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Form 3160-4
(August 2007)

FEB 12 2013

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFarmington Field Office
Bureau of Land ManagementFORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.

Jic 460

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☐ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
*Other **Black Hills Clean Up**6. If Indian, Allottee or Tribe Name
Jicarilla Apache

7. Unit or CA Agreement Name and No.

2. Name of Operator
Black Hills Gas Resources, Inc.8. Lease Name and Well No.
Jicarilla 460-16 #63. Address
3200 N 1st Street, Bloomfield, NM3a. Phone No. (include area code)
(505) 634-51049. AFI Well No.
30-039-25865

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

At surface **1190' FNL & 1748' FEL (UL: B)**

At top prod. interval reported below

10. Field and Pool or Exploratory
Cabresto Canyon Tert.11. Sec., T., R., M., on Block and
Surveyor Area
Sec 16 T30N R3W12. County or Parish
Rio Arriba 13. State
NM

At total depth

14. Date Spudded
6/3/9815. Date T.D. Reached
6/10/9816. Date Completed
☐ D&A ☒ Ready to Prod. **7/25/98**17. Elevations (DF, RKB, RT, GL)
7291'18. Total Depth: MD
TVD 4060'19. Plug Back T.D.: MD
TVD 3686'20. Depth Bridge Plug Set: MD
TVD

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

SDL-DSN, DIGL22. 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 K55	539'			300 sx class "H" circ 56 sx to surface		Circ 56 sx to surf.	
7-7/8"	5-1/2"	15.5 K55	4045		3720'	Stg 1 - 100 sx 50/50 POZ		DV tool @ 3720'	
								Circ thru DV tool	
								10 sx to surface	
						Stg 2 - 450 sx POZ		300' Temp Survey	

24. Tubing Record

Size	Depth Set (MD)	Pacher Depth (MD)	Size	Depth Set (MD)	Pacher Depth (MD)	Size	Depth Set (MD)	Pacher Depth (MD)
1.9	1618							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A San Jose	Surface	2258'	1646		92	Open
B						
C						
D						

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

Depth Interval	Amount and Type of Material
1646' - 1709'	Acidize w/2000 7-1/2% HCl
	Fac 37,000 lbs 12/20 sand

28. Production - Interval A

Date First Produce	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
7/26/98	6/26/98	24	→		642	20			
Choke Size	Tbg. Press. Flwg. SI	Csg. Press	24 HR. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
3/8"	SI	0	→		642	20		Producing	

28a. Production - Interval B

Date First Produce	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	
	SI		→						

*(See instructions and spaces for additional data on page 2)

ACCEPTED FOR RECORD

NMOCD

FARMINGTON FIELD OFFICE
FEB 14 2013

28a. Production - Interval C

Date First Produce	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	
			→						

28a. Production - Interval d

Date First Produce	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 (Solid, 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
				Nacimiento	2258'
				Ojo Alamo	3274'
				Kirtland	3499'
				Fruitland	3731'
				Pictured Cliffs	3818'
				Lewis	3883'

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☐ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ 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) **Daniel Manus**Title **Regulatory Technician**

Signature

Date

02/12/13

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.

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