

Well Name: FEDERAL 28	Well Location: T25N / R9W / SEC 28 / NWSW / 36.36896 / -107.80042	County or Parish/State: SAN JUAN / NM
Well Number: 2E	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078309	Unit or CA Name:	Unit or CA Number:
US Well Number: 300452620500C1	Well Status: Producing Gas Well	Operator: EPIC ENERGY LLC

Notice of Intent

Sundry ID: 2506809

Type of Submission: Notice of Intent	Type of Action: Plug and Abandonment
Date Sundry Submitted: 07/08/2021	Time Sundry Submitted: 02:35
Date proposed operation will begin: 07/09/2021	

Procedure Description: Please find attached P&A procedure and reclamation plan

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

PA\_Federal\_28E\_20210708143349.pdf

Received by OCD: 11/4/2021 11:43:26 AM

Page 2 of 29

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Conditions of Approval

Additional Reviews

2506809\_NOIA\_Fed\_28\_2E\_3004526205\_KR\_11042021\_20211104110836.pdf  
General\_Requirement\_PxA\_20211104110823.pdf  
25N09W28LKd\_Federal\_28\_2E\_20211104102448.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: VANESSA FIELDS	Signed on: JUL 08, 2021 02:33 PM
Name: EPIC ENERGY LLC	
Title: Regulatory Manager	
Street Address: 7415 EAST MAIN STREET	
City: FARMINGTON	State: NM
Phone: (505) 327-4892	
Email address: VANESSA@WALSHENG.NET	

Field Representative

Representative Name: VANESSA FIELDS	
Street Address: 7415 EAST MAIN STREET	
City: FARMINGTON	State: NM
Phone: (150)578-7910	Zip: 87402
Email address: vanessa@walsheng.net	

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5055647742	BLM POC Email Address: krennick@blm.gov
Disposition: Approved	Disposition Date: 11/04/2021
Signature: Kenneth Rennick	

**P&A Procedure****EPIC Energy – Federal 28 2E**

API: 30-045-26205

1490' FSL &amp; 790' FWL, Section 20, T25N, R9W

San Juan County, New Mexico

**Plug & Abandonment Procedure:**

Note: All cement volumes use 100% excess outside casing and 50' excess inside pipe. Stabilizing wellbore fluid will be 8.33 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Class G neat 1.15 ft<sup>3</sup>/sk or equivalent. Cement calculations based on 4-1/2" 10.5# casing. Circulated cement on all stages of the primary casing cement job. If casing pressure tests tagging plugs will not be required. Chacra not productive in the area so no plug was planned.

1. **Plug #1, 6288' – 6412' (Dakota Top: 6380; DK Perfs: 6388'-6412')**: TIH & set 4-1/2" CICR at 6338'. Pressure test tubing to 1000 psi. Mix & pump 15 sx (17.3 cf) of Class G cement (or equivalent). Sting out of CICR, leaving a minimum of 50' of cement on top of retainer. Reverse circulate to clean out tubing.
2. **Plug #2, 5243' – 5634' (Gallup Top: 5343')**: TIH & set 4-1/2" CICR at 5293'. Pressure test tubing to 1000 psi. Mix & pump 31 sx (35.7 cf) of Class G cement (or equivalent). Sting out of CICR, leaving a minimum of 50' of cement on top of retainer to cover Gallup formation top. Reverse circulate to clean out tubing.
3. **Plug #3, 4502' – 4652' (Mancos Top: 4602')**: Mix and spot 12 sx (13.8 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC, TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.
4. **Plug #4, 3425' – 3575' (Mesaverde Top: 3525')**: Mix and spot 12 sx (13.8 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC, TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.
5. **Plug #5, 1586' – 1910' (PC top: 1860', Fruitland Top: 1636')**: Mix and spot 26 sx (29.9 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC, TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.

6. **Plug #6, 915' – 1065' (Ojo Alamo top: 1015'):** Mix and spot 12 sx (13.8 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC. Re-spot cement if necessary.
7. **Plug #7, (Surface Plug, 50' to Surface):** Spot 6 sx (7.1 cf) of Class G cement from 50' to surface. Top off cement as necessary. Original reports indicate cement was circulated to surface on original cement job).
8. ND BOP and cut off wellhead. RD & MOL. Cut off anchors and restore location per BLM stipulations.

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John C. Thompson  
Engineer



Federal 28 No. 2E

Proposed P&A

Basin Dakota

1490' FSL & 790' FWL, Section 20, T25N, R9W, San Juan County, NM

API: 30-045-26205

Today's Date: 5/1/2021  
Spud: 2/14/85  
Completed: 3/18/85

Elevation: 6712' GL

Ojo Alamo @ 1015'

Fruitland @ 1636'

Pictured Cliffs @ 1860'

