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

O5/12/2022

Well Name: ESCRITO GALLUP UNIT

Well Location: T24N / R7W / SEC 19 /

NENE / 36.304428 / -107.60878

County or Parish/State: RIO

ARRIBA / NM

Well Number: 10

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMSF080034

Unit or CA Name: ESCRITO GALLUP

UNIT

Unit or CA Number:

NMNM78390X

US Well Number: 300390542700S1

Well Status: Producing Oil Well

Operator: EPIC ENERGY LLC

#### **Notice of Intent**

Sundry ID: 2668160

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 04/21/2022

Time Sundry Submitted: 04:33

Date proposed operation will begin: 04/21/2022

**Procedure Description:** Please find attached the P&A and reclamation plan. This sundry is in replace of sundry ID 2668157.

#### **Surface Disturbance**

Is any additional surface disturbance proposed?: No

#### **NOI Attachments**

**Procedure Description** 

Escrito\_Gallup\_Unit\_10\_P\_A\_20220421163314.pdf

Received by OCD: 5/12/2022 2:01:35 PM. Well Name: ESCRITO GALLUP UNIT

Well Location: T24N / R7W / SEC 19 / NENE / 36.304428 / -107.60878

County or Parish/State: RIO

Page 2 of 25

ARRIBA / NM

Well Number: 10

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UNIT

Unit or CA Number: NMNM78390X

US Well Number: 300390542700S1

Well Status: Producing Oil Well

Operator: EPIC ENERGY LLC

#### Conditions of Approval

#### Additional

General\_Requirement\_PxA\_20220511102857.pdf

2668160\_NOIA\_10\_3003905427\_KR\_05112022\_20220511102847.pdf

24N07W19AKg\_Escrito\_Gallup\_Unit\_10\_20220510132232.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: ARLEEN SMITH Signed on: APR 21, 2022 04:33 PM

Name: EPIC ENERGY LLC Title: Regulatory Specialist Street Address: 332 RD 3100

City: AZTEC State: NM

Phone: (505) 327-4892

Email address: ARLEEN@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 Phone: 5055647742

Disposition: Approved

Signature: Kenneth Rennick

**BLM POC Title:** Petroleum Engineer

BLM POC Email Address: krennick@blm.gov

Disposition Date: 05/11/2022

Released to Imaging: 5/17/2022 7:45:33 AM

Page 2 of 2

## **Arleen Smith**

From: AFMSS <blm-afmss-notifications@blm.gov>

Sent: Thursday, April 21, 2022 4:34 PM

To: Arleen Smith

Subject: Well Name: ESCRITO GALLUP UNIT, Well Number: 10, Notification of Sundry Received

#### The Bureau of Land Management

# **Notice Of Intent Receipt**

Operator Name: EPIC ENERGY LLC
 Well Name: ESCRITO GALLUP UNIT

Well Number: 10

US Well Number: 300390542700S1

Sundry ID: 2668160

The BLM received your Notice Of Intent, Plug and Abandonment sundry on 04/21/2022. This is to notify you that we are processing your sundry.

You may contact the field office if you have any questions.

If we need more information we will contact you. Thank you.

This notification is automatically generated. Please do not reply to this message as this account is not monitored.

#### **Arleen Smith**

From: AFMSS <blm-afmss-notifications@blm.gov>

**Sent:** Friday, April 22, 2022 1:18 PM

To: Arleen Smith

Subject: Well Name: ESCRITO GALLUP UNIT, Well Number: 10, Notification of Issue with Notice

Of Intent

## The Bureau of Land Management

#### Notice of Issue with Notice Of Intent

Operator Name: EPIC ENERGY LLC

Well Name: ESCRITO GALLUP UNIT

Well Number: 10

US Well Number: 300390542700S1

Sundry ID: 2668157

The BLM received your Notice Of Intent, Plug and Abandonment on 04/21/2022. This is to notify you that we are returning your Notice Of Intent Plug and Abandonment for the following reason(s):

Replaced by 2668160. Will be deleted from the system.

The returned Notice Of Intent has generated another task in your worklist that will allow you to update your request and then resubmit to the BLM.

Correlled - Resubrutted NOT -

You may contact the field office if you have any questions.

This notification is automatically generated. Please do not reply to this message as this account is not monitored.

#### **Arleen Smith**

From: AFMSS < blm-afmss-notifications@blm.gov>

Sent: Thursday, April 21, 2022 4:11 PM

To: Arleen Smith

Subject: Well Name: ESCRITO GALLUP UNIT, Well Number: 10, Notification of Sundry Received

## The Bureau of Land Management

# **Notice Of Intent Receipt**

Operator Name: EPIC ENERGY LLC

Well Name: ESCRITO GALLUP UNIT

Well Number: 10

US Well Number: 300390542700S1

Sundry ID: 2668157

The BLM received your Notice Of Intent, Plug and Abandonment sundry on 04/21/2022. This is to notify you that we are processing your sundry.

