Form 3160-3 (August 1999)

FORM APPROVED OMB No. 1004-0136

UNITED ST	Expires Novem	Expires November 30, 2000		
DEPARTMENT OF T BUREAU OF LAND	5. Lease Serial No. CONTRACT 451			
APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Trib JICARILLA APACHI		
1a. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement	, Name and No.	
1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Otl			(23930)	
2. Name of Operator BLACK HILLS GAS RESOURCES, INC	KATHY L SCHNEEBECK E-Mail: BPMIBlackHills@banko1.com	9. API Well No. 30-039-	29460	
3a. Address 350 INDIANA STREET, SUITE 400 GOLDEN, CO 80401	3b. Phone No. (include area code) Ph: 303.820.4480 Fx: 303.820.4124		10. Field and Pool, or Exploratory E BLANCO/PICTURED CLIFFS	
4. Location of Well (Report location clearly and in accordance	nce with any State requirements.*)	11. Sec., T., R., M., or Blk.	and Survey or Area	
At surface NENE 960FNL 535FEL		A Sec 10 T29N R3W N	Mer NMP	
At proposed prod. zone NENE 960FNL 535FEL		M		
14. Distance in miles and direction from nearest town or post 57 MILES FROM BLOOMFIELD, NEW MEXICO		12. County or Parish RIO ARRIBA	13. State NM	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease	17. Spacing Unit dedicated	to this well	
535' FEL (LEASE LINE)	2560.00 160.00 NE/L			
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 20. BLM/BIA Bond No. on fil		file	
500' FROM JICARILLA 451-10 2	4000 MD NMB000230			
21. Elevations (Show whether DF, KB, RT, GL, etc. 7124 GL	22. Approximate date work will start 03/16/2005	23. Estimated duration		
	24. Attachments			
The following, completed in accordance with the requirements of	f Onshore Oil and Gas Order No. 1, shall be attached to	to this form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Off 	Item 20 above). 5. Operator certification	information and/or plans as may b	,	
25. Signature (Electronic Submission)	Name (Printed/Typed) KATHY L SCHNEEBECK Ph: 303.82	0.4480	Date 02/14/2005	
Title PERMIT AGENT FOR BLACK HILLS				
Approved by (Signature) (anki w	Name (Printed/Typed)		Date /12/06	
Title	Office FFO			
Application approval does not warrant or certify the applicant ho operations thereon. Conditions of approval, if any, are attached.	lds legal or equitable title to those rights in the subject	lease which would entitle the app	olicant to conduct	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, r States any false, fictitious or fraudulent statements or representat		to make to any department or ag	ency of the United	

Additional Operator Remarks (see next page)

Electronic Submission #54090 verified by the BLM Well Information System For BLACK HILLS GAS RESOURCES, INC, sent to the Rio Puerco

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED



DETRICT | 1825 N. Prench Dr., Hobbs, N.M. 86240

DESTRICT II 1301 V. Grand Ava., Artesia, N.M. 88210

DESTRUCT III 1000 Bio Brazos Rd., Aztec, N.M. 67410 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe. NM 87505

