

## Remediation Summary & Soil Closure Request

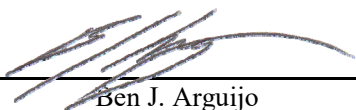
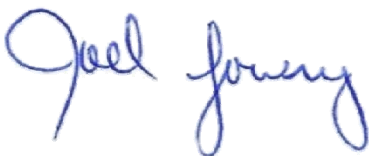
### Permian Resources Operating, LLC Vitalizer 33 Battery #2

Lea County, New Mexico  
Unit Letter "P", Section 33, Township 21 South, Range 34 East  
Latitude 32.42890001° North, Longitude 103.4680001° West  
NMOCD Reference No. nAPP2521134185

Prepared By:

**Etech Environmental & Safety Solutions, Inc.**  
6309 Indiana Ave, Ste. D  
Lubbock, Texas 79413

November 7, 2025

  
Ben J. Arguijo  
Joel Lowry

Carlsbad • Hobbs • Houston • Lafayette • Lubbock • Midland

## TABLE OF CONTENTS

	<i>Section</i>
PROJECT INFORMATION.....	<b>1.0</b>
SITE CHARACTERIZATION.....	<b>2.0</b>
CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE.....	<b>3.0</b>
REMEDIATION ACTIVITIES SUMMARY.....	<b>4.0</b>
SOIL CLOSURE REQUEST.....	<b>5.0</b>
RESTORATION, RECLAMATION & RE-VEGETATION PLAN.....	<b>6.0</b>
LIMITATIONS.....	<b>7.0</b>
DISTRIBUTION.....	<b>8.0</b>

### FIGURES

Figure 1 - Site Location Map  
Figure 2A - Site Characterization Map (0.5-Mile Radius)  
Figure 2B - Site Characterization Map (5-Mile Radius)  
Figure 3 - Sample Location Map

### TABLES

Table 1 - Concentrations of BTEX, TPH & Chloride in Soil

### APPENDICES

Appendix A – Depth to Groundwater Information  
Appendix B – Historical Aerial Imagery  
Appendix C – Soil Survey Information  
Appendix D – Protected Species & Habitats  
Appendix E – Photographic Log  
Appendix F – Field Data  
Appendix G – Laboratory Analytical Reports  
Appendix H – Sampling Notifications

## 1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Permian Resources Operating, LLC, has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the Vitalizer 33 Battery #2 ("Site"). Details of the release are summarized below:

### Location of Release Source

Latitude: 32.42890001° Longitude: -103.4680001°

Provided GPS are in WGS84 format.

Site Name: Vitalizer 33 Battery #2	Site Type: Tank Battery
Date Release Discovered: 7/29/2025	API # (if applicable): N/A

Unit Letter	Section	Township	Range	County
"P"	33	21S	34E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name \_\_\_\_\_)

### Nature and Volume of Release

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 4	Volume Recovered (bbls) 0
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released	Volume/Weight Recovered
Cause of Release: Equipment Failure (Resulting in a Fire) - Dump Valve		

### Initial Response

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

Previously submitted portions of the New Mexico Oil Conservation Division (NMOCD) Form C-141 are available in the NMOCD Permitting System.

## 2.0 SITE CHARACTERIZATION

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (bgs)?	Between 51 and 75 (ft.)
What method was used to determine the depth to groundwater?	NM OSE iWaters Database Search
Did the release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
What is the minimum distance between the closest lateral extents of the release and the following surface areas?	
A continuously flowing watercourse or any other significant watercourse?	Between 500 and 1,000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	Between 500 and 1,000 (ft.)
An occupied permanent residence, school, hospital, institution or church?	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Between ½ and 1 (mi.)
Any other fresh water well or spring?	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field?	Greater than 5 (mi.)
A wetland?	Between 500 and 1,000 (ft.)
A subsurface mine?	Greater than 5 (mi.)
A (non-karst) unstable area?	Between 500 and 1,000 (ft.)
Categorize the risk of this well/site being in a karst geology.	Low
A 100-year floodplain?	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half-mile radius of the Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided in Appendix A.

Additional NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) and Fish and Wildlife Services (FWS) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted in Figures 1, 2A, 2B, and 4.

Although the release left the production pad, a review of historical aerial imagery indicates that remediation activities did "not involve new surface disturbing activity outside the authorized boundaries of any existing roads, rights of way, well pads, associated oil and gas facilities or other structures." Therefore, it was inferred that said activities were exempt from the acknowledgment, archaeological records inspection/survey, and compliance measures requirements of the Cultural Properties Protection Rule, pursuant to Subsection 19.2.24.10.A.(8) of the New Mexico Administrative Code (NMAC). Historical aerial imagery is provided in Appendix B.

Review of United States Department of Agriculture soil survey data indicates that the soil at the Site is classified as Tunoco loamy fine sand with zero (0) to three (3) percent slopes. The depth to the restrictive layer is listed as "12 to 20 inches to petrocalcic." Soil survey information is provided in Appendix C.

The Site is not located within known Dunes Sagebrush Lizard, Lesser Prairie Chicken, or other sensitive wildlife or plant habitats. No sensitive species or habitats were encountered during the course of remediation activities; therefore, associated timing restrictions and other requirements were not applicable. Additional information regarding protected species and habitats is provided in Appendix D.



### 3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the release, inferred depth to groundwater, and NMOCD Siting Criteria, the Closure Criteria and Reclamation Standards for the Site are as follows:

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standards*‡
Between 51 and 75 (ft.)	Chloride (Cl-)	EPA** 300.0 or SM4500 Cl B	10,000	600
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 Method 8015M Ext	2,500	100
	Gas Range Organics + Diesel Range Organics (GRO+DRO)	EPA SW-846 Method 8015M	1,000	N/A
	Benzene	EPA SW-846 Methods 8021b or 8260b	10	10
	Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA SW-846 Methods 8021b or 8260b	50	50

\* Measured in milligrams per kilogram (mg/kg)

\*\* Environmental Protection Agency

† Table I, Section 19.15.29.12 NMAC

‡ Reclamation Standards apply only to the top 4' of soil in non-production areas. Section 19.15.29.13 D.(1) NMAC.

### 4.0 REMEDIATION ACTIVITIES SUMMARY

Requesting a remediation plan approval with this submission?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Have the lateral and vertical extents of contamination been fully delineated?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Was this release entirely contained within a lined containment area?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
On what estimated date will (or did) the remediation commence?	8/28/2025	
On what date will (or did) the final sampling or liner inspection occur?	9/15/2025	
On what date will (or was) the remediation complete(d)?	10/1/2025	
What is the total surface area (sq. ft.) in need of or that will <i>eventually</i> be reclaimed?	4,497	
What is the total volume (cy) in need of or that will <i>eventually</i> be reclaimed?	36	
What was the total surface area (sq. ft.) that has or will be remediated?	4,497	
What was the total volume (cy) that has or will be remediated?	36	
This remediation utilized the following processes to remediate/reduce contaminants:		
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
(In Situ) Soil Vapor Extraction	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
(In Situ) Biological processing (i.e. Microbes/Fertilizer, etc.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Ground Water Abatement pursuant to 19.15.30 NMAC	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Other (Non-listed remedial process)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Which OCD approved facility was or will be used for off-site disposal?	Lea Land, Inc.	
NMOCD Disposal Facility ID?	fEEM0112342028	
Summarize any additional remediation activities not included by answers above.	See below	

On August 28, 2025, Etech commenced remediation activities at the Site. In accordance with NMOCD regulatory guidelines, impacted soil affected above the Closure Criteria and/or Reclamation Standards was excavated and stockpiled on-site, pending transfer to an NMOCD-permitted surface waste facility for disposal. Olfactory/visual senses and/or a chloride test kit were utilized to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. The sidewalls and floor of the excavation were advanced until field tests and field observations suggested that BTEX, TPH, and chloride concentrations were below the applicable Closure Criteria and Reclamation Standards. Representative five-point composite confirmation soil

samples representing no more than 200 square feet were collected from the sidewalls and floor of the excavated area to be submitted to a certified, commercial laboratory ("the laboratory") for analysis. A summary of soil sampling events is provided below:

Constituent	Highest Observed Concentration (mg/kg)	Sample ID	Sample Date	Sample Depth (ft bgs)	Soil Status
Chloride	48.0	FL 13 @ 4-6"	9/15/2025	0.5	In-Situ
TPH	524	FL 11	8/28/2025	0.25	Excavated
GRO+DRO	432	FL 11	8/28/2025	0.25	Excavated
BTEX	<0.300	All submitted samples	8/28 & 9/15/25	0-0.5	Excavated & In-Situ
Benzene	<0.050	All submitted samples	8/28 & 9/15/25	0-0.5	Excavated & In-Situ

Please reference Table 1 for additional information.

On August 28, 2025, Etech collected 18 confirmation soil samples (FL 1 through FL 14, NW 1, EW 1, SW 1, and WW 1) from the floor and sidewalls of the excavated area. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated that BTEX and chloride concentrations were below the applicable Closure Criteria and Reclamation Standards in each of the submitted soil samples. TPH concentrations were below the Closure Criterion and/or Reclamation Standard in a majority of the samples, with the exception of samples FL 1, FL 5, FL 9, FL 10, FL 11, FL 13, and FL 14. Based on these laboratory analytical results, the excavation was subsequently further advanced in the areas characterized by samples FL 1, FL 5, FL 9, FL 10, FL 11, FL 13, and FL 14.

On September 15, 2025, Etech collected seven (7) confirmation soil samples (FL 1 @ 4-6", FL 5 @ 4-6", FL 9 @ 4-6", FL 10 @ 4-6", FL 11 @ 4-6", FL 13 @ 4-6", and FL 14 @ 4-6") from the floor of the excavated area. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were below the applicable Closure Criteria and Reclamation Standards in each of the submitted soil samples.

The final dimensions of the excavated area were approximately 122 feet in length, 30 to 58 feet in width, and three (3) to six (6) inches in depth. During the course of remediation activities, Etech transported approximately 36 cubic yards of impacted soil to an NMOCD-permitted surface waste facility for disposal and imported a commensurate volume of locally sourced, non-impacted material to the Site for use as backfill.

Soil sample locations and the extent of the excavated area are depicted in Figure 3, "Sample Location Map". Soil chemistry data is summarized in Table 1. General photographs of the Site are provided in Appendix E. Field data is provided in Appendix F. Laboratory analytical reports are provided in Appendix G. NMOCD sampling notification documentation is provided in Appendix H.

## 5.0 SOIL CLOSURE REQUEST

Requesting a deferral of remediation closure due date with the approval of this submission?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Requesting a remediation closure approval with this submission?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Have the lateral and vertical extents of contamination been fully delineated?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Was this release entirely contained within a lined containment area?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the site's existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
What was the total surface area (sq. ft.) remediated?	4,497	
What was the total volume (cy) remediated?	36	

Remediation activities were conducted in accordance with NMOCD regulatory guidelines. Impacted soil affected above the Closure Criteria and Reclamation Standards was excavated and transported to an NMOCD-permitted disposal facility. Laboratory analytical results from confirmation soil samples indicate that in-situ concentrations of BTEX, TPH, and chloride are below the applicable Closure Criteria and Reclamation Standards.

