

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2004

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
Jicarilla Contract 4511a. 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.

24245

8. Lease Name and Well No.

Jicarilla 451-09 No. 11

9. API Well No.

30-039-27799

10. Field and Pool, or Exploratory

Cabresto Canyon, Tertiary

11. Sec., T., R., M., on Block and Survey
or Area

Sec. 9, T29N-R03W

12. County or Parish

Rio Arriba

13. State

NM

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

7050' KB, 7037' GL

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 735' FNL & 705' FWL (NWNW) Unit D

At top prod. interval reported below 735' FNL & 705' FWL (NWNW) Unit D

At total depth 735' FNL & 705' FWL (NWNW) Unit D

14. Date Spudded

7/3/2004

15. Date T.D. Reached

7/6/2004

16. Date Completed

☐ D&A☒ Ready to Prod.

11/10/2004

18. Total Depth: MD 3814'

TVD 3811.6'

19. Plug Back T.D.: MD 3758.4'

TVD 3756'

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, LSS

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 lb	0	279' KB		175 sx		surface;	
								circ 5bbls	
								to surface	
7 7/8"	5 1/2"	15.5 lb	0	3808'		610 & "B"		surface;	
								circ 30bbl	
								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"	3601.34'	3601.34'						

25. Producing Intervals

Formation	TOP	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Ojo Alamo	3161	3178	3161-63,3165-67,3170-72,3174-78	4	40	
B) Nacimiento	2195	3024	2195-97,2243-45,50-52,54-56,2387	2	68	-89,2573-75,78-80,2727-29,34-36,
C)			74-76,80-82,88-90,2862-64,74-76,			2968-70,76-78,3024-26
D) San Jose	1342	2154	1342-44,48-50,1400-02,26-28,63-	2	40	65,2040-42,44-46,2118-20,36-38,52-5

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

Depth Interval	Amount and Type of Material
3161-3178	Acid w/500 gals of 3% HCl. Frac w/70Q lightning 18 foam. 6,947 scf N2, 25,140 lbs. of 12/20 Brown & 55,000 polar prop sand.
2195-2389	Acid w/500 gals of 3% HCl. Frac w/70Q N2 lightning 18 foam. 587,300 scf N2, 71,500 polar prop 12/20 mesh sand 452 bw/ma-844 + additives.
2573-2790	Acid w/400 gals of 3% HCl. Frac w/70Q N2 lightning 18 foam. 851,900 scf N2, 95,000 polar prop 12/20 mesh sand 598 bw/ma-844 + additives.
2862-3026	Acid w/400 gals of 3% HCl. Frac w/70Q N2 lightning 18 foam. 51,000 polar prop 12/20 mesh sand.

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
	11/19/04	24	☐		20				Flowing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
			☐					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
			☐						
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

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	2157'
				Ojo Alamo	3126'
				Kirtland	3343'
				Fruitland	3550'
				Pictured Cliffs	3674'

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 12/7/2004

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.

27. (cont) Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
1342-1465	Acid w/500 gals of 3% HCl. Frac w/60Q green lightning 16 foam. 154,000 scf N2, 48,220 polar prop 12/20 mesh sand 292 bw w/ma-844 + additives.
2040-2154	Acid w/500 gals of 3% HCl. Frac w/70Q N2 lightning 18 foam. 109,600 scf N2, 24,060 polar prop 12/20 mesh sand 182 bw w/ma-844 + additives.
3161-3178	Cement Squeezed: pump 100 sacks 14.5 ppg type III cement.