

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM 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.

5. Lease Serial No.  
NMSF080375D

6. If Indian, Allottee or Tribe Name  
RCUD OCT 15 '14  
OIL CONS DIV

7. If Unit or CA/Agreement, Name and/or No.  
DIST. 3

8. Well Name and No.  
Sheets A #1

9. API Well No.  
30-039-06264

10. Field and Pool, or Exploratory Area  
Ballard Pictured Cliffs

11. County or Parish, State  
Rio Arriba NM

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)  
809' FNL 1632' FWL, Sec. 31 T26N R07W (C)

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"/> Subsequent Report	<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Production (Start/Resume)
	<input type="checkbox"/> Alter Casing
	<input type="checkbox"/> Fracture Treat
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Recomplete
	<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
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Well Integrity
	<input type="checkbox"/> Other

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.)

Energen Resources plans to plug and abandon the subject well according to the attached downhole and reclamation procedure.

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

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Notify NMOCD 24 hrs  
prior to beginning  
operations

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

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

Name (Printed/Typed)  
Kyle Mason

Title  
District Engineer

Signature  
*Kyle Mason*

Date  
10/9/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by  
Troy Salyers

Title  
Petroleum Eng.

Date  
10/14/2014

Office  
FFO

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.

NMOCD

# Sheets A 1 Current

Largo Canyon Pictured Cliffs Ext.

809' FSL & 1632' FWL, Section 31, T-26-N, R-7-W, Rio Arriba County, NM

Lat: N \_\_\_\_\_ / Long: W \_\_\_\_\_ / API #30-039-06264

Today's Date: 5/15/13  
Spud: 7/10/56  
Completed: 9/23/56  
Elevation: 6347' GI

12-1/4" hole

9-5/8", 25.4#, J-55 Casing set @ 122'  
Cmt with 125 sxs (Circulated to Surface)

2" tubing at 2237'

Ojo Alamo @ 1415'

TOC at 1527' (Calc, 75%)

Kirtland @ 1595'

Fruitland @ 2004'

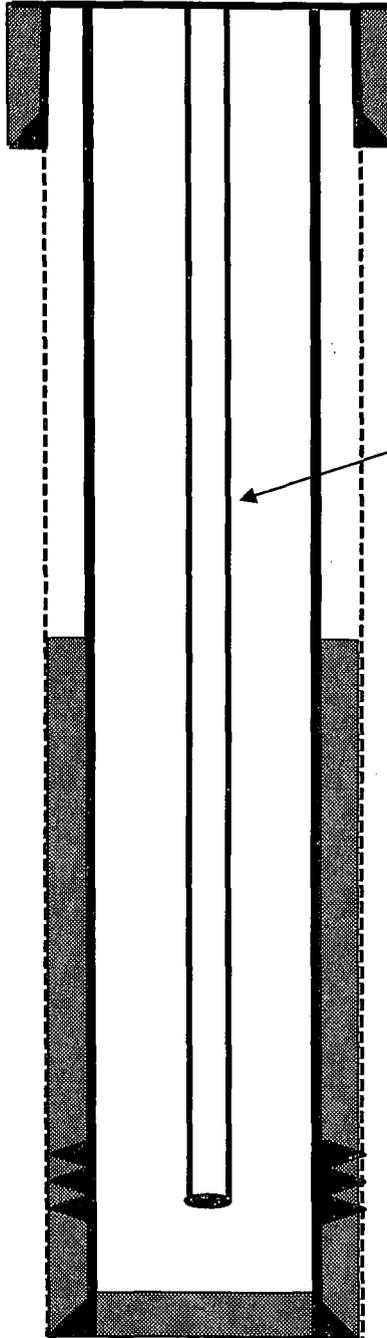
Pictured Cliffs @ 2163'

Pictured Cliffs Perforations:  
2196' - 2262'

7-7/8" hole

5-1/2" 15.5#, J-55 Casing set @ 2293'  
Cement with 150 sxs

TD 2301'  
COTD 2271'



# Sheets A 1 Proposed P&A

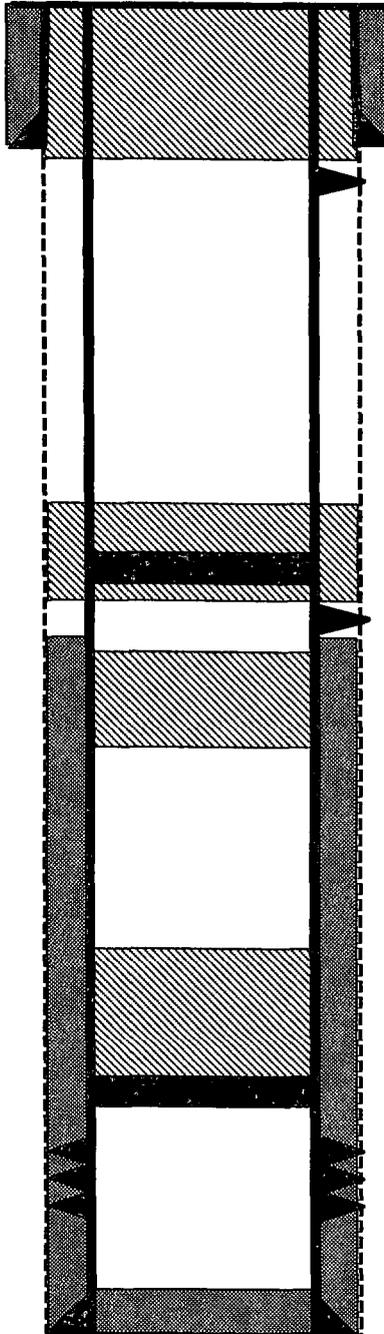
Largo Canyon Pictured Cliffs Ext.