Based on laboratory analytical results and field activities conducted to date, Etech recommends that Permian Resources Operating, LLC, provide copies of this *Remediation Summary & Soil Closure Request* to the appropriate agencies and request remediation closure approval be granted to the Site.

## 6.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN

All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste containing earthen material with concentrations of less than 600 mg/kg chloride, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg benzene?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Requesting a reclamation approval with this submission?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Requesting a restoration complete approval with this submission?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
What was the total surface area (in square feet) reclaimed?	4,497	
What was the total volume (in cubic yards) reclaimed?	36	

On May 15, 2025, a 5-point composite soil sample (Caliche Pit) was collected at the nearby Merchant San Simone borrow pit to ensure that material obtained from therein was suitable for use as backfill at remediation/reclamation sites in the area. The soil sample was submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were below the applicable NMOCD Reclamation Standards, confirming that material obtained from the Merchant San Simone caliche pit was acceptable for use as backfill.

Upon receiving laboratory analytical results from confirmation soil samples, the excavated area was backfilled with material sourced from the Merchant San Simone caliche pit and emplaced at or near original relative positions. The affected area was compacted and contoured to achieve erosion control, stability, and preservation of surface water flow, to the extent practicable. Affected areas not on production pads and/or lease roads will be seeded with an agency and/or landowner-approved seed mix, which has been certified to be free of noxious weeds, during the first favorable growing season following closure of the Site. The seed will be installed at the prescribed rate utilizing either a seed drill or a broadcaster and harrow.

## 7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Remediation Summary & Soil Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Permian Resources Operating, LLC. Use of the information contained in this report is prohibited without the consent of Etech and/or Permian Resources Operating, LLC.

## **8.0 DISTRIBUTION**

***Permian Resources Operating, LLC***

*300 N. Marienfeld St. Suite 100  
Midland, TX 79701*

***New Mexico State Land Office***

*Hobbs Field Office  
2827 North Dal Paso Street  
Suite 117  
Hobbs, NM 88240*

***New Mexico Energy, Minerals and Natural Resources Department***

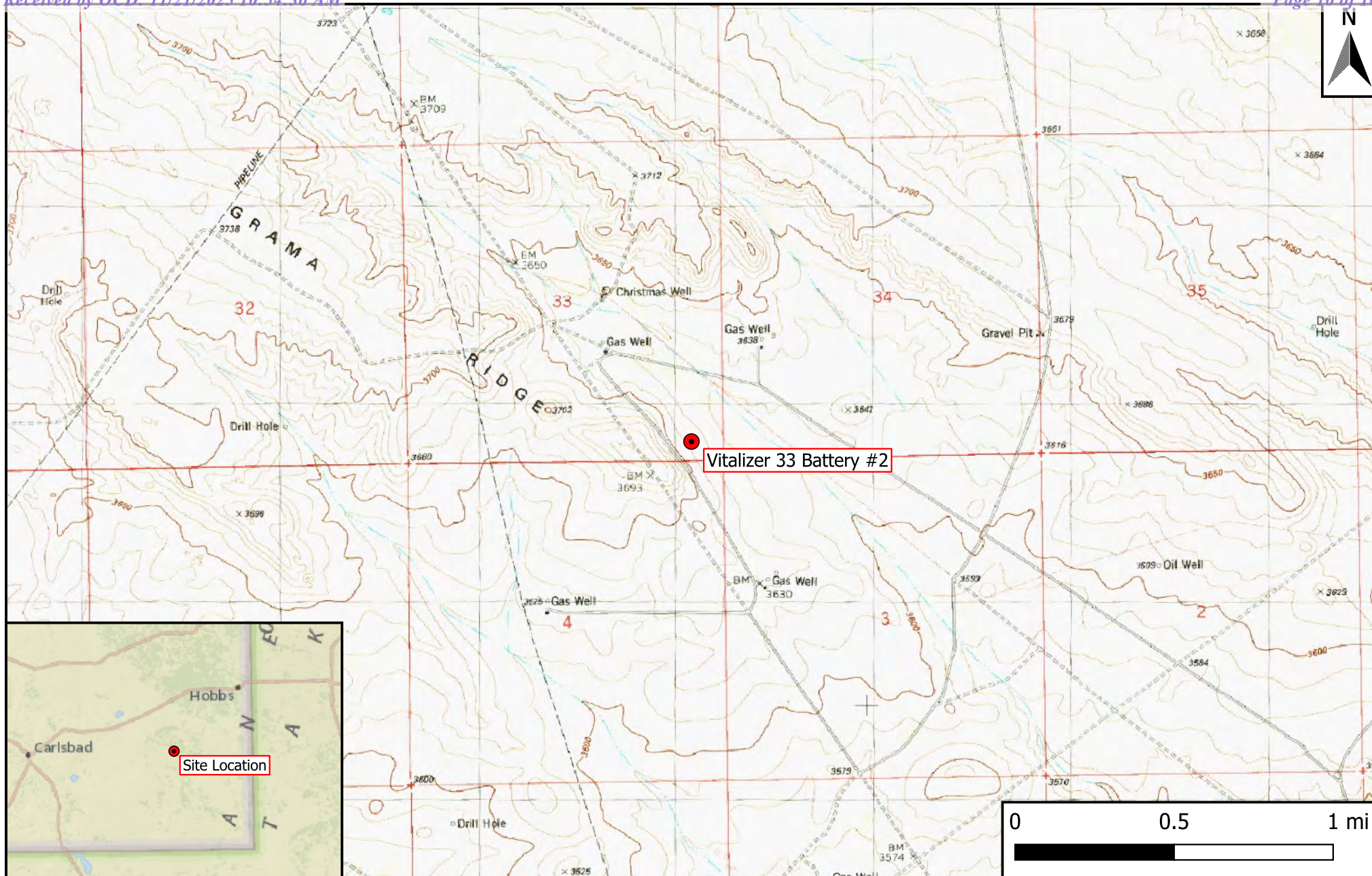
*Oil Conservation Division, District 1  
1220 South St. Francis Drive  
Santa Fe, NM 87505*

*(Electronic Submission)*

## **Figure 1**

### **Site Location Map**





## Legend

- Site Location

**Figure 1**  
 Site Location Map  
 Permian Resources Operating, LLC  
 Vitalizer 33 Battery #2  
 GPS: 32.42890001, -103.4680001  
 Lea County, New Mexico



