

Site Assessment Summary, Proposed Remediation Plan & Alternative Sampling Plan

Permian Resources Whitten SWD ROW

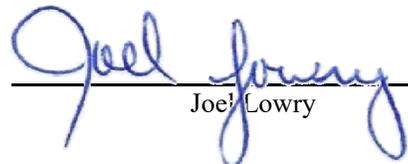
Lea County, New Mexico
Unit Letter "H", Section 14, Township 20 South, Range 34 East
Latitude 32.574814° North, Longitude 103.536446° West
NMOCD Reference No. nAPP2429762272 & nAPP2503175872

Prepared By:

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


Ben J. Arguijo


Joel Lowry



Midland • San Antonio • Lubbock • Hobbs • Lafayette

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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: <u>32.574814°</u>	Longitude: <u>-103.536446°</u>										
<small>Provided GPS are in NAD83 format.</small>											
Site Name: <u>Whitten Road SWD</u>	Site Type: <u>Pipeline</u>										
Date Release Discovered: <u>10/23/2024</u>	API # (if applicable): <u>N/A</u>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">Unit Letter</th> <th style="width: 15%;">Section</th> <th style="width: 15%;">Township</th> <th style="width: 15%;">Range</th> <th style="width: 15%;">County</th> </tr> <tr> <td style="text-align: center;">"H"</td> <td style="text-align: center;">14</td> <td style="text-align: center;">20S</td> <td style="text-align: center;">34E</td> <td style="text-align: center;">Lea</td> </tr> </table>	Unit Letter	Section	Township	Range	County	"H"	14	20S	34E	Lea	
Unit Letter	Section	Township	Range	County							
"H"	14	20S	34E	Lea							
Surface Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Private (Name _____)											
Nature and Volume of Release											
<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) <u>258</u>	Volume Recovered (bbls) <u>144</u>									
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) <u>2,321</u>	Volume Recovered (bbls) <u>1,296</u>									
	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: <u>Equipment failure - Pipeline</u>											
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.											

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-)	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 eventually be reclaimed?	32,594	
What is the total volume (cy) in need of or that will eventually 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

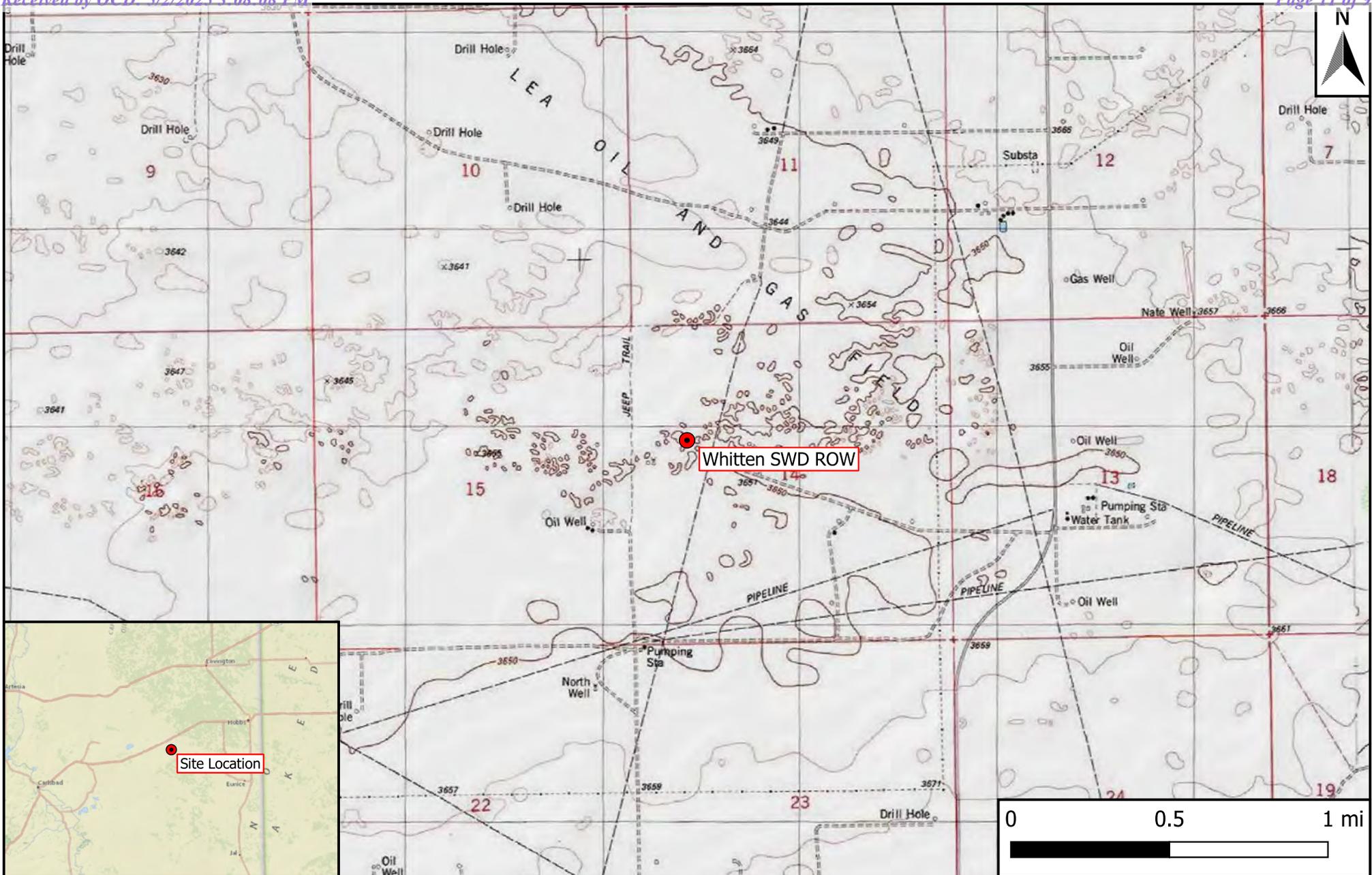
*Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210*

