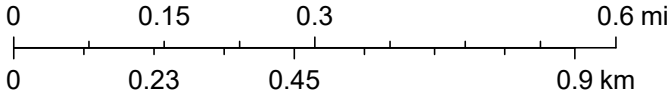


8/2/2025, 2:31:33 PM

GIS WATERS PODs

● Active

1:14,353



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

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	Tws	Rng	X	Y	Map
	C 03726 POD3	SE	SW	NE	20	21S	30E	603463.1	3592652.8	

* UTM location was derived from PLSS - see Help

Driller License:	1210	Driller Company:	CASCADE DRILLING, LP		
Driller Name:	MARK GREEN				
Drill Start Date:	2014-12-03	Drill Finish Date:	2014-12-20	Plug Date:	
Log File Date:	2015-02-13	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:	5.00	Depth Well:	166	Depth Water:	

Casing Perforations:

Top	Bottom
101	105
105	145

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.



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

2015 FEB 13 PM 1:45

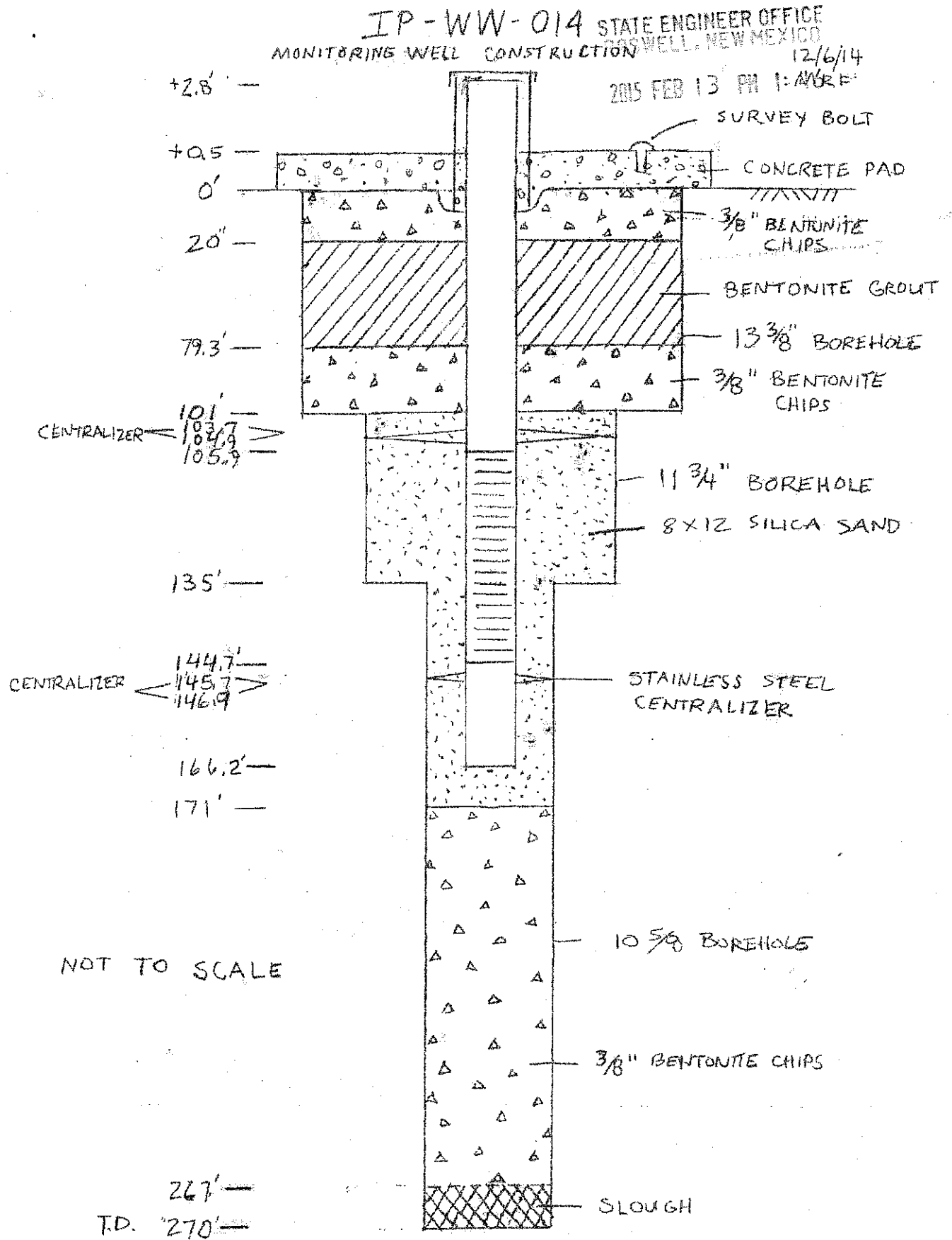
1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) Pod-3P-WW-14				OSE FILE NUMBER(S) C-3726			
	WELL OWNER NAME(S) Intrepid Pot Ash				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 707 17th Street Suite 4200				CITY Denver		STATE CO	
					ZIP 80202			
	WELL LOCATION (FROM GPS)		DEGREES 32		MINUTES 27		SECONDS 58.54	
	LATITUDE		N				* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
	LONGITUDE		W				* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1210		NAME OF LICENSED DRILLER Bryan Nydoske			NAME OF WELL DRILLING COMPANY National EWP		
	DRILLING STARTED 12-3-14		DRILLING ENDED 12-20-15		DEPTH OF COMPLETED WELL (FT) 166.2		BORE HOLE DEPTH (FT) 270	
							DEPTH WATER FIRST ENCOUNTERED (FT) NA	
	COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☒ SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) NA	
	DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☐ ROTARY ☒ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	101	13 3/8	PVC	flush	5"	80	
	101	105	11 3/4	PVC	flush	5"	80	.020
105	145	10 5/8	PVC	flush	5"	80	.020	
145	165	10 5/8	PVC	Flush	5"	80		
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						
	0	20	13 3/8	Chips	30	trimed		
	20	79.3	13 3/8	Quick grout	52	trimed		
	79.3	101	13 3/8	Chips	29.7	trimed		
	101	135	11 3/4	8 1/2 sand	27.5	trimed		
	135	171	10 5/8	8 1/2 sand	29.3	trimed		
	171	267	10 5/8	chips	57.9			
	267	270	10 5/8	hole cave in				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER C-3726	POD NUMBER 3	TRN NUMBER 542145
LOCATION 21S.30E.20.2.3.4	monitor	

PAGE 1 OF 2



TEMPORARILY CASSED TO 100 FEET WITH 13 3/8 CASING
TEMPORARILY CASSED TO 135 FEET WITH 11 3/4 CASING

EXPLORATORY BORING LOG				STATE ENGINEER OFFICE SANTA FE, NEW MEXICO		Foth	
BORING NUMBER		OWNER		PROJECT NAME		PAGE: 1 of 6	
PROJECT NUMBER		PROJECT LOCATION		GROUND ELEVATION		TOTAL DEPTH	
DRILLING CONTRACTOR		DRILLING METHOD		1ST GROUNDWATER		STATIC GW	
LOGGED BY		DATE STARTED		DATE COMPLETED		NOTES	
IP-WW-014		Intrepid Potash		West Mine Monitoring Wells		2015 FEB 13 PM 1:46	
141015		Eddy County, New Mexico		~ 3164		270	
National		Air Rotary/DH Hammer		est 98'			
Mike Free (GRAB SAMPLES)		12/3/2014					
DEPTH (FT)	SAMPLED INTERVAL	SAMPLE TYPE	GRAPHIC LOG	MATERIAL DESCRIPTION		WELL DIAGRAM	
0				0 to 35 FEET: SILTY SAND (SM) DARK REDDISH BROWN (2.5YR 3/4) FINE SAND, SILT, DISCONTINUOUS LENSES OF FTO M. CALICHE GRAVEL, DRY			
5							
8				SM @ 8 FEET: REDDISH BROWN (2.5YR 4/4)			
10							
12				@ 12 FEET: CALICHE GRAVEL - RICH ZONE; RED (2.5YR 5/1)			
15				@ 15 FEET REDDISH BROWN (2.5YR 4/4)			
20							
22				@ 22 FEET RED (2.5YR 4/6)			
25				@ 25 FEET: CALICHE-CEMENTED - SAND "GRAVEL" LIGHT RED (2.5YR 6/6) CALICHE IS PINKISH WHITE (7.5YR 8/2) TO LIGHT REDDISH BROWN (5YR 6/4); SOME FRAGMENTS PORCELLANEUS WITH SUSPENDED SAND GRAINS			
30							
35				@ 35 FEET: SAND (SP); RED 2.5YR 4/6 95% FINE SAND, 5% FINES, MOSTLY SILT SOME CARBONATE CEMENT; FEW SILTSTONE FRAGMENTS			
40				@ 38 FT: SILTY SAND (SM); RED (2.5YR 4/6) 80% FINE SAND; 20% FINES; TRACE SILTSTONE PIECES; CALCAREOUS. STRONG EFFERVESCENCE WITH 5% HCL			
43				@ 43 FEET: SAND WITH SILT (SP-SM); RED (2.5YR 5/6)			
45							

GRAVEL ONLY

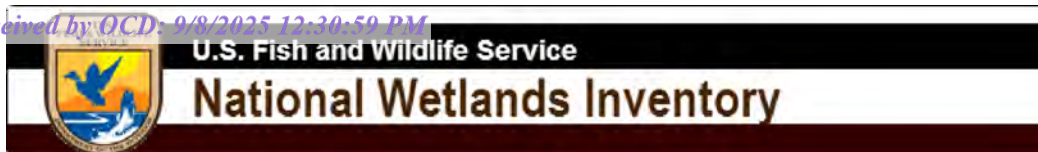
EXPLORATORY BORING LOG				STATE ENGINEER OFFICE ROSSELL, NEW MEXICO	
BORING NUMBER		IP-WW-014		2015 FEB 13 PM 1:46	
OWNER		Intrepid Potash		PROJECT NAME Groundwater Monitoring Wells	
PROJECT NUMBER		141015		PROJECT LOCATION Eddy County, New Mexico	
DEPTH (FT)		SAMPLED INTERVAL / SAMPLE TYPE		MATERIAL DESCRIPTION	
		GRAPHIC LOG		WELL DIAGRAM	
				@ 45 FEET: SILTY SAND (SM); REDDISH BROWN (2.5YR 5/4) 80% FINE SAND, INCLUDING CALICHE GRAINS; 20% FINES; MODERATE EFFERVESCENCE WITH 5% HCl	
50				@ 46 FEET: RED (2.5YR 5/6)	
				@ 50 FEET: RED (2.5YR 5/6)	
55			SM		
60					
65					
				@ 66 FEET: SAND WITH SILT (SP-SM); RED (2.5YR 5/6); 85% FINE SAND; 15% FINES, MOSTLY SILT, MUCH CALICHE SAND; STRONG EFFERVESCENCE WITH 5% HCl	
70			SP-SM		
				@ 70 FEET: SILTY SAND (SM); RED (2.5YR 4/6) 80% FINE SAND; 20% FINES; TRACE FRAGMENTS OF CALCAREOUS SANDSTONE; CALICHE	
75					
			SM		
80				@ 80 FEET: LIGHT RED (2.5YR 6/6)	
85				@ 85 FEET: SAND (SP) RED (2.5YR 5/6) 60% FINE SAND; 30% FINE TO MEDIUM GRAVEL; 5% FINES	
			SP		
90				@ 92 FEET: SANDY SILTSTONE; RED (2.5YR 4/6); NON-EFFERVESCENT, FORMATION GROWS UP BY BIT (DEWEY LAKE FORMATION)	
			DEWEY LAKE FM		
95				@ 94 FEET: CUTTINGS SLIGHT EFFERVESCENCE WITH	

EXPLORATORY BORING LOG				Foth STATE ENGINEER OFFICE ROSWEIL, NEW MEXICO		PAGE 3 of 6	
BORING NUMBER <u>IP-WW-014</u>				OWNER <u>Intrepid Potash</u>		PROJECT NAME <u>Groundwater Monitoring Wells</u>	
PROJECT NUMBER <u>141015</u>				PROJECT LOCATION <u>Eddy County, New Mexico</u>		NOTES	
DEPTH (FT)	SAMPLED INTERVAL/ SAMPLE TYPE	GRAPHIC LOG	MATERIAL DESCRIPTION			WELL DIAGRAM	
		DEWEY LAKE FM					
100	X		@ 102 FEET: SILTSTONE; RED (2.5YR 4/6); MODERATE EFFERVESCENCE WITH 5% HCl				
105	X		@ 105 FEET: AS ABOVE				
	X	A-4	@ 105.5 FEET				
	X		@ 107 FEET: ANHYDRITE, CALICHE, SANDSTONE				
110	X	ANHY- DRITE	@ 110 FEET: DRILLER SAYS DRILLING EASED				
115	X		@ 115 FEET: DOLOMITE; LIGHT BROWNISH GRAY (2.5Y 6/2) AND REDDISH BROWN (2.5YR 4/3)				
120	X		@ 120 FEET: ANHYDRITE AND DOLOMITE, LIGHT BROWNISH GRAY (2.5Y 6/2); 10% SILTSTONE AND SANDSTONE				
	X		@ 122 FEET: DOLOMITE, ANHYDRITE, CALICHE, SILTSTONE, SANDSTONE CUTTINGS				
125	X		@ 125 FEET: DOLOMITE GRAY (10YR 6/1) ANHYDRITE WEAK RED (10R 5/4); SILTSTONE; REDDISH BROWN (2.5YR 6/3)				
130	X		@ 129 FEET: DRILLER SAYS HARDER DRILLING AND BOREHOLE MAKING WATER; AT LEAST 20 GPM				
	X		@ 130-132 FEET: 40% ANHYDRITE; 30% CALICHE; 20% DOLOMITE; 10% SILTSTONE/SANDSTONE				
135	X	A-3	@ 132-135 FEET: 85% ANHYDRITE; PINKISH GRAY (7.5YR 6/2); 15% SILTSTONE; REDDISH BROWN (2.5YR 4/4) AND CALICHE; PINK (5YR 7/4)				
140	X	ANHY- DRITE	@ 140 FEET: ANHYDRITE; GRAYISH BROWN (10YR 5/2) MODERATE HARDNESS; MASSIVE; CRYSTALLINE				
145	X						

EXPLORATORY BORING LOG				Foth STATE ENGINEER OFFICE ROSSELL, NEW MEXICO		PAGE 4 of 6	
BORING NUMBER <u>IP-WW-014</u>				PROJECT NAME <u>Groundwater Monitoring Well</u>		NOTES	
OWNER <u>Intrepid Potash</u>				PROJECT LOCATION <u>Eddy County, New Mexico</u>			
PROJECT NUMBER <u>141015</u>							
DEPTH (FT)	SAMPLED INTERVAL SAMPLE TYPE	GRAPHIC LOG	MATERIAL DESCRIPTION		WELL DIAGRAM		
			@ 145 FEET: ANHYDRITE, GRAYISH BROWN (10YR 5/2), CRYSTALLINE MASSIVE				
150	X						
155	X						
		A-3					
160	X	ANHY- DRITE	COLOR CHANGE IN DISCHARGE WATER: @ 162 FEET: TRACE CLAYSH SILTSTONE/MUDSTONE INTERBED(S); DARK RED (2.5YR 14)				
165	X						
170	X						
175	X	ANHYDRITE					
180	X	A-3	@ 180 FEET: LIGHT BROWNISH GRAY (10YR 6/2)				
	X		@ 182 FEET: SUGARY TEXTURE, LIGHT GRAY, TRACE CLAY DUSKY RED (10R 3/4) AND REDDISH YELLOW (5YR 6/6)				
185	X						
190	X		@ 190 FEET: AS ABOVE WITH 15% VERY DARK GRAY (7.5YR 3/1)				
	X		@ 192 FEET: TRACB DOLOMITE/LIMESTONE, SUGARY TEXTURE; RED 2.5YR 4/6				
195	X						

EXPLORATORY BORING LOG				DATE ENGINEER OFFICE Foth NEW MEXICO		PAGE 5 of 6	
BORING NUMBER IP-WW-014				PROJECT NAME Groundwater Monitoring Wells		NOTES	
OWNER Intrepid Potash				PROJECT LOCATION Eddy County, New Mexico			
PROJECT NUMBER 141015							
DEPTH (FT)	SAMPLED INTERVAL/ SAMPLE TYPE	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM			
	X		@ 195 FEET: ANHYDRITE; GRAY (10YR 6/1); TRACE OF DARK GRAY ANHYDRITE; BLACK (2.5/N)				
200	X		@ 200 FEET: AS ABOVE; DARK GRAY (4/N); TRACE CLAYSTONE				
	X		@ 201 FEET: MUDDSTONE; REDDISH BROWN (2.5YR 4/4) WITH 25% ANHYDRITE				
205	X		@ 205 FEET: AS ABOVE				
210	X	ANHYDRITE	@ 210 FEET: 60% ANHYDRITE 10% SELENITE 30% CLAY (AS ABOVE)				
215	X	A-3	@ 215 FEET: ANHYDRITE; DARK GRAY (10YR 4/1) TRACE REDDISH BROWN CLAY				
220	X		@ 220 FEET: AS ABOVE; VERY DARK GRAY (10YR 3/1) TRACE CLAY				
		M-3	221 TO 224 FT. MUDDSTONE M-3				
225	X		@ 225 FEET: 40% MUDDSTONE; DARK REDDISH BROWN (2.5YR 3/3); 60% DOLOMITE; VERY DUSKY RED (2.5YR 2.5/2); FINE SANDY TEXTURE AT CLAYSTONE/MUDDSTONE CONTACT; MOSTLY GRAYISH BROWN (10YR 5/2)				
230	X	CULEBRA DOL.	VERY FINE SANDY TEXTURE; 10% VUGS < 1 mm; NEARLY SPHERICAL (CULEBRA DOLOMITE MEMBER)				
	X		@ 228 FEET: DOLOMITE; VERY FINE GRAINED (SILT SIZE); GRAYISH BROWN (10YR 5/2); MODERATE HARDNESS				
235	X		@ 230, 235 FEET: AS ABOVE				
	X		@ 238 FEET: 15 TO 30% DISCONTINUOUS VUGS ≤ 2 mm TRACE CLAY, RED (2.5YR 4/6)				
240	X		@ 240 FEET: 10% VUGS				
	X		@ 244 FEET: AS ABOVE				
	X		@ 245 FEET: 50% ANHYDRITE; DARK GRAYISH BROWN; 50% CLAY; DARK GRAY (10YR 4/1) (10YR 5/2)				
245	X		M-2 MUDDSTONE				

EXPLORATORY BORING LOG			Foth ENGINEER OFFICE SMALL, NEW MEXICO		PAGE 6 of 6
BORING NUMBER			OWNER Intrepid Potash		PROJECT NAME Groundwater Monitoring Wells
PROJECT NUMBER 141015			PROJECT LOCATION Eddy County, New Mexico		NOTES
DEPTH (FT)	SAMPLED INTERVAL SAMPLE TYPE	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM	
	X	M-2 MUDSTONE	@ 246 FEET: MUDSTONE / MUD: DARK GRAY (7.5YR 4/1) TO DARK REDDISH BROWN (2.5YR 3/3) (M-2 MUDSTONE)		
250	X	M-2 MUDSTONE	@ 250 FEET: MUD; DUSKY RED (10R 3/4)		
	X	M-2 MUDSTONE	@ 252 FEET: DRILLER SAYS HE HIT HARD MATERIAL (ANHYDRITE 2)		
255	X	A-1 ANHYDRITE	@ 255 FEET: 50% ANHYDRITE, 50% MUD (AS ABOVE) (A-1 ANHYDRITE)		
260	X	A-1 ANHYDRITE	@ 260 FEET: ANHYDRITE; LIGHT GRAY (10YR 7/1) TO DARK GRAYISH BROWN (10YR 4/2)		
265	X	M-1	@ 265 FEET: 60% MUD, 40% ANHYDRITE (LOS MEDANOS)		
270			TO 270 FEET		
275					
280					
285					
290					
295					



