

# Site Assessment Summary, Proposed Remediation Plan & Alternative Sampling Plan

## Permian Resources Whitten SWD ROW

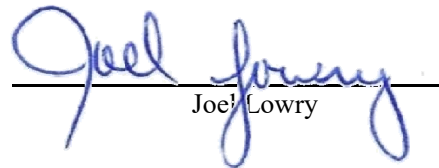
Lea County, New Mexico  
Unit Letter "H", Section 14, Township 20 South, Range 34 East  
Latitude 32.574814° North, Longitude 103.536446° West  
NMOCD Reference No. nAPP2429762272 & nAPP2503175872

Prepared By:

**Etech Environmental & Safety Solutions, Inc.**  
6309 Indiana Ave, Ste. D  
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May 1, 2025

  
Ben J. Arguijo

  
Joel Lowry



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## 1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Permian Resources, has prepared this *Site Assessment Summary, Proposed Remediation Plan & Alternative Sampling Plan* for the release site known as the Whitten SWD ROW. A crude oil and produced water release that occurred on January 31, 2025 (Incident ID #nAPP2503175872), affected an area that had been previously impacted by a release that occurred on October 23, 2024 (Incident ID #nAPP2429762272). Details of the individual releases are summarized below. Remediation of the commingled affected area (henceforth, "Site") is currently underway.

**nAPP2429762272**

### Location of Release Source

Latitude: 32.574814° Longitude: -103.536446°

Provided GPS are in NAD83 format.

Site Name:	Whitten Road SWD	Site Type:	Pipeline
Date Release Discovered:	10/23/2024	API # (if applicable):	N/A

Unit Letter	Section	Township	Range	County
"H"	14	20S	34E	Lea

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

### Nature and Volume of Release

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls)	258	Volume Recovered (bbls)	144
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	2,321	Volume Recovered (bbls)	1,296
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input 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 - Pipeline				

### 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.

**nAPP2503175872**  
**Location of Release Source**

Latitude: 32.574814° Longitude: -103.536446°

Provided GPS are in NAD83 format.

Site Name:	Whitten SWD ROW	Site Type:	Pipeline
Date Release Discovered:	1/31/2025	API # (if applicable):	N/A

Unit Letter	Section	Township	Range	County
"H"	14	20S	34E	Lea

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

**Nature and Volume of Release**

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls)	295	Volume Recovered (bbls)	210
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	1,890	Volume Recovered (bbls)	769
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input 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 - Pipeline				

**Initial Response**

<input checked="" type="checkbox"/> The source of the release has been stopped.
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.
<input checked="" type="checkbox"/> Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.

Previously submitted portions of the New Mexico Oil Conservation Division (NMOCD) Forms 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 100 and 500 (ft.)
What method was used to determine the depth to groundwater?	Direct Measurement
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 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution or church?	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Between 500 and 1,000 (ft.)
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 1 and 5 (mi.)
A subsurface mine?	Greater than 5 (mi.)
A (non-karst) unstable area?	Between 1 and 5 (mi.)
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 Site Characterization 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.

## 3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the releases, depth to groundwater, and NMOCD Site Characterization data, the NMOCD Closure Criteria and NMOCD Reclamation Standards for the Site are as follows:

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria**†	Reclamation Standards*‡
Between 100 and 500 (ft.)	Chloride (Cl <sup>-</sup> )	EPA** 300.0 or SM4500 Cl B	20,000	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 of the New Mexico Administrative Code (NMAC).

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

## 4.0 INITIAL SITE ASSESSMENT

From March 11 through 13, 2025, Etech conducted an initial site assessment. During the site assessment, four (4) hand-augered soil bores (TT 1 through TT 4) were advanced within the release margins in an effort to determine the vertical extent of impacted soil. In addition, ten (10) hand-augered soil bores (NH 1, NH 2, EH 1, EH 2, EH 3, SH 1, SH 2, WH 1, WH 2, and WH 3) were advanced at the inferred edges of the affected area in an effort to determine the horizontal extent of impacted soil. During the advancement of the test trenches and soil bores, soil samples were collected and field-screened for concentrations of chloride utilizing a Hach Quantab ® chloride test kit and/or the presence of Volatile Organic Compounds (VOCs) utilizing olfactory/visual senses.

Based on field observations and field test data, a total of 28 delineation soil samples (TT 1 @ 2', TT 1 @ 4', TT 2 @ 2', TT 2 @ 4', TT 3 @ 2', TT 3 @ 4', TT 4 @ 2', TT 4 @ 4', NH 1 @ 2', NH 1 @ 6', NH 2 @ 2', NH 2 @ 6', EH 1 @ 2', EH 1 @ 6', EH 2 @ 2', EH 2 @ 6', EH 3 @ 2', EH 3 @ 6', SH 1 @ 2', SH 1 @ 6', SH 2 @ 2', SH 2 @ 6', WH 1 @ 2', WH 1 @ 6', WH 2 @ 2', WH 2 @ 6', WH 3 @ 2', and WH 3 @ 6') were submitted to a certified, commercial laboratory (henceforth, "the laboratory") for analysis of BTEX, TPH, and chloride. Based on laboratory analytical results and field screens, the horizontal extent of impacted soil was adequately defined in the areas characterized by sample points NH 1, NH 2, EH 1, EH 2, EH 3, SH 1, SH 2, WH 1, WH 2, and WH 3. The vertical extent of impacted soil was adequately defined in the areas characterized by sample points TT 1 through TT 4 and did not extend beyond four (4) feet bgs.

The locations of the test trenches and hand-augered soil bores are depicted in Figure 3, "Sample Location Map."

## 5.0 PROPOSED REMEDIATION PLAN & ALTERNATIVE SAMPLING PLAN

Requesting a remediation plan approval with this submission?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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 type="checkbox"/> Yes	<input checked="" 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?	4/28/2025	
On what date will (or did) the final sampling or liner inspection occur?	6/13/2025	
On what date will (or was) the remediation complete(d)?	6/27/2025	
What is the total surface area (sq. ft.) in need of or that will <i>eventually</i> be reclaimed?	32,594	
What is the total volume (cy) in need of or that will <i>eventually</i> be reclaimed?	~6,300	
What was the total surface area (sq. ft.) that has or will be remediated?	32,594	
What was the total volume (cy) that has or will be remediated?	~6,300	
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.	N/A	

Summary of Soil Sampling Events

Constituent	Highest Observable Concentration (mg/kg)	Sample ID	Sample Date	Sample Depth (ft bgs)	Soil Status
Chloride	14,600	TT 2 @ 4'	3/11/2025	4	In-Situ
TPH	<30.0	See Table 1	3/11–13/2025	0–4	In-Situ
GRO+DRO	<20.0	See Table 1	3/11–13/2025	0–4	In-Situ
BTEX	<0.300	See Table 1	3/11–13/2025	0–4	In-Situ
Benzene	<0.050	See Table 1	3/11–13/2025	0–4	In-Situ

Please reference Table 1 for additional information.

The entire affected area will be excavated in accordance with the established NMOCD Closure Criteria and NMOCD Reclamation Standards to a total depth of approximately four (4) feet bgs. Permian Resources hereby requests an alternative sampling plan comprised of five-point composite confirmation samples collected from the floor of the excavated area at intervals representing no more than 400 square feet. Permian Resources believes that a relaxation of sampling frequency is permissible given the size and nature of the release, the depth to groundwater (>100 feet), the lack of variability in surface topography, and the shallow depths of contaminant intrusion (i.e. 2 to 4 feet bgs).

Based on the size of the affected area (~32,594 square feet), approximately 82 composite soil samples will be collected from the floor of the excavated area under the proposed alternative sampling plan, as opposed to approximately 163 samples under a standard 200-square-foot plan. Figure 4 provides a side-by-side comparison of the 200-square-foot and 400-square-foot sampling plans. The map illustrates that, while there are fewer total composite samples in the 400-square-foot plan, there is a nominal difference between the spatial coverage of the plans, and both plans are equally representative of the affected area, with minimal gaps between each sampling section/zone. Since each individual composite sample will incorporate soil from five (5) spots within a 400-square-foot zone, this effectively equates to a total of approximately 407 sample points, which decreases the likelihood that any hotspots will be missed. Furthermore, discrete soil samples will be collected from wet and/or visibly stained areas, as necessary.

Based on the information summarized above, Permian Resources believes that the proposed 400-square-foot sampling plan provides an equal protection of fresh water, public health, and the environment as a standard 200-square-foot plan, pursuant to Section 19.15.29.14 A.(2) NMAC.

## 6.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN

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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Requesting a reclamation approval with this submission?	<input type="checkbox"/> Yes <input checked="" 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 (sq. ft.) reclaimed?	<u>0 (To be completed)</u>
What was the total volume (cy) reclaimed?	<u>0 (To be completed)</u>

Upon receipt of all confirmation soil sample results, areas affected by remediation and closure activities will be substantially restored to the condition that existed prior to the release, to the extent practicable. Excavated areas will be backfilled with locally sourced, non-impacted, "like" material placed at or near original relative positions. The affected areas will be compacted and contoured to achieve erosion control, stability, and preservation of surface water flow, to the extent practicable. Affected areas not on production pads, pipeline rights-of-way, and/or lease roads will be revegetated with an agency and/or landowner-approved seed mixture certified to be free of noxious weeds at a time conducive to germination. The seed will be installed at the prescribed rate utilizing either a seed drill or a broadcaster and harrow.