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



Figures 2A & 2B

Site Characterization Maps

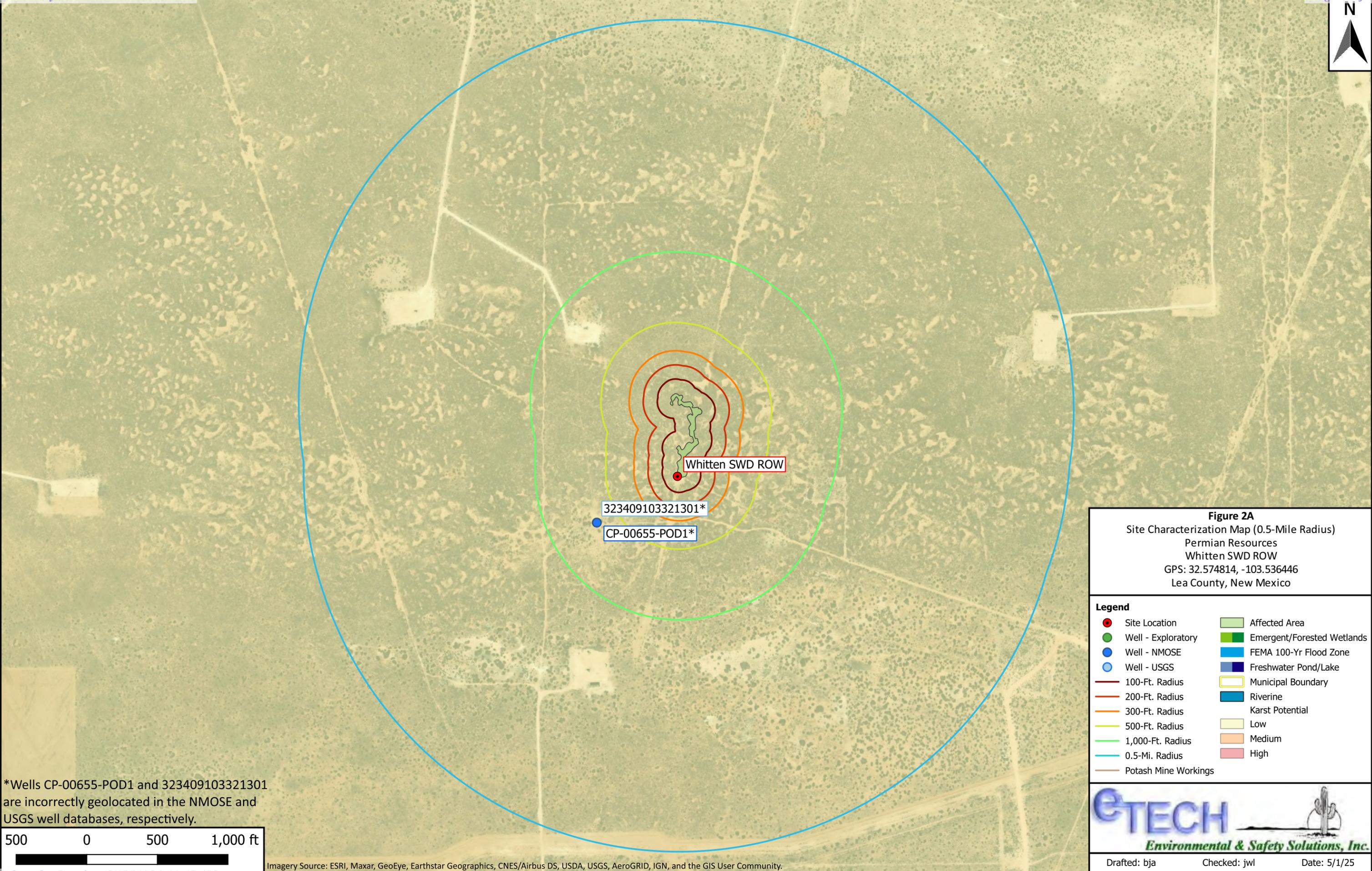
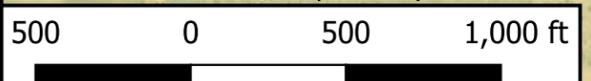


Figure 2A
 Site Characterization Map (0.5-Mile Radius)
 Permian Resources
 Whitten SWD ROW
 GPS: 32.574814, -103.536446
 Lea County, New Mexico

Legend

Site Location	Affected Area
Well - Exploratory	Emergent/Forested Wetlands
Well - NMOSE	FEMA 100-Yr Flood Zone
Well - USGS	Freshwater Pond/Lake
100-Ft. Radius	Municipal Boundary
200-Ft. Radius	Riverine
300-Ft. Radius	Karst Potential
500-Ft. Radius	Low
1,000-Ft. Radius	Medium
0.5-Mi. Radius	High
Potash Mine Workings	

*Wells CP-00655-POD1 and 323409103321301 are incorrectly geolocated in the NMOSE and USGS well databases, respectively.



