Form 3160-3 (August 1999)	FORM APPRO OMB No. 1004	4-0136	
UNITED ST	Expires November	r 30, 2000	
DEPARTMENT OF T BUREAU OF LAND	5. Lease Serial No. CONTRACT 452		
APPLICATION FOR PERMIT	6. If Indian, Allottee or Tribe JICARILLA APACHE		
la. Type of Work: ☑ DRILL ☐ REENTER	7. If Unit or CA Agreement, N	Name and No.	
1b. Type of Well: ☐ Oil Well 🔀 Gas Well 🔲 Oth	er Single Zone 🔀 Multiple Zone	8. Lease Name and Well No. JIC 452-07 13	(35847)
2. Name of Operator Contact: BLACK HILLS GAS RESOURCES, INC	KATHY L SCHNEEBECK E-Mail: BPMIBlackHills@banko1.com	9. API Well No. 36-039- 290	470
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 accorda	nce with any State requirements.*)	11. Sec., T., R., M., or Blk. an	d Survey or Area
At surface NWNE 690FNL 1345FEL		$ $ \mathcal{B} Sec 7 T29N R3W Mer	NMP
At proposed prod. zone NWNE 690FNL 1345FEL			
14. Distance in miles and direction from nearest town or post of 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	
3,935' FWL (LEASE LINE)	2560.00	160.00 NEM	
18. Distance from proposed location to nearest well, drilling,	19. Proposed Depth	20. BLM/BIA Bond No. on file	
completed, applied for, on this lease, ft. 1,400' FROM JICARILLA 452 1Y (SHUT IN)	4000 MD	NMB000230	
21. Elevations (Show whether DF, KB, RT, GL, etc. 7133 GL	22. Approximate date work will start 03/28/2005	23. Estimated duration	
	24. Attachments		
The following, completed in accordance with the requirements o	f Onshore Oil and Gas Order No. 1, shall be attached to t	his 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 	em Lands, the ice). 4. Bond to cover the operation Item 20 above). 5. Operator certification Such other site specific in authorized officer.	ns unless covered to the light of AP on the light was may be	provide the required by the
25. Signature (Electronic Submission)	Name (Printed/Typed) KATHY L SCHNEEBECK Ph: 303.820.4	Date 02/22/2005	
Title PERMIT AGENT FOR BLACK HILLS			
Approved by (Signature) Mancleoux		Date /2/00	
Title AFM	Office		
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 lea	ise which would entitle the appli-	cant to conduct

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.

Additional Operator Remarks (see next page)

Electronic Submission #54389 verified by the BLM Well Information System For BLACK HILLS GAS RESOURCES, INC, sent to the Rio Puerco

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



DISTRICT I. 1625 N. Frenich Dr., Hobbs, N.M. 85240

DISTRICY II 1901 W. Grand Ave., Artema, H.M. 88210

DESTRICT IN 1900 Rd., Artec, N.M. 87410

State of New Mexico Energy, Minorals & Natural Resources Department OIL. CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

160 acres - NE/4

☐ AMENDED REPORT

	Number 39 - S	9410		*Pool Code 2400		E. Blanco	*Pool Name		
Property Co	×ie		and the state of t		*Property	Наше	militari di sono en meno del con capero do considera e processo del con	•	ell Number
-24245	35	847			JICARILLA 4	52-07			13
OGRAD No		Canadamahanaama	ramanina amang an masan	and an analysis of the same of	*Operator	Harne	andreas and an annual section and an analysis of the section of the section and the section an		Elevation
013925		BLACK HILLS GAS RESOURCES 71.33'					7133		
e van reconscioner anno escaparación escapa acceso describados.					10 Surface	Location	o anno actorio actorio del como actorio del	unina ukumunina puka Akap kapa Palansus masi	ease. It is the manager of the second se
UL or lot no.	Section 7	Township 29-N	Range 3-W	læt Idn	Feet from the 690	North/South line NORTH	Feet from the	East/West line EAST	County RIO ARRIBA
	······································	k nomen with other new cools	" Botto	om Hole	Location	f Different Fr	om Surface		. In manifestation of the second
VL or lot no.	Section	Township	Range	Lot lida	Peat from the	North/South line	Post from the	East/West line	County
* Dedicated Acre		L	" Joint or	l	* Consolidation	Code	*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