Upon completion of remediation and reclamation activities, a *Remediation Summary & Soil Closure Request* will be prepared detailing field activities and laboratory analytical results from confirmation soil samples.

## 7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Site Assessment Summary, Proposed Remediation Plan & Alternative Sampling Plan* 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. Use of the information contained in this report is prohibited without the consent of Etech and/or Permian Resources.

## **8.0 DISTRIBUTION**

***Permian Resources***

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

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

*Oil Conservation Division, District 2  
811 S. First Street  
Artesia, NM 88210*

***United States Department of the Interior***

*Bureau of Land Management  
620 E. Greene Street  
Carlsbad, NM 88220*

*(Electronic Submission)*

## **Figure 1**

### **Site Location Map**





### Legend

 Site Location

**Figure 1**  
Site Location Map  
Permian Resources  
Whitten SWD ROW  
GPS: 32.574814, -103.536446  
Lea County, New Mexico



Drafted: bja

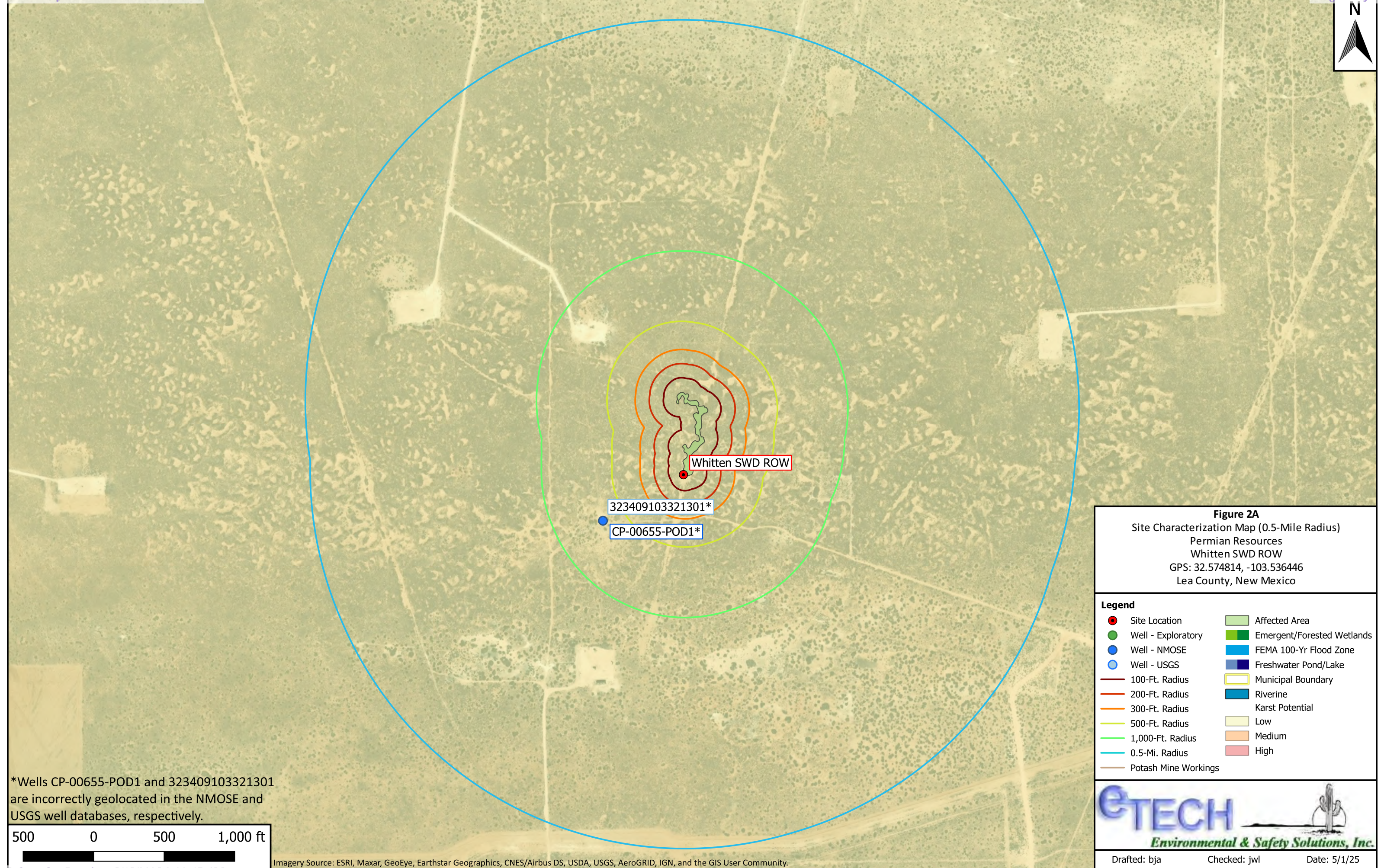
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Date: 4/29/25