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



Drafted: bja Checked: jwl Date: 5/1/25

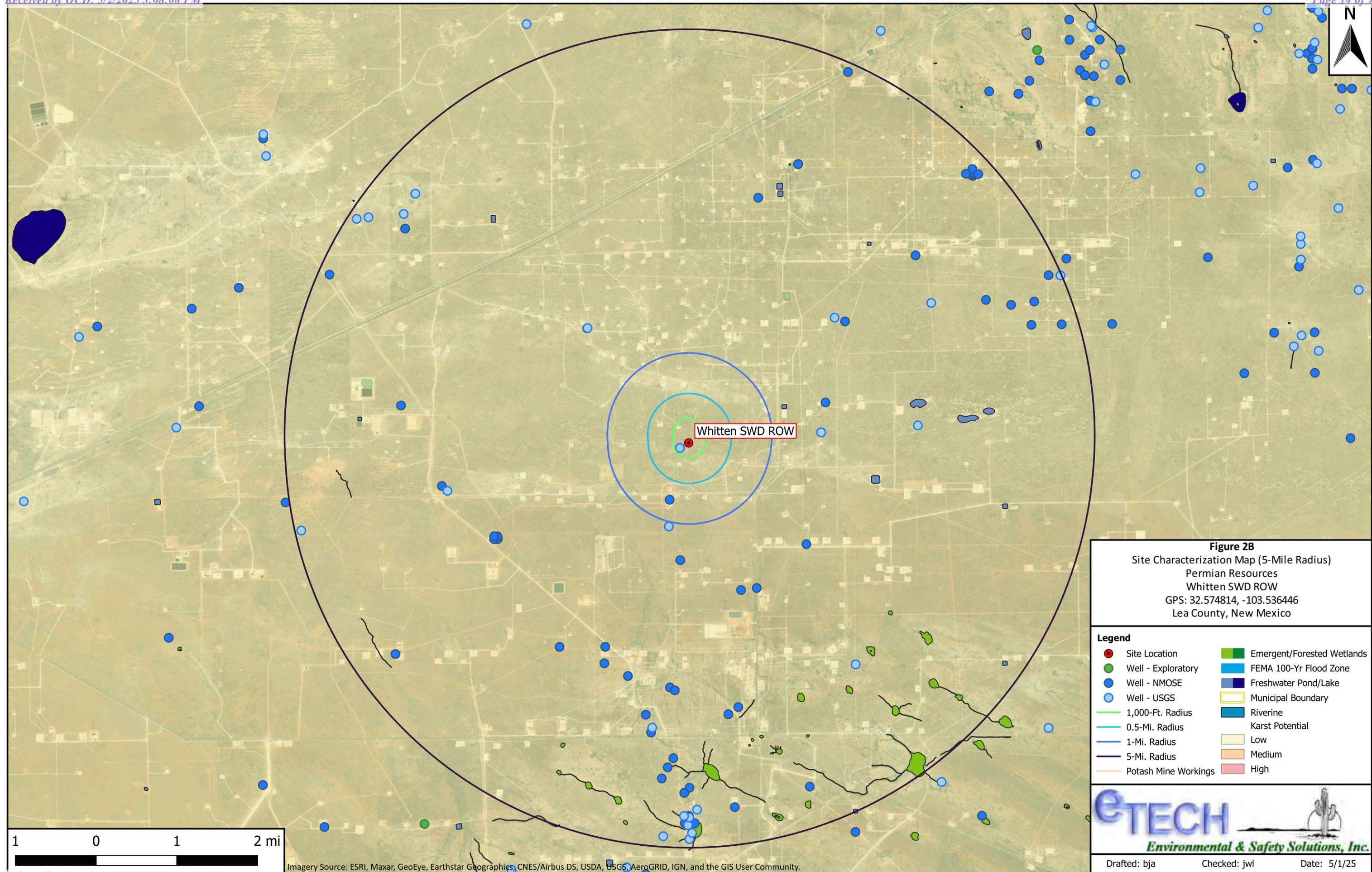


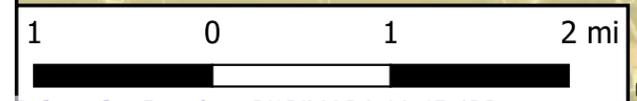
Figure 2B

Site Characterization Map (5-Mile Radius)
 Permian Resources
 Whitten SWD ROW
 GPS: 32.574814, -103.536446
 Lea County, New Mexico

- Legend**
- Site Location
 - Well - Exploratory
 - Well - NMOSE
 - Well - USGS
 - 1,000-Ft. Radius
 - 0.5-Mi. Radius
 - 1-Mi. Radius
 - 5-Mi. Radius
 - Potash Mine Workings
 - Emergent/Forested Wetlands
 - FEMA 100-Yr Flood Zone
 - Freshwater Pond/Lake
 - Municipal Boundary
 - Riverine
 - Karst Potential
 - Low
 - Medium
 - High