*Pool Code

Form C-102 Revised June 10, 2003

Submit to Appropriate District Office

*Pool Hame

State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

DESTRUCT IV 1220 South St. Francis Dr., Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-0	J39-	2946	0 7	2400		E. Blanco /	Pictured	Cliffs	
1Property C - 24245 1		<i>30</i>			Property JICARILLA 4:	r (1985) kir dir die kradition by die ee			ell Number 14
'оско ка 013925				BLA	*Operator CK HILLS GAS	et begang i di takanban bita			Blevallon 7124
					¹⁰ Surface	Location			
UL or lot so.	Section 10	Township 29-N	Rauge 3-W	Let Ide	Feet from the 960	North/South line NORTH	Feet from the 535	Bant/West Mas EAST	County RIO ARRIBA
			** Bott	om Hole	Location 1	f Different Fr	om Surface		
IIL or lot no.	Section	Township	Dange	lot lan	Past from the	North/South line	Feet from the	Bart/Word line	County
Dodicated Acro		E/4	s soint of	I68III	M Consolidation (ode	* Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 FD: 2 1/2 BC. U.S.G.L.O. 1917	S 87-57-24 W	5280.87' (M) - FD. 2.1/2' BC. U.S.G.L.O. 1917	535	OPERATOR CERTIFICATION (hereby control that the impermention contributed herein is but and complete to the best of my broadedge and below
	LAT 36'44'39.0"N LONG 107'07'51'9'		N 00-02-09 W	Kathy Ishneeleck Sgneture Kathy L. Schneebeck Printed Name Permit Agent for Black Hills Nue February 10, 2005
			FD. 2 1/2" BC U.S.G.L.O. 1917	Data 18 SURVEYOR CERTIFICATION I havely savely that the soil location shows as the plat or posted from field noted of sould accomp made by many ander to the competition of the sould be some to first used correct to the competition of the sould be some to first used overest to the competition of the sould be sound to first used overest to the competition of the sould be sound to first used overest to the competition of the sould be sound to first used overest to the competition of the competiti
				Strict Chipself To

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District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Printed Name/Title

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Feorfice.