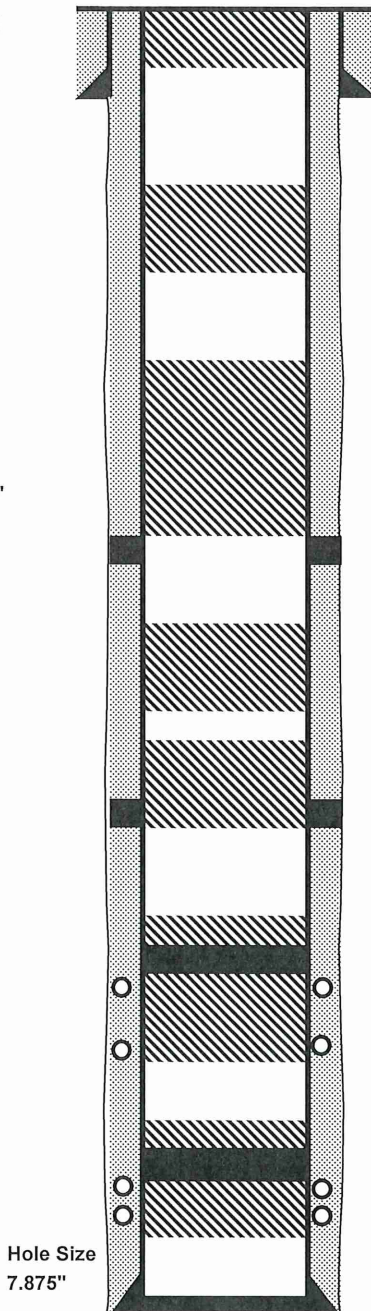
Cliff House @ 3525'

PLO @ 4285'

Mancos @ 4602'

Gallup @ 5343'

Dakota @ 6380'



Hole Size: 12-1/4"

Plug #7: (Surf - 50')

Class B cement, 6 sxs (7.1 cf)

8-5/8", 24#, K55 Casing set @ 260'

Cement with 290 cf, cmt circ to surface

Plug #6 (Ojo Alamo): (915' - 1065')

Class G cement, 12 sxs (13.8 cf)

Plug #5 (Pictured Cliffs/Fruitland): (1586' - 1910')

Class G cement, 26 sxs (29.9 cf)

DV Tool at 2150'

Plug #4 (Mesaverde): (3425' - 3575')

Class G cement, 12 sxs (13.8 cf)

Plug #3 (Mancos): (4502' - 4652')

Class G cement, 12 sxs (13.8 cf)

DV Tool at 4633'

Plug #2 (Gallup): (5243' - 5634')

Class G cement, 31 sxs (35.7 cf)

Set CIRC @ 5293'

Gallup Perforations:

5366' - 5634' (35 holes)

Plug #1 (Dakota): (6288' - 6412')

Class G cement, 15 sxs (17.3 cf)

Set CIRC @ 6338'

Dakota Perforations:

6388' - 6412' (30 holes)

4-1/2", 10.5#, J55 casing set @ 6526'

1st Stg: 772 cf - TOC - 4633'

2nd Stg: 1263 cf & 59 cf. - TOC - 2150'

3rd Stg: 1644 cf & 59 cf - Circulated Cement to surf

PBTD:6480'

TD: 6541'

Hole Size  
7.875"

## Basin Dakota

API: 30-045-26205

Dakota @ 6380'

4-1/2", 10.5#, J55 casing set @ 6526'  
1st Stg: 772 cf - TOC - 4633'  
2nd Stg: 1263 cf & 59 cf. - TOC - 2150'  
3rd Stg: 1644 cf & 59 cf - Circulated Cement to surf

Hole Size  
7.875"

PBTD:6480'  
TD: 6541'

United States Department of the Interior  
Bureau of Land Management

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Reclamation Plan

EPIC Energy, LLC.

Federal 28 #002E  
Plug and Abandonment  
Project

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Prepared by

Vanessa Fields, Regulatory Compliance  
Manger

Walsh Engineering & Production Corporation  
7415 East Main  
Farmington, New Mexico 87402

March  
2021

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U.S. Department of the Interior  
Bureau of Land Management  
Farmington District  
Farmington Field Office  
6251 N. College Blvd., Ste. A  
Farmington, NM 87402  
Phone: (505) 564-7600  
FAX: (505) 564-7608

BLM



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## Reclamation Plan (Procedure B)

Applicant	EPIC Energy, LLC.
Project Type	Reclamation of a natural gas well site.
Well, Oil and Gas Lease, or Right-of-Way (ROW) Name	Federal 28 #002E API# 30-045-26205
Legal Location	Section 28 (1490' FSL, 790' FWL), Township 25 North, Range 09 West, New Mexico Principal Meridian, in San Juan, New Mexico
Lease Number(s)	NMSF-078309

### Introduction

This reclamation plan has been prepared to meet the requirements and guidelines of the Bureau of Land Management (BLM) Farmington Field Office (FFO) Bare Soil Reclamation Procedures (BLM 2013a) and Onshore Oil and Gas Order No. 1 as well as any requirements from the

EPIC Energy, LLC contact person for this Reclamation Plan is:

Vanessa Fields, Regulatory Compliance Manager  
 7415 East Main  
 Farmington, New Mexico 87402  
 Phone: (505) 327-4892

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### Vegetation Reclamation Procedure B

Completion of a Vegetation Reclamation Plan in accordance with Procedure B of the Bureau Land Management Bare Soil Reclamation Procedures is required for surface disturbing actions, grants, or permits authorized by the Bureau Land Management resulting in bare mineral soil **across an area greater than or equal to 1 acre**, not including a BLM approved working area. Working areas include areas routinely used to operate and maintain facilities or improvements. The FFO makes no distinction between interim and final revegetation processes; revegetation processes and standards are the same for all revegetation activities.