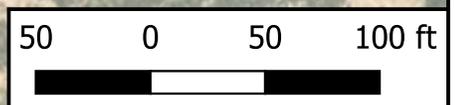
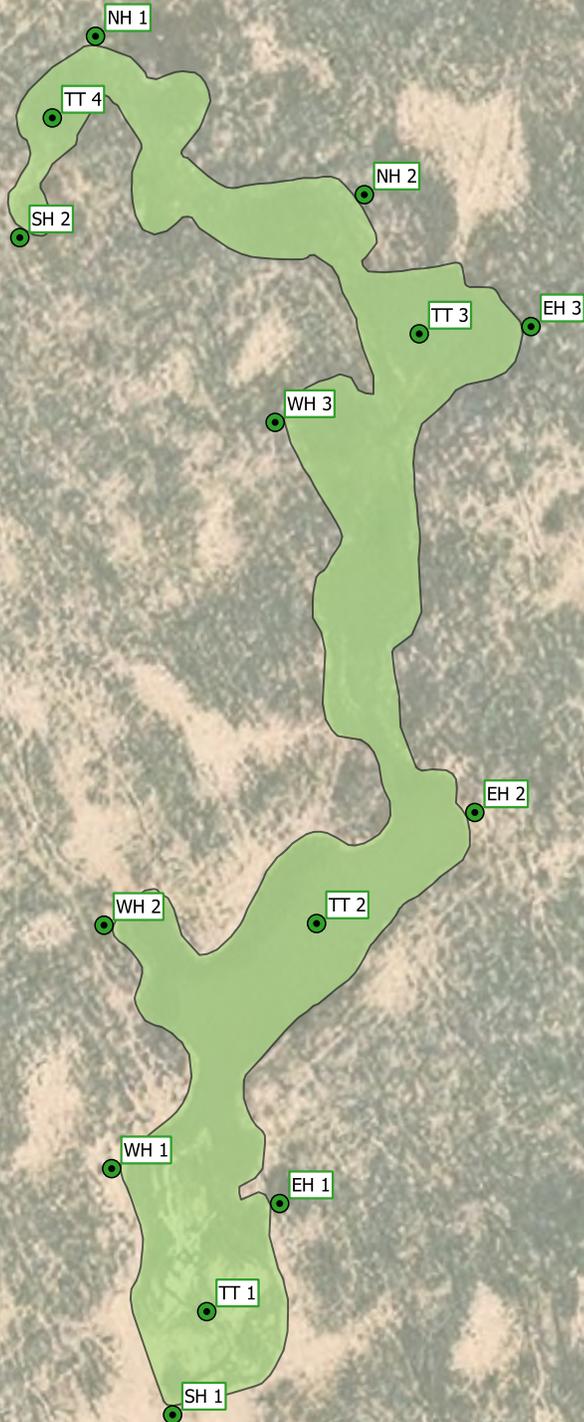
Drafted: bja Checked: jwl Date: 5/1/25



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

Figure 3

Sample Location Map



Legend

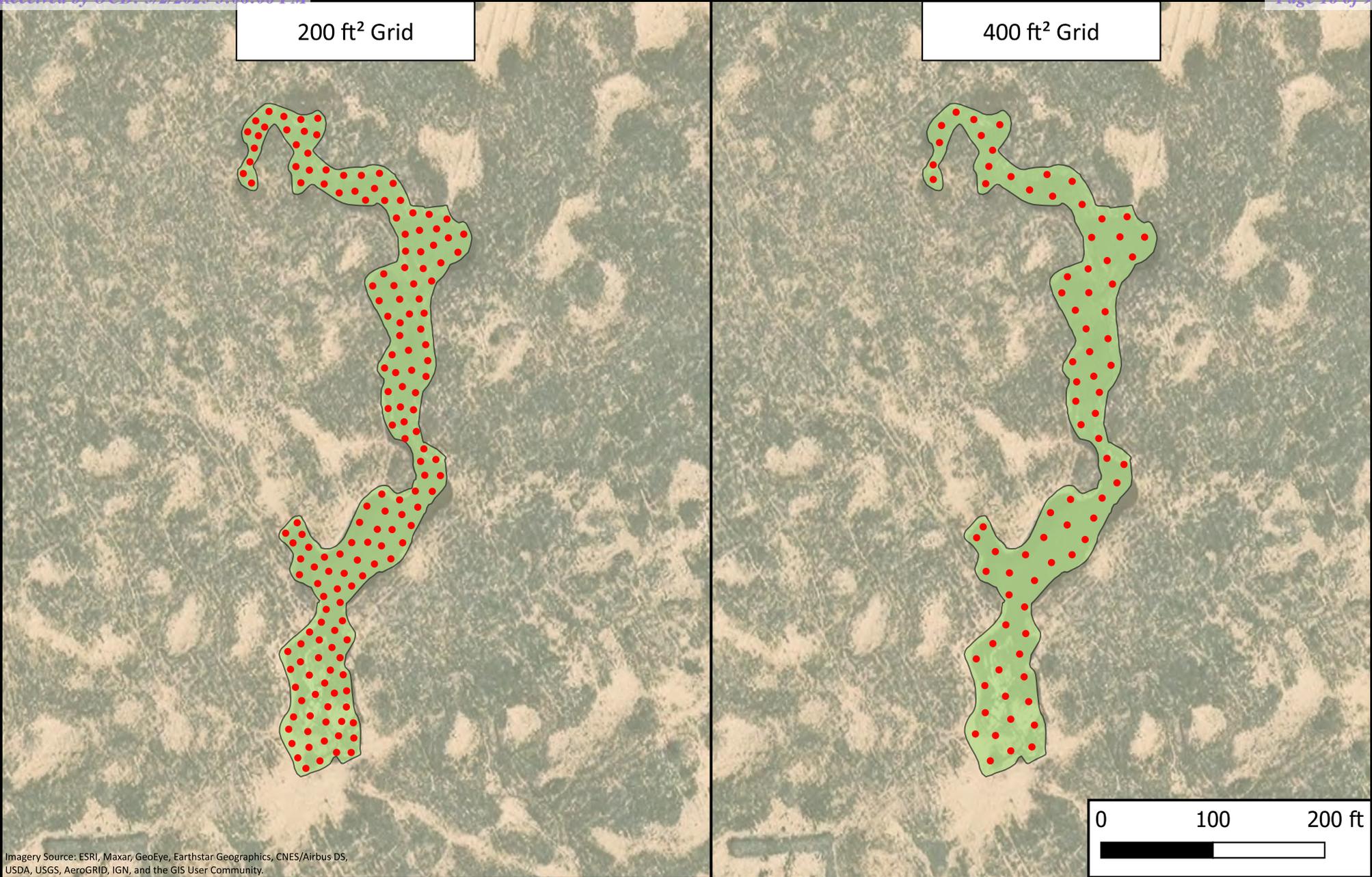
	Affected Area (~32,594 ft ²)
	Delineation Sample Location