02_Big Eddy Unit DI 9 Battery_Watercours



August 1, 2025

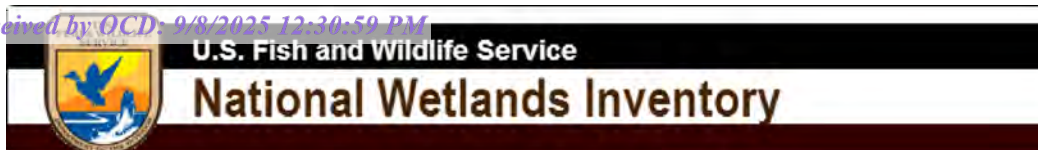
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

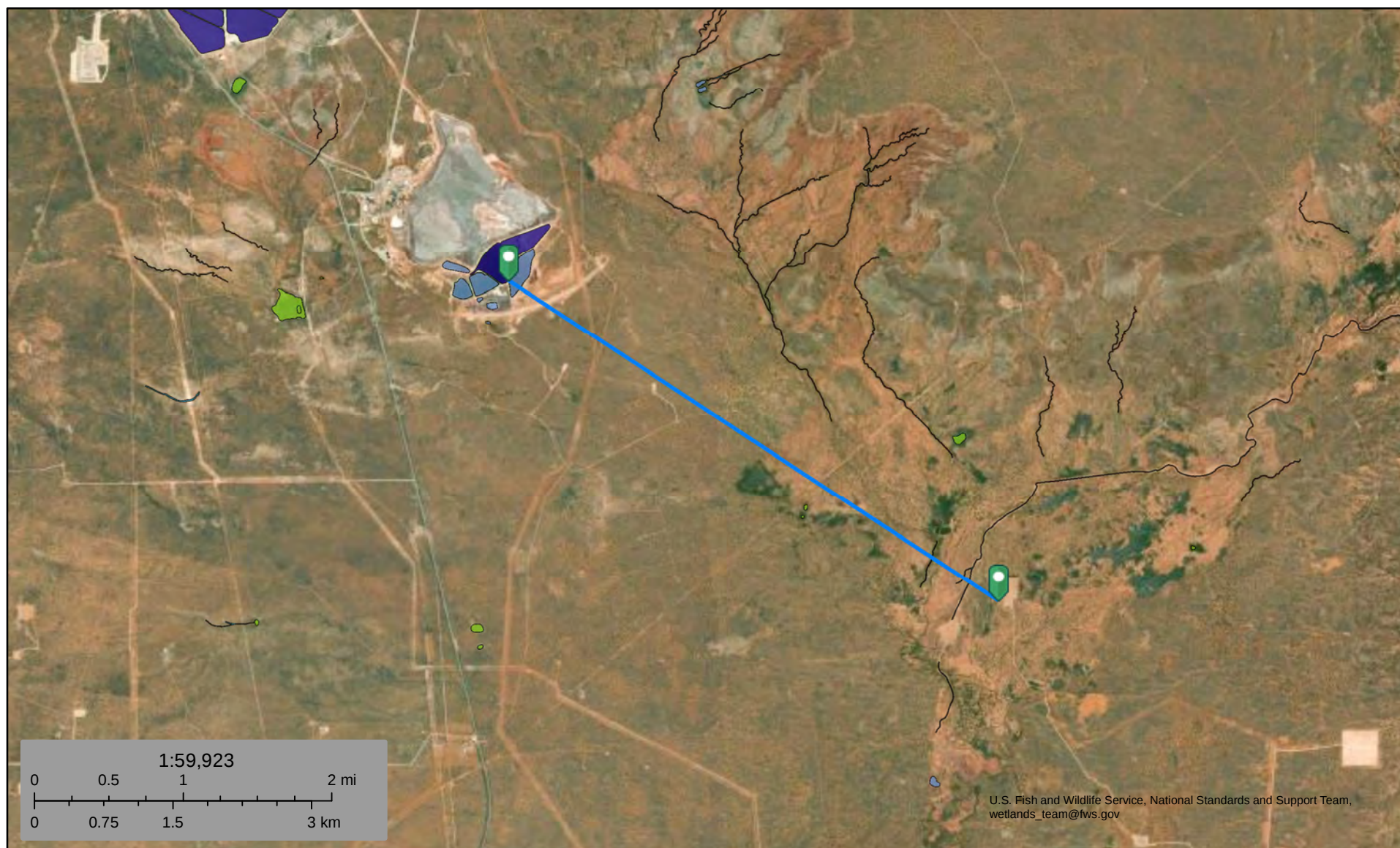
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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



03_Big Eddy Unit DI 9 Battery_Lake_17,54



August 1, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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

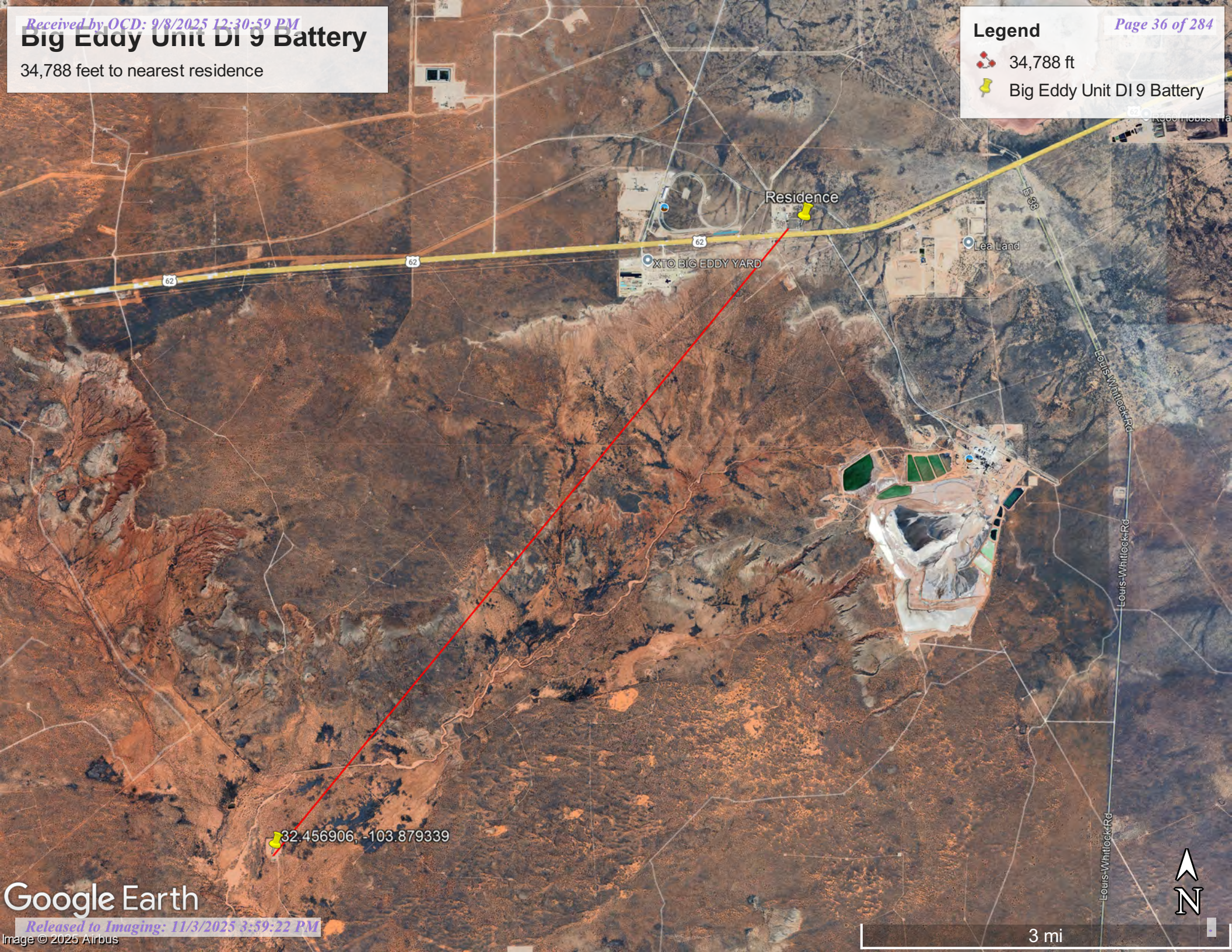
Big Eddy Unit DI 9 Battery

34,788 feet to nearest residence

Legend

 34,788 ft

 Big Eddy Unit DI 9 Battery



 32.456906, -103.879339

Google Earth

Released to Imaging: 11/3/2025 3:59:22 PM

3 mi

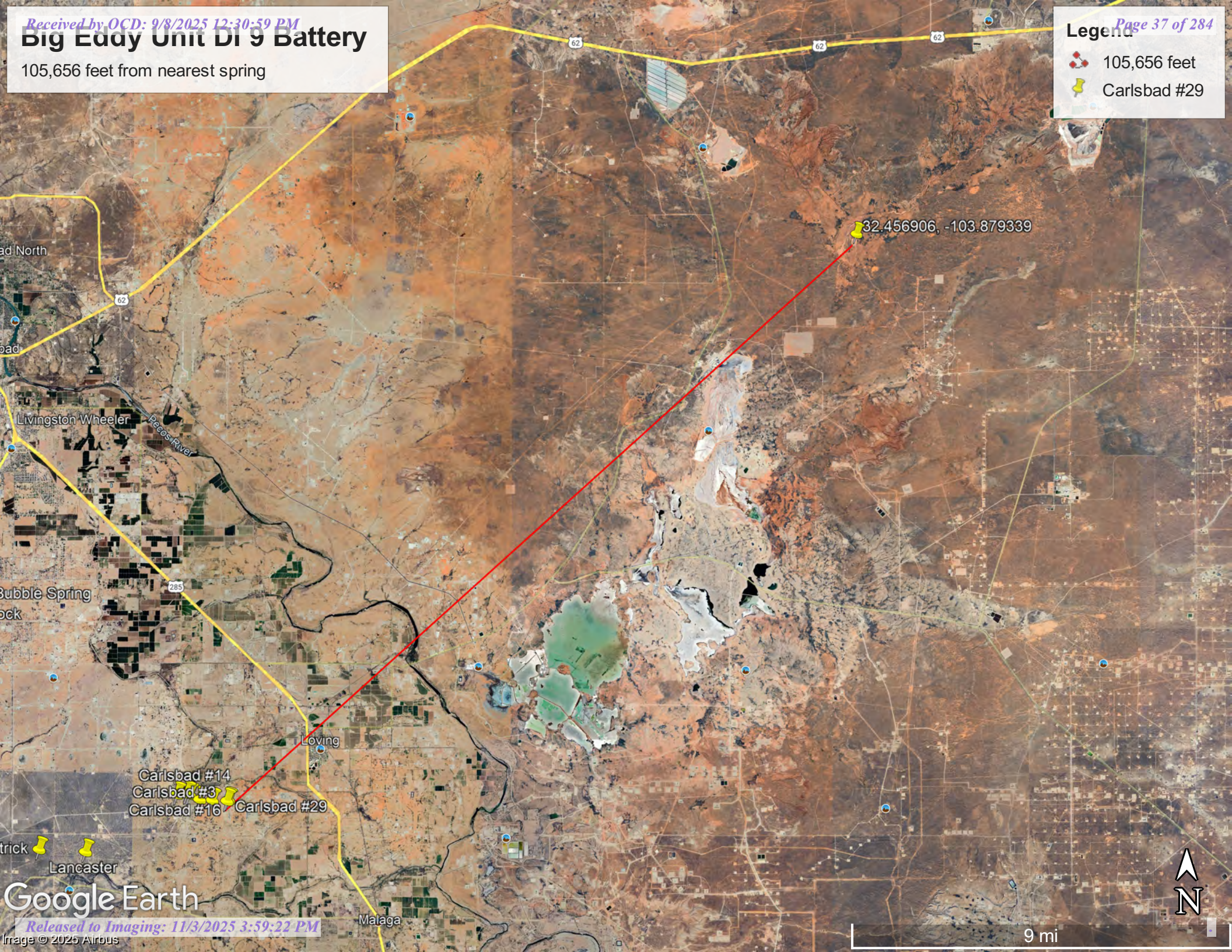


Big Eddy Unit DI 9 Battery

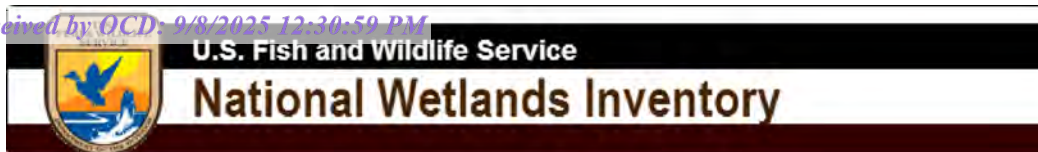
105,656 feet from nearest spring

Legend

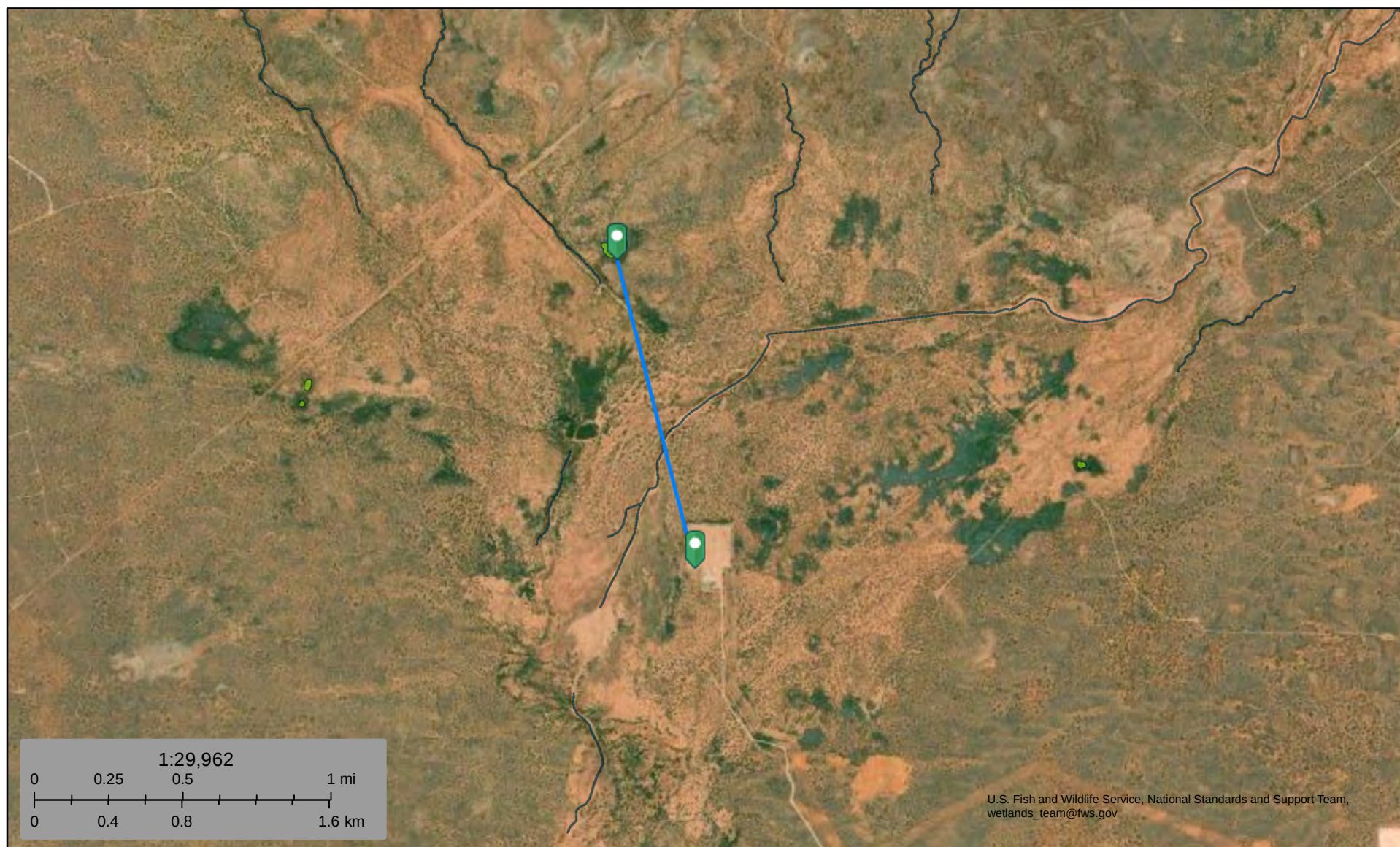
- 105,656 feet
- Carlsbad #29



Google Earth



07_Big Eddy Unit DI 9 Battery_Wetland_4,



August 1, 2025

Wetlands

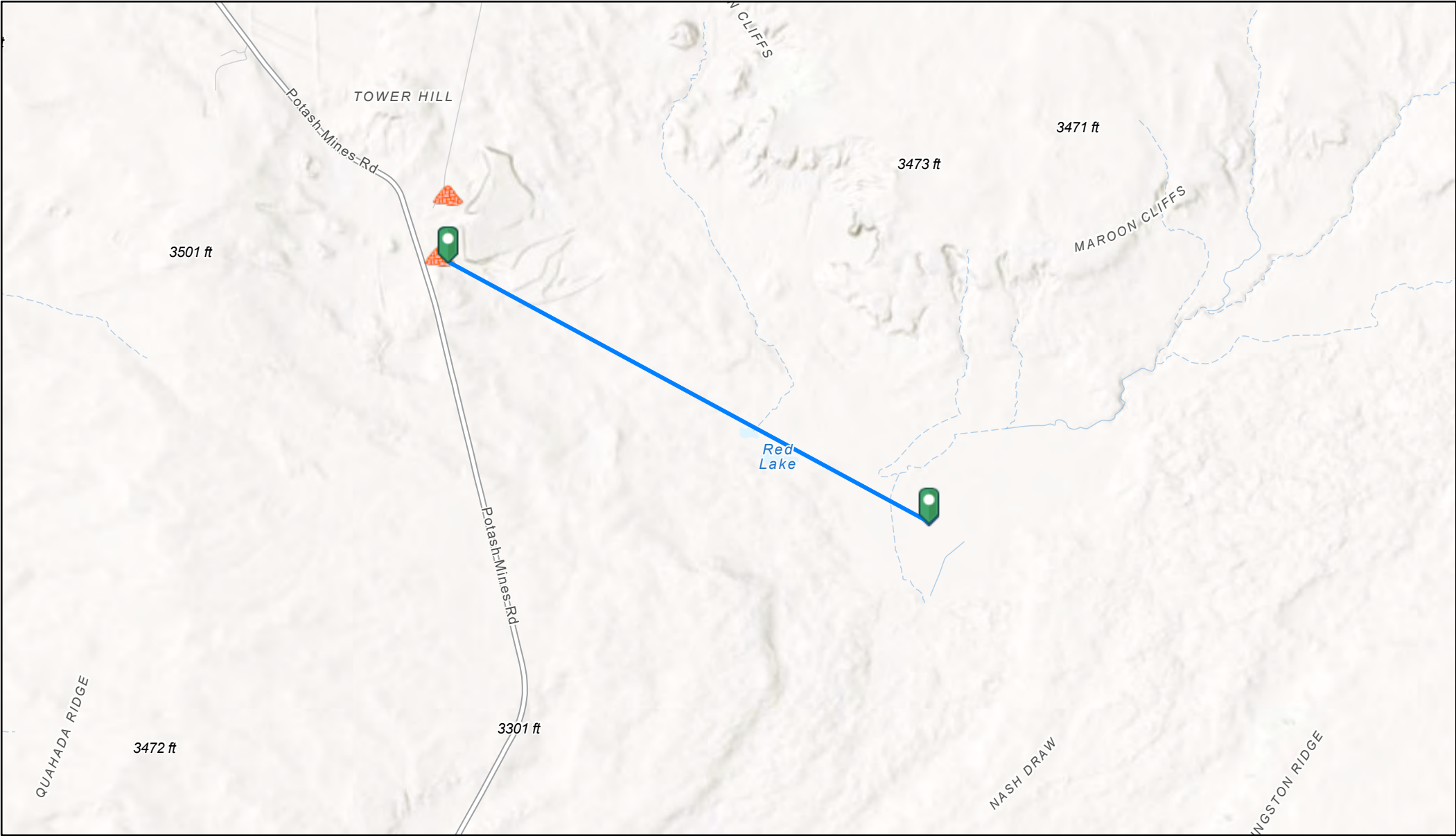
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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