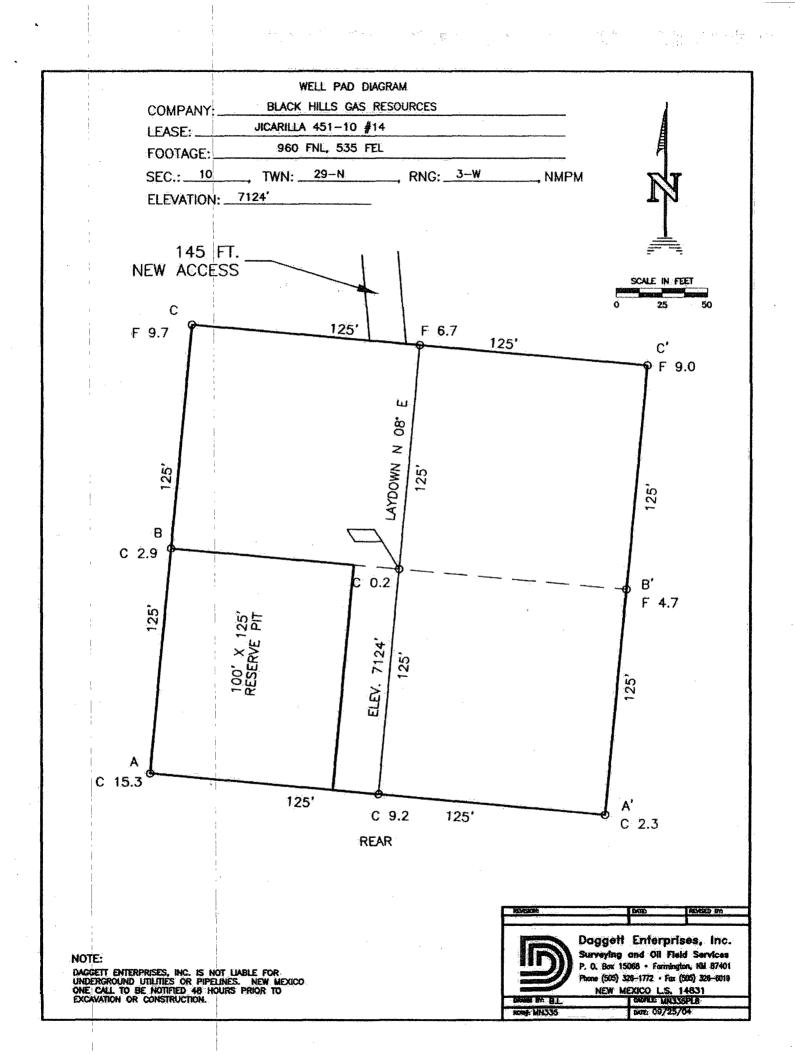
Form C-144 June 1, 2004

Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes ⊠ No □

Type of action: Registration of a pit	or below-grade tank 🛛 Closure of a pi	t or below-grade tank	
Operator: Black Hills Gas Resources, Inc. Address: 300 Indiana St. Suite 400, Golden, CO 80401	_Telephone:	e-mail address:	cmaybee@bliep.com
Facility or well name: <u>Jicarilla 451-10 14</u> API#: County: <u>Rio Arriba</u> Latitude <u>36° 44' 39.0"</u> Longitude <u>107° 07</u>	Pending U/L or Qtr/Qtr _\frac{1}{2} "-51.9" NAD: 1927 \Bigcup 1983 \Bigcup Surface		
Pit Type: Drilling ☑ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☑ Liner type: Synthetic ☐ Thicknessmil Clay ☑ Pit Volume ±17.811bbl	Below-grade tank Volume:bbl Type of fluid: _ Construction material: Double-walled, with leak detection?	and the second s	•
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)	
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points)	
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 f	(20 points) (10 points) (0 points)	>
	Rinking Score (Total Points)	/ 0 points	and the state of t
If this is a pit closure: (1) attach a diagram of the facility showing the pit your are burying in place) onsite offsite If offsite, name of facility remediation start date and end date. (4) Groundwater encountered: No Attach soil sample results and a diagram of sample locations and excavation	Yes If yes, show depth below ground	ach a general description of a	emedial action taken including
Additional Comments:		and the second of the second o	
I hereby certify that the information above is true and complete to the bes has been/will be constructed or closed according to NMOCD guidelii Date: 02/10/05			
Printed Name/Title <u>Kathy L. Schneebeck / Permit Agent for Black Hills</u> Your certification and NMOCD approval of this application/closure does otherwise endanger public health or the environment. Nor does it relieve regulations.	not relieve the operator of liability should		nk contaminate ground water or
Approval: DEFUTT ON & GAS INSPECTOR, DIST.		W/_	HII 1 / 2006

WELL PAD CROSS-SECTIONAL DIAGRAM BLACK HILLS GAS RESOURCES COMPANY:_ JICARILLA 451-10 #14 LEASE: _ 960 FNL, 535 FEL FOOTAGE:_ ____, TWN: ______, RNG: ______, NMPM SEC .: 10 ELEVATION: 7124' NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION. ELEV. A-A' C/L 7160 7150 7140 7130 7120 7110 7100 ELEV. B-B' C/L 7160 7150 7140 7130 7120 7110 7100 ELEV. C-C' Surveying and Oil Field Services P. O. Box 15088 · Famington, NA 87401. Phone (505) 226-1772 · Fox (505) 226-6019 NEW MEXICO L.S. 14831 7160 7150 7140 7130 KN335PLB 7120 7110

7100



Black Hills Gas Resources, Inc. Jicarilla 451-10 14 960' FNL 535' FEL (NE/4 NE/4) Sec. 10 T29N R3W Rio Arriba County, New Mexico

Lease: Contract 451

DRILLING PROGRAM

This Application for Permit to Drill (APD) was initiated under the NOS process as stated in Onshore Order No. 1 and supporting Bureau of Land Management (BLM) documents. This NOS process includes an onsite meeting which was held on October 12, 2004, as determined by BLM, Bureau of Indian Affairs (BIA) and Jicarilla Oil & Gas Administration (JOGA), and at which time the specific concerns of Black Hills Gas Resources, Inc. (Black Hills), BLM, BIA and JOGA were discussed.

BLACK HILLS RESPECTFULLY REQUESTS THAT ALL INFORMATION REGARDING THIS WELL BE KEPT CONFIDENTIAL.

