PARAGON ENVIRONMENTAL

April 4, 2025

NMOCD District 2
Artesia, NM 88210

Bureau of Land Management
Carlsbad Field Office

Re: Proposed Sampling Request
Jones D Tank Battery
API No. 30-015-00192
GPS: Latitude 32.7506142 Longitude -104.3300247
UL "H", Sec. 13, T18S, R26E
Eddy County, NM
NMOCD Ref. No. NMLB1401534243, nRM2008547914

Paragon Environmental, LLC (Paragon) has been contracted by Spur Energy Partners (Spur) to propose a sampling event to the NMOCD. This is an effort to get more clear and concise data in regard to what has taken place by previous contractors to determine what needs to happen to move these incidents to closure. Details of the release are summarized below:

NMLB1401534243 Details			
Type of Release:	Mixed Fluids	**Volume of Release:**	Unknown bbls
		Volume Recovered:	Unknown bbls
Source of Release:	Transmitter malfunction	**Date of Discovery:**	8/29/2013
Was Immediate Notice Given?	No	**If, Yes, to Whom?**	N/A
Was a Watercourse Reached?	No	**If Yes, Volume Impacting Watercourse:**	N/A
Surface Owner:	**Private**	**Mineral Owner:**	
A field inspection by Mike Bratcher of the NMOCD discovered a trench from the water tank. To an open excavation. Talon L contacted to complete the site assessment and collect soil samples.			

nRM2008547914 Release Details			
Type of Release:	Produced Water	**Volume of Release:**	22 bbls
		Volume Recovered:	18 bbls
Source of Release:	Tank	**Date of Release:**	1/10/2020
Was Immediate Notice Given?	No	**If, Yes, to Whom?**	N/A
Was a Watercourse Reached?	No	**If Yes, Volume Impacting Watercourse:**	N/A
Surface Owner:	**Private**	**Mineral Owner:**	
A hole developed in the bottom of the holding tank for oil. This created a spill of approximately 22 bbls on an unlined containment. Approximately 18 bbls were recovered.			

Topo and Wetlands Maps are provided in Figures #2 and #4.

REGULATORY FRAMEWORK & SITE CHARACTERIZATION

Surface impacts from unauthorized releases of fluids or gases are generally regulated by the New Mexico Oil Conservation Division (NMOCD) in accordance with 19.15.29 of the New Mexico Administrative Code (NMAC). 19.15.29 NMAC establishes reporting, site assessment/characterization, remediation, closure, variance, and enforcement procedures. Table I of 19.15.29.12 NMAC determines the closure criteria for soils impacted by a release based on depth to groundwater and the following characteristics:

- Depth to Groundwater in the affected area 26-50'
- Method to determine DTW NM OSE
- Did the release impact groundwater or surface water No

Depth to groundwater information is provided in Appendix A.

What are the minimum distances between the closest lateral extents of the release and the following surface areas:

- A Continuously flowing watercourse or any other significant watercourse- 1000'-1/2 mile
- Any lakebed, sinkhole, or playa lake- 1000'-1/2 mi
- An occupied permanent residence, school, hospital, institution, or church- 1-5 mi
- A spring or a private domestic fresh water well used by less than 5 households for domestic or stock watering purposes- 1-5 mi
- Any other fresh water well or spring- 1-5 mi
- Incorporated municipal boundaries or a defined municipal fresh water well field- 1-5 mi
- A wetland- 1/2-1 mi
- A subsurface mine- >5 mi
- An (non-karst) unstable area- 1/2-1 mi
- Categorize the risk of this well/site being in a karst area geology- Medium
- A 100-year floodplain- Zero feet, underlying, or within the area
- Did the release impact areas not on an exploration, development, production, or storage site- Yes

Groundwater could not be determined within the ½ mile guideline. The closest water data that was found to conform to the OCD guidelines (within 25 years) was from RA 12740 POD 1, which is located 1 mile away, has a depth to water of 86 feet. Since this

location is within a flood zone and near a high karst area, strict standards of Table 19.15.29.12 will be used for the purpose of this incident.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Alluvium (Holocene to upper Pleistocene) (Qa). The soil in this area is comprised of Reeves loam, with 0 to 1 percent slopes, according to the United States Department of Agriculture Natural Resources Conservation Service. The drainage course in this area is well-drained.

