Form 3160-5 (April 2004)

Type of Well

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

OMB No. 1004-0137

OMB No. 1004-013/ Expires: March 31, 2007

#### 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 Institution

5.	Lease Serial No.
M	IDA 701-98-0013, Tract 1
6.	If Indian, Allottee, or Tribe Name
Ji	carilla Apache
7.	If Unit or CA. Agreement Name and/or No.
8	Well Name and No.

Oil Well √ Gas Well SEP 0 6 2007 Jicarilla 29-03-24 #34 Name of Operator bureau of Land Management 9. API Well No. Black Hills Gas Resources Falsengion Wold And Gea code) 3a. Address 30-039-29499 10. Field and Pool, or Exploratory Area 3200 N 1st Street PO Box 249 Bloomfield, NM 87413 505-634-1111 ext 27 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) La Jara Canyon, Tertiary 11. County or Parish, State Surface: 1.785' FSL 1.260' FEL NE/SE Sec. 24 T29N R3W Unit I Rio Arriba, New Mexico

TYPE OF SUBMISSION	TYPE OF ACTION			
Notice of Intent	Acidize	Deepen	Production ( Start/ Resume)	Water Shut-off
	Altering Casing	Fracture Treat	Reclamation	Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplete	√ Other
	Change Plans	Plug and abandon	Temporarily Abandon	Convert undrilled
Final Abandonment Notice	Convert to Injection	Plug back	Water Disposal	PC to SJ well

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 or pertinent markers and sands. 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.)

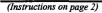
The initial APD to drill a Picture Cliffs (PC) well was approved on August 1, 2006. The well was given API number 30-039-29499. After evaluation of drilling data in the immediate area, BHGR has determined that this well is best drilled to the San Jose formation. BHGR is submitting an updated drilling plan, and a revised C-102, to change the well from a PC to a San Jose.

Surface disturbance will not change from the initial APD, therefore the Surface Use Plan Will hot be updated or modified.

DIST. 3
RCVD SEP 14'07
OIL CONS. DIV.

14. I hereby certify that the foregoing is true and correct.					
Name (Printed/ Typed)	Tide				
Lynn H. Benally	Title	Regulate	Regulatory Specialist		
Signature Colombia	Date 9-/	2007			
THIS SPACE FOR FEDERAL OR STATE OFFICE USE					
Approved by	Title Pet	c. Eno.	Date 9/13/07		
Conditions of approval, if any are attached. Approval of this not		-3			
certify that the applicant hold legal or equitable title to those right which would entitle the applicant to conduct	ghts in the subject lease Office operations thereon.				
Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 12	12, make it a crime for any person knowir	ngly and willfully to m	ake any department or agency of the United		

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.





#### Jicarilla 29-03-24 #34

Surface: 1785' FSL 1,260' FEL NE/SE Sec 24 T29N R3W Unit I Rio Arriba County, New Mexico Lease: MDA 701-98-0013, Tract 1

## DRILLING PROGRAM (Per Rule 320)

The Application for Permit to Drill (APD) was initiated under the NOS process as stated in Onshore Order No. 1 and supporting Bureau of Land Management (BLM) documents. This APD process includes an onsite meeting which was held on October 14, 2004 as determined by Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA) and Jicarilla Oil & Gas Administration (JOGA), and at which time the specific concerns of Black Hills Gas Resources (BHGR) were discussed.

This well was recently sundried and approved as a horizontal Pictured Cliff well on October 10, 2006. This new drilling plan addresses changing the un-drilled Pictured Cliffs well to a vertical San Jose well.

SURFACE FORMATION - San Jose

**GROUND ELEVATION - 7,067**°

ESTIMATED FORMATION TOPS - (Water, oil, gas and/or other mineral-bearing formations)

San Jose

Surface

Sandstone, shales & siltstones

Nacimiento

1.977

Sandstone, shales & siltstones

TOTAL DEPTH

3,000

TD

Estimated depths of anticipated fresh water, oil, or gas:

Nacimiento

1,977

Gas

#### **CASING PROGRAM**

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0-250' TVD	12-1/4"	7"	J-55 20# ST&C New	To surface (± 175 sxs ClassB) **
0' - TD	6-1/4"	4-1/2"	J-55 10.5# ST&C New	TD to surface (± 630 sxs lite or 65:35 poz and ± 270 sxs 50:50 poz) *

<sup>\*</sup> Actual cement volume to be determined by caliper log.

