# LINER INSPECTION AND CLOSURE REPORT REPORTABLE RELEASE

# **Spur Energy Partners**

Falabella 31 Fee 1H Battery Incident ID: nAPP2307231629 Eddy County, NM

Prepared by:



Paragon Environmental LLC 1601 N. TURNER ST. STE.500 Hobbs, NM 88240 575-631-6977

#### **GENERAL DETAILS**

This report was prepared by Paragon Environmental LLC (Paragon) in response to the release for Spur Energy Partners (Spur) at the **Fallabella 31 Fee 1H Battery (Fallabella)**.

API #: 30-015-40814

Site Coordinates: Latitude: 32.69764 Longitude: -104.42861

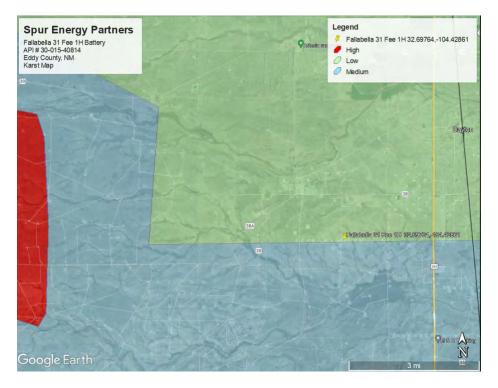
Unit UL M, Section 31, Township 18S, Range 26E

Incident ID: nAPP2307231629

#### **REGULATORY FRAMEWORK**

<u>Depth to Groundwater</u>: According to the New Mexico State of Engineers Office, the nearest water data is more than 1/2 mile away. See Appendix A for details.

<u>Soil Survey:</u> Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Piedmont alluvial deposits (Holocene to lower Pleistocene)—Includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include uppermost Pliocene deposits (QP). According to the United States Department of Agriculture Natural Resources Conservation Service soil survey, the soil in this area comprises the Atoka Loam, with 0 to 3 percent slopes, and the Upton Gravelly Loam, with 0 to 9 percent slopes. The drainage courses in this area are well-drained. The karst geology in the area of the Stonewall is in Medium Karst. See the map below.



#### **RELEASE DETAILS**

This release was due to corrosion of the joint on the FWKO . This resulted in the release of 6 bbls of produced water and 7 bbls of crude oil into the Falcon Lined Containment. A vacuum truck was dispatched and recovered 12 bbls of the fluids.

**Date of Spill:** 03/10/2023

**Comments:** Reportable release.

Released: 6 bbls of Produced Water

7 bbls of Crude Oil

Recovered: 6 bbls of Produced Water

6 bbls of Crude Oil

#### **INITIAL SITE ASSESSMENT**

On March 23, 2023, Paragon went to the Falabella and conducted an initial assessment. There was obvious staining on the liner from the spill. There were no signs outside the containment that the liner had been breached. Therefore, no samples were taken.

#### **REMEDIATION ACTIVITIES**

On March 24, 2023, Paragon returned to the site with equipment and personnel to conduct cleanup activities. We initially sprayed the affected area with a degreaser. We then power washed and squeegeed the runoff to where the vacuum truck could capture the fluids.

On April 10, 2023, Paragon returned to the site to conduct a liner inspection. A 48-hour notification was sent out to the NMOCD on April 5, 2023. The inspection concluded that the liner was intact and in good condition. The integrity of the liner appears to have the ability to contain spills. See Appendix D for the email notification and liner report.

#### **CLOSURE REQUEST**

After careful review, Paragon requests that the incident, nAPP2307231629, be closed. Spur has complied with the applicable closure requirements. If you have any questions or need additional information, please contact Tristan Jones at 575-318-6841 or <a href="mailto:tristan@paragonenvironmental.net">tristan@paragonenvironmental.net</a>.