SURFACE FORMATION – San Jose

GROUND ELEVATION - 7,124'

ESTIMATED FORMATION TOPS - (Water, oil, gas and/or other mineral-bearing formations)

San Jose	Surface	Sandstone, shales & siltstones
Nacimiento	1,977'	Sandstone, shales & siltstones
Ojo Alamo	3,185'	Sandstone, shales & siltstones
Fruitland	3,611'	Sandstone, shales & siltstones
Pictured Cliffs	3,700°	Sandstone, shales & siltstones
Lewis	3,808'	Sandstone, shales & siltstones

TOTAL DEPTH 4,000'

Estimated depths of anticipated fresh water, oil, or gas:

Tertiary		
San Jose	surface	Gas
Nacimiento	1,977'	Gas
Ojo Alamo	3,185'	Gas
Fruitland	3,611'	Gas
Pictured Cliffs	3.700'	Gas

CASING PROGRAM

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0'-250'	12-1/4"	8-5/8"	J-55 24# ST&C New	To surface (±175 sxs Class B)
0'-T.D.	7-7/8"	5-1/2"	J-55 15.5# LT&C New	TD to surface (±630 sxs lite or 65:35 poz and ±270 sxs 50:50 poz)*

^{*} Actual cement volume to be determined by caliper log.

Yields:

Class B yield = $1.18 \text{ ft}^3/\text{sx}$

65:35 Poz yield = $1.62 \text{ ft}^3/\text{sx}$ 50:50 Poz yield = $1.26 \text{ ft}^3/\text{sx}$

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and protected.

PRESSURE CONTROL

BOPs and choke manifold will be installed and pressure tested before drilling out under surface casing (subsequent pressure test will be performed whenever pressure seals are broken), and then will be checked daily as to mechanical operating condition. BOP's will be pressure tested at least once every 30 days. Ram type preventors and related pressure control equipment will be pressure tested to 1,000 psi. Annular type preventor will be pressure tested to 50% of the rated working pressure, not to exceed 1,000 psi. All casing strings will be pressure tested to 0.22 psi/ft. or 1,000 psi, whichever is greater, not to exceed 70% of internal yield.

BOP to be either double gate rams or an annular preventor as per Onshore Order No. 2.

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with Onshore Order No. 2 for 2M systems.

A remote accumulator will be used. Pressures, capacities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.

MUD PROGRAM

0' - 250' Fresh water – M.W. 8.5 ppg, Vis 30-33
250' - TD Fresh water - Low solids non-dispersed
M.W. 8.5 – 9.2 ppg
Vis – 28 – 50 sec
W.L. 15cc or less

Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at wellsite.

AUXILIARY EQUIPMENT

- A) A Kelly cock will be kept in the drill string at all times
- B) Inside BOP or stab-in valve (available on rig floor)
- C) Mud monitoring will be visually observed

LOGGING, CORING, TESTING PROGRAM

A) Logging:

DIL-CNL-FDC-GR - TD - BSC (GR to surface)

Sonic (BSC to TD)

B) Coring:

None

C) Testing:

Possible DST - None anticipated. Drill stem tests may be run on shows of interest

ABNORMAL CONDITIONS

A) Pressures:

No abnormal conditions are anticipated

Bottom hole pressure gradient – 0.31 psi/ft

B) Temperatures:

No abnormal conditions are anticipated

C) H_2S :

None anticipated

D) Estimated bottomhole pressure: 1,240 psi

ANTICIPATED START DATE

March 16, 2005

COMPLETION

The location pad will be of sufficient size to accommodate all completion activities and equipment. A string of 2-3/8" J-55 4.7#/ft tubing will be run for a flowing string. A Sundry Notice will be submitted with a revised completion program if warranted.

2-M SYSTEM Black Hills Gas Resources, Inc.

A COURT OF THE COU

ANNULAR PREVENTOR MAY BE SUBSTITUTED FOR DOUBLE GATE PREVENTORS BOP PRESSURE TEST TO 1,000 PSI

