

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							
	Mixed Fluids	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 Licontacted 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 Impact	ting 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,



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

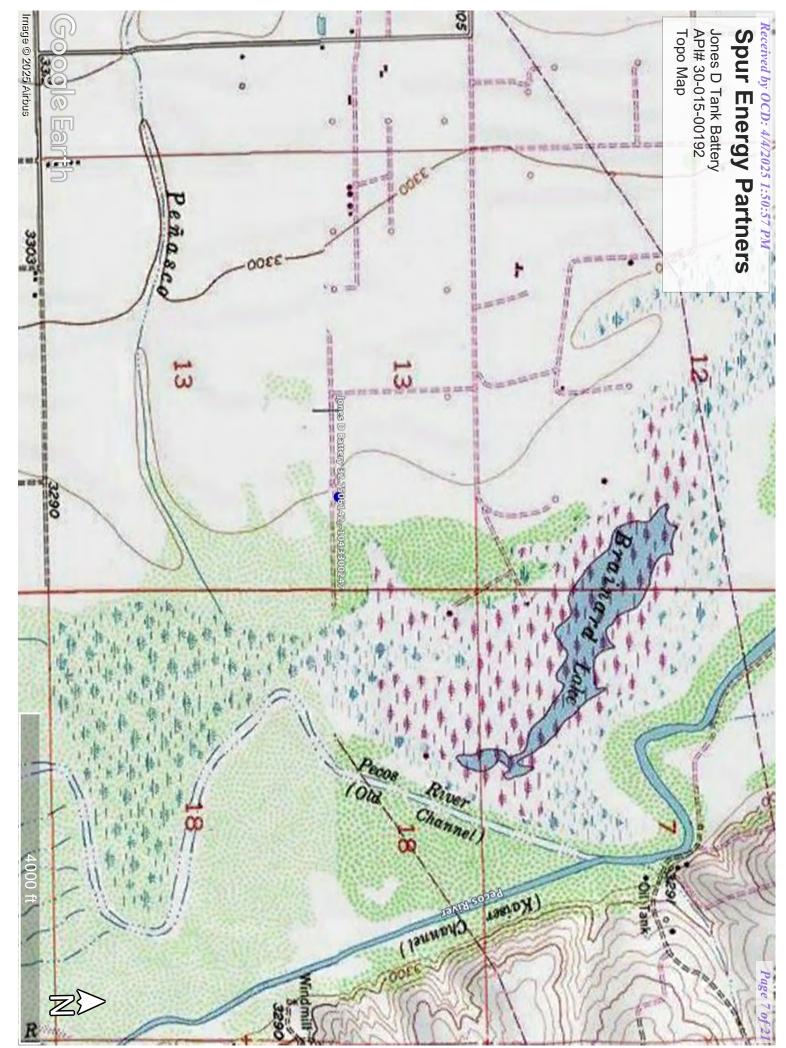
Appendix B – Soil Survey and FEMA Flood Map