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and protected.

#### PRESSURE CONTROL

BOPs and choke manifold will be installed and pressure tested before drilling out under surface casing (subsequent pressure test will be performed whenever pressure seals are broken), and then will be checked daily as to mechanical operating condition. BOP's will be pressure tested at least once every 30 days. Ram type preventors and related pressure control equipment will be pressure tested to 1,000 psi. Annular type preventor will be pressure tested to 50% of the rated working pressure, not to exceed 1,000 psi. All casing strings will be pressure tested to 0.22 psi/ft. or 1,000 psi, whichever is greater, not to exceed 70% of internal yield.

BOP to be either double gate rams or an annular preventor as per Onshore Order No. 2.

#### Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with Onshore Order No. 2 for 2M systems.

A remote accumulator will be used. Pressures, capacities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.

#### **MUD PROGRAM**

0' - 250' Fresh water – M.W. 8.5 ppg, Vis 30-33
250' - TD' Fresh water - Low solids non-dispersed
M.W. 8.5 – 9.2 ppg
Vis – 28 – 50 sec
W.L. 15cc or less

Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at well site.

#### **AUXILIARY EQUIPMENT**

- A) A Kelly cock will be kept in the drill string at all times
- B) Inside BOP or stab-in valve (available on rig floor)
- C) Mud monitoring will be visually observed

#### LOGGING, CORING, TESTING PROGRAM

A) Logging: DIL-CNL-FDC-GR - TD - BSC (GR to surface)

Sonic (BSC to TD)

B) Coring:

None

C) Testing:

Possible DST – None anticipated. Drill stem tests may be run on shows of interest

#### **ABNORMAL CONDITIONS**

A) Pressures: No abnormal conditions are anticipated

Bottom hole pressure gradient – 0.31 psi/ft

B) Temperatures: No abnormal conditions are anticipated

C)  $H_2S$ : See attached  $H_2S$  plan in event  $H_2S$  is encountered.

D) Estimated bottomhole pressure: 930 psi

E) Centralizers

Centralizers					
1	Near surface				
_2_	-1 each at middle of bottom joint, second joint				
2	-1 each at every other joint, 80' spacing				
5	Total centralized ± 240 feet (10 feet – 250 feet)				
	** Note that field experience indicates that additional centralizers greatly increase the chance of "sticking"				
	the surface casing prior to reaching surface casing total depth.				

#### **ANTICIPATED START DATE**

September 10, 2007

#### **COMPLETION**

The location pad will be of sufficient size to accommodate all completion activities and equipment. A string of 2-3/8" J-55 4.7# tubing will be run for a flowing string. A Sundry Notice will be submitted with a revised completion program if warranted.

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DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Axtec, N.M. 67410

### State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised June 10, 2003 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMENDED REPORT

DISTRICT IV 1220 South St. Francis Dr., Santa Fe, NM 87505

# WELL LOCATION AND ACREAGE DEDICATION PLAT

WLI MOTHINGL	LOOT CODE			
30-039-29499	97036 LA JARA CANYON, TERT		ΓIARY	
Property Code	Property Name		• Well Number	
35403	JICARILLA 29-03-24			
OGRID No.	* Ope	* Elevation		
013925	BLACK HILLS GAS RESOURCES			
	<del></del>			

<sup>10</sup> Surface Location

County RIO ARRIB
County

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16			FD. 2 1/2" BC. U.S.G.L.O. 1917	17 OPERATOR CERTIFICATION I hereby certify that the tenformation contained herein is true and complete to the best of my knowledge and belief
· ·	LAT. 36°42'30.5"N LONG. 107°05'51.7"	(NAD 83) W (NAD 83)	E 5188.77' (M)	Signature Lynn H. Benally Printed Nama Regulatory Specialist Title 9/6/07
			1260' N	Date  18 SURVEYOR CERTIFICATION  I hereby certify that the well location shows on this plat was plotted from flaid notes of notual surveys made by me or under my supervision, and that the same is true and correct to the best of the be
CALC'D CORNER FROM G.L.O.	S 89-56-00 W	5273.39' (C)	FD. MARKED STONE	Sandra of Providence 14831  Certificate Sumber