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### Revision of the Reclamation Plan

EPIC Energy LLC, may submit a request to the BLM/FFO to revise the Reclamation Plan at any time during the life of the project in accordance to page 44 of the Gold Book (USDI-USDA 2007). EPIC Energy LLC will include justification for the revision request.



## Project Description

EPIC Energy is proposing to plug and abandon the Federal 28 #002E wellbore and reclaim the well pad. This location is located on lands owned and managed by the Bureau of Land Management, ~ 34 miles South of Bloomfield, NM. The Federal 28 #002E is accessed by travelling South on HWY 550 for 29.2 miles. Turn left on RD 7685 traveling 2.6 miles. Turn right and travel 1.43 miles and you will arrive at the Federal 28 #002E. The access road to the Federal 28 #002E will be closed at the cattle guard with the cattle guard being removed. All rig anchors and piping will be removed from location including the berms. Epic Energy will notify Enterprise Field Services to remove meter run and line. Existing soil will be utilized from the Federal 28 #002E to fill from the cut to grade. No further soil will be brought onto location. The access road will be contoured in and reseeded.

## Estimated Total Area of Disturbance

The existing Federal 28 #002E well pad was originally 368 ft by 437 ft with a maximum 1 ft cut and a maximum of a 1 ft fill. The access road will be closed. The well pad will be reseeded with the BLM approved seed mix. The anchor and piping will be removed, and the disturbed area will be reclaimed with Mesa seed mix. The well location is located on Bureau of Land Management and is managed by the Bureau of Land Management. Total surface disturbance as a result of well pad and pipeline construction that will be reclaimed is approximately 1.85 acres on Bureau of Land Management Lands.

The pre-disturbance site visit occurred on February 9, 2021. The following persons were present at the site visit (Table 1).

Table 1. Site Visit Attendees

Name	Affiliation	Contact Info
James Hellekson	Envirotech	505-801-4034
Bob Switzer	BLM	505-564-7600
Vanessa Fields	EPIC Energy	505-787-9100
John Hampton Jr.	EPIC Energy	505-486-6988

## Vegetation Community

Based on observations made during the pre-disturbance site visit, it has been determined that the vegetation community which best represents the proposed project area is Mesa or Pinion –Juniper Community. The Mesa or Pinion–Juniper Community is comprised primarily of pinion and juniper trees with lesser amounts of basin big sage and minor areas of black sage with various grasses. It is found on all aspects from about 4,800 to 8,800 with pinyon trees dominating at higher elevations and juniper trees at lower elevations. The Mesa or Pinion –Juniper Community are typically found in shallow rock soils. The seed mix will be used with an emphasis placed on protecting reclaimed well pad from exotic plant invasion.

## Proposed Reclamation Seed Mix

Disturbance will be re-contoured, and topsoil will be redistributed and prepared for seeding by the construction contractor. Ripping, disking, and seeding of the site will be done by EPIC Energy and its contractor using the BLM-approved seed mix (Mesa), which is shown in Table 2. The proposed reclamation seed mix considers the existing vegetation on the proposed project site.

### MESA menu-based seed mix by habitat type for reclamation (minimum requirement) \*\*

Common Name	Scientific Names	Variety	Season	Form	PLS lbs/acre*
<b>Plant one of the following:</b>					
Mountain mahogany	<i>Cercocarpus montanus</i>	VNS	Warm	Shrub	2.0
Antelope bitterbrush	<i>Purshia tridentata</i>	VNS	Cool	Shrub	2.0
<b>and two of the following:</b>					
Western wheatgrass	<i>Pascopyrum smithii</i>	Arriba	Cool	Sod	2.0
Bottlebrush squirreltail	<i>Elymus elymoides</i>	Tusas or VNS	Cool	Bunch	3.0
Needleandthread	<i>Hesperostipa comata</i>	VNS	Cool	Bunch	3.0
<b>and three of the following:</b>					
Indian ricegrass	<i>Achnatherum hymenoides</i>	Paloma or Rimrock	Warm	Bunch	3.5
Blue grama	<i>Bouteloua gracilis</i>	Alma or Hachita	Warm	Bunch	2.0
Sand dropseed	<i>Sporobolus cryptandrus</i>	VNS	Warm	Bunch	0.5
Prairie Junegrass	<i>Koeleria macrantha</i>	VNS	Cool	Bunch	2.0
Muttongrass	<i>Poa fendleriana</i>	VNS	Cool	Bunch	2.0
<b>and one of the following:</b>					
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	VNS	Warm	Forb	0.25
Utah sweetvetch	<i>Hedysarum boreale</i>	VNS	Warm	Forb	0.25

\*\*Based on 60 pure live seeds (PLS) per square foot, drill seeded. Double this rate (120 PLS per square foot) if broadcast or hydroseeded.



## Vegetation Reclamation Standards

Requirements for determining reclamation and if it is successfully completed for the selected vegetation community are determined by the reclamation percent cover standards for the community, as outline in Table 3. These standards must be met during post-disturbance monitoring procedures in order for the Bureau of Land Management to sign off on the attainment of vegetation reclamation standards.