Respectfully,
Tristan Jones
Project Coordinator

Paragon Environmental LLC

Chris Jones
Environmental Professional
Paragon Environmental LLC

### **Attachments**

#### Figures:

- 1- Site Map
- 2- Topo Map
- 3- Aerial Map

#### Appendices:

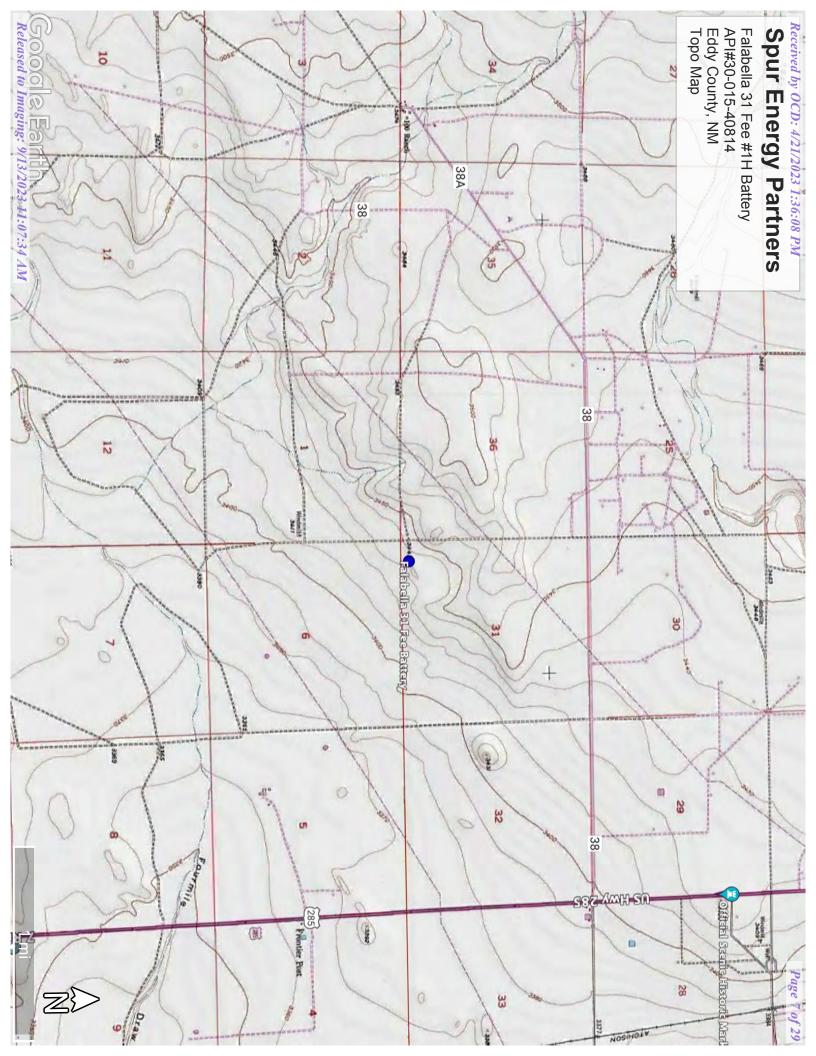
- Appendix A- Referenced Water Data
- Appendix B- Soil Survey & FEMA Flood Map
- Appendix C- C-141
- Appendix D- Email Notification, Liner Inspection, and Photographic Documentation