Drafted: bja

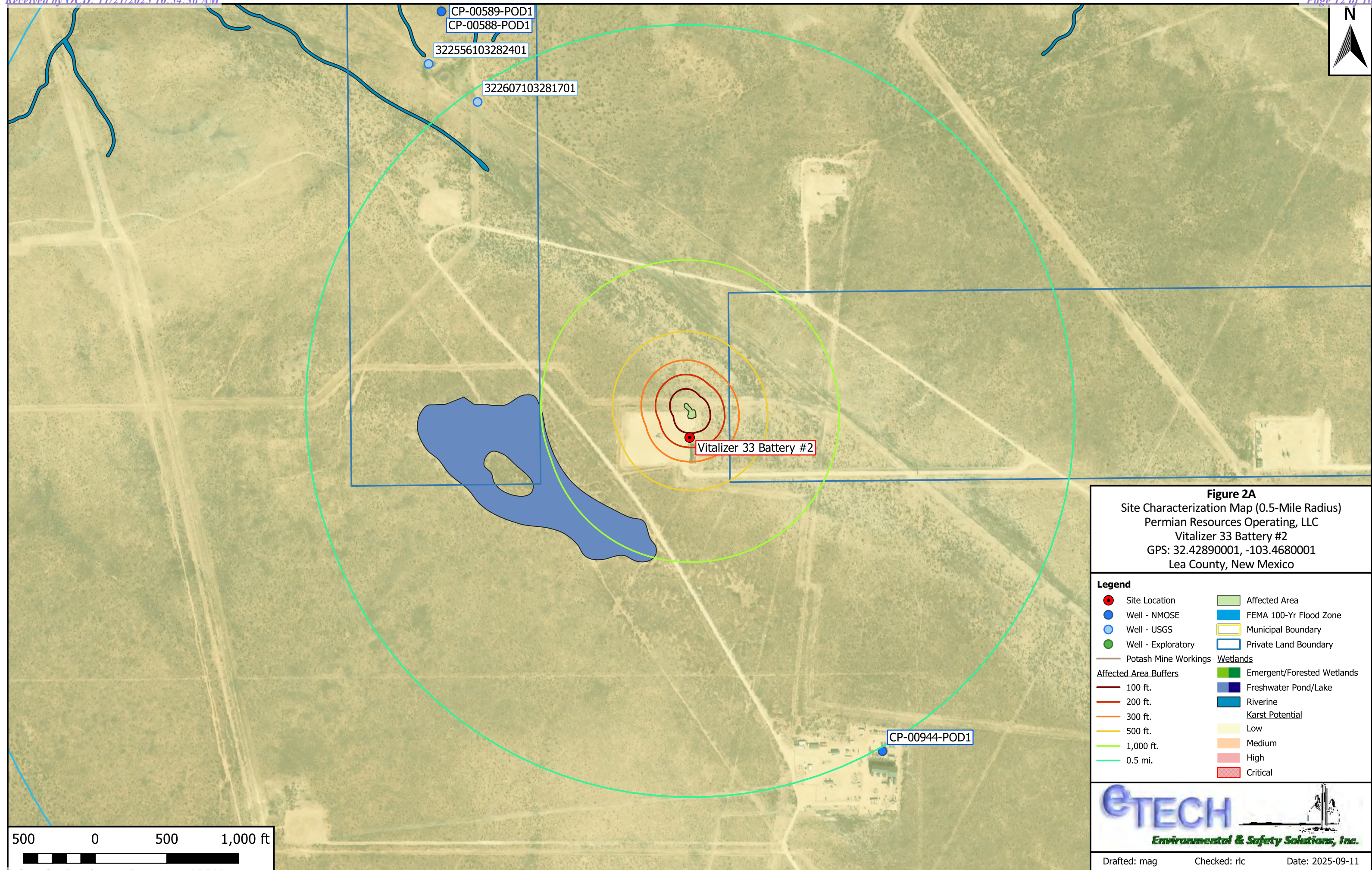
Checked: rlc

Date: 11/6/25

## **Figures 2A & 2B**

### **Site Characterization Maps**

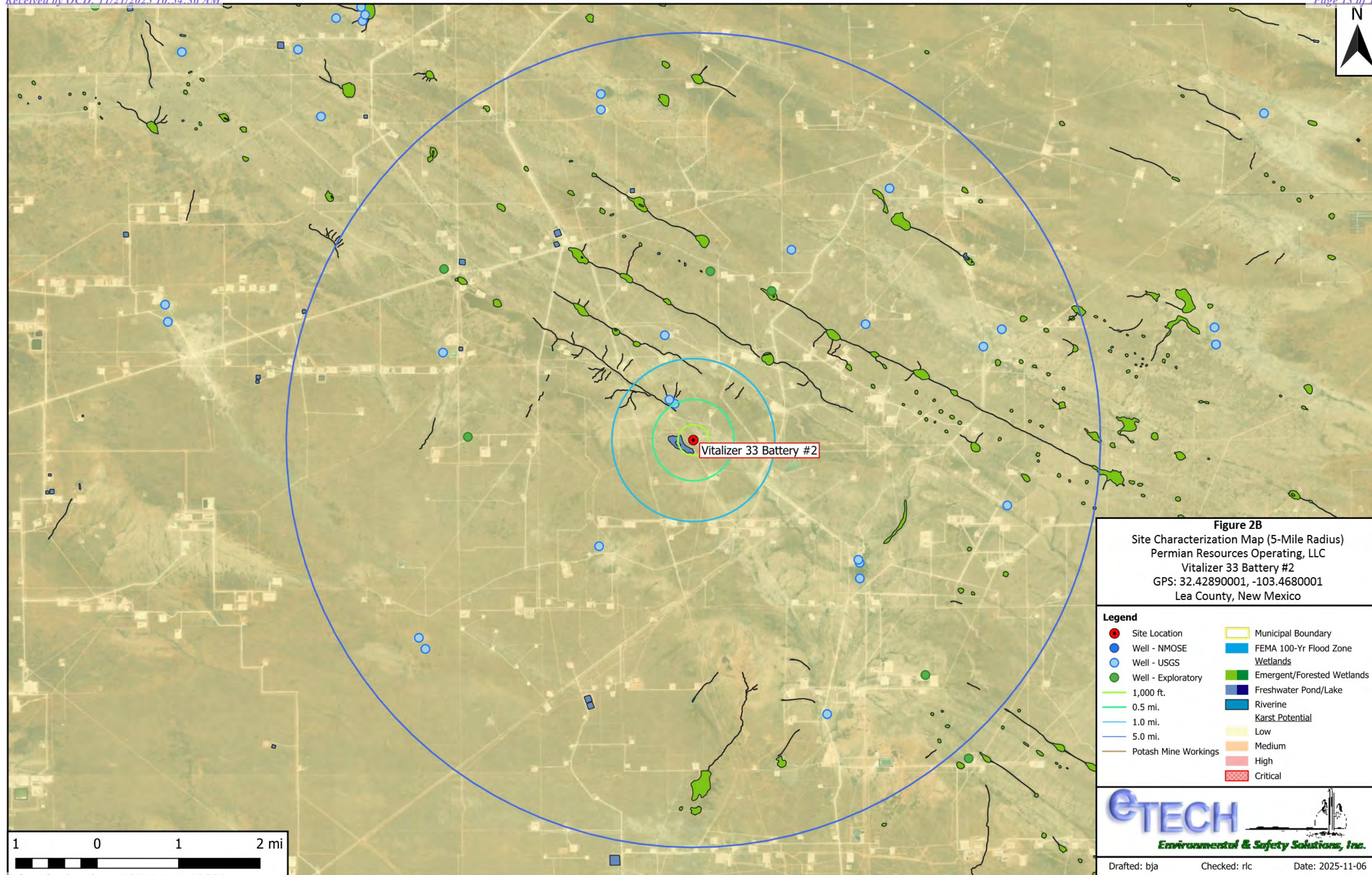




**Figure 2A**  
Site Characterization Map (0.5-Mile Radius)  
Permian Resources Operating, LLC  
Vitalizer 33 Battery #2  
GPS: 32.42890001, -103.4680001  
Lea County, New Mexico

- Legend**
- |                              |                              |
|------------------------------|------------------------------|
| ● Site Location              | ■ Affected Area              |
| ● Well - NMOSE               | ■ FEMA 100-Yr Flood Zone     |
| ● Well - USGS                | ■ Municipal Boundary         |
| ● Well - Exploratory         | ■ Private Land Boundary      |
| — Potash Mine Workings       | <b>Wetlands</b>              |
| <b>Affected Area Buffers</b> | ■ Emergent/Forested Wetlands |
| — 100 ft.                    | ■ Freshwater Pond/Lake       |
| — 200 ft.                    | ■ Riverine                   |
| — 300 ft.                    | ■ Karst Potential            |
| — 500 ft.                    | ■ Low                        |
| — 1,000 ft.                  | ■ Medium                     |
| — 0.5 mi.                    | ■ High                       |
|                              | ■ Critical                   |

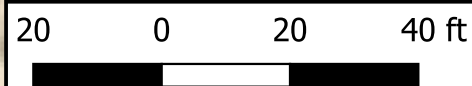
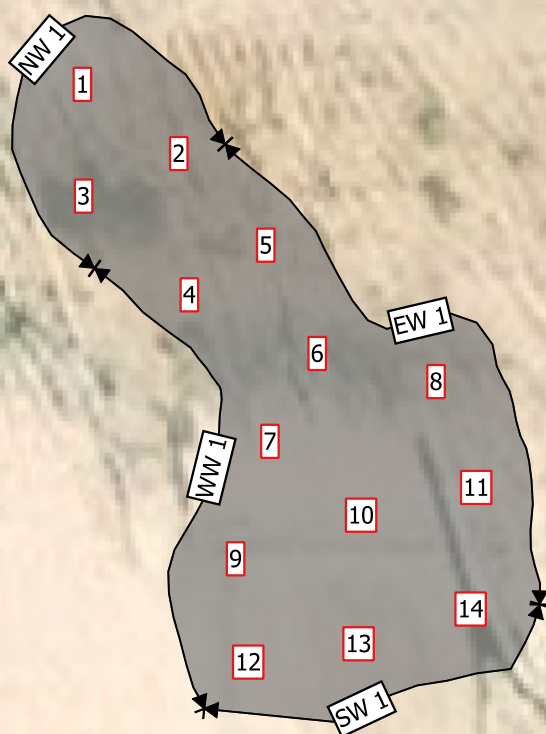






## **Figure 3**

### **Sample Location Map**



## Legend

- Excavation Extent
- Composite Floor Sample
- Composite Wall Sample

**Figure 3**

Sample Location Map  
 Permian Resources Operating, LLC  
 Vitalizer 33 Battery #2  
 GPS: 32.42890001, -103.4680001  
 Lea County, New Mexico



Drafted: bja

Checked: jwl

Date: 2025-11-06

**Table 1**  
**Concentrations of BTEX, TPH & Chloride in Soil**

**Table 1**  
**Concentrations of BTEX, TPH & Chloride in Soil**  
**Permian Resources Operating, LLC**  
**Vitalizer 33 Battery #2**  
**NMOCD Ref. #: nAPP2521134185**

NMOCD Closure Criteria				10	50	N/A	N/A	1,000	N/A	2,500	10,000
NMOCD Reclamation Standards				10	50	N/A	N/A	N/A	N/A	100	600
Sample ID	Date	Depth (Feet)	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C <sub>6</sub> -C <sub>10</sub> (mg/kg)	DRO C <sub>10</sub> -C <sub>28</sub> (mg/kg)	GRO + DRO C <sub>6</sub> -C <sub>28</sub> (mg/kg)	ORO C <sub>28</sub> -C <sub>36</sub> (mg/kg)	TPH C <sub>6</sub> -C <sub>36</sub> (mg/kg)	Chloride (mg/kg)
FL 1	8/28/2025	0.25	Excavated	<0.050	<0.300	<10.0	91.0	91.0	21.0	112	<16.0
FL 1 @ 4-6"	9/15/2025	0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 2	8/28/2025	0.25	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 3	8/28/2025	0.25	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 4	8/28/2025	0.25	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 5	8/28/2025	0.25	Excavated	<0.050	<0.300	<10.0	94.8	94.8	12.7	108	<16.0
FL 5 @ 4-6"	9/15/2025	0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 6	8/28/2025	0.25	In-Situ	<0.050	<0.300	<10.0	36.3	36.3	<10.0	36.3	32.0
FL 7	8/28/2025	0.25	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 8	8/28/2025	0.25	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 9	8/28/2025	0.25	Excavated	<0.050	<0.300	<10.0	267	267	40.5	308	<16.0
FL 9 @ 4-6"	9/15/2025	0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 10	8/28/2025	0.25	Excavated	<0.050	<0.300	<10.0	381	381	68.5	450	<16.0
FL 10 @ 4-6"	9/15/2025	0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 11	8/28/2025	0.25	Excavated	<0.050	<0.300	<10.0	432	432	92.2	524	<16.0
FL 11 @ 4-6"	9/15/2025	0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
FL 12	8/28/2025	0.25	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL 13	8/28/2025	0.25	Excavated	<0.050	<0.300	<10.0	153	153	20.1	173	<16.0
FL 13 @ 4-6"	9/15/2025	0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
FL 14	8/28/2025	0.25	Excavated	<0.050	<0.300	<10.0	188	188	34.6	223	32.0
FL 14 @ 4-6"	9/15/2025	0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
NW 1	8/28/2025	0-0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
EW 1	8/28/2025	0-0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
SW 1	8/28/2025	0-0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
WW 1	8/28/2025	0-0.5	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
Caliche Pit	5/15/2025	N/A	Backfill	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	480

Dash (-): Sample not analyzed for that constituent.

Bold: NMOCD Closure Criteria exceedance.