Table 3. Reclamation Goal for Mesa or Pinion-Juniper-Mesa Community Cover – Wooded shrubland (deep soil)

<i>Functional Group</i>	<i>Percent (%) Foliar Cover</i>	<i>Common Species</i>
Trees/Shrubs/Grasses/Forbs	≥20	Utah juniper, Pinyon pine; big sagebrush, four-wing saltbrush, Antelope bitterbrush, rubber rabbitbrush, broom snakeweed, bottlebrush squirreltail, western wheatgrass, Indian ricegrass, galleta, sand dropseed, threeawn grass, scarlet globmallow, wooly Indianwheat, fleabane spp., Penstemon spp., buckwheat spp., threadleaf groundsel
Invasive/undesirables <b>10% allowed toward meeting standard of 20%.</b>	≤10	Plants that have the potential to become a dominant species on a site where its presence is a detriment to revegetation efforts or the native plant community. Examples of invasive species include cheatgrass, Russian thistle, kochia.

## Weed Survey

During the site visit, the proposed action area was surveyed for noxious weeds listed on the New Mexico Department of Agriculture's Class A and Class B list. During the survey, no noxious weeds were found.

## Soil Evaluation

Unless any stained soil is discovered during the surface reclamation, no soil testing will be necessary.

## Reclamation Techniques for Successful Revegetation

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### Site Clearing

After the well is plugged the wellhead will be cut-off 3' below ground level and a 4" diameter P&A marker will be welded to the casing stub. All flow lines and anchors will be cut-off at least 3' below ground level or removed completely. The meter will be removed and cut off down 6' or to the top of the pipeline. The production equipment (tanks, separator) will be removed from location.

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### Topsoil Replacement

No topsoil was stock piled during the original construction of the well pad. The remaining location will be re-contoured to match the natural topography. Epic Energy (and its contractor) will take care not to mix topsoil with the underlying subsoil horizons. Topsoil and sub-surface soils will be replaced in the proper order, prior to final seedbed preparation.

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### Water Management/Erosion Control Features

Based on the site visit with the Bureau Land Management representative(s) and the EPIC Energy representative determined there was no need to develop any other site-specific erosion control or water management features than the planned silt trap. Based on the topography natural run off can occur with no impact as far as erosion is concerned.

EPIC Energy (or its contractors) will use erosion control blankets, straw bales, or straw wattles as appropriate to limit erosion and sediment transport from any stockpiled soils.

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### Seedbed Preparation

For cut and fill slopes, initial seedbed preparation will consist of backfilling and re-contouring to achieve a configuration as close to pre-disturbance conditions as possible. Areas to be reclaimed will be re-contoured to blend with the surrounding landscape, emphasizing restoration of existing drainage patterns and landform to pre-construction condition, to the extent practicable.

Seedbed preparation of compacted areas will be ripped to a minimum depth of 12 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. Disking will be conducted if large clumps or clods remain after ripping. Any tilling or disking that occurs along the contour of the slope and seed drills will also be run along the contour to provide terracing and prevent rapid run-off and erosion. If broadcast seeding is used, a dozer or other tracked equipment will track perpendicular to the slope prior to broadcast seeding.

Final seedbed preparation will consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting.

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### Soil Amendments

Based on information gathered at the onsite inspection, the EPIC Energy and Bureau Land Management representatives have decided collaboratively that no soil amendments will be used during reclamation of the affected environment.

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## Seeding Requirements

The seed mix chosen for this project is listed in Table 2. Seeding will occur in November or later (depending upon weather conditions) after the well has been plugged and abandoned.

A Truax seed drill or modified rangeland drill that allows for seeding species from different seed boxes at different planting depths will be used to seed the disturbed areas of the project area. EPIC Energy or its reclamation contractor will ensure that perennial grasses and shrubs are planted at the appropriate depth. Intermediate size seeds (such as wheatgrasses and shrubs) will be planted at a depth of 1 to 2 inches. Small seeds (such as alkali sacaton and sand drop seed) will be planted at a depth of 0.25 inch. In situations where differing planting depths are not practicable using available equipment, the entire seed mix will be planted no deeper than 0.25 inch.

Drill seeding may be used on well-packed and stable soils that occur on gentler slopes and where equipment and drills can safely operate. Where drill seeding is not practicable due to topography, the reclamation contractor will hand-broadcast seed using a "cyclone" hand seeder or similar broadcast seeder. Broadcast application of seed requires a doubling of the drill-seeding rate. The seed will then be raked into the ground, so the seed is planted no deeper than 0.25 inch below the surface.

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## Mulching

Based on the onsite, mulching should not be necessary but if needed hand seeding with hydro-mulch, excelsior netting, and/or mulch with netting could be utilized on cut and fill slopes. Mulch should be grass or straw spread at 2,000 to 3,000 pounds per acre, or approximately 1 to 2 inches deep. Mulching will consist of crimping certified weed-free straw or certified weed-free native grass hay into the soil.

Straw or native grass hay mulch can be applied by hand broadcasting or blowing to a relatively uniform depth of 2 to 3 inches, equivalent to a rate of approximately 2 tons per acre (one 74-pound bale per 800 square feet). When applied properly, approximately 20 to 40 percent of the original ground surface will be visible.

