

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

MAY 17 2016

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.*

Farmington  
Bureau of Land Management  
Jicarilla Contract 459  
Jicarilla Tribe

**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>Jicarilla Contract 459</b>
2. Name of Operator <b>Black Hills Gas Resources, Inc.</b>		6. Field and Pool, or Exploratory Area <b>Jicarilla</b>
3a. Address <b>P.O. Box 249 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>1795' FNL &amp; 425' FEL SE/NE Section 17 T30N R3W (UL: H)</b>		8. Well Name and No. <b>Jicarilla 459-17 #24</b>
		9. API Well No. <b>30-039-29324</b>
		10. Field and Pool, or Exploratory Area <b>Cabresto Cnyn</b>
		11. County or Parish, State <b>Tert / Basin FRTC / E Blanco PC</b>
		<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 reclamantion, 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 459-17 #24 per attached procedure.  
BHGR will use a closed loop system.

**Attachments:**

Proposed procedure  
Current wellbore diagram  
Proposed wellbore diagram



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

Notify NMOCD 24 hrs  
prior to beginning  
operations

**BHGR  
RECEIVED**

**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**

MAY 17 2016

By:

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

**Daniel Manus**

**Regulatory Technician II**

Title

Signature

Date

May 16, 2016

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

Approved by

Title

Date

**PE**

**8/25/16**

Office

**FFO**

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.

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**



## PLUG AND ABANDONMENT PROCEDURE

May 13, 2016

### Jicarilla 459-17 #24

1759' FNL, 425' FEL, Section 17, T30N, R2W, Rio Arriba County, NM

API 30-039-29324 / 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 a 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 X, No \_\_\_\_\_, Unknown\_\_\_\_\_.  
Tubing: Yes X, No \_\_\_\_\_, Unknown\_\_\_\_\_, Size 2-3/8", Length 3813'.  
Packer: Yes \_\_\_\_\_, No x, Unknown\_\_\_\_\_, Type \_\_\_\_\_.  
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.
4. **Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops, 3842' - 3120'):**  
Note: open perms, unable to pressure test casing. TIH. Mix and pump 106 sxs Class B cement (30% excess, open perms) and spot a plug from 3842' isolate the PC interval and fill and cover the Fruitland Coal perforations and Fruitland, Kirtland and Ojo Alamo tops. PUH and WOC. TIH and tag cement, if necessary top off. PUH.
5. **Plug #2 (Nacimiento top, 2274' - 2016'):** Mix 40 sxs Class B cement (30% excess, due to open perms) and spot a plug to cover the Nacimiento top. PUH and WOC. TIH and tag cement, if necessary top off. TOH.
6. **Plug #3 (San Jose perforations, 1528' - 1428'):** Round trip 5.5" casing scraper to 1528'. TIH and set 5.5" CR or CIBP at 1528'. Pressure test casing to 800 psi. If casing does not test then WOC and tag plug as needed. Mix 17 sxs Class B cement and spot a plug inside the casing above the CR or CIBP to isolate the San Jose interval. PUH.
7. **Plug #4 (8-5/8" Surface casing shoe, 317' - 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 317' 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 317' 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 459-17 #24**  
**CURRENT Wellbore Diagram**  
 API # 30-039-29324  
 SE NE Sec. 17, T30N, R3W

**5/13/2016**

Spud Date: 5/22/05  
 Compl Date: 7/22/05

Elev. GL= 7166'  
 Elev. KB= 7179'

12 1/4" hole

**Surface Csg**

8 5/8" 24# K-55 @ 267'. Cmt w/ 175 sx. Circ 20 bbl cmt to surface.

7 7/8" hole

Nacimiento 2066'

Ojo Alamo 3170'

Kirtland 3414'

Fruitland 3596'

Pictured Cliffs 3738'

**Production Csg**

5 1/2" 15.5 & 17# J-55 @ 3885'. Cmt w/ 750 sx. Circ 60 bbls cmt to surface. Ran CBL (6/2005). TOC at surface.

**Perf for sqz 350-352'.** Sqz'd w/ 32 sx. Resqz'd w/ 10 sx. (7/2005)

**San Jose perms:** 1578-1580, 1583-1585, 1587-1589, 1594-1598, 1674-1676, 1678-1680'.

**Nacimiento perms:** 2132-2134, 2222-2224'

Prod Tubing (11/14/06):

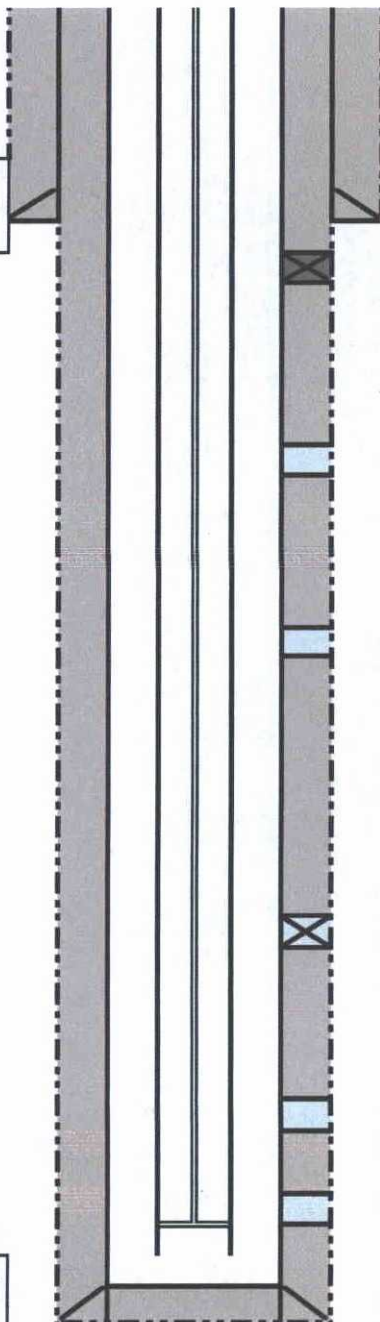
10' tbg sub, 119 jts 2 3/8", 4.7#, J-55 tbg, SN, 2 3/8" x 20' mud anchor w/ weephole. EOT 3813'.  
 Rods & Pump:  
 151 - 3/4" rods & 2 x 1 1/4" x 16' RHAC pump

