

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. MDA 701-98-0013,
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name JICARILLA APACHE NATION
2. Name of Operator BLACK HILLS GAS RESOURCES, INC. Contact: KATHY L SCHNEEBECK Email: BPMIBlackHills@banko1.com 13925		7. If Unit or CA Agreement, Name and No.
3a. Address 350 INDIANA STREET, SUITE 400 GOLDEN, CO 80401		8. Lease Name and Well No. JIC 29-03-11 41 24251
3b. Phone No. (include area code) Ph: 303-820-4480 Fx: 303-820-4124		9. API Well No. 30-039-29496
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSW 875FSL 1290FWL At proposed prod. zone SWSW 875FSL 1290FWL		10. Field and Pool, or Exploratory E BLANCO/PICTURED CLIFFS 72400
14. Distance in miles and direction from nearest town or post office* 57 MILES FROM BLOOMFIELD, NEW MEXICO		11. Sec., T., R., M., or Blk. and Survey or Area Sec 11 T29N R3W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,290' FWL (LEASE LINE)	16. No. of Acres in Lease 9920.00	12. County or Parish RIO ARRIBA
17. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 2,700' FROM JICARILLA 29-03-14 2	18. Proposed Depth 4000 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 7192 GL	22. Approximate date work will start 04/19/2005	17. Spacing Unit dedicated to this well 160.00 SW/4
20. BLM/BIA Bond No. on file NMB000230		23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

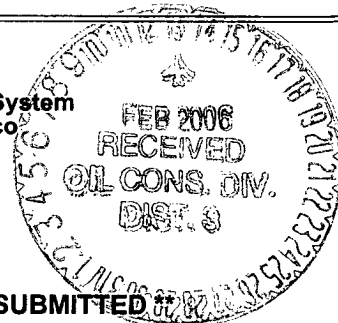
25. Signature (Electronic Submission)	Name (Printed/Typed) KATHY L SCHNEEBECK Ph: 303-820-4480	Date 03/15/2005
Title PERMIT AGENT FOR BLACK HILLS		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) Wagner Townsend	Date 2/10/06
Title Acting AFM	Office FFO	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

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 #54923 verified by the BLM Well Information System  
For BLACK HILLS GAS RESOURCES, INC, sent to the Rio Puerco



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

NMOCD

**Certificate Number**

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

Form C-144  
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**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 pit or below-grade tank ☐

Operator: <u>Black Hills Gas Resources, Inc.</u> Telephone: <u>*720-210-1300</u> e-mail address: <u>lbenally@bhgp.com</u>		
Address: <u>300 Indiana St. Suite 400, Golden, CO 80401</u> <u>30-039-29496</u>		
Facility or well name: <u>Jicarilla 29-03-11 41</u> API #: <u>Pending</u> U/L or Qtr/Qtr <u>SW SW</u> Sec <u>11</u> T <u>29N</u> R <u>3W</u>		
County: <u>Rio Arriba</u> Latitude <u>36° 44' 05.5"</u> Longitude <u>107° 07' 29.5"</u> NAD: 1927 <input type="checkbox"/> 1983 <input checked="" type="checkbox"/> Surface Owner Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input checked="" type="checkbox"/>		
<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input type="checkbox"/> Unlined <input checked="" type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness <u>    </u> mil Clay <input checked="" type="checkbox"/> Pit Volume <u>±17,811</u> bbl	<b>Below-grade tank</b> Volume: <u>    </u> bbl Type of fluid: <u>    </u> Construction material: <u>    </u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: <u>    </u>	
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 <u>100 feet or more</u>	(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 <u>No</u>	(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 feet <u>1000 feet or more</u>	(20 points) (10 points) ( 0 points)
<b>Ranking Score (Total Points)</b>		<b>0 points</b>

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 onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility     . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface      ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:
* Local contact in New Mexico is Lynn Benally at 505-634-1111 Ext. 27

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		
Date: <u>03/15/05</u>		
Printed Name/Title <u>Kathy L. Schneebeck / Permit Agent for Black Hills Gas Resources, Inc.</u>	Signature <u>Kathy L. Schneebeck</u>	
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Approval: <b>DEPUTY OIL &amp; GAS INSPECTOR, DIST. #3</b>	Signature <u>[Signature]</u>	Date: <b>FEB 13 2006</b>