		Dan our ma be		
18	FD. 2 1/2" BC. U.S.G.L.O. 1917 LOT 1	N 89*58'02" W 2638.76' (M) 50 00	FD. 2 1/2" BC U.S.G.L.O. 1917	17 OPERATOR CERTIFICATION I hereby certify that the information conducted herein is brue and complete to the best of my knowledge and bellet
	LAT. 36'44'41.7"N LONG. 107'11'16:4" LOT 2	(NAD 83) W (NAD 83)	00'06'12" E 2640.32" (M)	Kathy J. Schneebeck Kathy L. Schneebeck Printed Name Permit Agent for Black Hills
			FD. 2 1/2" BC. U.S.G.L.O. 1917	February 22, 2005 Date 18 SURVEYOR CERTIFICATION I hereby certify that the well lecution shown on this plat was plotted from field makes of actual surveys made by me
	LOT 3		A national literature, and the Company of the Compa	or under my reperiodic, and that the same to bree and correct to the besiden with College Coll
	LOT 4			14831 Certificate Maraber

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

State of New Mexico Energy Minerals and Natural Resources

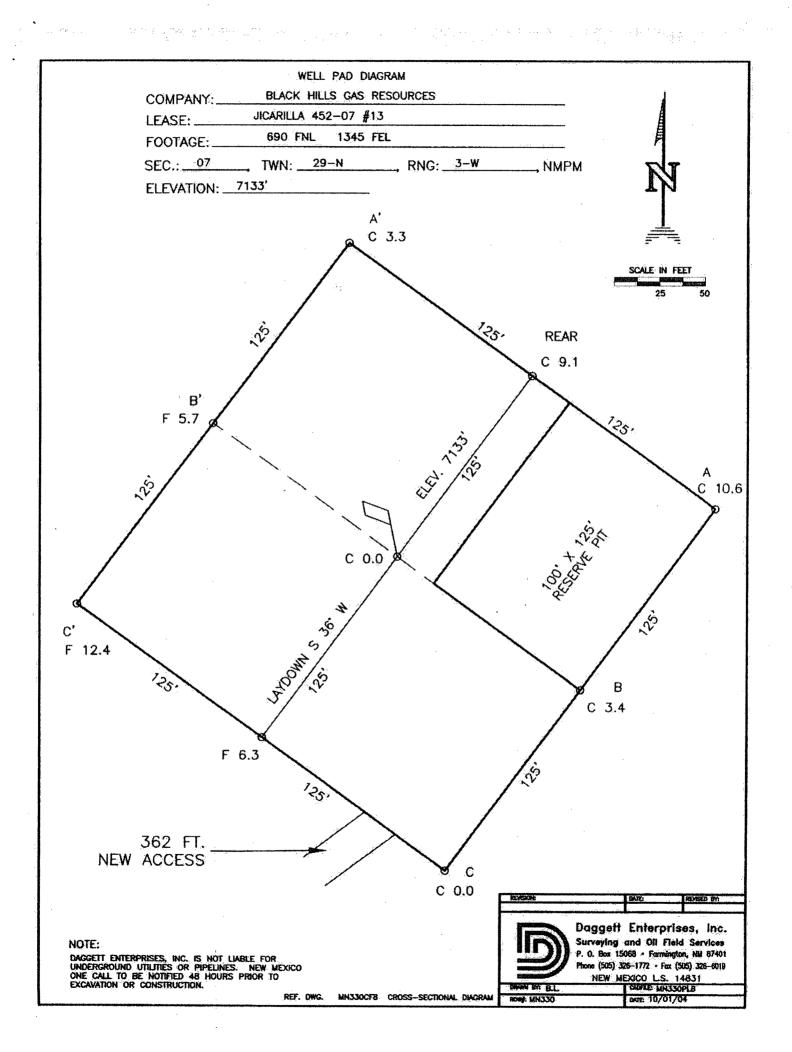
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office.

