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U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

06/26/2023

Well Name: FEDERAL 1**Well Location:** T24N / R7W / SEC
27 / SWSE / 36.27809 / -107.55833**County or Parish/State:**
RIO ARRIBA / NM**Well Number:** 27**Type of Well:** OIL WELL**Allottee or Tribe Name:****Lease Number:** NMSF078562**Unit or CA Name:****Unit or CA Number:****US Well Number:**
300390528500S1**Well Status:** Oil Well Shut In**Operator:** EPIC ENERGY LLC**Notice of Intent****Sundry ID:** 2736343**Type of Submission:** Notice of Intent**Type of Action:** Plug and Abandonment**Date Sundry Submitted:** 06/19/2023**Time Sundry Submitted:** 07:40**Date proposed operation will begin:**
06/19/2023**Procedure Description:****Surface Disturbance****Is any additional surface disturbance proposed?:** No**NOI Attachments****Procedure Description**

NOI__Federal_1_27__1_20230619074000.pdf

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search report

Well Name: FEDERAL 1

Well Location: T24N / R7W / SEC
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Well Number: 27

Type of Well: OIL WELL

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Lease Number: NMSF078562

Unit or CA Name:

Unit or CA Number:

US Well Number:
300390528500S1

Well Status: Oil Well Shut In

Operator: EPIC ENERGY LLC

Conditions of Approval**Additional**

Px_A_24N07W27OJm_Federal_1_27_001_20230623151238.pdf

Authorized

2736343_NOIA_27_3003905285_KR_06232023_20230623164349.pdf

General_Requirement_PxA_20230623164326.pdf

Operator

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

Operator Electronic Signature: SHAWNA MARTINEZ

Signed on: JUN 19, 2023 07:40 AM

Name: EPIC ENERGY LLC

Title: Regulatory Tech

Street Address: 332 RD 3100

City: AZTEC

State: NM

Phone: (505) 327-4892

Email address: SHAWNA@WALSHENG.NET

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

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: 06/23/2023

Signature: Kenneth Rennick

P&A Procedure**EPIC Energy – Federal I-27 #1**

Escrito Gallup Unit

790' FSL & 1708' FEL, Section 27, T24N, R7W

Rio Arriba County, New Mexico, API #30-039-05285

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 ft³/sk or equivalent. If casing pressure tests tagging plugs will not be required. Cement circulated on surface casing string. TOC @ 3980' based off temp log. This procedure has been prepared with the understanding that it may be modified based on TOC from the CBL. Volumes calculated off 7.0" 23# casing.

Prior to Mobilization

1. Notify BLM & NMOCD
2. Verify all cement volumes based on actual slurry to be pumped. Calculations based on 1.15 ft³/sk.
3. Comply with all COA's from BLM and NMOCD

P&A Procedure

1. MIRU Service Unit and required cement equipment.
 2. LD horse head. LD stuffing box and polished rods/pump (hot oil if necessary).
 3. ND WH, NU BOP, RU rig floor and 2 3/8" handling tools.
 4. POOH 2 3/8" production string.
 - a. Scanning pipe while TOOH.
 5. Round Trip 7.0" casing scraper to 5675'.
 6. TIH with CICR and set @ 5650'. Roll hole with fresh water. PT tubing to 500 psi. PT casing to 500 psi. Run CBL.
-
1. **Plug #1: 5550' – 5650' (Perfs 5700' – 5768')**: Sting out of CICR, mix & spot 20 sxs (23 ft³) of Class G neat cement on top of CICR in balanced plug. PU 200' above plug reverse circulate to clean tubing. WOC and tag plug if casing does not test. Re-spot cement if necessary.
 2. **Plug #2, 4650' – 4750' (Mancos)**: Mix & spot 29 sx (33.4 ft³) Class G neat cement in balanced plug. PU 100' above plug and reverse circulate tubing clean. WOC and tag plug if required. PT casing if previous test failed. Re-spot cement if necessary.