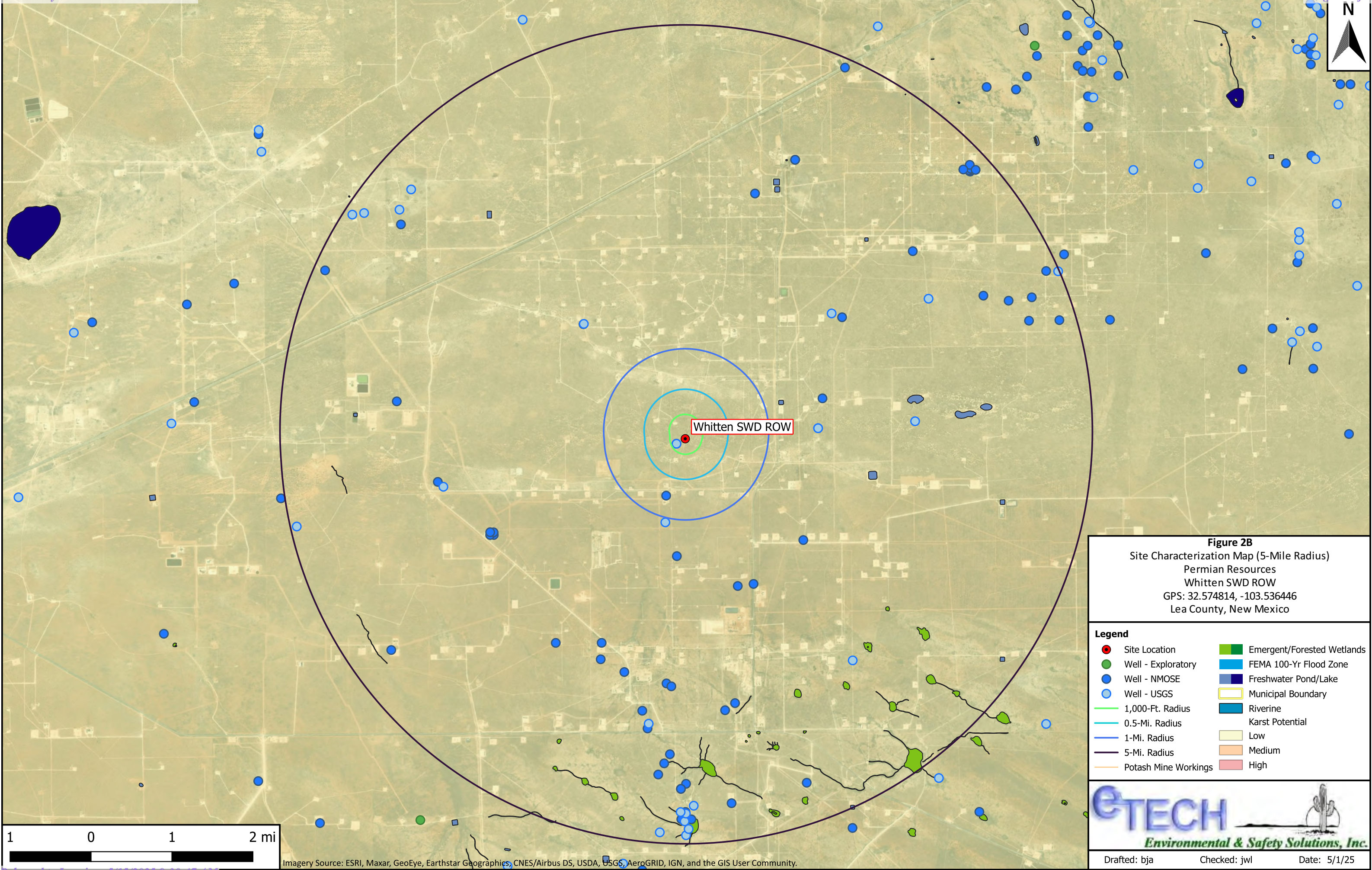
## **Figures 2A & 2B**

### **Site Characterization Maps**





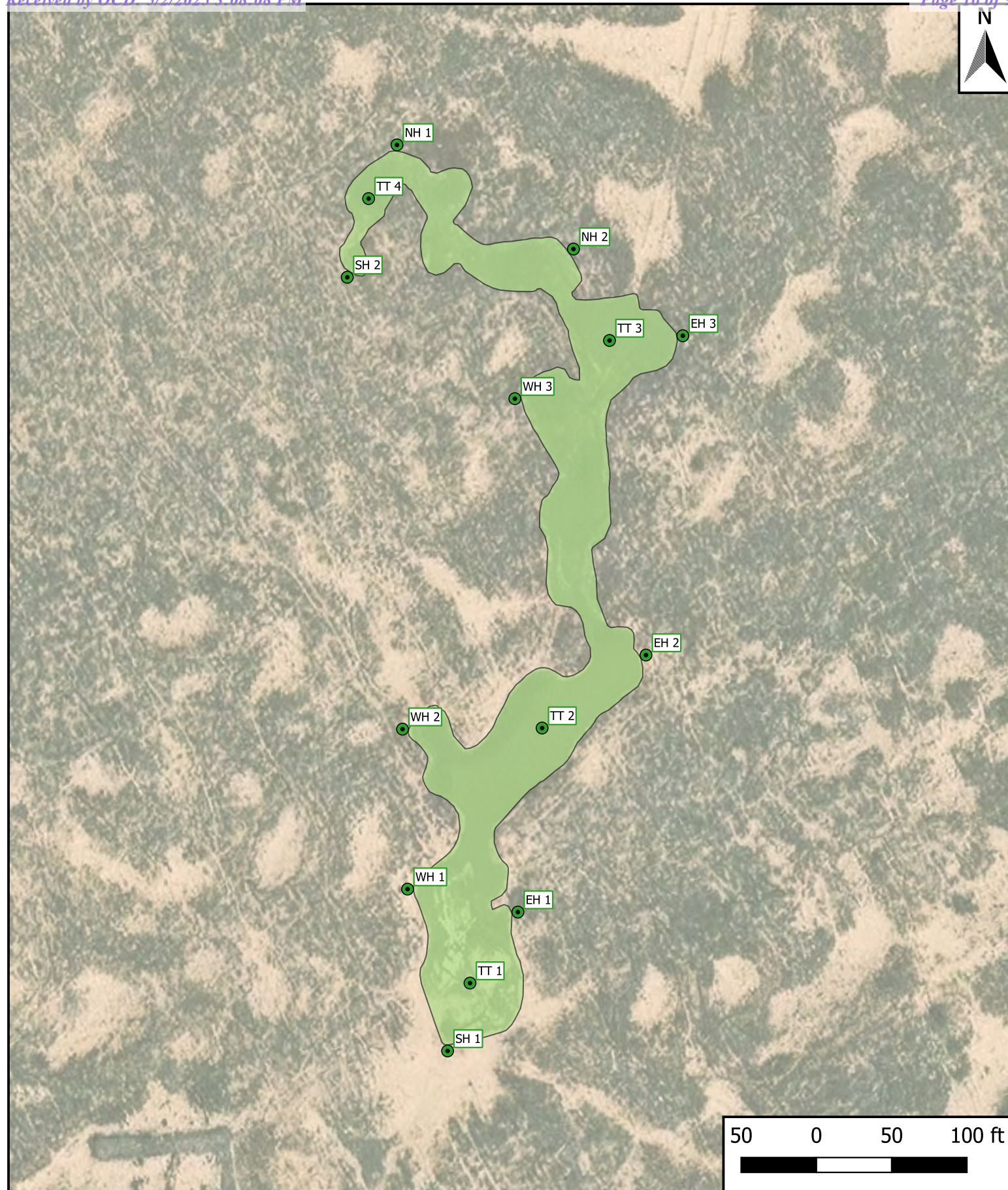








## **Figure 3**

### **Sample Location Map**

**Legend**

-  Affected Area (~32,594 ft²)
-  Delineation Sample Location

**Figure 3**

Sample Location Map  
Permian Resources  
Whitten SWD ROW  
GPS: 32.574814, -103.536446  
Lea County, New Mexico



Drafted: bja

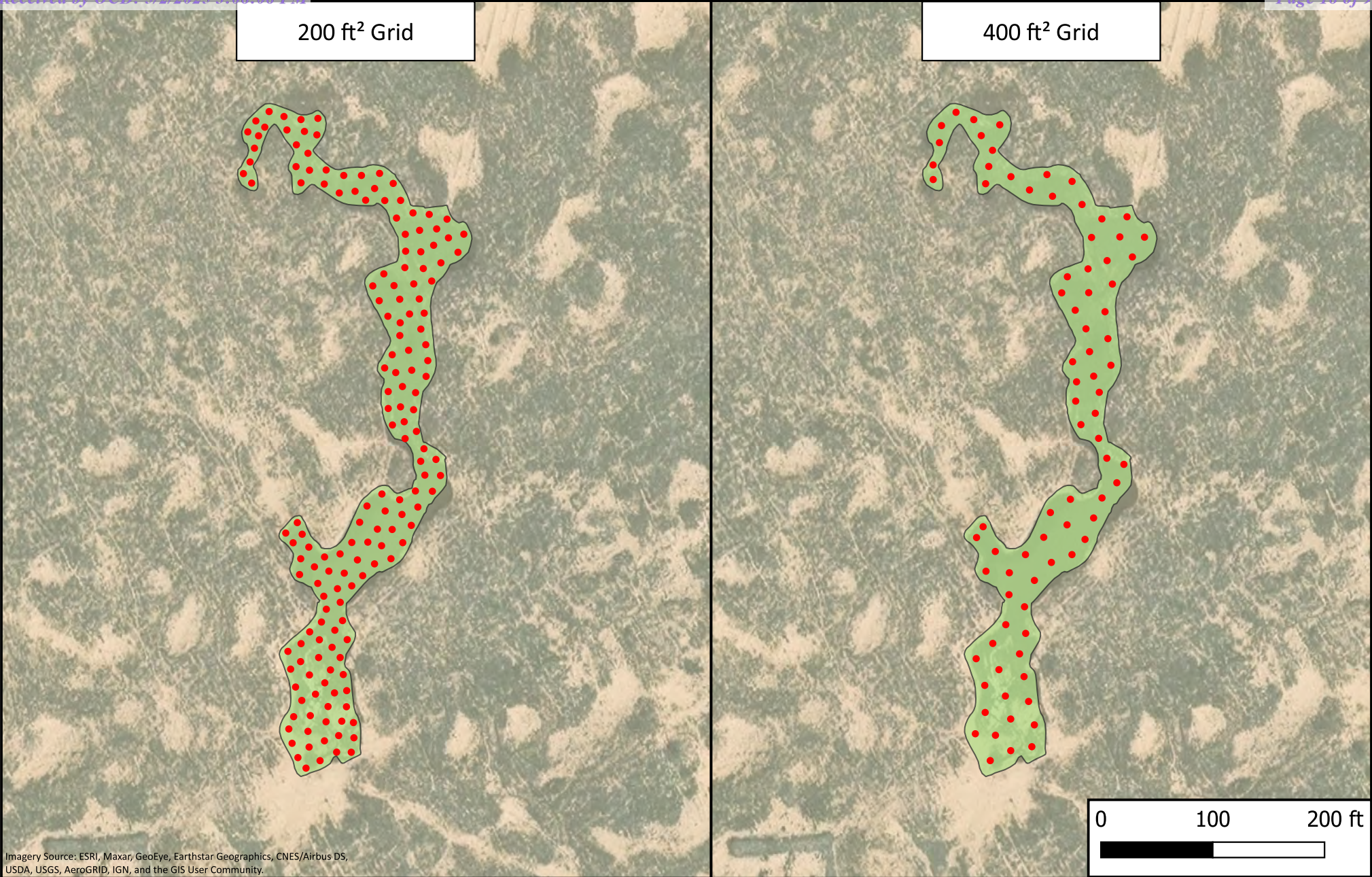
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Date: 4/30/25

## **Figure 4**



### **Sample Plan Comparison Map**





Imagery Source: ESRI, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

**Legend**

-  Affected Area (32,594 ft²)
-  Proposed Floor Sample Location

**Figure 4**  
Sampling Plan Comparison Map  
Permian Resources  
Whitten SWD ROW  
GPS: 32.574814, -103.536446  
Lea County, New Mexico