# WELL PAD CROSS-SECTIONAL DIAGRAM

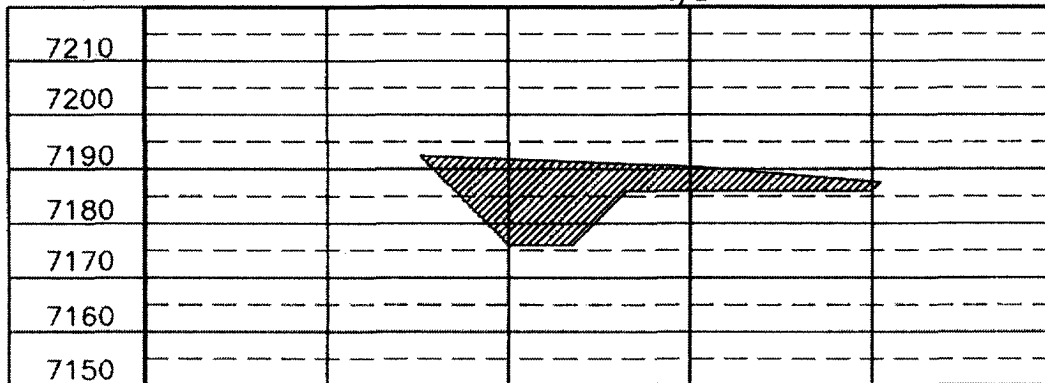
COMPANY: BLACK HILLS GAS RESOURCES  
 LEASE: JICARILLA 29-03-11 No. 41  
 FOOTAGE: 775' FSL 1145' FWL  
 SEC.: 11, TWN: 29-N, RNG: 3-W, NMPM  
 ELEVATION: 7186'

## 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.

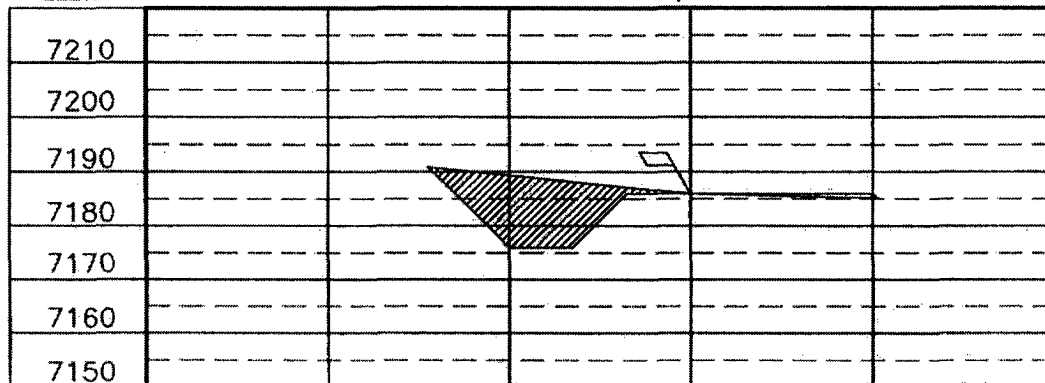
ELEV. A-A'

C/L



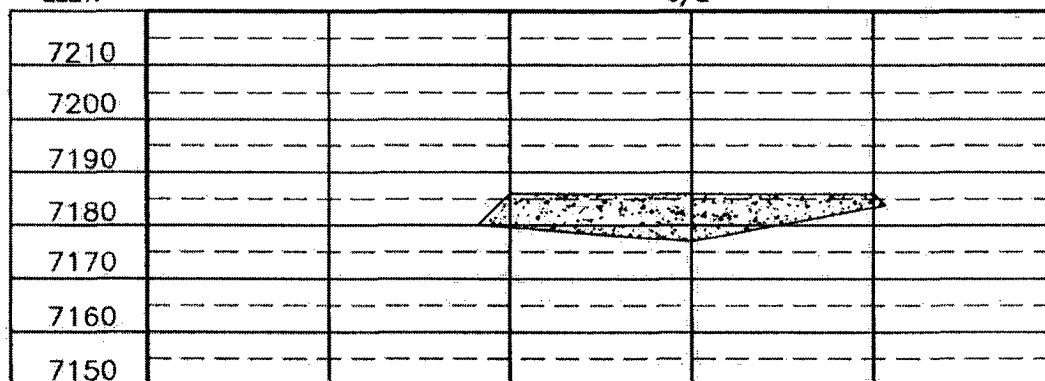
ELEV. B-B'

C/L



ELEV. C-C'

C/L



REF. DWG. MN3377LB WELL PAD DIAGRAM

REVISION: \_\_\_\_\_ DATE: \_\_\_\_\_ DESIGNED BY: \_\_\_\_\_

**Daggett Enterprises, Inc.**  
 Surveying and Oil Field Services  
 P. O. Box 15088 • Farmington, NM 87401  
 Phone (505) 326-1772 • Fax (505) 326-6018  
 NEW MEXICO L.S. 14831