**Ojo Alamo perms:** 3178-3180, 3186-3190, 3194-3198, 3200-3202, 3206-3210'. Sqz'd w/ 49 sx. Resqz'd w/ 75 sx, 100 sx. (7/2005)

**Fruitland Coal perms:** 3668-3670, 3678-3680, 3685-3687, 3694-3698'

**Pictured Cliffs perms:** 3735-3755, 3784-3792'

**PBTD=3848'**  
**TD = 3887'**





# **Jicarilla 459-17 #24** **Proposed P&A**

1795' FNL & 425' FEL, Section 17-T-30-N, R-3-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-29324

Today's Date: 5/13/16  
Spud: 5/22/05  
Comp 7/22/05  
Elevation: 7166' GI  
7179' KB

Nacimiento @ 2066'

Ojo Alamo @ 3170'

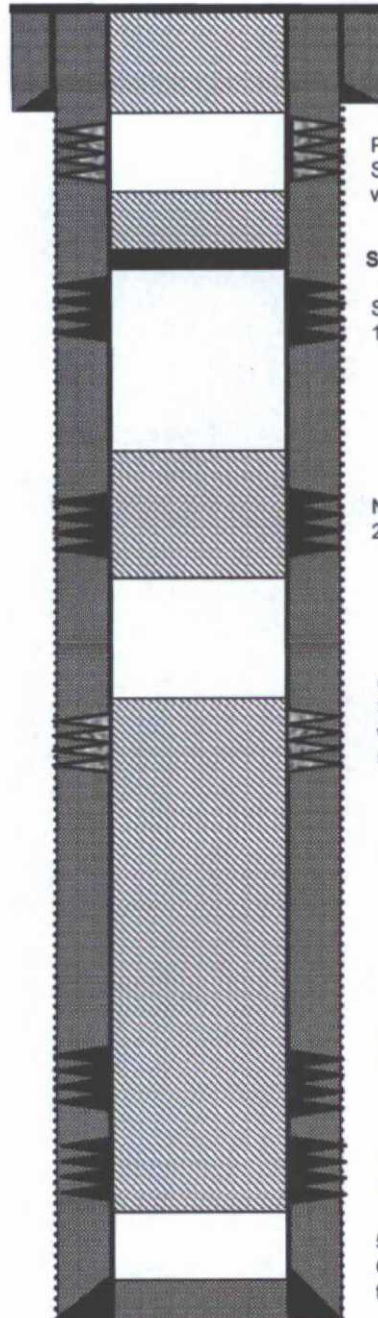
Kirtland @ 3414'

Fruitland @ 3596'

Pictured Cliffs @ 3738'

12-1/4" Hole

7-7/8" Hole



TOC @ Surface (CBL)

8-5/8" 24#, K-55 @ 267'.  
Cement with 175 sxs, circulated 20 bbl to surface.

**Plug #4: 317' - 0'**  
Class B cement, 40 sxs

Perf for sqz 350'-352'  
Sqz'd w/32 sx. Resqz'd  
w/10 sx. (7/2005).

**Set CR @ 1628'**

**Plug #3: 1528' - 1428'**  
Class B cement, 17 sxs

San Jose Perforations:  
1578' - 1680'

Nacimiento Perforations:  
2132' - 2224'

**Plug #2: 2274' - 2016'**  
Class B cement, 40 sxs  
(excess due to open perms)

Ojo Alamo Perforations:  
3178' - 3210', Sqz'd  
w/49 sx. Resqz'd w/75  
sx, 100 sx (7/2005)

**Plug #1: 3842' - 3120'**  
Class B cement, 106 sxs  
(30% excess, long plug)

Fruitland Coal Perforations:  
3668' - 3698'

Pictured Cliffs Perforations:  
3735' - 3792'

5.5" 15.5 & 17#, J-55 Casing @ 3885'  
Cement with 750 sxs. Circ 60 bbls cmt  
to surface. Ran CBL (06/2005) TOC at surface

3887' TD  
3848' 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: Jicarilla 459-17 #24

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.

CBL ran 6/2005 is on file and will be used for plugging proposes.

Note: Operator reports low concentrations of H<sub>2</sub>S (79 ppm GSV) at this location. High to very high concentrations of H<sub>2</sub>S (135 ppm- 3000 ppm GSV) have also been reported in several wells which produce gas from the San Jose, Nacimiento and Ojo Alamo formations within a 1 mile radius of this location. **It is imperative that H<sub>2</sub>S monitoring and safety equipment be on location during the P&A operations at this well site.**

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.