

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.*

AUG 25 2014

5. Lease Serial No. **MM080469**  
6. If Indian, Allottee or Tribe Name **0733**  
7. If Unit or CA/Agreement, Name and/or No.  
8. Well Name and No. **Murphy A Com #2**  
9. API Well No. **30-045-08818**  
10. Field and Pool, or Exploratory Area **Aztec Pictured Cliffs**  
11. County or Parish, State **San Juan 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)  
**990' FNL 1650' FWL, Sec. 2 T29N R11W (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"/> 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 <i>bl</i>	<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.)

RCVD SEP 4 '14

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

OIL CONS. DIV.

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

DIST. 3

Notify NMOCD 24 hrs  
prior to beginning  
operations

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

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



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

Date **8/25/14**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by **Troy Salyers**

Title **Petroleum Eng.**

Date **9/2/2014**

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**

NMOCD

## PLUG AND ABANDONMENT PROCEDURE

May 2, 2013

### Murphy A Com #2A

Aztec Pictured Cliffs

990' FNL, 1650' FWL, Section 2, T29N, R11W, San Juan County, New Mexico

API 30-045-08818 / 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 1-1/4", Length 2041'.  
Packer: Yes \_\_\_\_\_, No \_\_\_\_\_, Unknown \_\_\_\_\_, Type \_\_\_\_\_.

If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. Note: LD 1-1/4" tubing and PU workstring. Round trip 5.5" gauge ring or casing scraper to 1997' or as deep as possible.

*See CoA*

4. **Plug #1 (Pictured Cliffs interval and Fruitland top, 1997' – 1665')**: TIH and set 5.5" CR at 1997'. 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 44 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 and Ojo Alamo tops, 900' – 695')**: Perforate HSC squeeze holes at 900'. Establish injection rate. RIH and set CR at 850'. TIH with tubing and sting into CR. Establish rate. Mix 90 sxs Class B cement, squeeze 61 sxs outside casing and leave 29 sxs inside casing. TOH and LD tubing.
6. **Plug #3 (8-5/8" surface casing shoe, 190' - Surface)**: Perforate 3 squeeze holes at 190'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 65 sxs Class B cement and pump down the 5.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
7. 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.

# Murphy A Com #2A

## Current

Aztec Pictured Cliffs

990' FNL & 1650' FWL, Section 2, T-29-N, R-11-W, San Juan County, NM

Lat: N \_\_\_\_\_ / Long: W \_\_\_\_\_ / API #30-045-08818

Today's Date: 5/3/13

Spud: 5/2/59

Completed: 5/5/59

Elevation: 5732' GI

12-1/4" hole

8-5/8" 32#, J-55 Casing set @ 140'  
Cmt with 88 sxs (Circulated to Surface)

Ojo Alamo @ 745'

Kirtland @ 850'

1-1/4", 2.4# tubing at 2041'

TOC at 1680' (T.S.)

Fruitland @ 1715' \*est

Pictured Cliffs @ 2053'

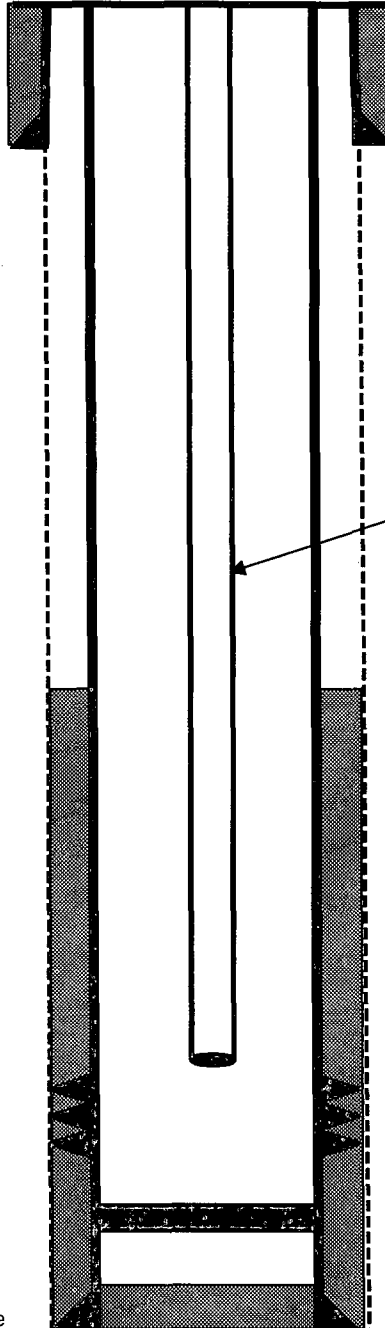
Pictured Cliffs Perforations:  
2047' - 2077'