3. **Plug #3, 3672' – 3772' (Mesa Verde):** Mix & spot 29 sx (33.4 ft³) Class G neat cement in balanced plug. PU 100' above plug and reverse circulate tubing clean. WOC and tag plug if required. PT casing if previous test failed. Re-spot cement if necessary. POOH prep for WL.
4. **Plug #4, 2472' – 2572' (Chacra):** Perforate @ 2572'. Set CICR @ 2522'. Sting into CICR and establish injection rate. Mix and pump 30 sx (34.5 ft³) below CICR. Sting out of CICR leaving 20 sx (23 ft³) Class G neat cement in balanced plug over retainer. PU 100' above plug and reverse circulate tubing clean. WOC and tag plug if required. PT casing if previous test failed. Re-spot cement if necessary.
5. **Plug #5, 1811' – 2232' (Fruitland/PC):** Perforate @ 2232'. Set CICR @ 1861'. Sting into CICR and establish injection rate. Mix and pump 84 sx (96.6 ft³) below CICR. Sting out of CICR leaving 20 sx (23 ft³) Class G neat cement in balanced plug over retainer. PU 100' above plug and reverse circulate tubing clean. WOC and tag plug if required. PT casing if previous test failed. Re-spot cement if necessary.
6. **Plug #6, 1074' – 1430' (Ojo Alamo/Kirtland):** Perforate @ 1430'. Set CICR @ 1124'. Sting into CICR and establish injection rate. Mix and pump 80 sx (92 ft³) below CICR. Sting out of CICR leaving 20 sx (23 ft³) Class G neat cement in balanced plug over retainer. PU 100' above plug and reverse circulate tubing clean. WOC and tag plug if required. PT casing if previous test failed. Re-spot cement if necessary.
7. **Plug #7, Surface – 545' (8-5/8" Shoe @ 495'):** Perforate @ 545'. Attempt to establish circulation out of 9-5/8" * 7.0" annulus. Mix and pump 187 sx (215.1 ft³) or until cement circulates to surface. Top off cement as necessary.
7. ND BOP and cut off wellhead below surface casing flange, top off casing and annulus as necessary. Install P&A marker and cut off and/or remove anchors. RD, MOL - Restore location per BLM stipulations. Take pictures from all cardinal directions. Ensure to notify project management of all remaining equipment on location once plugging is complete.

Kyle T. Mason
Engineer

Federal I-27 #1**Current WBD****Escrito Gallup Unit****790' FSL & 1708' FEL, Section 27, T24N, R7W, Rio Arriba County, NM****API: 30-039-05285**

Today's Date: 5/30/2023

Spud: 2/20/1957

Elevation: 7012' GL

Elevation: 7022' KB

Ojo Alamo @ 1124'

Kirtland @ 1380'

FT Coal Top @ 1861'

Pictured Cliffs @ 2182'

Chacra @ 2522'

Mesa Verde @ 3722'

Mancos @ 4700'

Gallup @ 5564'

Greenhorn @ 6432'

Graneros @ 6483'

Dakota @ 6674'

Morrison @ 6944'

Hole Size: 12-1/4"

9-5/8", 36#, Casing set @ 495'

Cement to surface with 350 sks

2 3/8" J-55 4.7# tubing set @ ??

Hole Size
8-3/4"

Gallup Perforations

5700-5713'

5759-5768'

7.0", 23#, casing set @ 6941'

Production CMT:

600 sxs

TOC 3980' Temp survey

TD: 6956'

PBSD: 5776' (Gallup block squeeze reported/ no further detail)

Federal I-27 #1**Proposed WBD****Escrito Gallup Unit**

790' FSL & 1708' FEL, Section 27, T24N, R7W, Rio Arriba County, NM

API: 30-039-05285

Today's Date: 5/30/2023

Spud: 2/20/1957

Elevation: 7012' GL

Elevation: 7022' KB

Ojo Alamo @ 1124'

Kirtland @ 1380'

FT Coal Top @ 1861'

Pictured Cliffs @ 2182'

Chacra @ 2522'

Mesa Verde @ 3722'

Mancos @ 4700'

Gallup @ 5564'

Greenhorn @ 6432'

Graneros @ 6483'

Dakota @ 6674'

Morrison @ 6944'

Hole Size: 12-1/4"
9-5/8", 36#, Casing set @ 495'

Cement to surface with 350 sks

Perf: 545'

Plug #6: Surface' - 545'

Class G neat, 187 sx (215.05 ft³) or until cement circulates.

