

State of New Mexico  
Energy, Minerals and Natural Resources Department

**Susana Martinez**  
Governor

**David Martin**  
Cabinet Secretary

**Brett F. Woods, Ph.D.**  
Deputy Cabinet Secretary

**Jami Bailey, Division Director**  
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

Operator Signature Date: 7/16/2014

Well information:

API WELL #	Well Name	Well #	Operator Name	Type	Stat	County	Surf. Owner	UL	Sec	Twp	N/S	Rng	W/E
30-039-06514-00-00	JICARILLA 108	013	ENERGEN RESOURCES CORPORATION	G	A	Rio Arriba	J	A	13	26	N	5	W

Application Type:

- P&A   
  Drilling/Casing Change   
  Recomplete/DHC  
 Location Change   
  Other:

Conditions of Approval:

Notify NMOCD 24hrs prior to beginning operations

Provide CBL to agencies for review/ approval prior to cementing

\_\_\_\_\_  
NMOCD Approved by Signature

8-15-14  
Date

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

RECEIVED

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.

JUL 29 2014

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. Jicarilla 108
2. Name of Operator ENERGEN RESOURCES CORPORATION		6. If Indian, Allottee or Tribe Name Jicarilla Apache
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. Jicarilla
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 950' ENL, 1115' FEL, Sec. 13, T:26N, 05W. (A)		8. Well Name and No. Jicarilla 108 13
		9. API-Well-No. 03-039-06514
		10. Field and Pool, or Exploratory Area S. Blanco Pictured Cliffs
		11. County or Parish, State Rio Arriba 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"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<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 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 plug and abandon the Jicarilla 108 #13 per the attached procedure.

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

OIL CONS. DIV DIST. 3

AUG 08 2014

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

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 7/16/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Tray Salyers	Title Petroleum Engineer	Date 8/6/2014
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	

## PLUG AND ABANDONMENT PROCEDURE

July 9, 2014

### Jicarilla 108 #13

So. Blanco Pictured Cliffs Ext.

950' FNL, 1115' FEL, Section 13, T26N, R5W, Rio Arriba County, New Mexico

API 30-039-06514 / 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. 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.
2. Rods: Yes \_\_\_\_\_, No X, Unknown \_\_\_\_\_.  
Tubing: Yes X, No \_\_\_\_\_, Unknown \_\_\_\_\_, Size 1-1/4", Length 3519.27'.  
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 1-1/4" tubing and PU workstring. Round trip gauge ring or casing scraper to 3402' or as deep as possible.

3. **Plug #1 (Pictured Cliffs interval and Fruitland, Kirtland tops 3402' – 3035')**: TIH and set 5.5" CR at 3402'. 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 48 sxs Class B cement and spot a balanced plug inside the casing above the CR to isolate the Pictured Cliffs interval and cover the Fruitland/Kirtland tops. TOH.
4. **Plug #2 (Ojo Alamo top 2901' – 2801')**: Perforate squeeze holes at 2901'. Attempt to establish rate if the casing pressure tested. TIH and set CR at 2851'. 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 with tubing.  
*See COA*
5. **Plug #3 (Nacimiento top 1571' – 1471')**: Perforate squeeze holes at 1571'. Attempt to establish rate if the casing pressure tested. TIH and set CR at 1521'. Mix and pump 47 sxs Class B cement, squeeze 30 sxs outside 5.5" casing and leave 17 sxs inside casing to cover the Nacimiento top. TOH and LD tubing.  
*See COA*
6. **Plug #4 (8-5/8" surface casing shoe, 150' - Surface)**: Perforate squeeze holes at 150'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 55 sxs Class B cement and pump down the 5.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
7. 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