Set Baker Model "NC" CIBP @ 2079' (1972)

7-7/8" hole

5-1/2" 16#, J-55 Casing set @ 2152'  
Cement with 150 sxs

TD 2152'  
COTD 2079'



# Murphy A Com #2A

## Proposed P&A

### Aztec Pictured Cliffs

990' FNL & 1650' FWL, Section 2, T-29-N, R-11-W, San Juan County, NM

Lat: N \_\_\_\_\_ / Long: W \_\_\_\_\_ / API #30-045-08818

Today's Date: 5/3/13  
 Spud: 5/2/59  
 Completed: 5/5/59  
 Elevation: 5732' GI

12-1/4" hole

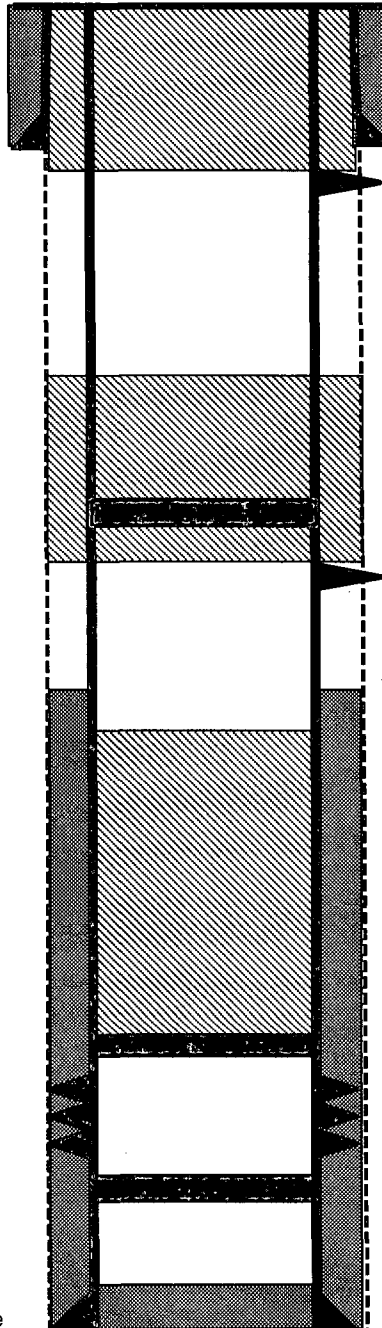
Ojo Alamo @ 745'

Kirtland @ 850'

Fruitland @ 1715' \*est

Pictured Cliffs @ 2053'

7-7/8" hole



8-5/8" 32#, J-55 Casing set @ 140'  
 Cmt with 88 sxs (Circulated to Surface)

Perforate @ 190'

**Plug #3: 190' - 0'**  
 Class B cement, 65 sxs

**Plug #2: 900' - 695'**  
 Class B cement, 90 sxs:  
 29 inside and 61 outside

CR @ 850'

Perforate @ 900'

TOC at 1680' (T.S.)

**Plug #1: 1997' - 1665'**  
 Class B cement, 44 sxs

CR @ 1997'

Pictured Cliffs Perforations:  
 2047' - 2077'

Set Baker Model "NC" CIBP @ 2079" (1972)

5-1/2" 16#, J-55 Casing set @ 2152'  
 Cement with 150 sxs

TD 2152'  
 COTD 2079'

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: Murphy A Com #2

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. Bring the top of plug #1 to 1580 ft. to cover the Fruitland formation top. Adjust cement volume accordingly.

Operator must run a CBL from 1997 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

Note: H<sub>2</sub>S has not been reported at this location; however, low concentrations of H<sub>2</sub>S (5-22) ppm 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.