Big Eddy Unit DI 9 Battery_Mine_20,872 ft

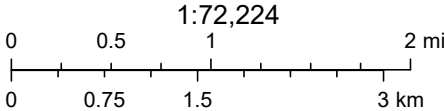


8/1/2025, 10:35:04 AM

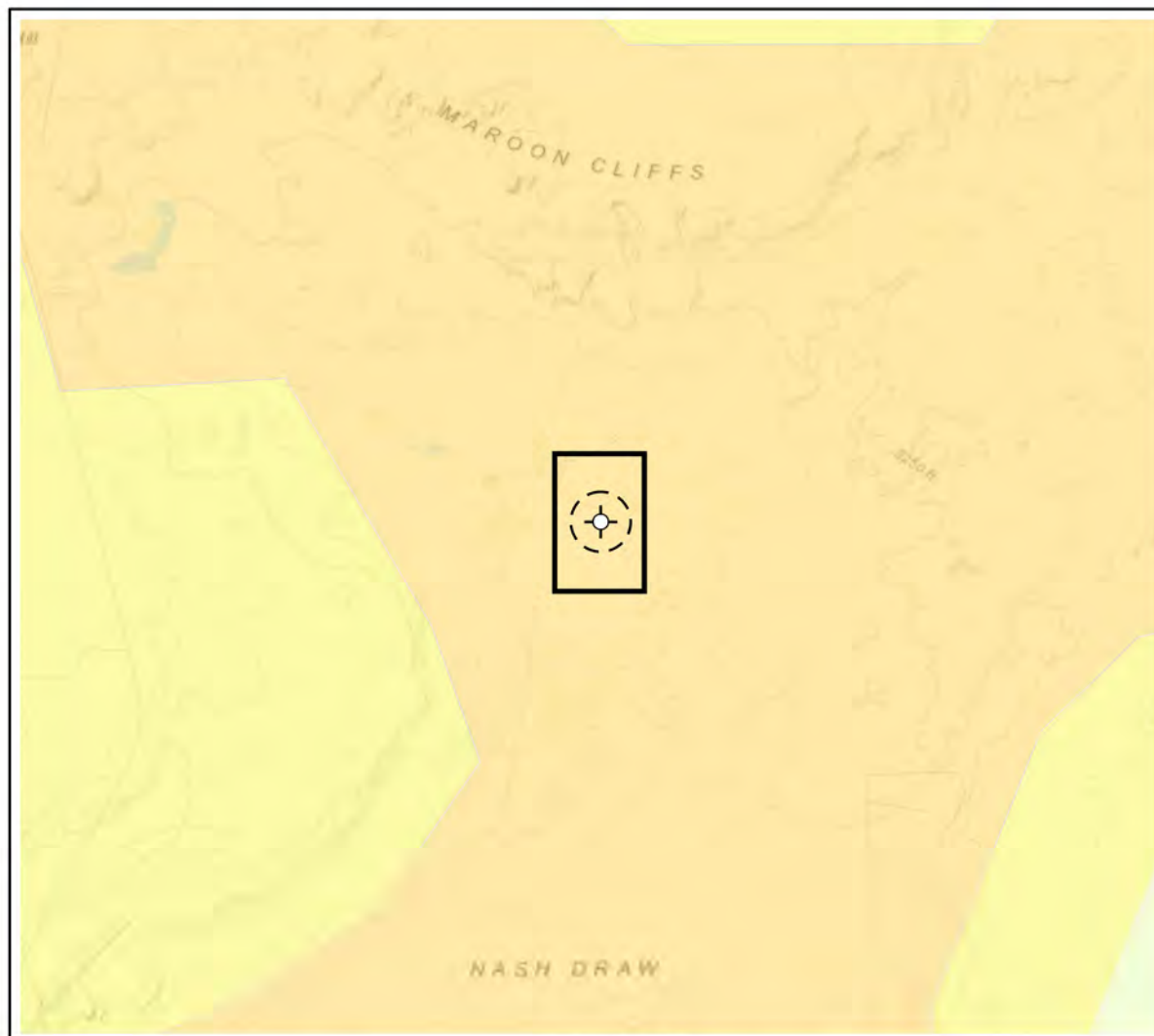
Registered Mines



Potash



Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1,000 ft)

Overview Map

0 0.5 1 mi



Detail Map

0 250 500 ft



Map Center:
Lat/Long
32.456837°, -103.879473°

NAD 1983 UTM Zone 13N
Date: Aug 01/25



Karst Potential Map Big Eddy Unit DI 9 Battery

Figure:
9



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 sources from Roswell Field Office, Bureau of Land Management, 2020 or United States Department of the Interior, Bureau of Land Management, (2018). Karst Potential.

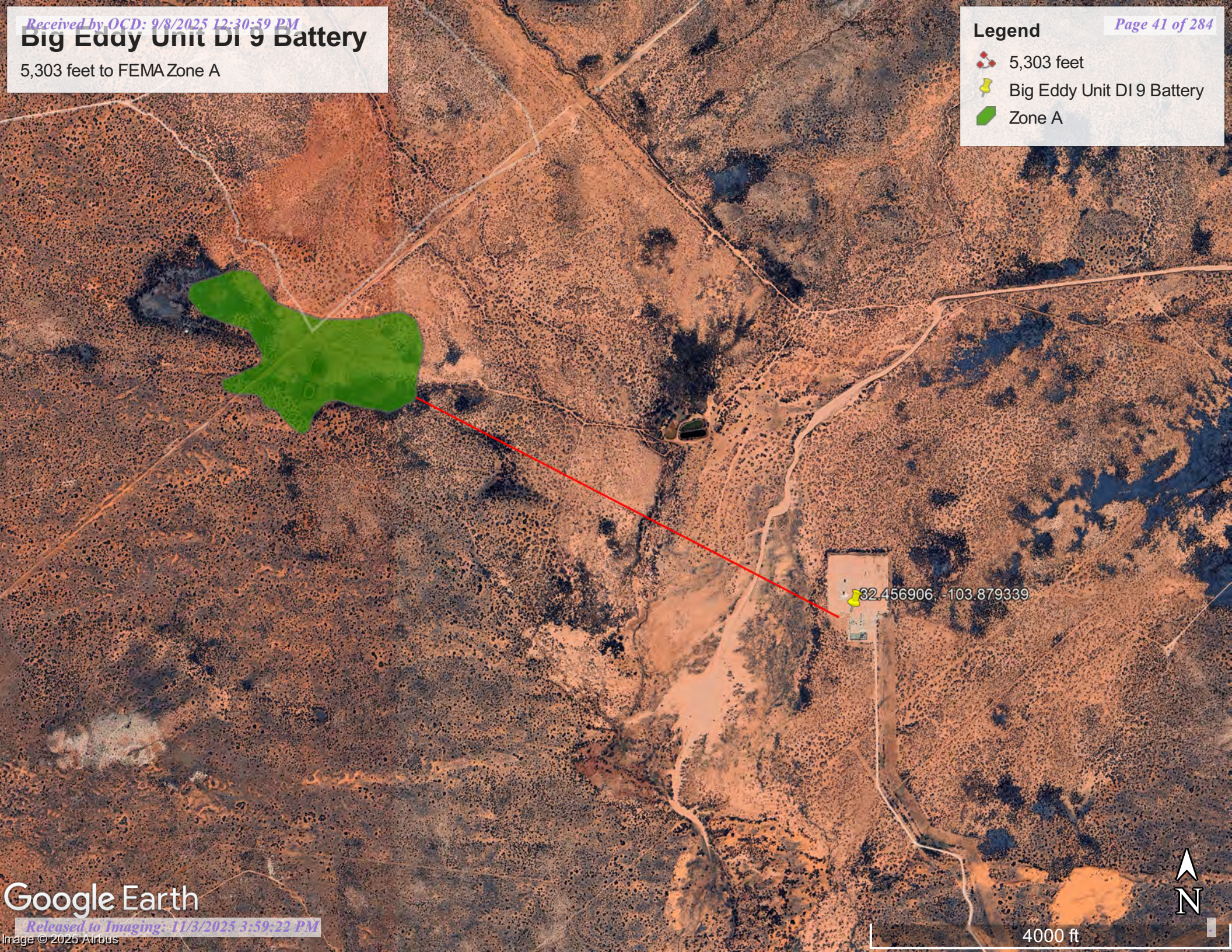
VERSATILITY. EXPERTISE.

Big Eddy Unit DI 9 Battery

5,303 feet to FEMA Zone A

Legend

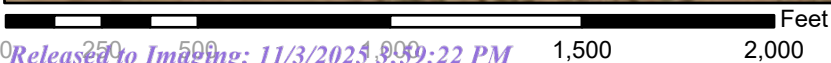
-  5,303 feet
-  Big Eddy Unit DI 9 Battery
-  Zone A



National Flood Hazard Layer FIRMMette



103°53'4"W 32°27'40"N



1:6,000

103°52'27"W 32°27'10"N

Released to Imaging: 11/3/2025 3:39:22 PM

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 8/2/2025 at 2:52 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.

Custom Soil Resource Report Soil Map



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 20, Sep 3, 2024

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PD	Pajarito-Dune land complex, 0 to 3 percent slopes	80.9	100.0%
Totals for Area of Interest		80.9	100.0%

Map Unit Descriptions

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 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.

Custom Soil Resource Report

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**PD—Pajarito-Dune land complex, 0 to 3 percent slopes****Map Unit Setting***National map unit symbol:* 1w55*Elevation:* 3,000 to 5,000 feet*Mean annual precipitation:* 10 to 15 inches*Mean annual air temperature:* 60 to 64 degrees F*Frost-free period:* 190 to 220 days*Farmland classification:* Not prime farmland**Map Unit Composition***Pajarito and similar soils:* 46 percent*Dune land:* 45 percent*Minor components:* 9 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Pajarito****Setting***Landform:* Plains, interdunes, dunes*Landform position (three-dimensional):* Side slope*Down-slope shape:* Convex, linear*Across-slope shape:* Linear, convex*Parent material:* Mixed alluvium and/or eolian sands**Typical profile***H1 - 0 to 9 inches:* fine sandy loam*H2 - 9 to 36 inches:* fine sandy loam*H3 - 36 to 72 inches:* fine sandy loam**Properties and qualities***Slope:* 0 to 3 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Well drained*Runoff class:* Very low*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)*Depth to water table:* More than 80 inches*Frequency of flooding:* None*Frequency of ponding:* None*Calcium carbonate, maximum content:* 15 percent*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 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):* 2e*Land capability classification (nonirrigated):* 7e*Hydrologic Soil Group:* A*Ecological site:* R070BD003NM - Loamy Sand*Hydric soil rating:* No

Custom Soil Resource Report

Description of Dune Land

Setting

Landform: Dune fields

Landform position (two-dimensional): Shoulder, backslope, footslope

Landform position (three-dimensional): Talf

Down-slope shape: Convex, linear

Across-slope shape: Convex, linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 6 inches: sandy loam

H2 - 6 to 60 inches: sandy loam

Interpretive groups

Land capability classification (irrigated): None specified

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent

Hydric soil rating: No

Largo

Percent of map unit: 4 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

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Custom Soil Resource Report

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Ecological site R070BD003NM

Loamy Sand

Accessed: 07/22/2025

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.

Associated sites

R070BD004NM	Sandy Sandy
R070BD005NM	Deep Sand Deep Sand

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site is on uplands, plains, dunes, fan piedmonts and in inter dunal areas. The parent material consists of mixed alluvium and or eolian sands derived from sedimentary rock. Slope range on this site range from 0 to 9 percent with the average of 5 percent.

Low stabilized dunes may occur occasionally on this site. Elevations range from 2,800 to 5,000 feet.

Table 2. Representative physiographic features

Landforms	(1) Fan piedmont (2) Alluvial fan (3) Dune
Elevation	2,800–5,000 ft
Slope	0–9%
Aspect	Aspect is not a significant factor

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 being late March or early April and the first killing frost being in later 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 from January through June, which accelerates soil drying during a critical period 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 from water from wetlands or streams.

Soil features

Soils are moderately deep or very deep. Surface textures are loamy fine sand, fine sandy loam, loamy very fine sand or gravelly sandy loam.

Subsurface is a loamy fine sand, coarse sandy loam, fine sandy loam or loam that averages less than 18 percent clay and less than 15 percent carbonates.

Substratum is a fine sandy loam or gravelly fine sandy loam with less than 15 percent gravel and with less than 40 percent calcium carbonate. Some layers high in lime or with caliche fragments may occur at depths of 20 to 30 inches.

These soils, if unprotected by plant cover and organic residue, become wind blown and low hummocks are formed.

Minimum and maximum values listed below represent the characteristic soils for this site.

Characteristic soils are:

Maljamar

Berino

Parjarito

Palomas

Wink

Pyote

Table 4. Representative soil features

Surface texture	(1) Fine sand (2) Fine sandy loam (3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to moderately rapid
Soil depth	40–72 in
Surface fragment cover ≤3"	0–10%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	5–7 in
Calcium carbonate equivalent (0-40in)	3–40%
Electrical conductivity (0-40in)	2–4 mmhos/cm

Sodium adsorption ratio (0-40in)	0–2
Soil reaction (1:1 water) (0-40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	4–12%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

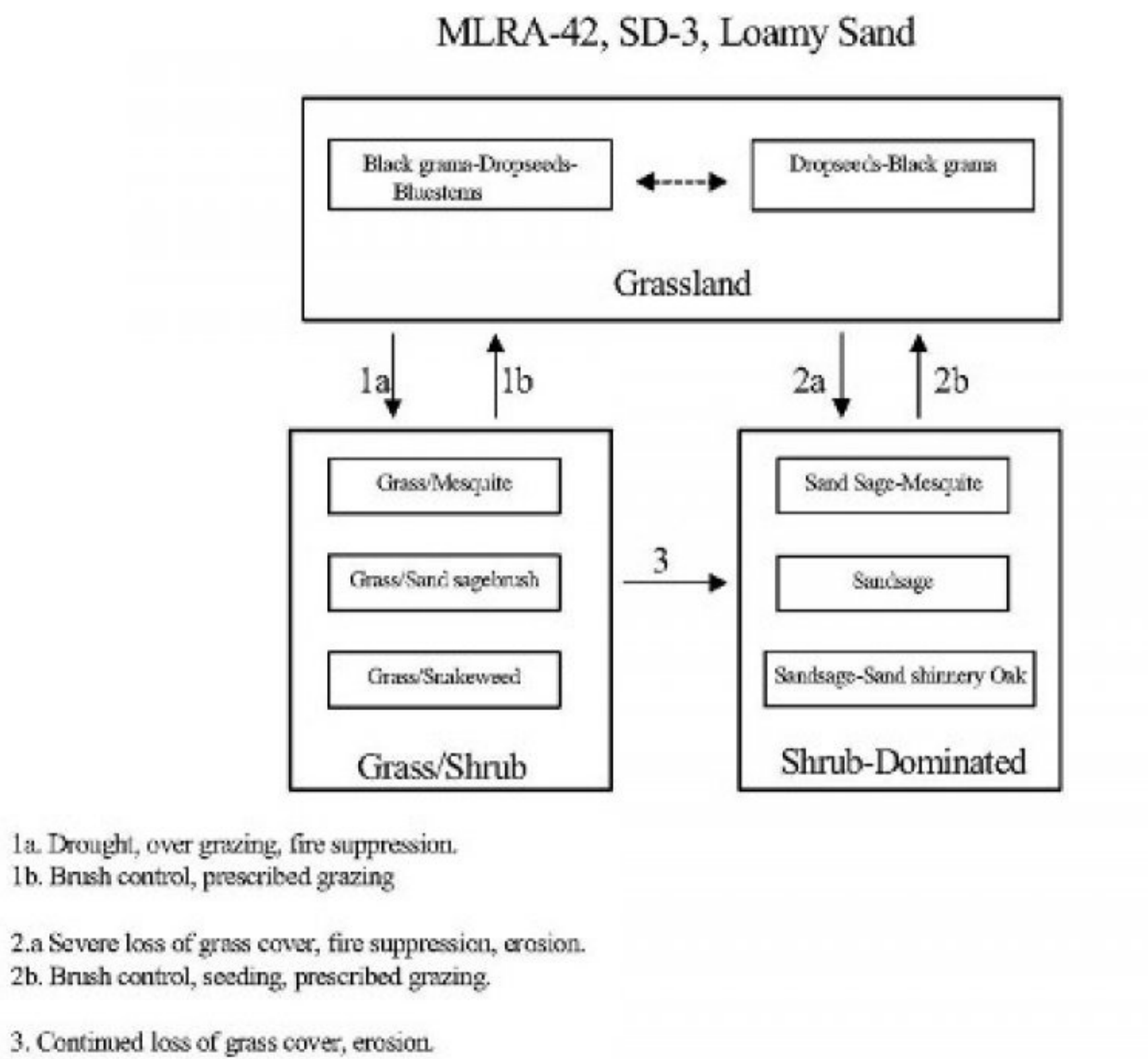
Overview

The Loamy Sand site intergrades with the Deep Sand and Sandy sites (SD-3). These sites can be differentiated by surface soil texture and depth to a textural change. Loamy Sand and Deep Sand sites have coarse textured (sands and loamy sand) surface soils while Sandy sites have moderately coarse textured (sandy loam and fine sandy loam) surfaces. Although Loamy Sand and Deep Sand sites have similar surface textures, the depth to a textural change is different—Loamy Sand sub-surface textures typically increase in clay at approximately 20 to 30 inches, and Deep Sand sites not until around 40 inches.

The historic plant community of Loamy Sand sites is dominated by black grama (*Bouteloua eriopoda*), dropseeds (*Sporobolus flexuosus*, *S. contractus*, *S. cryptandrus*), and bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), with scattered shinnery oak (*Quercus havardii*) and sand sage (*Artemisia filifolia*). Perennial and annual forb abundance and distribution are dependent on precipitation. Litter and to a lesser extent, bare ground, are a significant proportion of ground cover while grasses compose the remainder. Decreases in black grama indicate a transition to either a grass/shrub or shrub-dominated state. The grass/shrub state is composed of grasses/honey mesquite (*Prosopis glandulosa*), grasses/broom snakeweed (*Gutierrezia sarothrae*), or grasses/sand sage. The shrub-dominated state occurs after a severe loss of grass cover and a prevalence of sand sage with secondary shinnery oak and mesquite. Heavy grazing intensity and/or drought are influential drivers in decreasing black grama and bluestems and subsequently increasing shrub cover, erosion, and bare patches. Historical fire suppression also encourages shrub pervasiveness and a competitive advantage over grass species (McPherson 1995). Brush and grazing management, however, may reverse grass/shrub and shrub-dominated states toward the grassland-dominated historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram):



State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

Grassland: The historic plant community is a uniformly distributed grassland dominated by black grama, dropseeds, and bluestems. Sand sage and shinnery oak are evenly dispersed throughout the grassland due to the coarse soil surface texture. Perennial and annual forbs are common but their abundance and distribution are reflective of precipitation. Bluestems initially, followed by black grama, decrease with drought and heavy grazing intensity. Historical fire frequency is unknown but likely occurred enough to remove small shrubs to the competitive advantage of grass species. Fire suppression, drought conditions, and excessive grazing drive most grass species out of competition with shrub species. Diagnosis: Grassland dominated by black grama, dropseeds, and bluestems. Shrubs, such as sand sage, shinnery oak, and mesquite are dispersed throughout the grassland. Forbs are present and populations fluctuate with precipitation variability.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	442	833	1224
Forb	110	208	306
Shrub/Vine	98	184	270
Total	650	1225	1800

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	28%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	50%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	22%

Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - Warm season plant community .