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 □

Operator: Black Hills Gas Resources, Inc.		nail address: cmaybee@bhep.com		
Address: 300 Indiana St. Suite 400, Golden, CO 80401	<u>30-639-29470 </u>			
Facility or well name: <u>Jicarilla 452-07 13</u> API #:	Pending U/L or Qtr/Qtr_NW NI			
County: Rio Arriba Latitude 36° 44' 41.7" Longitude [0.7° L]	'16.4" NAD: 1927 ☐ 1983 🛭 Surface Own	ier Federal ☐ State ☐ Private ☐ Indian 🛭		
	Below-grade tank			
Type: Drilling ☑ Production ☐ Disposal ☐	Volume: bbl. Type of fluid:			
Workover	Construction material:			
Lined Unlined	Double-walled, with leak detection? Yes [Double-walled, with leak detection? Yes 🔲 If not, explain why not		
Liner type: Synthetic ☐ Thicknessmil Clay ☑				
Pit Volume <u>±17.811</u> <u>661</u>				
Depth to ground water (vertical distance from bottom of pit to seasonal	Less than 50 feet	(20 points)		
high water elevation of ground water.)	50 feet or more, but less than 100 feet	(10 points)		
	100 feet or more	(0 points)		
Wellhead protection area: (Less than 200 feet from a private domestic		(20 points)		
water source, or less than 1000 feet from all other water sources.)	No	(0 points)		
	Less than 200 feet	(20 points)		
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)		
irrigation canals, ditches, and perennial and ephemeral watercourses.)	1000 feet or more	(_O points)		
	Ranking Score (Total Points)	0 points		
If this is a pit closure: (1) attach a diagram of the facility showing the pit	's relationship to other equipment and tanks. (2) indicate disposal location: (check the onsire box if		
our are burying in place) onsite 🔲 offsite 🔲 If offsite, name of facility_		eneral description of remedial action taken including		
emediation start date and end date. (4) Groundwater encountered. No	a file of the control	2 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Attach soil sample results and a diagram of sample locations and excavation	[[통기 : 사는 기계 : 백년 1941 : 19 : HESPEN 14] :	, sasamen samperesime, (3)		
Additional Comments:		Signatura and a second a second and a		
		The second secon		
		in the control of the		

I hereby certify that the information above is true and complete to the best has been/will be constructed or closed according to NMOCD guidelin	of my knowledge and belief. I further certify es 🗵, a general permit 🔲, or an (attached)	that the above-described pit or below-grade tank alternative OCD-approved plan		
Date <u>02/72/05</u>				
Printed Name/litle Kathy L. Schneebeck / Permit Agent for Black Hills				
Your certification and NMOCD approval of this application/closure does otherwise endanger public health or the environment. Nor does it relieve t regulations.	not relieve the operator of liability should the co the operator of its responsibility for compliance	ontents of the pit or tank contaminate ground water of with any other federal, state, or local laws and/or		
Approval: Approv		The state of the s		
Approval: OCFUTY ON & GAS INSPECTOR, DIST. 69	Signature 55	Double 1 4 2006		



WELL PAD CROSS-SECTIONAL DIAGRAM COMPANY: BLACK HILLS GAS RESOURCES JICARILLA 452-07 #13 LEASE: ____ 690 FNL, 1345 FEL FOOTAGE: __ _____ TWN: ______ PNG: _____ NMPM SEC.: ___7___ ELEVATION: 7133' 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' 7160 DIAGRAM 7150 3 7140 7130 7120 7110

7100

Black Hills Gas Resources, Inc. Jicarilla 452-07 13

690' FNL 1,345' FEL (NW/4 NE/4) Sec. 7 T29N R3W

Rio Arriba County, New Mexico Lease: Contract 452

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 6, 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.

SURFACE FORMATION - San Jose

GROUND ELEVATION - 7,133'

<u>ESTIMATED FORMATION TOPS</u> - (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)

None

Sonic (BSC to TD)

B) Coring:

C) Testing: Possible DST – None anticipated. Drill stem tests may be run on shows of interest

ABNORMAL CONDITIONS

A) Pressures: N

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 28, 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.

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

