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Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Albuquerque Field Office
Bureau of Land Management

AUG 28 2013

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 <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease, Serial No. Jicarilla Contract 464
2. Name of Operator Black Hills Gas Resources, Inc.		6. If Indian, Allottee, or Tribe Name Jicarilla Apache Tribe
3a. Address 3200 N 1st St, Bloomfield, NM 87413	3b. Phone No. (include area code) (505) 634-5104	7. If Unit or CA, Agreement Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1840' FSL & 1725' FEL NW/SE Section 31 T30N R3W (UL: J)		8. Well Name and No. Jicarilla 464-31 #233
		9. API Well No. 30-039-30195
		10. Field and Pool, or Exploratory Area East Blanco Pictured Cliffs
		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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug back	<input type="checkbox"/> 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 reclamanation, have been completed, and the operator has determined that the site is ready for final inspection.)

Per the Notice of Intent dated May 30, 2013, to plug and abandon Jicarilla 464-31 #233, Black Hills Gas Resources is submitting the attached plug and abandon procedure.

Black Hills Gas Resources will be using a Close-Loop system for the P&A work.

RCVD SEP 3 '13
OIL CONS. DIV.
DIST. 3

**Notify NMOCD 24 hrs
prior to beginning
operations**

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

Daniel Manus

Regulatory Technician

Title

Signature

Daniel Manus

Date

August 28, 2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Date

AUG 29 2013

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

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 AV

PLUG AND ABANDONMENT PROCEDURE

August 7, 2013

Jicarilla 464-31 #233

East Blanco Pictured Cliffs

Surface: 1840' FSL, 1725' FEL, Section 31, T30N, R3W, Rio Arriba County, NM

Upper Lateral TD: 1889' FSL, 799' FEL, Section 31, T30N, R3W,

Lower Lateral TD: 2291' FSL, 582' FEL, Section 32, T30N, R3W

API 30-039-30195 / 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. 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.
2. Rods: Yes ☒ , No _____, Unknown _____.
Tubing: Yes ☒ , No _____, Unknown _____, Size 2-3/8", Length 128 jts, SN, 3.5" perf sub and 2 jts 3.5" tubing, BP with TAC at 3430'.
Packer: Yes _____, No ☒ , Unknown _____, Type _____.
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.

Round trip 7" casing scraper to 4180' or as deep as possible.

Note: Blow down parasite string and keep shut in while pumping plugs #1 & #2.

3. **Plug #1 (Pictured Cliffs interval and Fruitland top, 4180' – 3829')**: RIH and set 7" Hydro-set CIBP at 4180'. Pressure test tubing to 1000#. **Pressure test casing to 800#. If casing does not test then spot or tag subsequent plugs as appropriate.** Mix 76 sxs Class B cement and spot a balanced plug above CIBP, inside the casing, to cover the Pictured Cliffs interval and Fruitland top. PUH.
4. **Plug #2 (Kirtland and Ojo Alamo tops, 3516' – 3141')**: Mix 80 sxs Class B cement and spot a balanced plug inside the casing to cover the Kirtland and Ojo Alamo tops. PUH.
5. **Plug #3 (2696' to surface in 1.9" Parasite string, 2696' to 2570' inside 7" casing)**: Pump down 7" casing and attempt to establish circulation out 1.9" parasite string (make sure parasite string is open at surface). If able to establish circulation, then circulate 25 bbls through the parasite string. RIH and set 7" CR at 2620'. Pressure test tubing to 1000#. Pressure test casing to 800#. Mix approximately 73 sxs Class B cement. Pump 38 sxs to fill and circulate good cement out parasite string to surface and leave 15 sxs to fill inside 7" casing below CR and leave 20 sxs above CR.

NOTE: If unable to establish circulation, then set CIBP at 2746' and spot 57 sxs Class B cement (250') inside 7" casing to isolate the parasite string. PUH.

6. **Plug #4 (Nacimientito top, 1984' – 1884')**: Mix 29 sxs Class B cement and spot a balanced plug inside the casing to cover the Nacimientito top. PUH.

7. **Plug #5 (13-3/8" Surface casing shoe, 303' - 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 65 sxs cement and spot a balanced plug from 303' 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 303' and the annulus from the squeeze holes to surface. Shut in well and WOC.
8. 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.