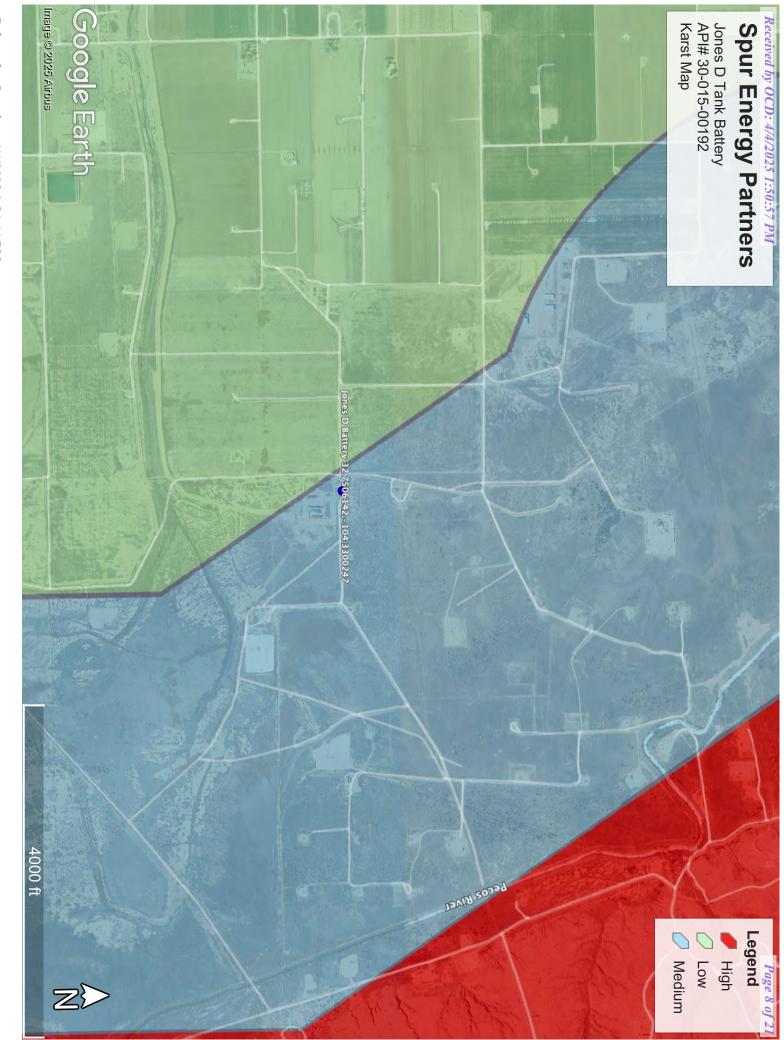


Figures:

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











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)			(quarte to large	rs are sm st)	allest				(NAD83 UTM	1 in meters)			(In feet)	(In feet)	(In feet)
POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Υ	Мар	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**

Water Column/Average Depth to Water

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

reliability, usability, or suitability for any particular purpose of the data.

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,

3/3/25 1:16 PM MST

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	Υ	Мар
	RA 03409	NW	SE	NE	24	185	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:

Тор	Bottom	Description
105	175	Shallow Alluvium/Basin Fill

Casing Perforations:

Тор	Bottom
85	162

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.

3/3/25 1:18 PM MST Point of Diversion Summary

Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE quarters are smallest to largest

NAD83 UTM in meters

Page 13 of 21

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Υ	Мар
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 HAMM	ARK 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:

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

Casing Perforations:

Тор	Bottom
70	150

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.

3/3/25 1:19 PM MST Point of Diversion Summary



Appendix B:

Soil Survey

U.S.D.A.

FEMA Flood Map

Eddy Area, New Mexico

RI—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

104°20'7"W 32°45'17"N



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

SPECIAL FLOOD HAZARD AREAS

Regulatory Floodway

With BFE or Depth Zone AE, AO, AH, VE, AR Without Base Flood Elevation (BFE)

areas of less than one square mile Zone X

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average

depth less than one foot or with drainage

Area with Reduced Flood Risk due to Chance Flood Hazard Zone X **Future Conditions 1% Annual**

Levee. See Notes. Zone X

Area with Flood Risk due to Levee Zone D

NO SCREEN Area of Minimal Flood Hazard Zone X

Area of Undetermined Flood Hazard Zone D

STRUCTURES | 1111111 Levee, Dike, or Floodwall GENERAL | - -- - Channel, Culvert, or Storm Sewer

Water Surface Elevation Cross Sections with 1% Annual Chance

ന്നു Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect

--- Coastal Transect Baseline Profile Baseline

Hydrographic Feature

FEATURES

OTHER

No Digital Data Available Digital Data Available

Unmapped



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

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

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

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



1,500

1:6,000

104°19'29"W 32°44'47"N

Basemap Imagery Source: USGS National Map 2023

From: Hall, Brittany, EMNRD

To: Katherine Purvis

Cc: <u>Braidy Moulder</u>; <u>Chris Jones</u>

Subject: RE: [EXTERNAL] Jones D Sampling Plan, revised

Date: Friday, April 4, 2025 1:48:00 PM

Attachments: <u>image001.png</u>

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/

<u>Effective 12/1/2024</u>: 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-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

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



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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

CONDITIONS

Action 448904

CONDITIONS

Operator:	OGRID:
Spur Energy Partners LLC	328947
9655 Katy Freeway	Action Number:
Houston, TX 77024	448904
	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
bhall	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.	4/4/2025
bhall	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.	4/4/2025
bhall	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.	4/4/2025
bhall	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.	4/4/2025
bhall	If groundwater is encountered during boring/hand augering activities, a sample must be collected and analyzed for BTEX, total dissolved solids (TDS), and chloride.	4/4/2025
bhall	A complete and accurate report must be submitted to the OCD via the online permitting website by July 11, 2025.	4/4/2025