Perf: 1430'

Plug #6: 1074' - 1430'

Below CICR: Class G neat, 80 sx (92 ft³)Above CICR: Class G neat, 20 sx (23 ft³)

Perf: 2232'

Plug #5: 1811' - 2232'

Below CICR: Class G neat, 84 sx (96.6 ft³)Above CICR: Class G neat, 20 sx (23 ft³)

Perf: 2572'

Plug #4: 2472' - 2572'

Below CICR: Class G neat, 30 sx (34.5 ft³)Above CICR: Class G neat, 20 sx (23 ft³)

Plug #3: 3672' - 3772'

Class G neat, 29 sx (33.4 ft³)

Plug #2: 4650' - 4750'

Class G neat, 29 sx (33.4 ft³)

Plug #1: 5550' - 5650'

Class G neat, 20 sx (23 ft³)

Set CICR at 5650'

Gallup Perforations

5700-5713'

5759-5768'

7.0", 23#, casing set @ 6941'

Production CMT:

600 sxs

TOC 3980' Temp survey

Hole Size
8-3/4"

TD: 6956'

PBTD: 5776' (Gallup block squeeze reported/ no further detail)

**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 H₂S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), through the Automated Fluid Minerals Support System (AFMSS) 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.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402

AFMSS 2 Sundry ID 2736343

Attachment to notice of Intention to Abandon

Well: Federal 1 27

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. The following modifications to your plugging program are to be made:
 - a. Adjust Plug #6 (Kirtland/ Ojo Alamo), or add a plug, to cover BLM Kirtland top @ 1696' and Ojo Alamo top @ 1530'.
3. Farmington Office is to be notified at least 24 hours before the plugging operations commence at (505) 564-7750.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

K. Rennick 06/23/2023

BLM FFO Fluid Minerals P&A Geologic Report

AFMSS ID: 2736343

Date Completed: 6/23/2023

Well No.	Federal 1-27 #001	SHL	587	FSL	1395	FEL
API No.	3003905285			Sec. 27	T24N	R07W
Lease No.	NMSF078562	BHL	Same			
Operator	Epic Energy, LLC					
Elev. (KB)	7022	County	Rio Arriba	State	NM	
Total Depth	6956	PBTD	5776	Formation	Gallup	

Formation Top	TVD (ft KB)	Remarks
San Jose Fm.		
Nacimiento Fm.	Surface	Surface/freshwater sands
Ojo Alamo Ss	1530	Aquifer (possible freshwater)
Kirtland Fm.	1696	Possible gas/water
Fruitland Fm.	1868	Coal/gas/water
Pictured Cliffs Ss	2182	Gas/water
Lewis Shale	2280	
Chacra	2522	Possible gas
Cliff House Ss	3722	Probable gas/water
Menefee Fm.	3748	Coal/probable gas/water
Point Lookout Fm.	4465	Possible gas/water
Mancos Shale	4700	Oil & gas
Gallup	5348	Oil & gas
Greenhorn Ls	6432	
Graneros Shale	6483	
Dakota Ss	6674	
Morrison Fm.	6944	

Remarks:

- Gallup perms 5700' - 5768'.

- Adjust Plug #6 (Kirtland/Ojo Alamo), or add a plug, to cover BLM Kirtland top @ 1696' and Ojo Alamo top @ 1530'.

Reference Well:

1) Formation Tops

Same

Prepared by: Chris Wenman

P&A RECLAMATION PLAN

for

**Federal 1-27 #1
30-039-05285
587' FSL & 1395' FEL
Sec. 27, T24N, R07W
Rio Arriba County, New Mexico**

Prepared for

Epic Energy

June 2023



Created by:

Shawna Martinez

**332 Rd 3100
Aztec, New Mexico 87410
Phone: (505) 327-4892**

Table of Contents

1. Introduction	3
2. Project Description.....	3
3. Pre-Disturbance Site Visit	3
3.1 Vegetation Community	3
3.2 Proposed Reclamation Seed Mix.....	4
3.3 Vegetation Reclamation Standards	5
3.4 Weed Survey.....	5
3.5 Soil Evaluation	5
4. Reclamation Techniques for Successful Revegetation	5
4.1 Site Clearing.....	5
4.2 Topsoil Replacement.	5
4.3 Water Management/Erosion Control Features	6
4.4 Seedbed Preparation.	6
4.5 Soil Amendments.....	6
4.6 Seeding.....	6
4.7 Mulching.....	7
4.8 Noxious and Invasive Weed Control.....	7
4.9 Revegetation Success for Final Abandonment	8
5. Monitoring Requirements.....	
5.1 Post Reclamation Monitoring Initiation	8
5.2 Annual Monitoring.....	8
5.3 Attainment of Vegetation Reclamation Standards.....	8
5.4 Long-Term Monitoring	9
5.5 Final Abandonment	9
5.6 Cessation of Monitoring.....	9
6. References	9

Applicant	Epic Energy, LLC
Project Type	Reclamation of an Oil well site.
Well, Oil and Gas Lease, or Right-of-Way (ROW) Name	Federal 1-27 #1 (30-039-05285)
Legal Location	587' FSL 1395' FEL Section 27, Township 24 North, Range 07 West Rio Arriba County, NM
Lease Number(s)	SF-078562

1. 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.

