

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

APR 09 2009

Bureau of Land Management
Farmington Field Office

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Energen Resources Corporation

3a. Address

2010 Afton Place, Farmington, NM 87401

3b. Phone No. (include area code)

(505) 325-6800

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1870' FSL and 903' FEL of Sec. 25 T-27N R 09W ✓

5. Lease Serial No.

NNMM-011285

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Navajo 1 #1M

9. API Well No.

30-048-34919

10. Field and Pool, or Exploratory Area

Mesa Verde / Dakota

11. County or Parish, State

San Juan NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
- ☐ Subsequent Report
- ☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input type="checkbox"/> Other _____ |
| <input checked="" type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

The intermediate casing is ~~going~~ to be raised so that it is set in the Lewis Shale at 2450' TVD. The cement program will be shortened to fit the new casing depth. The 4 1/2" 11.6 # J-55 casing will still be run with a 200' lap and the cementing program will be increased based on the caliper log to make up for the longer length. ✓

An updated ops plan is attached

RCVD APR 13 '09
OIL CONS. DIV.
DIST. 3CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Devin Mills

Title Drilling Engineer

Signature

Date 4-10-09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Troy L. Salvers

Title

Petroleum Engineer

Date

4/10/09

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

FFO

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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.

NMOC

Operations Plan

April 10, 2009

Navajo 1 #1M

General Information

Location	1870' fsl, 903' fsl nese S25, T27N, R09W San Juan County, New Mexico
Elevations	6137' GL
Total Depth	6869' (MD)
Formation Objective	Dakota

Formation Tops

Nacimiento	Surface	Huerfanito Bentonite	2553'
Ojo Alamo Ss	1229'	Cliff House	3639'
Kirtland Sh	1349'	Menefee	3725'
Fruitland Fm	1709'	Point Lookout Ss.	4339'
Top Coal	1892'	Mancos Shale	4689'
Pictured Cliffs	2082'	Dakota	6524'
Lewis Shale	2239'	Morrison	6729'
Int Csg Point	2450' ✓	TD	6896'

Drilling

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 8 3/4" wellbore will be drilled with a low solids non-dispersed fresh water mud system. Weighting materials will be drill cuttings and/or barite as needed. Mud density is expected to range from 8.3 ppg to 8.9 ppg.

The 6 1/4" hole will be drilled with a low solids non-dispersed fresh water mud system. Weighting materials will be drill cuttings and/or barite as needed. Mud density is expected to range from 8.3 ppg to 8.9 ppg

Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack (figure 1) will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations.

Logging Program:

Open hole logs: From Surface to Intermediate setting depth - None
From Intermediate setting depth to TD - Triple Combo

Mud Logs: From 2239'

Coring: None

Surveys: Surface and/or every 500' to TD

Tubulars

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-200'	12 1/4"	9 5/8"	32.3 ppf	H-40 ST&C
Intermediate	200'-2450'	8 3/4"	7"	23.0 ppf	J-55 LT&C
Production	2250'-6896'	6 1/4"	4 1/2"	11.6 ppf	J-55 LT&C
Tubing	0'-6574'		2 3/8"	4.7 ppf	J-55

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

Intermediate Casing: Depending on wellbore conditions, a cement nose guide shoe on bottom with self fill insert float collar on top of shoe joint and casing centralization with bow spring centralizers to optimize standoff. Two turbolating centralizers at the base of the Ojo Alamo are recommended.

Production Liner: Depending on wellbore conditions, a cement nose guide shoe on bottom with self fill insert float collar on top of shoe joint and casing centralization with standard bow spring centralizers to optimize standoff. If multistage cementing is required, DV tool will be placed based on formation characteristics.

Wellhead

11" 3000 x 9 5/8" Casing Head, 11" 3000 x 7 1/16" 3000 Christmas Tree.

Cementing

Surface Casing: 225 sks Std (class B) with 2.0 % CaCl_2 and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk 247 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 600 psi for 30 min.

Intermediate Casing: Before cementing, circulate hole at least 1 1/2 hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of ~200 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl_2 , 10 #/sk Gilsonite, and 1/2 #/sk Flocele (12.3 ppg, 1.96 ft³/sk) and a tail of ~30 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and 1/4 #/sk Flocele (15.2ppg, 1.24 ft³/sk). (20 % excess to circulate to surface). WOC 12 hours. Pressure test casing to 1200 psi for 30 min. ✓

Production Liner: Depending on wellbore conditions, cement may consist of 250 sks 50/50 with 2.0 % Bentonite, 0.50% Halad-9, 0.10% CFR-3, 5 #/sk Gilsonite, and 1/4 #/sk Flocele (13.5 ppg, 1.30 ft³/sk). (325 ft³ of slurry, 20 % excess open hole, no excess in liner lap to circulate off liner top). Use calipers on logs to figure cement volumes.

Other Information

- 1) This well will be cased and the Dakota fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) Mesa Verde pore pressure is anticipated to be 800 psi, the Pictured Cliffs is 600 psi and the Fruitland is 500 psi.
- 4) No abnormal temperatures or pressures are anticipated.