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	3	5	10	10	25	30	12	5	0	0

State 2

Grass/Shrub

Community 2.1

Grass/Shrub

Grass/Shrub



*Black grama/Mesquite community,
with some dropseeds, threeawns, and
scattered sand shinnery oak
*Grass cover low to moderate

Grass/Shrub State: The grass/shrub state is dominated by communities of grasses/mesquite, grasses/snakeweed, or grasses/sand sage. Decreases in black grama and bluestem species lead to an increase in bare patches and mesquite which further competes with grass species. An increase of dropseeds and threeawns occurs. Grass distribution becomes more patchy with an absence or severe decrease in black grama and bluestems. Mesquite provides nitrogen and soil organic matter to co-dominant grasses (Ansley and Jacoby 1998, Ansley et al. 1998). Mesquite mortality when exposed

to fire is low due to aggressive resprouting abilities. Herbicide application combined with subsequent prescribed fire may be more effective in mesquite reduction (Britton and Wright 1971). Diagnosis: This state is dominated by an increased abundance of communities including grass/mesquite, grass/snakeweed, or grass/sand sage. Dropseeds and threeawns have a patchy distribution. Transition to Grass/Shrub State (1a): The historic plant community begins to shift toward the grass/shrub state as drivers such as drought, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by a decrease in black grama with a subsequent increase of dropseeds, threeawns, mesquite, and snakeweed. Snakeweed has been documented to outcompete black grama especially under conditions of fire suppression and drought (McDaniel et al. 1984). Key indicators of approach to transition: • Loss of black grama cover • Surface soil erosion • Bare patch expansion • Increased dropseed/threeawn and mesquite, snakeweed, or sand sage abundances Transition to Historic Plant Community (1b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community.

State 3

Shrub Dominated

Community 3.1

Shrub Dominated

Shrub-Dominated State: The shrub-dominated state results from a severe loss of grass cover. This state's primary species is sand sage. Shinnery oak and mesquite also occur; however, grass cover is limited to intershrub distribution. Sand sage stabilizes light sandy soils from wind erosion, which enhances protected grass/forb cover (Davis and Bonham 1979). However, shinnery oak also responds to the sandy soils with dense stands due to an aggressive rhizome system. Shinnery oak's extensive root system promotes competitive exclusion of grasses and forbs. Sand sage, shinnery oak, and mesquite can be controlled with herbicide (Herbel et al. 1979, Pettit 1986). Transition to Shrub-Dominated (2a): Severe loss of grass species with increased erosion and fire suppression will result in a transition to a shrub-dominated state with sand sage, Shin oak, and honey mesquite directly from the grassland-dominated state. Key indicators of approach to transition: • Severe loss of grass species cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite abundance Transition to Historic Plant Community (2b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community. In addition, seeding with native grass species will augment the transition to a grassland-dominated state. Transition to Shrub-Dominated (3): If the grass/shrub site continues to lose grass cover with soil erosion, the site will transition to a shrub-dominated state with sand sage, shinnery oak, and honey mesquite. Key indicators of approach to transition: • Continual loss of dropseeds/threeawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/dropseed/threeawn

and mesquite/snakeweed abundance

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass/Grasslike					
1	Warm Season			61–123	
	little bluestem	SCSC	<i>Schizachyrium scoparium</i>	61–123	–
2	Warm Season			37–61	
	sand bluestem	ANHA	<i>Andropogon hallii</i>	37–61	–
3	Warm Season			37–61	
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	37–61	–
	silver bluestem	BOSA	<i>Bothriochloa saccharoides</i>	37–61	–
4	Warm Season			123–184	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	123–184	–
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	123–184	–
5	Warm Season			123–184	
	thin paspalum	PASE5	<i>Paspalum setaceum</i>	123–184	–
	plains bristlegrass	SEVU2	<i>Setaria vulpiseta</i>	123–184	–
	fringed signalgrass	URCI	<i>Urochloa ciliatissima</i>	123–184	–
6	Warm Season			123–184	
	spike dropseed	SPCO4	<i>Sporobolus contractus</i>	123–184	–
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	123–184	–
	mesa dropseed	SPFL2	<i>Sporobolus flexuosus</i>	123–184	–
7	Warm Season			61–123	
	hooded windmill grass	CHCU2	<i>Chloris cucullata</i>	61–123	–
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	61–123	–
9	Other Perennial Grasses			37–61	
	Grass, perennial	2GP	<i>Grass, perennial</i>	37–61	–
Shrub/Vine					
8	Warm Season			37–61	
	New Mexico feathergrass	HENE5	<i>Hesperostipa</i>	37–61	–

			<i>neomexicana</i>		
	giant dropseed	SPGI	<i>Sporobolus giganteus</i>	37–61	–
10	Shrub			61–123	
	sand sagebrush	ARFI2	<i>Artemisia filifolia</i>	61–123	–
	Havard oak	QUHA3	<i>Quercus havardii</i>	61–123	–
11	Shrub			34–61	
	fourwing saltbush	ATCA2	<i>Atriplex canescens</i>	37–61	–
	featherplume	DAFO	<i>Dalea formosa</i>	37–61	–
12	Shrub			37–61	
	jointfir	EPHED	<i>Ephedra</i>	37–61	–
	littleleaf ratany	KRER	<i>Krameria erecta</i>	37–61	–
13	Other Shrubs			37–61	
	Shrub (>.5m)	2SHRUB	<i>Shrub (>.5m)</i>	37–61	–
Forb					
14	Forb			61–123	
	leatherweed	CRPOP	<i>Croton pottsii</i> var. <i>pottsii</i>	61–123	–
	Indian blanket	GAPU	<i>Gaillardia pulchella</i>	61–123	–
	globemallow	SPHAE	<i>Sphaeralcea</i>	61–123	–
15	Forb			12–37	
	woolly groundsel	PACA15	<i>Packera cana</i>	12–37	–
16	Forb			61–123	
	touristplant	DIWI2	<i>Dimorphocarpa wislizeni</i>	61–123	–
	woolly plantain	PLPA2	<i>Plantago patagonica</i>	61–123	–
17	Other Forbs			37–61	
	Forb (herbaceous, not grass nor grass-like)	2FORB	<i>Forb (herbaceous, not grass nor grass-like)</i>	37–61	–

Animal community

This Ecological Site provides habitat which supports a resident animal community that is characterized by pronghorn antelope, desert cottontail, spotted ground squirrel, black-tailed prairie dog, yellow faced pocket gopher, Ord's kangaroo rat, northern grasshopper mouse, southern plains woodrat, badger, roadrunner, meadowlark, burrowing owl, white necked raven, lesser prairie chicken, morning dove, scaled quail, Harris hawk, side blotched lizard, marbled whiptail, Texas horned lizard, western diamondback rattlesnake, dusty hognose snake and ornate box turtle.

Where mesquite has invaded, most resident birds and scissor-tailed flycatcher, morning dove and Swainson's hawk, nest. Vesper and grasshopper sparrows utilize the site during migration.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations

Soil Series Hydrologic Group

Berino B

Kinco A

Maljamar B

Pajarito B

Palomas B

Wink B

Pyote A

Recreational uses

This site offers recreation potential for hiking, borseback riding, nature observation, photography and hunting. During years of abundant spring moisture, this site displays a colorful array of wildflowers during May and June.

Wood products

This site has no potential for wood products.

Other products

This site is suitable for grazing by all kinds and classes of livestock at any time of year. In cases where this site has been invaded by brush species it is especially suited for goats. Mismanagement of this site will cause a decrease in species such as the bluestems, black grama, bush muhly, plains bristlegrass, New Mexico feathergrass, Arizona cottontop and fourwing saltbush. A corresponding increase in the dropseeds, windmill grass, fall witchgrass, silver bluestem, sand sagebrush, shiner oak and ephedra will occur. This will also cause an increase in bare ground which will increase soil erodibility. This site will respond well to a system of management that rotates the season of use.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM

100 - 76 2.3 – 3.5

75 – 51 3.0 – 4.5

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

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Eddy County, New Mexico



Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525

📅 (505) 346-2542

2105 Osuna Road Ne

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1923	EXPN
Piping Plover <i>Charadrius melodus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Clams

NAME	STATUS
Texas Hornshell <i>Popenaias popeii</i> Wherever found There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/919	Endangered

Insects

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

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The [data](#) in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the [Supplemental Information on Migratory Birds and Eagles document](#) to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#) document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Cactus Wren <i>Campylorhynchus brunneicapillus guttatus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8834	Breeds Mar 5 to Sep 30
Cassin's Sparrow <i>Peucaea cassinii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9512	Breeds Aug 1 to Oct 10
Henry's Common Nighthawk <i>Chordeiles minor henryi</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 21 to Aug 25
Scott's Oriole <i>Icterus parisorum</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 21 to Aug 15
Virginia's Warbler <i>Leiothlypis virginiae</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental](#)

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Eddy County, New Mexico



Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525

📅 (505) 346-2542

2105 Osuna Road Ne

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1923	EXPN
Piping Plover <i>Charadrius melodus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Clams

NAME	STATUS
Texas Hornshell <i>Popenaias popeii</i> Wherever found There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/919	Endangered

Insects

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

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The [data](#) in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the [Supplemental Information on Migratory Birds and Eagles document](#) to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#) document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Cactus Wren <i>Campylorhynchus brunneicapillus guttatus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8834	Breeds Mar 5 to Sep 30
Cassin's Sparrow <i>Peucaea cassinii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9512	Breeds Aug 1 to Oct 10
Henry's Common Nighthawk <i>Chordeiles minor henryi</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 21 to Aug 25
Scott's Oriole <i>Icterus parisorum</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 21 to Aug 15
Virginia's Warbler <i>Leiothlypis virginiae</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental](#)

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Stephanie Garcia Richard
COMMISSIONER

State of New Mexico
Commissioner of Public Lands

310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE

Phone (505) 827-5760

Fax (505) 827-5766

www.nmstatelands.org

MEMORANDUM

TO: Vertex on behalf of XTO

FROM: Carlyn Stewart, *Trust Land Archaeologist*
(505) 365-3800
cstewart@nmslo.gov

SUBJECT: Vertex on behalf of XTO
Remediation for: Big Eddy Unit (BEU) DI 9 Remediation ARMS
T21S R30E S28 N.M.P.M. Eddy County

REFERENCE: NMSLO Cultural Properties Protection Rule (19.2.24 NMAC)

DATE: 7/30/2025

Thank you for your submission relating to the Proponent's proposed remediation activities at Big Eddy Unit (BEU) DI 9. An archaeological survey of the entire area of potential effect has been completed (NMCRIS Activity No. 128032) and no cultural properties were identified. Pursuant to NMSLO 19.2.24.8 (C) NMAC, remediation may proceed.

If any cultural materials are inadvertently encountered during surface disturbance, work must cease within 50 feet and the NMSLO Cultural Resources Office must be notified immediately by emailing (CROinfo@slo.state.nm.us). Please reach out if you have questions or need additional clarification.

APPENDIX C – Laboratory Data Reports and Chain of Custody Forms



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 11, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BEU DI 9 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/07/25 12:43.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Coley D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 01 @ 0' (H254029-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2025	ND	2.08	104	2.00	0.718	
Toluene*	<0.050	0.050	07/07/2025	ND	2.21	110	2.00	0.671	
Ethylbenzene*	<0.050	0.050	07/07/2025	ND	2.01	101	2.00	0.132	
Total Xylenes*	<0.150	0.150	07/07/2025	ND	6.04	101	6.00	0.0216	
Total BTEX	<0.300	0.300	07/07/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/08/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	217	108	200	3.64	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	211	106	200	4.83	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 82.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.2 % 40.6-153

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 02 @ 0' (H254029-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2025	ND	2.08	104	2.00	0.718	
Toluene*	<0.050	0.050	07/07/2025	ND	2.21	110	2.00	0.671	
Ethylbenzene*	<0.050	0.050	07/07/2025	ND	2.01	101	2.00	0.132	
Total Xylenes*	<0.150	0.150	07/07/2025	ND	6.04	101	6.00	0.0216	
Total BTEX	<0.300	0.300	07/07/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/08/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	217	108	200	3.64	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	211	106	200	4.83	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 80.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 70.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 03 @ 0' (H254029-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2025	ND	2.08	104	2.00	0.718	
Toluene*	<0.050	0.050	07/07/2025	ND	2.21	110	2.00	0.671	
Ethylbenzene*	<0.050	0.050	07/07/2025	ND	2.01	101	2.00	0.132	
Total Xylenes*	<0.150	0.150	07/07/2025	ND	6.04	101	6.00	0.0216	
Total BTEX	<0.300	0.300	07/07/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 77.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 70.9 % 40.6-153

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 04 @ 0' (H254029-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2025	ND	2.08	104	2.00	0.718		
Toluene*	<0.050	0.050	07/07/2025	ND	2.21	110	2.00	0.671		
Ethylbenzene*	<0.050	0.050	07/07/2025	ND	2.01	101	2.00	0.132		
Total Xylenes*	<0.150	0.150	07/07/2025	ND	6.04	101	6.00	0.0216		
Total BTEX	<0.300	0.300	07/07/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 78.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 71.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 05 @ 0' (H254029-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2025	ND	2.08	104	2.00	0.718	
Toluene*	<0.050	0.050	07/07/2025	ND	2.21	110	2.00	0.671	
Ethylbenzene*	<0.050	0.050	07/07/2025	ND	2.01	101	2.00	0.132	
Total Xylenes*	<0.150	0.150	07/07/2025	ND	6.04	101	6.00	0.0216	
Total BTEX	<0.300	0.300	07/07/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 78.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 71.5 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 06 @ 0' (H254029-06)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2025	ND	2.08	104	2.00	0.718	
Toluene*	<0.050	0.050	07/07/2025	ND	2.21	110	2.00	0.671	
Ethylbenzene*	<0.050	0.050	07/07/2025	ND	2.01	101	2.00	0.132	
Total Xylenes*	<0.150	0.150	07/07/2025	ND	6.04	101	6.00	0.0216	
Total BTX	<0.300	0.300	07/07/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 79.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 07 @ 0' (H254029-07)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/07/2025	ND	2.08	104	2.00	0.718	
Toluene*	<0.050	0.050	07/07/2025	ND	2.21	110	2.00	0.671	
Ethylbenzene*	<0.050	0.050	07/07/2025	ND	2.01	101	2.00	0.132	
Total Xylenes*	<0.150	0.150	07/07/2025	ND	6.04	101	6.00	0.0216	
Total BTEX	<0.300	0.300	07/07/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 79.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 71.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/07/2025
 Reported: 07/11/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/02/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: BH25 - 08 @ 0' (H254029-08)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/08/2025	ND	1.78	89.2	2.00	8.84		
Toluene*	<0.050	0.050	07/08/2025	ND	1.90	95.2	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/08/2025	ND	1.96	98.2	2.00	4.07		
Total Xylenes*	<0.150	0.150	07/08/2025	ND	5.98	99.7	6.00	4.40		
Total BTEX	<0.300	0.300	07/08/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 83.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 76.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 09 @ 0' (H254029-09)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/08/2025	ND	1.78	89.2	2.00	8.84	
Toluene*	<0.050	0.050	07/08/2025	ND	1.90	95.2	2.00	4.58	
Ethylbenzene*	<0.050	0.050	07/08/2025	ND	1.96	98.2	2.00	4.07	
Total Xylenes*	<0.150	0.150	07/08/2025	ND	5.98	99.7	6.00	4.40	
Total BTEX	<0.300	0.300	07/08/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 82.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 74.2 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/07/2025
Reported: 07/11/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/02/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Alyssa Parras

Sample ID: BH25 - 10 @ 0' (H254029-10)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/08/2025	ND	1.78	89.2	2.00	8.84		
Toluene*	<0.050	0.050	07/08/2025	ND	1.90	95.2	2.00	4.58		
Ethylbenzene*	<0.050	0.050	07/08/2025	ND	1.96	98.2	2.00	4.07		
Total Xylenes*	<0.150	0.150	07/08/2025	ND	5.98	99.7	6.00	4.40		
Total BTEX	<0.300	0.300	07/08/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/08/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/08/2025	ND	192	96.0	200	0.805	
DRO >C10-C28*	<10.0	10.0	07/08/2025	ND	216	108	200	2.57	
EXT DRO >C28-C36	<10.0	10.0	07/08/2025	ND					

Surrogate: 1-Chlorooctane 79.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 71.9 % 40.6-153

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Vertex Resource</u>				BILL TO				ANALYSIS REQUEST																					
Project Manager: <u>Chad Hensley</u>				P.O. #: <u>1080871001</u>				BTEX TPH Chloride																					
Address: <u>3103 Boyd drive</u>				Company: <u>ExxonMobil</u>																									
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn: <u>Ashley McAfee</u>																									
Phone #: <u>575-200-6167</u> Fax #:				Address: <u>3104 E Greene St</u>																									
Project #: <u>25A-03553</u> Project Owner:				City: <u>Carlsbad</u>																									
Project Name: <u>BEU DI 9 Battery</u>				State: <u>NM</u> Zip: <u>88220</u>																									
Project Location:				Phone #: <u>575-988-0812</u>																									
Sampler Name: <u>Riley Arnold</u>				Fax #: <u>Ashley A. McAfee</u>																									
FOR LAB USE ONLY																													
Lab I.D.	Sample I.D.	GRAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.			SAMPLING																	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE													TIME			
<u>105429</u>	<u>BH25-01 @ 0'</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>			<u>7.2.25</u>	<u>9:30</u>	<u>X</u>	<u>X</u>	<u>X</u>												
<u>2</u>	<u>BH25-02 @ 0'</u>													<u>9:46</u>															
<u>3</u>	<u>BH25-03 @ 0'</u>													<u>9:59</u>															
<u>4</u>	<u>BH25-04 @ 0'</u>													<u>10:20</u>															
<u>5</u>	<u>BH25-05 @ 0'</u>													<u>10:27</u>															
<u>6</u>	<u>BH25-06 @ 0'</u>													<u>10:40</u>															
<u>7</u>	<u>BH25-07 @ 0'</u>													<u>10:50</u>															
<u>8</u>	<u>BH25-08 @ 0'</u>													<u>10:58</u>															
<u>9</u>	<u>BH25-09 @ 0'</u>													<u>11:15</u>															
<u>10</u>	<u>BH25-10 @ 0'</u>													<u>11:27</u>															

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Relinquished By: <u>[Signature]</u>		Date: <u>7.7.25</u>	Received By: <u>[Signature]</u>		Verbal Result: ☐ Yes ☐ No Add'l Phone #:	
Time: <u>1243</u>			Time: <u>[Signature]</u>		All Results are emailed. Please provide Email address:	
Relinquished By:		Date:	Received By:		REMARKS: <u>Arnold@vertexresource.com</u>	
Time:						
Delivered By: (Circle One)	Observed Temp. °C <u>28.1</u>	Sample Condition	CHECKED BY: (Initials)	Turnaround Time: <u>Standard</u>	☒ Bacteria (only)	Sample Condition
Sampler - UPS - Bus - Other:	Corrected Temp. °C <u>3.0</u>	Cool Intact ☒ Yes ☒ No	<u>AD</u>	Thermometer ID #140	☐ Cool ☐ Intact	Observed Temp. °C
				Correction Factor +0.3°C	☐ Yes ☐ No	Corrected Temp. °C

