JUN 13 2012

			TO COIL			
Form 3160- 5	UNITED S	TATES	an Field Office		FORM APPROVED	
(August 2007)	DEPARTMENT OF THE INTERIOR INGTON Field Office BUREAU OF LAND MANAGEMENT Land Manager			OMB No 1004- 0137		
	BUREAU OF LAND	MANAGEMENII L	and Manageme	5. Lease Senal No	Expires July 31,2010	
	SUNDRY NOTICES AND	REPORTS ON WE	LLS	Contract		
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.					6 If Indian, Allottee, or Tribe Name	
			osais.		Apache Tribe Agreement Name and/or No.	
1 Type of Well	IBMIT IN TRIPLICATE - Other Inst	ructions on page 2.		7. If Ollit of CA, F	agreement wante and or two.	
	Gas Well Other			8. Well Name and	No.	
2. Name of Operator				Jicarilla 4	.60 #2	
Black Hills Gas I	Resources, Inc.			9. API Well No.		
3a Address 3b. Phone No. (include area code)					30-039-24112	
3200 N 1st St, Bloomfield, NM 87413 (505) 634-5104					10. Field and Pool, or Exploratory Area	
4. Location of Well (Footage, Sec. T. R. M. or Survey Description) 790' FSL & 890' FWL SW/SW Sec.21 T30N R3W UnitM					E. BlancoPC & Cabresto Cyn Tertiary	
790 FSL & 690 FWL SW/SW Sec.21 TSON RSW CHRM					11. County or Parish, State Rio Arriba County, New Mexico	
12 CUECI	K APPROPRIATE BOX(S) TO INDIC	ATE NATIDE OF NO	TICE DEPORT O			
	***			K OTHER DA	10	
TYPE OF SUBMISSI	ON	<u> </u>	YPE OF ACTION			
✓ Notice of Intent	Acidize	Deepen	Production (St	art/ Resume)	Water Shut-off	
	Altering Casing	Fracture Treat	Reclamation		Well Integrity	
Subsequent Report	Casing Repair	New Construction	Recomplete		Other	
 DG-	Change Plans	Plug and abandon	Townsons	handan		
[D]		1	Temporarily A			
Final Abandonment	Notice Convert to Injection Police Convert to Injection Conpleted Operation Clearly state all pertinent detail	Plug back	Water Disposa			
Attach the Bond under wh following completion of it testing has been complete determined that the site is Black Hills Gas Resou	n directionally or recomplete horizontally, give such the work will performed or provide the Bond it involved operations. If the operation results in d. Final Abandonment Notice shall be filed only a ready for final inspection.) arces intends to plug and abandonment is at 2,700', therefore Black	No. on file with the BLM/BL a multiple completion or recor fter all requirements, includin n Jicarilla 460 #2 pe	A Required subsequent repletion in a new interval greelamantion, have been rattached process	eports shall be filed, a Form 3160-4 sha completed, and the	within 30 days ill be filed once coperator has	
potential water well.						
	Notify N	MOCD 24 hrs				
	prior (Ope	heginning erations			RCVD JUN 20'12	
•						
File a con	by of the Reference	1 2007 CBI	+ 1987 T	5 00	OIL CONS. DIV.	
					, DIST. 3	
run a new	CBL and submit for	review prio	r to cemen	ting firs	H	
ping.		·				
')						
14. I hambu gartifu that the fo	regoing is true and correct. Name (Printed/ Types	<i>J</i>)				
• •	regoing is true and correct. Name (Frinteal Types	^				
Daniel Manus		Regulatory	Techician			
Signature JM	il Chours	Date (2)	12	2012		
Signature 1/2/1/2	THIS SPACE	FOR FEDERAL OR	STATE OFFICE U	SE		
Approved by					8 0 2017	
Original S	igned: Stephen Mason	Title		Date	JUN 1 8 2012	
	Children Applicable to the subject lease operations thereon.					
	ND Title 43 U.S.C. Section 1212, make it a crime its or representations as to any matter within its ju		d willfully to make any de	epartment or agency	of the United States any false,	
nemious of fraudulent statemen	is or representations as to any matter within its ju	i isuiction.				

