

RECEIVED

Form 3160-5  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APR 05 2013

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

**SUNDRY NOTICES AND REPORTS ON WELLS** Field Office  
Do not use this form for proposals to drill, or to re-enter, or to abandon a well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. **Contract 451**

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 451-4 #44**

9. API Well No.  
**30-039-27729**

10. Field and Pool, or Exploratory Area  
**Cabresto Cnyn Tert. & E. Blanco PC**

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

**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)  
**660' FSL & 660' FEL Sec. 4 T29N R3W (UL:P)**

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 checked="" type="checkbox"/> Other <b>Formation</b>	
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and abandon	<input type="checkbox"/> Temporarily Abandon	<b>correction</b>	
	<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 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.)

Per the Notice of Intent dated February 21, 2013, to plug and abandon Jicarilla 451-04 #44, Black Hills Gas Resources is submitting the attached plug and abandon procedure.

The Pictured Cliffs formation top has been corrected to 3651'.

RCVD APR 10 '13  
OIL CONS. DIV.  
DIST. 3

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

**Daniel Manus**

**Regulatory Technician**

Title

Signature

Date

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: **Stephen Mason**

Title

Date

**APR 05 2013**

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)

NMOCDAY

## PLUG AND ABANDONMENT PROCEDURE

April 1, 2013

### Jicarilla 451-4 #44

East Blanco Pictured Cliffs / Cabresto Canyon; Tertiary  
660' FSL, 660' FEL, Section 4, T29N, R3W, Rio Arriba County, NM  
API 30-039-27729 / 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 2-3/8", Length 3614'.  
Packer: Yes X, No \_\_\_\_\_, Unknown \_\_\_\_\_, Type \_\_\_\_\_.  
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.

NOTE: Due to high probability of holes in tubing and multiple sets of perforations above packer the decision was made to leave the packer in the well. PU on tubing and turn to the left to release on/off tool. TOH and LD tubing. PU workstring. Round trip 5.5" gauge ring to 2168' or as deep as possible. If unable to get through perforations then modify Plug #2 as appropriate.

4. **Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops, (3605' – 3113')):** TIH with workstring and tag packer. Mix 72 sxs Class B cement (10 sxs excess for PC perfs) and spot a balanced plug inside casing above the packer to isolate the PC interval and cover through the Ojo Alamo top. PUH and WOC. TIH and tag cement. Plug should be at least 50' above the top of the Ojo Alamo. TOH.
5. **Plug #2 (Nacimiento perforations and top, 2168' – <sup>1888</sup>2046')**: TIH and set 5.5" wireline CIBP or CR at 2168'. Mix ~~28~~ sxs Class B cement (note: 100% excess to cover 50' above Nacimiento top in Lower San Jose perforations) and spot balanced plug to isolate the Nacimiento perforations and cover the Nacimiento top. TOH.
6. **Plug #3 (San Jose perforations, 962' – 862')**: TIH and set 5.5" CIBP or CR at 962'. Mix 17 sxs Class B cement and spot a balanced plug inside the casing above the CIBP or CR to isolate the San Jose perforations. PUH.

7. **Plug #4 (8-5/8" Surface casing shoe, 332' – 0')**: 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 45 sxs cement and spot a balanced plug from 332' 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 332' and the annulus from the squeeze holes to surface. 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.

# Jicarilla 451-4 #44

## Current

East Blanco Pictured Cliffs / Cabresto Canyon; Tertiary

660' FSL & 660' FEL, Section 4, T-29-N, R-3-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-27729

Today's Date: 4/1/13  
Spud: 5/30/04  
Comp: 9/03/04  
Elevation: 7048' GI  
7061' KB

