

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: July 8<sup>th</sup>, 2014

Well information:

API WELL #	Well Name	Well #	Operator Name	Type	Stat	County	Surf. Owner	UL	Sec	Twp	N/S	Rng	W/E
30-039-26098-00-00	JICARILLA 28 02 05	001	BLACK HILLS GAS RESOURCES, INC.	G	A	Rio Arriba	J	J	5	28	N	2	W

Application Type:

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

Conditions of Approval:

Notify NMOCD 24hrs prior to beginning operations

Please extend Nacimiento plug to 2193 feet

NMOCD Approved by Signature

7-17-14  
Date

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 08 2014

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.*

**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. <b>MDA 701-98-0013</b>
2. Name of Operator <b>Black Hills Gas Resources, Inc.</b>		6. If Indian, Allottee, or Tribe Name <b>Jicarilla Apache Tribe</b>
3a. Address <b>3200 N 1st St, Bloomfield, NM 87413</b>	3b. Phone No. (include area code) <b>(505) 634-5104</b>	7. If Unit or CA. Agreement Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>1760' FSL &amp; 1760 FEL NW/SE Section 5 T28N R2W UL: J)</b>		8. Well Name and No. <b>Jicarilla 28-02-05 #1</b>
		9. API Well No. <b>30-039-26098</b>
		10. Field and Pool, or Exploratory Area <b>East Blanco Pictured Cliffs</b>
		11. County or Parish, State <b>Rio Arriba County, New Mexico</b>

**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 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 recomplate 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 May 14, 2014, to plug and abandon Jicarilla 28-02-05 #1, Black Hills Gas Resources is submitting the attached plug and abandon procedure.

Black Hills Gas Resources will be using a closed loop system.

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 FOR  
CONDITIONS OF APPROVAL

OIL CONS. DIV DIST. 3

JUL 14 2014

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

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)

NMOC

# PLUG AND ABANDONMENT PROCEDURE

June 5, 2014

## Jicarilla 28-02-05 #1

East Blanco PC / Burro Canyon, Tertiary  
1760' FSL, 1760' FEL, Section 5, T28N, R2W, Rio Arriba County, NM  
API 30-039-26098 / 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 will use 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 3644'.  
Packer: Yes X, \_\_\_\_\_, Unknown \_\_\_\_\_, Type A-1X packer at 3454'.  
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.  
TOH with tubing and LD packer.
4. **Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops, 3548' – 2953'):**  
Round trip 5.5" csg scraper or gauge ring to 3548'. RIH and set 5.5" CR or CIBP at 3548'.  
Pressure test tubing to 1000#. Circulate well clean. Spot 73 sxs Class B cement above the CR or CIBP 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. PUH.  
Note: if Plug #1 is set at the end of the day then don't set CR. TIH with open ended tubing and spot 104 sxs Class B cement (30% excess over perforations) and WOC overnight. TIH and tag plug the next morning at 50' above OA top. If necessary top off plug. PUH.  

**See cch**
5. **Plug #2 (Nacimiento top, 2133' - 2033'):** Mix 17 sxs Class B cement and spot a balanced plug inside the casing to isolate the Nacimiento top. TOH.
6. **Plug #3 (San Jose perforations, 1509' – 1409'):** TIH and set 5.5" CR or CIBP at 1509'.  
Pressure test tubing to 1000#. Attempt to pressure test casing to 800#. 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 San Jose perforations top. PUH.
7. **Plug #4 (8-5/8" Surface casing shoe, 303' - 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 44 sxs cement and spot a balanced plug from 303' 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 303' 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. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. Cut off anchors and clean up location. Restore location per BLM stipulations.