(Snaelled Sundry )

You may contact the field office if you have any questions.

If we need more information we will contact you. Thank you.

This notification is automatically generated. Please do not reply to this message as this account is not monitored.

#### **P&A Procedure**

## EPIC Energy - Escrito Gallup Unit #10

Escrito Gallup Unit

660' FNL & 660' FEL, Section 19, T24N, R7W

San Juan County, New Mexico, API #30-039-05427

#### 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. Plugs dictated by CBL results.

- Plug #1, 5730' 5880' (Gallup top: 5920): TIH & set 5-1/2" CICR at 5880'. Pressure test tubing to 1000 psi. Sting out of CICR, mix & spot 18 sx (21 ft³) of Class G neat cement on top of CICR. PU 100' above plug reverse circulate to clean tubing. Circulate WBV. TOH. RUWL RIH w/ CBL and log to surface.
- 2. Plug #2, 4954' 6104' (Mancos Top: 5054'): Mix & spot 18 sx (21 ft<sup>3</sup>) Class G neat cement in balanced plug. PUH 100' above plug and reverse circulate tubing clean. WOC and tag plug. Re-spot cement if necessary.
- 3. Plug #3, 3958' 4108' (Mesaverde Top: 4058'): Mix & spot 18 sx (21 ft³) Class G neat cement in balanced plug. PUH 100' above plug and reverse circulate tubing clean. WOC and tag plug. Re-spot cement if necessary.
- 4. Plug #4, 2030' 2546' (FT Coal Top: 2130', PC Top: 2496'): Mix and spot 60 sx (69 ft<sup>3</sup>) Class G neat cement in balanced plug. PUH 100' above plug and reverse circulate tubing clean. WOC and tag plug. Re-spot cement if necessary.
- 5. Plug #5, 1426' 1717' (Ojo Alamo top: 1526', Kirtland: 1667'): Mix and spot 34 sx (39 ft³) Class G neat cement in balanced plug. PUH 100' above plug and reverse circulate tubing clean. WOC and tag plug. Re-spot cement if necessary.
- **6.** Plug #6, (Surface Plug, 50' to Surface): If required, RIH w/ WL and shoot 3 spf @ 50'. Attempt to circulate through braidenhead and pump 23 sx (26 ft³). If unable to circulate, top off cement as necessary.

7.	ND BOP and cut off wellhead.	RD &	MOL.	Cut off anchors and	restore	location	per BLM stipulations.
----	------------------------------	------	------	---------------------	---------	----------	-----------------------

Kyle T. Mason

Engineer

#### Escrito Gallup Unit #10

#### **Current WBD**

#### Basin Dakota

660' FNL & 660' FEL, Section 19, T24N, R7W, Rio Arriba County, NM API: 30-039-05427

Today's Date: 5/28/2019 Spud: 10/28/1957 Completed: 01/01/1958 8-5/8", 24#, J55 Casing set @ 422' Cement with 240 sx (276 cf @1.15 ft³/sk), ~22.5 bbls cmt circ to surface (110 sks) Elevation: 7289' GL 2" tubing set @ 6075' Ojo Alamo @ 1526' Kirtland @ 1667' FT Coal Top @ 2130' Pictured Cliffs @ 2496' Mesaverde @ 4058' Calculated TOC - 4875' Calculated TOC - 4875' Mancos @ 5054' 0 Gallup @ 5920' **Gallup Perforations** 5930' - 5962' **Hole Size** 6054' - 6080' 7.875 6090' - 6104' 5-1/2", 15.5#, J55 casing set @ 6202' Production CMT: 200 sx (230 cf/40.96 bbls) PBTD:6149' TD: 6202'

Hole Size: 12-1/4"

## Escrito Gallup Unit #10

#### **Current WBD**

#### Proposed P&A

660' FNL & 660' FEL, Section 19, T24N, R7W, Rio Arriba County, NM

API: 30-039-05427

Hole Size: 12-1/4"