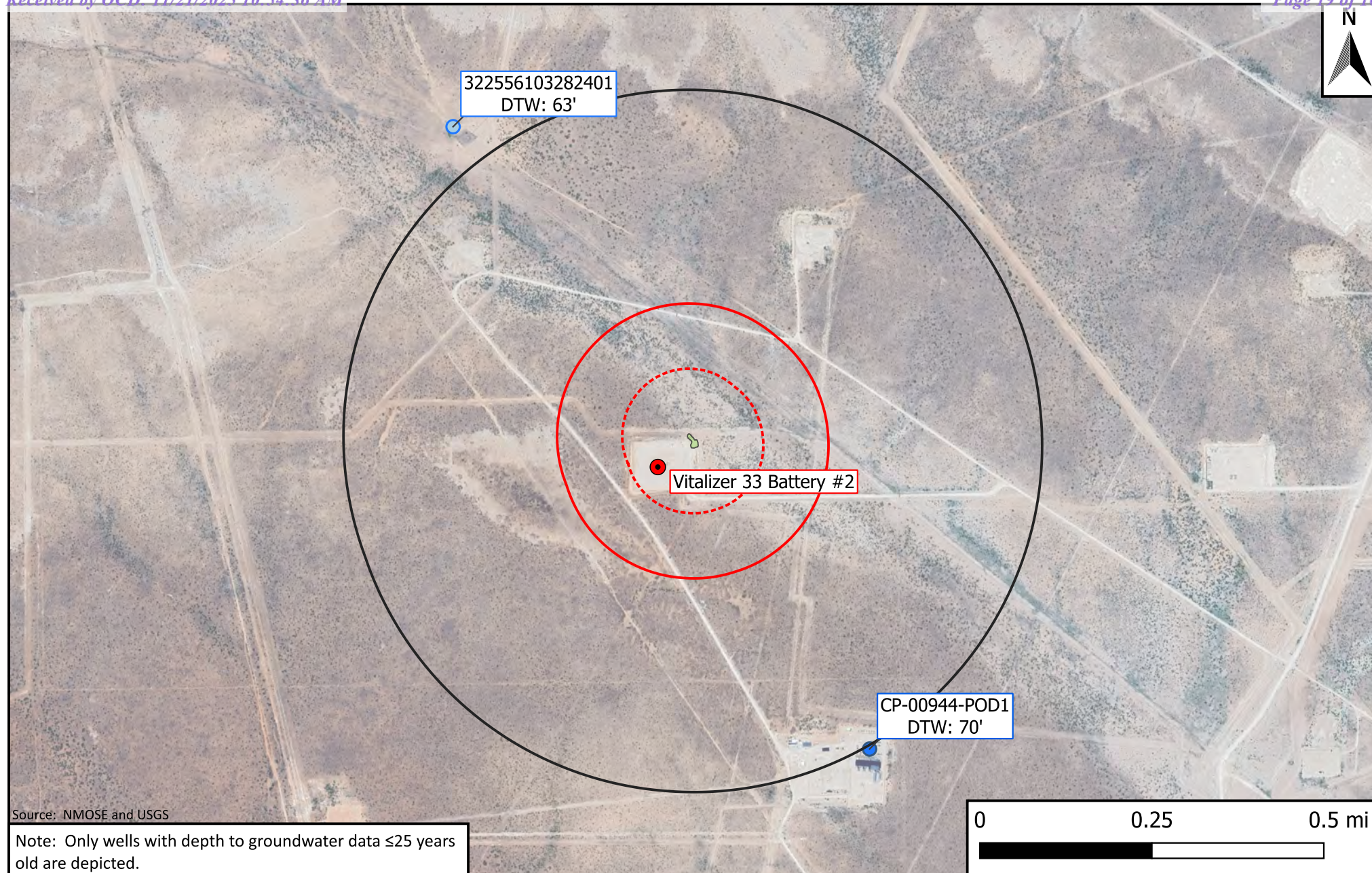
Red: NMOCD Reclamation Standard exceedance.

Red Border with Shading: Highest observed concentration.

## **Appendix A**

### **Depth to Groundwater Information**



**Legend**

- |                     |                   |
|---------------------|-------------------|
| ● C-141 Coordinates | ■ Affected Area   |
| ● Well - NMOSE      | ⋯ 500-Ft Radius   |
| ● Well - USGS       | □ 1,000-Ft Radius |
| ● Well - Other      | □ 0.5-Mi Radius   |

**Figure 4**

Inferred Depth to Groundwater Map  
Permian Resources Operating, LLC  
Vitalizer 33 Battery #2  
GPS: 32.42890001, -103.4680001  
Lea County, New Mexico




Drafted: bja

Checked: rlc

Date: 11/7/25



# 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
	CP 00944 POD1		SW	NW	03	22S	34E	644530.7	3588351.0	

\* UTM location was derived from PLSS - see Help

Driller License:	1456	Driller Company:	WHITE DRILLING COMPANY					
Driller Name:	WHITE, JOHN W							
Drill Start Date:	2007-03-05	Drill Finish Date:	2007-03-05			Plug Date:		
Log File Date:	2007-03-22	PCW Rcv Date:				Source:	Shallow	
Pump Type:			Pipe Discharge Size:				Estimated Yield:	
Casing Size:	5.00	Depth Well:	109			Depth Water:	70	

## Water Bearing Stratifications:

Top	Bottom	Description
62	72	Other/Unknown

## Casing Perforations:

Top	Bottom
57	97

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.



File Number: \_\_\_\_\_

**NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD**

**1. OWNER OF WELL**

**Enstor Grama Ridge Storage & Transportation**  
 Name: Enstor Grama Ridge Storage & Transportation Work Phone: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
 Address: 20333 State Hwy. 249, Suite 400  
 City: Houston State: TX Zip: 77070

**2. LOCATION OF WELL (A, B, C, or D required, E or F if known)**

A. SW 1/4 NW 1/4 Section: 3 Township: 22S Range: 34E N.M.P.M.  
 in Lea County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
 \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.  
 U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: 32 d 25 m 22.4 s Longitude: 103 d 27 m 46.2 s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract \_\_\_\_\_ of the  
 \_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): State of New Mexico

**3. DRILLING CONTRACTOR**

License Number: WD-1456  
 Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
 Agent: John W. White Home Phone: 325-893-2950  
 Mailing Address: P.O. Box 906  
 City: Clyde State: TX Zip: 79510

**4. DRILLING RECORD: WW#1**

Drilling began: 3/05/07; Completed: 3/05/07; Type tools: Air Rotary;  
 Size of hole: 8 3/4 in.; Total depth of well: 109.0 ft.;  
 Completed well is: shallow (shallow, artesian);  
 Depth to water upon completion of well: 70.0 ft.

File Number: CP-944  
 Form: wr-20 page 1 of 4

Trn Number: 374942 W1667

22.34.3.13

Form provided by Forms On-A-Disk · 214-340-9429 · FormsOnADisk.com

File Number: \_\_\_\_\_

**NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD**

**5. PRINCIPAL WATER-BEARING STRATA: WW#1**

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
<b>62.0</b>	<b>72.0</b>	<b>10.0</b>	<b>Orange brown sand moist.</b>	
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

**6. RECORD OF CASING**

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<b>5.0</b>	<b>Sch. 40</b>	<b>4.0</b>	<b>0.0</b>	<b>57.0</b>	<b>57.0</b>			
<b>5.0</b>	<b>.035</b>	<b>4.0</b>	<b>57.0</b>	<b>97.0</b>	<b>40.0</b>		<b>57.0</b>	<b>97.0</b>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

**7. RECORD OF MUDDING AND CEMENTING**

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
<b>100.0</b>	<b>54.0</b>	<b>8 3/4</b>	<b>28.0</b>		<b>8/16 sand.</b>
<b>54.0</b>	<b>30.0</b>	<b>8 3/4</b>	<b>9.0</b>		<b>Bentonite pellets.</b>
<b>30.0</b>	<b>0.0</b>	<b>8 3/4</b>	<b>22.0</b>		<b>Cement – hand mix</b>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**8. PLUGGING RECORD**

Plugging Contractor: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Plugging Method: \_\_\_\_\_  
 Date Well Plugged: \_\_\_\_\_

Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

	No. Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_

Form: wr-20 page 2 of 4

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD[illegible]

STATE ENGINEER OFFICE  
ROSWELL, NEW MEXICO  
2007 MAR 22 A 10:57

Trn Number: 374942

page 3 of 4

Released to Imaging: 1/27/2026 2:01:27 PM

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: WW#1  
Domestic water well.

This image shows a single page from a notebook or ledger. It features approximately 20 evenly spaced horizontal blue or grey lines across its entire width. The lines are thin and consistent in color. There are no vertical margin lines, headers, footers, or any other markings present on the page. The background is a uniform off-white or light cream color.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

  
\_\_\_\_\_  
Driller

3/19/07  
(mm/dd/year)

\_\_\_\_\_

FOR STATE ENGINEER USE ONLY

Quad ;FWL ;FSL ;Use ;Location No.

File Number: \_\_\_\_\_

Form: wr-20

Trn Number:

---

page 4 of 4

Form provided by Forms On-A-Disk · 214-340-9429 · FormsOnADisk.com



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

## National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:

Groundwater

Geographic Area:

United States

GO



Click for News Bulletins

Groundwater levels for the Nation



Important: [Next Generation Monitoring Location Page](#)

### Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 322556103282401

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 322556103282401 21S.34E.33.233442

Lea County, New Mexico

Latitude 32°26'10.1", Longitude 103°28'22.7" NAD83

Land-surface elevation 3,642 feet above NAVD88

The depth of the well is 92 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

#### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
>=2000			7								
2015-12-18	17:30 UTC	m	72019	62.52			1	S	USGS	S	A

Explanation		
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	P	Pumping
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions or Comments](#)[Help](#)[Data Tips](#)[Explanation of terms](#)[Subscribe for system changes](#)[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)**Title: Groundwater for USA: Water Levels****URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2025-11-07 19:00:54 EST

0.42 0.34 nadww02

## **Appendix B**

### **Historical Aerial Imagery**



Legend

Release

Calibrator 33 Battery #2

Imagery Date: 12/27/2019



Google Earth

Image © 2025 CNES / Airbus

200 ft





## **Appendix C**

### **Soil Survey Information**

Soil Map—Lea County, New Mexico  
(Vitalizer 33 Battery 2)



Natural Resources  
Conservation Service


Web Soil Survey  
National Cooperative Soil Survey

11/6/2025  
Page 1 of 3

Soil Map—Lea County, New Mexico  
(Vitalizer 33 Battery 2)

## 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: Lea County, New Mexico

Survey Area Data: Version 22, Sep 9, 2025

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TF	Tonuco loamy fine sand, 0 to 3 percent slopes	0.1	100.0%
Totals for Area of Interest		0.1	100.0%

Map Unit Description: Tonuco loamy fine sand, 0 to 3 percent slopes---Lea County, New Mexico

Vitalizer 33 Battery 2

## Lea County, New Mexico

### TF—Tonuco loamy fine sand, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tw3c

*Elevation:* 3,280 to 4,460 feet

*Mean annual precipitation:* 10 to 16 inches

*Mean annual air temperature:* 59 to 64 degrees F

*Frost-free period:* 180 to 220 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Tonuco and similar soils:* 70 percent

*Minor components:* 30 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Tonuco

##### Setting

*Landform:* Plains, ridges

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

*Parent material:* Sandy eolian deposits

##### Typical profile

*A - 0 to 12 inches:* loamy fine sand

*Bw - 12 to 17 inches:* loamy sand

*Bkkm - 17 to 39 inches:* cemented material

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* 12 to 20 inches to petrocalcic

*Drainage class:* Excessively drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 2 percent

*Gypsum, maximum content:* 1 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 2.0

*Available water supply, 0 to 60 inches:* Very low (about 1.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

Map Unit Description: Tonuco loamy fine sand, 0 to 3 percent slopes---Lea County, New Mexico

Vitalizer 33 Battery 2

*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: D*  
*Ecological site: R077DY048TX - Shallow 12-17" PZ*  
*Hydric soil rating: No*

### Minor Components

#### Simona

*Percent of map unit: 15 percent*  
*Landform: Plains, ridges*  
*Landform position (two-dimensional): Shoulder*  
*Landform position (three-dimensional): Rise*  
*Down-slope shape: Linear, convex*  
*Across-slope shape: Linear*  
*Ecological site: R070BD002NM - Shallow Sandy*  
*Hydric soil rating: No*