Straw or native grass hay mulch will then be anchored using one of the following methods:

- Hand Punching – a spade or shovel is used to punch mulch into the topsoil at 1-foot intervals until all areas have mulch standing perpendicular to the slope and the mulch is embedded at least 4 inches into the soil.
- Roller Punching – a roller is used to spread mulch over an area; the roller is equipped with straight studs not less than 6 inches long, from 4 to 6 inches wide, and approximately 1 inch thick.
- Crimper Punching – similar to roller punching, a crimper is used over the soil. The crimper has serrated disk blades about 4 to 8 inches apart that force the mulch into the soil. Crimping should be done in two directions with the final pass across the slope.

Mulch applications in extremely clayey soils should be evaluated carefully to avoid developing an adobe mixture. In these cases, a soil amendment may be beneficial.



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## Noxious and Invasive Weed Control

Should noxious or invasive weeds be documented after earthwork and seeding activities, the Bureau Land Management weed coordinator will provide EPIC Energy, LLC with specific requirements and instructions for weed treatments, including the period of treatment, approved herbicides that may be used, required documentation to be submitted to the Bureau Land Management after treatment, and any other site-specific instructions that may be applicable.

## Monitoring Requirements

Monitoring will be completed according to the Bureau Land Management Bare Soil Reclamation Procedure B (BLM 2013b) and Monitoring activities will be initiated after the project is completed, during the post-disturbance earthwork and seeding inspection process.

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### Post-Reclamation Monitoring Initiation

After the well has been plugged and the reclamation work and seeding have been completed, a post-disturbance inspection at the project site will occur. The Bureau Land Management representative (in collaboration with EPIC Energy) will determine site-specific monitoring locations for photo point monitoring and vegetation line point intercept transects, (if necessary). Bureau Land Management will collect GPS data on the monitoring locations, take the initial monitoring photographs, and complete the initial monitoring report within 60 days of the post-disturbance earthwork and seeding inspection. The initial report will be available from the Bureau Land Management.

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### Post-Reclamation Monitoring Photographs

The minimum photo points necessary to document post-disturbance monitoring (including annual monitoring and long-term monitoring) are described in Table 5. Photographs will be taken with a digital camera without zoom or wide-angle adjustments. GPS coordinates for each photo point will be provided by the Bureau Land Management the initial monitoring report and subsequently included with each photograph in the annual monitoring report.

Table 5. List of Minimum Required Post-Disturbance Monitoring Photographs

Photo Point	Photographs	Location Description

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### Annual Monitoring

If needed, EPIC Energy will begin annual monitoring of the photo points and the vegetation line point intercept transects 2 calendar years after the completion and approval of the final earthwork and seeding. Monitoring may occur any time of the year. A completed monitoring report of the permanent photo points will be submitted by EPIC Energy to Bureau Land Management by December 31 of the year the site is monitored. Within 60 days after receipt, the Bureau Land Management will acknowledge that the report has been received and evaluated.

Vegetation line point intercept transects will be monitored annually until attainment of vegetation reclamation cover standards have been met. EPIC Energy will keep a record of the monitoring for future submittal to the Bureau Land Management at reclamation attainment.

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### **Attainment of Vegetation Reclamation Standards**

When vegetation on a reclaimed site appears to meet the required percent revegetation standard, EPIC Energy will submit to the Bureau Land Management a written request for concurrence that revegetation standards have been attained. The request will include all annual transect data sheets and a current set of monitoring photographs. The Bureau Land Management will review the request and approve or deny the request within 60 days of receipt. If the request is denied, the Bureau Land Management may initiate a site inspection within 60 days of the denial to analyze the site and determine if remedy actions may be appropriate.

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### **Long-Term Monitoring**

If needed, after the required percent revegetation standard has been attained, EPIC Energy will begin long-term monitoring. Every fifth year after attainment, EPIC Energy will monitor the site at all established photo points to ensure the site remains productive and stable. A completed monitoring report of the permanent photo points will be submitted to the Bureau Land Management by December 31 of the year the site is monitored. The Bureau Land Management will acknowledge that the report has been received and evaluated within 60 days after receipt.

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### **Final Abandonment**

If 1 or more acre of bare soil results from earthwork required in preparation for final abandonment, EPIC Energy, LLC will follow Vegetation Reclamation Plan in accordance with Procedure B of the BLM/FFO Bare Soil Reclamation Procedures (2013a) and any additional or separate requirements from the Bureau Land Management.

Revegetation percent cover standards will be attained, documented, and submitted to the Bureau Land Management by EPIC Energy, LLC or an exception granted before the Bureau Land Management will approve a final abandonment notice (FAN) or relinquishment.

Upon final reclamation, the location will be returned to pre-disturbance conditions as practicable.

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### **Cessation of Monitoring**

Monitoring requirements will remain in effect as long as the permit, grant, or authorization remains in effect and until all infrastructure or associated facilities are abandoned by established BLM procedure and a FAN or relinquishment is issued by the Bureau Land Management. EPIC Energy, LLC will document that percent cover standards have been attained when submitting a request for a FAN or relinquishment.

