

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 20045. Lease Serial No.
Jicarilla Contract 4601a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry Other
b. Type of Completion: ☐ New Well ☒ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____6. If Indian, Allottee or Tribe Name
Jicarilla Apache Tribe7. Unit or CA Agreement Name and No.
22183

2. Name of Operator

Black Hills Gas Resources, Inc

8. Lease Name and Well No.

Jicarilla 460-16 No. 4

3. Address

350 Indiana Street, Suite 400 Golden, CO 80401

3a. Phone No. (include area code)

720-210-1308

9. API Well No.

30-039-25785

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

At surface 840' FSL & 1180' FWL (SWSW) Unit M

At top prod. interval reported below 840' FSL & 1180' FWL (SWSW) Unit M

At total depth 840' FSL & 1180' FWL (SWSW) Unit M

10. Field and Pool, or Exploratory

Cabresto Canyon, Tertiary

11. Sec., T., R., M., on Block and Survey
or Area Sec. 16, T30N-R03W

12. County or Parish

Rio Arriba

13. State

NM

14. Date Spudded

3/23/98

15. Date T.D. Reached

3/31/98

16. Date Completed

☐ DEAD ☒ Ready to Prod.

3-22-05

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

725' GL

18. Total Depth: MD

TVD 4070'

19. Plug Back T.D.: MD

TVD 3841'

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, DILT

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cement Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12 1/4"	8 5/8"	24		544'		300 & B		circ. 84sx	
								to surface	
7 7/8"	4 1/2"	10.5		4049'		870 sx		circ 10sx	
								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"	3814'	3814'						

25. Producing Intervals

Formation	TOP	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Ojo Alamo Cab. Test.	3247'	3291'	3247-3291	4 jspf	176	Open
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material

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
			<input type="checkbox"/>						Flowing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			<input type="checkbox"/>					Shut In	

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
			<input type="checkbox"/>						
Choke Size	Tbg. Press. Flwg. SI	Call Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			<input type="checkbox"/>						

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

NMCCD

ACCEPTED FOR RECORD

APR 15 2005

FARMINGTON FIELD OFFICE

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
			<input type="checkbox"/>						
Choke Size	Tbg Press Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			<input type="checkbox"/>						

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
			<input type="checkbox"/>						
Choke Size	Tbg Press Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			<input type="checkbox"/>						

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
				Ojo Alamo	3244'
				Kirtland	3482'
				Fruitland	3665'
				Pictured Cliffs	3780'
				Lewis	3885'

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 3/28/2005

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.