

### SEP 27 2012

Form 3160- 5

**UNITED STATES** 

FORM APPROVED

(August 2007)	DEPARTMENT OF T BUREAU OF LAND N	THE INTERIORFARMINGTON FIE MANAGEMEN TEAU OF LAND M	ld Office anagemen.	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.			5. Lease Serial N  Contract  6. If Indian, Allor	
SUBMIT IN TRIPLICATE - Other Instructions on page 2.				Agreement Name and/or No.
l Type of Well			8 Well Name and	4 N.
Onl Well Gas Well Other				457 #1
2. Name of Operator  Black Hills Gas Resources, Inc.				45/#1
3a. Address 3b. Phone No. (include area code)			30-039-24	
3200 N 1st St, Bloomfield, NM 87413 (505) 634-5104  4 Location of Well (Footage, Sgc., T., R., M., or Survey Description)				ol, or Exploratory Area PC & Cabresto Cnyn Tert.
1450 FSL & 1190 FWL (UL: L) Section 9 T30N R3W			11. County or Par	
1498' 1144'				oa County, New Mexico
12. CHECK APPR	OPRIATE BOX(S) TO INDICA	ATE NATURE OF NOTICE, REPOR	T, OR OTHER DA	ATA
TYPE OF SUBMISSION		TYPE OF ACTIO	<u>N</u>	
Notice of Intent	Acidize	Deepen Production	n ( Start/ Resume)	Water Shut-off
	Altering Casing	racture Treat Reclamat	ion	Well Integrity
Subsequent Report	Casing Repair	New Construction Recomple	ete	Other
al 1	Change Plans	Plug and abandon Temporar	nly Abandon	
Final Abandonment Notice	Convert to Injection	Plug back Water Di	sposal	
determined that the site is ready for	final inspection.)	Jicarilla 457 #1 per attached pr  Notify NMOC  prior to beg  operation	ocedure. D 24 hrs inning	RCVD OCT 1'12 OIL CONS. DIV. DIST. 3
14 I hereby certify that the foregoing is	true and correct. Name (Printed/ Typed)			
Daniel Manus		Regulatory Techician		
Signature Lamin	Many	Date Sept 2	7,20	012
	THIS SPACE F	OR FEDERAL OR STATE OFFIC	E ÙSE	
Approved by Original	Signed: Stephen Mason	Title	Da	sep 2 8 2012
Conditions of approval, if any are attached that the applicant holds legal or equitable entitle the applicant to conduct operations	title to those rights in the subject lease w	nt or certufy		
	43 U.S.C. Section 1212, make it a crime f	or any person knowingly and willfully to make sdiction.	any department or agenc	ry of the United States any false,

(Instructions on page 2)



#### PLUG AND ABANDONMENT PROCEDURE

September 26, 2012

#### Jicarilla 457 #1

East Blanco PC / Cabresto	Canyon; Tertiary
1450' FSL, 1190' FWL, Section 9, T30N,	R3W, Rio Arriba County, NM
API 30-039-24106 / 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.
- 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.

Plug #1 (Pictured Cliffs interval and Fruitland and Kirtland tops, 3658' – 3323'): Round trip 4.5" casing scraper to 3658'. PU 4.5" CR and set at 3658'. Pressure test tubing to 1000#. Mix 30 sxs Class B cement and spot a balanced plug inside the casing above the CR to isolate the PC interval and cover through the Kirtland top. TOH with tubing.

4. Plug #2 (Ojo Alamo perforations and top, 3247' – 2996'): TIH and set 4.5" CR at 3096'.

Attempt to pressure test casing to 800#. If casing does not test then spot or tag subsequent plugs as appropriate. Mix 44 sxs Class B cement, squeeze 32 sxs below CR into Ojo Alamo perforations and leave 12 sxs above. TOH with tubing.

7028 1928 2028

- 5. Plug #3 (Nacimiento top, 2670' 1970'): Perforate 3 squeeze holes at 2670'. Attempt to establish rate into squeeze holes if the casing pressure tested. Set 4.5" cement retainer at 2020'. 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.
- 6. Plug #4 (7-5/8" Surface casing shoe, 188' 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 20 sxs cement and spot a balanced plug from 188' 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 188' and the annulus from the squeeze holes to surface. Shut in well and WOC.
- 7. 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 457 #1

#### Current

East Blanco PC/ Cabresto Canyon; Tertiary

1450' FSL &1190' FWL, Section 9, T-30-N, R-3-W, Rio Arriba County, NM

/API 30-039-24106 / Lat: Today's Date: 9/4/12 Spud: 12/15/86 PC Comp: 1/6/87 9-7/8" Hole Tertiary Comp: 6/10/89 7-5/8" 26.4#, S-95 casing set @ 138' Cement with 60 sxs, circulated to surface Elevation: 7154' GI 7167' KB RU Huskey Wireline and Cementers, Inc. Pumped 150 sxs (177 cf) cement containing 5 mc radioactive tracer down the bradenhead. Ran gamma ray tracer and found bottom of cement at 764'. Cement from 764' to surface. (July 1990) 2-3/8" tubing at 3803' (117 jts, 4.7#, J-55 with SN at 3783' with rods and pump) Nacimiento @ 2020 \*est TOC @ 2825' (CBL 1989) Ojo Alamo @ 3128' Oio Alamo Perforations: 3146' - 3247' Kirtland @ 3373' Fruitland @ 3419' Pictured Cliffs @ 3702' Pictured Cliffs Perforations: 3708' - 3762' 6-3/4" Hole 4.5" 11.6#, J-55 Casing @ 4038' Cement with 200 sxs

4045' TD 3972' PBTD

## Jicarilla 457 #1 Proposed P&A

East Blanco PC/ Cabresto Canyon; Tertiary

1450' FSL &1190' FWL, Section 9, T-30-N, R-3-W, Rio Arriba County, NM

Long: \_\_\_\_\_/ Lat: \_\_\_\_\_/API 30-039-24106

Today's Date: 9/26/12 Spud: 12/15/86 PC Comp: 1/6/87 Tertiary Comp: 6/10/89 Elevation: 7154' GI

7167' KB

9-7/8" Hole

Plug #4: 188' - 0' Class B cement, 20 sxs

7-5/8" 26.4#, S-95 Casing set @ 138' Cement with 60 sxs, circulated to surface

RU Huskey Wireline and Cementers, Inc. Pumped 150 sxs (177 cf) cement containing 5 mc radioactive tracer down the bradenhead. Ran gamma ray tracer and found bottom of cement at 764'. Cement from 764' to surface. (July 1990)

Nacimiento @ 2020 \*est

Ojo Alamo @ 3128'

Kirtland @ 3373'

Fruitland @ 3419'

Pictured Cliffs @ 3702'

6-3/4" Hole

Set CR @ 2020'

Plug #3: 2070' - 1970' Class B cement, 36 sxs 24 sxs outside and 12 sxs inside

Perforate @ 2070'

TOC @ 2825' (CBL 1989)

Set CR @ 3096'

Plug #2: 3247' – 2996' Class B cement, 44 sxs<sup>-</sup> 32 sxs below CR and 12 sxs

above CR

Ojo Alamo Perforations: 3146' – 3247'

Plug #1: 3658' - 3323' Class B cement, 30 sxs

Set CR @ 3658'

Pictured Cliffs Perforations: 3708' – 3762'

4.5" 11.6#, J-55 Casing @ 4038' Cement with 200 sxs

4045' TD 3972' 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: 1 Jicarilla 457

#### **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 2028' 1928' inside and outside the 4 1/2" casing.
- b) You are required to have H2S monitoring equipment and personnel on location during plugging operations.

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