Form 3160- 5 (August 2007)

> Type of Well Oil Well

Name of Operator

√ Gas Well

P.O. Box 249 Bloomfield, NM 87413

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

Black Hills Gas Resources, Inc.

# UNITED STATES RECEIVED DEPARTMENT OF THE INTERIOR 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 2d Mana

	5. Lease Serial No.
	Jicarilla Contract 464
	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 464 #1
	9. API Well No.
	30-039-24088
	10. Field and Pool, or Exploratory Area
	East Blanco Pictured Cliffs
	11. County or Parish, State
	Rio Arriba County, New Mexico
T,	OR OTHER DATA

1800' FSL & 965' FEL	NE/SE Section 30 T3	the state of the s	11. County or Parish, State  Rio Arriba County, New Mexico	
12. CHECK APPR	OPRIATE BOX(S) TO I	NDICATE NATURE OF N	OTICE, REPORT, OR OTHE	R DATA
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
_ 6K	Change Plans	✓ Plug and abandon	Temporarily Abandon	
Final Abandonment Notice	Convert to Injection	Plug back	Water Disposal	E Savinson

3b. Phone No. (include area code)

(505) 634-5104

\*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 of all pertinent markers and zones. 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 recomplete 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 has plug and abandon Jicarilla 464 #1 per attachment.

OIL CONS. DIV DIST. 3

Attachment: Plug and Abandonment Report

JAN 04 2016

Approved as to plugging of the well bore. Liability under bond is retained until surface restoration is completed. DEC 2 1 2015

FARMING ON FILLD OFFICE
BY:

ACCEPTED FOR RECORD

14. I hereby certify that the foregoing is true and correct. Name (Printed/ Typed)		
Daniel Manus	egulatory Technician	II
Signature Tarriel Mannez Date	Remeh	
THIS SPACE FOR FEDE	RAL OR STATE OFF	CE USE <sup>1</sup>
Approved by	Title	Date
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	

(Instructions on page 2)

1800' FSL and 965' FEL, Section 30, T-30-N, R-3-W Rio Arriba County, NM Lease Number: Jicarilla Contract 464 API #30-039-24088

Plug and Abandonment Report
Notified Jicarilla BLM, NMOCD & BLM on 11/19/15

## Plug and Abandonment Summary:

- Plug #1 with CIBP at 3691', spot 61 sxs (71.98 cf) Class B cement from 3691' to 2867' to cover the Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops. Tag TOC at 2896'.
- Plug #2 with squeeze holes at 2051' & CR at 2022', pump 16 sxs Class B cement down tubing, start circulating out 4-1/2" casing valve. Sting out CR, reverse out cement.
- Plug #2a with squeeze holes at 2051' & CR at 2022', spot 44 sxs (51.92 cf) Class B cement with 2% CaCl from 2051' to 1793' to cover the Nacimiento top 1) pump 27 sxs below CR at 2022' (3 sxs inside and 24 sxs outside 4-1/2" casing), 2) sting out CR and leave 17 sxs from 2022' to 1793'. TIH and tag TOC at 1828'.
- Plug #3 with squeeze holes at 177', spot 48 sxs (56.64 cf) Class B cement from 177' to surface to cover the 7-5/8" shoe and surface. Circulate good cement out BH valve.
- Plug #3a with CR at 204' spot 20 sxs (23.6 cf) Class B cement from 204' to surface to cover the 7-5/8" shoe and surface, circulate good cement out 4-1/2" casing valve.
- Plug #4 with 24 sxs Class B cement thru poly pipe to top off casings and install P&A marker with coordinates N 36° 46′ 49″ / W 107° 11′ 12″.