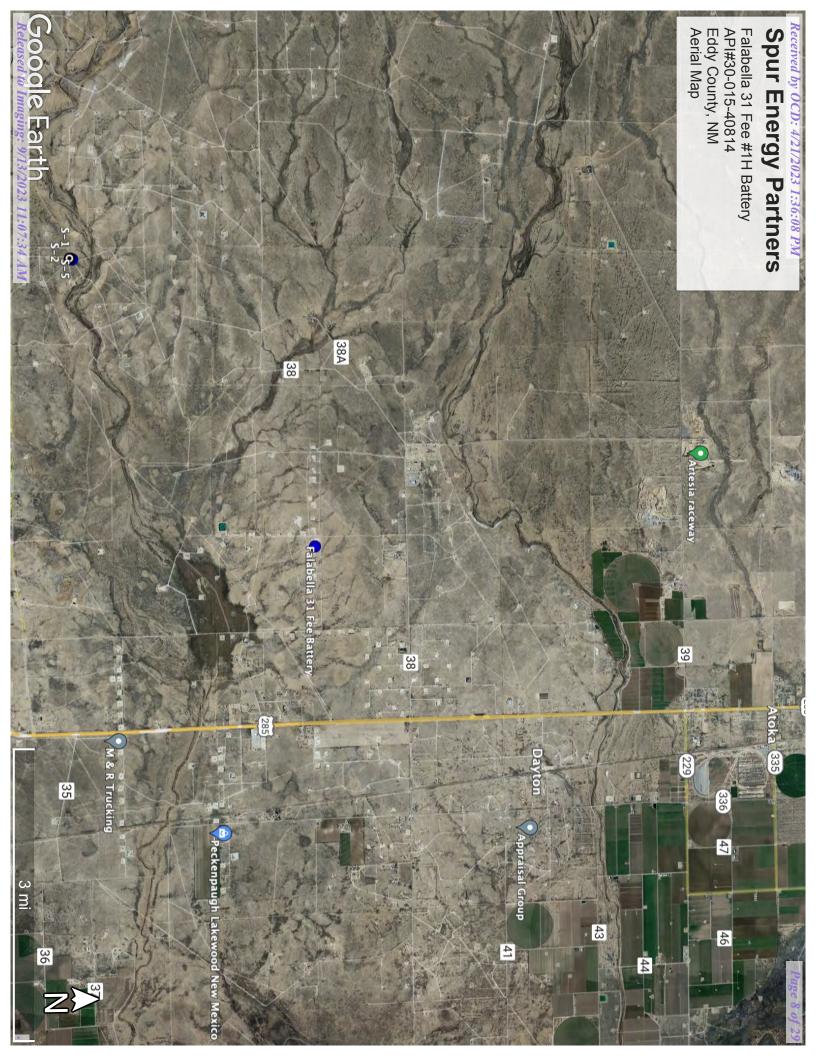


# Figures:

- 1-Site Map
- 2- Topo Map
- 3- Aerial Map









# Appendix A Referenced Water Data:

New Mexico State of Engineers Office



# New Mexico Office of the State Engineer

# 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)

Code

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Sub-

Sub- Q Q Q basin County 64 16 4 Sec Tws Rng

4 2 1 31 18S 26E

Q Q
16 4 Sec Tws Rng X Y DistanceDept

554138 3619158\*

**Radius: 1600** 

Water DistanceDepthWellDepthWater Column 1349 222 80 142

Average Depth to Water:

80 feet

Minimum Depth:

80 feet

Maximum Depth:

80 feet

Record Count: 1

**POD Number** 

RA 08999

**UTMNAD83 Radius Search (in meters):** 

**Easting (X):** 553641.501 **Northing (Y):** 3617903.439

\*UTM location was derived from PLSS - see Help

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.

4/4/23 10:59 AM

WATER COLUMN/ AVERAGE DEPTH TO



Appendix B Soil Survey:

U.S.D.A.

FEMA Flood Map

## **Eddy Area, New Mexico**

### At—Atoka loam, 1 to 3 percent slopes

#### **Map Unit Setting**

National map unit symbol: 1w41 Elevation: 1,100 to 4,300 feet

Mean annual precipitation: 7 to 14 inches
Mean annual air temperature: 60 to 70 degrees F

Frost-free period: 200 to 240 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Atoka and similar soils: 98 percent Minor components: 2 percent

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

#### **Description of Atoka**

#### Setting

Landform: Plains

Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Linear Parent material: Mixed alluvium

#### **Typical profile**

H1 - 0 to 8 inches: loam
H2 - 8 to 33 inches: loam
H3 - 33 to 37 inches: indurated

#### Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 40 inches to petrocalcic

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: 15 percent

Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0

mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Moderate (about 6.4

inches)

#### Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 7e



Hydrologic Soil Group: C

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

#### **Minor Components**

#### **Atoka**

Percent of map unit: 1 percent Ecological site: R070BC007NM - Loamy Hydric soil rating: No