#### Berino

*Percent of map unit: 10 percent*  
*Landform: Plains, ridges*  
*Landform position (two-dimensional): Shoulder*  
*Landform position (three-dimensional): Rise*  
*Down-slope shape: Linear, convex*  
*Across-slope shape: Linear*  
*Ecological site: R070BD003NM - Loamy Sand*  
*Hydric soil rating: No*

#### Cacique

*Percent of map unit: 5 percent*  
*Landform: Plains, ridges*  
*Landform position (two-dimensional): Shoulder*  
*Landform position (three-dimensional): Rise*  
*Down-slope shape: Linear, convex*  
*Across-slope shape: Linear*  
*Ecological site: R070BD004NM - Sandy*  
*Hydric soil rating: No*

## Data Source Information

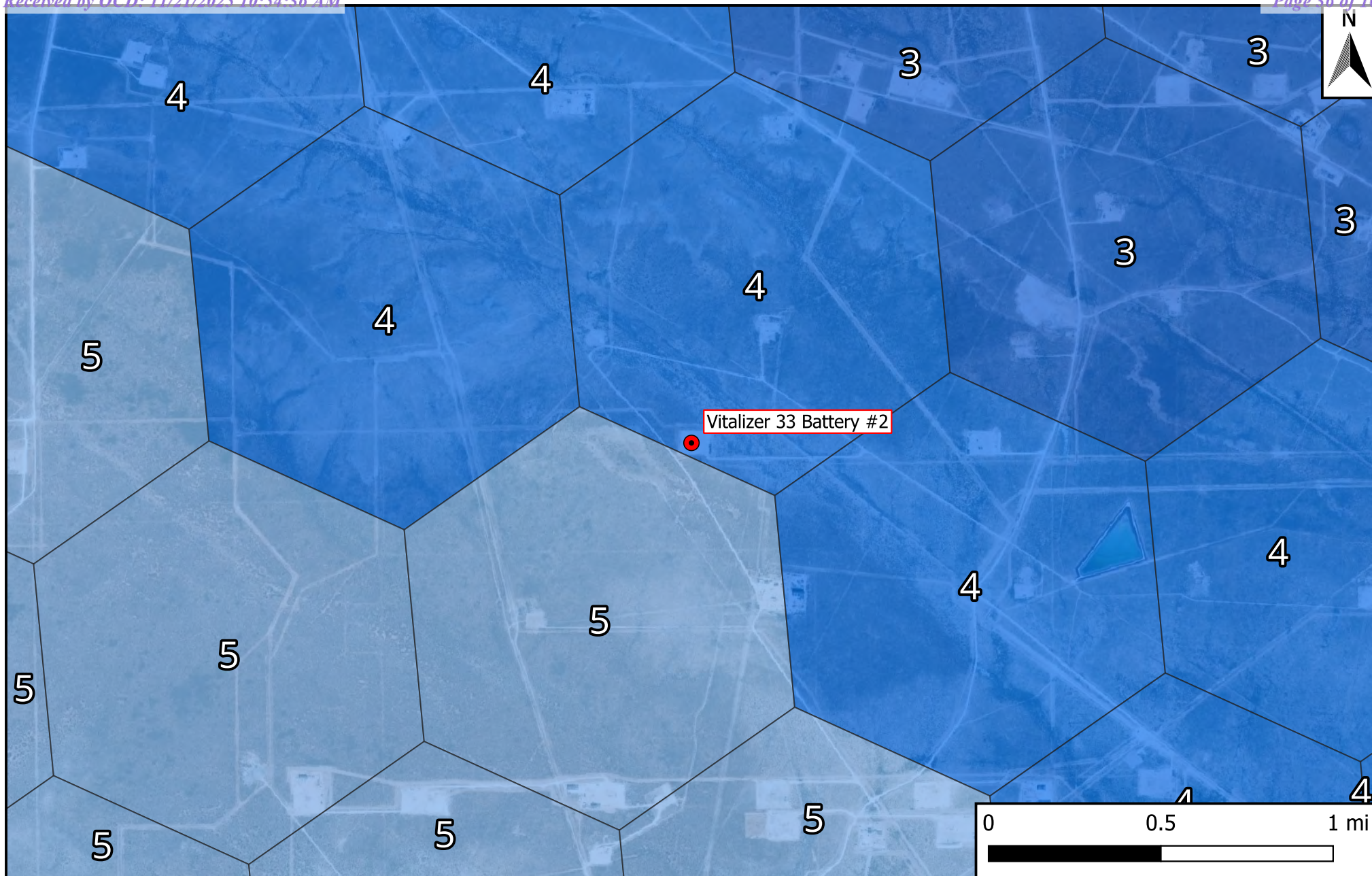
Soil Survey Area: Lea County, New Mexico

Survey Area Data: Version 22, Sep 9, 2025

## **Appendix D**

### **Protected Species & Habitats**





## Legend

● Site Location

## CHAT Priority Level

- 1
- 2
- 3
- 4
- 5
- 6

**Figure 5**  
**New Mexico Crucial Habitat Assessment Tool (CHAT)**  
Permian Resources Operating, LLC  
Vitalizer 33 Battery #2  
GPS: 32.42890001, -103.4680001  
Lea County, New Mexico



Drafted: bja

Checked: rlc

Date: 11/6/2025



## Vitalizer 33 Battery #2



11/6/2025, 4:59:22 PM

 ArcGIS World Geocoding Service

Lesser Prairie Chicken Habitat

 Isolated Population Area

World Imagery

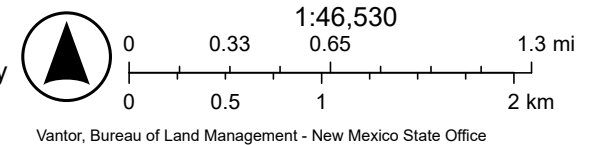
Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations

9.6m Resolution Metadata



Vantor, Bureau of Land Management - New Mexico State Office

# 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

Lea County, New Mexico



## Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525  
📠 (505) 346-2542

2105 Osuna Road Ne  
Albuquerque, NM 87113-1001

# Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

## Birds

NAME	STATUS
Lesser Prairie-chicken Tympanuchus pallidicinctus No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1924">https://ecos.fws.gov/ecp/species/1924</a>	Endangered
Northern Aplomado Falcon Falco femoralis septentrionalis No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1923">https://ecos.fws.gov/ecp/species/1923</a>	<a href="#">EXPN</a>

## Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	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 <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. 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) <sup>1</sup> 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
Chestnut-collared Longspur <i>Calcarius ornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 10
Northern Harrier <i>Circus hudsonius</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8350">https://ecos.fws.gov/ecp/species/8350</a>	Breeds Apr 1 to Sep 15

## 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 Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

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 year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the

presence score if the corresponding survey effort is also high.

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

1. 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.
2. 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  $0.05/0.25 = 0.2$ .
3. 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.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

**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. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

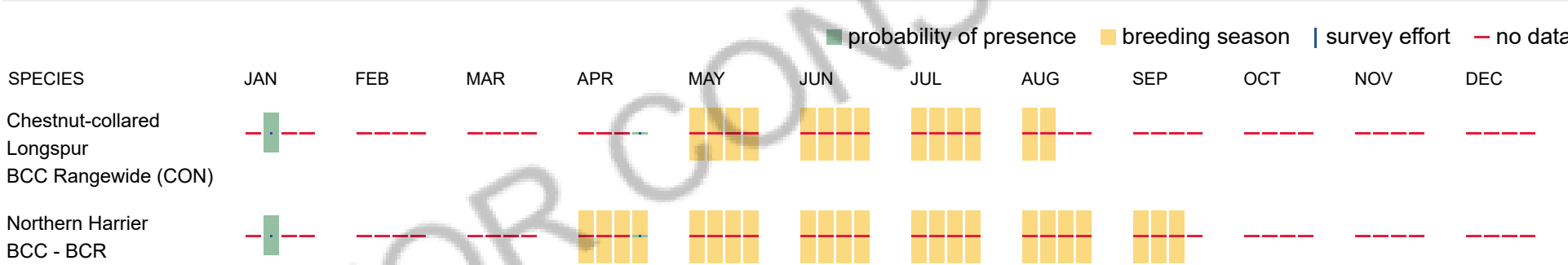
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

**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 Bird FAQs**

**Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project 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) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**Why are subspecies showing up on my list?**

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).



## What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is 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 a bird 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.

## What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

## 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.

## **Appendix E**


### **Photographic Log**


Photographic Log

<b>Photo Number:</b> 1	
<b>Photo Direction:</b> Northeast	
<b>Date:</b> 7/29/2025	
<b>Coordinates:</b> 32.429315,-103.467045	
<b>Photo Description:</b>  Release point.	

<b>Photo Number:</b> 2	
<b>Photo Direction:</b> North-Northeast	
<b>Date:</b> 7/29/2025	
<b>Coordinates:</b> 32.429241,-103.467038	
<b>Photo Description:</b>  View of the affected area.	

## Photographic Log

<b>Photo Number:</b> 3	
<b>Photo Direction:</b> Northeast	
<b>Date:</b> 7/29/2025	
<b>Coordinates:</b> 32.429286,-103.467066	
<b>Photo Description:</b>  View of the affected area.	

<b>Photo Number:</b> 4	
<b>Photo Direction:</b> North-Northeast	
<b>Date:</b> 7/29/2025	
<b>Coordinates:</b> 32.429289,-103.467073	
<b>Photo Description:</b>  View of the affected area.	



## Photographic Log

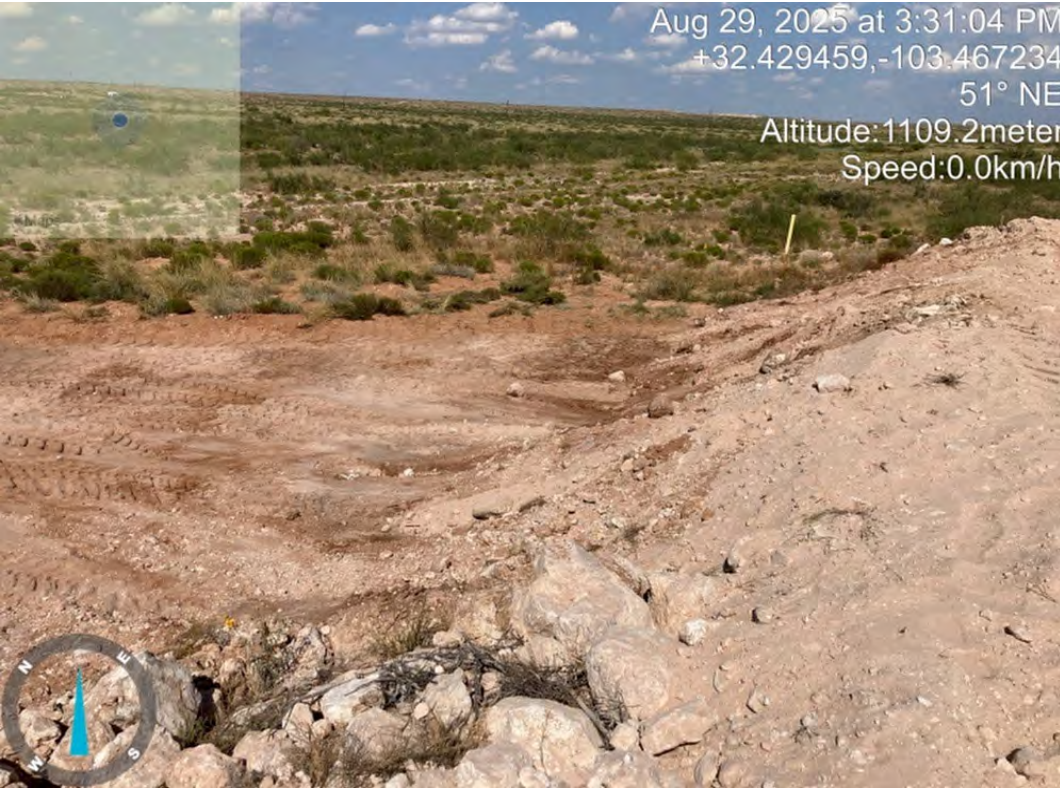
<b>Photo Number:</b> 5	
<b>Photo Direction:</b> East-Southeast	
<b>Photo Description:</b>  View of the excavated area.	