The Soil Survey and FEMA Flood Map are provided in Appendix B. A Karst Map is provided in Figure #3.

PROPOSED SAMPLING EVENT

Spur Energy is reviewing the status of this battery and its incoming wells and infrastructure to consider plugging and abandoning this site and the wells or selling these assets off. If they move toward plugging and abandoning these, Spur will fully remediate and reclaim these sites to the standards in Rule 19.15.29.13.

Paragon, in collaboration with Spur Energy, proposes we obtain ten (10) soil samples from within the lined containment. These will be labeled S-1 through S-10. We will be breaching the installed liner in the containment and utilizing a hand auger to obtain these samples. They will be obtained from 0-6" and at 1-foot intervals to a total depth of 10 feet or refusal; our hand augers are limited to this depth's capability. Based on the results, if we are unable to delineate at these depths, we will have to utilize a geoprobe to obtain deeper samples. Based on the layout of the battery, these samples will be limited in the amount we can obtain and will have to serve as representative samples for the battery. Any damages to the existing liner will be repaired based on the damages incurred during this process, either by fusing in new liner or using liner tape and spray-textured epoxy to ensure the liner's integrity stays intact.

We will also use the previous sample locations sampled by Terracon and extend the sample depths to eighteen (18) feet BGS, starting at a depth of 5 feet, where they left off, and obtaining samples at five-foot intervals to a total depth of 18 feet. These samples will be labeled S-11 through S-37. We will obtain samples at 5, 10, 15, and 18 feet utilizing a geoprobe, and bentonite hole plug will be used to backfill these sample holes. The 18-foot depth was a determination based on the previous remediation work performed by Talon, to which it was concluded that they excavated and delineated to 18 feet in these areas. If we find that at 18 feet, we don't have delineation, the sampling will continue. Addressing previously submitted data from Talon in 2014, boreholes were drilled, labeled B-1 and B-2. The B-1 samples extended to a depth of 40 feet BGS, which fully delineated to closure standards and should be considered as representative delineation in this area. For this reason we didn't see the need to sample to this depth again. We are trying to confirm the work performed in 2020, this is the data that has not been completed. These samples will serve as confirmation samples of previous work and to determine if any further remediation steps are needed for these open incidents. See the attached Sample Map in Figure 1. These samples will be collected in accordance with NMAC 19.15.29 and submitted to an approved laboratory for analysis.

This will be our first step in addressing the NMOCD's concerns with this location and the first step in moving toward closure. Upon receiving the results, any issues with samples above the closure criteria will be addressed in any remediation activities needed.

If it is determined that monitoring wells will need to be installed. Spur will request an onsite meeting with the NMOCD to choose the exact well locations.

If you have any questions or need additional information, please get in touch with Chris Jones by phone at (575)631-6977 or email at chris@paragonenvironmental.net

Respectfully,

Chris Jones
Environmental Professional
Paragon Environmental, LLC

Attachments

Figures:
1- Proposed Sample Map
2- Topo Map
3- Karst Map
4- Wetlands Map

Appendices:
Appendix A – Referenced Water Surveys
Appendix B – Soil Survey and FEMA Flood Map

Figures:

1- Sample Map
2- Topo Map
3- Karst Map
4- Wetlands Map

Spur Energy Partners

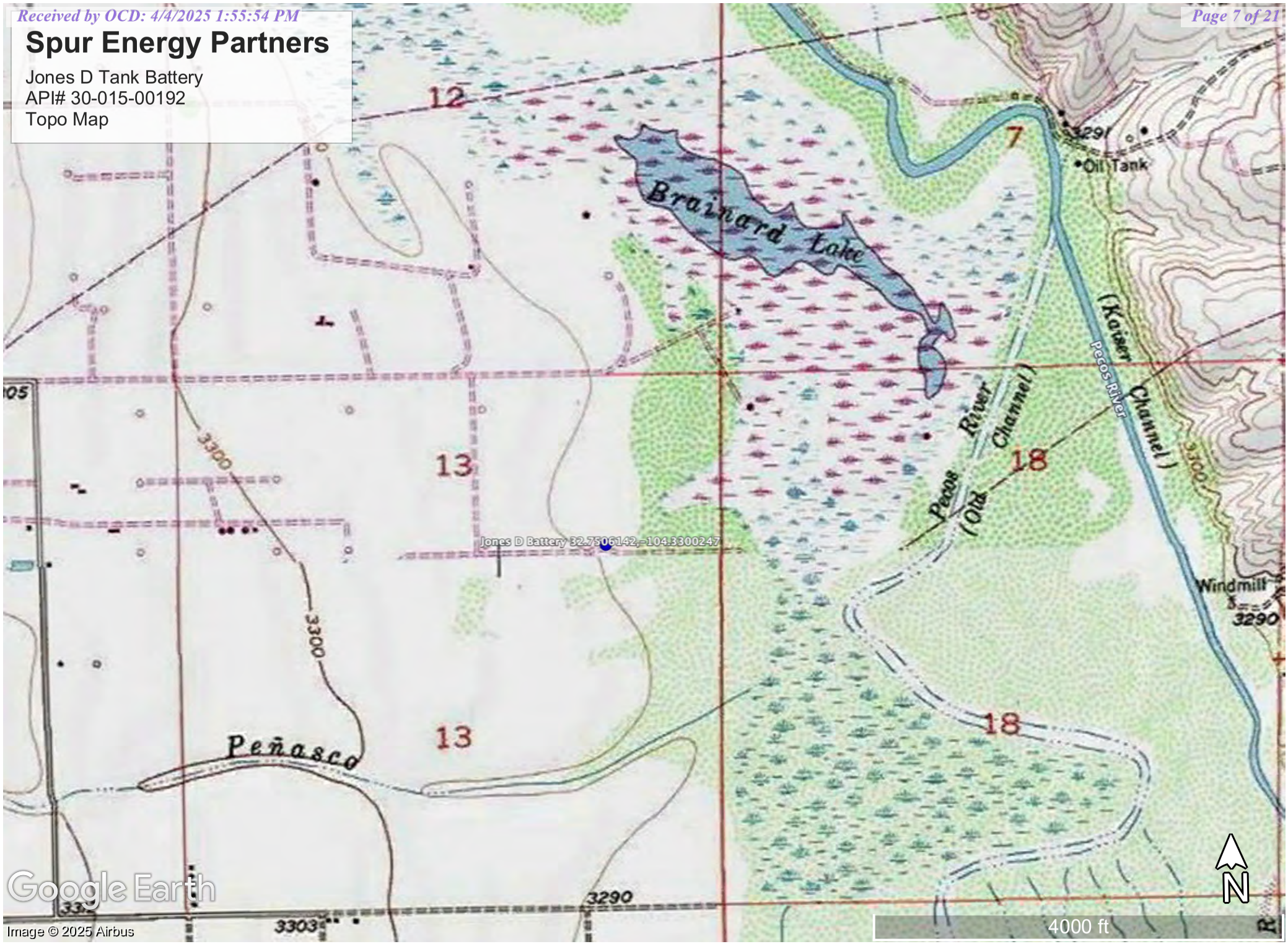
Jones D Tank Battery
API# 30-015-00192
Eddy County, NM
Sampling Map