#### Upton

Percent of map unit: 1 percent

Ecological site: R070BC025NM - Shallow

Hydric soil rating: No

# **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 18, Sep 8, 2022

## **Eddy Area, New Mexico**

### Uo—Upton gravelly loam, 0 to 9 percent slopes

#### **Map Unit Setting**

National map unit symbol: 1w67 Elevation: 1,100 to 4,400 feet

Mean annual precipitation: 7 to 15 inches

Mean annual air temperature: 60 to 70 degrees F

Frost-free period: 200 to 240 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

*Upton and similar soils:* 96 percent *Minor components:* 4 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### **Description of Upton**

#### Setting

Landform: Ridges, fans

Landform position (three-dimensional): Side slope, rise

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Residuum weathered from limestone

#### **Typical profile**

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented

H4 - 21 to 60 inches: very gravelly loam

#### **Properties and qualities**

Slope: 0 to 9 percent

Depth to restrictive feature: 7 to 20 inches to petrocalcic

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Low to

moderately high (0.01 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 75 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0

mmhos/cm)

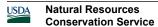
Sodium adsorption ratio, maximum: 1.0

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

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s



Hydrologic Soil Group: D

Ecological site: R070BC025NM - Shallow

Hydric soil rating: No

#### **Minor Components**

#### **Atoka**

Percent of map unit: 1 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

#### **Atoka**

Percent of map unit: 1 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

#### Upton

Percent of map unit: 1 percent

Ecological site: R070BC025NM - Shallow

Hydric soil rating: No

#### Reagan

Percent of map unit: 1 percent

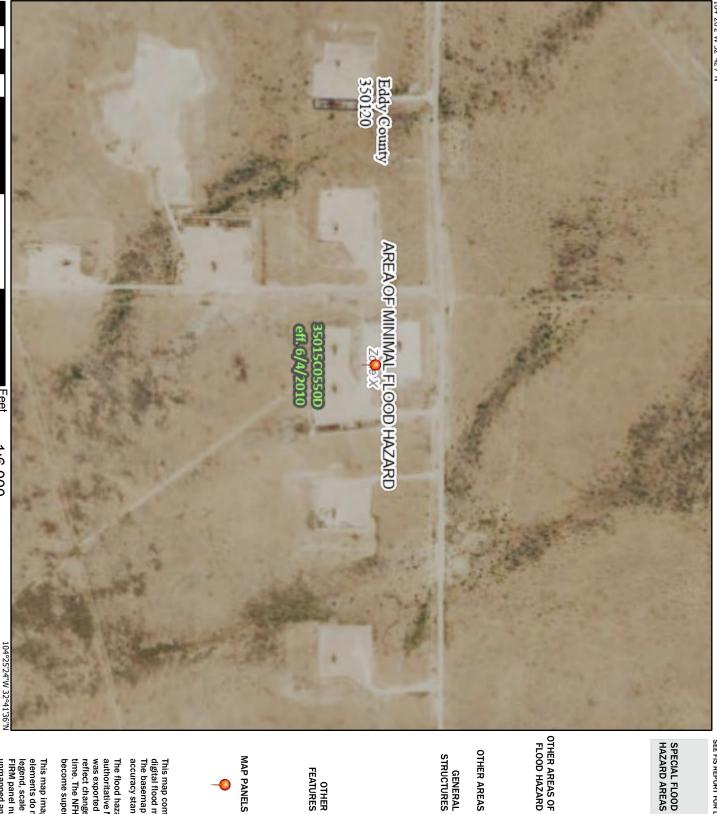
Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

# **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 18, Sep 8, 2022





# Legend

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

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

Zone A, V, A99



0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average areas of less than one square mile Zone X depth less than one foot or with drainage



**Future Conditions 1% Annual** 



Levee. See Notes. Zone X Area with Reduced Flood Risk due to Chance Flood Hazard Zone X