Today's Date: 6/7/13
Spud: 4/8/08
Elev: 7015' GL
7028' KB

Jicarilla 464-31 #233
PROPOSED P&A Wellbore Diagram
API # 30-039-30195
NW SE, Sec 31, T30N, R3W Rio Arriba, NM

17 1/2" hole

SURF CASING

13 3/8", 61#, J-55 csg @ 253'.
Cmt w/ 340 sx, circ 23 bbls to surface.

1.9", 2.76#, J-55, IJ parasite
string banded to outside of 7" csg
and tied into 7" csg at 2696'

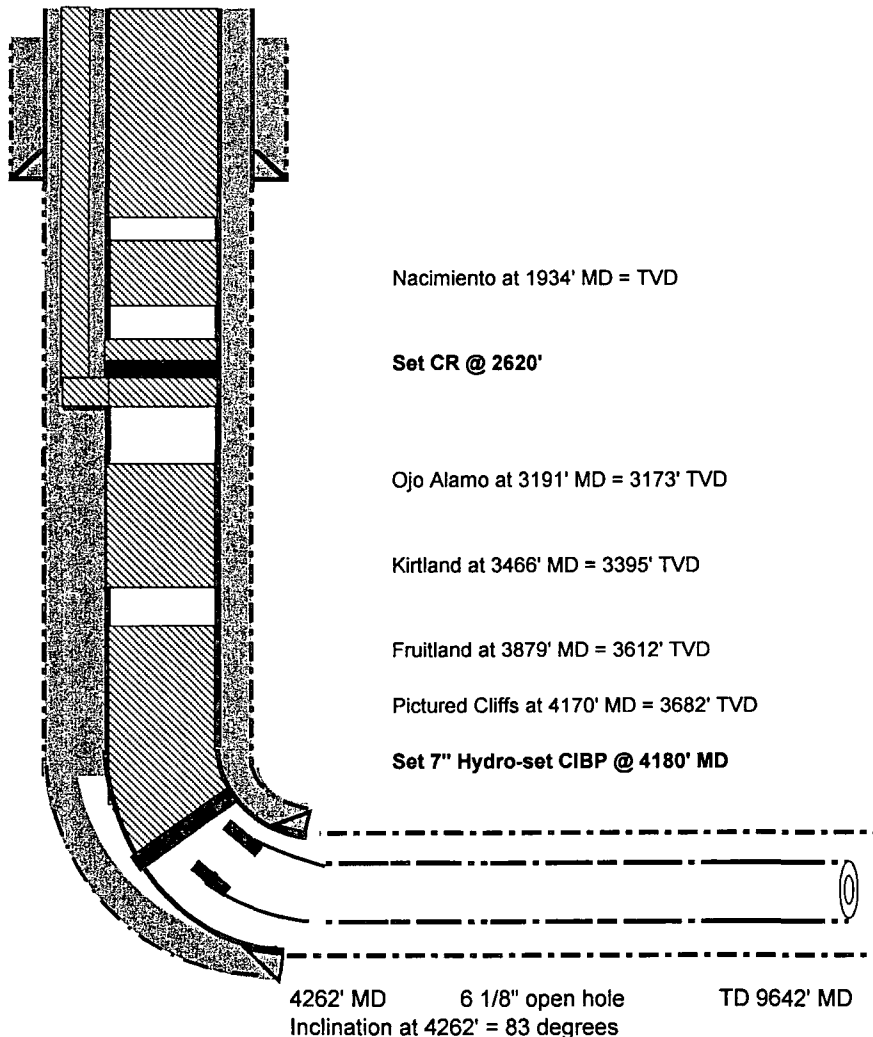
12 1/4" hole to 2717'

Kick off point at 2717'

8 3/4" hole from 2717' to 4264'

PROD CASING

7", 23#, J-55 casing set at 4262'.
1.9", 2.76#, J-55, IJ parasite
string tied into 7" at 2696'. 7" csg
cmt'd with 660 sx lead + 440 sx
tail. Circ 83 bbl to surface.



