

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires July 31, 2010

## SUNDRY NOTICES AND REPORTS ON WELLS

OCT 09 2014

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 page 2

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNMO29146
2. Name of Operator Energen Resources Corporation		6. If Indian, Allottee or Tribe Name ROYD OCT 16 '14
3a. Address 2010 Afton Place, Farmington, NM 87401	3b. Phone No. (include area code) (505) 325-6800	7. If Unit or CA/Agreement, Name and/or No. OIL CONS. DIST. 3
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1780' FSL, 830' FWL, Sec. 33, T29, R09W. (L) NW/SW		8. Well Name and No. San Juan 21
		9. API Well No. 30-045-07655
		10. Field and Pool, or Exploratory Area Aztec Pictured Cliffs
		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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" 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 recompleat 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 recompleat 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.)

Energen Resources plans to P&A this well according to the attached downhole and reclamation procedures.

This will be a closed loop operation. NMOCDC will be notified 24 hrs prior to commencing operation.

BLM'S APPROVAL OR ACCEPTANCE OF THIS  
ACTION DOES NOT RELIEVE THE LESSEE AND  
OPERATOR FROM OBTAINING ANY OTHER  
AUTHORIZATION REQUIRED FOR OPERATIONS  
ON FEDERAL AND INDIAN LANDS

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Notify NMOCDC 24 hrs  
prior to beginning  
operations



H<sub>2</sub>S POTENTIAL EXIST

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Kyle Mason		Title District Engineer
Signature <i>Kyle Mason</i>		Date 10/9/14
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by Troy Salvers	Title Petroleum Eng.	Date 10/14/2014
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.

NMOCDC

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# San Juan 29-9 #21

Current

Aztec Pictured Cliffs

1780' FSL, 830' FWL, Section 33, T-29-N, R-9-W, San Juan County, NM

Lat: \_\_\_\_\_ /Long: \_\_\_\_\_ API #30-045-07655

Today's Date: 6/16/14

Spud: 9/19/58

Completion: 11/13/58

Elevation: 6230' GI

12-1/4" hole

TOC @ surface, circulated per sundry

10-3/4", 32.75# Casing set @ 146'  
Cement with 200 sxs, circulate to surface

Ojo Alamo @ 1448'

Kirtland @ 1574'

1.66", 2.3# J-55 tubing at 2606'

Fruitland @ 2315'

Pictured Cliffs @ 2547'

Pictured Cliffs Perforations:  
2550' - 2596'

8-3/4" Hole

7" 23#, K-55 Casing set at 2705'  
Cement with 500 sxs (590 cf)

TOC unknown, cement did not circulate,  
75% Calc 2730'

**CIBP @ 3005' (1958)**

Unknown fish in hole; plug set at 3005'  
with 16' of cement on top (1958)

Mesaverde @ 4134'

Mesaverde Perforations:  
4135' - 4735'

6-1/4" Hole

5" 11.5#, Casing liner set 2587' - 5038'  
Cement with 200 sxs (236 cf)

TD 5038'  
PBD 2989'

# San Juan 29-9 #21

## Proposed P&A Aztec Pictured Cliffs

1780' FSL, 830' FWL, Section 33, T-29-N, R-9-W, San Juan County, NM

Lat: \_\_\_\_\_ /Long: \_\_\_\_\_ API #30-045-07655

Today's Date: 6/16/14

Spud: 9/19/58

Completion: 11/13/58

Elevation: 6230' GI

12-1/4" hole

TOC @ surface, circulated per sundry

10-3/4", 32.75# Casing set @ 146'  
Cement with 200 sxs, circulate to surface

**Plug #4: 196' – 0'**  
Class B cement, 25 sxs

**Plug #3: 1624' – 1398'**  
Class B cement, 27 sxs

**Plug #2: 2500' – 2265'**  
Class B cement, 28 sxs

**Set CR @ 2500'**

Pictured Cliffs Perforations:  
2550' – 2596'

TOL @ 2587'

7" 23#, K-55 Casing set at 2705'  
Cement with 500 sxs (590 cf)

