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Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 04 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. Jicarilla Contract 457
2. Name of Operator Black Hills Gas Resources, Inc.		6. If Indian, Allottee, or Tribe Name Jicarilla Apache Tribe
3a. Address P.O. Box 249 Bloomfield, NM 87413	3b. Phone No. (include area code) (505) 634-5104	7. If Unit or CA. Agreement Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1150' FNL & 874' FEL NE/NE Section 9 T30N R3W (UL: A)		8. Well Name and No. Jicarilla 457-9 #3
		9. API Well No. 30-039-25863
		10. Field and Pool, or Exploratory Area East Blanco Pictured Cliffs
		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 recomplete 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 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.)

Black Hills Gas Resources intends to plug and abandon Jicarilla 457-09 #3 per attached procedure.
Black Hills will be using a close loop system.

RCVD SEP 12 '14
OIL CONS. DIV.
DIST. 3

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

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

Notify NMOCD 24 hrs prior to beginning operations



H2S POTENTIAL EXIST

14. I hereby certify that the foregoing is true and correct. Name (Printed/ Typed) **Daniel Manus** Title **Regulatory Technician II**

Signature *Daniel Manus* Date *Sept 3, 2014*

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by **Troy Salvors** Title **Petroleum Eng.** Date **9/10/2014**

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

September 3, 2014

Jicarilla 457-9 #3

Cabresto Canyon; San Jose Ext.

1150' FNL, 874' FEL, Section 9, T30N, R3W, Rio Arriba County, NM

API 30-039-25863 / 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 _____, Unknown _____.
Tubing: Yes , No _____, Unknown _____, Size 2-3/8", Length 1580'
Packer: Yes _____, No , Unknown _____, Type _____
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.

NOTE: PU 2-7/8" workstring, drill collars and mill. TIH and mill out CIBP at 3032'. Circulate well clean. Continue in hole and drill out CR set at 3210' and cement plug set below CR. Circulate well clean. Round trip 5.5" casing scraper or mill to PBTD. TOH and LD workstring and BHA.

4. **Plug #1 (Pictured Cliffs, Fruitland, Kirtland tops and Ojo Alamo interval, 3694' – 3036')**: TIH with open ended tubing and circulate well clean. Mix 97 sxs Class B cement (30% excess, long plug) and spot plug 3694' to 50' above Ojo Alamo top. PUH and WOC. TIH and tag cement. If plug is not 50' above Ojo Alamo top then top plug off as required. PUH.
5. **Plug #2 (Nacimiento top, 2031' – 1931')**: Mix 20 sxs Class B cement (Note: extra cement due to this being an underbalanced plug) and spot inside to cover the Nacimiento top. PUH and WOC. TIH and tag cement at 50' above Nacimiento top. If plug is not 50' above top then top plug off as required. TOH.
6. **Plug #3 (San Jose perforations, 1384' – 1284')**: TIH and set 5.5" CR at 1384'. Mix 17 sxs Class B cement and spot a plug inside the casing above the CR to isolate the San Jose interval. PUH.
7. **Plug #4 (8-5/8" Surface casing shoe, 604' - 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 70 sxs cement and spot a balanced plug from 604' 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 604' 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 457-09 #3

Current

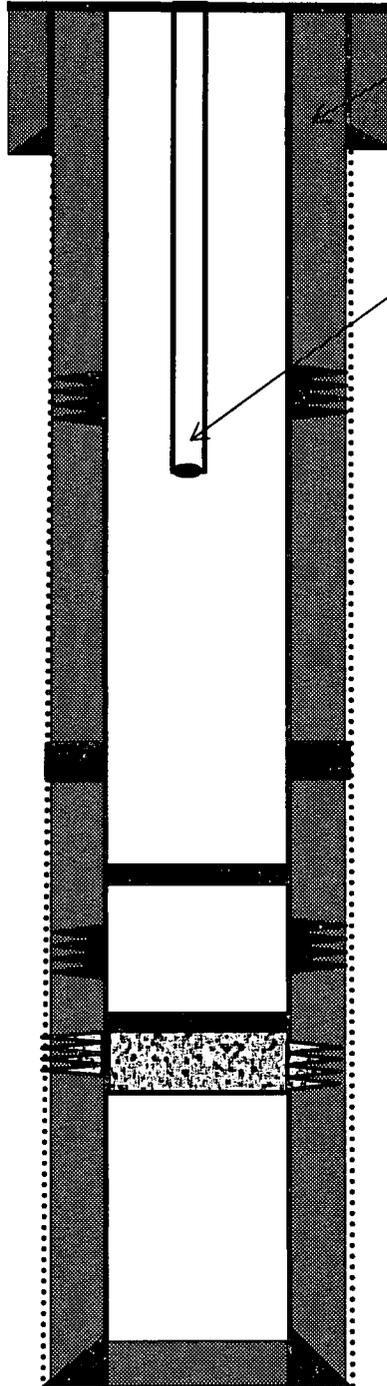
Cabresto Canyon; San Jose Ext.