Figure 3
 Sample Location Map
 Permian Resources
 Whitten SWD ROW
 GPS: 32.574814, -103.536446
 Lea County, New Mexico

Drafted: bja Checked: jwl 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


 ETECH
 Environmental & Safety Solutions, Inc.

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

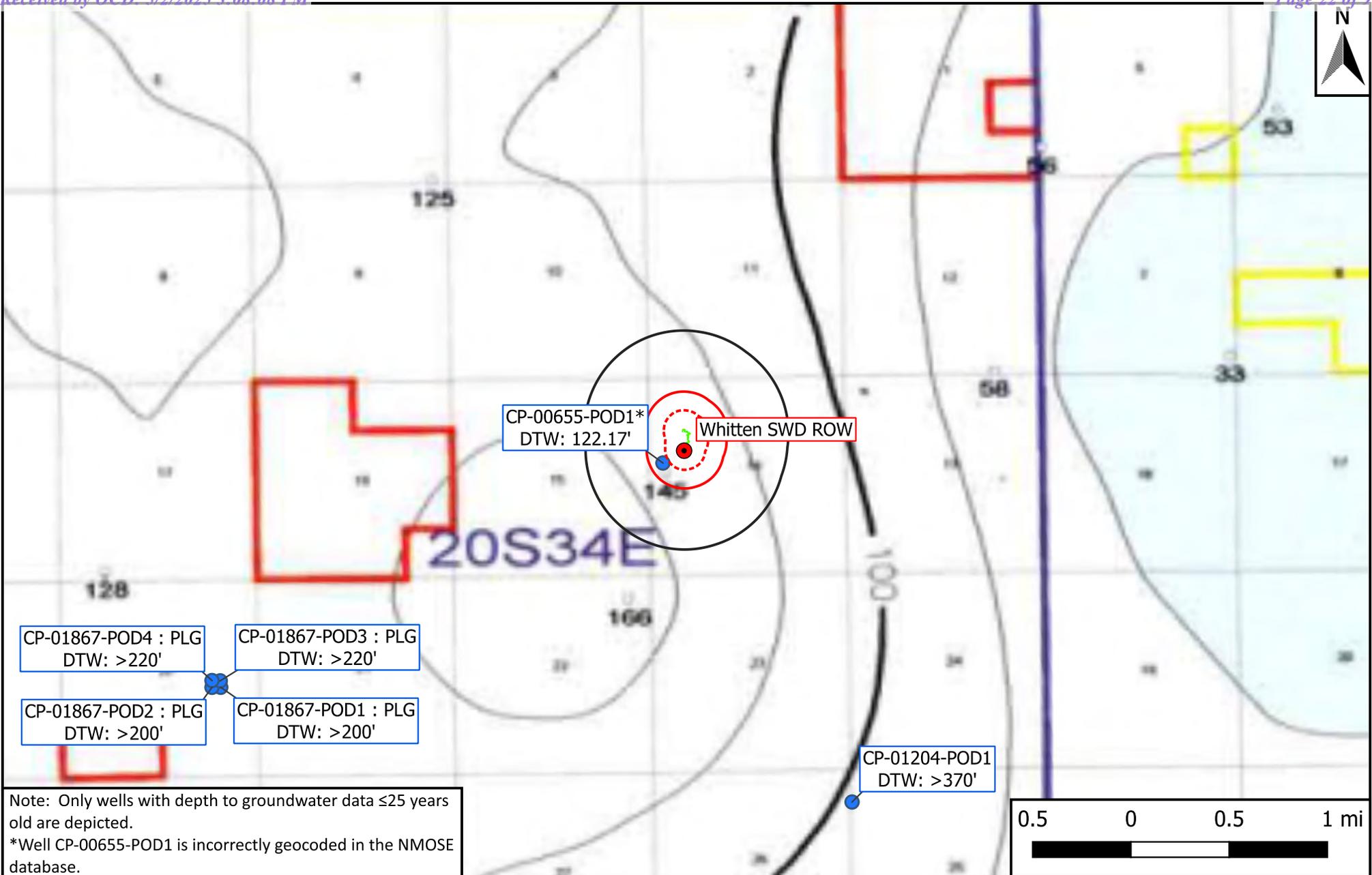
Table 1
Concentrations of BTEX, TPH & Chloride in Soil