<b>Photo Number:</b> 6	
<b>Photo Direction:</b> East	
<b>Photo Description:</b>  View of the excavated area.	




## Photographic Log


<b>Photo Number:</b> 7	
<b>Photo Direction:</b> East	
<b>Photo Description:</b>  View of the excavated area.	

<b>Photo Number:</b> 8	
<b>Photo Direction:</b> Northeast	
<b>Photo Description:</b>  View of the excavated area.	



## Photographic Log


<b>Photo Number:</b> 9	
<b>Photo Direction:</b> North	
<b>Photo Description:</b>  View of the excavated area.	

<b>Photo Number:</b> 10	
<b>Photo Direction:</b> Northeast	
<b>Photo Description:</b>  View of the remediated area following backfill and regrading.	





## Photographic Log

<b>Photo Number:</b> 11	
<b>Photo Direction:</b> Southeast	
<b>Photo Description:</b>  View of the remediated area following backfill and regrading.	

<b>Photo Number:</b> 12	
<b>Photo Direction:</b> East-Northeast	
<b>Photo Description:</b>  View of the remediated area following backfill and regrading.	

## Photographic Log

<b>Photo Number:</b> 13	
<b>Photo Direction:</b> Northeast	
<b>Photo Description:</b>  View of the remediated area following backfill and regrading.	

<b>Photo Number:</b> 14	
<b>Photo Direction:</b> Northeast	
<b>Photo Description:</b>  View of the remediated area following backfill and regrading.	



## **Appendix F**

### **Field Data**



### Sample Log

Date: \_\_\_\_\_

Project: Vitalizer 33 Battery #2

Project Number: 22742      Latitude: 32.42893      Longitude: -103.467136

[illegible]

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

**Stockpile = Stockpile #1**

GPS Sample Points, Center of Comp Areas



## **Appendix G**

### **Laboratory Analytical Reports**



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

September 04, 2025

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: VITALIZER 33 BATTERY #2

Enclosed are the results of analyses for samples received by the laboratory on 08/29/25 14:41.

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](http://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:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 1 (H255417-01)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEx	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.2 % 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	<16.0	16.0	09/02/2025	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	91.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	21.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 96.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 95.8 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 2 (H255417-02)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.8 % 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	09/02/2025	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 94.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 3 (H255417-03)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.4 % 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	<16.0	16.0	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 94.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 88.2 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 4 (H255417-04)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.8 % 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	<16.0	16.0	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 88.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 83.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 5 (H255417-05)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.7 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	94.8	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	12.7	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 93.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 95.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 6 (H255417-06)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.9 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	36.3	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 89.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 88.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 7 (H255417-07)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEx	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.2 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 98.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 97.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 8 (H255417-08)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.2 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 87.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 88.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 9 (H255417-09)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.0 % 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	<16.0	16.0	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	267	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	40.5	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 98.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 113 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 10 (H255417-10)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.6 % 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	<16.0	16.0	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	381	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	68.5	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 93.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 107 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 11 (H255417-11)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.7 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	432	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	92.2	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 122 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 12 (H255417-12)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.7 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 94.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 96.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 13 (H255417-13)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEx	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.1 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	153	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	20.1	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 92.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 101 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FL 14 (H255417-14)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEx	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.6 % 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	32.0	16.0	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	188	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	34.6	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 99.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 109 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: NW 1 (H255417-15)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTX	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.9 % 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	<16.0	16.0	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 93.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 94.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: EW 1 (H255417-16)**

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	09/02/2025	ND	1.66	82.8	2.00	7.78		
Toluene*	<0.050	0.050	09/02/2025	ND	1.75	87.6	2.00	8.23		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	1.78	88.9	2.00	9.08		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	5.27	87.8	6.00	9.40		
Total BTEx	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.3 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	210	105	200	5.41	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	202	101	200	2.68	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 102 % 44.4-145

Surrogate: 1-Chlorooctadecane 105 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW 1 (H255417-17)**

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	09/02/2025	ND	1.80	90.1	2.00	4.96	
Toluene*	<0.050	0.050	09/02/2025	ND	2.04	102	2.00	7.81	
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	2.12	106	2.00	7.83	
Total Xylenes*	<0.150	0.150	09/02/2025	ND	6.57	110	6.00	7.92	
Total BTEx	<0.300	0.300	09/02/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	240	120	200	2.48	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	248	124	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 81.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 78.8 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 08/29/2025  
 Reported: 09/04/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 08/28/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: WW 1 (H255417-18)**

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	09/02/2025	ND	1.80	90.1	2.00	4.96		
Toluene*	<0.050	0.050	09/02/2025	ND	2.04	102	2.00	7.81		
Ethylbenzene*	<0.050	0.050	09/02/2025	ND	2.12	106	2.00	7.83		
Total Xylenes*	<0.150	0.150	09/02/2025	ND	6.57	110	6.00	7.92		
Total BTEx	<0.300	0.300	09/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	09/02/2025	ND	432	108	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	09/02/2025	ND	240	120	200	2.48	
DRO >C10-C28*	<10.0	10.0	09/02/2025	ND	248	124	200	3.11	
EXT DRO >C28-C36	<10.0	10.0	09/02/2025	ND					

Surrogate: 1-Chlorooctane 90.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 87.6 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



---

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

---

### Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 1 of 2

Company Name: Etech Environmental & Safety Solutions, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																					
Project Manager: Joel Lowry				P.O. #:				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH (8015M)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX (8021B)</div> </div>																					
Address: 2617 West Marland				Company: Permian Resources																									
City: Hobbs State: NM Zip: 88240				Attn: Montgomery Floyd																									
Phone #: (575) 264-9884 Fax #:				Address:																									
Project #: 22742 Project Owner: Permian Resources Oper				City:																									
Project Name: Vitalizer 33 Battery #2				State: Zip:																									
Project Location: 32.42893, -103.467136				Phone #:																									
Sampler Name: Martin Sepulveda				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													
1		FL 1		C	1			X					X		8/28/25		X	X	X										
2		FL 2		C	1			X					X		8/28/25		X	X	X										
3		FL 3		C	1			X					X		8/28/25		X	X	X										
4		FL 4		C	1			X					X		8/28/25		X	X	X										
5		FL 5		C	1			X					X		8/28/25		X	X	X										
6		FL 6		C	1			X					X		8/28/25		X	X	X										
7		FL 7		C	1			X					X		8/28/25		X	X	X										
8		FL 8		C	1			X					X		8/28/25		X	X	X										
9		FL 9		C	1			X					X		8/28/25		X	X	X										
10		FL 10		C	1			X					X		8/28/25		X	X	X										

**PLEASE NOTE: Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the services. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Mth</i>		Date: <i>8-29-25</i>	Received By: <i>Shodkigney</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
		Time: <i>1441</i>		All Results are emailed. Please provide Email address: <a href="mailto:pm@etechenv.com">pm@etechenv.com</a>
Relinquished By:		Date:	Received By:	REMARKS:
		Time:		
Delivered By: (Circle One)	Observed Temp. °C <i>-10.0</i>	Sample Condition	CHECKED BY: (Initials) <i>SL</i>	Turnaround Time: <i>Standard Rush</i>
Sampler - UPS - Bus - Other:	Corrected Temp. °C <i>-9.7</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Cool <input type="checkbox"/> Intact		Bacteria (only) Sample Condition <input type="checkbox"/> Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				Thermometer ID #149 Correction Factor -0.6°C <i>10-3</i>





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 2

<b>Company Name:</b> Etech Environmental & Safety Solutions, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																																																																																																																																																																																	
<b>Project Manager:</b> Joel Lowry				<b>P.O. #:</b>				<div style="display: flex; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH (8015M)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX (8021B)</div> </div>																																																																																																																																																																																	
<b>Address:</b> 2617 West Marland				<b>Company:</b> Permian Resources																																																																																																																																																																																					
<b>City:</b> Hobbs		<b>State:</b> NM		<b>Zip:</b> 88240		<b>Attn:</b> Montgomery Floyd																																																																																																																																																																																			
<b>Phone #:</b> (575) 264-9884		<b>Fax #:</b>		<b>Address:</b>																																																																																																																																																																																					
<b>Project #:</b> 22742		<b>Project Owner:</b> Permian Resources Oper		<b>City:</b>																																																																																																																																																																																					
<b>Project Name:</b> Vitalizer 33 Battery #2				<b>State:</b>		<b>Zip:</b>																																																																																																																																																																																			
<b>Project Location:</b> 32.42893, -103.467136				<b>Phone #:</b>																																																																																																																																																																																					
<b>Sampler Name:</b> Martin Sepulveda				<b>Fax #:</b>																																																																																																																																																																																					
<table border="1"> <thead> <tr> <th rowspan="2">Lab I.D.</th> <th rowspan="2">Sample I.D.</th> <th rowspan="2">(G)RAB OR (C)OMP.</th> <th rowspan="2"># CONTAINERS</th> <th colspan="6">MATRIX</th> <th colspan="3">PRESERV.</th> <th colspan="2">SAMPLING</th> </tr> <tr> <th>GROUNDWATER</th> <th>WASTEWATER</th> <th>SOIL</th> <th>OIL</th> <th>SLUDGE</th> <th>OTHER :</th> <th>ACID/BASE:</th> <th>ICE / COOL</th> <th>OTHER :</th> <th>DATE</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>HASS417</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>11</td> <td>FL 11</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> <tr> <td>12</td> <td>FL 12</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> <tr> <td>13</td> <td>FL 13</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> <tr> <td>14</td> <td>FL 14</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> <tr> <td>15</td> <td>NW 1</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> <tr> <td>16</td> <td>EW 1</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> <tr> <td>17</td> <td>SW 1</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> <tr> <td>18</td> <td>WW 1</td> <td>C</td> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>8/28/25</td> <td></td> </tr> </tbody> </table>																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	HASS417																11	FL 11	C	1			X					X			8/28/25		12	FL 12	C	1			X					X			8/28/25		13	FL 13	C	1			X					X			8/28/25		14	FL 14	C	1			X					X			8/28/25		15	NW 1	C	1			X					X			8/28/25		16	EW 1	C	1			X					X			8/28/25		17	SW 1	C	1			X					X			8/28/25		18	WW 1	C	1			X					X			8/28/25	
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																																																																																																																																																																											
HASS417																																																																																																																																																																																									
11	FL 11	C	1			X					X			8/28/25																																																																																																																																																																											
12	FL 12	C	1			X					X			8/28/25																																																																																																																																																																											
13	FL 13	C	1			X					X			8/28/25																																																																																																																																																																											
14	FL 14	C	1			X					X			8/28/25																																																																																																																																																																											
15	NW 1	C	1			X					X			8/28/25																																																																																																																																																																											
16	EW 1	C	1			X					X			8/28/25																																																																																																																																																																											
17	SW 1	C	1			X					X			8/28/25																																																																																																																																																																											
18	WW 1	C	1			X					X			8/28/25																																																																																																																																																																											