Legend

- Jones D Battery 32.7506142,-104.3300247
- Previously Remediated Area
- Samples

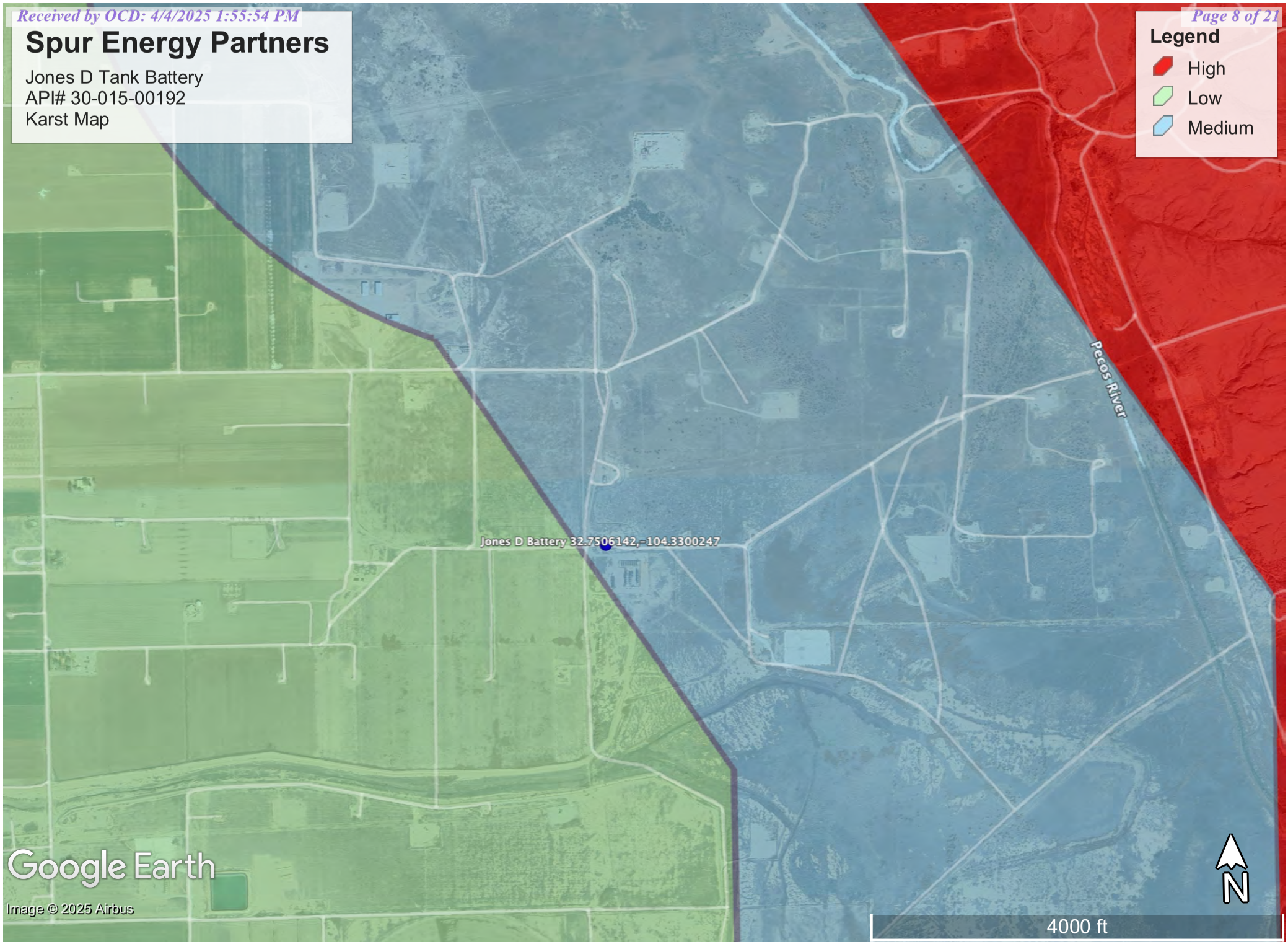
Spur Energy Partners

Jones D Tank Battery
API# 30-015-00192
Topo Map