PLUG AND ABANDONMENT PROCEDURE

June 11, 2012

Jicarilla 460 #2

	East Blanco PC / Cabresto Canyon; Tertia	ıry
7 90'	FSL, 890' FWL, Section 21, T30N, R3W, Rio Arriba	County, NM
	API 30-039-24112 / 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 requires a NMOCD C-144 CLEZ Closed-Loop System Permit for the use of 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 ____, No _X_, Unknown____, Size _____, Length ____. Packer: Yes_____, No_X__, Unknown____, Type_____ If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. NOTE: PU tubing workstring, drill collars and mill. TIH and mill out CIBP at 3025' and composite plug at 3200'. Circulate well clean. 4. Plug #1 (Pictured Cliffs interval and Fruitland and Kirtland tops, 3672' - 3377'): PUH tubing workstring and TIH; tag existing CIBP at 3672'. Mix 27 sxs Class B cement and spot a balanced plug inside the casing above the CIBP to isolate the PC interval and cover through the Kirtland top. TOH with tubing. 5. Plug #2 (Ojo Alamo perforations and top, 3174' - 3074'): Round trip 4.5" gauge ring or casing scraper to 3174' or as deep as possible. TIH and set 4.5" CIBP at 3174'. Mix 12 sxs Class B cement and spot a balanced plug inside the casing above the CIBP to isolate the Ojo Alamo perforations and top. TOH with tubing. 6. Plug #3 (Nacimiento perforations, 2992' - 2892'): TIH and set 4.5" CIBP at 2992'. Mix 12 sxs Class B cement and spot a balanced plug inside the casing above the CIBP to isolate the Nacimiento perforations. TOH with tubing. 1976 1876 1976

7. Plug #4 (Nacimiento top, 2965' - 1965'): Perforate 3 squeeze holes at 2665'. Attempt to establish rate into squeeze holes if the casing pressure tested. Set 4.5" cement retainer at 2015'. Establish rate into squeeze holes. Mix and pump 36 sxs cement, squeeze 24 sxs outside the casing and leave 12 sxs inside the casing to cover the Nacimiento top. TOH with tubing.

- 8. Plug #5 (San Jose top and 7-5/8" Surface casing shoe, 191' Surface): Perforate 3 squeeze holes at 191'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 50 sxs Class B cement and pump down the 4.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
- 9. 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.

Jicarilla 460 #2

Current

East Blanco PC/ Cabresto Canyon; Tertiary

790' FSL & 890' FWL, Section 21, T-30-N, R-3-W, Rio Arriba County, NM

Long: _____/ Lat: _____/ API 30-039-24112 Today's Date: 4/20/12 Spud: 12/29/86 9-7/8" Hole Wildcat Comp 1/19/87 PC Comp: 4/5/05 7-5/8" 26.4#, Casing set @ 141' Cement with 60 sxs, circulated to surface Tertiary Comp: 11/14/87 Elevation: 7191' GI 7203' KB San Jose @ 0' Nacimiento @ 2015' *est TOC @ 2700' (1987 T.S. & 2007 CBL) CIBP @ 3025' (2007) Nacimiento Perforations: 3042' - 3046' Ojo Alamo @ 3177' Composite plug set at @ 3200' (2007) Ojo Alamo Perforations: 3224' - 3286' Kirtland @ 3427' CIBP set at 3672' (2007) Fruitland @ 3556' Pictured Cliffs Perforations: 3688' - 4000' CIBP set at 3900' (2005) Pictured Cliffs @ 3687' 6-3/4" Hole 4.5" 11.6#, J-55 Casing @ 4104' Cement with 225 sxs (284 cf)

4112' TD 3025' PBTD

Jicarilla 460 #2 Proposed P&A

East Blanco PC/ Cabresto Canyon; Tertiary

790' FSL & 890' FWL, Section 21, T-30-N, R-3-W, Rio Arriba County, NM

_/ API 30-039-24112 _/ Lat: _ Long: __ Today's Date: 4/20/12 Spud: 12/29/86 9-7/8" Hole Wildcat Comp 1/19/87 PC Comp: 4/5/05 7-5/8" 26.4#, Casing set @ 141'
Cement with 60 sxs, circulated to surface Tertiary Comp: 11/14/87 Elevation: 7191' GI 7203' KB Perforate @ 191' Plug #5: 191' - 0' Class B cement, 50 sxs San Jose @ 0' Plug #4: 2065' - 1965' Class B cement, 36 sxs: 12 inside and 24 outside Cement Retainer @ 2015' Nacimiento @ 2015' *est Perforate @ 2065' TOC @ 2700' (1987 T.S. & 2007 CBL) Plug #3: 2992' - 2892' CIBP at 2992' Class B cement, 12 sxs Nacimiento Perforations: 3042' - 3046' Plug #2: 3174' - 3074' CIBP at @ 3174' Class B cement, 12 sxs Ojo Alamo @ 3177' Ojo Alamo Perforations: 3224' - 3286' Kirtland @ 3427' Plug #1: 3672' - 3377' Class B cement, 27 sxs Fruitland @ 3556' CIBP set at 3672' (2007) Pictured Cliffs Perforations: 3688' - 4000' Pictured Cliffs @ 3687' CIBP set at 3900' (2005) 6-3/4" Hole 4.5" 11.6#, J-55 Casing @ 4104' Cement with 225 sxs (284 cf)

4112' TD

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: 2 Jicarilla 460

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) Place the Nacimiento plug from 1976' 1876' inside and outside the 4 1/2" casing.

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.