

RECEIVED

Form 3160-5  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SEP 25 2014

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

Fairington Field Office  
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  
**P.O. Box 249 Bloomfield, NM 87413**

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
*[Handwritten description]*

5. Lease Serial No.  
**MDA 701-98-0013, Tract 1**

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

7. If Unit or CA. Agreement Name and/or No.  
**ROVD OCT 7 '14**

8. Well Name and No.  
**OIL CONS. DIV.  
Jicarilla 29-03-12 #2**

9. API Well No.  
**30-039-26860 DIST. 3**

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 recomplate 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 recompletion 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 August 21, 2014, to plug and abandon Jicarilla 29-03-12 #2, Black Hills Gas Resources is submitting the attached plug and abandon procedure.**

**Black Hills will be using a closed loop system.**

**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**



**H<sub>2</sub>S POTENTIAL EXIST**

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

**Daniel Manus**

**Regulatory Technician II**

Title

Signature

*[Handwritten Signature: Daniel Manus]*

Date

*[Handwritten Date: Sept 25, 2014]*

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

Approved by

*[Handwritten Signature: Troy Salvors]*

Title **Petroleum Eng.**

Date **10/2/2014**

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**

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  
*[Handwritten initials]*

## PLUG AND ABANDONMENT PROCEDURE

September 23, 2014

### Jicarilla 29-03-12 #2

#### East Blanco Pictured Cliffs

Surface 896' FSL, 1745' FWL, Section 12, T29N, R3W, Rio Arriba County, NM

API 30-039-26860 / 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.

This project will use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.

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  , Unknown \_\_\_\_\_.  
Tubing: Yes  , No \_\_\_\_\_, Unknown \_\_\_\_\_, Size 2-3/8" \_\_\_\_\_, Length 3599' \_\_\_\_\_.  
Packer: Yes \_\_\_\_\_, No  , Unknown \_\_\_\_\_, Type \_\_\_\_\_  
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.  
Round trip 5.5" casing scraper to 3598' or as deep as possible.
3. **Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops, 3598' – 3158')**: RIH and set 5.5" CR or CIBP at 3598'. Pressure test tubing to 1000#. Pressure test casing to 800#. If casing does not test then spot or tag subsequent plugs as appropriate. Mix 56 sxs Class B cement and spot a balanced plug above CR or CIBP, inside the casing, to isolate the Pictured Cliffs interval and cover through the Fruitland, Kirtland and Ojo Alamo tops. PUH.  

See COA
4. **Plug #2 (Nacimiento top, 2153' – 2053')**: Mix 17 sxs Class B cement and spot a balanced plug inside the casing to cover Nacimiento top. TOH and LD tubing.
5. **Plug #3 (Surface, 320' - Surface)**: Perforate squeeze holes at 320'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 105 sxs Class B cement and pump down the 5.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
6. 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 29-03-12 #2**  
**Current Wellbore**  
**SESW Sec 12, T29N, R03W**  
**Rio Arriba, NM**  
**API# 30-039-26860**

9/3/2014

Spud: 6/14/03  
 Compl: 9/12/03

7142' GL  
 7157' KB

12 1/4" hole

8 5/8" 24# surface casing set @ 270', cmt w/ 110 sx. Circ 10 bbls cmt to surface

7 7/8" hole

Nacimiento 2103'

TOC at 1000' (CBL - 8/18/03)

**Nacimiento perms:** 2427-2444'  
 Sqz'd w/ 10 sx - 11/17/04

Ojo Alamo 3208'

**Tubing (10/2/08):**  
 111 jts 2 3/8" 4.7#, J-55 tbg SN  
 1 jt 2 3/8" tbg  
**EOT 3599'**

Kirtland 3439'

Fruitland 3569'

Pictured Cliffs 3643'