Table 1 Concentrations of BTEX, TPH & Chloride in Soil Permian Resources Whitten SWD ROW NMOCD Ref. #: nAPP2429762272 & nAPP2503175872											
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 ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (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		Affected Area
	Well - Exploratory		500-Ft Radius
	Well - NMOSE		1,000-Ft Radius
	Well - USGS		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



 Environmental & Safety Solutions, Inc.

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.

10/23/24 12:04 PM MST

Point of Diversion Summary

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Groundwater Sampling Log

Project No. 21343

Date 10/23/24

Site Location 32.574193,-103.538281

Well ID CP 00655 POD1 / 323409103321301

Weather Sunny/clear

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
- Bladder
- Bailer
- Monsoon
- Grundfos
- Monsoon
- PDB

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"/>				

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

Photo Number: 1	 <p>May 1, 2025 at 12:33:38 PM +32.573876,-103.538769</p>
Photo Direction: Northeast	
Photo Description: NMOSE well CP-00655-POD1 & USGS well 323409103321301.	

Photo Number: 2	 <p>May 1, 2025 at 12:33:41 PM +32.573876,-103.538769</p>
Photo Direction: Northeast	
Photo Description: NMOSE well CP-00655-POD1 & USGS well 323409103321301.	

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

108440
6

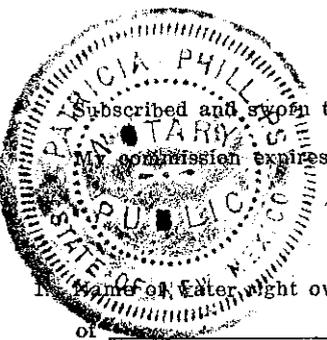
Declaration of Owner of Underground Water Right

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
My commission expires 5-23-85
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 ACRES 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

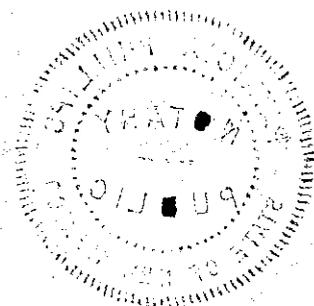
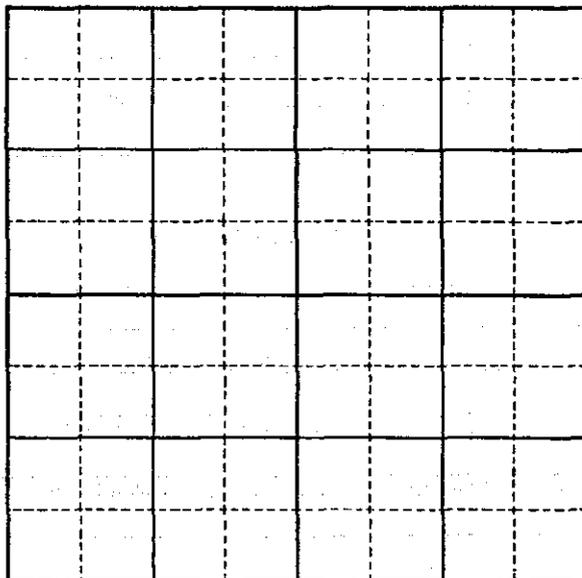
UNDER NEW MEXICO LAW A DECLARATION IS ONLY A STATEMENT OF DECLARANT'S CLAIM. ACCEPTANCE FOR FILING DOES NOT CONSTITUTE APPROVAL OR REJECTION OF THE CLAIM.

STATE ENGINEER
ROSEBELL, NM
STATE ENGINEER
SANTA FE, NM.

02 NOV 22 PM 10 30

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 2 1/2 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 the 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.

f

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



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National Water Information System: Web Interface

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Data Category: Groundwater Geographic Area: United States GO

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Groundwater levels for the Nation