FORM-000 R 3.0 02/12/20

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 16, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BEU DI 9 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/10/25 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 01 @ 1' (H254106-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/14/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 109 % 44.4-145

Surrogate: 1-Chlorooctadecane 110 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 02 @ 1' (H254106-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/14/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 97.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 03 @ 1' (H254106-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/14/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 111 % 44.4-145

Surrogate: 1-Chlorooctadecane 107 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 04 @ 1' (H254106-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/14/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 105 % 44.4-145

Surrogate: 1-Chlorooctadecane 99.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 05 @ 1' (H254106-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	07/14/2025	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 100 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 06 @ 1' (H254106-06)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 107 % 44.4-145

Surrogate: 1-Chlorooctadecane 102 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 07 @ 1' (H254106-07)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 111 % 44.4-145

Surrogate: 1-Chlorooctadecane 107 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 08 @ 1' (H254106-08)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/14/2025	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 108 % 44.4-145

Surrogate: 1-Chlorooctadecane 102 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 09 @ 1' (H254106-09)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	203	101	200	0.281	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	226	113	200	0.266	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 115 % 44.4-145

Surrogate: 1-Chlorooctadecane 110 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 10 @ 1' (H254106-10)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 100 % 44.4-145

Surrogate: 1-Chlorooctadecane 101 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 11 @ 0' (H254106-11)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 93.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 97.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 11 @ 1' (H254106-12)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 91.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 88.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 05 @ 2' (H254106-13)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	07/14/2025	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 97.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 94.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 05 @ 3' (H254106-14)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 111 % 44.4-145

Surrogate: 1-Chlorooctadecane 110 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 05 @ 4' (H254106-15)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 107 % 44.4-145

Surrogate: 1-Chlorooctadecane 104 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 06 @ 2' (H254106-16)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 95.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 06 @ 3' (H254106-17)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38		
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 102 % 44.4-145

Surrogate: 1-Chlorooctadecane 98.3 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 06 @ 4' (H254106-18)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	1.75	87.6	2.00	9.38	
Toluene*	<0.050	0.050	07/11/2025	ND	1.82	91.0	2.00	9.55	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	1.81	90.4	2.00	9.60	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	5.31	88.5	6.00	10.0	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	10.2	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 107 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 10 @ 2' (H254106-19)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96	
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05	
Total BTX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 96.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 94.6 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 10 @ 3' (H254106-20)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96		
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 108 % 44.4-145

Surrogate: 1-Chlorooctadecane 106 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 10 @ 4' (H254106-21)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96		
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 86.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 84.7 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 12 @ 0' (H254106-22)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.56	0.500	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	34.3	0.500	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	16.3	0.500	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	88.3	1.50	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTEX	141	3.00	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5920	16.0	07/14/2025	ND	432	108	400	3.77		
TPH 8015M	mg/kg		Analyzed By: ms							S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2470	50.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	37400	50.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	6530	50.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 509 % 44.4-145

Surrogate: 1-Chlorooctadecane 1250 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 12 @ 1' (H254106-23)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	11.1	1.00	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	96.8	1.00	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	32.5	1.00	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	163	3.00	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTEX	304	6.00	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2560	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	3400	50.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	13800	50.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	1840	50.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 446 % 44.4-145

Surrogate: 1-Chlorooctadecane 264 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 13 @ 0' (H254106-24)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.31	0.200	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	16.9	0.200	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	11.6	0.200	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	40.9	0.600	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTEX	71.7	1.20	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1410	16.0	07/14/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: ms				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2100	50.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	25400	50.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	4460	50.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 334 % 44.4-145

Surrogate: 1-Chlorooctadecane 900 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 13 @ 1' (H254106-25)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	23.9	2.00	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	214	2.00	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	59.4	2.00	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	261	6.00	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTEX	558	12.0	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	07/14/2025	ND	416	104	400	0.00	QM-07
TPH 8015M		mg/kg		Analyzed By: ms					

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	3470	50.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	8730	50.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	1130	50.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 387 % 44.4-145

Surrogate: 1-Chlorooctadecane 179 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 13 @ 2' (H254106-26)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	48.1	5.00	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	506	5.00	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	143	5.00	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	651	15.0	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTEX	1350	30.0	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	07/14/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	19700	50.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	40600	50.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	4670	50.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 2230 % 44.4-145

Surrogate: 1-Chlorooctadecane 1040 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 13 @ 3' (H254106-27)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.142	0.050	07/11/2025	ND	2.05	103	2.00	5.96	
Toluene*	0.456	0.050	07/11/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	0.079	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	0.371	0.150	07/11/2025	ND	6.25	104	6.00	3.05	
Total BTEX	1.05	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	07/14/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	93.3	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 110 % 44.4-145

Surrogate: 1-Chlorooctadecane 114 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 13 @ 4' (H254106-28)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96	
Toluene*	0.143	0.050	07/11/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	0.087	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	0.470	0.150	07/11/2025	ND	6.25	104	6.00	3.05	
Total BTEX	0.699	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	07/14/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	12.8	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 94.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 95.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 14 @ 0' (H254106-29)

BTEx 8021B		mg/kg	Analyzed By: JH					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	5.63	0.100	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	4.52	0.100	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	26.9	0.300	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTEX	37.1	0.600	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 141 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	07/14/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: ms					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	486	10.0	07/11/2025	ND	207	103	200	0.883	
DRO >C10-C28*	9450	10.0	07/11/2025	ND	198	98.9	200	1.21	
EXT DRO >C28-C36	1260	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 151 % 44.4-145

Surrogate: 1-Chlorooctadecane 263 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 14 @ 1' (H254106-30)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96	
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	07/14/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	215	107	200	1.49	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 96.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 95.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 14 @ 2' (H254106-31)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96	
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05	
Total BTX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	07/14/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	215	107	200	1.49	
DRO >C10-C28*	103	10.0	07/11/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	19.2	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 99.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 105 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 14 @ 3' (H254106-32)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96	
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05	
Total BTX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	07/14/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	215	107	200	1.49	
DRO >C10-C28*	<10.0	10.0	07/11/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 93.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 94.5 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 14 @ 4' (H254106-33)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96		
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/14/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	215	107	200	1.49	
DRO >C10-C28*	24.3	10.0	07/11/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 73.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 73.2 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 15 @ 0' (H254106-34)

BTEx 8021B		mg/kg	Analyzed By: JH					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	1.50	0.050	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	1.97	0.050	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	10.0	0.150	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTEX	13.5	0.300	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 188 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1280	16.0	07/14/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	936	50.0	07/11/2025	ND	215	107	200	1.49	
DRO >C10-C28*	16400	50.0	07/11/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	2900	50.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 294 % 44.4-145

Surrogate: 1-Chlorooctadecane 342 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/10/2025
Reported: 07/16/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/08/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BH25 - 15 @ 1' (H254106-35)

BTX 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.263	0.100	07/14/2025	ND	2.05	103	2.00	5.96	
Toluene*	5.91	0.100	07/14/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	4.63	0.100	07/14/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	26.2	0.300	07/14/2025	ND	6.25	104	6.00	3.05	
Total BTX	37.0	0.600	07/14/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 168 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8480	16.0	07/14/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	919	10.0	07/11/2025	ND	215	107	200	1.49	
DRO >C10-C28*	6600	10.0	07/11/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	968	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 175 % 44.4-145

Surrogate: 1-Chlorooctadecane 290 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 15 @ 2' (H254106-36)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/14/2025	ND	2.05	103	2.00	5.96		
Toluene*	<0.050	0.050	07/14/2025	ND	2.03	102	2.00	4.32		
Ethylbenzene*	<0.050	0.050	07/14/2025	ND	2.00	99.8	2.00	3.08		
Total Xylenes*	<0.150	0.150	07/14/2025	ND	6.25	104	6.00	3.05		
Total BTEX	<0.300	0.300	07/14/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	512	16.0	07/14/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/11/2025	ND	215	107	200	1.49	
DRO >C10-C28*	35.7	10.0	07/11/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	<10.0	10.0	07/11/2025	ND					

Surrogate: 1-Chlorooctane 72.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.4 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 15 @ 3' (H254106-37)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96		
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32		
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08		
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05		
Total BTEX	<0.300	0.300	07/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	07/14/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/14/2025	ND	215	107	200	1.49	
DRO >C10-C28*	<10.0	10.0	07/14/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	<10.0	10.0	07/14/2025	ND					

Surrogate: 1-Chlorooctane 109 % 44.4-145

Surrogate: 1-Chlorooctadecane 111 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/10/2025
 Reported: 07/16/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/08/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BH25 - 15 @ 4' (H254106-38)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/11/2025	ND	2.05	103	2.00	5.96	
Toluene*	<0.050	0.050	07/11/2025	ND	2.03	102	2.00	4.32	
Ethylbenzene*	<0.050	0.050	07/11/2025	ND	2.00	99.8	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/11/2025	ND	6.25	104	6.00	3.05	
Total BTEX	<0.300	0.300	07/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/14/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/14/2025	ND	215	107	200	1.49	
DRO >C10-C28*	<10.0	10.0	07/14/2025	ND	215	107	200	2.95	
EXT DRO >C28-C36	<10.0	10.0	07/14/2025	ND					

Surrogate: 1-Chlorooctane 97.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 98.2 % 40.6-153

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Vertex Resource</u>				BILL TO				ANALYSIS REQUEST											
Project Manager: <u>Chad Hensley</u>				P.O. #: <u>1080871001</u>				BTEX TPH chloride											
Address: <u>3101 Boyd drive</u>				Company: <u>Exxon Mobil</u>															
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn: <u>Ashley Mcatee</u>															
Phone #: <u>575-200-6167</u> Fax #:				Address: <u>3104 E Greene St</u>															
Project #: <u>25A-03553</u> Project Owner:				City: <u>Carlsbad</u>															
Project Name: <u>BEU DI 9 Battery</u>				State: <u>NM</u> Zip: <u>88220</u>															
Project Location:				Phone #:															
Sampler Name: <u>Riley Arnold</u>				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	(G) GRAB OR (C) COMP.	# CONTAINERS	MATRIX				PRESERV.		SAMPLING									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME					
<u>H254106</u>																			
1	BH25-01 @ 1'	G	1			X					X		7.7.25	10:00	X	X			
2	BH25-02 @ 1'													10:12					
3	BH25-03 @ 1'													10:20					
4	BH25-04 @ 1'													10:35					
5	BH25-05 @ 1'													10:50					
6	BH25-06 @ 1'													11:00					
7	BH25-07 @ 1'													11:10					
8	BH25-08 @ 1'													11:17					
9	BH25-09 @ 1'													11:28					
10	BH25-10 @ 1'													11:38					

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Relinquished By: <u>[Signature]</u>	Date: <u>7-10-25</u>	Received By: <u>[Signature]</u>	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Time: <u>1:34D</u>	Date:	Received By:	All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	<u>chensley@vertexresource.com</u>
Time:	Date:	Received By:	REMARKS:
			<u>Rarnold@vertexresource.com</u>
Delivered By: (Circle One)	Observed Temp. °C <u>0.0</u>	Sample Condition	Turnaround Time: ☒ Standard ☐ Rush
Sampler - UPS - Bus - Other:	Corrected Temp. °C <u>0.3</u>	Cool Intact ☒ Yes ☐ No	Bacteria (only) Sample Condition
		Checked By: (Initials) <u>[Signature]</u>	Cool Intact ☐ Yes ☐ No
			Observed Temp. °C
			Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: <u>Vertex Resource</u>		BILL TO		ANALYSIS REQUEST										
Project Manager: <u>Chad Hensley</u>		P.O. #: <u>1080871001</u>												
Address: <u>3101 Boyd drive</u>		Company: <u>ExxonMobil</u>												
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>		Attn: <u>Ashley McAfee</u>												
Phone #: <u>575-200-6167</u> Fax #:		Address: <u>3104 E Greene St</u>												
Project #: <u>25A-03553</u> Project Owner:		City: <u>Carlsbad</u>												
Project Name: <u>BEU DI 9 Battery</u>		State: <u>NM</u> Zip: <u>88220</u>												
Project Location:		Phone #:												
Sampler Name: <u>Riley Arnold</u>		Fax #:												
FOR LAB USE ONLY														
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING								
				GROUNDWATER										
				WASTEWATER										
				SOIL										
				OIL										
				SLUDGE										
				OTHER:										
				ACID/BASE:										
				ICE / COOL										
				OTHER:										
				DATE	TIME									
<u>H254106</u>														
<u>11</u>	<u>BH25-11 @ 0'</u>	<u>G</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>7.7.25</u>	<u>12:00</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>12</u>	<u>BH25-11 @ 1'</u>						<u>12:09</u>							
<u>13</u>	<u>BH25-05 @ 2'</u>						<u>12:20</u>							
<u>14</u>	<u>BH25-05 @ 3'</u>						<u>12:27</u>							
<u>15</u>	<u>BH25-05 @ 4'</u>						<u>12:36</u>							
<u>16</u>	<u>BH25-06 @ 2'</u>						<u>12:42</u>							
<u>17</u>	<u>BH25-06 @ 3'</u>						<u>12:50</u>							
<u>18</u>	<u>BH25-06 @ 4'</u>						<u>1:00</u>							
<u>19</u>	<u>BH25-10 @ 2'</u>						<u>1:11</u>							
<u>20</u>	<u>BH25-10 @ 3'</u>						<u>1:22</u>							

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Relinquished By: <u>[Signature]</u>	Date: <u>7-10-25</u>	Received By: <u>[Signature]</u>	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By: <u>[Signature]</u>	Time: <u>1340</u>	Received By: <u>[Signature]</u>	All Results are emailed. Please provide Email address: <u>racnodd@vertexresource.com</u>
Relinquished By: <u>[Signature]</u>	Date: <u>7-10-25</u>	Received By: <u>[Signature]</u>	REMARKS: <u>Chensley@vertexresource.com</u>
Relinquished By: <u>[Signature]</u>	Time: <u>1340</u>	Received By: <u>[Signature]</u>	REMARKS:
Delivered By: (Circle One)	Observed Temp. °C <u>0.0</u>	Sample Condition	Turnaround Time: ☒ Standard ☐ Rush
Sampler - UPS - Bus - Other:	Corrected Temp. °C <u>0.3</u>	Cool Intact ☒ Yes ☐ No	Bacteria (only) Sample Condition
		Checked By: (Initials) <u>[Signature]</u>	Cool Intact ☐ Yes ☐ No
			Observed Temp. °C
			Corrected Temp. °C

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Vertex Resource</u>				BILL TO				ANALYSIS REQUEST											
Project Manager: <u>Chad Hensley</u>				P.O. #: <u>1080871001</u>															
Address: <u>3101 Boyd drive</u>				Company: <u>Exxon Mobil</u>															
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn: <u>Ashley McAfee</u>															
Phone #: <u>575-200-6167</u> Fax #:				Address: <u>3104 E Greene St</u>															
Project #: <u>25A-03553</u> Project Owner:				City: <u>Carlsbad</u>															
Project Name: <u>BEU DI 9 Battery</u>				State: <u>NM</u> Zip: <u>88220</u>															
Project Location:				Phone #:															
Sampler Name: <u>Riley Arnold</u>				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX				PRESERV.		SAMPLING		BTEX Chloride TPH							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL					OTHER	DATE	TIME	
<u>H254106</u>																			
<u>21</u>	<u>BH25-10 @ 4'</u>	<u>G</u>	<u>1</u>			<u>X</u>				<u>X</u>							<u>7.7.25</u>	<u>1:32</u>	
<u>22</u>	<u>BH25-12 @ 0'</u>																<u>7.8.25</u>	<u>9:30</u>	
<u>23</u>	<u>BH25-12 @ 1'</u>												<u>7.8.25</u>	<u>9:46</u>					
	<u>BH25-12 @ 2'</u>												<u>7.8.25</u>	<u>9:52</u>					
	<u>BH25-12 @ 3'</u>												<u>7.8.25</u>	<u>10:00</u>					
	<u>BH25-12 @ 4'</u>												<u>7.8.25</u>	<u>10:06</u>					
<u>24</u>	<u>BH25-13 @ 0'</u>												<u>7.8.25</u>	<u>10:20</u>					
<u>25</u>	<u>BH25-13 @ 1'</u>												<u>7.8.25</u>	<u>10:35</u>					
<u>26</u>	<u>BH25-13 @ 2'</u>												<u>7.8.25</u>	<u>11:00</u>					
<u>27</u>	<u>BH25-13 @ 3'</u>												<u>7.8.25</u>	<u>11:07</u>					

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Relinquished By: <u>[Signature]</u>	Date: <u>7-10-25</u>	Received By: <u>[Signature]</u>	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Time: <u>7340</u>			All Results are emailed. Please provide Email address: <u>Rarnold@vertexresource.com</u>
Relinquished By:	Date:	Received By:	REMARKS: <u>Chensley@vertexresource.com</u>
Time:			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C <u>8.0</u> Corrected Temp. °C <u>8.3</u>	Sample Condition Cool Intact ☒ Yes ☐ No Yes ☐ No	CHECKED BY: (Initials) <u>20</u>
Turnaround Time: ☐ Standard ☒ Rush	Bacteria (only) Sample Condition Cool Intact ☐ Yes ☐ No Observed Temp. °C ☐ Yes ☐ No Corrected Temp. °C ☐ Yes ☐ No	Thermometer ID #140 Correction Factor +0.3°C	

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Vertex Resource</u>		BILL TO		ANALYSIS REQUEST															
Project Manager: <u>Chad Hensley</u>		P.O. #: <u>1080871001</u>																	
Address: <u>3101 Boyd Drive</u>		Company: <u>ExxonMobil</u>																	
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>		Attn: <u>Ashley McAfee</u>																	
Phone #: <u>575-200-6167</u> Fax #:		Address: <u>3104 E Greene St</u>																	
Project #: <u>25A-03553</u> Project Owner:		City: <u>Carlsbad</u>																	
Project Name: <u>BEU DI 9 Battery</u>		State: <u>NM</u> Zip: <u>88220</u>																	
Project Location:		Phone #:																	
Sampler Name: <u>Riley Arnold</u>		Fax #:																	
FOR LAB USE ONLY																			
Lab I.D.	Sample I.D.	(G)IRAB OR (C)OMP.	# CONTAINERS	MATRIX			PRESERV.	SAMPLING		<u>BTEX</u> <u>TPH</u> <u>chloride</u>									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER						ACID/BASE	ICE / COOL	OTHER	DATE	TIME
<u>H254106</u>																			
<u>28</u>	<u>BH25-13 @ 4'</u>	<u>G</u>	<u>1</u>			<u>X</u>										<u>X</u>		<u>7.8.25</u>	<u>11:26</u>
<u>29</u>	<u>BH25-14 @ 0</u>																		<u>11:35</u>
<u>30</u>	<u>BH25-14 @ 1'</u>																		<u>11:45</u>
<u>31</u>	<u>BH25-14 @ 2'</u>																		<u>11:57</u>
<u>32</u>	<u>BH25-14 @ 3'</u>																		<u>12:11</u>
<u>33</u>	<u>BH25-14 @ 4'</u>																		<u>12:19</u>
<u>34</u>	<u>BH25-15 @ 0'</u>																		<u>12:27</u>
<u>35</u>	<u>BH25-15 @ 1'</u>													<u>12:40</u>					
<u>36</u>	<u>BH25-15 @ 2'</u>													<u>12:52</u>					
<u>37</u>	<u>BH25-15 @ 3'</u>													<u>12:59</u>					

