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Form 3160-4
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 26 2013

FORM APPROVED
OMB NO. 1004-0137
Expires: July 31, 2010

Farmington Field Office

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Lease Serial No.

Jic 458

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name	
b. Type of Completion: <input type="checkbox"/> New Well <input checked="" type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resrv., Other Amendment		Jicarilla Apache Tribe	
2. Name of Operator Black Hills Gas Resources, Inc.		7. Unit or CA Agreement Name and No.	
3. Address 3200 N 1st Street Bloomfield, NM 87413		8. Lease Name and Well No. Jicarilla 458-8 #6	
3a. Phone No. (include area code) (505) 634-5104		9. AFI Well No. 30-039-25757	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 1050' FNL & 1700' FWL UL: C At top prod. interval reported below At total depth		10. Field and Pool or Exploratory East Blanco Pictured Cliffs	
14. Date Spudded 1/14/98		11. Sec., T., R., M., on Block and Surveyor Area Sec. 8 T30W R3W	
15. Date T.D. Reached 02/25/98		12. County or Parish Rio Arriba	
16. Date Completed <input type="checkbox"/> D&A <input checked="" type="checkbox"/> Ready to Prod. 5/10/06		13. State NM	
17. Elevations (DF, RKB, RT, GL) 7178' GL			
18. Total Depth: MD 6400' TVD		19. Plug Back T.D.: MD 5900' TVD	
20. Depth Bridge Plug Set: MD 5900' TVD			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) Induction, SDL-DSN, Temp Survey		22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST Run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit Report) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> 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'	504'		345sx "B"		0' Cir	0
7-7/8"	5-1/2"	17#	0'	6400'	5697'	Stage1 - 170sx POZ		5697' Circ thru DV	0
								tool, 40sx to surf.	
						Stg2 - 1450sx POZ		380' Temp Survey	

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"	3748'	3708'	4-1/2"					

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A Pictured Cliffs	3766'	3858'	3766'-74, 3776'-85	0.34"	90	2 SPF
B			3694'-98, 3809'-18			
C			3823'-30, 3843'-51			
D						

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

Depth Interval	Amount and Type of Material
3766' - 3851'	BD w/ 500 gal acetic acid & 135 Pert Balls.
	Fraced w/ 141,000# 20/40 sand in foam on 5/2/06

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
Ready	05-09-06	5	→		365				Flowing
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 HR. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
3/8"	500 SI		→		1,750			Shut-in	

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.	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)

NMOCDA

FARMINGTON FIELD OFFICE
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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.)

Vent

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	1588'	1711'	Gas	San Jose	0'
Ojo Alamo	3196'	3430'	Gas	Nacimiento	2020'
Pictured Cliffs	3766'	3858'	Gas	Ojo Alamo	3196'
				Kirtland	3430'
				Fruitland	3663'
				Pictured Cliffs	3766'
				Lewis	3858'
				Mesa Verde	5747'

32. Additional remarks (include plugging procedure):

Jicarilla 458-8 #6 PC

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 **02/26/13**

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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