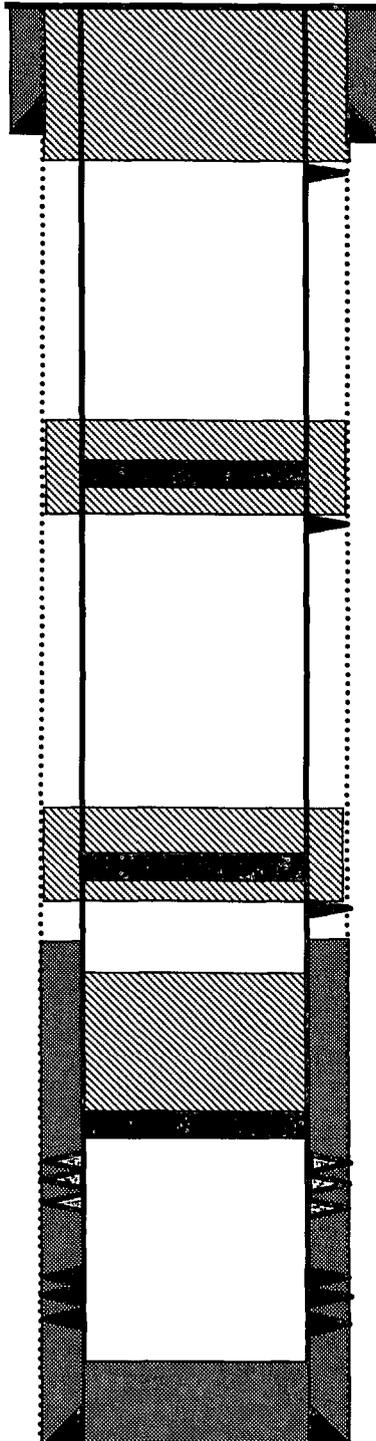
# Jicarilla 108 #13

## Proposed P&A

So. Blanco Pictured Cliffs Ext.  
950' FNL, 1115' FEL, Section 13, T-26-N, R-5-W,  
Rio Arriba County, NM / API #30-039-06514  
Lat \_\_\_\_\_ / Long \_\_\_\_\_

Today's Date: 7/9/14  
Spud: 9/24/58  
Completed: 10/31/58  
Elevation: 6822' GI  
6829' KB

12-1/4" hole



8-5/8", 24#, J-55 Casing set @ 100'  
Cement with 70 sxs (Circulated to Surface)

Perforate @ 150'

Plug #4: 150' - 0'  
Class B cement, 55 sxs

Nacimiento @ 1521' \*est

Set CR @ 1521'

Perforate @ 1571'

See COA

Plug #3: 1571' - 1471'  
Class B cement, 47 sxs,  
17 inside and 30 outside

Ojo Alamo @ 2851'

Set CR @ 2851'

Perforate @ 2901'

See COA

Plug #2: 2901' - 2801'  
Class B cement, 47 sxs,  
17 inside and 30 outside

Kirtland @ 3085'

TOC at 2990' (T.S.)

Fruitland @ 3283'

Set CR @ 3402'

Fruitland Coal Perforations:  
3443' - 3444'  
Squeezed with 100 sxs cement (1958)

Plug #1: 3402' - 3035'  
Class B cement, 48 sxs

Pictured Cliffs @ 3450'

Pictured Cliffs Perforations:  
3452' - 3505'