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Relinquished By: <u>[Signature]</u>	Date: <u>7-10-25</u>	Received By: <u>[Signature]</u>	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Time: <u>1340</u>	Date: <u>7-10-25</u>	Received By: <u>[Signature]</u>	All Results are emailed. Please provide Email address: <u>Rarnolda@vertexresource.com</u>
Relinquished By:	Date:	Received By:	REMARKS: <u>Chensley@vertexresource.com</u>
Time:			
Delivered By: (Circle One)	Observed Temp. °C <u>0.0</u>	Sample Condition	CHECKED BY: (Initials) <u>[Signature]</u>
Sampler - UPS - Bus - Other:	Corrected Temp. °C <u>0.3</u>	Cool Intact ☒ Yes ☐ No	Turnaround Time: Standard ☒ Rush ☐
			Thermometer ID #140
			Correction Factor +0.3°C
			Bacteria (only) Sample Condition
			Cool Intact Observed Temp. °C
			☐ Yes ☐ Yes
			☐ No ☐ No Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Vertex Resource</u>				BILL TO				ANALYSIS REQUEST													
Project Manager: <u>Chad Hensley</u>				P.O. #: <u>1080871001</u>																	
Address: <u>3101 Boyd Drive</u>				Company: <u>ExxonMobil</u>																	
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn: <u>Ashley McFee</u>																	
Phone #: <u>575-200-6167</u> Fax #:				Address: <u>3104E Greene St</u>																	
Project #: <u>25A-03553</u> Project Owner:				City: <u>Carlsbad</u>																	
Project Name: <u>BEU DI 4 Battery</u>				State: <u>NM</u> Zip: <u>88220</u>																	
Project Location:				Phone #:																	
Sampler Name: <u>Riley Arnold</u>				Fax #:																	
FOR LAB USE ONLY																					
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX				PRESERV.		SAMPLING		BTEX		TPH		Chloride	
<u>H254106</u>		<u>BH25-152 4'</u>		<u>G</u>		<u>1</u>		GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:				ACID/BASE: ICE / COOL OTHER:		DATE <u>7.8.25</u>		TIME <u>1:16</u>					

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Relinquished By: <u>[Signature]</u>		Date: <u>7-10-25</u>		Received By: <u>[Signature]</u>		Verbal Result: ☐ Yes ☐ No Add'l Phone #:	
		Time: <u>1:340</u>				All Results are emailed. Please provide Email address:	
Relinquished By:		Date:		Received By:		<u>chensley@vertexresource.com</u>	
		Time:				REMARKS:	
Delivered By: (Circle One)		Observed Temp. °C <u>0.0</u>		Sample Condition		Turnaround Time: Standard ☒ Rush ☐	
Sampler - UPS - Bus - Other:		Corrected Temp. °C <u>0.3</u>		Cool Intact ☒ Yes ☐ No ☐ No		Bacteria (only) Sample Condition	
				CHECKED BY: (Initials) <u>[Signature]</u>		Cool Intact ☐ Yes ☐ No ☐ No	
						Observed Temp. °C	
						Corrected Temp. °C	

FORM-000 R 3.0 02/12/23

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 04, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BEU DI 9 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/29/25 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 01 @ 4' (H254592-01)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/30/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/30/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/30/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/30/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/30/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/30/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 107 % 44.4-145

Surrogate: 1-Chlorooctadecane 104 % 40.6-153

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 02 @ 4' (H254592-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672	
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/30/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 104 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 03 @ 4' (H254592-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672	
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 104 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 04 @ 4' (H254592-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEx	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 99.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 05 @ 4' (H254592-05)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672	
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	96.7	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 105 % 44.4-145

Surrogate: 1-Chlorooctadecane 105 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 06 @ 4' (H254592-06)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEx	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 109 % 44.4-145

Surrogate: 1-Chlorooctadecane 108 % 40.6-153

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 07 @ 4' (H254592-07)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 100 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 08 @ 4' (H254592-08)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 124 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	125	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	10.2	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 107 % 44.4-145

Surrogate: 1-Chlorooctadecane 108 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 09 @ 4' (H254592-09)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 107 % 44.4-145

Surrogate: 1-Chlorooctadecane 106 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 10 @ 4' (H254592-10)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672	
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	38.0	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 109 % 44.4-145

Surrogate: 1-Chlorooctadecane 108 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 11 @ 5' (H254592-11)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672	
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	224	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	36.6	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 110 % 44.4-145

Surrogate: 1-Chlorooctadecane 116 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 12 @ 5' (H254592-12)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	221	111	200	3.41	
DRO >C10-C28*	12.7	10.0	07/30/2025	ND	215	107	200	3.04	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 105 % 44.4-145

Surrogate: 1-Chlorooctadecane 107 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 13 @ 5' (H254592-13)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	22.3	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 98.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 97.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 14 @ 5' (H254592-14)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	50.3	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 90.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 89.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 15 @ 4' (H254592-15)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	07/30/2025	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	57.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	10.3	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 89.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 87.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 16 @ 4' (H254592-16)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672	
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	48.3	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 91.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 90.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 17 @ 4' (H254592-17)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	177	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	31.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 87.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 88.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 18 @ 4' (H254592-18)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 129 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	107	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	15.7	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 83.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 83.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 19 @ 4' (H254592-19)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.93	96.4	2.00	0.672		
Toluene*	<0.050	0.050	07/31/2025	ND	2.07	103	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	2.11	106	2.00	2.45		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	6.53	109	6.00	1.96		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	560	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	135	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	20.6	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 83.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 85.3 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 20 @ 4' (H254592-20)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 82.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 79.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 21 @ 4' (H254592-21)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	18.6	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 85.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 22 @ 3' (H254592-22)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	07/30/2025	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	16.1	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 75.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 73.1 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 23 @ 3' (H254592-23)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	32.3	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 62.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 63.2 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 24 @ 3' (H254592-24)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	17.3	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 72.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 69.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 25 @ 3' (H254592-25)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 72.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 69.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 26 @ 3' (H254592-26)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 71.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 67.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 27 @ 3' (H254592-27)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62	
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16	
Total BTX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 73.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 69.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 28 @ 3' (H254592-28)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62	
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 76.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.1 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/25/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 29 @ 3' (H254592-29)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	84.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	12.8	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 73.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 73.7 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/25/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 30 @ 3' (H254592-30)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	89.6	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	15.4	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 77.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 78.2 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 25 - 31 @ 4' (H254592-31)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 75.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.5 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 01 @ 0-4' (H254592-32)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	220	110	200	1.55	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	219	110	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 75.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 70.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 02 @ 0-4' (H254592-33)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62	
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 84.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 83.5 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 03 @ 0-4' (H254592-34)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 79.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 77.3 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 04 @ 0-4' (H254592-35)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTEX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 80.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 80.3 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/29/2025
 Reported: 08/04/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/28/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 05 @ 0-4' (H254592-36)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62	
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 84.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 84.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 06 @ 0-4' (H254592-37)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62	
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 81.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 79.3 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 07 @ 0-4' (H254592-38)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62	
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16	
Total BTEX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/30/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 83.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 82.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 08 @ 0-5' (H254592-39)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	2.62		
Toluene*	<0.050	0.050	07/31/2025	ND	1.84	91.8	2.00	4.71		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.86	92.8	2.00	6.26		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.63	93.8	6.00	6.16		
Total BTX	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 81.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 78.2 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/29/2025
Reported: 08/04/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/28/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 25 - 09 @ 0-5' (H254592-40)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/31/2025	ND	1.85	92.5	2.00	2.76		
Toluene*	<0.050	0.050	07/31/2025	ND	1.88	93.8	2.00	1.49		
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.89	94.5	2.00	1.41		
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.71	95.1	6.00	1.89		
Total BTEx	<0.300	0.300	07/31/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	07/30/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/30/2025	ND	198	99.2	200	1.70	
DRO >C10-C28*	<10.0	10.0	07/30/2025	ND	190	94.9	200	0.547	
EXT DRO >C28-C36	<10.0	10.0	07/30/2025	ND					

Surrogate: 1-Chlorooctane 81.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource				BILL TO				ANALYSIS REQUEST			
Project Manager: Chad Hensley				P.O. #: 1080871001							
Address: 3101 Boyd drive				Company: Exxon Mobil							
City: Carlsbad State: NM Zip: 88220				Attn: Ashley McAfee							
Phone #: 575-200-6167 Fax #:				Address: 3104 E Greene St							
Project #: 25A-03553 Project Owner:				City: Carlsbad							
Project Name: BEU OI 9 Battery				State: NM Zip: 88220							
Project Location:				Phone #:							
Sampler Name: Riley Arnold				Fax #:							

Lab I.D.	Sample I.D.	FOR LAB USE ONLY	CONTAINER TYPE	MATRIX					PRESERV.		SAMPLING		DATE	TIME	BTEX	TPH	Chloride	
				GROUNDWATER	WASTE WATER	SLURRY	SLUDGE	OTHER	ACID/BASE	ICE / ALCOHOL	OTHER							
H254592																		
1	8525-01	W	4'	C1		X				X			7.25.25	9:00	X	X	X	
2	8525-02	W	4'										9:15					
3	8525-03	W	4'										9:22					
4	8525-04	W	4'										9:32					
5	8525-05	W	4'										9:44					
6	8525-06	W	4'										9:56					
7	8525-07	W	4'										10:08					
8	8525-08	W	4'										10:20					
9	8525-09	W	4'										10:27					
10	8525-10	W	4'										10:40					

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Relinquished By: Riley Arnold	Date: 7-29-25	Received By: Jamara Oldabry	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Time: 1415			All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	Chensley@vertexresource.com
Time:			REMARKS: Rarnold@vertexresource.com
Delivered By: (Circle One)	Delivered Temp: 2.6	Sample Condition: Cool Intact	Turnaround Time: Standard ☒ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp: 2.9	Checked By: JO	Bacteria (only) Sample Condition: Cool Intact
			Thermometer ID: #140
			Correction Factor: -0.3°C
			Observed Temp: 2.6°C
			Corrected Temp: 2.9°C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Vertex Resource				BILL TO								ANALYSIS REQUEST							
Project Manager: Chad Hensley				P.O. #: 1080871001															
Address: 3101 Boyd drive				Company: Exxon Mobil															
City: Carlsbad State: NM Zip: 88220				Attn: Ashley McAfee															
Phone #: 575-200-6167 Fax #:				Address: 3104 E Green St															
Project #: 25A-03553 Project Owner:				City: Carlsbad															
Project Name: BEU DI 4 Battery				State: NM Zip: 88220															
Project Location:				Phone #:															
Sampler Name: Riley Arnold				Fax #:															

FOR LAB USE ONLY		LAB I.D.	Sample I.D.	CORR OR CORR COMP	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	BTEX	TPH	Chloride
						GROUNDEWATER WASTE WATER SOIL SLUDGE OTHER	ACIDBASE REF / COOL OTHER						
11	BS25 - 11 @ 5'	C1	X			X	7.25.25	11:00	X	X	X		
12	BS25 - 12 @ 5'							11:10					
13	BS25 - 13 @ 5'							11:19					
14	BS25 - 14 @ 5'							11:28					
15	BS25 - 15 @ 4'							11:36					
16	BS25 - 16 @ 4'							11:44					
17	BS25 - 17 @ 4'							11:59					
18	BS25 - 18 @ 4'							7.28.25 12:07					
19	BS25 - 19 @ 4'							7.28.25 12:10					
20	BS25 - 20 @ 4'							7.25.25 12:32					

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Relinquished By: [Signature]	Date: 7-29-25	Received By: [Signature]	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Time: 1:45			All Results are emailed. Please provide Email address: chensley@vertexresource.com
Relinquished By:	Date:	Received By:	REMARKS: Rarnold@vertexresource.com
Time:			

Delivered By: (Circle One)	Delivery Temp: °C 2.6	Sample Condition Cool Intact ☒	CHECKED BY: (Initials) V.S.	Turnaround Time: Standard ☒ Rush ☐	Bacteria (only) Sample Condition Cool Intact ☒
Sampler - UPS - Bus - Other:	Corrected Temp: °C 2.9	☐ Yes ☒ No		Thermometer ID: #140	☐ Yes ☒ No
				Correction Factor: +0.3°C	Observed Temp: °C
					Corrected Temp: °C

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource				BILL TO				ANALYSIS REQUEST			
Project Manager: Chad Hensley				P.O. #: 1080871001							
Address: 3101 Boyd drive				Company: Exxon Mobil							
City: Carlsbad State: NM Zip: 88220				Attn: Ashley McAfee							
Phone #: 575-200-6167 Fax #:				Address: 3104 E Green St							
Project #: 25A-03553 Project Owner:				City: Carlsbad							
Project Name: BEU OI 9 Battery				State: NM Zip: 88220							
Project Location:				Phone #:							
Sampler Name: Riley Arnold				Fax #:							
Lab I.D.	Sample I.D.	CONTAINER	MATRIX	PRESERV	SAMPLING	DATE	TIME	BTEX	TPH	Chloride	
H254592											
21	BS25-21 @ 4'	C1	X	X		7.25.25	12:42	X	X	X	
22	BS25-22 @ 3'					7.28.25	12:45				
23	BS25-23 @ 3'					7.28.25	12:56				
24	BS25-24 @ 3'					7.28.25	1:15				
25	BS25-25 @ 3'					7.25.25	12:52				
26	BS25-26 @ 3'					7.25.25	12:59				
27	BS25-27 @ 3'					7.28.25	1:30				
28	BS25-28 @ 3'					7.28.25	1:45				
29	BS25-29 @ 3'					7.26.25	1:26				
30	BS25-30 @ 3'					7.25.25	1:35				

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Relinquished By: [Signature]	Date: 7.29.25	Received By: [Signature]	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Time: 1415			All Results are emailed. Please provide Email address:
Relinquished By: [Signature]	Date: 7.29.25	Received By: [Signature]	Vertex Resource
Time: 1415			Chensley@gmail.com
			REMARKS: Rarnold@vertexresource.com
Delivered By: (Circle One)	Observed Temp: 26	Sample Condition: Cool Intact	Turnaround Time: Standard ☒ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp: 2.9	CHECKED BY: [Signature]	Bacteria (only) Sample Condition: Cool Intact
			Thermometer ID: #140
			Correction Factor: -0.3°C
			Observed Temp: 1°C
			Corrected Temp: 1°C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource				BILL TO				ANALYSIS REQUEST													
Project Manager: Chad Hensley				P.O. #: 1080871001																	
Address: 3101 Boyd drive				Company: Exxon Mobil																	
City: Carlsbad State: NM Zip: 88220				Attn: Ashley McAfee																	
Phone #: 575-200-6167 Fax #:				Address: 3104 E Greene St																	
Project #: 25A-03553 Project Owner:				City: Carlsbad																	
Project Name: BEU DI 4 Battery				State: NM Zip: 88220																	
Project Location:				Phone #:																	
Sampler Name: Riley Arnold				Fax #:																	
FOR LAB USE ONLY				MATRIX		PRESERV		SAMPLING													
Lab I.D.	Sample I.D.	CONTAINER (C/JOB#)	# CONTAINERS	GROUNDWATER	WASTE WATER	SOIL	SLUDGE	OTHER	ADDITIONAL	DATE	TIME										
H254592												BTEX	TPH	Chloride							
31	WS25-31 @ 4'	C1		X					X	7.28.25	1:52	X	X	X							
32	WS25-01 @ 0-4'										2:00										
33	WS25-02 @ 0-4'										2:10										
34	WS25-03 @ 0-4'										2:19										
35	WS25-04 @ 0-4'										2:30										
36	WS25-05 @ 0-4'										2:39										
37	WS25-06 @ 0-4'										2:50										
38	WS25-07 @ 0-4'										3:00										
39	WS25-08 @ 0-5'										3:10										
40	WS25-09 @ 0-5'										3:18										

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Relinquished By: [Signature]	Date: 7-29-25	Received By: [Signature]	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Relinquished By: [Signature]	Date: 7-29-25	Received By: [Signature]	All Results are emailed. Please provide Email address: chensley@vertexresource.com
Time: 1415			REMARKS: Rarnold@vertexresource.com
Delivered By: (Circle One)	Observed Temp: 2.6	Sample Condition: Cool Intact	Turnaround Time: Standard ☒ Rush ☐
Sampler: UPS - Bus - Other:	Corrected Temp: 2.9	Checked By: [Signature]	Bacteria (only): ☐ Cool Intact ☐ Observed Temp: 2.6
			Thermometer ID: #140
			Correction Factor: +0.30
			Corrected Temp: 2.9

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 06, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BEU DI 9 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/31/25 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/31/2025
Reported: 08/06/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/29/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS25 - 11 @ 0-4' (H254663-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03	
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16	
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797	
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589	
Total BTEX	<0.300	0.300	08/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	08/04/2025	ND	480	120	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	186	92.9	200	5.93	
DRO >C10-C28*	<10.0	10.0	08/04/2025	ND	204	102	200	7.38	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 90.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 92.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/31/2025
 Reported: 08/06/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/29/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS25 - 12 @ 0-4' (H254663-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTEX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	08/04/2025	ND	480	120	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	30.6	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 81.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 83.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/31/2025
 Reported: 08/06/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/29/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS25 - 13 @ 0-4' (H254663-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTEX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	08/04/2025	ND	480	120	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	23.5	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 88.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 86.7 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/31/2025
Reported: 08/06/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/29/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS25 - 14 @ 0-4' (H254663-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTEX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/04/2025	ND	480	120	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	<10.0	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 83.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/31/2025
 Reported: 08/06/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/29/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS25 - 15 @ 0-4' (H254663-05)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03	
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16	
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797	
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589	
Total BTEX	<0.300	0.300	08/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	08/04/2025	ND	480	120	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	79.5	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 88.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 88.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/31/2025
 Reported: 08/06/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/29/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS25 - 16 @ 0-4' (H254663-06)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTEX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	08/04/2025	ND	480	120	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	<10.0	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 87.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 83.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/31/2025
Reported: 08/06/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/29/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS25 - 17 @ 0-3' (H254663-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTEX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	08/04/2025	ND	480	120	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	71.3	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	12.1	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 81.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 80.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/31/2025
 Reported: 08/06/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/29/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS25 - 18 @ 0-3' (H254663-08)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03	
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16	
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797	
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589	
Total BTEX	<0.300	0.300	08/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	08/04/2025	ND	480	120	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	86.7	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	16.6	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 87.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 88.5 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/31/2025
Reported: 08/06/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/29/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS25 - 19 @ 0-3' (H254663-09)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	08/04/2025	ND	480	120	400	3.39		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	76.7	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 75.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 74.2 % 40.6-153

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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/31/2025
Reported: 08/06/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/29/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS25 - 20 @ 0-3' (H254663-10)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03	
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16	
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797	
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589	
Total BTEX	<0.300	0.300	08/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	08/04/2025	ND	480	120	400	3.39	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	73.6	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 88.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 86.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/31/2025
Reported: 08/06/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/29/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS25 - 10 @ 0-5' (H254663-11)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTEX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	08/04/2025	ND	480	120	400	3.39		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	<10.0	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 87.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 85.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/31/2025
 Reported: 08/06/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/29/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SAND BACKFILL (H254663-12)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03		
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16		
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797		
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589		
Total BTEX	<0.300	0.300	08/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/04/2025	ND	480	120	400	3.39		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	<10.0	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 92.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 90.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 07/31/2025
 Reported: 08/06/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 07/29/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: CALICHE BACKFILL (H254663-13)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2025	ND	1.75	87.5	2.00	3.03	
Toluene*	<0.050	0.050	08/04/2025	ND	1.81	90.6	2.00	2.16	
Ethylbenzene*	<0.050	0.050	08/04/2025	ND	1.84	92.2	2.00	0.797	
Total Xylenes*	<0.150	0.150	08/04/2025	ND	5.63	93.8	6.00	0.589	
Total BTX	<0.300	0.300	08/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/04/2025	ND	480	120	400	3.39		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	<10.0	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 67.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 63.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 07/31/2025
Reported: 08/06/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 07/29/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS25 - 21 @ 0-3' (H254663-14)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/05/2025	ND	1.83	91.5	2.00	3.99	
Toluene*	<0.050	0.050	08/05/2025	ND	1.87	93.5	2.00	0.0603	
Ethylbenzene*	<0.050	0.050	08/05/2025	ND	1.90	94.9	2.00	1.81	
Total Xylenes*	<0.150	0.150	08/05/2025	ND	5.84	97.4	6.00	2.10	
Total BTEX	<0.300	0.300	08/05/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/04/2025	ND	480	120	400	3.39	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/04/2025	ND	203	102	200	0.541	
DRO >C10-C28*	<10.0	10.0	08/04/2025	ND	199	99.4	200	2.48	
EXT DRO >C28-C36	<10.0	10.0	08/04/2025	ND					