Area with Flood Risk due to Levee Zone D



Effective LOMRs

Area of Undetermined Flood Hazard Zone D

OTHER AREAS

GENERAL ---- Channel, Culvert, or Storm Sewer



Water Surface Elevation Cross Sections with 1% Annual Chance

Coastal Transect

~~ ത്യാം Base Flood Elevation Line (BFE) Limit of Study

 Coastal Transect Baseline Jurisdiction Boundary

Hydrographic Feature Profile Baseline

**FEATURES** 

OTHER



Unmapped

MAP PANELS



Digital Data Available



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

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

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 was exported on 4/4/2023 at 1:01 PM and does not authoritative NFHL web services provided by FEMA. This map 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



Appendix C:

C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible	Party			OGRID		
Contact Name			Contact	Contact Telephone		
Contact email			Inciden	Incident # (assigned by OCD)		
Contact mail	ing address			<b>'</b>		
					~	
			Location	of Release	Source	
Latitude				Longitud	e	
			(NAD 83 in dec	cimal degrees to 5 de	ecimal places)	
Site Name				Site Typ	e	
Date Release	Discovered			API# (if	applicable)	
Unit Letter	Section	Township	Range	Co	ounty	
Ont Letter	Section	Township	Runge		, unity	-
						_
Surface Owner	r: State	☐ Federal ☐ Tr	ribal Private (I	Name:		)
			Nature and	d Volume o	f Release	
Crude Oil		l(s) Released (Select al Volume Release		calculations or spec	Volume Reco	e volumes provided below) overed (bbls)
Produced	Water	Volume Release	` ,		Volume Reco	• • •
			ion of dissolved c	chloride in the	Yes N	,
		produced water				
Condensa	te	Volume Release	d (bbls)		Volume Reco	overed (bbls)
☐ Natural Gas Volume Released (Mcf)			Volume Reco	overed (Mcf)		
Other (describe) Volume/Weight Released (provide units)		e units)	Volume/Wei	ght Recovered (provide units)		
Cause of Rele	ease					

Received by OCD: 4/21/2023 1:36:08 PM Form C-141 State of New Mexico Page 2 Oil Conservation Division

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Incident ID	
District RP	
Facility ID	
A1' ID	

Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?		
☐ Yes ☐ No		
If YES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	Initial Ro	esponse
The responsible p	party must undertake the following actions immediatel	y unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
☐ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
☐ All free liquids and re	ecoverable materials have been removed and	l managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain	vhy:
	-	
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
		best of my knowledge and understand that pursuant to OCD rules and
regulations all operators are public health or the environment	required to report and/or file certain release noti nent. The acceptance of a C-141 report by the C	Exactions and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In
addition, OCD acceptance of and/or regulations.	f a C-141 report does not relieve the operator of	responsibility for compliance with any other federal, state, or local laws
Printed Name:		Title:
Signature: <u>Katherin</u>	re Purvis	Date:
email:		Telephone:
OCD Only		
Received by:Jocely	yn Harimon	Date: 03/13/2023

### State of New Mexico Oil Conservation Division

Form C-141

Incident ID	NAPP2307231629
District RP	
Facility ID	
Application ID	

# **Site Assessment/Characterization**

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?	80(ft bgs)			
Did this release impact groundwater or surface water?				
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?				
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?				
Are the lateral extents of the release within 300 feet of a wetland?				
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No			
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No			
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ⊠ No			
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.				
Characterization Report Checklist: Each of the following items must be included in the report.				
<ul> <li>Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li> <li>Field data</li> <li>Data table of soil contaminant concentration data</li> <li>Depth to water determination</li> <li>Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>Boring or excavation logs</li> <li>Photographs including date and GIS information</li> <li>Topographic/Aerial maps</li> <li>Laboratory data including chain of custody</li> </ul>				

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan

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and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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.			
Printed Name: Kathy Purvis.	Title: HSE Coordinator		
Signature: <u>Katherine Purvis</u>	Date: 04/21/2023		
email: <u>katherine.purvis@spurenergy.com</u>	Telephone: 575-441-8619		
OCD Only			
Received by:	Date: 04/21/2023		

