Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
NOV 27 2007
Bureau of Land Management
Farmington Field Office

RCVD NOV 29 '07
OIL CONS. DIV.
DIST. 3

5. Lease Serial No.
NMSF-077968

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other

8. Well Name and No.
Central Basin SWD #1

2. Name of Operator
Energen Resources Corporation

9. API Well No.
30-045-34426

3a. Address
2198 Bloomfield Highway, Farmington, NM 87401

3b. Phone No. *(include area code)*
(505) 325-6800

10. Field and Pool, or Exploratory Area
Entrada

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
690 fnl, 1727 fwl
fsl

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	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☒ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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)

Due to regulatory requirements, Energen Resources would like to deepen the Central Basin SWD #1 to include the target total depth formation of the Chinle Formation. The revised proposed TD of the well will be 7725'.

The following casing strings and depths will be revised as follows:

*Intermediate Casing: Change from 7" to 7 5/8" 26.4 ppf N-80 LT&C. Cement with 250 sacks (338 cuft) cement for the first stage, and 375 sacks (673 cuft) cement for the second stage.'

*Liner: 5 1/2" 17 ppf N-80 LT&C. Cement with 475 sacks (1149 cuft) cement.

Attached is a revised Operations Plan.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Nathan Smith

Title
Drilling Engineer

Date 11/27/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L. Salyers

Title Petroleum Engineer

Date 11/28/2007

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

NMOCD

Drilling Plan

Revised November 12, 2007

Central Basin SWD #1

General Information

Location	690' fsl, 1727' fwl sesw S09, T28N, R13W San Juan County, New Mexico
Elevations	6015' GL
Total Depth	7725' (MD)
Formation Objective	Chinle

Formation Tops

Nacimiento	Surface	Gallup Ss/Shale	5402'
Ojo Alamo Ss	240'	Greenhorn	6192'
Kirtland Sh	355'	Graneros	6247'
Fruitland Fm	1298'	Dakota	6247'
Pictured Cliffs Ss	1665'	Morrison	6542'
Lewis Shale	1857'	Bluff Ss	7222'
Cliff House Ss	3215'	Summerville	7297'
Menefee Fm	3255'	Entrada Ss	7457'
Point Lookout Ss	4145'	Chinle	7617'
Mancos Shale	4430'	**Total Depth**	**7725'**
Int. **Total Depth**	**4645'**		

Drilling

The 12 ¼" wellbore will be drilled with a fresh water Spud Mud system.
The 8 ¾" wellbore will be drilled with a low solids non-dispersed fresh water mud system. Weighting materials will be drill cuttings. Mud density is expected to range from 8.3 ppg to 8.9 ppg.
The 7 7/8" wellbore will be drilled with a low solids non-dispersed fresh water mud system. Weighting materials will be drill cuttings, and if needed barite. Mud density is expected to range from 9.2 ppg to 10.2 ppg. An under-reamer will be used to increase hole size from ID of intermediate casing.
Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack 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 TD – Temp / HRI / CNT, LDT / GR
Coring: None
Surveys: Surface and/or every 500' to TD

Tubulars

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-600'	12 ¼"	9 5/8"	36 ppf	J-55 LT& C
Intermediate	600'-4645'	8 ¾"	7 5/8"	26.4 ppf	N-80 LT& C
Liner	4400'-7725'	7 7/8"	5 ½"	17 ppf	N-80 LT& C
Tubing	0'-4400'		3 ½"	9.3 ppf	N-80

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: String will be cemented in multiple (2) stages. Cement float shoe on bottom of first joint and a float collar on top of first joint. One centralizer every 3rd joint up to the stage collar and one every 3rd joint to surface. Anticpated Stage Collar depth @ 3000'.

Production Liner: Cement float shoe on bottom of first joint with float collar on top of 2nd joint for a two joint shoe track. One centralizer every 3rd joint up to 4750'.

Wellhead

5000 psi 11" x 9 5/8" casing head. 9 5/8" x 7 5/8"x 3 ½" 5000 psi Flanged Wellhead .

Cementing

Surface Casing: 350 sks Type V with 2.0 % $CaCl_2$ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft^3/sk 413 ft^3 of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Intermediate Casing:

First Stage: Depending on wellbore conditions, cement may consist of 250 sks 50/50 Type V with 0.30 % Halad-344, 0.10 % CFR-3, 5 #/sk Gilsonite and ¼ #/sk Cellophane Flakes (13.3 ppg, 1.35 ft^3/sk), followed by (338 ft^3 of slurry, 100 % excess to circulate to surface). **Stage Collar at 3000'**. Circulate 4 hours starting at time of plug down.

Second Stage: Depending on wellbore conditions, cement may consist a lead of 325 sks 65/35 Type V with 2.0% $CaCl_2$, 10 #/sk Gilsonite, and ½ #/sk Cellophane Flakes and a tail of 50 sks Type V with 1.0 % $CaCl_2$. (12.4 ppg, 1.89 ft^3/sk and 15.6 ppg, 1.18 ft^3/sk respectively). (673 ft^3 of slurry, 100% excess to circulate to surface).

Liner:

Depending on wellbore conditions, cement may consist of 475 sks 65/35 Type V with 0.30 % Halad-344, 5 #/sk Gilsonite, ¼ #/sk Cellophane Flakes (12.5 ppg, 1.85 ft^3/sk) followed by 200 sks 50/50 Type V with 0.80 % Halad-9, 5 #/sk Gilsonite, ¼ #/sk Cellophane Flakes (13.5 ppg, 1.35 ft^3/sk). (1149 ft^3 of slurry, 100% excess to circulate off liner top).

Other Information

1) This well will be cased and the target formation fracture stimulated if no natural fracturing is found.
2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
3) Mesa Verde pore pressure is anticipated to be 700 psi, the Pictured Cliffs is 500 psi and the Fruitland is 300 psi.
4) No abnormal temperatures or pressures are anticipated.
5) This gas is dedicated.