Surrogate: 1-Chlorooctane 83.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 82.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource				BILL TO				ANALYSIS REQUEST								
Project Manager: Chad Hensley				P.O. #: 1080871001												
Address: 3101 Boyd drive				Company: Exxon Mobil												
City: Carlsbad State: NM Zip: 88220				Attn: Ashley McAfee												
Phone #: 575-200-6167 Fax #:				Address: 3104 E Greene St												
Project #: 25A-03553 Project Owner:				City: Carlsbad												
Project Name: BEU DI 4 Battery				State: NM Zip: 88220												
Project Location:				Phone #:												
Sampler Name: Riley Arnold				Fax #:												
FOR LAB USE ONLY																
Lab I.D.	Sample I.D.	CONTAINER	# CONTAINERS	MATRIX				PRESERV.	SAMPLING		DATE	TIME	BTEX	TPH	Chloride	
				GROUNDWATER	WASTE WATER	SOIL	SLURRY		OTHER	ACIDIC						OTHER
H254663																
1	WS25-11 @ 0-4'		1			X			X		7.29.25	12:30	X	X	X	
2	WS25-12 @ 0-4'											12:39				
3	WS25-13 @ 0-4'											12:49				
4	WS25-14 @ 0-4'											1:00				
5	WS25-15 @ 0-4'											1:16				
6	WS25-16 @ 0-4'											1:22				
7	WS25-17 @ 0-3'											1:52				
8	WS25-18 @ 0-3'											1:44				
9	WS25-19 @ 0-3'											1:56				
10	WS25-20 @ 0-3'											2:10				

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Relinquished By: Riley Arnold	Date: 7-31-25	Received By: Juanita Ochoa	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Relinquished By:	Date: 7/30	Received By:	All Results are emailed. Please provide Email address: chensley@vertexresource.com
Relinquished By:	Date:	Received By:	REMARKS: Rarnold@vertexresource.com
Delivered By: (Circle One)	Delivery Temp: 3.2	Sample Condition: ☒ Cool ☐ Intact	Turnaround Time: ☐ Standard ☒ Rush
Sampler: UPS - Bus - Other:	Corrected Temp: 3.5	Checked By: JO	Bacteria (only) Sample Condition: ☐ Cool ☐ Intact
			Thermometer ID: #140
			Correction Factor: -0.3
			Observed Temp: 3.2
			Corrected Temp: 3.5

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardnallab.com



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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Resource				BILL TO				ANALYSIS REQUEST			
Project Manager: Chad Hensley				P.O. #: 1080871001							
Address: 3101 Boyd drive				Company: Exxon Mobil							
City: Carlsbad State: NM Zip: 88220				Attn: Ashley McAfee							
Phone #: 575-200-6167 Fax #:				Address: 3104 E Greene St							
Project #: 25A-03553 Project Owner:				City: Carlsbad							
Project Name: BEU OI 9 Battery				State: NM Zip: 88220							
Project Location:				Phone #:							
Sampler Name: Riley Arnold				Fax #:							

Lab I.D.	Sample I.D.	LOGRAB OR C-PROP	# CONTAINERS	MATRIX					PRESERV		SAMPLING		DATE	TIME	BTEX	TPH	Chloride	
				GROUNDWATER	WASTE WATER	SOIL	SLUDGE	OTHER	ACID/DRAINAGE	ICE / CRYO	OTHER							
H254663																		
11	WS25-10 @ 0-5'		1			X				X			7.29.25	2:30	X	X	X	
12	Sand Backfill													11:30				
13	Caliche Backfill													12:00				
14	WS25-21 @ 0-3'													2:45				

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Relinquished By:	Date: 7-31-25	Received By:	Verbal Result: ☐ Yes ☒ No Add'l Phone #:
Time: 1340			All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	VertexResource.com
Time:			REMARKS: Rarnold@vertexresource.com
Delivered By: (Circle One)	Delivered Temp: °C 3.2	Sample Condition: ☒ Cool ☐ Intact	Turnaround Time: ☐ Standard ☒ Rush
Sampler: UPS - Bus - Other:	Corrected Temp: °C 3.5	☐ Yes ☐ No ☐ Yes ☐ No	Bacteria (only): ☐ Sample Condition ☐ Cool ☐ Intact ☐ Observed Temp: °C
		7.0	☐ Yes ☐ No ☐ Yes ☐ No ☐ Corrected Temp: °C
			Thermometer ID: 3113 # 140
			Correction Factor: -0.30

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 15, 2025

CHAD HENSLEY

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BEU DI 9 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/11/25 14:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/11/2025
Reported: 08/15/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 08/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS25 - 08 @ 4' (H254915-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/12/2025	ND	1.80	89.8	2.00	0.470	
Toluene*	<0.050	0.050	08/12/2025	ND	1.87	93.3	2.00	0.161	
Ethylbenzene*	<0.050	0.050	08/12/2025	ND	1.88	94.0	2.00	0.795	
Total Xylenes*	<0.150	0.150	08/12/2025	ND	5.59	93.1	6.00	0.926	
Total BTEX	<0.300	0.300	08/12/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/12/2025	ND	416	104	400	14.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/12/2025	ND	205	103	200	2.76	
DRO >C10-C28*	<10.0	10.0	08/12/2025	ND	189	94.6	200	0.428	
EXT DRO >C28-C36	<10.0	10.0	08/12/2025	ND					

Surrogate: 1-Chlorooctane 97.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 92.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/11/2025
Reported: 08/15/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 08/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS25 - 11 @ 5' (H254915-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/12/2025	ND	1.80	89.8	2.00	0.470	
Toluene*	<0.050	0.050	08/12/2025	ND	1.87	93.3	2.00	0.161	
Ethylbenzene*	<0.050	0.050	08/12/2025	ND	1.88	94.0	2.00	0.795	
Total Xylenes*	<0.150	0.150	08/12/2025	ND	5.59	93.1	6.00	0.926	
Total BTEX	<0.300	0.300	08/12/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 91.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/12/2025	ND	416	104	400	14.3	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/12/2025	ND	205	103	200	2.76	
DRO >C10-C28*	14.9	10.0	08/12/2025	ND	189	94.6	200	0.428	
EXT DRO >C28-C36	<10.0	10.0	08/12/2025	ND					

Surrogate: 1-Chlorooctane 93.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 86.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/11/2025
 Reported: 08/15/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 08/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS25 - 17 @ 4' (H254915-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/12/2025	ND	1.80	89.8	2.00	0.470		
Toluene*	<0.050	0.050	08/12/2025	ND	1.87	93.3	2.00	0.161		
Ethylbenzene*	<0.050	0.050	08/12/2025	ND	1.88	94.0	2.00	0.795		
Total Xylenes*	<0.150	0.150	08/12/2025	ND	5.59	93.1	6.00	0.926		
Total BTEX	<0.300	0.300	08/12/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 92.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	08/12/2025	ND	416	104	400	14.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/12/2025	ND	205	103	200	2.76	
DRO >C10-C28*	<10.0	10.0	08/12/2025	ND	189	94.6	200	0.428	
EXT DRO >C28-C36	<10.0	10.0	08/12/2025	ND					

Surrogate: 1-Chlorooctane 97.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.5 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/11/2025
Reported: 08/15/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 08/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS25 - 18 @ 4' (H254915-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/12/2025	ND	1.80	89.8	2.00	0.470		
Toluene*	<0.050	0.050	08/12/2025	ND	1.87	93.3	2.00	0.161		
Ethylbenzene*	<0.050	0.050	08/12/2025	ND	1.88	94.0	2.00	0.795		
Total Xylenes*	<0.150	0.150	08/12/2025	ND	5.59	93.1	6.00	0.926		
Total BTEX	<0.300	0.300	08/12/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 92.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/12/2025	ND	416	104	400	14.3		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/12/2025	ND	205	103	200	2.76	
DRO >C10-C28*	19.2	10.0	08/12/2025	ND	189	94.6	200	0.428	
EXT DRO >C28-C36	<10.0	10.0	08/12/2025	ND					

Surrogate: 1-Chlorooctane 97.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.9 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
CHAD HENSLEY
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/11/2025
Reported: 08/15/2025
Project Name: BEU DI 9 BATTERY
Project Number: 25A-03553
Project Location: XTO

Sampling Date: 08/07/2025
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS25 - 19 @ 4' (H254915-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/12/2025	ND	1.80	89.8	2.00	0.470		
Toluene*	<0.050	0.050	08/12/2025	ND	1.87	93.3	2.00	0.161		
Ethylbenzene*	<0.050	0.050	08/12/2025	ND	1.88	94.0	2.00	0.795		
Total Xylenes*	<0.150	0.150	08/12/2025	ND	5.59	93.1	6.00	0.926		
Total BTEX	<0.300	0.300	08/12/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/12/2025	ND	448	112	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/12/2025	ND	205	103	200	2.76	
DRO >C10-C28*	13.6	10.0	08/12/2025	ND	189	94.6	200	0.428	
EXT DRO >C28-C36	<10.0	10.0	08/12/2025	ND					

Surrogate: 1-Chlorooctane 98.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 92.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/11/2025
 Reported: 08/15/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 08/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS25 - 31 @ 4' (H254915-06)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/12/2025	ND	1.80	89.8	2.00	0.470	
Toluene*	<0.050	0.050	08/12/2025	ND	1.87	93.3	2.00	0.161	
Ethylbenzene*	<0.050	0.050	08/12/2025	ND	1.88	94.0	2.00	0.795	
Total Xylenes*	<0.150	0.150	08/12/2025	ND	5.59	93.1	6.00	0.926	
Total BTEX	<0.300	0.300	08/12/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	08/12/2025	ND	448	112	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/12/2025	ND	205	103	200	2.76	
DRO >C10-C28*	77.4	10.0	08/12/2025	ND	189	94.6	200	0.428	
EXT DRO >C28-C36	14.6	10.0	08/12/2025	ND					

Surrogate: 1-Chlorooctane 98.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 95.5 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 CHAD HENSLEY
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/11/2025
 Reported: 08/15/2025
 Project Name: BEU DI 9 BATTERY
 Project Number: 25A-03553
 Project Location: XTO

Sampling Date: 08/07/2025
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS25 - 18 @ 0' - 3' (H254915-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/12/2025	ND	1.80	89.8	2.00	0.470		
Toluene*	<0.050	0.050	08/12/2025	ND	1.87	93.3	2.00	0.161		
Ethylbenzene*	<0.050	0.050	08/12/2025	ND	1.88	94.0	2.00	0.795		
Total Xylenes*	<0.150	0.150	08/12/2025	ND	5.59	93.1	6.00	0.926		
Total BTEX	<0.300	0.300	08/12/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 92.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	08/12/2025	ND	448	112	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/12/2025	ND	205	103	200	2.76	
DRO >C10-C28*	20.9	10.0	08/12/2025	ND	189	94.6	200	0.428	
EXT DRO >C28-C36	<10.0	10.0	08/12/2025	ND					

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 95.1 % 40.6-153

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 10 of 10

Company Name: Vertex Resource				BILL TO				ANALYSIS REQUEST															
Project Manager: Chad Hensley				P.O. #: 1080871001																			
Address: 3101 Boyd drive				Company: ExxonMobil																			
City: Carlsbad State: NM Zip: 88220				Attn: Ashley McAfee																			
Phone #: 575-200-6167 Fax #:				Address: 3104 E Greene St																			
Project #: 25A-03553 Project Owner:				City: Carlsbad																			
Project Name: BEU OI 9 Battery				State: NM Zip: 88220																			
Project Location:				Phone #:																			
Sampler Name: Riley Arnold				Fax #:																			
FOR LAB USE ONLY				MATRIX				PRESERV.		SAMPLING													
Lab I.D.	Sample I.D.	(GIRAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME									
H254915																							
1	BS25-08 @ 4'	C	1			X					X		8.7.25	1:00	X	X	X						
2	BS25-11 @ 5'													1:20									
3	BS25-17 @ 4'													1:27									
4	BS25-18 @ 4'													1:39									
5	BS25-19 @ 4'													1:50									
6	BS25-31 @ 4'													2:06									
7	WS25-18 @ 0-3													2:15									

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Relinquished By:	Date: 8-11-25	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1420		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	REMARKS: Vertex Resource Chensley@vertexresource.com Rarnold@vertexresource.com
	Time:		
Delivered By: (Circle One)	Observed Temp. °C 1.4	Sample Condition Cool Intact ☒ Yes ☐ No	Turnaround Time: Standard ☒ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C 1.7	CHECKED BY: (Initials)	Bacteria (only) Sample Condition Cool Intact ☐ Yes ☐ No
			Thermometer ID # 1140
			Correction Factor -0.3°C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

APPENDIX D - Vegetation Survey

BEU DI 9 BATTERY

Project Details			
Client	ExxonMobil	Program Type	Vegetation Survey
NDIC Number		Location	
Project Description	25A-03553	Current Status	
Inspector Name	Fernando Rodriguez	Inspection Date	8/10/2025

Overall Vegetaton Coverage	
Crop Coverage Percentage	0%
Grass Percentage	1%
Other Desirable Species Percentage	10%
Weed Coverage Percentage	1%
Bare Land Percentage	88%
TOTAL	100%
Comments: No visible rare species encountered.	

Desireable Vegetation Summary			
Off-Site			
Type	Species	Coverage	GPS Position
Forb	Mesquite	5%	32.4569, -103.87983
Forb	Fourwing Saltbush	1%	32.45691, -103.87982
Forb	Ragweed	1%	32.4569, -103.87983
Forb	Russian Thistle	5%	32.45689, -103.87983
Forb	Broom Snakeweed	1%	32.4569, -103.87984
Native Grass	Burrowgrass	1%	32.4569, -103.87983

Undesireable Vegetation Summary**Vegetation Management Method Summary****Surface Materials Summary**

Off-Site		
Type	Approx. Size	GPS Position
Sand		32.4569, -103.87984

Departure

Departure Signature		
Printed Name	Fernando Rodriguez	B.Sc. for Fish, Wildlife, and Conservation Ecology

Arrival & Land Use Photos

Photo of the Site's Info Placard



Desirable Vegetation Photos

Off-Site: Broom Snakeweed

Viewing Direction: Southeast



Off-Site: Broom Snakeweed
Viewing Direction: Southeast
User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:19:51 PM
Dv-GPS: Lat:32.4568963713112, Long:-103.879838983469

Description: Closeup view

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:19:51 PM
Dv-GPS: Lat:32.4568963713112, Long:-103.879838983469

Off-Site: Burrowgrass	
Viewing Direction: West	Viewing Direction: West
 Photo (1) - Offsite Grass: Burrowgrass Facing: West (Desc: Close up view) User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:10:45 PM Dv-GPS: Lat:32.4569003464681, Long:-103.879833791576	 Photo (1) - Offsite Grass: Burrowgrass Facing: West (Desc: Coverage) User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:11:09 PM Dv-GPS: Lat:32.4569003464681, Long:-103.879833791576
Description: Close up view	Description: Coverage
Photo Stamp: User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:10:45 PM Dv-GPS: Lat:32.4569003464681, Long:-103.879833791576	Photo Stamp: User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:11:09 PM Dv-GPS: Lat:32.4569003464681, Long:-103.879833791576

Off-Site: Fourwing Saltbush

Viewing Direction: South



Photo (1) - Fort: Fourwing Saltbush
Facing: South (Desc: Closeup)
User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:14:27 PM
Dv-GPS: Lat:32.4569071177695, Long:-103.879816420473

Description: Closeup

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:14:27 PM
Dv-GPS: Lat:32.4569071177695, Long:-103.879816420473

Off-Site: Mesquite	
Viewing Direction: Southwest	Viewing Direction: South
 Photo of: Off-Site Mesquite Facing: Southwest (Down Downroad) User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:12:46 PM Dv-GPS: Lat:32.4569002762653, Long:-103.879825395574	 Photo of: Off-Site Mesquite Facing: South (Down Closeup view) User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:13:09 PM Dv-GPS: Lat:32.4569002762653, Long:-103.879825395574
Description: Coverage	Description: Close up view
Photo Stamp: User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:12:46 PM Dv-GPS: Lat:32.4569002762653, Long:-103.879825395574	Photo Stamp: User: Rodriguez, Fernando ExxonMobil 25A-03553 BEU DI 9 Battery 8/10/2025 4:13:09 PM Dv-GPS: Lat:32.4569002762653, Long:-103.879825395574

Off-Site: Ragweed

Viewing Direction: West



Description: Closeup view

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:16:37 PM
Dv-GPS: Lat:32.4568966924662, Long:-103.879834550472

Off-Site: Russian Thistle

Viewing Direction: North



Photo (1) - Russian Thistle
Filing: 8/10/2025: Closeup view
User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:18:43 PM
Dv-GPS: Lat:32.456893809426, Long:-103.879829301353

Description: Closeup view

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:18:43 PM
Dv-GPS: Lat:32.456893809426, Long:-103.879829301353

Undesireable Vegetation Photos

Vegetation Management Photos

Surface Material Photos

Off-Site: Sand

Viewing Direction: Southeast



Description: Offsite areas

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:21:12 PM
Dv-GPS: Lat:32.4568987059725, Long:-103.879836140482

Viewing Direction: West



Description: Offsite areas

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:21:36 PM
Dv-GPS: Lat:32.4568987059725, Long:-103.879836140482

Viewing Direction: South



Description: Offsite areas

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:22:03 PM
Dv-GPS: Lat:32.4568987059725, Long:-103.879836140482

Viewing Direction: East



Description: Offsite areas

Photo Stamp: User: Rodriguez, Fernando
ExxonMobil 25A-03553 BEU DI 9 Battery
8/10/2025 4:22:40 PM
Dv-GPS: Lat:32.4568987059725, Long:-103.879836140482

Departure Photos	
Desirable Veg Photo	Bare Land Photo
 Location's Non-Cap Desirable Vegetation Coverage - Photo (3) Percentage: 10 % Viewing Direction: Southwest Desc: Overview 8/10/2025 4:28:27 PM Lat:32.670604, Long:-103.670630	 Location's Bare Land Coverage - Photo (4) Percentage: 88 % Viewing Direction: South Desc: Overview 8/10/2025 4:28:22 PM Lat:32.669904, Long:-103.670630
Description: Overview	Description: Overview
Photo Stamp:	Photo Stamp:

APPENDIX B - Daily Field and Sampling Reports

Daily Site Visit Report



Client:	ExxonMobil	Incident ID #:	
Site Location Name:	BEU DI 9 Battery	API #:	
Inspection Date:	7/18/2025		

Summary of Times

Arrived at Site	7/18/2025 9:00 AM
Departed Site	7/18/2025 3:00 PM

Daily Site Visit Report



Field Notes

- 9:57 Travel to site/ safety paperwork/ ExxonMobil was contacted for authorization
- 9:57 Excavation area was line swept
- 9:58 Hydrovac began near pipelines and infrastructure
- 9:58 Excavation began on south eastern leg of spill