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Application ID	

# **Closure**

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.			
□ A scaled site and sampling diagram as described in 19.15.29.11 NMAC			
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)			
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)			
☐ Description of remediation activities			
	ediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ons. The responsible party acknowledges they must substantially ditions that existed prior to the release or their final land use in		
email: <u>katherine.purvis@spurenergy.com</u>	Telephone: 575-441-8619		
OCD Only			
Received by:Jocelyn Harimon	Date:04/21/2023		
	f liability should their operations have failed to adequately investigate and ater, human health, or the environment nor does not relieve the responsible regulations.		
Closure Approved by: Shelly Wells	Date: <u>9/13/2023</u>		
Printed Name: Shelly Wells	Title: Environmental Specialist-Advanced		



Appendix D:

**Email Notification** 

Liner Inspection

Photographic Documentation



#### Tristan Jones <tristan@paragonenvironmental.net>

## **Liner Inspection Notification 4/10/23**

1 message

Tristan Jones <tristan@paragonenvironmental.net>

Wed, Apr 5, 2023 at 11:49 AM

To: mike.bratcher@state.nm.us, Jennifer.Nobui@state.nm.us, Robert.Hamlet@state.nm.us, Chris Jones <chris@paragonenvironmental.net>, katherine.purvis@spurenergy.com, bmoulder@spurenergy.com, Angel Pena <angel@paragonenvironmental.net>

Cc: Jeremy Maner < jeremy@paragonenvironmental.net>

All,

This is to inform you that Paragon will conduct liner inspections on behalf of Spur Energy Partners on the date of 4/10/23. We will begin these inspections at 9:00 AM and will be going in the following order. Feel free to call me so we can coordinate with you if you'd like to join us. We are re-doing these liner inspections due to seeing previous closures not being accepted from not having time-stamped pictures. We will be sure to have time-stamped pictures to match the referenced date to ensure closure.

Bradley 8 Fee 2H - nAPP2215750109 Stonewall 9 Fee 1H - nAPP2305834071 Falabella 31 Fee 1H Battery - nAPP2307231629 Halberd 27 St Com 1H Battery - nAPP2236235169 Halberd 27 St Com 3H Battery - nAPP2301731619

Thank you,

Tristan Jones
Project Coordinator
1601 N. Turner Ste. 500
Hobbs, NM 88240
tristan@paragonenvironmental.net
575-318-6841





# Paragon Environmental LLC

# **Liner Inspection Form**

ompany Name:	Stu	2		
Site:	Falabella 31 FEE #14			
Lat/Long:	32.69764, -104.42861			
NMOCD Incident ID & Incident Date:	nAPF	2307	1231629	
2-Day Notification Sent:	yes			
Inspection Date:	(	04/10	2023	
Liner Type: E	arthen	w/liner	Earthen no liner	Polystar
S	teel w/j	poly line	Steel w/spray epoxy	No Liner
	teel w/j	No No	Steel w/spray epoxy  Comments	No Liner
Other:				No Liner
Other:  Visualization  Is there a tear in the				No Liner
Visualization  Is there a tear in the liner?  Are there holes in the				No Liner
Visualization  Is there a tear in the liner?  Are there holes in the liner?  Is the liner retaining			Comments	No Liner
Other:  Visualization  Is there a tear in the liner?  Are there holes in the liner?  Is the liner retaining any fluids?  Does the liner have integrity to contain a			Comments	No Liner



# Photographic Documentation

# Before Remediation









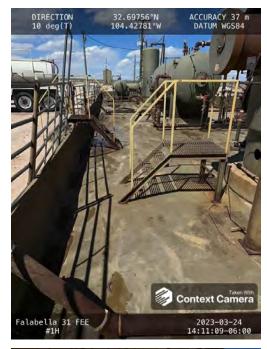


# Photographic Documentation

# Post Cleaning











## Photographic Documentation Liner Inspection









District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 209770

#### **CONDITIONS**

Operator:	OGRID:
Spur Energy Partners LLC	328947
9655 Katy Freeway	Action Number:
Houston, TX 77024	209770
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
scwells	None	9/13/2023