8-5/8", 24#, J55 Casing set @ 422' Today's Date: 5/28/2019 Surface cemented with 240 sx (276 ft<sup>3</sup>), ~22.5 bbls cmt circ to surface (110 sks) Spud: 10/28/1957 Completed: 01/01/1958 Plug #6: Surface - 50' Elevation: 7289' GL Class G neat, 23 sxs (26 ft3) Ojo Alamo @ 1526' Kirtland @ 1667' Plug #5: 1426' - 1717' Class G neat, 34 sxs (39 ft<sup>3</sup>) FT Coal Top @ 2130' Pictured Cliffs @ 2496' Plug #4: 2030' - 2546' Class G neat, 60 sxs (69 ft3) Plug #3: 3958' - 4108' Class G neat, 18 sxs (21 ft3) Mesaverde @ 4058' Calculated TOC - 4875' Plug #2: 4954' - 6104' Mancos @ 5054' Class G neat, 18 sxs (21 ft3) Plug #1: 5880' - 5730' Class G neat, 18 sxs (21 ft3) Set CICR at 5880' Gallup @ 5920' **Gallup Perforations** 5930' - 5962' **Hole Size** 7.88 6054' - 6080' 6090' - 6104'

> PBTD:6149' TD: 6202'

5-1/2", 15.5#, J55 casing set @ 6202' Production CMT: 200 sx (230 cf/40.96 bbis)

# United States Department of the Interior Bureau of Land Management

Reclamation Plan

EPIC Energy, LLC.

Escrito Gallup Unit #10 Plug and Abandonment Project

Prepared by

Arleen Smith, Regulatory Specialist

EPIC Energy, LLC. 332 Rd 3100 Aztec, New Mexico 87410

> April 2022

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



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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)	Escrito Gallup Unit #10
Name	
Legal Location	Section 19 (660' FNL, 660' FEL), Township 24 North,
	Range 07 West, New Mexico Principal Meridian, in Rio
	Arriba, New Mexico
Lease Number(s)	NMSF-080034

## 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. 1as well as any requirements from the

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

Arleen Smith, Regulatory Specialist 332 Road 3100 Aztec, New Mexico 87410 Phone: (505) 327-4892

## **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.

#### 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 Escrito Gallup Unit #10 wellbore and reclaim the well pad. This location is located on lands owned and managed by the Bureau of Land Management, ~ 55.8 miles South of Bloomfield, NM. The Escrito Gallup Unit #10 is accessed by travelling South on HWY 64 for 47.4 miles. Turn right on Co Rd 377 traveling 2.1 miles. Turn left at the 1st cross street to stay on Co Rd 377 and continue 3.8 miles. Turn left 0.3 miles, slight right 0.1 mile and continue to travel 0.7 miles. The well is located to the right. All rig anchors and pumpjack skid will be removed from location. Remove separator concrete block on the northwest side of the well pad. Remove all the above ground pipeline from the Escrito Gallup Unit #10 to the Escrito Gallup Unit #27 well pad. Gravel tank berm will be pushed into the road east side of the location (per Roger Herrera). Fill dirt will be brought back from the east and south side of location to the cut area on the northwest and west side of the well pad. Clean up contaminated soil around the wellhead. Rip and reclaim pad. Seeding will occur to sagebrush area of road.

#### **Estimated Total Area of Disturbance**

The existing Escrito Gallup Unit #10 well pad was originally 71 ft by73 ft with a maximum 1 ft cut and a maximum of a 1 ft fill. 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 0.47 acres on Bureau of Land Management Lands.

The pre-disturbance site visit occurred on February 24, 2022. The following persons were present at the site visit (Table 1).

Table 1. Site Visit Attendees

Name	Affiliation	Contact Info
John Hampton	EPIC Energy	505-486-6988
James Helickson	Envirotech	505-632-0615
Roger Herrera	BLM	505-564-7600

## **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 takes into account 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 Ibs/acre*
	Plant one o	ng:			
Mountain mahogany	Cercocarpus montanus	VNS	Warm	Shrub	2.0
Antelope bitterbrush	Purshia tridentata	VNS	Cool	Shrub	2.0

and two of the following:								
Western wheatgrass	Pascopyrum smithii	Arriba	Cool	Sod	2.0			
Bottlebrush squirreltail	Elymus elymoides	Tusas or VNS	Cool	Bunch	3.0			
Needleandthread	Hesperostipa comata	VNS	Cool	Bunch	3.0			
	and three of	the following:			l			
Indian ricegrass	Achnatherum hymenoides	Paloma or Rimrock	Warm	Bunch	3.5			
Blue grama	Bouteloua gracilis	Alma or Hachita	Warm	Bunch	2.0			
Sand dropseed	Sporobolus cryptandrus	VNS	Warm	Bunch	0.5			
Prairie Junegrass	Koeleria macrantha	VNS	Cool	Bunch	2.0			
Muttongrass	Poa fendleriana	VNS	Cool	Bunch	2.0			
	and one of	the following	;	1				
Scarlet globemallow	Sphaeralcea coccinea	VNS	Warm	Forb	0.25			
Utah sweetvetch	Hedysarum boreale	VNS	Warm	Forb	0.25			

<sup>\*\*</sup>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)

Functional Group	Percent (%) Foliar Cover	Common Species
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 10% allowed toward meeting standard of 20%.	≤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**

## 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) have been previously removed from location.

## 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.

## 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.

## **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 recontoured 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 or raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting.