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 with page 44 of the Gold Book (USDI-USDA 2007). Epic Energy LLC will include justification for the revision request.

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

Shawna Martinez, Regulatory Specialist
Walsh Engineering & Production
332 Road 3100
Aztec, New Mexico 87410
Phone: (505) 327-4892

2. PROJECT DESCRIPTION

EPIC Energy, LLC is proposing to plug and abandon the Federal 1-27 #1 wellbore and reclaim the well pad. This location is located on lands owned and managed by the Bureau of Land Management, ~ 43.5 miles North of Cuba, NM. The Federal 1-22 #2 is accessed by travelling North on US-550 N/Main Street toward Reed Rd for 38.2 miles. Turn right onto Co. Rd. 378 for 1.1 miles, turn left to stay on Co. Rd. 378 and continue for 0.4 miles. Turn left for 325', a slight right for 1.3 miles. Turn right for 0.9 miles, turn right for 0.5 miles. Turn left onto Co. Rd. 499 for 1 mile.

3. PRE-DISTURBANCE SITE VISIT

3.1 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 classified as Sagebrush/grass community.

3.2 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 the construction contractor using the BLM-approved seed mix shown which is shown in Table 2. The proposed reclamation seed mix considers the existing vegetation on the proposed project site.

Table 2. BLM Farmington Field Office Sagebrush/grass Community Seed Mix

Sagebrush/grass community menu-based seed mix by habitat type for reclamation (minimum requirement) **

Sagebrush/grass community menu-based seed mix for use in reclamation (minimum requirement) **

Common Name.	Scientific Names	., Variety	I Season	FOFm	PLS lbs/acre*
Plant two of the following:					
Fourwing saltbush	<i>Atriplex canescens</i>	VNS	Cool	Shrub	2.0
Antelope bitterbrush	<i>Purshia tridentata</i>	VNS	Cool	Shrub	2.0
Winterfat	<i>Krascheninnikovia lanata</i>	VNS	Cool	Shrub	2.0
and three of the following:					
Indian ricegrass	<i>Achnatherum hymenoides</i>	Paloma or Rimrock	Cool	Bunch	4.0
Blue grama	<i>Bouteloua gracilis</i>	Alma or Hachita	Warm	Sod-forming	2.0
Galleta	<i>Pleuraphis Jamesii</i>	Viva florets	Warm	Bunch/Sod-forming	3.0
Sand dropseed	<i>Sporobolus cryptandrus</i>	VNS	Warm	Bunch	0.5
Western wheatgrass	<i>Pascopyrum smithii</i>	Arriba	Cool	Sod-forming	4.0
and one of the following:					
Bottle brush squirreltail	<i>Elymus elymoides</i>	Tusas or VNS	Cool	Bunch	3.0
Siberian wheategrass	<i>Agropyron fragile</i>	Vavilov	Cool	Bunch	3.0
and two of the following					
Small burnet	<i>Sanguisorba minor</i>	Delar	Cool	Forb	2.0
Rocky Mtn. bee plant	<i>Cleome serrulata</i>	Local collection or VNS	Cool	Forb	0.25
Blue flax	<i>Linum lewisii</i>	Apar	Cool	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 hydroseeds**

3.3 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 for the Bureau of Land Management to sign off on the attainment of vegetation reclamation standards.

Table 3. Reclamation Goal for Sagebrush/Grass Community

Table 3. Reclamation Goal for Sagebrush/Grass Community

<i>Functional Group</i>	<i>Percent (%) Foliar Cover</i>	<i>Common Species</i>
Trees/Shrubs/Grasses/Forbs	≥ 35	Utah Juniper-Pinyon pine; big sagebrush, four-wing saltbush , antelope bitterbrush, alkali sacaton, Western wheatgrass, Indian ricegrass, galleta, sand dropseed, scarlet globemallow, wooly Indianwheat , fleabane, Penstemon spp., buckwheat, threadleaf groundsel
Invasive/undesirables 10% allowed toward meeting standard of 35%.	≤ 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.

3.4 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.

