

**DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2004

5. Lease Serial No.
Jicarilla Contract 460

a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry Other _____
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

2. Name of Operator

Black Hills Gas Resources, Inc

3. Address

350 Indiana Street, Suite 400 Golden, CO 80401

3a. Phone No. (include area code)
720-210-1308

4. Location of Well (Report location clearly and in accordance with Federal requirements)

At surface 820' FNL & 1965' FEL (NWNE) Unit B

At top prod. interval reported below 820' FNL & 1965' FEL (NWNE) Unit B

At total depth 820' FNL & 1965' FEL (NWNE) Unit B

14. Date Spudded

7/12/2004

15. Date T.D. Reached

7/15/2004

16. Date Completed

☐ D & A ☒ Ready to Prod.

12/23/04

6. If Indian, Allottee or Tribe Name

Jicarilla Apache Tribe

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No.

Jicarilla 460-15 No. 13

9. API Well No.

30-039-27801

10. Field and Pool, or Exploratory

Cabresto Canyon, Tertiary

11. Sec., T., R., M., on Block and Survey
or Arca Sec. 15, T30N-R03W

12. County or Parish

Rio Arriba

13. State

NM

17. Elevations (DF, RKB, RT, GL)*

7375' KB, 7374' DF, 7362' GL

18. Total Depth: MD 3915'
TVD

19. Plug Back T.D.: MD 3879'
TVD

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? ☒ No ☐ Yes (Submit analysis)

Was DST run? ☒ No ☐ Yes (Submit report)

Directional Survey? ☒ No ☐ Yes (Submit copy)

SDL/DSN, HRI, BCS

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12 1/4"	8 5/8"	24	0'	282'		175 & B		surface;	
								circ 15bbl	
								to surface	
7 7/8"	5 1/2"	17	0'	3907'		850 & B		surface;	
								circ 60bbl	
								to surface	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 3/8"	3756'	3756'						

25. Producing Intervals

Formation	TOP	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Ojo Alamo	3298	3349	3298-3302, 11-15, 26-30, 41-43, 47-4	2	32	
B) Nacimiento	2816	3040	2816-20, 33-35, 58-60, 88-90, 94-96,			
C)			3034-3040	2	36	
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
3298-3349	Frac w/70Q Lightning 12, 31,740# 16/30 brown & 69,140# sb excel sand, 7,052 scf N2.
2816-3040	Frac w/70Q Lightning 12 gel, 88,000# 16/30 sb excel sand, 682,800 scf N2.
2833-2896	cmt sqz w/47.2 cu/ft (8.4bbbls) of cmt 3 b/m 50psi.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
1/20/05	1/20/05	24	☐		140				Flowing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			☐					Producing	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			☐						
Choke Size	Tbg. Press. Flwg. SI	Call Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			☐						

(See instructions and spaces for additional data on next page)

NMOCD

RECEIVED
2005 FEB 10 5M 10 3H
OTD FARMINGTON NM
ACCEPTED FOR RECORD
MAR 2 2005

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			☐						
Choke Size	Tbg Press Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			☐						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			☐						
Choke Size	Tbg Press Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			☐						

29. Disposition of Gas (Sold used for fuel, vented, etc.)

Sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				San Jose	surface
				Nacimiento	2199'
				Ojo Alamo	3298'
				Kirtland	3487'
				Fruitland	3728'
				Pictured Cliffs	3823'

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

- ☒ 1 Electrical/Mechanical Logs (1 full set req'd.)
 ☐ 2 Geologic Report
 ☐ 3 DST Report
 ☐ 4 Directional Survey
☐ 5 Sundry Notice for plugging and cement verification
☐ 6 Core Analysis
☐ 7 Other: _____

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Allison Newcomb

Title Engineering Technician

Signature

Allison Newcomb

Date 2/7/2005

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 to any department or agency of the United States any false fictitious or fraudulent statements or representations as to any matter within its jurisdiction.