#### 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.

## 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.

### 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.

## **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.

## 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.

## **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
Photographs
Description

## **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.

# **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.

## **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.

#### 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.

### 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.

BLM. 2013a. Farmington Field Office Bare Soil Reclamation Procedures. Available at: <a href="http://www.blm.gov/nm/st/en/fo/Farmington Field Office/ffo planning/surface use plan of.ht">http://www.blm.gov/nm/st/en/fo/Farmington Field Office/ffo planning/surface use plan of.ht</a> ml. Accessed November 2013.

BLM. 2013b. Updated Reclamation Goals. Available at: <a href="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</a>. Accessed November 2013.

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/WO/ST-06/021+307/REV 07. Bureau of Land Management, Denver, Colorado. 84 pp.

contaminated soil around well head Contour Location Push gravel tank berm into road nto cut area Push fill dirt into cut area Remove concrete pad

ESCRITO GALLUP UNIT #10 API# 30-039-05427 36.3046188, -107.6093445

# 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 <u>minimum general</u> 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.

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- 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)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON DISTRICT OFFICE

6251 COLLEGE BLVD. FARMINGTON, NEW MEXICO 87402

AFMSS 2 Sundry ID 2668160

Attachment to notice of Intention to Abandon

Well: Escrito Gallup Unit 10

#### CONDITIONS OF APPROVAL

- 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. Bring the top of Plug #1 (Gallup) up to 5670'.
  - b. Add an inside/outside plug to cover the Chacra formation top at 2988'.
  - c. Adjust Plug #5 (or bring the top of Plug #4 up) to cover BLM picks for the top of the Kirtland (1970') and Ojo Alamo (1820') formations.
  - d. Add an inside/outside plug to cover the surface casing shoe at 422'.
- 3. Farmington Office is to be notified at least 24 hours before the plugging operations commence (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 05/11/2022

## BLM FLUID MINERALS P&A Geologic Report

**Date Completed:** 05/10/2022

Well No. Escrito Gallup Unit #1	Location	660 FNL		&	660	FEL	
Lease No. NMSF-080034	Sec. 19	T24N Rio Arriba			R07W New Mexico		
Operator Epic Energy, LLC	County			State			
Total Depth 6202'	Formation Gallup Elevation (KB) 7291'						
Elevation (GL) 7280'							

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm			Surface	1820	Surface/possible freshwater sands
Nacimiento Fm					
Ojo Alamo Ss			1820	1970	Aquifer (possible freshwater)
Kirtland Shale			1970	2298	
Fruitland Fm			2298	2496	Coal/Gas/Water
Pictured Cliffs Ss			2496	2602	Gas
Lewis Shale			2602	2988	
Chacra			2988	4058	Possible Gas
Cliff House Ss			4058	4093	Water/Possible gas
Menefee Fm			4093	4761	Coal/Ss/Water/Possible O&G
Point Lookout Ss			4761	5054	Probable water/Possible O&G
Mancos Shale			5054	5720	Probable O&G
Gallup			5720	PBTD	O&G/Water
Greenhorn					
Graneros Shale					
Dakota Ss					
Morrison Formation					

#### Remarks:

#### P & A

- BLM picks for the Ojo Alamo and Kirtland formation tops vary from Operator.

- Bring the top of Plug #1 (Gallup) up to 5670'.
- Add an inside/outside plug to cover the Chacra formation top at 2988'.
- Adjust Plug #5 (or bring the top of Plug #4 up) to cover BLM picks for the top of the Kirtland (1970') and Ojo Alamo (1820') formations.
- Add an inside/outside plug to cover the surface casing shoe at 422'.
- The plugs proposed in the P&A procedure, with recommended changes, will adequately protect any freshwater sands in this well bore.
- Gallup perfs 5930' 6104'.

Reference Well:

1) Formation Tops

Same

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 106480

#### **CONDITIONS**

Operator: EPIC ENERGY, L.L.C. 332 Road 3100		OGRID:
	· · · · · · · · · · · · · · · · · · ·	372834
	332 Road 3100	Action Number:
ı	Aztec, NM 87410	106480
		Action Type:
		[C-103] NOI Plug & Abandon (C-103F)

#### CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL required	5/17/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	5/17/2022
kpickford	Adhere to BLM approved plugs and COAs. See GEO Report	5/17/2022