Form 3160-3 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

5. Lease Serial No.

	= ON COEVED =	MDA 701-98-0013,		
APPLICATION FOR PERMIT	TO DRILL OF REENTER VS. DIV.	6. If Indian, Allottee or Tribe Name JICARILLA APACHE NATION		
a. Type of Work: 🛛 DRILL 🔲 REENTER	(C)//2/2019	7. If Unit or CA Agreement, Name and No.		
lb. Type of Well: □ Oil Well Gas Well □ Otl	her ⊠ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. JIC 28-02-06 14		
2. Name of Operator Contact: BLACK HILLS GAS RESOURCES, INC	KATHY L SCHNEEBECK E-Mail: BPMIBLACKHILLS@BANKO1.COM	9. API Well No. 30-039-79435		
Ba. 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	ance with any State requirements.*)	11. Sec., T., R., M., or Blk. and Survey or Area		
At surface NENE Lot 1 Tract 2 570FN	IL 775FEL	ASec 6 T28N R2W Mer NMP		
At proposed prod. zone NENE Lot 1 Tract 2 570FN	NL 775FEL			
14. Distance in miles and direction from nearest town or post 57 MILES FROM BLOOMFIELD, NM	office*	12. County or Parish RIO ARRIBA NM		
 Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 4505' FWL (LEASE LINE) 	16. No. of Acres in Lease 10240.00	17. Spacing Unit dedicated to this well 160.00 158.86 AC NE/4		
8. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file		
1700 (FROM JICARILLA 28-02-05 11)	4000 MD	1318288		
21. Elevations (Show whether DF, KB, RT, GL, etc. 7189 GL	22. Approximate date work will start 02/16/2005	23. Estimated duration		
	24. Attachments			
e following, completed in accordance with the requirements of	of Onshore Oil and Gas Order No. 1, shall be attached 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 Of	Item 20 above). tem Lands, the 5. Operator certification	ons unless covered by an existing bond on file (see formation and/or plans as may be required by the		
25. Signature (Electronic Submission)	Name (Printed/Typed) KATHY L SCHNEEBECK Ph. 303-820-	4480 Date 01/17/2005		
Title PERMIT AGENT				
Approved by (Signature) (an lee let	Name (Printed/Typed)	Date / (1/24//		
Title AFM	Office FFO	7-77		
plication approval does not warrant or certify the applicant ho erations thereon. Inditions of approval, if any, are attached.	olds legal or equitable title to those rights in the subject le	ease which would entitle the applicant to conduct		
tle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, r	make it a crime for any person knowingly and willfully to tions as to any matter within its jurisdiction.	make to any department or agency of the United		

Electronic Submission #52957 verified by the BLM Well Information System For BLACK HILLS GAS RESOURCES, INC, sent to the Farmington

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED

GENERAL REQUIREMENTS.

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

DISTRICT 1 1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, N.M. 88210

OIL CONSERVATION DIVISION

Submit to Appropriate District Office State Lease — 4 Copies Fee Lease — 3 Copies

DESTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

2040 South Pacheco Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

	API Number			Pool Code			³ Pool Name					
30-03	9-2	9435	7.2	72400 E. Blanco / Pictured Cliffs								
Property Co	ode	_	Property Name					* We	ll Number			
24245	352	27	JICARILLA 28-02-06 14					14				
OGRID No					*Opera	tor Nep	ne .	***************************************				devation
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			" Botto	m Hole	Location	n If	Different Fr		Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from t	he	North/South line	Fe	et from the	East	/West line	County
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Certificate Hu

