Form 3160- 5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

Lease Schall No.	
MDA 701-98-0013, Tract 1	
MDA 701-98-0013, Tract 1 If Indian, Allottee, or Tribe Name Farmington Field Office Jicarilla Apache Tribe au of Land Management If Unit or CA. Agreement Name and/or No.	
If Unit or CA. Agreement Name and/or No.	1

abandoned well. Use Form 3160-3 (APD) for such proposals. SUBMIT IN TRIPLICATE - Other Instructions on page 2. Type of Well Oil Well Well Name and No. √ Gas Well Name of Operator Jicarilla 30-03-34 #2 Black Hills Gas Resources, Inc. API Well No. 3a. Address 30-039-26101 Phone No. (include area code) 3200 N 1st St, Bloomfield, NM 87413 (505) 634-5104 10. Field and Pool, or Exploratory Area Location of Well (Footage, Sec., T., R., M., or Survey Description) Cabresto Cyn Tert / E Blanco PC 440' FNL & 440' FEL NE/NE Section 34 T30N R3W (UL: A) 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 ✓ Notice of Intent Acidize Production (Start/Resume) Water Shut-off Altering Casing Well Integrity Fracture Treat Reclamation Subsequent Report Casing Repair New Construction Recomplete Bl Change Plans Temporarily Abandon

Final Abandonment Notice Convert to Injection Plug back 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 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 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 30-03-34 #2 per attached procedure.

Black Hills will use closed loop system.

OIL CONS. DIV DIST, 3

MAY 0 9 2016

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

Notify NMOCD 24 hrs prior to beginning

* Reclamation plan has not been approved	operations						
14. I hereby certify that the foregoing is true and correct. Name (Printed Typed)	The second of th						
Daniel Manus Reg	ulatory Techician II						
Signature Tarrel Manus Date	March 22 2016						
THIS SPACE FOR FEDERAL OR STATE OFFICE USE							
Approved by	Title PE Date 5/4/16						
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 FTO						
Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 1212, make it a crime for any person kno fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	wingly and willfully to make any department or agency of the United States any false,						

PLUG AND ABANDONMENT PROCEDURE

February 19, 2016

Jicarilla 30-03-34 #2

East Blanco PC /Cabresto Canyon; Tertiary
440' FNL, 440' FEL, Section 34, T30N, R3W, Rio Arriba County, NM
API 30-039-26101 / Long: ______ / Lat: ______

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. 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. Packer: Yes____, No__, Unknown____, Type_____ If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. 3. Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops, 3678' - 3084'): TIH with open ended tubing to 3678'. Mix and pump 85 sxs Class B cement (100% excess over Pictured Cliffs perforations) and spot a plug to isolate the PC interval and top, Fruitland, Kirtland and Ojo Alamo tops. PUH and WOC. TIH and tag TOC 50' higher than Ojo Alamo top. If tag is low spot additional cement as required. TOH. 4. Plug #2 (Nacimiento perforations and top, 2512' - 2012'): Round trip 5.5" scraper or gauge ring to 2512'. TIH and set 5.5" CR or CIBP at 2512'. Attempt to pressure test casing to 800 psi. If casing does not test then spot or tag subsequent plugs as appropriate. Mix 63 sxs Class B cement and spot a balanced plug inside casing above CR or CIBP to isolate the Nacimiento top. PUH. 5. Plug #3 (8-5/8" Surface casing shoe, 257' - 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 35 sxs cement and spot a balanced plug from 257' 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

6. 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.

surface. Shut in well and WOC.

circulate cement to surface filling the casing from 257' and the annulus from the squeeze holes to

Jicarilla 30-03-34 #2 Proposed P&A East Blanco PC/ Cabresto Canyon Tertiary

440' FNL & 440' FEL, Section 34, T-30-N, R-3-W, Rio Arriba County, NM

	Long:	/ Lat:	/ API	30-039-26101	
Today's Date: 2/19/16 Spud: 12/6/99 PC Comp: 12/12/99	12-1/4" Hole			TOC circulated to surface	е
CCT Comp: 1/15/00 Elevation: 7189' GI 7201' KB		4		8-5/8" 24#, K-55 Casing : Cement with 130 sxs, circ	set @ 207' culated to surface
					Plug #3: 257' – 0' Class B cement, 35 sxs
Nacimiento @ 2062'					Plug #2: 2512' - 2012 Class B cement, 63 sxs
				Set CR @ 2512'	
				Nacimiento Perforations: 2562'- 2714'	
Ojo Alamo @ 3134'					Plug #1: 3678' - 3084' Class B cement, 85 sxs
Kirtland @ 3365'					
Fruitland @ 3520'					
Pictured Cliffs @ 3618'				Pictured Cliffs Perforation 3618' – 3628'	s:
		Allininininini			
	7-7/8" Hole			5.5" 15.5#, J-55 Casing @ Cement with 825 sxs surface.	3875' Circulated 82 sx to
		2020/ TD		ouridos.	

3920' TD 3802' PBTD

Jicarilla 30-03-34 #2

Current

East Blanco PC/ Cabresto Canyon Tertiary

440' FNL & 440' FEL, Section 34, T-30-N, R-3-W, Rio Arriba County, NM

/ API 30-039-26101 Long: _____/ Lat: _____ TOC circulated to surface Today's Date: 2/19/16 Spud: 12/6/99 12-1/4" Hole PC Comp: 12/12/99 CCT Comp: 1/15/00 8-5/8" 24#, K-55 Casing set @ 207' Cement with 130 sxs, circulated to surface Elevation: 7189' GI 7201' KB 2-3/8", 4.7#, J-55 tubing at 3675' 111 jts tbg, 4' sub, 2 7/8" tbg pump, 4' perf sub, 1 jt tbg, bull plug. 47 - 7/8" & 96 - 3/4" rods and plunger. Nacimiento @ 2062' Nacimiento Perforations: 2562'- 2714' Ojo Alamo @ 3134' Kirtland @ 3365' Fruitland @ 3520' Pictured Cliffs Perforations: Pictured Cliffs @ 3618' 3618' - 3628' 7-7/8" Hole 5.5" 15.5#, J-55 Casing @ 3875' Cement with 825 sxs, Circulated 82 sx to surface.

3920' TD 3802' 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 30-03-34 #2

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 1897 ft. to cover the Nacimiento top. BLM picks top of Nacimiento at 1947 ft. Adjust cement volume accordingly.

High to Very High concentrations of H_2S (187 ppm – 1,731 ppm GSV) have been reported in wells which produce gas from the San Jose, Nacimiento and Ojo Alamo fms. within a 1 mile radius of this location. It is imperative that H_2S monitoring and safety equipment be on location during 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.