

RECEIVED

APR 29 2016

Form 3160-5
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Farmington Field Office

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 abandoned well. Use Form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other Instructions on page 2.**

1. Type of Well

☐ Oil Well☒ Gas Well☐ Other

2. Name of Operator

Black Hills Gas Resources, Inc.

3a. Address

P.O. Box 249 Bloomfield, NM 87413

3b. Phone No. (include area code)

(505) 634-5104

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2060' FNL & 2215' FEL SW/NE Section 6, T29N R3W (UL: G)

Jicarilla Contract 452

6. If Indian, Allottee, or Tribe Name

Jicarilla Apache Tribe

7. If Unit or CA. Agreement Name and/or No.

8. Well Name and No.

Jicarilla 452-06 #23

9. API Well No.

30-039-27730

10. Field and Pool, or Exploratory Area

Cabresto Canyon 1ert.

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☐ Deepen☐ Production (Start/Resume)☐ Water Shut-off☐ Subsequent Report☐ Altering Casing☐ Fracture Treat☐ Reclamation☐ Well Integrity☐ Final Abandonment Notice☐ Casing Repair☐ New Construction☐ Recomplete☐ Other☐ Change Plans☒ Plug and abandon☐ Temporarily Abandon☐ 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 recompleat 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 recompleat 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 452-06 #23 per attached procedure.
A closed loop system will be used.

Attachment:

Proposed Procedure
Current Well Bore Diagram
Proposed Well Bore Diagram

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
operations

OIL CONS. DIV DIST. 3

MAY 09 2016

** Reclamation plan has not been approved.*

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Daniel Manus

Regulatory Technician II

Title

Signature

Date

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

FFO

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

5

PLUG AND ABANDONMENT PROCEDURE

April 28, 2016

Jicarilla 452-06 #23

East Blanco Pictured Cliffs/Basin Fruitland Coal /Cabresto Canyon Tertiary

2060' FNL, 2215' FEL, Section 6, T29N, R3W, Rio Arriba County, NM

API 30-039-27730 / Long: _____ / Lat: _____

1. 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.
2. This project will use an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.
3. 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.
4. Rods: Yes____, No X, Unknown____.
Tubing: Yes X, No____, Unknown____, Size 2-3/8", Length 3745'.
Packer: Yes X, No____, Unknown____, Type AS-1X 10K packer w/ 10k comp @ 3638'.

PU on tubing and release packer. TOH and LD packer. If packer dragged coming out of hole then RIH with scraper. If packer came out of hole free then proceed to Plug #1.

5. **Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo interval, 3763' – 3168'):** Mix 90 sxs Class B cement (25% excess, long plug) and spot plug to to isolate the PC interval, fill the Fruitland Coal perforations and cover the Fruitland, Kirtland and Ojo Alamo tops. PUH and WOC. TIH and tag cement 50' above top of Ojo Alamo. If necessary top off cement and go to Plug #2.
6. **Plug #2 (Nacimiento top, 2538' – 2210'):** TIH with open ended tubing. Mix and pump 50 sxs Class B cement (30% excess, long plug) and spot a plug to isolate the Nacimiento perforations and top. PUH and WOC. If tag is low spot additional cement as required. TOH.
7. **Plug #3 (San Jose perforations, 1286' – 1186'):** Round trip 5.5" gauge ring or casing scraper to 1286'. TIH and set 5.5" CR or CIBP at 1286'. Attempt to pressure test casing to 800 psi. If casing does not test then spot or tag subsequent plugs as appropriate. Mix 17 sxs Class B cement and spot a balanced plug inside casing above CR or CIBP to isolate the San Jose interval. PUH.
8. **Plug #4 (8-5/8" Surface casing shoe, 327' - 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 40 sxs cement and spot a balanced plug from 327' 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 327' and the annulus from the squeeze holes to surface. Shut in well and WOC.
9. ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and cut off anchors. Restore location per BLM stipulations.

Jicarilla 452-06 #23

Current

East Blanco Pictured Cliffs / Basin Fruitland Coal / Cabresto Canyon Tertiary

2060' FNL & 2215' FEL, Section 6, T-29-N, R-3-W, Rio Arriba County, NM

Long: _____ / Lat: _____ / API 30-039-27730

Today's Date: 4/28/16

Spud: 6/5/04

Comp: 3/1/05

Elevation: 7042' GI
7055' KB

12-1/4" Hole

8-5/8" 24#, J-55 Casing set @ 277'
Cement with 175 sxs, circulated to surface

2-3/8" tubing at 3745'
(111 jts - 2 3/8", 4.7#, J-55, packer, 3 jts,
R nipple and 2' pup joint)

San Jose Perforations:
1336' - 1388'

Nacimiento @ 2260'

Nacimiento Perforations:
2478' - 2488'

Ojo Alamo @ 3218'

Kirtland @ 3392'

Fruitland @ 3612'

AS-1X 10K packer set with 10K compression @ 3638'.

Fruitland Coal Perforations:
3654' - 3678'

Pictured Cliffs @ 3726'

Pictured Cliffs Perforations:
3726' - 3752'

7-7/8" Hole

5.5" 15.5#, J-55 Casing @ 3791'
Cement with 714 sxs, circulate 29 bbls to surface

3800' TD
3763' PBTd

Jicarilla 452-06 #23

Proposed P&A

East Blanco Pictured Cliffs / Basin Fruitland Coal / Cabresto Canyon Tertiary

2060' FNL & 2215' FEL, Section 6, T-29-N, R-3-W, Rio Arriba County, NM

Long: _____ / Lat: _____ / API 30-039-27730

Today's Date: 4/28/16

Spud: 6/5/04

Comp: 3/1/05

Elevation: 7042' GI
7055' KB

12-1/4" Hole

Plug #4: 327' - 0'
Class B cement, 40 sxs

8-5/8" 24#, J-55 Casing set @ 277'
Cement with 175 sxs, circulated to surface

Plug #3: 1286' - 1186'
Class B cement, 17 sxs

Set CR @ 1286'

San Jose Perforations:
1336' - 1388'

Plug #2: 2538' - 2210'
Class B cement, 50 sxs
(30% excess, long plug)

Nacimiento Perforations:
2478' - 2488'

Plug #1: 3763' - 3168'
Class B cement, 90 sxs,
(25% excess, long plug)

Fruitland Coal Perforations:
3654' - 3678'

Pictured Cliffs Perforations:
3726' - 3752'

5.5" 15.5#, J-55 Casing @ 3791'
Cement with 714 sxs, circulate 29 bbls to surface

Nacimiento @ 2260'

Ojo Alamo @ 3218'

Kirtland @ 3392'

Fruitland @ 3612'

Pictured Cliffs @ 3726'

7-7/8" Hole

3800' TD
3763' PBD

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 452-06 #23

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 1958 ft. to cover the Nacimiento top. BLM picks top of Nacimiento at 2008 ft. Adjust cement volume accordingly.

H₂S has not been reported at this location, however, **high to very high concentrations of H₂S** have been reported in wells to the north of this location which produce gas from the San Jose, Nacimiento and Ojo Alamo fms. **It is imperative that H₂S 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.