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

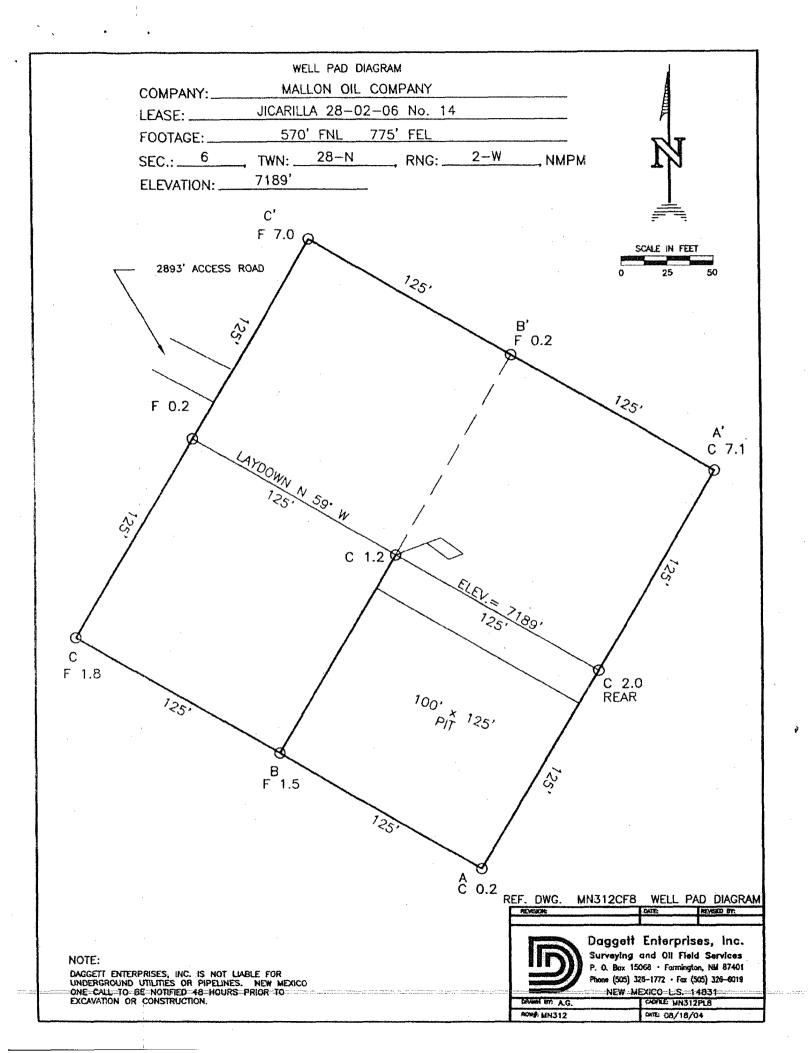
Form C-144

June 1, 2004

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes No

Type of action: Registration of a pit o	r below-grade lank 🔲 Closure of a pit of below-gr	rade tank			
Operator: Black Hills Gas Resources, Inc.	Telephone: <u>505-634-1111</u> e-mail ac	ldress: lhenally@bhen.com			
Address: 3200 N. 1 st St., Bloomfield, NM 87413	Pending 9 29 435 Pending NE				
County: Rio Arriba Latitude 36° 40' 24" Longitude 107° 04' 39'	🔼 NAD: 1927 🗌 1983 🔀 Surface Owner Federal	☐ State ☐ Private ☐ Indian ☒			
<u>Pit</u>	Below-grade tank				
Type: Drilling Production Disposal	Volume:bbl Type of fluid:				
Workover					
Lined 🛛 Unlined 🗍	Double-walled, with leak detection? Yes If n				
	Bodole-walled, with leak detection: Tes [] If it	oc, explain why not.			
Liner type: Synthetic ☑ Thickness <u>15</u> mil Clay ☑					
Pit Volume _ <u>±17,811</u> bbl					
Depth to ground water (vertical distance from bottom of pit to seasonal	Less than 50 feet	(20 points)			
	50 feet or more, but less than 100 feet	(10 points)			
high water elevation of ground water.)	100 feet or more	(0 points)			
	Yes	(20 points)			
Wellhead protection area: (Less than 200 feet from a private domestic					
water source, or less than 1000 feet from all other water sources.)	<u>No</u>	(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)			
	1000 teet of more	- Political			
	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) India	cate disposal location: (check the onsite boy if			
your are burying in place) onsite 🔲 offsite 🔲 If offsite, name of facility					
remediation start date and end date. (4) Groundwater encountered: No 🔲 Y	es 🔲 If yes, show depth below ground surface	ft. and attach sample results. (5)			
Attach soil sample results and a diagram of sample locations and excavation	S.	61892			
Additional Comments:	Á	N A A			
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		DIST 6 S			
	TEL.	- S			
I hereby certify that the information above is true and complete to the best	of my knowledge and belief. I further certify that	the 6 have desorited but or below-grade tank			
has been/will be constructed or closed according to NMOCD guideline	s 🖂, a general permit 🔲, or an (attached) altern	ative OCD approved plan .			
Date: 11/07/05 2 C	0,10				
Printed Name/Title Lynn H. Benally	Signature Corpus				
Your certification and NMOCD approval of this application/closure does n	ot relieve the operator of liability should the content	ts of the pit or tank contaminate ground water or			
otherwise endanger public health or the environment. Nor does it relieve the regulations.	ne operator of its responsibility for compliance with	any other federal, state, or local laws and/or			
		NOV A a acce			
Approval: OFFITY OR & GAS INSPECTION, DEST. (5)		_ 11UY U.S. 2005			
		- 0 5000			
Printed Name/ Titre	Signature Jewy Ja	Date:			



WELL PAD CROSS-SECTIONAL DIAGRAM MALLON OIL COMPANY COMPANY: ____ JICARILLA 28-02-6 No. 14 LEASE: _____ FOOTAGE: ____ 570' FNL 775' FEL SEC.: 6 TWN: 28-N RNG: 2-W NMPM 7189' ELEVATION: 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. C/L C/L Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15068 · Familiation, NW 87401 Phone (505) 226-1772 · Fax (505) 226-5019 NEW MEXICO L.S., 14831 DIAGRAM 2 WELL MN312PLB

OMC

ELEV. A-A'

7210 7200

7190 7180

7170

7160

7150

7210 7200

7190

7180

7170

7160

7150

7210

7200

7190

7180

7170

7160

7150

ELEV. C-C'

ELEV. B-B'

Black Hills Gas Resources, Inc. Jicarilla 28-02-06 14

570' FNL 775' FEL (NE/4 NE/4) – Lot 1 Sec. 6 T28N R2W

Rio Arriba County, New Mexico Lease: MDA 701-98-0013, Tract 2

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 August 26, 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 – 7,189'

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

surface	Gas
1,977	Gas
3,185'	Gas
3,611'	Gas
3,700'	Gas
	1,977' 3,185' 3,611'

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 I

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

Logging: A)

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

Sonic (BSC to TD)

B) Coring: None

Testing: C)

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) H₂S: None anticipated

D) Estimated bottomhole pressure: 1,240 psi

ANTICIPATED START DATE

February 13, 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