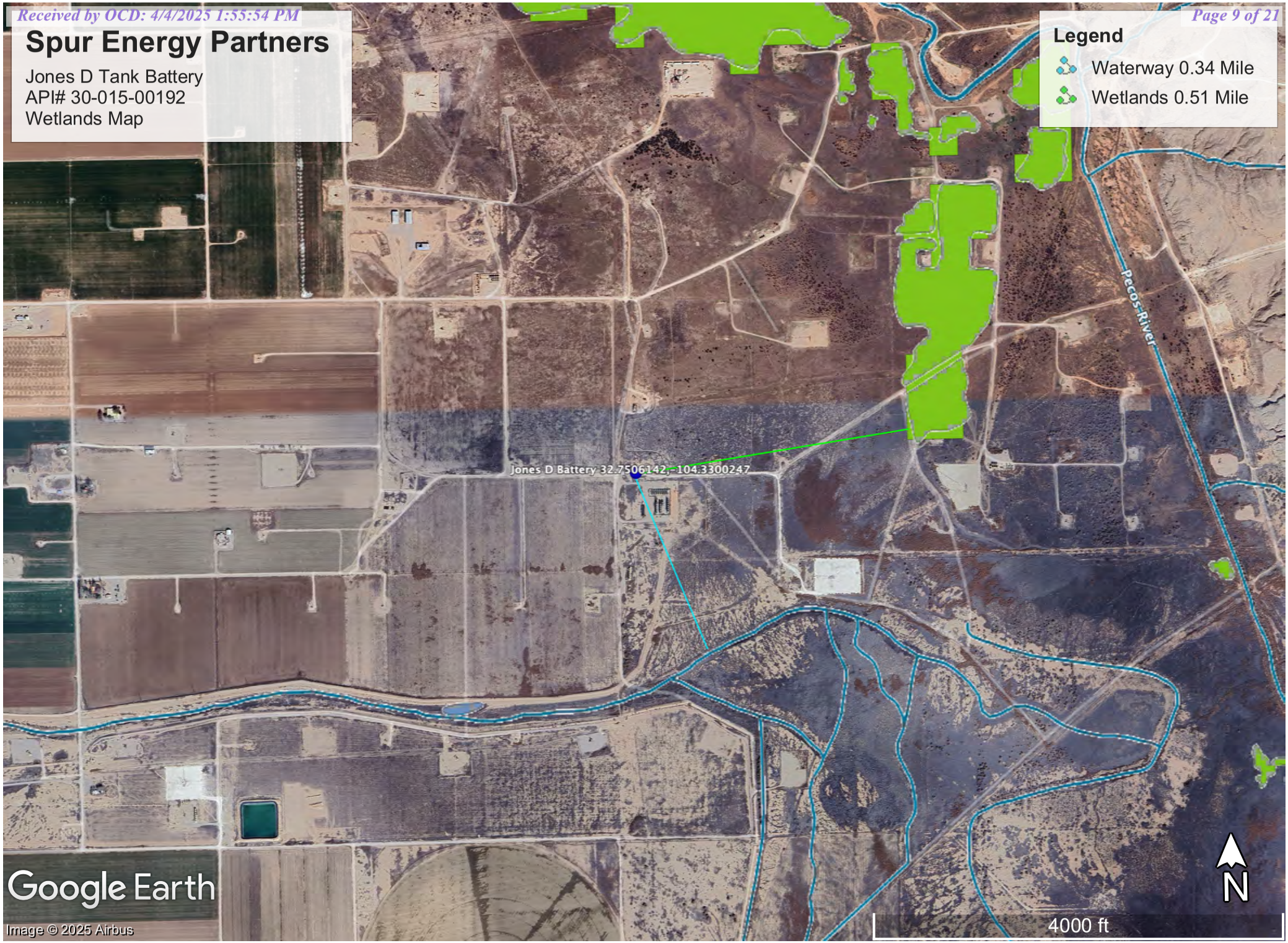
Spur Energy Partners

Jones D Tank Battery
API# 30-015-00192
Karst Map



Spur Energy Partners

Jones D Tank Battery
API# 30-015-00192
Wetlands Map



Appendix A:

Referenced Water Data

New Mexico State of Engineers Office

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced, O=orphaned, C=the file is closed)			(quarters are smallest to largest)						(NAD83 UTM in meters)				(In feet)	(In feet)	(In feet)
POD Number	**Code**	**Sub basin**	**County**	**Q64**	**Q16**	**Q4**	**Sec**	**Tws**	**Range**	**X**	**Y**	**Map**	**Distance**	**Well Depth**	**Depth Water**	**Water Column**
RA 02132 B		RA	ED	NW	NE	NW	24	18S	26E	561958.0	3622611.0 *		1434	166		
RA 03409		RA	ED	NW	SE	NE	24	18S	26E	562763.0	3622210.0 *		1616	175	18	157
RA 12740 POD1		RA	ED	NE	SW	NE	14	18S	26E	560985.2	3623759.9		1737	150	86	64
RA 03600		RA	ED	NE	SW	NE	14	18S	26E	560956.0	3623821.0 *		1765	955		
RA 12483 POD3		RA	ED	NW	SE	SE	14	18S	26E	561120.0	3623003.2		1800	58	47	11
RA 12483 POD2		RA	ED	NW	SE	SE	14	18S	26E	561083.6	3622999.9		1834	62	51	11
RA 12483 POD5		RA	ED	NW	SE	SE	14	18S	26E	561125.7	3622920.1		1834	59	53	6
RA 12483 POD1		RA	ED	NW	SE	SE	14	18S	26E	561070.5	3623006.0		1843	72	55	17
RA 12483 POD4		RA	ED	NW	SE	SE	14	18S	26E	561086.4	3622959.9		1849	60	48	12
RA 03585		RA	ED	SE	NW	SE	14	18S	26E	560955.0	3623216.0 *		1868	1849		
RA 04298		RA	ED		NW	NE	19	18S	27E	564082.0	3622523.0 *		1883	92		
RA 03596		RA	ED		SW	SE	11	18S	26E	560858.0	3624531.0 *		1992	1736		
RA 03900		RA	ED	NW	SW	NW	24	18S	26E	561557.0	3622206.0 *		1994	845	90	755

Average Depth to Water: **56 feet**

Minimum Depth: **18 feet**

Maximum Depth: **90 feet**

Record Count: 13

Basin/County Search:
County: ED

UTM Filters (in meters):
Easting: 562721.149
Northing: 3623825.870
Radius: 2000

*** UTM location was derived from PLSS - see Help**

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
	RA 03409	NW	SE	NE	24	18S	26E	562763.0	3622210.0 *	

*** UTM location was derived from PLSS - see Help**

Driller License:	28	**Driller Company:**	SMITH, A.F.		
Driller Name:	SMITH, A.F.VERNON A.VIN				
Drill Start Date:	1956-02-13	**Drill Finish Date:**	1956-02-21	**Plug Date:**	
Log File Date:	1956-02-27	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	175	**Depth Water:**	18

Water Bearing Stratifications:

Top	Bottom	Description
105	175	Shallow Alluvium/Basin Fill

Casing Perforations:

Top	Bottom
85	162

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
22270	RA 12740 POD1	NE	SW	NE	14	18S	26E	560985.2	3623759.9	

*** UTM location was derived from PLSS - see Help**

Driller License:	1400	**Driller Company:**	SOUTHEAST DRILLING COMPANY		
Driller Name:	MARK HAMMOND				
Drill Start Date:	2019-07-02	**Drill Finish Date:**	2019-07-14	**Plug Date:**	
Log File Date:	2019-08-21	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	80
Casing Size:	6.00	**Depth Well:**	150	**Depth Water:**	86

Water Bearing Stratifications:

Top	Bottom	Description
86	104	Sandstone/Gravel/Conglomerate
130	142	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
70	150

Appendix B:

Soil Survey

U.S.D.A.