Next Steps & Recommendations

- 1 Continue excavation
- 2 Continue Hydrovac
- 3 Confirmation sampling

Daily Site Visit Report



Site Photos

Viewing Direction: North



Hydrovac in progress

Viewing Direction: South



Mechanical Excavation began

Viewing Direction: East



Contaminated material placed on spill area

Viewing Direction: East



Hydrovac at end of day



Daily Site Visit Report

Viewing Direction: East



Excavation on south western leg

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:


Signature

Daily Site Visit Report



Client:	ExxonMobil	Incident ID #:	
Site Location Name:	BEU DI 9 Battery	API #:	
Inspection Date:	7/22/2025		

Summary of Times

Arrived at Site	7/22/2025 8:30 AM
Departed Site	7/22/2025 3:30 PM

Daily Site Visit Report



Field Notes

- 8:52** Travel to site/ safety paperwork/ tailgate safety meeting
- 8:52** Contaminated material was moved to plastic liner
- 8:53** Hydrovac continued around equipment
- 8:53** Mechanical excavation continued
- 12:48** Base sample were taken to ensure proper excavation depth
- 13:43** Remediation extent was mapped

Next Steps & Recommendations

- 1** Continue excavation
- 2** Continue Hydrovac
- 3** Confirmation sampling

Daily Site Visit Report



Site Photos

Viewing Direction: West



Contaminated material placed on plastic liner

Viewing Direction: South



Excavation continued

Viewing Direction: East



Hydrovacing continued @ 3'

Viewing Direction: East



Excavation @ 3'



Daily Site Visit Report

Viewing Direction: North



Excavation @ 3'

Viewing Direction: East



Composite Base sample 1 @ 3'

Viewing Direction: West



Composite Base sample 2 @ 3'

Viewing Direction: North



Composite Base sample 3 @ 3'



Daily Site Visit Report

Viewing Direction: West



Excavation @ 3'

Viewing Direction: North



Excavation @ 3'

Viewing Direction: East



Excavation @ 3'

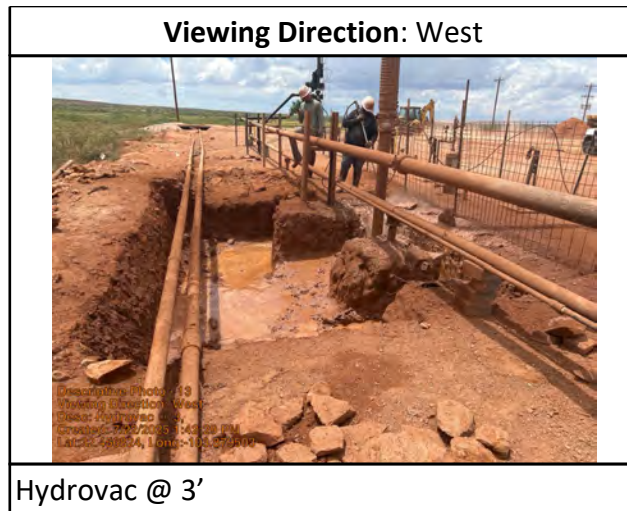
Viewing Direction: West



Excavation @ 3'



Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:

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



Daily Site Visit Report

Client:	<u>ExxonMobil</u>	Incident ID #:	<u></u>
Site Location Name:	<u>BEU DI 9 Battery</u>	API #:	<u></u>
Inspection Date:	<u>7/23/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>7/23/2025 8:30 AM</u>
Departed Site	<u>7/23/2025 10:30 AM</u>

Daily Site Visit Report



Field Notes

7:55 Hydrovac continued

7:55 Excavation continued

11:22 Contaminated material was placed on plastic liner

Next Steps & Recommendations

1 Continue Hydrovacing

2 Continue excavation

3 Confirmation sampling

Daily Site Visit Report



Site Photos

Viewing Direction: East



Hydrovacing continued

Viewing Direction: South



Excavation continued

Viewing Direction: West



Contaminated material placed in plastic liner

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:

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



Daily Site Visit Report

Client:	<u>ExxonMobil</u>	Incident ID #:	<u></u>
Site Location Name:	<u>BEU DI 9 Battery</u>	API #:	<u></u>
Inspection Date:	<u>7/28/2025</u>		<u></u>

Summary of Times	
Arrived at Site	<u>7/28/2025 11:30 AM</u>
Departed Site	<u>7/28/2025 4:30 PM</u>

Daily Site Visit Report



Field Notes

- 11:22** Travel to site/ safety paperwork
- 11:22** Confirmation samples were collected and field screened
- 11:23** Contaminated material was hauled to R360
- 15:39** Confirmation samples were jarred and labeled
- 15:39** Mapping edits

Next Steps & Recommendations

- 1** Complete confirmation sampling
- 2** Backfill and seed
- 3** Haul remaining contaminated material to R360
- 4** Reporting

Daily Site Visit Report



Site Photos

Viewing Direction: North



BS25-18 @ 4'
5 point composite sample

Viewing Direction: East



BS25-19 @ 4'
5 point composite sample

Viewing Direction: East



BS25-22 @ 3'
5 point composite sample

Viewing Direction: North



BS25-23 @ 3'
5 point composite sample



Daily Site Visit Report

Viewing Direction: Northeast  Descriptive Photo 1 Viewing Direction: Northeast Date: 8/28/25 @ 3:14 PM 5 point composite sample Created: 7/28/2025 12:40:14 PM Lat: 33.45595, Long: -103.67904 BS25-24 @ 3' 5 point composite sample	Viewing Direction: South  Descriptive Photo 2 Viewing Direction: South Date: 8/28/25 @ 3:14 PM 5 point composite sample Created: 7/28/2025 12:40:14 PM Lat: 33.45595, Long: -103.67904 BS25-31 @ 4' 5 point composite sample
Viewing Direction: Northwest  Descriptive Photo 3 Viewing Direction: Northwest Date: 8/28/25 @ 3:14 PM 5 point composite sample Created: 7/28/2025 12:40:17 PM Lat: 33.45595, Long: -103.67904 BS25-27 @ 3' 5 point composite sample	Viewing Direction: South  Descriptive Photo 4 Viewing Direction: South Date: 8/28/25 @ 3:14 PM 5 point composite sample Created: 7/28/2025 12:40:17 PM Lat: 33.45595, Long: -103.67904 BS25-28 @ 3' 5 point composite sample



Daily Site Visit Report

Viewing Direction: North  WS25-01 @ 0-4' 5 point composite sample	Viewing Direction: Northwest  WS25-02 @ 0-4' 5 point composite sample
Viewing Direction: Southeast  WS25-03 @ 0-4' 5 point composite sample	Viewing Direction: Southeast  WS25-04 @ 0-4' 5 point composite sample



Daily Site Visit Report

Viewing Direction: East  Descriptive Photo - 13 Viewing Direction: East Date: 7/28/2025 @ 0-4' 5 point composite sample Created: 7/28/2025 1:00:29 PM Lat:32.455555, Long:-103.575555 WS25-05 @ 0-4' 5 point composite sample	Viewing Direction: North  Descriptive Photo - 14 Viewing Direction: North Date: 7/28/2025 @ 0-4' 5 point composite sample Created: 7/28/2025 1:01:45 PM Lat:32.455555, Long:-103.575555 WS25-06 @ 0-4' 5 point composite sample
Viewing Direction: East  Descriptive Photo - 15 Viewing Direction: East Date: 7/28/2025 @ 0-4' 5 point composite sample Created: 7/28/2025 1:03:12 PM Lat:32.455555, Long:-103.575555 WS25-07 @ 0-4' 5 point composite sample	Viewing Direction: West  Descriptive Photo - 16 Viewing Direction: West Date: 7/28/2025 @ 0-4' 5 point composite sample Created: 7/28/2025 1:03:49 PM Lat:32.455555, Long:-103.575555 WS25-08 @ 0-5' 5 point composite sample



Daily Site Visit Report

Viewing Direction: East



WS25-09 @ 0-5'
5 point composite sample

Viewing Direction: Northwest



WS25-10 @ 0-5'
5 point composite sample

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:

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



Daily Site Visit Report

Client:	<u>ExxonMobil</u>	Incident ID #:	<u></u>
Site Location Name:	<u>BEU DI 9 Battery</u>	API #:	<u></u>
Inspection Date:	<u>7/29/2025</u>		<u></u>

Summary of Times	
Arrived at Site	<u>7/29/2025 12:00 PM</u>
Departed Site	<u>7/29/2025 4:00 PM</u>

Daily Site Visit Report



Field Notes

13:15 Travel to sand pit for backfill sample
13:15 Travel to site/ safety paperwork
13:15 Caliche backfill sample collected
13:15 WS25-11 through WS25-21 were collected and field screened
13:16 Sample were jarred and labeled
15:41 Coc's were created

Next Steps & Recommendations

- 1 Reporting
- 2 Backfill/ seeding

Daily Site Visit Report



Site Photos

Viewing Direction: East



SAND BACKFILL SAMPLE

Viewing Direction: North



CALICHE BACKFILL SAMPLE

Viewing Direction: East

WS25-11 @ 0-4'
5 point composite sample

Viewing Direction: North

WS25-12 @ 0-4'
5 point composite sample



Daily Site Visit Report

Viewing Direction: North  WS25-13 @ 0-4' 5 point composite sample	Viewing Direction: Southeast  WS25-14 @ 0-4' 5 point composite sample
Viewing Direction: Northwest  WS25-15 @ 0-4' 5 point composite sample	Viewing Direction: Northwest  WS25-16 @ 0-4' 5 point composite sample



Daily Site Visit Report

Viewing Direction: East  Description Photo 11 Viewing Direction: East Date: 7/29/2025 @ 2:04 PM 5 point composite sample Created: 7/29/2025 2:04:04 PM Lat:32.456776, Long:103.876881	Viewing Direction: West  Description Photo 10 Viewing Direction: West Date: 7/29/2025 @ 2:04 PM 5 point composite sample Created: 7/29/2025 2:04:04 PM Lat:32.456776, Long:103.876881
WS25-17 @ 0-3' 5 point composite sample	WS25-18 @ 0-3' 5 point composite sample
Viewing Direction: Northwest  Description Photo 13 Viewing Direction: Northwest Date: 7/29/2025 @ 2:04 PM 5 point composite sample Created: 7/29/2025 2:04:04 PM Lat:32.456776, Long:103.876881	Viewing Direction: West  Description Photo 12 Viewing Direction: North Date: 7/29/2025 @ 2:04 PM 5 point composite sample Created: 7/29/2025 2:04:04 PM Lat:32.456776, Long:103.876881
WS25-19 @ 0-3' 5 point composite sample	WS25-20 @ 0-3' 5 point composite sample



Daily Site Visit Report

Viewing Direction: North



WS25-21 @ 0-3'
5 point composite sample

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:


Signature



Daily Site Visit Report

Client:	<u>ExxonMobil</u>	Incident ID #:	<u></u>
Site Location Name:	<u>BEU DI 9 Battery</u>	API #:	<u></u>
Inspection Date:	<u>8/7/2025</u>		<u></u>

Summary of Times

Arrived at Site	<u>8/7/2025 12:30 PM</u>
Departed Site	<u>8/7/2025 3:30 PM</u>

Daily Site Visit Report



Field Notes

- 14:39** Travel to site/ safety paperwork
- 14:39** Confirmation sampling
- 14:40** Samples were field screened
- 14:40** Samples jarred and labeled
- 14:40** Coc creation

Next Steps & Recommendations

- 1** Send to lab for further analysis
- 2** Backfill/ reporting

Daily Site Visit Report



Site Photos

Viewing Direction: South



BS25-08 @ 4'

Viewing Direction: North



BS25-11 @ 5'

Viewing Direction: Northeast



BS25-17 @ 4'

Viewing Direction: North

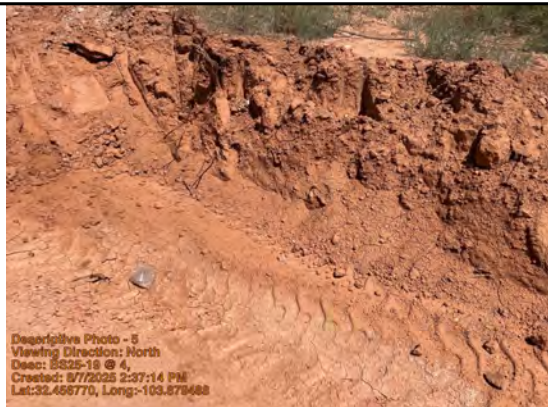


BS25-18 @ 4'



Daily Site Visit Report

Viewing Direction: East



BS25-19 @ 4'

Viewing Direction: Southeast



BS25-31 @ 4'

Viewing Direction: Northwest



WS25-18 @ 0-3'

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Arnold

Signature:


Signature



Daily Site Visit Report

Client:	ExxonMobil	Incident ID #:	
Site Location Name:	BEU DI 9 Battery	API #:	
Inspection Date:	9/4/2025		

Summary of Times

Arrived at Site	9/4/2025 7:19 AM
Departed Site	9/4/2025 7:48 AM

Field Notes

7:33 Completed JSA and informed Chris Purcell of presence on arrival. On site to assess reclamation progress.

7:45 Confirmed that excavation was backfill with topsoil and ready to seed.

Next Steps & Recommendations

1 Check on reseeding.

Daily Site Visit Report



Site Photos

Viewing Direction: South



Northwest of tank battery facing south.

Viewing Direction: Northwest



Southwest of production equipment facing northwest.

Viewing Direction: North



Southwest of production equipment facing north.

Viewing Direction: Northeast



South-Southwest of flare facing northeast.



Daily Site Visit Report

Viewing Direction: East



Southwest of flare facing east.

Viewing Direction: Southeast



Southwest of flare facing southeast.

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 horizontal line. Below the line, the word 'Signature' is printed in a small font.

Signature



Daily Site Visit Report

Client:	ExxonMobil	Incident ID #:	
Site Location Name:	BEU DI 9 Battery	API #:	
Inspection Date:	9/5/2025		

Summary of Times

Arrived at Site	9/5/2025 5:45 PM
Departed Site	9/5/2025 6:23 PM

Field Notes

- 17:50** Completed JSA at previous location. On site to assess reclamation work on pasture west of production equipment.
- 18:17** Excavation was backfilled to grade with topsoil. The slope of reclamation area matches matches the surrounding landscape.
- 18:18** Seed was applied to the topsoil and is visible on the surface.
- 18:19** Reclamation activities are completed until the seeds germinate.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: South



West-southwest of flare facing south.

Viewing Direction: Southeast



West-southwest of flare facing south.

Viewing Direction: East



Southwest of flare facing east.

Viewing Direction: Southeast



Southwest of flare facing southeast. Seed applied to new topsoil.



Daily Site Visit Report

Viewing Direction: East  Descriptive Photo - 2 Viewing Direction: East East: Southwest of flare facing east. Seed applied to new topsoil. Created: 9/6/2025 12:14 PM Latitude: 34.0000, Longitude: 118.0000 Southwest of flare facing east. Seed applied to new topsoil.	Viewing Direction: Northeast  Descriptive Photo - 3 Viewing Direction: Northeast East: West edge of reclamation area facing northeast. Created: 9/6/2025 12:14 PM Latitude: 34.0000, Longitude: 118.0000 West edge of reclamation area facing northeast.
Viewing Direction: East  Descriptive Photo - 7 Viewing Direction: East East: West edge of reclamation area facing east. Created: 9/6/2025 12:14 PM Latitude: 34.0000, Longitude: 118.0000 West edge of reclamation area facing east.	Viewing Direction: Southeast  Descriptive Photo - 8 Viewing Direction: Southeast East: West edge of reclamation area facing southeast. Created: 9/6/2025 12:14 PM Latitude: 34.0000, Longitude: 118.0000 West edge of reclamation area facing southeast.



Daily Site Visit Report

Viewing Direction: Northwest



South edge of reclamation area facing northwest.

Viewing Direction: North



South edge of reclamation area facing north.

Viewing Direction: Northeast



South edge of reclamation area facing northeast.

Viewing Direction: North



South of flare facing north. Seed applied to topsoil.



Daily Site Visit Report

Viewing Direction: Northwest



Southeast corner of reclamation area facing northwest.

Viewing Direction: West



East edge of reclamation area facing west.
Seed applied to topsoil.

Viewing Direction: Southwest



East edge of reclamation area facing southwest.

Viewing Direction: West



East edge of reclamation area facing west.



Daily Site Visit Report

Viewing Direction: Northwest  Descriptive Photo - 17 Viewing Direction: Northwest East edge of reclamation area facing northwest. Created: 9/5/2025 2:04:31 PM Lat:32.487765, Long:-103.875424 East edge of reclamation area facing northwest.	Viewing Direction: Southwest  Descriptive Photo - 18 Viewing Direction: Southwest Northeast corner of reclamation area facing southwest. Created: 9/5/2025 2:04:31 PM Lat:32.487765, Long:-103.875424 Northeast corner of reclamation area facing southwest.
Viewing Direction: Southwest  Descriptive Photo - 19 Viewing Direction: Southwest Northeast corner of reclamation area facing southwest. Seed applied to topsoil. Created: 9/5/2025 2:04:31 PM Lat:32.487765, Long:-103.875424 Northeast corner of reclamation area facing southwest. Seed applied to topsoil.	Viewing Direction: Southwest  Descriptive Photo - 20 Viewing Direction: Southwest North edge of reclamation area facing southeast. Created: 9/5/2025 2:04:31 PM Lat:32.487765, Long:-103.875424 North edge of reclamation area facing southeast.



Daily Site Visit Report

Viewing Direction: South



North edge of reclamation area facing south.

Viewing Direction: Southwest



North edge of reclamation area facing southwest.

Viewing Direction: South



Northwest of tank battery facing south.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

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

Signature

Sante Fe Main Office
Phone: (505) 476-3441

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

QUESTIONS

Action 503782

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 503782
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2517841727
Incident Name	NAPP2517841727 BIG EDDY UNIT DI 9 BATTERY @ FAPP2123049175
Incident Type	Other
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2123049175] DI 9

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	BIG EDDY UNIT DI 9 BATTERY
Date Release Discovered	06/21/2025
Surface Owner	State

Incident Details	
<i>Please answer all the questions in this group.</i>	
Incident Type	Other
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: Corrosion Flow Line - Production Crude Oil Released: 4 BBL Recovered: 1 BBL Lost: 3 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 7 BBL Recovered: 1 BBL Lost: 6 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 503782

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 503782
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 09/08/2025
--	---

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QUESTIONS, Page 3

Action 503782

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 503782
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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 26 and 50 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
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 ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between ½ and 1 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Between 300 and 500 (ft.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

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)	8000
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	67887
GRO+DRO (EPA SW-846 Method 8015M)	4670
BTEX (EPA SW-846 Method 8021B or 8260B)	1350
Benzene (EPA SW-846 Method 8021B or 8260B)	48.1
<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	07/18/2025
On what date will (or did) the final sampling or liner inspection occur	08/07/2025
On what date will (or was) the remediation complete(d)	08/07/2025
What is the estimated surface area (in square feet) that will be reclaimed	4633
What is the estimated volume (in cubic yards) that will be reclaimed	172
What is the estimated surface area (in square feet) that will be remediated	4633
What is the estimated volume (in cubic yards) that will be remediated	172
<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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QUESTIONS, Page 4

Action 503782

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 503782
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 09/08/2025
<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 503782

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 503782
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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 503782

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 503782
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	492224
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/07/2025
What was the (estimated) number of samples that were to be gathered	18
What was the sampling surface area in square feet	3600

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	4633
What was the total volume (cubic yards) remediated	172
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	4633
What was the total volume (in cubic yards) reclaimed	172
Summarize any additional remediation activities not included by answers (above)	see 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: Robert Woodall Title: Environmental Analyst Email: robert.d.woodall@exxonmobil.com Date: 09/08/2025

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, Page 7

Action 503782

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 503782
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 503782

CONDITIONS

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	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	11/3/2025