## References

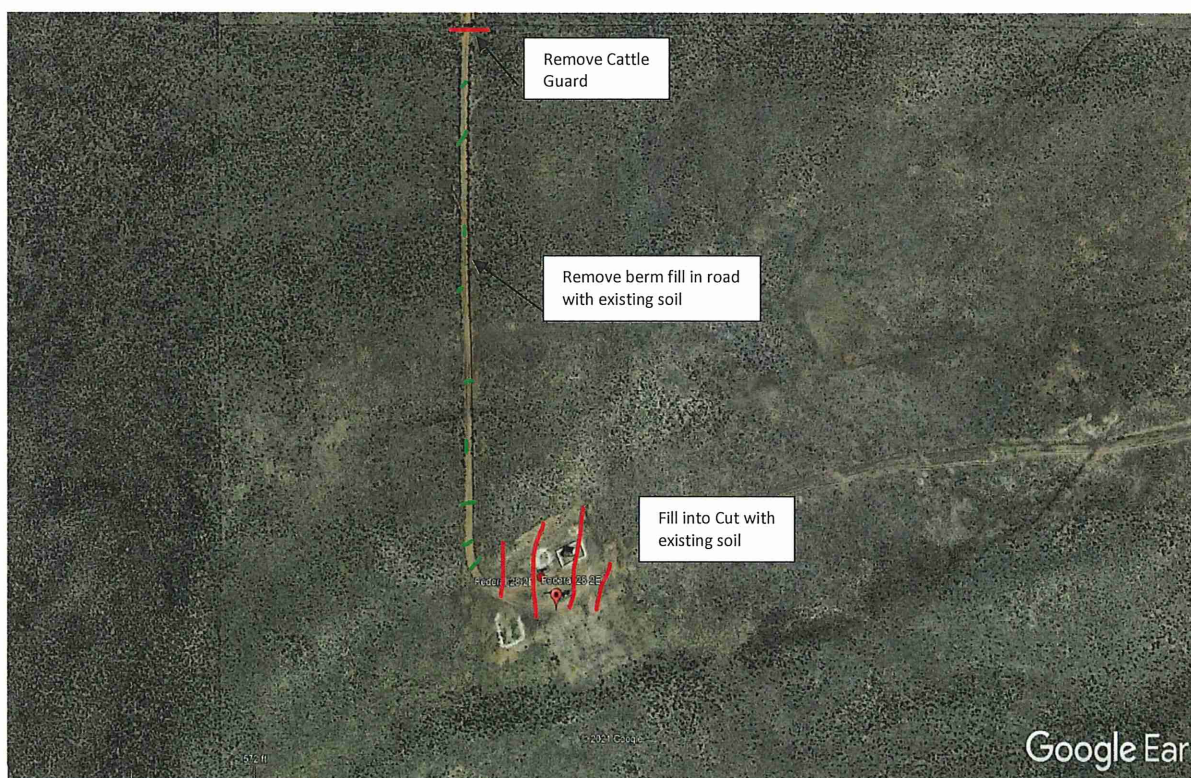
43 CFR Part 3160, "Onshore Oil and Gas Order No. 1; Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; approval of Operations," 72 Federal Register 44 (March 2007), pp. 10328-10338.

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BLM. 2013b. Updated Reclamation Goals. Available at: [http://www.blm.gov/nm/st/en/fo/Farmington\\_Field\\_Office/ffo\\_planning/surface\\_use\\_plan\\_of/updated\\_reclamation.html](http://www.blm.gov/nm/st/en/fo/Farmington_Field_Office/ffo_planning/surface_use_plan_of/updated_reclamation.html). Accessed November 2013.

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**P&A Procedure****EPIC Energy – Federal 28 2E**

API: 30-045-26205

1490' FSL &amp; 790' FWL, Section 20, T25N, R9W

San Juan County, New Mexico

**Plug & Abandonment Procedure:**

Note: All cement volumes use 100% excess outside casing and 50' excess inside pipe. Stabilizing wellbore fluid will be 8.33 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Class G neat 1.15 ft<sup>3</sup>/sk or equivalent. Cement calculations based on 4-1/2" 10.5# casing. Circulated cement on all stages of the primary casing cement job. If casing pressure tests tagging plugs will not be required. Chacra not productive in the area so no plug was planned.

1. **Plug #1, 6288' – 6412' (Dakota Top: 6380; DK Perfs: 6388'-6412'):** TIH & set 4-1/2" CICR at 6338'. Pressure test tubing to 1000 psi. Mix & pump 15 sx (17.3 cf) of Class G cement (or equivalent). Sting out of CICR, leaving a minimum of 50' of cement on top of retainer. Reverse circulate to clean out tubing.
2. **Plug #2, 5243' – 5634' (Gallup Top: 5343'):** TIH & set 4-1/2" CICR at 5293'. Pressure test tubing to 1000 psi. Mix & pump 31 sx (35.7 cf) of Class G cement (or equivalent). Sting out of CICR, leaving a minimum of 50' of cement on top of retainer to cover Gallup formation top. Reverse circulate to clean out tubing.
3. **Plug #3, 4502' – 4652' (Mancos Top: 4602'):** Mix and spot 12 sx (13.8 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC, TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.
4. **Plug #4, 3425' – 3575' (Mesaverde Top: 3525'):** Mix and spot 12 sx (13.8 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC, TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.
5. **Plug #5, 1586' – 1910' (PC top: 1860', Fruitland Top: 1636'):** Mix and spot 26 sx (29.9 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC, TIH & tag cement to confirm TOC (not necessary if pressure test OK). Re-spot cement if necessary.

