

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 4621a. 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 Tribe

7. Unit or CA Agreement Name and No.

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 1975' FNL &amp; 2050' FWL (SENW) Unit F

At top prod. interval reported below 1975' FNL &amp; 2050' FWL (SENW) Unit F

At total depth 1975' FNL &amp; 2050' FWL (SENW) Unit F

8. Lease Name and Well No.

Jicarilla 462-22 No. 22

9. API Well No.

30-039-27800

10. Field and Pool, or Exploratory

East Blanco, Pictured Cliffs

11. Sec., T., R., M., on Block and Survey  
or Area Sec. 22, T30N-R03W

12. County or Parish

Rio Arriba

13. State

NM

14. Date Spudded

7/8/2004

15. Date T.D. Reached

7/11/2004

16. Date Completed

☐ D & A☒ Ready to Prod.

11/18/04

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

7223' KB, 7222' DF, 7209' GL

18. Total Depth: MD 3814'

TVD

19. Plug Back T.D.: MD 3763'

TVD 3762.4'

20. Depth Bridge Plug Set: MD

TVD

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

HRI, LSS, SDL/DSN

22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
Was DST run? ☒ No ☐ Yes (Submit report)  
Directional Survey? ☒ No ☐ Yes (Submit copy)

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'	264'		175 sx		surface;	
								circ 7bbls	
								to surface	
7 7/8"	5 1/2"	15.5	0'	3810'		750 sx		surface;	
								circ 16bbl	
								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"	3606.7'							

25. Producing Intervals

Formation	TOP	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Pictured Cliffs	3700	3760	3700-3710, 3750-3760	4	40	
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
3700-3760	Acidize w/1000 gals of 3% HCl. Frac w/70Q N2 FOAM/WF120. 70% QUALITY FOAM. 120,136 LBS. OF 20/40 ARIZON SAND AT 1.0 TO 4.0 PPG STAGES. 657,000 SCF NITROGEN.

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
	10/7/04	24	<input type="checkbox"/>		92	36			Flowing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
3/8"	12		<input type="checkbox"/>					Waiting on Pipeline	

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)

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
			<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
				San Jose	surface
				Nacimiento	2085'
				Ojo Alamo	3191'
				Kirtland	3421'
				Fruitland	3601'
				Pictured Cliffs	3700'

## 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 2/3/2005

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.