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

Page Last Modified: 2025-04-30 16:38:23 EDT

0.32 0.23 nadww02

Appendix B

Photographic Log

Photographic Log

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

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

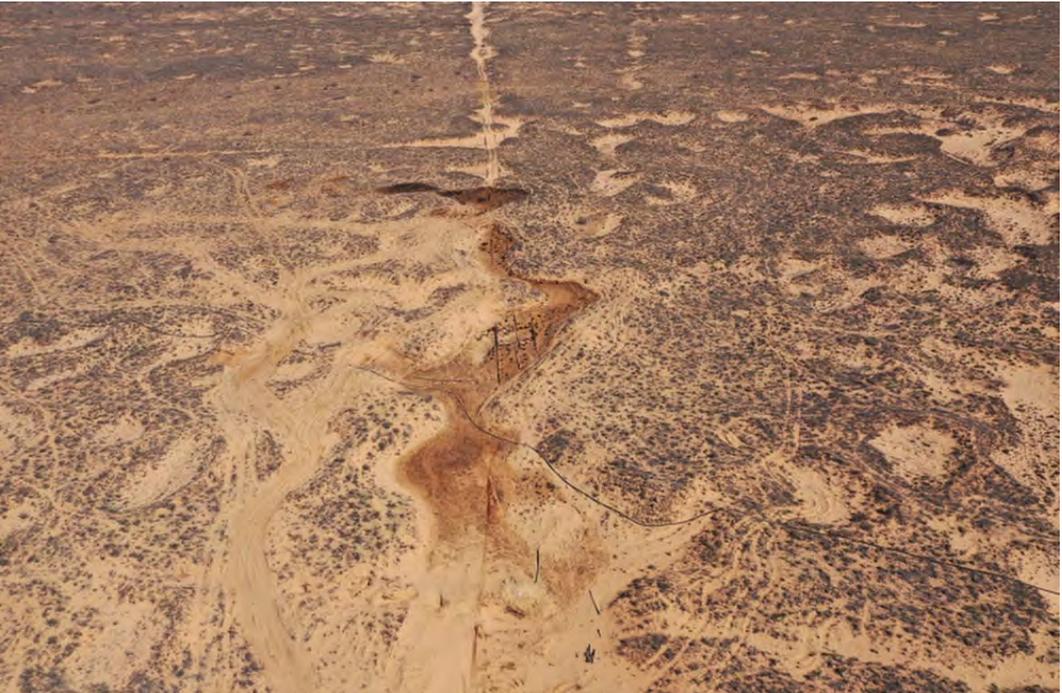
Photographic Log

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

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

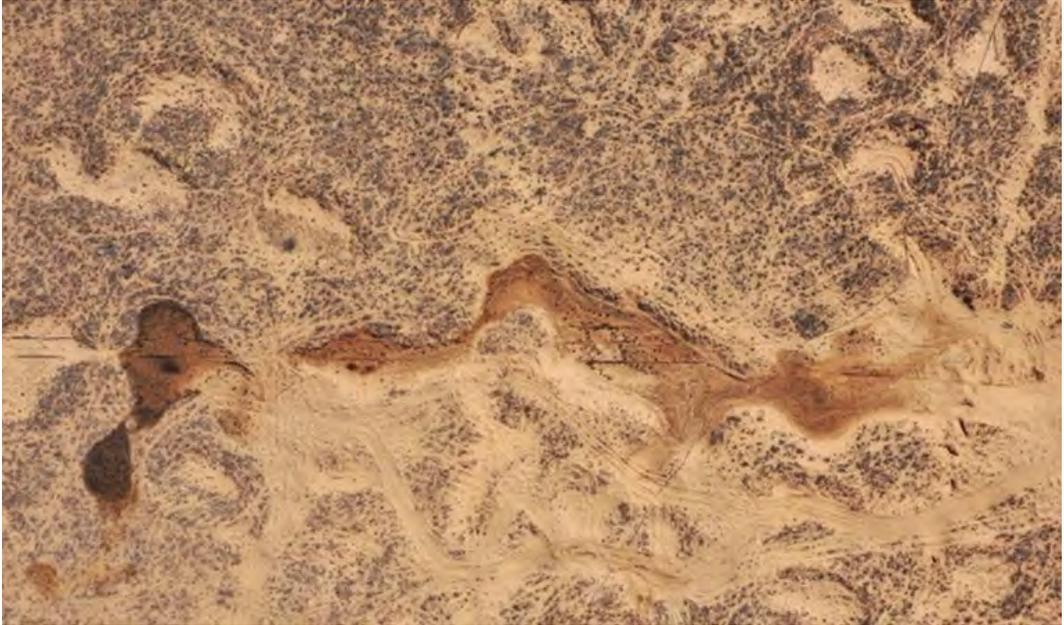
Photographic Log

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

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

Photographic Log

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

Photo Number: 8	
Photo Direction: Overhead/Bird's Eye	
Date: 3/11/2025	
Coordinates: 32.575795,-103.536116	
Photo Description: 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.

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".

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	Sampling Date:	03/11/2025
Reported:	03/18/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Alyssa Parras
Project Location:	PERMIAN 32.57508, -103.53642		

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

Chloride, SM4500CI-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					
<i>Surrogate: 1-Chlorooctane</i>	<i>94.3 %</i>	<i>44.4-145</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>90.6 %</i>	<i>40.6-153</i>							

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

Chloride, SM4500CI-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					
<i>Surrogate: 1-Chlorooctane</i>	<i>93.1 %</i>	<i>44.4-145</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>91.1 %</i>	<i>40.6-153</i>							

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	Sampling Date:	03/11/2025
Reported:	03/18/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Alyssa Parras
Project Location:	PERMIAN 32.57508, -103.53642		

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

Chloride, SM4500CI-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, SM4500CI-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	Sampling Date:	03/11/2025
Reported:	03/18/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Alyssa Parras
Project Location:	PERMIAN 32.57508, -103.53642		

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							

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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	Sampling Date:	03/11/2025
Reported:	03/18/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Alyssa Parras
Project Location:	PERMIAN 32.57508, -103.53642		

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

Chloride, SM4500CI-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, SM4500CI-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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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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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