6. **Plug #6, 915' – 1065' (Ojo Alamo top: 1015'):** Mix and spot 12 sx (13.8 cf) of Class G cement in a balanced plug. Pull above cement and reverse circulate to clean out tubing. Pull up hole & WOC. Re-spot cement if necessary.
7. **Plug #7, (Surface Plug, 50' to Surface):** Spot 6 sx (7.1 cf) of Class G cement from 50' to surface. Top off cement as necessary. Original reports indicate cement was circulated to surface on original cement job).
8. ND BOP and cut off wellhead. RD & MOL. Cut off anchors and restore location per BLM stipulations.

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John C. Thompson  
Engineer

# Federal 28 No. 2E

Proposed P&A

Basin Dakota

1490' FSL & 790' FWL, Section 20, T25N, R9W, San Juan County, NM

API: 30-045-26205

Today's Date: 5/1/2021

Spud: 2/14/85

Completed: 3/18/85

Elevation: 6712' GL

Ojo Alamo @ 1015'

Fruitland @ 1636'

Pictured Cliffs @ 1860'

Cliff House @ 3525'

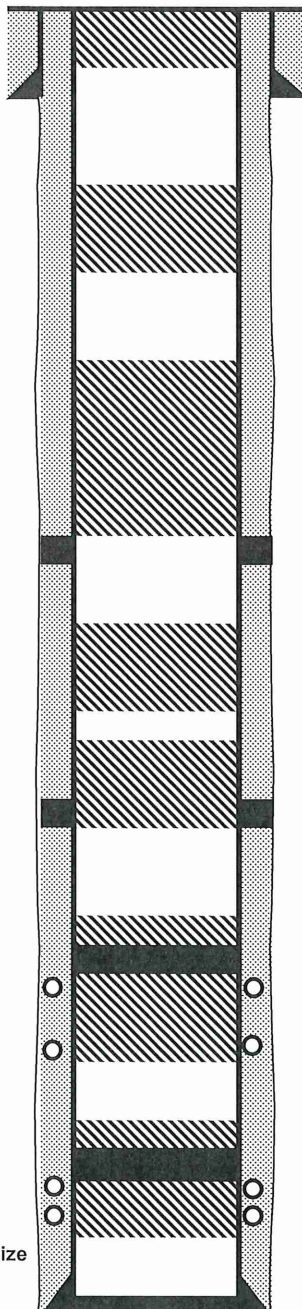
PLO @ 4285'

Mancos @ 4602'

Gallup @ 5343'

Dakota @ 6380'

Hole Size  
7.875"



PBTD:6480'

TD: 6541'

Hole Size: 12-1/4"

Plug #7: (Surf - 50')

Class B cement, 6 sxs (7.1 cf)

8-5/8", 24#, K55 Casing set @ 260'

Cement with 290 cf, cmt circ to surface

Plug #6 (Ojo Alamo): (915' - 1065')

Class G cement, 12 sxs (13.8 cf)

Plug #5 (Pictured Cliffs/Fruitland): (1586' - 1910')

Class G cement, 26 sxs (29.9 cf)

DV Tool at 2150'

Plug #4 (Mesaverde): (3425' - 3575')

Class G cement, 12 sxs (13.8 cf)

Plug #3 (Mancos): (4502' - 4652')

Class G cement, 12 sxs (13.8 cf)

DV Tool at 4633'

Plug #2 (Gallup): (5243' - 5634')

Class G cement, 31 sxs (35.7 cf)

Set CIRC @ 5293'

Gallup Perforations:

5366' - 5634' (35 holes)

Plug #1 (Dakota): (6288' - 6412')

Class G cement, 15 sxs (17.3 cf)

Set CIRC @ 6338'

Dakota Perforations:

6388' - 6412' (30 holes)

4-1/2", 10.5#, J55 casing set @ 6526'

1st Stg: 772 cf - TOC - 4633'

2nd Stg: 1263 cf & 59 cf. - TOC - 2150'