7-7/8" hole

5-1/2", 15.5#, J-55 Casing set @ 3576'  
Cement with 100 sxs

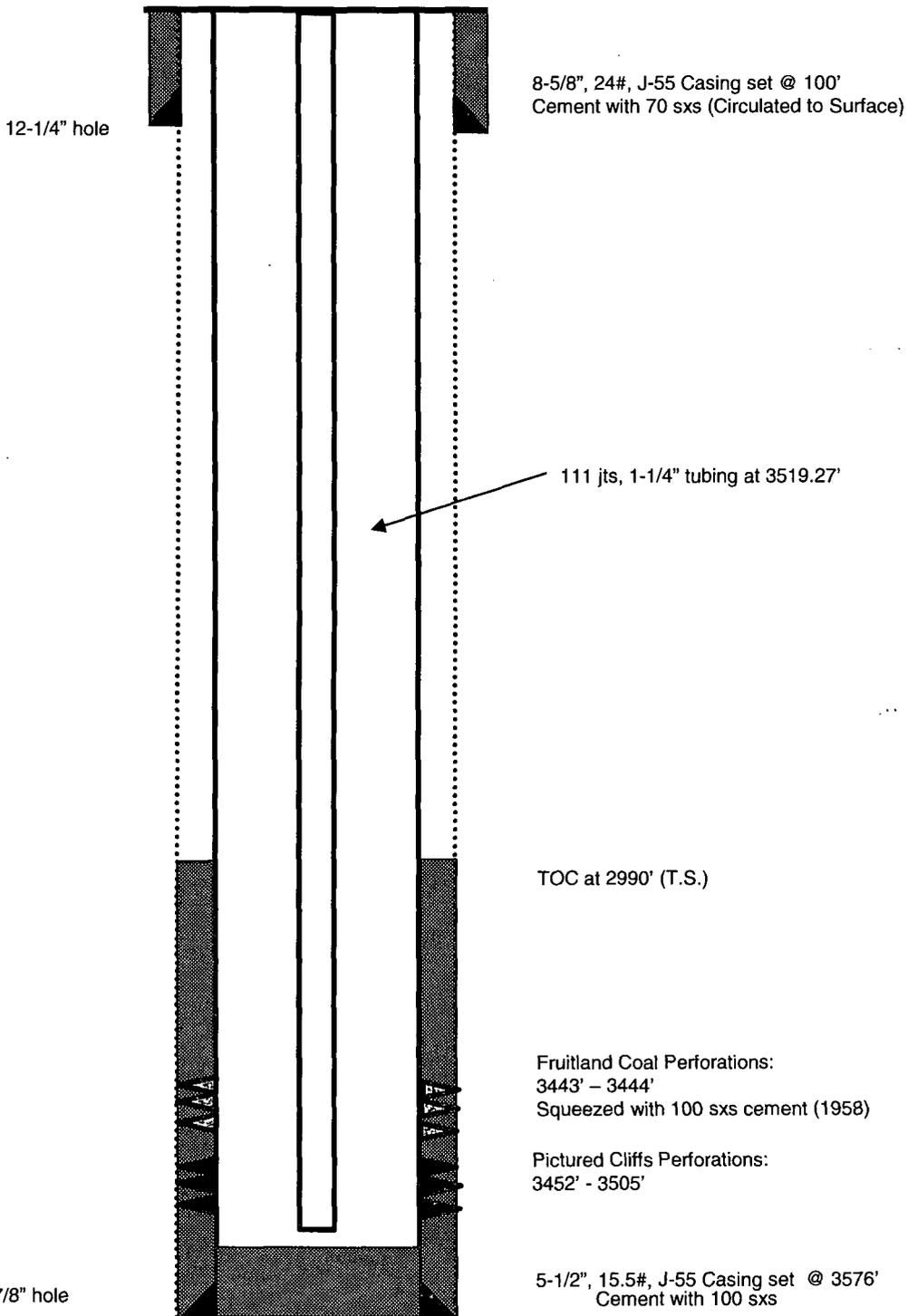
TD 3577'  
COTD 3531'

# Jicarilla 108 #13

## Current

So. Blanco Pictured Cliffs Ext.  
950' FNL, 1115' FEL, Section 13, T-26-N, R-5-W,  
Rio Arriba County, NM / API #30-039-06514  
Lat \_\_\_\_\_ / Long \_\_\_\_\_

Today's Date: 7/9/14  
Spud: 9/24/58  
Completed: 10/31/58  
Elevation: 6822' GI  
6829' KB



Nacimiento @ 1521' \*est

Ojo Alamo @ 2851'

Kirtland @ 3085'

Fruitland @ 3283'

Pictured Cliffs @ 3450'

8-5/8", 24#, J-55 Casing set @ 100'  
Cement with 70 sxs (Circulated to Surface)

111 jts, 1-1/4" tubing at 3519.27'

TOC at 2990' (T.S.)

Fruitland Coal Perforations:  
3443' - 3444'  
Squeezed with 100 sxs cement (1958)

Pictured Cliffs Perforations:  
3452' - 3505'

5-1/2", 15.5#, J-55 Casing set @ 3576'  
Cement with 100 sxs

7-7/8" hole

TD 3577'  
COTD 3531'

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: Jicarilla 108 #13

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 #2 (3035 ft. (or the top of plug #1) to 2801 ft.) Inside/outside to cover the entire Ojo Alamo fresh water aquifer. Adjust cement volume accordingly.
  - b) Set plug #3 (1620-1520) ft. Inside/outside to cover Nacimiento formation top.

Operator must run a CBL from 3402 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.