FEMA Flood Map

Eddy Area, New Mexico

Rl—Reeves loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 1w5p
Elevation: 1,250 to 4,800 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 120 to 225 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Reeves and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves

Setting

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Typical profile

Ap - 0 to 8 inches: loam
H2 - 8 to 32 inches: clay loam
H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 80 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Minor Components

Karro

Percent of map unit: 1 percent
Ecological site: R070BC030NM - Limy
Hydric soil rating: No

Cottonwood

Percent of map unit: 1 percent
Ecological site: R070BB006NM - Gyp Upland
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, Sep 3, 2024

National Flood Hazard Layer FIRMette

FEMA

104°20'7"W 32°45'17"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

104°19'29"W 32°44'47"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/3/2025 at 8:13 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

From: Hall, Brittany, EMNRD
To: Katherine Purvis
Cc: Braidy Moulder; Chris Jones
Subject: RE: [EXTERNAL] Jones D Sampling Plan, revised
Date: Friday, April 4, 2025 1:48:00 PM
Attachments: image001.png

Kathy,

The Jones D Sampling Plan is approved with the following conditions:

- The site must be delineated to the most stringent closure criteria found on Table I of 19.15.29 NMAC. If delineation is not achieved at the depths or the proposed locations found on the Sampling Map, deeper samples than what is proposed and additional horizontal delineation samples must be collected until full horizontal and vertical delineation is achieved.
- All samples collected must be analyzed for all constituents found on Table I of 19.15.29 NMAC.
- If contamination above the most stringent closure criteria is found during the sampling event, an accurate and complete remediation plan must be submitted to OCD via the online permitting website.
- Be advised that OCD does not have any record of an 18 feet deep excavation or delineation that took place in 2020. Additional delineation past the depth of 18 feet may still be warranted if sample results show contamination has not been delineated deeper than 18 feet.
- A C-141N (Sampling Notification) must be submitted at least two business days prior to collecting any samples that will be used as final/confirmation samples.
- If it is determined that no remediation is required at the site, a complete and accurate remediation closure report pursuant to 19.15.29 NMAC must be submitted to OCD via the online permitting website. The closure report must be a comprehensive report that includes all delineation and remediation activities, photos, scaled site maps, and all laboratory analytical data. Ensure that a remediation closure report includes a description of all remediation activities, including any activities that were not reported to OCD, and previously performed activities that were rejected by the OCD (the activities performed by Terracon); all analytical data including analytical data gathered from this sampling event and previously reported analytical data that were rejected by the OCD.
- If groundwater is encountered during boring/hand augering activities, immediate notification must be given to the OCD. Notification must be sent to OCD.Enviro@emnrd.nm.gov.
- If groundwater is encountered during boring/hand augering activities, a sample must be collected and analyzed for BTEX, total dissolved solids (TDS), and chloride.

- A complete and accurate report must be submitted to the OCD via the online permitting website by July 11, 2025.

The acceptance of this sampling plan 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 sampling plan does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

A copy of this email correspondence and the sampling report will be uploaded to the incident file.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ under "2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS".

The Digital C-141 guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Katherine Purvis <katherine.purvis@spurenergy.com>
Sent: Friday, April 4, 2025 9:01 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Braidy Moulder <bmoulder@spurenergy.com>; Chris Jones <chris@paragonenvironmental.net>
Subject: [EXTERNAL] Jones D Sampling Plan, revised

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Brittany-
AT your earliest convenience, please review the attached proposed sampling plan. We believe Chris has properly addressed the concerns outlined in the marked-up plan from yesterday. If all concerns have been addressed and you are in agreement with the proposed plan, we can forego this afternoon's meeting. However, if you have any additional questions or concerns, please let me know and we can address them in the 1:30 call. We look forward to your response.

Kathy Purvis
EHS Coordinator
(575) 441-8619

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Operator:	OGRID:
Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	328947
	Action Number: 448907
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	Sampling plan conditionally approved.	4/4/2025
bhall	The site must be delineated to the most stringent closure criteria found on Table I of 19.15.29 NMAC. If delineation is not achieved at the depths or the proposed locations found on the Sampling Map, deeper samples than what is proposed and additional horizontal delineation samples must be collected until full horizontal and vertical delineation is achieved.	4/4/2025
bhall	All samples collected must be analyzed for all constituents found on Table I of 19.15.29 NMAC.	4/4/2025
bhall	If contamination above the most stringent closure criteria is found during the sampling event, an accurate and complete remediation plan must be submitted to OCD via the online permitting website.	4/4/2025
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bhall	A complete and accurate report must be submitted to the OCD via the online permitting website by July 11, 2025.	4/4/2025