  
Drafted: bja      Checked: jwl      Date: 4/29/25

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



<b>Table 1</b> <b>Concentrations of BTEX, TPH &amp; Chloride in Soil</b> <b>Permian Resources</b> <b>Whitten SWD ROW</b> <b>NMOCD Ref. #: nAPP2429762272 &amp; nAPP2503175872</b>											
NMOCD Closure Criteria				10	50	N/A	N/A	1,000	N/A	2,500	20,000
NMOCD Reclamation Standard				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)
TT 1 @ 2'	3/11/2025	2	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	9,460
TT 1 @ 4'	3/11/2025	4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	11,000
TT 2 @ 2'	3/11/2025	2	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	10,900
TT 2 @ 4'	3/11/2025	4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	14,600
TT 3 @ 2'	3/11/2025	2	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	9,730
TT 3 @ 4'	3/11/2025	4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	10,000
TT 4 @ 2'	3/11/2025	2	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	368
TT 4 @ 4'	3/11/2025	4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	4,160
NH 1 @ 2'	3/12/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
NH 1 @ 6'	3/12/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
NH 2 @ 2'	3/12/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
NH 2 @ 6'	3/12/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
EH 1 @ 2'	3/12/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	96.0
EH 1 @ 6'	3/13/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
EH 2 @ 2'	3/12/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
EH 2 @ 6'	3/13/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	320
EH 3 @ 2'	3/13/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
EH 3 @ 6'	3/13/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	368
SH 1 @ 2'	3/13/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
SH 1 @ 6'	3/13/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
SH 2 @ 2'	3/12/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
SH 2 @ 6'	3/12/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
WH 1 @ 2'	3/13/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	240
WH 1 @ 6'	3/13/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
WH 2 @ 2'	3/12/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	224
WH 2 @ 6'	3/12/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
WH 3 @ 2'	3/12/2025	2	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
WH 3 @ 6'	3/12/2025	6	In-Situ	<10.0	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0

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

Bold: NMOCD Closure Criteria exceedance.

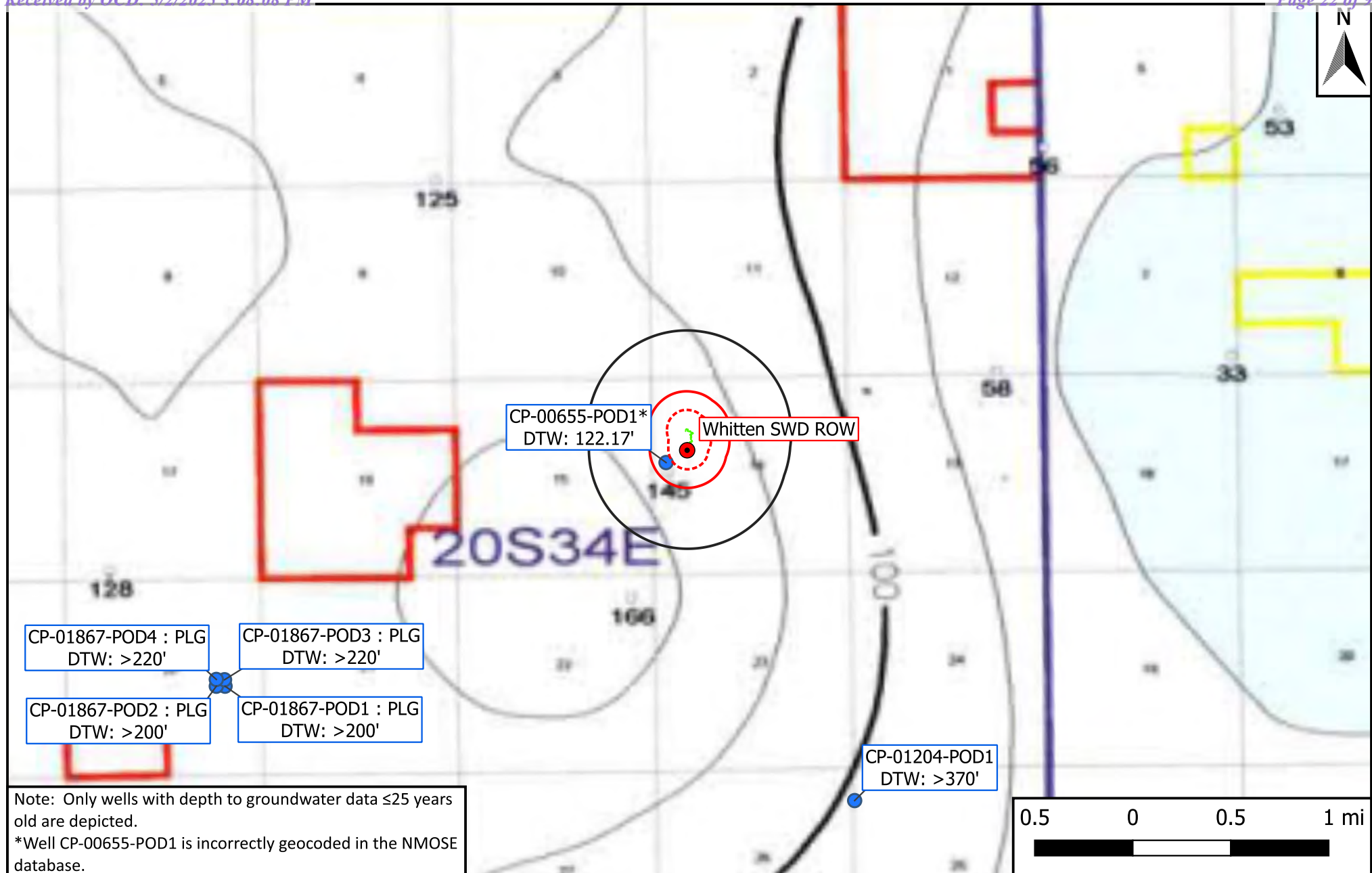
Red: NMOCD Reclamation Standard exceedance.

Red Border with Shading: Highest observed concentration.



## **Appendix A**

### **Depth to Groundwater Information**

**Legend**

- Site Location
- Well - Exploratory
- Well - NMOSE
- Well - USGS
- Affected Area
- 500-Ft Radius
- 1,000-Ft Radius
- 0.5-Mi Radius

**Figure 5**  
Inferred Depth to Groundwater Map  
Permian Resources  
Whitten SWD ROW  
GPS: 32.574814, -103.536446  
Lea County, New Mexico



Drafted: bja

Checked: jwl


Date: 5/1/25

# 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 00655 POD1		SW	NW	14	20S	34E	637294.0	3605108.0 *	

\* UTM location was derived from PLSS - see Help

Driller License:	122	Driller Company:	UNKNOWN
Driller Name:			
Drill Start Date:		Drill Finish Date:	Plug Date:
Log File Date:		PCW Rcv Date:	Source: Shallow
Pump Type:		Pipe Discharge Size:	Estimated Yield: 7
Casing Size:	6.00	Depth Well:	210
		Depth Water:	

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.



## Groundwater Sampling Log

Project No. 21343  
 Site Location 32.574193,-103.538281  
 Weather Sunny/clear

Date 10/23/24  
 Well ID CP 00655 POD1 / 323409103321301  
 Sample Collection Time N/A

### Casing

Diameter	Gal/ft	L/ft
<input checked="" type="checkbox"/> 10	4.08	15.44
<input type="checkbox"/> 4	.653	2.47
<input type="checkbox"/> 3	.367	1.39
<input type="checkbox"/> 2	.163	.618
<input type="checkbox"/> 1	.041	.154
<input type="checkbox"/> 3/4	.023	.087

### Evacuation Data

Screen Length (ft bls)	<u>N/A</u>
Well Length (ft bTOC)	<u>122.92</u>
Depth to water (ft bTOC)	<u>122.17</u>
Water column length (ft)	<u>0.75</u>
Well Volume	<u>501.5 Gal</u>
Evacuation Volume (x )	<u>N/A</u>

### Sample Method

☐ Peristaltic    ☐ Grundfos  
☐ Bladder    ☐ Monsoon  
☐ Bailer    ☐ PDB  
☐ Monsoon

### Purge Device

☐ Dedicated  
☐ Disposable  
☐ Decontaminated

### QA/QC Samples

☐ Duplicate  
☐ MS/MSD  
☐ Equipment Blank  
☐ Field Blank

### Sample ID for QA/QC

N/A  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Field Parameters

Time	Purge (ml)	Temp (°C)	pH (SU)	DO (mg/L)	Cond. (µmhos/cm)	Turb. (NTU)	Redox (mV)	Flow (mL/min)	Drawdown (ft)
N/A									