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

<b>Relinquished By:</b> <i>Martin Sepulveda</i>		<b>Date:</b> 8-29-25 <b>Time:</b> 1441		<b>Received By:</b> <i>Shodkigney</i>		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b>	
<b>Relinquished By:</b>		<b>Date:</b>		<b>Received By:</b>		<b>REMARKS:</b>	
<b>Delivered By: (Circle One)</b> Sampler - UPS - Bus - Other:		<b>Observed Temp. °C</b> -10.0 <b>Corrected Temp. °C</b> -9.7		<b>Sample Condition</b> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>CHECKED BY:</b> (Initials) <i>SK</i>	
						<b>Turnaround Time:</b> Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> <b>Thermometer ID</b> #140 <b>Correction Factor</b> -0.6°C to 0.3°C	
						<b>Bacteria (only) Sample Condition</b> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	
						<b>Observed Temp. °C</b> <b>Corrected Temp. °C</b>	





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

September 22, 2025

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: VITALIZER 33 BATTERY #2

Enclosed are the results of analyses for samples received by the laboratory on 09/16/25 14:47.

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](http://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' at the beginning.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received:	09/16/2025	Sampling Date:	09/15/2025
Reported:	09/22/2025	Sampling Type:	Soil
Project Name:	VITALIZER 33 BATTERY #2	Sampling Condition:	Cool & Intact
Project Number:	22742	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.42893, -103.467136		

**Sample ID: FL 1 @ 4-6" (H255791-01)**

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	09/16/2025	ND	1.68	83.8	2.00	2.87		
Toluene*	<0.050	0.050	09/16/2025	ND	1.75	87.7	2.00	1.75		
Ethylbenzene*	<0.050	0.050	09/16/2025	ND	1.80	90.1	2.00	0.305		
Total Xylenes*	<0.150	0.150	09/16/2025	ND	5.58	93.0	6.00	0.693		
Total BTEx	<0.300	0.300	09/16/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/17/2025	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	09/16/2025	ND	217	108	200	1.42	
DRO >C10-C28*	<10.0	10.0	09/16/2025	ND	229	114	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	09/16/2025	ND					

Surrogate: 1-Chlorooctane 94.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 89.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 09/16/2025  
 Reported: 09/22/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 09/15/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FL 5 @ 4-6" (H255791-02)**

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	09/16/2025	ND	1.68	83.8	2.00	2.87		
Toluene*	<0.050	0.050	09/16/2025	ND	1.75	87.7	2.00	1.75		
Ethylbenzene*	<0.050	0.050	09/16/2025	ND	1.80	90.1	2.00	0.305		
Total Xylenes*	<0.150	0.150	09/16/2025	ND	5.58	93.0	6.00	0.693		
Total BTX	<0.300	0.300	09/16/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/17/2025	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	09/16/2025	ND	217	108	200	1.42	
DRO >C10-C28*	<10.0	10.0	09/16/2025	ND	229	114	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	09/16/2025	ND					

Surrogate: 1-Chlorooctane 99.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 09/16/2025  
 Reported: 09/22/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 09/15/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FL 9 @ 4-6" (H255791-03)**

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	09/16/2025	ND	1.68	83.8	2.00	2.87		
Toluene*	<0.050	0.050	09/16/2025	ND	1.75	87.7	2.00	1.75		
Ethylbenzene*	<0.050	0.050	09/16/2025	ND	1.80	90.1	2.00	0.305		
Total Xylenes*	<0.150	0.150	09/16/2025	ND	5.58	93.0	6.00	0.693		
Total BTX	<0.300	0.300	09/16/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/17/2025	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	09/16/2025	ND	217	108	200	1.42	
DRO >C10-C28*	<10.0	10.0	09/16/2025	ND	229	114	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	09/16/2025	ND					

Surrogate: 1-Chlorooctane 80.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 75.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 09/16/2025  
 Reported: 09/22/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 09/15/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FL 10 @ 4-6" (H255791-04)**

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	09/16/2025	ND	1.68	83.8	2.00	2.87		
Toluene*	<0.050	0.050	09/16/2025	ND	1.75	87.7	2.00	1.75		
Ethylbenzene*	<0.050	0.050	09/16/2025	ND	1.80	90.1	2.00	0.305		
Total Xylenes*	<0.150	0.150	09/16/2025	ND	5.58	93.0	6.00	0.693		
Total BTX	<0.300	0.300	09/16/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/17/2025	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	09/16/2025	ND	217	108	200	1.42	
DRO >C10-C28*	<10.0	10.0	09/16/2025	ND	229	114	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	09/16/2025	ND					

Surrogate: 1-Chlorooctane 87.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 09/16/2025  
 Reported: 09/22/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 09/15/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FL 11 @ 4-6" (H255791-05)**

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	09/16/2025	ND	1.68	83.8	2.00	2.87		
Toluene*	<0.050	0.050	09/16/2025	ND	1.75	87.7	2.00	1.75		
Ethylbenzene*	<0.050	0.050	09/16/2025	ND	1.80	90.1	2.00	0.305		
Total Xylenes*	<0.150	0.150	09/16/2025	ND	5.58	93.0	6.00	0.693		
Total BTX	<0.300	0.300	09/16/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	09/17/2025	ND	432	108	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	09/16/2025	ND	217	108	200	1.42	
DRO >C10-C28*	<10.0	10.0	09/16/2025	ND	229	114	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	09/16/2025	ND					

Surrogate: 1-Chlorooctane 84.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 78.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 09/16/2025  
 Reported: 09/22/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 09/15/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FL 13 @ 4-6" (H255791-06)**

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	09/16/2025	ND	1.68	83.8	2.00	2.87		
Toluene*	<0.050	0.050	09/16/2025	ND	1.75	87.7	2.00	1.75		
Ethylbenzene*	<0.050	0.050	09/16/2025	ND	1.80	90.1	2.00	0.305		
Total Xylenes*	<0.150	0.150	09/16/2025	ND	5.58	93.0	6.00	0.693		
Total BTEX	<0.300	0.300	09/16/2025	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	48.0	16.0	09/17/2025	ND	432	108	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	09/16/2025	ND	217	108	200	1.42	
DRO >C10-C28*	<10.0	10.0	09/16/2025	ND	229	114	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	09/16/2025	ND					

Surrogate: 1-Chlorooctane 87.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received: 09/16/2025  
 Reported: 09/22/2025  
 Project Name: VITALIZER 33 BATTERY #2  
 Project Number: 22742  
 Project Location: PERMIAN 32.42893, -103.467136

Sampling Date: 09/15/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FL 14 @ 4-6" (H255791-07)**

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	09/16/2025	ND	1.68	83.8	2.00	2.87		
Toluene*	<0.050	0.050	09/16/2025	ND	1.75	87.7	2.00	1.75		
Ethylbenzene*	<0.050	0.050	09/16/2025	ND	1.80	90.1	2.00	0.305		
Total Xylenes*	<0.150	0.150	09/16/2025	ND	5.58	93.0	6.00	0.693		
Total BTEX	<0.300	0.300	09/16/2025	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	09/17/2025	ND	432	108	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	09/16/2025	ND	217	108	200	1.42	
DRO >C10-C28*	<10.0	10.0	09/16/2025	ND	229	114	200	1.38	
EXT DRO >C28-C36	<10.0	10.0	09/16/2025	ND					

Surrogate: 1-Chlorooctane 86.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.0 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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 1 of 1

Page 10 of 10

[illegible]

**PLEASE NOTE:** Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Moth</i>		Date: <i>4-16-25</i>	Received By: <i>Samara Saldak</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:
		Time: <i>1447</i>		All Results are emailed. Please provide Email address: <a href="mailto:pm@etechenv.com">pm@etechenv.com</a>
Relinquished By:		Date:	Received By:	REMARKS:
		Time:		
Delivered By: (Circle One)	Observed Temp. °C <i>-2.6</i>	Sample Condition	CHECKED BY: (Initials) <i>JS</i>	Turnaround Time: <b>Standard</b> <input checked="" type="checkbox"/> <b>Rush</b> <input type="checkbox"/>
Sampler - UPS - Bus - Other:	Corrected Temp. °C <i>-2.3</i>	Cool <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Thermometer ID #140 Correction Factor <i>-0.6°C</i> <b>+0.3°C</b>
				Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C



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

---

May 21, 2025

ROBBIE RUNNELS

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: MERCHANT SAN SIMONE CALICHE PIT

Enclosed are the results of analyses for samples received by the laboratory on 05/15/25 15:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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](http://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:**

Etech Environmental & Safety Solutions  
 ROBBIE RUNNELS  
 2617 W MARLAND  
 HOBBS NM, 88240  
 Fax To:

Received:	05/15/2025	Sampling Date:	05/15/2025
Reported:	05/21/2025	Sampling Type:	Soil
Project Name:	MERCHANT SAN SIMONE CALICHE PIT	Sampling Condition:	Cool & Intact
Project Number:	21762	Sample Received By:	Alyssa Parras
Project Location:	NONE GIVEN		

**Sample ID: CALICHE PIT (H252954-01)**

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	05/17/2025	ND	2.16	108	2.00	0.228	
Toluene*	<0.050	0.050	05/17/2025	ND	2.22	111	2.00	0.463	
Ethylbenzene*	<0.050	0.050	05/17/2025	ND	2.17	109	2.00	0.279	
Total Xylenes*	<0.150	0.150	05/17/2025	ND	6.42	107	6.00	0.167	
Total BTX	<0.300	0.300	05/17/2025	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	480	16.0	05/17/2025	ND	480	120	400	18.2	

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	05/16/2025	ND	194	97.1	200	1.92	
DRO >C10-C28*	<10.0	10.0	05/16/2025	ND	183	91.6	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	05/16/2025	ND					