**Plug #1: 2735' – 2587'**  
Class B cement, 43 sxs:  
20 outside and 23 inside  
**Note:** outside plug is from  
2735' to TOL at 2587'

TOC unknown, cement did not circulate,  
75% Calc 2730'

**CIBP @ 3005' (1958)**

Unknown fish in hole; plug set at 3005'  
with 16' of cement on top (1958)

Mesaverde Perforations:  
4135' – 4735'

5" 11.5#, Casing liner set 2587' – 5038'  
Cement with 200 sxs (236 cf)

8-3/4" Hole

6-1/4" Hole

TD 5038'  
PBTD 2989'

Ojo Alamo @ 1448'

Kirtland @ 1574'

Fruitland @ 2315'

Pictured Cliffs @ 2547'

Mesaverde @ 4134'

# PLUG AND ABANDONMENT PROCEDURE

June 16, 2014

## San Juan 29-9 #21

### Aztec Pictured Cliffs

1780' FSL, 830' FWL, Section 33, T29N, R9W, San Juan County, NM

API 30-045-07655 / Long: \_\_\_\_\_ / Lat: \_\_\_\_\_

Note: All cement volumes use 10% excess per 1000 foot of depth or 100% excess outside pipe and 50' excess inside pipe, whichever is greater. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.8 ppg with a 1.18 cf/sx yield.

1. This project will use an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.
2. Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.
3. Rods: Yes \_\_\_\_\_, No X, Unknown \_\_\_\_\_.  
Tubing: Yes X, No \_\_\_\_\_, Unknown \_\_\_\_\_, Size 1.66", Length 2606'.  
Packer: Yes \_\_\_\_\_, No X, Unknown \_\_\_\_\_, Type \_\_\_\_\_.  
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.
4. **Plug #1 (7" casing shoe and 5" liner top, 2735' - 2587'):** Attempt to establish injection rate. TIH with tubing to 2735'. Mix 43 sxs Class B cement, squeeze 20 sxs outside 5" liner to liner top (note: outside plug is from 2735' to 2587') and leave 23 sxs inside casing to cover the liner top. TOH.
5. **Plug #2 (Pictured Cliffs perforations, PC and Fruitland tops, 2500' - 2265'):** TIH and set CR at 2500'. Attempt to pressure test casing to 800#. IF casing does not test, then spot or tag subsequent plugs as appropriate. Mix and pump 28 sxs Class B cement and spot inside plug above CR to isolate the PC perforations and cover through the Fruitland top. TOH and LD setting tool.
6. **Plug #3 (Kirtland and Ojo Alamo tops, 1624' - 1398'):** TIH with open ended tubing. Spot 27 sxs Class B cement inside casing to cover the Kirtland and Ojo Alamo tops. PUH with tubing.
7. **Plug #4 (10-3/4" Surface casing shoe and surface, 196' - Surface):** Attempt to pressure test the bradenhead annulus to 300 PSI; note the volume to load. If the BH annulus holds pressure, then establish circulation out casing valve with water. Mix approximately 25 sxs cement and spot a balanced plug from 196' to surface, circulate good cement out casing valve. TOH and LD tubing. Shut well in and WOC. If the BH annulus does not test, then perforate at the appropriate depth (s) and attempt to circulate cement to surface filling the casing to surface (as approved). Shut in well and WOC.
8. ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and cut off anchors. Restore location per BLM stipulations

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

Attachment to notice of  
Intention to Abandon:

Re: Permanent Abandonment  
Well: San Juan #21

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. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
3. The following modifications to your plugging program are to be made:
  - a) Bring the top of plug #2 to 2178 ft. to cover the Pictured Cliffs and Fruitland tops. Adjust cement volume accordingly.
  - b) Bring the top of plug #3 to 1355 ft. to cover the Kirtland and Ojo Alamo tops. Adjust cement volume accordingly.

Note: H<sub>2</sub>S has not been reported in this section; however, low concentrations of H<sub>2</sub>S (4ppm-10ppm GSV) have been reported in wells within a 1 mile radius of this location

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.