### Laboratory Analyses

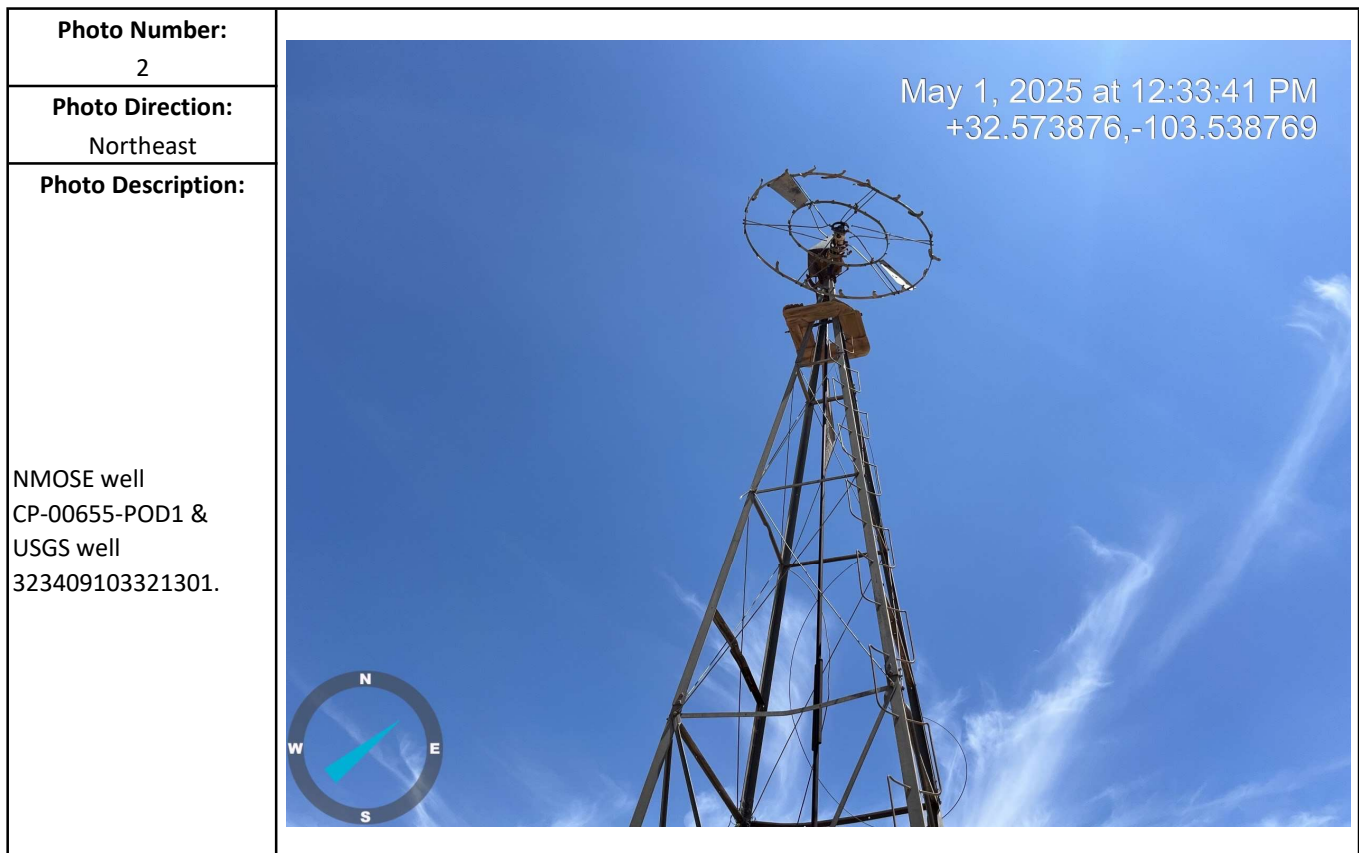
Analytical Parameter	Method	No. Bottles	Bottle Size/Type	Preservative
<input type="checkbox"/> N/A				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

Notes: Well was measured for depth to groundwater only. No groundwater samples were collected.

Well site is incorrectly geolocated in the NMOSE and USGS databases.

Sampling Personnel: Robbie Runnels





IMPORTANT — READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM.

108440  
6

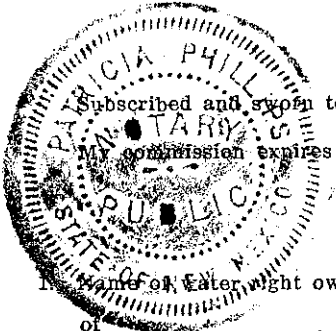
Declaration of Owner of Underground Water Right

CAPITAN BASIN

Declaration No. CP-655 Book \_\_\_\_\_ Date received November 17, 1982

I, Mark Smith being first duly sworn upon my oath, depose and say that the following is a full and complete statement prepared in accordance with the instructions on the reverse side of this form and submitted in evidence of ownership of a valid underground water right, that I have carefully read each and all of the items contained therein and that the same are true to the best of my knowledge and belief.

Mark Smith, declarant.



Subscribed and sworn to before me this 16 day of November, A.D. 1982  
Patricia Phillips  
Notary Public

STATEMENT

1. Name of water right owner MARK SMITH  
of Box 1296, Lovington, NM 88260

County of Lea, State of NEW MEXICO

2. Source of water supply Shallow  
(state whether artesian or shallow water basin)  
located in Capitan Basin  
(name of underground stream, valley, artesian basin, etc.)

3. The well is located in the SW 1/4, NW 1/4, \_\_\_\_\_  
of section 14, Township 20 South, Range 34 East, N.M.P.M.  
on land owned by APPLICANT

4. Description of well: date drilled 1940 driller \_\_\_\_\_ depth 210 feet.  
diameter (outside) of casing 6 inches; original flow \_\_\_\_\_ gal. per min.;  
present flow \_\_\_\_\_ gal. per min.; maximum pumping lift \_\_\_\_\_ feet;  
make and type of pump Wind Mill

make, type, horsepower, etc., of power plant AER MOTOR

Fractional or percentage interest claimed in well 100 %

5. Quantity of water appropriated and beneficially used 2 Acre Feet  
(feet depth or acre feet per acre)  
for \_\_\_\_\_ purposes.

6. Acreage actually irrigated and with water right NONE acres,  
located and described as follows (describe only lands actually irrigated):

Subdivision	Sec.	Twp.	Range	Acres Irrigated	Owner

(Note: location of well and acreage actually irrigated must be shown on plat on reverse side.)

7. Water was first applied to beneficial use 1940 and since that time has been used fully and continuously on all of the above described lands or for the above described purposes except as follows: \_\_\_\_\_

8. Additional statements or explanations POD Renumbered  
From: CP-655  
To: CP-655 pod 1

FILED

546889

UNDER NEW MEXICO LAW A DECLARATION IS ONLY A STATEMENT OF DECLARANT'S CLAIM. ACCEPTANCE FOR FILING DOES NOT CONSTITUTE APPROVAL OR REJECTION OF THE CLAIM.

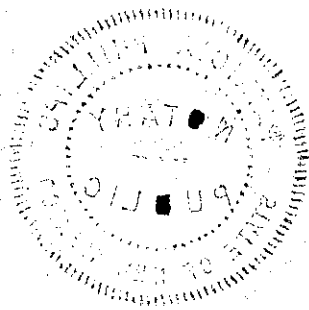
02 NOV 22 PM 10 30

STATE ENGINEER  
SANTA FE, N.M.

STATE ENGINEER  
ROSCHELL, NM

Locate well and areas actually irrigated as accurately as possible on following plat:

Section (s) \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_ N. M. P. M.

INSTRUCTIONS

- Declaration shall be executed (preferably typewritten) in triplicate and must be accompanied by a \$1.00 filing fee. Each of triplicate copies must be properly signed and attested.
- A separate declaration must be filed for each well in use.
- All blanks shall be filled out fully. Required information which cannot be sworn to by declarant shall be supplied by affidavit of person or persons familiar with the facts and shall be submitted herewith.
- Secs. 1-3. Complete all blanks.
- Sec. 4. Fill out all blanks applicable as fully as possible.
- Sec. 5. Irrigation use shall be stated in feet depth or acre feet of water per acre applied on the land. If used for domestic, municipal, or other purposes, state total quantity in acre feet used annually.
- Sec. 6. Describe only the acreage actually irrigated. When necessary to clearly define irrigated acreages, describe to nearest 2½ acre subdivision. If located on unsurveyed lands, describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily-located natural object.
- Sec. 7. Explain and give dates as nearly as possible of any years when all or part of acreage claimed was not irrigated.
- Sec. 8. If well irrigates or supplies supplemental water to any other land than that described above, or if land is also irrigated from any other source, explain under this section. Give any other data necessary to fully describe water right.
- If additional space is necessary, use a separate sheet or sheets and attach securely hereto.

Files: CP-653; CP-654; CP-655; CP-656;  
CP-657; CP-658

Mark Smith  
Box 1296  
Lovington, NM 88260

Dear Sir:

Enclosed are your copies of Declarations of Owner of Underground Water Right as numbered above, which have been filed for record in the office of the State Engineer.

Please refer to each individual number in all future correspondence concerning these declarations.

The filing of these declarations does not indicate affirmation or rejection of the statements contained therein.

Yours very truly,

Frank Bradley  
Basin Supervisor

FB/fh  
Encls.  
cc: Santa Fe





USGS Home  
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National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:  
Groundwater

Geographic Area:  
United States

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News Bulletins
- Groundwater levels for the Nation
- Important:

[Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 323409103321301

Minimum number of levels = 1  
[Save file of selected sites](#) to local disk for future upload

USGS 323409103321301 20S.34E.14.13343

Lea County, New Mexico  
Latitude 32°34'24", Longitude 103°32'18" NAD27  
Land-surface elevation 3,648.00 feet above NGVD29  
The depth of the well is 230 feet below land surface.  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Chinle Formation (231CHNL) 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
			72019								
1968-03-21		D	72019	152.84			1	Z			A
1971-02-03		D	72019	152.00			1	Z			A
1972-10-02		D	72019	190.22			P	Z			A
1976-02-20		D	72019	155.03			1	Z			A
1981-02-26		D	72019	155.36			P	Z			A

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
1986-04-01		D	72019	152.01			1	Z			A
1996-02-02		D	72019	145.20			1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
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
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.