809' FSL & 1632' FWL, Section 31, T-26-N, R-7-W, Rio Arriba County, NM

Lat: N \_\_\_\_\_ / Long: W \_\_\_\_\_ / API #30-039-06264

Today's Date: 5/15/13  
Spud: 7/10/56  
Completed: 9/23/56  
Elevation: 6347' GI

12-1/4" hole



9-5/8", 25.4#, J-55 Casing set @ 122'  
Cmt with 125 sxs (Circulated to Surface)

**Perforate @ 172'**

**Plug #4: 172' - 0'**  
Class B cement, 70 sxs

Ojo Alamo @ 1415'

**CR @ 1415'**

**Plug #3: 1465' - 1365'**  
Class B cement, 47 sxs:  
17 inside and 30 outside

**Perforate @ 1465'**

TOC at 1527' (Calc, 75%)

Kirtland @ 1595'

**Plug #2: 1645' - 1545'**  
Class B cement, 17 sxs

Fruitland @ 2004'

**Plug #1: 2146' - 1954'**  
Class B cement, 28 sxs

Pictured Cliffs @ 2163'

**Set CR @ 2146'**

Pictured Cliffs Perforations:  
2196' - 2262'

7-7/8" hole

5-1/2" 15.5#, J-55 Casing set @ 2293'  
Cement with 150 sxs

**TD 2301'**  
**COTD 2271'**

# PLUG AND ABANDONMENT PROCEDURE

May 15, 2013

## Sheets A 1

Largo Canyon Pictured Cliffs Ext.

809' FSL, 1632' FWL, Section 31, T26N, R7W, Rio Arriba County, New Mexico

API 30-039-06264 / Long \_\_\_\_\_ / Lat: \_\_\_\_\_

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield.

1. This project requires a NMOCD C-144 CLEZ Closed-Loop System Permit for the use of 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 2", Length 2237'.  
Packer: Yes \_\_\_\_\_, No X, Unknown \_\_\_\_\_, Type \_\_\_\_\_.

If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. Note: LD 2" tubing and PU workstring. Round trip 5.5" gauge ring or casing scraper to 2146' or as deep as possible.

**NOTE: BLM requires a CBL log to be run on all wells where the cement did not circulate to surface or where a T.S. or CBL log was not previously run. This procedure is prepared with the understanding that it may be modified based on the TOC from the CBL.**

4. **Plug #1 (Pictured Cliffs interval and Fruitland top, 2146' – 1954')**: TIH and set 5.5" CR at 2146'. Pressure test tubing to 1000#. Load casing with water and circulate well clean. Pressure test casing to 800#. *If the casing does not test, then spot or tag subsequent plugs as appropriate.* Mix 28 sxs Class B cement and spot a balanced plug inside the casing above the CR to isolate the Pictured Cliffs interval and the Fruitland top. TOH.
5. **Plug #2 (Kirtland top, 1645' – 1545')**: Spot 17 sxs Class B cement inside casing to cover the Kirtland top. TOH with tubing.
6. **Plug #3 (Ojo Alamo top, 1465' – 1365')**: *See COA* Perforate 3 squeeze holes at 1465'. Attempt to establish rate if the casing pressure tested. Set 5.5" cement retainer at 1415'. Establish rate into squeeze holes. Mix and pump 47 sxs Class B cement, squeeze 30 sxs outside 5.5" casing and leave 17 sxs inside casing to cover the Ojo Alamo top. TOH and LD tubing.
7. **Plug #4 (9-5/8" surface casing shoe, 172' - Surface)**: Perforate 3 squeeze holes at 172'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 70 sxs Class B cement and pump down the 5.5" casing to circulate good cement out bradenhead. Shut in well and WOC.

8. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. 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: Sheets A #1

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Leases."
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) Set plug #3 (1545 ft. (or the top of plug #2) to 1361 ft.) Inside/outside to cover the entire Ojo Alamo fresh water aquifer. Adjust cement volume accordingly.

Operator will run a CBL from 2146 ft., or as deep as possible, to verify cement top. Outside plugs may be revised, based on CBL result. Submit electronic copy of the log for verification to the following BLM address: [tsalyers@blm.gov](mailto:tsalyers@blm.gov)

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.