3.5 Soil Evaluation

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

4. RECLMATION TECHNIQUES FOR SUCCESSFUL REVEGETATION

4.1 Site Clearing

After the well is plugged and abandoned, a steel marker not less than four inches in diameter is set in cement and extends at least four feet above ground level. The operator's name, lease name and well number and location, including unit letter, section, township, and range, shall be welded, stamped, or otherwise permanently engraved into the marker's metal. The cable will be removed off edge of pad. The above ground pipeline will be removed all the way to the next tie in. Trash and concrete will be removed. All production equipment will be removed from location. The road entrance will be bermed.

4.2 Topsoil Replacement

No topsoil was stockpiled during the original construction of the well pad. The remaining location will be re-contoured into the hill side 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.

4.3 Water Management/Erosion Control Features

Based on the site visit with the Bureau of Land Management representative and the EPIC Energy representative, it was determined that the site shall be recontoured and water diversions be created as well as creating a silt trap and pond.

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.

4.4 Seedbed Preparation

For cut and fill slopes, initial seedbed preparation will consist of backfilling (dozer)/excavation (excavator)/hauling (belly scraper) and re-contouring areas to be reclaimed to blend with the surrounding landscape. Emphasis would be placed on restoration of the existing drainage patterns and landforms to preconstruction conditions, to the extent practicable.

Seedbed preparation within compacted areas will be ripped to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. If large clumps/clods result from the ripping process, disking would be conducted perpendicular to slopes to provide terracing and minimize runoff and erosion. Final seedbed preparation would consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting.

4.5 Soil Amendments

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

4.6 Seeding

The seed mix chosen for this project is listed in Table 2. Seeding would occur at the time of interim and final reclamation.

A disc-type 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. Larger seeds (such as Indian ricegrass) would be planted at a depth of one to two inches, Intermediate size seeds (such as wheatgrasses and shrubs) will be planted at a depth of 0.5 inch and 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.

A drag, packer, or roller would follow the seeder to ensure uniform seed coverage and adequate compaction. Seed would be drilled perpendicular to slopes at practical to minimize runoff and erosion.

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. Seeds like Galleta (with florets) and winter fat (with fine hairs) may also be broadcast as they do not flow well through a 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.

4.7 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.

4.8 Noxious and Invasive Weed Control

Should noxious or invasive weeds be documented after earthwork and seeding activities, EPIC Energy, LLC will contact BLM for a management and development plan for noxious or invasive weed.

4.9 Revegetation Success for Final Abandonment

To reach a final abandonment status for disturbance and reclamation on BLM-managed lands, reclamation efforts must reach a uniform vegetative cover of native plant species. Requirements for determining reclamation and its successful completion of the selected vegetation community on BLM lands are determined by the reclamation percent cover standards for the community, as outlined previously in Table 3. These standards must be met on BLM managed lands during post-disturbance monitoring procedures for the BLM-FFO to sign off on the attainment of vegetation reclamation standards.

Revegetation percent cover standards will be attained, documented, and submitted to the BLM-FFO by EPIC Energy, LLC or an exception granted before the BLM-FFO approves a final abandonment notice (FAN) or relinquishment.

5. MONITORING REQUIREMENTS

Monitoring activities will be initiated after the project is completed, during the post-disturbance earthwork and seeding inspection process. Operator will contact BLM/BIA when ready for Final Abandonment Notice (FAN) inspection.

5.1 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 operator will contact BLM to initiate an onsite inspection.

5.2 Annual Monitoring

If needed, EPIC Energy, LLC 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, LLC 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, LLC will keep a record of the monitoring for future submittal to the Bureau Land Management at reclamation attainment.

5.3 Attainment of Vegetation Reclamation Standards

When vegetation on a reclaimed site appears to meet the required percent revegetation standard, EPIC Energy, LLC 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.

5.4 Long-Term Monitoring

If needed, after the required percent revegetation standard has been attained, EPIC Energy, LLC will begin long-term monitoring per BLM directions.

5.5 Final Abandonment

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.

5.6 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.

6. 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.

U.S. Department of the Interior, U.S. Department of Agriculture (USDI, USDA). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/VO/ST-06/021+307/REV07. Bureau of Land Management, Denver, Colorado. 84 pp.

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Energy, Minerals and Natural Resources
Oil Conservation Division
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CONDITIONS

Action 232623

CONDITIONS

Operator: EPIC ENERGY, L.L.C. 332 Road 3100 Aztec, NM 87410	OGRID: 372834
	Action Number: 232623
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
john.harrison	Accepted for record - NMOCD JRH 6/28/23. BLM approved P&A 6/23/23	6/28/2023