# Jicarilla 28-02-05 #1

## Current

East Blanco Pictured Cliffs / Burro Canyon, Tertiary

1760' FSL & 1760' FEL, Section 5, T-28-N, R-2-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-26098

Today's Date: 6/5/14

Spud: 9/29/00

PC Comp: 6/26/03

Ojo Alamo Comp: 7/23/03

Elevation: 7228' GI  
7240' KB

12-1/4" Hole

TOC circulated to surface  
per completion report

8-5/8" 24#, Casing set @ 253'  
Cement with 110 sxs, circulated to surface

San Jose Perforations:  
1559' - 1620'

Nacimiento @ 2083'

2-3/8" tubing at 3644'  
(115 jts, SN and mule shoe coupling, A-1X pkr)

Ojo Alamo @ 3003'

Kirtland @ 3395'

A-1X packer 6K at 3454'

Fruitland @ 3533'

Pictured Cliffs @ 3572'

Pictured Cliffs Perforations:  
3598' - 3684'

7-7/8" Hole

5.5" 17#, K-55 Casing @ 3851'  
Cement with 975 sxs, circulate 20 sxs to surface

3850' TD  
3817' PBTB

# Jicarilla 28-02-05 #1

## Proposed P&A

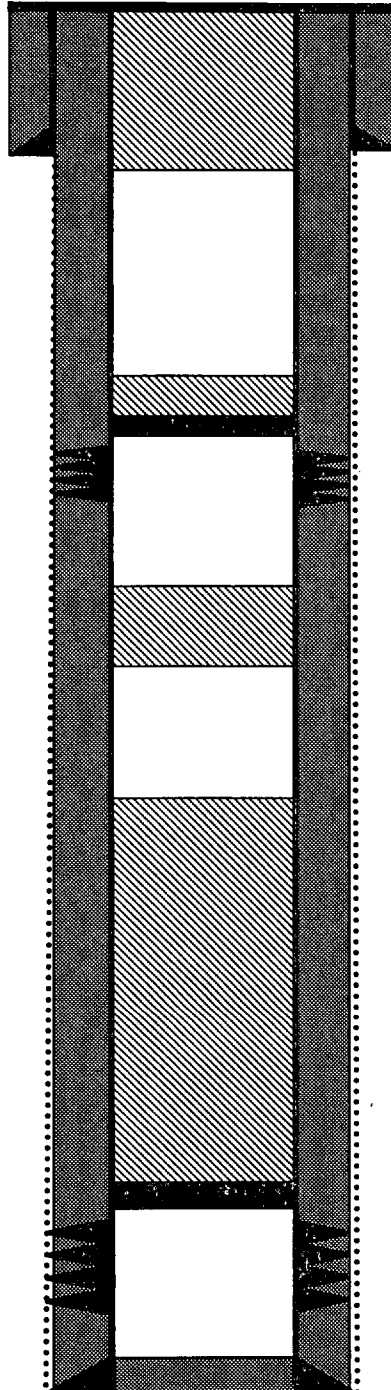
East Blanco Pictured Cliffs / Burro Canyon, Tertiary

1760' FSL & 1760' FEL, Section 5, T-28-N, R-2-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-26098

Today's Date: 6/5/14  
Spud: 9/29/00  
PC Comp: 6/26/03  
Ojo Alamo Comp: 7/23/03  
Elevation: 7228' GI  
7240' KB

12-1/4" Hole



TOC circulated to surface  
per completion report

8-5/8" 24#, Casing set @ 253'  
Cement with 110 sxs, circulated to surface

Plug #3: 303' – 0'  
Class B cement, 44 sxs

Set CR @ 1509'

Plug #3: 1509' – 1409'  
Class B cement, 17 sxs

San Jose Perforations:  
1559' – 1620'

*See COA*

Plug #2: 2133' – 2033'  
Class B cement, 17 sxs

Nacimiento @ 2083'

Ojo Alamo @ 3003'

Plug #1: 3548' – 2953'  
Class B cement, 73 sxs

Kirtland @ 3395'

Fruitland @ 3533'

Pictured Cliffs @ 3572'

Set CR @ 3548'

Pictured Cliffs Perforations:  
3598' – 3684'

7-7/8" Hole

5.5" 17#, K-55 Casing @ 3851'  
Cement with 975 sxs, circulate 20 sxs to surface

3850' TD  
3817' 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 29-02-05 #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) Bring the top of plug #2 to 1993' to cover the Nacimiento top

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.