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[Subscribe for system changes](#)




## **Appendix B**

### **Photographic Log**


## Photographic Log


<b>Photo Number:</b> 1	
<b>Photo Direction:</b> Overhead/Bird's Eye	
<b>Date:</b> 10/23/2024	
<b>Coordinates:</b> 32.575731,-103.536069	
<b>Photo Description:</b>  Aerial view of the affected area.	

<b>Photo Number:</b> 2	
<b>Photo Direction:</b> Northwest	
<b>Date:</b> 10/23/2024	
<b>Coordinates:</b> 32.575570,-103.535315	
<b>Photo Description:</b>  Aerial view of the affected area.	




## Photographic Log

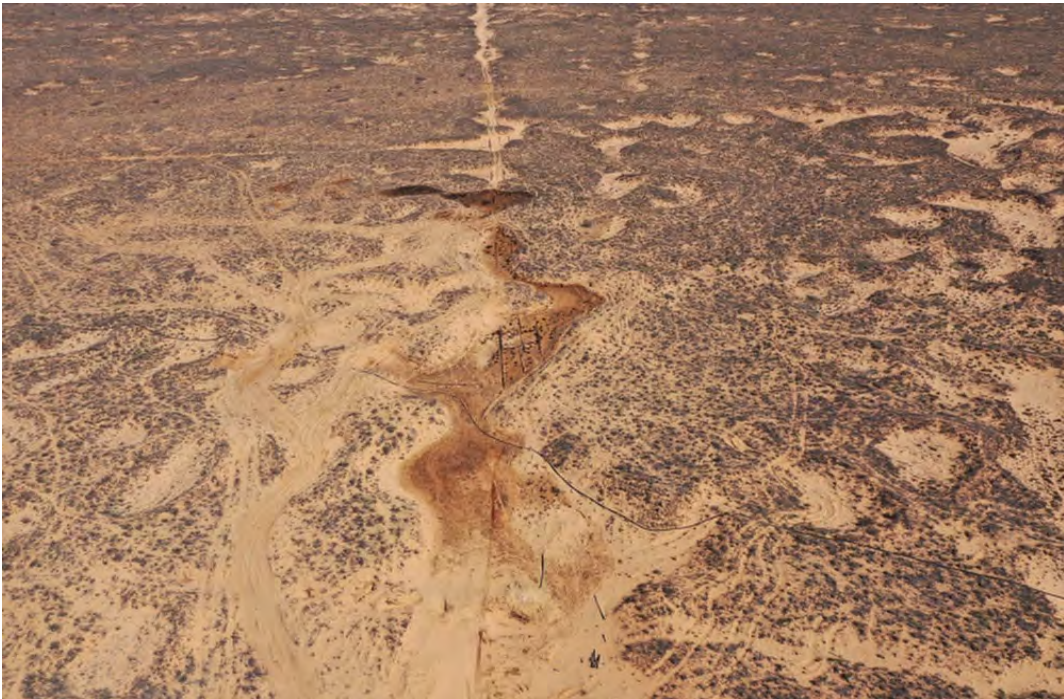
<b>Photo Number:</b> 3	
<b>Photo Direction:</b> North-Northeast	
<b>Date:</b> 10/23/2024	
<b>Coordinates:</b> 32.574910,-103.536400	
<b>Photo Description:</b>  Aerial view of the affected area.	

<b>Photo Number:</b> 4	
<b>Photo Direction:</b> Overhead/Bird's Eye	
<b>Date:</b> 10/23/2024	
<b>Coordinates:</b> 32.576073,-103.536421	
<b>Photo Description:</b>  Aerial view of the affected area.	




## Photographic Log

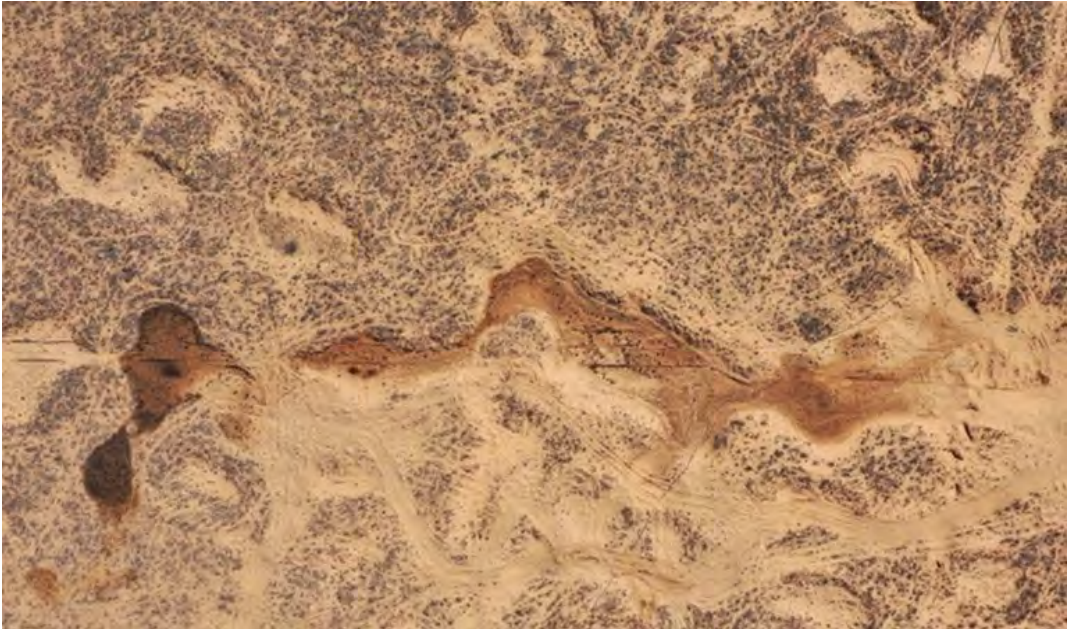
<b>Photo Number:</b> 5	
<b>Photo Direction:</b> Northwest	
<b>Date:</b> 3/11/2025	
<b>Coordinates:</b> 32.574629,-103.535915	
<b>Photo Description:</b>  Aerial view of the affected area.	

<b>Photo Number:</b> 6	
<b>Photo Direction:</b> North-Northeast	
<b>Date:</b> 3/11/2025	
<b>Coordinates:</b> 32.574792,-103.536454	
<b>Photo Description:</b>  Aerial view of the affected area.	



## Photographic Log

<b>Photo Number:</b> 7	
<b>Photo Direction:</b> Northwest	
<b>Date:</b> 3/11/2025	
<b>Coordinates:</b> 32.576194,-103.535562	
<b>Photo Description:</b>  Aerial view of the affected area.	

<b>Photo Number:</b> 8	
<b>Photo Direction:</b> Overhead/Bird's Eye	
<b>Date:</b> 3/11/2025	
<b>Coordinates:</b> 32.575795,-103.536116	
<b>Photo Description:</b>  Aerial view of the affected area.	

## **Appendix C**

### **Laboratory Analytical Reports**





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

---

March 18, 2025

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: WHITTEN SWD ROW

Enclosed are the results of analyses for samples received by the laboratory on 03/12/25 14:55.

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, flowing style.

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: 03/12/2025  
 Reported: 03/18/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/11/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: TT 1 @ 2' (H251472-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	9460	16.0	03/13/2025	ND	448	112	400	7.41		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57		
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18		
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND						
Surrogate: 1-Chlorooctane	94.3 %	44.4-145								
Surrogate: 1-Chlorooctadecane	90.6 %	40.6-153								

**Sample ID: TT 1 @ 4' (H251472-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11000	16.0	03/13/2025	ND	448	112	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57	
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18	
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND					
Surrogate: 1-Chlorooctane	93.1 %	44.4-145							
Surrogate: 1-Chlorooctadecane	91.1 %	40.6-153							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/12/2025  
 Reported: 03/18/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/11/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: TT 2 @ 2' (H251472-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10900	16.0	03/13/2025	ND	448	112	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57	
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18	
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND					
Surrogate: 1-Chlorooctane	100 %	44.4-145							
Surrogate: 1-Chlorooctadecane	95.4 %	40.6-153							

**Sample ID: TT 2 @ 4' (H251472-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14600	16.0	03/13/2025	ND	448	112	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57	
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18	
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND					
Surrogate: 1-Chlorooctane	98.2 %	44.4-145							
Surrogate: 1-Chlorooctadecane	94.6 %	40.6-153							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/12/2025  
 Reported: 03/18/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/11/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: TT 3 @ 2' (H251472-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9730	16.0	03/13/2025	ND	448	112	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57	
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18	
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND					
Surrogate: 1-Chlorooctane	92.6 %	44.4-145							
Surrogate: 1-Chlorooctadecane	89.7 %	40.6-153							