**Window 3648-3663'**

**Top of liner at 3668'**

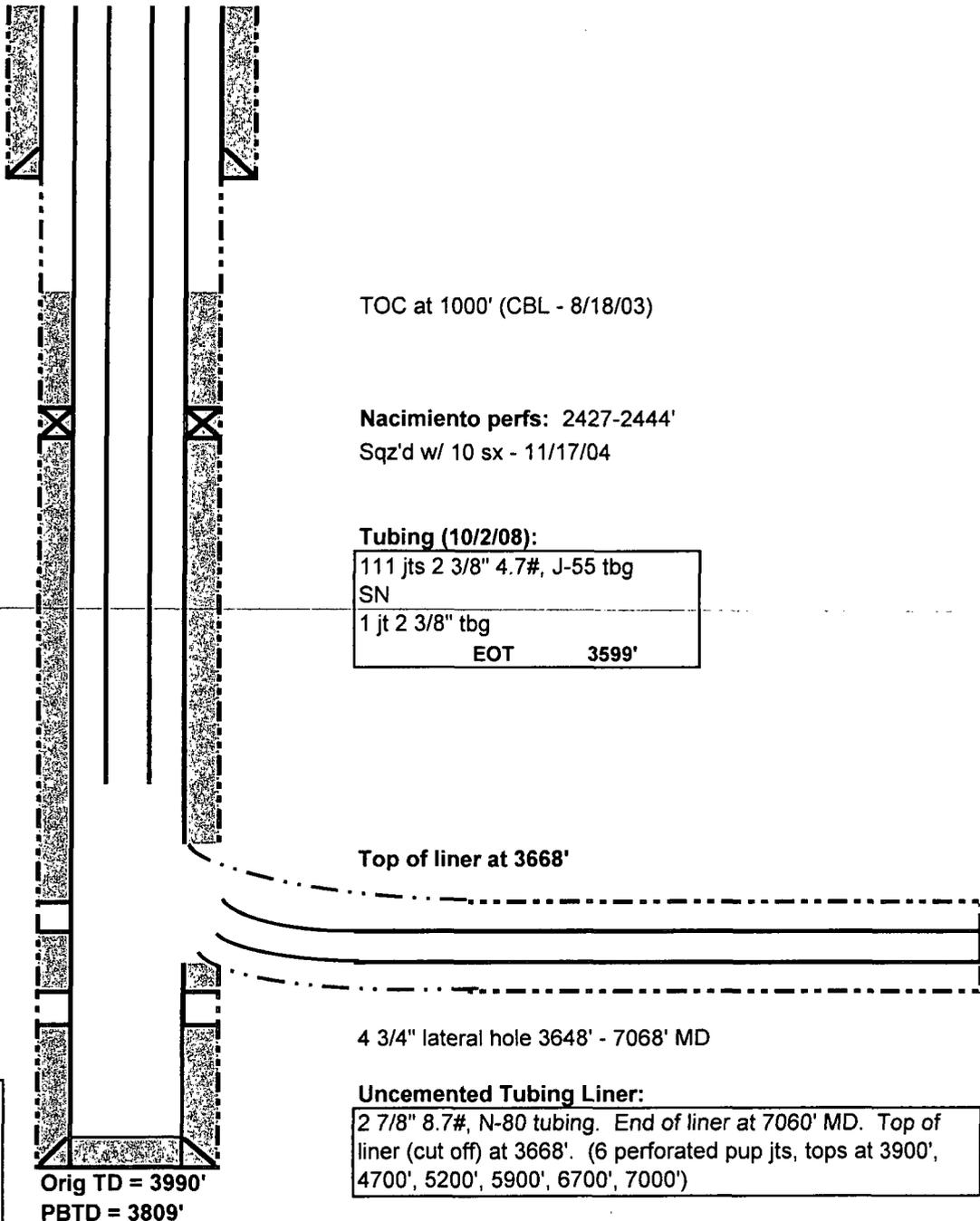
**Orig PC perms (8/19/03):**  
 3647-3664, 3730-3734'

5 1/2" 15.5# K-55 prod casing set @ 3856'. Cmt w/ 890 sx, circ 60 bbls cmt to surface. Ran CBL 8/18/03, TOC at 1000'.

**Orig TD = 3990'**  
**PBTD = 3809'**

4 3/4" lateral hole 3648' - 7068' MD

**Uncemented Tubing Liner:**  
 2 7/8" 8.7#, N-80 tubing. End of liner at 7060' MD. Top of liner (cut off) at 3668'. (6 perforated pup jts, tops at 3900', 4700', 5200', 5900', 6700', 7000')



**Jicarilla 29-03-12 #2**  
**Proposed P&A**  
**SESW Sec 12, T29N, R03W**  
**Rio Arriba, NM**  
**API# 30-039-26860**

9/3/2014

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 Compl: 9/12/03

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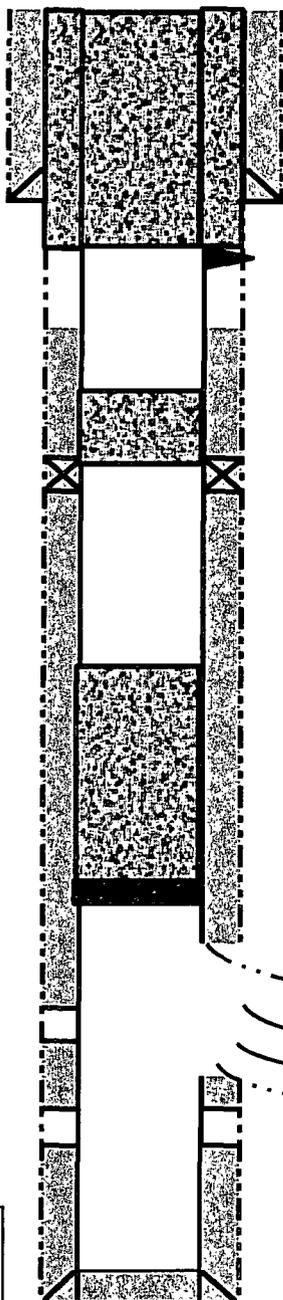
Fruitland 3569'

Pictured Cliffs 3643'

**Window 3648-3663'**

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**Plug #: 320' - 0'**  
 Class B cement, 105 sxs

Perforate @ 320'

TOC at 1000' (CBL - 8/18/03)

**Plug #2: 2153' - 2053'**  
 Class B cement, 17 sxs

**Nacimiento perfs: 2427-2444'**  
 Sqz'd w/ 10 sx - 11/17/04

**Plug #1: 3598' - 3158'**  
 Class B cement, 56 sxs

**Set CR @ 3598'**

**Top of liner at 3668'**

**4 3/4" lateral hole 3648' - 7068' MD**

**Uncemented Tubing Liner:**

2 7/8" 8.7#, N-80 tubing. End of liner at 7060' MD. Top of liner (cut off) at 3668'. (6 perforated pup jts, tops at 3900', 4700', 5200', 5900', 6700', 7000')

**Orig TD = 3990'**  
**PBD = 3809'**

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 29-03-12 #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. The following modifications to your plugging program are to be made:
  - a) Bring the top of plug #2 to 1994 ft. to cover the Nacimiento top. Adjust cement volume accordingly.

Note: High to very high concentrations of H<sub>2</sub>S have been reported in wells which produce gas from the Nacimiento, Ojo Alamo and San Jose formations to the north of this location. It is imperative that H<sub>2</sub>S monitoring and safety equipment be on location during the plugging operations at this wellsite.

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.