Company Name: Etech Environmental & Safety Solutions, Inc.
Project Manager: Joel Lowry
Address: 2617 West Marland
City: Hobbs State: NM Zip: 88240
Phone #: (575) 264-9884 Fax #:
Project #: 21343 Project Owner: Permian Resources
Project Name: Whitten SWD ROW
Project Location: 32.411922, -103.402427 32.57508, -103.53642
Sampler Name: Addison Elston
BILL TO: P.O. #: Company: Permian Resources Attn: Matt Taylor Address: City: State: Zip: Phone #: Fax #:
ANALYSIS REQUEST: Chloride, TPH (8015M), BTEX (8021B)

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Relinquished By: [Signature] Date: 3-12-25 Time: 1455
Received By: [Signature] Date: [Blank] Time: [Blank]
Verbal Result: [X] Yes [] No Add'l Phone #:
All Results are emailed. Please provide Email address: pm@etechnv.com
REMARKS: Project #, name + location corrected per customer. See email. Glad Kinyey 3-13-25
Delivered By: (Circle One) Observed Temp. °C -4.7 Corrected Temp. °C -4.4
Sample Condition Cool Intact [X] Yes [] No
CHECKED BY: (Initials) AD
Turnaround Time: Standard [] Rush [X]
Bacteria (only) Sample Condition Cool Intact Observed Temp. °C [] Yes [] No
Thermometer ID #140 Correction Factor -0.6°C to -0.32



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.

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	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	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) 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



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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, 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 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	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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



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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, 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	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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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	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	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	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

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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	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, 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 109 % 44.4-145

Surrogate: 1-Chlorooctadecane 105 % 40.6-153

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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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



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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, SM4500CI-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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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, 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 96.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.0 % 40.6-153

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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, 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 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 96.7 % 40.6-153

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	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) 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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Analytical Results For:

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

Received:	03/14/2025	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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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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	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	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, 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	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	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) 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	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	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, 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	Sampling Date:	03/13/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	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, 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	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, 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 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	Sampling Date:	03/12/2025
Reported:	03/20/2025	Sampling Type:	Soil
Project Name:	WHITTEN SWD ROW	Sampling Condition:	Cool & Intact
Project Number:	21343	Sample Received By:	Tamara Oldaker
Project Location:	PERMIAN 32.57508, -103.53642		

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, SM4500CI-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

Cardinal Laboratories

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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

Company Name: Etech Environmental & Safety Solutions, Inc.
Project Manager: Joel Lowry
Address: 2617 West Marland
City: Hobbs State: NM Zip: 88240
Phone #: (575) 264-9884 Fax #:
Project #: 21343 Project Owner: Permian Resources
Project Name: Whitten SWD ROW
Project Location: 32.57508, -103.53642
Sampler Name: Addison Elston

Table with columns: Lab I.D., Sample I.D., (GRAB OR (C)OMP., # CONTAINERS, MATRIX (GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER), PRESERV. (ACID/BASE, ICE / COOL, OTHER), SAMPLING (DATE, TIME), Chloride, TPH (8015M), BTEX (8021B). Rows 1-10 contain sample data.

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.

Relinquished By: [Signature] Date: 3-14-25 Time: 15:48
Received By: [Signature] Date: [Blank] Time: [Blank]
Verbal Result: [Blank] Yes [Blank] No [Blank] Add'l Phone #: [Blank]
All Results are emailed. Please provide Email address: pm@etechenv.com
REMARKS: [Blank]
Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C = 11.0 Corrected Temp. °C = 10.7
Sample Condition Cool Intact [Blank] Yes [Blank] No [Blank]
CHECKED BY: (Initials) [Signature]
Turnaround Time: Standard [Blank] Rush [X]
Bacteria (only) Sample Condition Cool Intact Observed Temp. °C [Blank] Yes [Blank] No [Blank]
Thermometer ID #140 Correction Factor 0.3°C



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Form containing company information (Etech Environmental & Safety Solutions, Inc.), project details (Whitten SWD ROW), and a table of analysis requests with columns for Lab I.D., Sample I.D., Matrix, Preserv., and Analysis Request (Chloride, TPH, BTEX).

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.

Form for Relinquished By, Received By, Verbal Result, and Sample Condition. Includes fields for Date, Time, and Observed/Corrected Temp. Includes handwritten signatures and dates.

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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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.

[Go Back](#)

OCD Permitting

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

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

Submission Information

Submission ID:	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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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:	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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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:	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		

Foms

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 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.503

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:	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		

Foms

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 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Witten SWD ROW release area (32.575080, -103.530

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:	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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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:	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		

Foms

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 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:	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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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:	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		

Foms

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 east for 1.19 mi, then W for 1.19 mi, then N for 0.06 mi to arrive at the Whitten 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	
<i>Please answer all the questions in this group.</i>	
Site Name	WHITTEN SWD ROW
Date Release Discovered	01/31/2025
Surface Owner	Federal

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: 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.

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 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

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Matthew Taylor Title: Environmental Coordinator Email: matthew.taylor@permianres.com Date: 02/06/2025
--	--

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 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

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 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
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 1000 (ft.)
Any other fresh water well or spring	Between 1/2 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

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	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

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	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

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS, Page 4

Action 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

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Matthew Taylor Title: Environmental Coordinator Email: matthew.taylor@permianres.com Date: 05/02/2025
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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.

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QUESTIONS, Page 5

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

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

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QUESTIONS, Page 6

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

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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Santa Fe, NM 87505**

CONDITIONS

Action 458061

CONDITIONS

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)

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