1150' FNL & 874' FEL, Section 9, T-30-N, R-3-W, Rio Arriba County, NM

Long: _____ / Lat: _____ / API 30-039-25863

Today's Date: 9/3/14
Spud: 8/8/98
Comp: 9/22/98
Elevation: 7125' GI
7137' KB

12-1/4" Hole



TOC @ Surface, circulated to pit.

8-5/8" 24#, K-55 Casing set @ 554'
Cement with 300 sxs, circulated cmt to surface

2-3/8" tubing at 1580'
(48 jts, SN, Perf Sub and Notched
Collar with rods and pump)

San Jose Perforations:
1434' - 1496'

Nacimiento @ 1981'

DV Tool @ 2817'
Stage 2: cement with 225 sxs,
circ 75 sx to surface

CIBP set at 3032' (1998)

Ojo Alamo @ 3086'

Ojo Alamo Perforations:
3092' - 3194'

CR set at 3210' (1998)

Kirtland @ 3332'

Ojo Alamo Perforations:
3220' - 3238'
(sqz'd with 138 sxs cement (1998))

Fruitland @ 3551'

Pictured Cliffs @ 3644'

7-7/8" Hole

5.5" 15.5#, J-55 Casing @ 3896'
Stage 1: cement with 225 sxs,
circ 25 sx to surface

3935' TD
3850'PBD

Jicarilla 457-09 #3

Proposed P&A

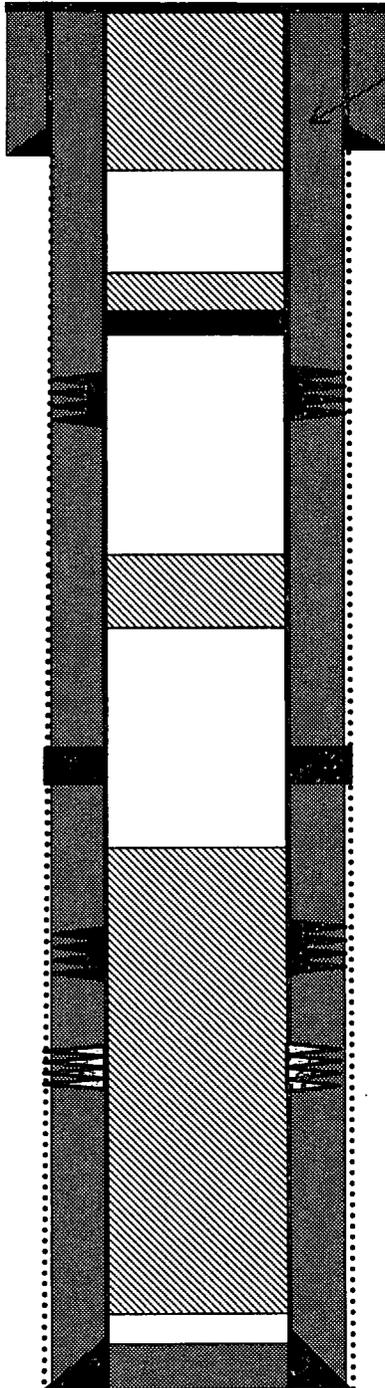
Cabresto Canyon; San Jose Ext.

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Today's Date: 9/3/14
Spud: 8/8/98
Comp: 9/22/98
Elevation: 7125' GI
7137' KB

12-1/4" Hole



Plug #4: 604' - 0'
Class B cement, 70 sxs

TOC @ Surface, circulated to pit.

8-5/8" 24#, K-55 Casing set @ 554'
Cement with 300 sxs, circulated cmt to surface

Plug #3: 1384' - 1284'
Class B cement, 17 sxs

Set CR @ 1384'

San Jose Perforations:
1434' - 1496'

Nacimiento @ 1981'

Plug #2: 2031' - 1931'
Class B cement, 20 sxs
(extra cement due to being underbalanced plug)

DV Tool @ 2817'
Stage 2: cement with 225 sxs,
circ 75 sx to surface

Ojo Alamo @ 3086'

Plug #1: 3694' - 3036'
Class B cement, 97 sxs
(30% excess, long plug)

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7-7/8" Hole

5.5" 15.5#, J-55 Casing @ 3896'
Stage 1: cement with 225 sxs,
circ 25 sx to surface

3935' TD
3850' 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 457-9 #3

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.

Note: High to very high concentrations of H₂S (130-3000) ppm GSV have been reported in wells which produce gas from the Pictured Cliffs, Ojo Alamo and San Jose formations within a 1 mile radius of this location. It is imperative that H₂S monitoring and safety equipment be on location during the P&A 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.