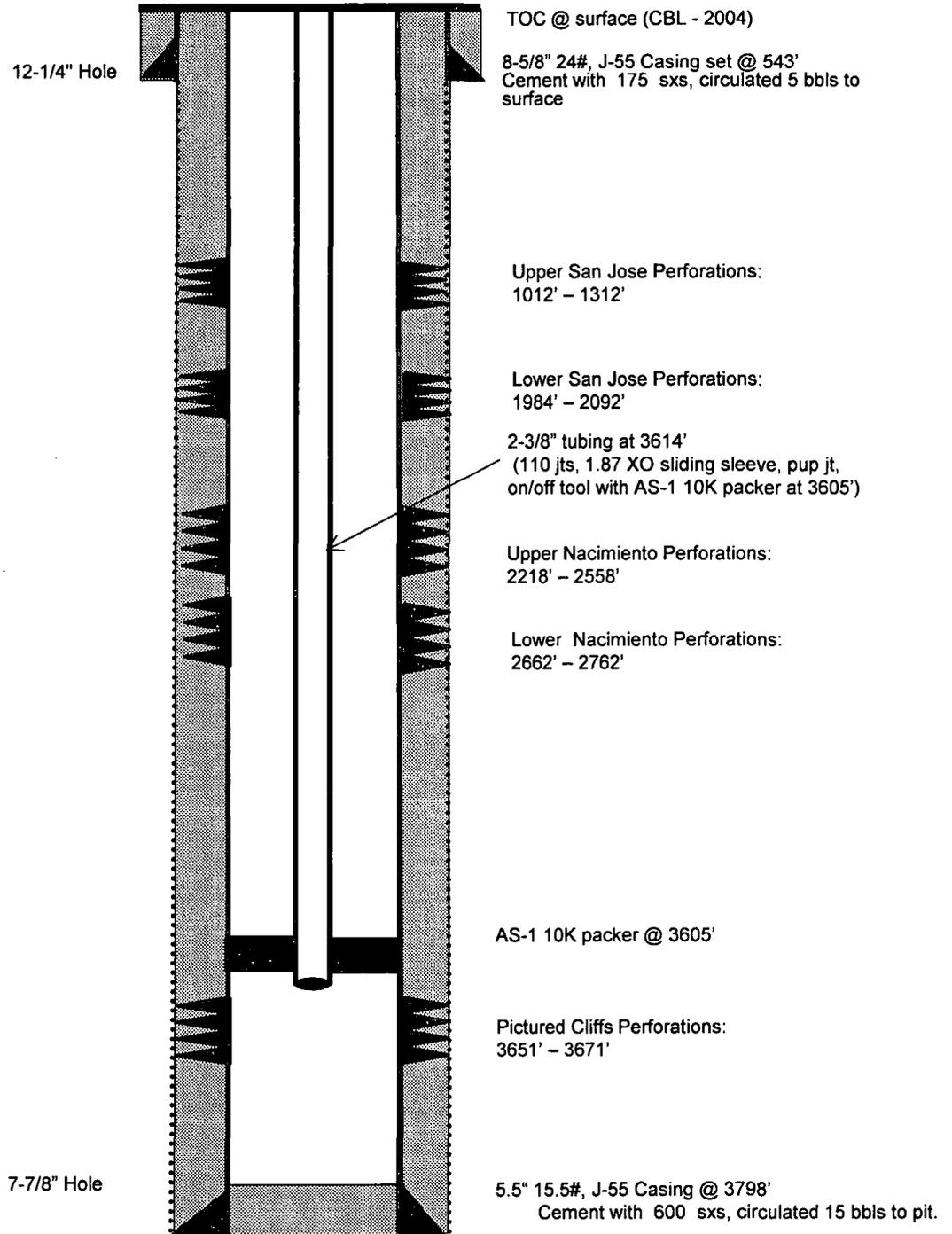
Nacimiento @ 2096'

Ojo Alamo @ 3163'

Kirtland @ 3395'

Fruitland @ 3590'

Pictured Cliffs @ 3651'



3800' TD  
3757' PBTD

# Jicarilla 451-4 #44

## Proposed P&A

East Blanco Pictured Cliffs / Cabresto Canyon; Tertiary

660' FSL & 660' FEL, Section 4, T-29-N, R-3-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-27729

Today's Date: 4/1/13  
Spud: 5/30/04  
Comp: 9/03/04  
Elevation: 7048' GI  
7061' KB

Nacimiento @ 2096'

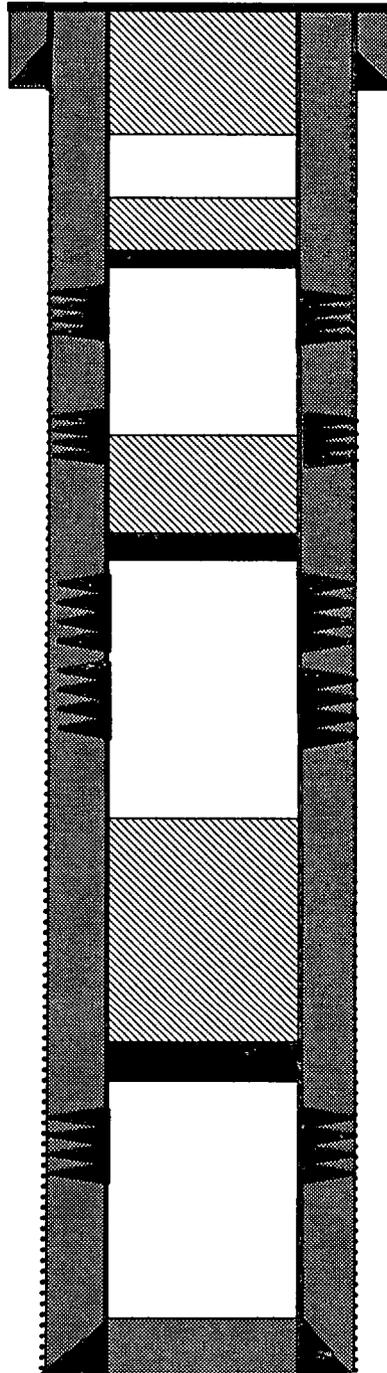
Ojo Alamo @ 3163'

Kirtland @ 3395'

Fruitland @ 3590'

Pictured Cliffs @ 3651'

7-7/8" Hole



TOC @ surface (CBL - 2004)

8-5/8" 24#, J-55 Casing set @ 282'  
Cement with 175 sxs, circulated 5 bbls to surface

**Plug #4: 332' - 0'**  
Class B cement, 45 sxs

**Plug #3: 962' - 862'**  
Class B cement, 17 sxs

**CIBP @ 962'**

Upper San Jose Perforations:  
1012' - 1312'

Lower San Jose Perforations:  
1984' - 2092'

**Plug #2: 2168' - 2046'**  
Class B cement, 29 sxs

**CIBP @ 2168'**

Upper Nacimiento Perforations:  
2218' - 2558'

Lower Nacimiento Perforations:  
2662' - 2762'

**Plug #1: 3605' - 3113'**  
Class B cement, 72 sxs

AS-1 10K packer @ 3605'

Pictured Cliffs Perforations:  
3651' - 3671'

5.5" 15.5#, J-55 Casing @ 3798"  
Cement with 600 sxs, circulated 15 bbls to pit.

3800' TD  
3757' PBTD

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: 44 Jicarilla 451-4

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 the Nacimiento plug to 1888'.

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.