**Sample ID: TT 3 @ 4' (H251472-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10000	16.0	03/13/2025	ND	448	112	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57	
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18	
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND					
Surrogate: 1-Chlorooctane	94.8 %	44.4-145							
Surrogate: 1-Chlorooctadecane	89.7 %	40.6-153							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/12/2025  
 Reported: 03/18/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/11/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: TT 4 @ 2' (H251472-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	03/13/2025	ND	448	112	400	7.41	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57	
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18	
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND					
Surrogate: 1-Chlorooctane	91.3 %	44.4-145							
Surrogate: 1-Chlorooctadecane	87.2 %	40.6-153							

**Sample ID: TT 4 @ 4' (H251472-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4160	16.0	03/13/2025	ND	448	112	400	7.41		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	03/13/2025	ND	203	101	200	2.57		
DRO >C10-C28*	<10.0	10.0	03/13/2025	ND	200	100	200	2.18		
EXT DRO >C28-C36	<10.0	10.0	03/13/2025	ND						
Surrogate: 1-Chlorooctane	96.9 %	44.4-145								
Surrogate: 1-Chlorooctadecane	91.0 %	40.6-153								

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



---

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---

### Notes and Definitions

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

---

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

---

Celey D. Keene, Lab Director/Quality Manager





# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 1 of 1

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;"> <div>Chloride</div> <div>TPH (8015M)</div> <div>BTEX (8021B)</div> </div>																				
Address: 2617 West Marland				Company: Permian Resources																								
City: Hobbs State: NM Zip: 88240				Attn: Matt Taylor																								
Phone #: (575) 264-9884 Fax #:				Address:																								
Project #: <del>24786</del> 21343 Project Owner: Permian Resources				City:																								
Project Name: <del>Testada 7 State Com 302</del> Whitten SWD ROW				State: Zip:																								
Project Location: <del>32-411022, 103-402427</del> 32.57508, -103.53642				Phone #:																								
Sampler Name: Addison Elston				Fax #:																								
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																				
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME														
H251472																												
1	TT 1 @ 2'	G	1			X				X			3/11/25		X	X												
2	TT 1 @ 4'	G	1			X				X			3/11/25		X	X												
3	TT 2 @ 2'	G	1			X				X			3/11/25		X	X												
4	TT 2 @ 4'	G	1			X				X			3/11/25		X	X												
5	TT 3 @ 2'	G	1			X				X			3/11/25		X	X												
6	TT 3 @ 4'	G	1			X				X			3/11/25		X	X												
7	TT 4 @ 2'	G	1			X				X			3/11/25		X	X												
8	TT 4 @ 4'	G	1			X				X			3/11/25		X	X												

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Relinquished By:	Date: 3-12-25	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:	
	Time: 1455		All Results are emailed. Please provide Email address: pm@etechenv.com		
Relinquished By:	Date:	Received By:	REMARKS: Project #, name & location corrected per customer. See Email. Glad Riqueney 31325		
	Time:				
Delivered By: (Circle One)	Observed Temp. °C -4.7	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) AD	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No
Sampler - UPS - Bus - Other:	Corrected Temp. °C -4.4			Thermometer ID #140 Correction Factor -0.5°C to -0.2	Observed Temp. °C
					Corrected Temp. °C





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

---

March 20, 2025

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: WHITTEN SWD ROW

Enclosed are the results of analyses for samples received by the laboratory on 03/14/25 15:48.

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, flowing style.

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: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: NH 1 @ 2' (H251539-01)**

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	03/18/2025	ND	1.96	98.2	2.00	0.409	
Toluene*	<0.050	0.050	03/18/2025	ND	2.03	102	2.00	0.732	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	1.98	99.1	2.00	0.806	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	5.78	96.3	6.00	0.610	
Total BTX	<0.300	0.300	03/18/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 102 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: NH 2 @ 2' (H251539-02)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/18/2025	ND	1.96	98.2	2.00	0.409	
Toluene*	<0.050	0.050	03/18/2025	ND	2.03	102	2.00	0.732	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	1.98	99.1	2.00	0.806	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	5.78	96.3	6.00	0.610	
Total BTEX	<0.300	0.300	03/18/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 105 % 44.4-145

Surrogate: 1-Chlorooctadecane 101 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: EH 1 @ 2' (H251539-03)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/17/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/17/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/17/2025	ND	2.56	128	2.00	2.89	QM-07
Total Xylenes*	<0.150	0.150	03/17/2025	ND	7.86	131	6.00	2.73	QM-07
Total BTEx	<0.300	0.300	03/17/2025	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/18/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 108 % 44.4-145

Surrogate: 1-Chlorooctadecane 105 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: EH 2 @ 2' (H251539-04)**

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	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTEx	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 105 % 44.4-145

Surrogate: 1-Chlorooctadecane 102 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: EH 3 @ 2' (H251539-05)**

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	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTEX	<0.300	0.300	03/18/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/18/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 100 % 44.4-145

Surrogate: 1-Chlorooctadecane 96.7 % 40.6-153

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SH 1 @ 2' (H251539-06)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTX	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 104 % 44.4-145

Surrogate: 1-Chlorooctadecane 100 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SH 2 @ 2' (H251539-07)**

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	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTEX	<0.300	0.300	03/18/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 126 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 109 % 44.4-145

Surrogate: 1-Chlorooctadecane 105 % 40.6-153

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WH 1 @ 2' (H251539-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTEx	<0.300	0.300	03/18/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 128 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	03/18/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 109 % 44.4-145

Surrogate: 1-Chlorooctadecane 104 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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 JOEL LOWRY  
 2617 W MARLAND  
 HOBBS NM, 88240  
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Received: 03/14/2025  
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 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WH 2 @ 2' (H251539-09)**

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	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTEX	<0.300	0.300	03/18/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	03/18/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	209	104	200	1.18	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	190	94.9	200	1.16	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 103 % 44.4-145

Surrogate: 1-Chlorooctadecane 99.3 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager





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 JOEL LOWRY  
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 HOBBS NM, 88240  
 Fax To:

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WH 3 @ 2' (H251539-10)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTEX	<0.300	0.300	03/18/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/18/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 96.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
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 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: NH 1 @ 6' (H251539-11)**

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	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTEX	<0.300	0.300	03/18/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 96.7 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: NH 2 @ 6' (H251539-12)**

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	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTEx	<0.300	0.300	03/18/2025	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 102 % 44.4-145

Surrogate: 1-Chlorooctadecane 96.6 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: EH 1 @ 6' (H251539-13)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTX	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 103 % 44.4-145

Surrogate: 1-Chlorooctadecane 98.5 % 40.6-153

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 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: EH 2 @ 6' (H251539-14)**

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	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTEx	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 99.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 95.7 % 40.6-153

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: EH 3 @ 6' (H251539-15)**

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	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTX	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 99.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 96.5 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SH 1 @ 6' (H251539-16)**

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	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTX	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 106 % 44.4-145

Surrogate: 1-Chlorooctadecane 102 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SH 2 @ 6' (H251539-17)**

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	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTX	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/17/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/17/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/17/2025	ND					

Surrogate: 1-Chlorooctane 104 % 44.4-145

Surrogate: 1-Chlorooctadecane 99.8 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/13/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WH 1 @ 6' (H251539-18)**

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	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTX	<0.300	0.300	03/18/2025	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/18/2025	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/18/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/18/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/18/2025	ND					

Surrogate: 1-Chlorooctane 104 % 44.4-145

Surrogate: 1-Chlorooctadecane 99.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WH 2 @ 6' (H251539-19)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/18/2025	ND	2.15	107	2.00	3.28		
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41		
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89		
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73		
Total BTEX	<0.300	0.300	03/18/2025	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/18/2025	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/18/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/18/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/18/2025	ND					

Surrogate: 1-Chlorooctane 100 % 44.4-145

Surrogate: 1-Chlorooctadecane 98.0 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received: 03/14/2025  
 Reported: 03/20/2025  
 Project Name: WHITTEN SWD ROW  
 Project Number: 21343  
 Project Location: PERMIAN 32.57508, -103.53642

Sampling Date: 03/12/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WH 3 @ 6' (H251539-20)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/18/2025	ND	2.15	107	2.00	3.28	
Toluene*	<0.050	0.050	03/18/2025	ND	2.34	117	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/18/2025	ND	2.56	128	2.00	2.89	
Total Xylenes*	<0.150	0.150	03/18/2025	ND	7.86	131	6.00	2.73	
Total BTEX	<0.300	0.300	03/18/2025	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/17/2025	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	03/18/2025	ND	192	96.0	200	0.729	
DRO >C10-C28*	<10.0	10.0	03/18/2025	ND	186	93.0	200	0.310	
EXT DRO >C28-C36	<10.0	10.0	03/18/2025	ND					

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 97.4 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