3rd Stg: 1644 cf & 59 cf - Circulated Cement to surf

# Federal 28 No. 2E

Current Status

Basin Dakota

1490' FSL & 790' FWL, Section 20, T25N, R9W, San Juan County, NM

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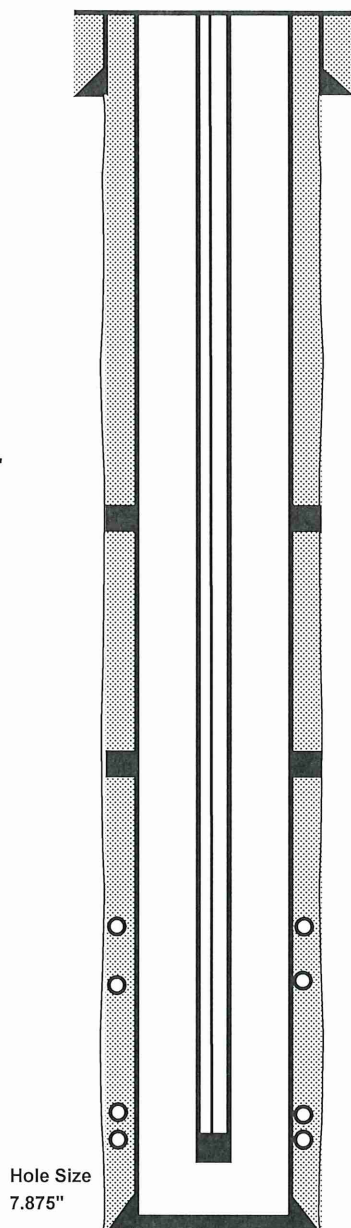
Cliff House @ 3525'

PLO @ 4285'

Mancos @ 4602'

Gallup @ 5343'

Dakota @ 6380'



Hole Size: 12-1/4"

8-5/8", 24#, K55 Casing set @ 260'  
Cement with 290 cf, cmt circ to surface

Tubing: 203 jts of 2-3/8", w/ SN & MA  
EOT: 6418' KB

Pump: 2"x1-1/4"x14' RHAC pump

Rods: 2 ea. 3'x7/8" stabilizers  
2 ea. 3/4" guided rods  
38 ea. 3/4" plain rods  
123 ea. 5/8" plain rods  
15 ea. 3/4" plain rods  
72 ea. 3/4" guided rods

DV Tool at 4633'

Gallup Perforations:  
5366' - 5634' (35 holes)

Dakota Perforations:  
6388' - 6412' (30 holes)

Hole Size  
7.875"

PBTD:6480'  
TD: 6541'

4-1/2", 10.5#, J55 casing set @ 6526'  
1st Stg: 772 cf - TOC - 4633'  
2nd Stg: 1263 cf & 59 cf. - TOC - 2150'  
3rd Stg: 1644 cf & 59 cf - Circulated Cement to surf

# BLM FLUID MINERALS P&A Geologic Report

**Date Completed:** 11/4/2021

Well No. Federal 28 #2E (API# 30-045-26205)		Location	1490	FSL	&	790	FWL
Lease No. NMSF-078309		Sec. 28	T25N			R09W	
Operator Epic Energy, LLC		County	San Juan		State	New Mexico	
Total Depth 6541'	PBTD 6480'	Formation Dakota					
Elevation (GL) 6712'		Elevation (KB) 6725'					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					
Nacimiento Fm			Surface	1015	Fresh water sands
Ojo Alamo Ss			1015	1237	Aquifer (fresh water)
Kirtland Shale			1237	1636	
Fruitland Fm			1636	1860	Coal/Gas/Possible water
Pictured Cliffs Ss			1860	2006	Gas
Lewis Shale			2006	2294	
Chacra (La Ventana)			2294	3525	
Cliff House Ss			3525	3555	Water/Possible gas
Menefee Fm			3555	4308	Coal/Ss/Water/Possible O&G
Point Lookout Ss			4308	4602	Probable water/Possible O&G
Mancos Shale			4602	5343	
Gallup			5343	6245	O&G/Water
Greenhorn			6245	6300	
Graneros Shale			6300	6338	
Dakota Ss			6338	PBTD	O&G/Water

Remarks:

P & A

- No CBL on file, recommend running CBL prior to pumping any plugs.
- Please add an inside plug from 2194' – 2344' to cover the Chacra top @ 2294'.
- Please add an inside plug from 1536' – 1686' to cover the Fruitland top @ 1636'.
- Bring the bottom of Plug #7 (Surface) down to 310' to cover 50' below the Surface shoe @ 260'.
- The plugs proposed in the P&A procedure, with changes recommended above, will adequately protect any freshwater sands in this well bore.
- Dakota perfs @ 6388' – 6412'. Gallup perfs @ 5366' – 5634'.

Reference Wells:

1) **Formation Tops**  
Same

**Prepared by:** Chris Wenman

**GENERAL REQUIREMENTS FOR  
PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES  
FARMINGTON FIELD OFFICE**

1.0 The approved plugging plans may contain variances from the following minimum general requirements.

1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.

1.2 Requirements may be added to address specific well conditions.

2.0 Materials used must be accurately measured. (densometer/scales)

3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

4.1 The cement shall be as specified in the approved plugging plan.

4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.3 Surface plugs may be no less than 50' in length.

4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.

4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.

**4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.**



5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

- 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
- 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. **If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.**

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H<sub>2</sub>S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

(October 2012 Revision)



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**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

**District IV**

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**

COMMENTS

Action 60224

**COMMENTS**

Operator: EPIC ENERGY, L.L.C. 332 Road 3100 Aztec, NM 87410	OGRID: 372834
	Action Number: 60224
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

**COMMENTS**

Created By	Comment	Comment Date
kpickford	KP GEO Review 11/10/2021	11/10/2021

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Phone:(575) 393-6161 Fax:(575) 393-0720

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CONDITIONS

Action 60224

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	Action Number: 60224
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	11/10/2021
kpickford	Adhere to BLM COAs, including those noted on the BLM GEO report.	11/10/2021