Surrogate: 1-Chlorooctane 78.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 74.0 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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 1 of 1

Page 4 of 4

<b>Company Name:</b> Etech Environmental & Safety Solutions, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																					
<b>Project Manager:</b> Robbie Runnels				<b>P.O. #:</b>				<div style="display: flex; justify-content: space-around;"> <div>Chloride</div> <div>TPH (8015M)</div> <div>BTEX (8021B)</div> </div>																					
<b>Address:</b> 2617 West Marland				<b>Company:</b> Etech																									
<b>City:</b> Hobbs <b>State:</b> NM <b>Zip:</b> 88240				<b>Attn:</b> Robbie Runnels																									
<b>Phone #:</b> (575) 264-9884 <b>Fax #:</b>				<b>Address:</b>																									
<b>Project #:</b> 21762 <b>Project Owner:</b> Merchant Livestock				<b>City:</b>																									
<b>Project Name:</b> Merchant San Simone Caliche Pit				<b>State:</b> <b>Zip:</b>																									
<b>Project Location:</b>				<b>Phone #:</b>																									
<b>Sampler Name:</b> Robbie Runnels				<b>Fax #:</b>																									
<b>FOR LAB USE ONLY</b>		<b>Lab I.D.</b>		<b>Sample I.D.</b>		<b>(G)RAB OR (C)OMP.</b>		<b># CONTAINERS</b>		<b>MATRIX</b>				<b>PRESERV.</b>		<b>SAMPLING</b>													
										GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:				ACID/BASE: ICE / COOL OTHER:		DATE TIME													
H853954		Caliche Pit		C		1		X				X		5/15/25				X X X											

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

<b>Relinquished By:</b>		<b>Date:</b> 5:15:95		<b>Received By:</b>		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>Add'l Phone #:</b>	
<i>[Signature]</i>		<b>Time:</b> 1:07		<i>[Signature]</i>		All Results are emailed. Please provide Email address:		<a href="mailto:pm@etechenv.com">pm@etechenv.com</a>	
<b>Relinquished By:</b>		<b>Date:</b>		<b>Received By:</b>		<b>REMARKS:</b>			
<b>Time:</b>									
<b>Delivered By: (Circle One)</b>		<b>Observed Temp. °C</b> -5.0		<b>Sample Condition</b>		<b>CHECKED BY:</b> (Initials)		<b>Turnaround Time:</b> 10:00:05	
Sampler - UPS - Bus - Other:		<b>Corrected Temp. °C</b> -4.7		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<i>PI</i>		Standard <input checked="" type="checkbox"/> Rush	
				<input type="checkbox"/> Yes <input type="checkbox"/> No				Bacteria (only) Sample Condition	
				<input type="checkbox"/> Yes <input type="checkbox"/> No				Cool Intact Observed Temp. °C	
				<input type="checkbox"/> No <input type="checkbox"/> No				Corrected Temp. °C	

## **Appendix H**

### **Sampling Notifications**



OCD Permitting

Home > Operator Data > Action Status > Action Search Results > Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	499080	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Vitalizer 33 Battery 2 , nAPP2521134185		
Status:	Approved		
Status Date:	08/25/2025		
References (0):			

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2521134185
Incident Name	NAPP2521134185 VITALIZER 33 BATTERY 2 @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2220958062] Vitalizer 33 Battery 2

Location of Release Source


Site Name	Vitalizer 33 Battery 2
Date Release Discovered	07/29/2025
Surface Owner	State

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	4,500
What is the estimated number of samples that will be gathered	27
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/28/2025
Time sampling will commence	08:00 AM
<b>Warning: Notification can not be less than two business days prior to conducting final sampling.</b>	
Please provide any information necessary for observers to contact samplers	Joel Lowry 432.466.4450
Please provide any information necessary for navigation to sampling site	32.4289,-103.468





SIGN-INHELP

SearchesOperator DataHearing Fee Application

Comments

No comments found for this submission.

Conditions

Summary:

*mtaylorpr* (8/25/2025), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

*mtaylorpr* (8/25/2025), If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.

Reasons

No reasons found for this submission.

Go Back



## OCD Permitting

Home > Operator Data > Action Status > Action Search Results > Action Status Item Details

### [NOTIFY] Notification Of Sampling (C-141N) Application

#### Submission Information

Submission ID:	499320	Districts:	Hobbs
Operator:	<a href="#">[372165]</a> Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Vitalizer 33 Battery 2 , nAPP2521134185		
Status:	Approved		
Status Date:	08/26/2025		
References (0):			

#### Forms

This application type does not have attachments.

#### Questions

##### Prerequisites

Incident ID (n#)	nAPP2521134185
Incident Name	NAPP2521134185 VITALIZER 33 BATTERY 2 @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2220958062] Vitalizer 33 Battery 2

##### Location of Release Source

Site Name	Vitalizer 33 Battery 2
Date Release Discovered	07/29/2025
Surface Owner	State

##### Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	2,400
What is the estimated number of samples that will be gathered	12
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/01/2025
Time sampling will commence	08:00 AM
<b>Warning: Notification can not be less than two business days prior to conducting final sampling.</b>	
Please provide any information necessary for observers to contact samplers	Joel Lowry 432.466.4450
Please provide any information necessary for navigation to sampling site	32.4289,-103.468

[SIGN-IN](#) [HELP](#)[Searches](#) ▾[Operator Data](#) ▾[Hearing Fee Application](#) ▾

## Comments

No comments found for this submission.

## Conditions

### Summary:

*mtaylorpr* (8/26/2025), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

*mtaylorpr* (8/26/2025), If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.

## Reasons

No reasons found for this submission.

[Go Back](#)

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012  
1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220

[EMNRD Home](#) [OCD Main Page](#) [OCD Rules](#) [Help](#)



OCD Permitting

Home    Operator Data    Action Status    Action Search Results    Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	505383	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Vitalizer 33 Battery 2 , nAPP2521134185		
Status:	Approved		
Status Date:	09/11/2025		
References (0):			

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2521134185
Incident Name	NAPP2521134185 VITALIZER 33 BATTERY 2 @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Facility	[fAPP2220958062] Vitalizer 33 Battery 2

Location of Release Source

Site Name	Vitalizer 33 Battery 2
Date Release Discovered	07/29/2025
Surface Owner	State

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	1,400
What is the estimated number of samples that will be gathered	7
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/16/2025
Time sampling will commence	08:00 AM
<b>Warning: Notification can not be less than two business days prior to conducting final sampling.</b>	
Please provide any information necessary for observers to contact samplers	Zach Conder, 806-724-5943
Please provide any information necessary for navigation to sampling site	32.428900001,-103.468000001





[SIGN-IN](#) [HELP](#)

[Searches](#) [Operator Data](#) [Hearing Fee Application](#)

### Comments

No comments found for this submission.

### Conditions

#### Summary:

*mtaylorpr* (9/11/2025), Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

*mtaylorpr* (9/11/2025), If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.

### Reasons

No reasons found for this submission.

[Go Back](#)

New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012  
1220 South St. Francis Drive | Santa Fe, NM 87505 | P: (505) 476-3200 | F: (505) 476-3220



[EMNRD Home](#) [OCD Main Page](#) [OCD Rules](#) [Help](#)

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 528778

**QUESTIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 528778
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2521134185
Incident Name	NAPP2521134185 VITALIZER 33 BATTERY 2 @ FAPP2220958062
Incident Type	Oil Release
Incident Status	Reclamation Report Received
Incident Facility	[fAPP2220958062] Vitalizer 33 Battery 2

**Location of Release Source**

Please answer all the questions in this group.

Site Name	Vitalizer 33 Battery 2
Date Release Discovered	07/29/2025
Surface Owner	State

**Incident Details**

Please answer all the questions in this group.

Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	Yes
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Dump Valve   Crude Oil   Released: 4 BBL   Recovered: 0 BBL   Lost: 4 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 2

Action 528778

**QUESTIONS (continued)**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 528778
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>More info needed to determine if this will be treated as a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>Yes</b>
Reasons why this would be considered a submission for a notification of a major release	<b>From paragraph A. "Major release" determine using: (2) an unauthorized release of a volume that: (a) results in a fire or is the result of a fire.</b>
<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	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<b>Not answered.</b>

*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	<b>Name: Matthew Taylor</b> <b>Title: Environmental Coordinator</b> <b>Email: matthew.taylor@permianres.com</b> <b>Date: 11/21/2025</b>
--	--

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 3

Action 528778

**QUESTIONS (continued)**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 528778
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Site Characterization</b>	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 500 and 1000 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 500 and 1000 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 500 and 1000 (ft.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

<b>Remediation Plan</b>	
<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
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	48
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	524
GRO+DRO (EPA SW-846 Method 8015M)	432
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	08/28/2025
On what date will (or did) the final sampling or liner inspection occur	09/15/2025
On what date will (or was) the remediation complete(d)	10/01/2025
What is the estimated surface area (in square feet) that will be reclaimed	4497
What is the estimated volume (in cubic yards) that will be reclaimed	36
What is the estimated surface area (in square feet) that will be remediated	4497
What is the estimated volume (in cubic yards) that will be remediated	36
<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>	



Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 4

Action 528778

**QUESTIONS (continued)**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 528778
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<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>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	<a href="#">fEEM0112342028 LEA LAND LANDFILL</a>
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> 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: Matthew Taylor Title: Environmental Coordinator Email: <a href="mailto:matthew.taylor@permianres.com">matthew.taylor@permianres.com</a> Date: 11/21/2025
<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>	

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 5  
  
Action 528778

QUESTIONS (continued)

Operator:  Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID:  372165
	Action Number:  528778
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 6

Action 528778

**QUESTIONS (continued)**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 528778
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	505383
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/16/2025
What was the (estimated) number of samples that were to be gathered	7
What was the sampling surface area in square feet	1400

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

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	4497
What was the total volume (cubic yards) remediated	36
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	4497
What was the total volume (in cubic yards) reclaimed	36
Summarize any additional remediation activities not included by answers (above)	Remediation activities have been completed at site.

*The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Matthew Taylor Title: Environmental Coordinator Email: matthew.taylor@permianres.com Date: 11/21/2025
--	--

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 528778

**QUESTIONS (continued)**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 528778
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	4497
What was the total volume of replacement material (in cubic yards) for this site	36
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	03/02/2026
Summarize any additional reclamation activities not included by answers (above)	Site will be reseeded during first favorable growing season.
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Matthew Taylor Title: Environmental Coordinator Email: matthew.taylor@permianres.com Date: 11/21/2025



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 8  
  
Action 528778

QUESTIONS (continued)

Operator:  Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID:  372165
	Action Number:  528778
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

<b>Revegetation Report</b>	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 528778

**CONDITIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 528778
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**CONDITIONS**

Created By	Condition	Condition Date
scott.rodgers	The reclamation report has been approved pursuant to 19.15.29.13 E. NMAC. The acceptance of this 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; or if the location fails to revegetate properly. In addition, the OCD approval does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	1/27/2026