---

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---

### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

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

---

Celey D. Keene, Lab Director/Quality Manager



# 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;"> <div>Chloride</div> <div>TPH (8015M)</div> <div>BTEX (8021B)</div> </div>																					
Address: 2617 West Marland				Company: Permian Resources																									
City: Hobbs State: NM Zip: 88240				Attn: Matt Taylor																									
Phone #: (575) 264-9884 Fax #:				Address:																									
Project #: 21343 Project Owner: Permian Resources				City:																									
Project Name: Whitten SWD ROW				State: Zip:																									
Project Location: 32.57508, -103.53642				Phone #:																									
Sampler Name: Addison Elston				Fax #:																									
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																					
Lab I.D.	Sample I.D.	(GRAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME															
H251539																													
1	NH 1 @ 2'	G	1			X					X		3/12/25		X	X	X												
2	NH 2 @ 2'	G	1			X					X		3/12/25		X	X	X												
3	EH 1 @ 2'	G	1			X					X		3/12/25		X	X	X												
4	EH 2 @ 2'	G	1			X					X		3/12/25		X	X	X												
5	EH 3 @ 2'	G	1			X					X		3/13/25		X	X	X												
6	SH 1 @ 2'	G	1			X					X		3/13/25		X	X	X												
7	SH 2 @ 2'	G	1			X					X		3/12/25		X	X	X												
8	WH 1 @ 2'	G	1			X					X		3/13/25		X	X	X												
9	WH 2 @ 2'	G	1			X					X		3/12/25		X	X	X												
10	WH 3 @ 2'	G	1			X					X		3/12/25		X	X	X												

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Relinquished By:		Date: 3-14-25	Received By:		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
		Time: 1548			All Results are emailed. Please provide Email address: pm@etechenv.com	
Relinquished By:		Date:	Received By:		REMARKS:	
		Time:				
Delivered By: (Circle One)		Observed Temp. °C: 11.0	Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/>		Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C: 10.7	CHECKED BY: (Initials)		Bacteria (only) Sample Condition: Cool <input type="checkbox"/> Intact <input type="checkbox"/>	
					Thermometer ID #140	
					Correction Factor: +0.3°C	
					Cool <input type="checkbox"/> Intact <input type="checkbox"/>	
					Observed Temp. °C	
					Corrected Temp. °C	





# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 2 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;"> <div>Chloride</div> <div>TPH (8015M)</div> <div>BTEX (8021B)</div> </div>																					
Address: 2617 West Marland				Company: Permian Resources																									
City: Hobbs State: NM Zip: 88240				Attn: Matt Taylor																									
Phone #: (575) 264-9884 Fax #:				Address:																									
Project #: 21343 Project Owner: Permian Resources				City:																									
Project Name: Whitten SWD ROW				State: Zip:																									
Project Location: 32.57508, -103.53642				Phone #:																									
Sampler Name: Addison Elston				Fax #:																									
FOR LAB USE ONLY						MATRIX		PRESERV.		SAMPLING																			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME															
11	NH 1 @ 6'	G	1			X				X			3/12/25		X	X	X												
12	NH 2 @ 6'	G	1			X				X			3/12/25		X	X	X												
13	EH 1 @ 6'	G	1			X				X			3/13/25		X	X	X												
14	EH 2 @ 6'	G	1			X				X			3/13/25		X	X	X												
15	EH 3 @ 6'	G	1			X				X			3/13/25		X	X	X												
16	SH 1 @ 6'	G	1			X				X			3/13/25		X	X	X												
17	SH 2 @ 6'	G	1			X				X			3/12/25		X	X	X												
18	WH 1 @ 6'	G	1			X				X			3/13/25		X	X	X												
19	WH 2 @ 6'	G	1			X				X			3/12/25		X	X	X												
20	WH 3 @ 6'	G	1			X				X			3/12/25		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.

Relinquished By:	Date: 3-14-25	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 1:54 PM		All Results are emailed. Please provide Email address: pm@etechenv.com	
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			
Delivered By: (Circle One)	Observed Temp. °C: 11.0	Sample Condition: Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>
Sampler - UPS - Bus - Other:	Corrected Temp. °C: -10.7	<input type="checkbox"/> Yes <input type="checkbox"/> No		Bacteria (only) Sample Condition: Cool Intact
		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
				Observed Temp. °C
				Corrected Temp. °C

## **Appendix D**

### **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:	444903	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2429762272		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2429762272		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2429762272
Incident Name	NAPP2429762272 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	10/23/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/26/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head E for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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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:	444905	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2429762272		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2429762272		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2429762272
Incident Name	NAPP2429762272 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	10/23/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/28/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head N for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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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:	444906	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2429762272		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2429762272		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2429762272
Incident Name	NAPP2429762272 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	10/23/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/31/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head N for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)



Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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

Submission Information

Submission ID:	444911	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2429762272		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2429762272		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2429762272
Incident Name	NAPP2429762272 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	10/23/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/02/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head N for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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

Submission Information

Submission ID:	444912	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2429762272		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2429762272		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2429762272
Incident Name	NAPP2429762272 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	10/23/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/04/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head N for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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

Submission Information

Submission ID:	444914	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2429762272		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2429762272		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2429762272
Incident Name	NAPP2429762272 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	10/23/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/07/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head E for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)



Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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

Submission Information

Submission ID:	444892	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2503175872		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2503175872		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2503175872
Incident Name	NAPP2503175872 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/26/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head E on Co Rd 27-A for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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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:	444894	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2503175872		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2503175872		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2503175872
Incident Name	NAPP2503175872 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/28/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head E for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)



Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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

Submission Information

Submission ID:	444895	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2503175872		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2503175872		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2503175872
Incident Name	NAPP2503175872 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/31/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head E for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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

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

Submission Information

Submission ID:	444897	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2503175872		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2503175872		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2503175872
Incident Name	NAPP2503175872 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/02/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head E on Co Rd 27-A for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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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:	444900	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2503175872		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2503175872		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2503175872
Incident Name	NAPP2503175872 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/04/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head E on Co Rd 27-A for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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

Submission Information

Submission ID:	444902	Districts:	Hobbs
Operator:	[372165] Permian Resources Operating, LLC	Counties:	Lea
Description:	Permian Resources Operating, LLC [372165] , Whitten SWD ROW , nAPP2503175872		
Status:	APPROVED		
Status Date:	03/24/2025		
References (1):	nAPP2503175872		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2503175872
Incident Name	NAPP2503175872 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source

Site Name	Whitten SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	30,000
What is the estimated number of samples that will be gathered	150
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	04/07/2025
Time sampling will commence	07:00 AM
Please provide any information necessary for observers to contact samplers	Addison Elston 432-236-1152
Please provide any information necessary for navigation to sampling site	Driving Directions - From the intersection of US-62 and Co Rd 27-A (32.635257, -103.515500), head N on US-62 for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.515500)

Comments

No comments found for this submission.

Conditions

**Summary:**                      mtaylorpr (3/24/2025), 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.

Reasons

No reasons found for this submission.

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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 458061

**QUESTIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 458061
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2503175872
Incident Name	NAPP2503175872 WHITTEN SWD ROW @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received

**Location of Release Source***Please answer all the questions in this group.*

Site Name	WHITTEN SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

**Incident Details***Please answer all the questions in this group.*

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

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

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Pipeline (Any)   Crude Oil   Released: 295 BBL   Recovered: 210 BBL   Lost: 85 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Pipeline (Any)   Produced Water   Released: 2,659 BBL (Unknown Released Amount)   Recovered: 1,890 BBL   Lost: 769 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.



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Action 458061

**QUESTIONS (continued)**

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**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be 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: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.</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	Name: Matthew Taylor Title: Environmental Coordinator Email: matthew.taylor@permianres.com Date: 02/06/2025
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QUESTIONS, Page 3

Action 458061

**QUESTIONS (continued)**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 458061
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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 100 and 500 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
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 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 500 and 1000 (ft.)
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 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
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)	14600
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	30
GRO+DRO (EPA SW-846 Method 8015M)	20
BTEX (EPA SW-846 Method 8021B or 8260B)	0.3
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	04/28/2025
On what date will (or did) the final sampling or liner inspection occur	06/13/2025
On what date will (or was) the remediation complete(d)	06/27/2025
What is the estimated surface area (in square feet) that will be reclaimed	32594
What is the estimated volume (in cubic yards) that will be reclaimed	6300
What is the estimated surface area (in square feet) that will be remediated	32594
What is the estimated volume (in cubic yards) that will be remediated	3600
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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Action 458061

**QUESTIONS (continued)**

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	Action Number: 458061
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**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	LEA LAND LANDFILL [fEEM0112342028]
<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: 05/02/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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Action 458061

**QUESTIONS (continued)**

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	Action Number: 458061
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

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

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Action 458061

**QUESTIONS (continued)**

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	Action Number: 458061
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	462477
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/19/2025
What was the (estimated) number of samples that were to be gathered	145
What was the sampling surface area in square feet	29000

**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	No
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CONDITIONS

Action 458061

**CONDITIONS**

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
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	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. All sidewall samples should be taken from the sidewall of the excavation. The Variance Request for 400 ft2 floor confirmation sample size is approved. The release area will still need confirmation sidewall samples representing no more than 200 ft2. All off-pad areas must meet reclamation standards in the OCD Spill Rule. The work will need to be completed in 90 days after the report has been reviewed.	5/15/2025