

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**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 page 2.**

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

2. Name of Operator  
**Black Hills Gas Resources, Inc.**

3a. Address  
**3200 N 1st St, Bloomfield, NM 87413**

3b. Phone No. (include area code)  
**(505) 634-5104**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**1900' FSL & 1100' FWL NW/SW Section 8 T29N R2W (UL: L)**

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2016

RECEIVED

MAR 22 2016

5. Lease Serial No.  
**MDA 701-98-0013, Tract 4**

6. If Indian, Allottee, or Tribe Name  
**Jicarilla Apache Tribe**

7. If Unit or C.A. Agreement Name and/or No.

8. Well Name and No.  
**Jicarilla 29-02-08 #1**

9. API Well No.  
**30-039-26327**

10. Field and Pool, or Exploratory Area  
**Cabresto Canyon Tertiary**

11. County or Parish, State  
**Rio Arriba County, New Mexico**

**12. CHECK APPROPRIATE BOX(S) 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"/> Altering 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 recomple 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 the 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 recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

**Black Hills Gas Resources intends to plug and abandon Jicarilla 29-02-08 #1 per attached procedure.**

**Black Hills will use closed loop system.**

OIL CONS. DIV DIST. 3

MAY 09 2016

**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 CONDITIONS OF APPROVAL**  
Notify NMOCD 24 hrs prior to beginning operations

*\* Reclamation plan has not been approved.*

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

**Daniel Manus**

**Regulatory Technician II**

Title

Signature

Date

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

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

Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCD

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## PLUG AND ABANDONMENT PROCEDURE

February 19, 2016

### Jicarilla 29-02-08 #1

Cabresto Canyon; Tertiary

1900' FSL, 1100' FWL, Section 8, T29N, R2W, Rio Arriba County, NM

API 30-039-26327 / 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   X  , No       , Unknown       .  
Tubing: Yes   X  , No       , Unknown       , Size   2-3/8"  , Length   2315'  .  
Packer: Yes       , No       , Unknown       , Type       .  
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.
3. **Plug #1 (Pictured Cliffs, Fruitland, Kirtland and Ojo Alamo tops, 3758' – 3183'):** TIH with open ended tubing. Mix and pump 77 sxs Class B cement (100' excess due to open San Jose perforations) and spot a plug to isolate the PC, Fruitland, Kirtland and Ojo Alamo tops. PUH and WOC. TIH and tag TOC 50' higher than the Ojo Alamo top. If tag is low spot additional cement as required. PUH.
4. **Plug #2 (Nacimiento top, 2352' – 2252'):** TIH with open ended tubing. Mix and pump 23 sxs Class B cement (100' excess due to open San Jose perforations) and spot a plug to isolate the Nacimiento top. PUH and WOC. TIH and tag TOC 50' higher than the Nacimiento top. If tag is low spot additional cement as required. TOH.
5. **Plug #3 (San Jose perforations, 1280' – 1180'):** Round trip 5.5" scraper or gauge ring to 1280'. TIH and set 5.5" CR or CIBP at 1280'. Attempt to pressure test casing to 800 psi. If casing does not test then spot or tag subsequent plugs as appropriate. Mix 17 sxs Class B cement and spot a balanced plug inside casing above CR or CIBP to isolate the San Jose interval. PUH.
6. **Plug #4 (8-5/8" Surface casing shoe, 306' - 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 40 sxs cement and spot a balanced plug from 306' 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 and attempt to circulate cement to surface filling the casing from 306' and the annulus from the squeeze holes to surface. 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.



# Jicarilla 29-02-08 #1

## Proposed P&A

Cabresto Canyon Tertiary

1900' FSL & 1100' FWL, Section 8, T-29-N, R-2-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-26327

Today's Date: 2/19/16

Spud: 9/30/2000

Comp: 1/18/2001

Elevation: 7335' GI  
7347' KB

12-1/4" Hole

TOC circulated to surface

8-5/8" 24#, J-55 Casing set @ 256'  
Cement with 140 sxs, circulated to surface

**Plug #4: 306' – 0'**  
Class B cement, 40 sxs

**Plug #3: 1280' – 1180'**  
Class B cement, 17 sxs

**Set CR @ 1280'**

San Jose Perforations:  
1330' – 1449'

San Jose Perforations:  
1876' – 1906'

**Plug #2: 2352' – 2252'**  
Class B cement, 23 sxs  
(100' excess due to open  
perfs above)

**Plug #1: 3758' – 3183'**  
Class B cement, 77 sxs  
(100' excess due to open  
perfs above)

Nacimiento @ 2302'

Ojo Alamo @ 3233'

Kirtland @ 3554'

Fruitland @ 3639'

Pictured Cliffs @ 3708'

7-7/8" Hole

5.5" 17#, K-55 Casing @ 4000'  
Cement with 825 sxs, Circulated 40 sx to  
surface.

4000' TD  
3951' PBTd

# Jicarilla 29-02-08 #1

## Current

Cabresto Canyon Tertiary

1900' FSL & 1100' FWL, Section 8, T-29-N, R-2-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-26327

Today's Date: 2/19/16

Spud: 9/30/2000

Comp: 1/18/2001

Elevation: 7335' GI  
7347' KB

12-1/4" Hole

TOC circulated to surface

8-5/8" 24#, J-55 Casing set @ 256'  
Cement with 140 sxs, circulated to surface

2-3/8" tubing at 2315'  
70 jts, 2-3/8", 4.7#, J-55 tbg, SN, 4' perf sub, 2 jts 2-  
7/8", 6.5#, J-55 tbg, bull plug.  
(with rods and pump.)

San Jose Perforations:  
1330' - 1449'

San Jose Perforations:  
1876' - 1906'

Nacimiento @ 2302'

Ojo Alamo @ 3233'

Kirtland @ 3554'

Fruitland @ 3639'

Pictured Cliffs @ 3708'

7-7/8" Hole

5.5" 17#, K-55 Casing @ 4000'  
Cement with 825 sxs, Circulated 40 sx to  
surface.

4000' TD  
3951' PBTB

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 29-02-08 #1

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) Set a plug #2 (2208-2108) ft. to cover the Nacimiento top. BLM picks top of Nacimiento at 2158 ft.

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.