#### **Plugging Work Details:**

- 11/20/15 MIRU A-Plus #14 & McGuire H2S safety equipment. SITP 0 psi. SICP 210 psi. SIBHP 0 psi. No H2S monitored. Blow well down, up to 12 PPM H2S monitored. Pump 30 bbls wtr down tubing. Pump 2 gal H2S scavenger & 3 bbls wtr down casing. No H2S. ND WH. NU & function test BOP. Monitor up to 348 PPM H2S from casing. Pump 30 bbls wtr down casing to kill well. TOH with 2 3/8" production tubing. Killed well twice with wtr & H2S scavenger while TOH. Pump 45 bbl down casing. RU wireline. Pump 35 bbls, ran 4-1/2" GR to 3700', POH. SWI. SDFD.
- 11/23/15 SICP 260 psi. SIBHP 0 psi. No H2S monitored. Pump 30 bbls down casing, on vacuum. RU wireline. Pump 25 bbls, RIH with 4-1/2" CIBP & set at 3691'. Load well. Ran CBL from 3690' to 1000', TOC in annulus at 3030'. Receive OK to continue with procedure from B. Hammond, Jicarilla BLM, J. Savage, BLM, & B. Powell, NMOCD. TIH w/ tubing, tag CIBP at 3691'. Circulate well clean. Pressure test casing, bled from 500 psi down to 200 psi in 1 minute. Spot plug #1 with calculated TOC at 2867'. TOH. SWI. SDFD.
- 11/24/15 SICP on vacuum, SIBHP 0 psi. Function test BOP. TIH and tag TOC at 2896'. RU wireline. Perforate 3 squeeze holes at 2051'. Establish rate of 1.5 bpm at 800 psi. TIH with 4-1/2" CR and set at 2022'. Pressure test tubing. Sting out of CR. Attempt to pressure test casing, bled from 700 psi to 200 psi in ½ minute. Sting into CR, establish rate at 1.5 bpm, 1100 psi. Pump 16 sxs of plug #2 down tubing & started circulating out 4-1/2" casing valve. Sting out CR, reverse out cement. Pressure test casing above CR, establish rate of 1.5 bpm at 800 psi. Pressure test tubing to 1500 psi, OK. Sting into CR, establish rate of 2 bpm at 500 psi with circulation out 4-1/2" casing valve. Receive OK from R. Velarde, Jicarilla BLM, J.

1800' FSL and 965' FEL, Section 30, T-30-N, R-3-W Rio Arriba County, NM Lease Number: Jicarilla Contract 464 API #30-039-24088

## Plugging Work Details continued):

Savage, BLM and B. Powell, NMOCD to pump plug as planned. Pump **plug #2a** inside & outside 4-1/2" csg with calculated TOC inside at 1793'. SWI. WOC. TIH and tag TOC at 1828'. TOH. Attempt to pressure test casing bled to 800 psi, bled to 500 psi in ½ minute. RU wireline. Perforate 3 squeeze holes at 177'. Establish rate down casing 3 bpm at 600 psi. Establish circulation out bradenhead. Spot **plug #3** with TOC at surface. SWI. SDFD.

11/25/15 Check pressures, casing and bradenhead on vacuum. Function test BOP. TIH with tubing to 756', no tag. Pressure test casing to 800 psi, bled to 500 psi in ½ minute. Load & pressure test bradenhead with ½ bbl, pressure tested to 300 psi, OK. TOH. WOO. Receive OK from R. Velarde, Jicarilla BLM, J. Savage, BLM and B. Powell, NMOCD to set CR at +/- 200' & fill inside 4-1/2" casing to surface. TIH & set CR at 204'. TOH. TIH open-ended to 204'. Spot plug #3a with TOC at surface. TOH. ND BOP. Cut off WH. Found cement down 20' in 4-1/2" casing and down 12' in 7-5/8" casing. Spot plug #4 Class B cement thru poly pipe to top off casings and install P&A marker with coordinates N 36° 46' 49" / W 107° 11' 12". RDMOL.

Rod Velarde, Jicarilla BLM representative, was on location. Robert Maggard, McGuire representative, was on location.