Plug #5: 303' - surface
Class B cement, 65 sxs

Plug #4: 1984' - 1884'
Class B cement, 29 sxs

Plug #3: 2696'-surface in 1.9" & 2696'-2570' in 7"
Class B cement, 73 sxs
38 sxs in 1.9" parasite string & 35 sxs in 7" casing

Plug #2: 3516' - 3141'
Class B cement, 80 sxs

Plug #1: 4180' - 3829'
Class B cement, 76 sxs

Lateral Detail:

4 1/2", 11.6#, J-55 liner (uncemented)
Top of Liner (H Latch tool) at 4231' MD
Bottom of Liner at 9642' MD

12 perfed jts at 4235-4276, 4737-4778, 5239-5280,
5742-5782, 6245-6287, 6749-6791, 7253-7295,
7756-7796, 8216-8258, 8676-8718, 9139-9179,
9600-9640'. Each jt has 28 - 3/4" holes.

Today's Date: 6/7/13
Spud: 4/8/08
Elev: 7015' GL
7028' KB

Jicarilla 464-31 #233
CURRENT Wellbore Diagram
API # 30-039-30195
NW SE, Sec 31, T30N, R3W Rio Arriba, NM

17 1/2" hole

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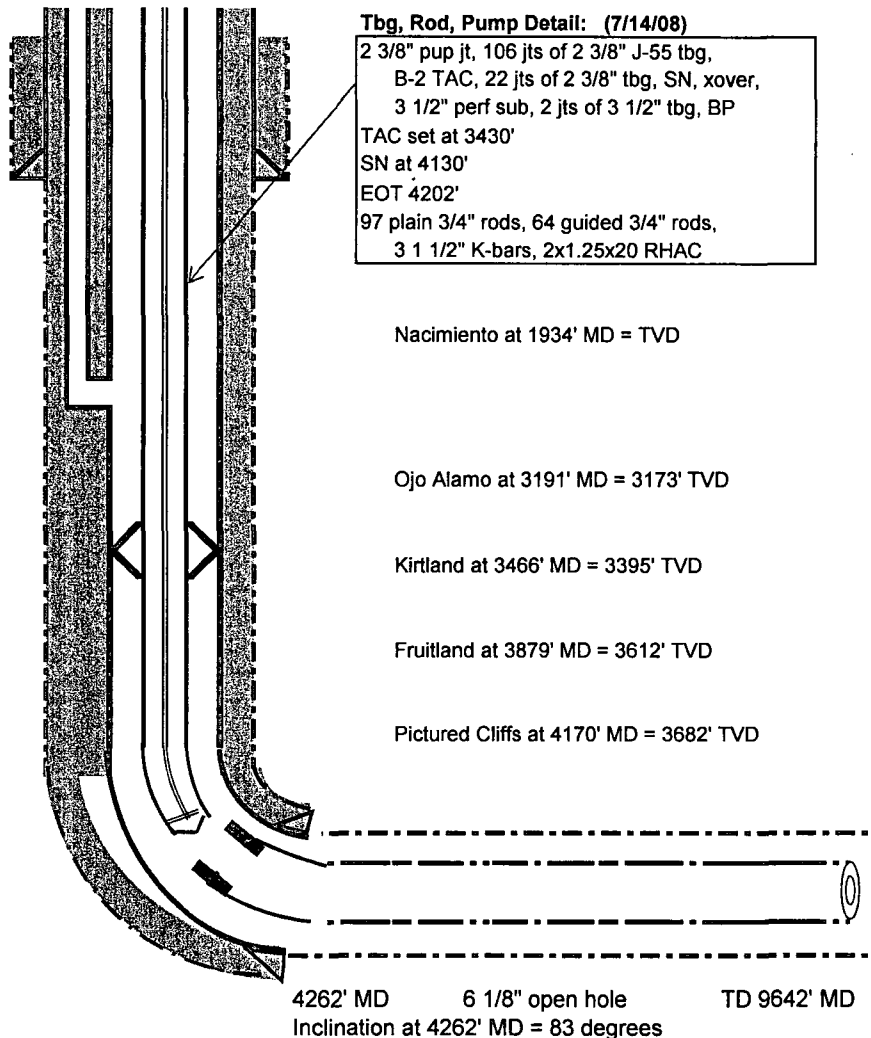
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UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
6251 COLLEGE BLVD.
FARMINGTON, NEW MEXICO 87402

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: 233 Jicarilla 464-31

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) 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.