DRAWN BY: A.G. CHECKED BY: \_\_\_\_\_

DATE: 10/11/04

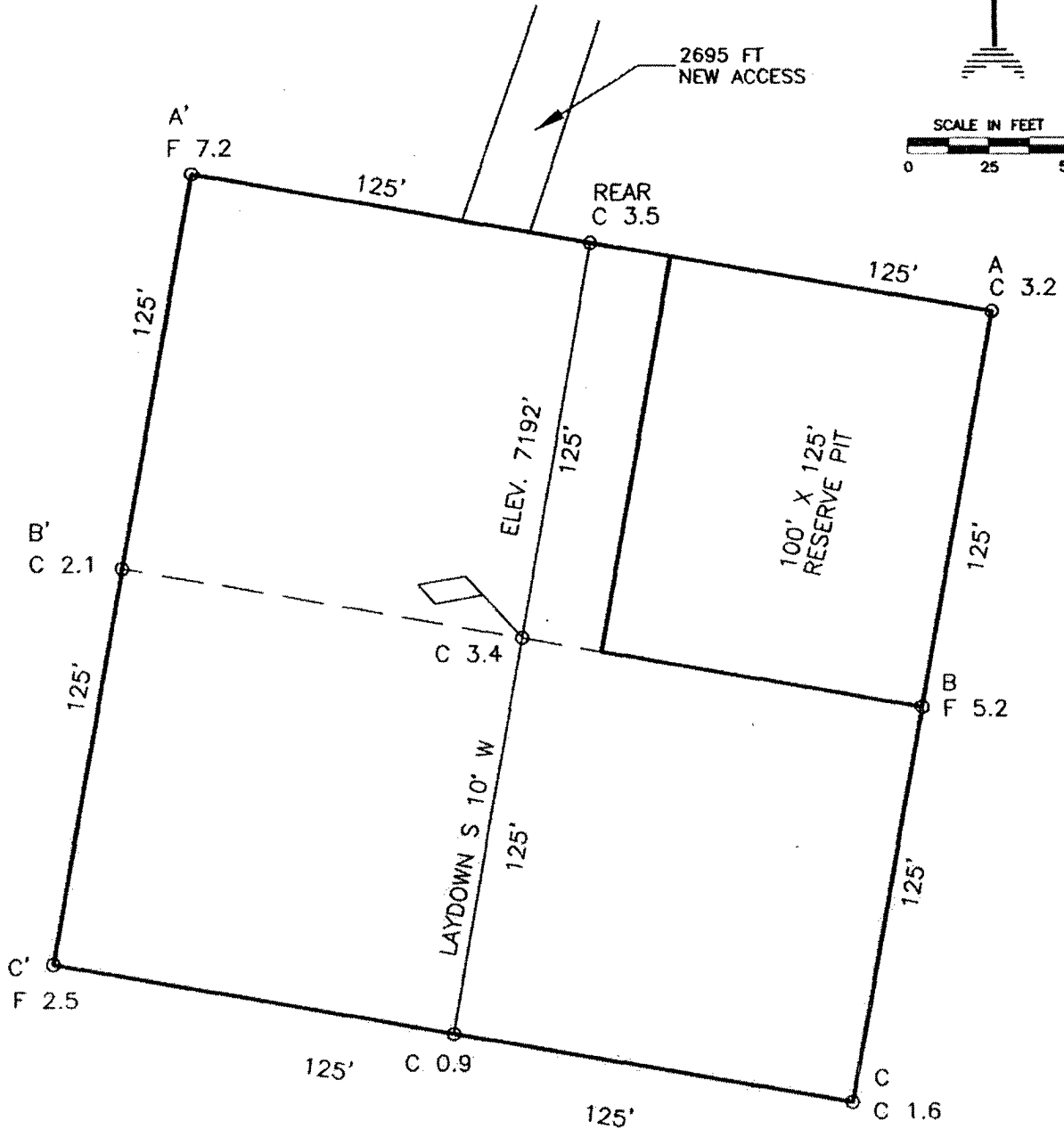
NO. MN337

# WELL PAD DIAGRAM

COMPANY: BLACK HILLS GAS RESOURCES  
 LEASE: JICARILLA 29-03-11 No. 41  
 FOOTAGE: 875 FSL, 1290 FWL  
 SEC.: 11, TWN: 29-N, RNG: 3-W, NMPM  
 ELEVATION: 7192'




SCALE IN FEET  
 0 25 50



## 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.

REVISION:	DATE:	REVISED BY:
RESTAKE LOCATION	12/02/04	B1
 <b>Daggett Enterprises, Inc.</b> Surveying and Oil Field Services P. O. Box 15068 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO L.S. 14831		
DRAWN BY: A.C.	CADD: MN337/PLB	
NO. MN337	DATE: 10/11/04	

Black Hills Gas Resources, Inc.  
**Jicarilla 29-03-11 41**  
875' FSL 1,290' FWL (SW/4 SW/4)  
Sec. 11 T29N R3W  
Rio Arriba County, New Mexico  
Lease: MDA 701-98-0013, Tract 1

## 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 included an onsite meeting, which was held on October 14, 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 – 7,192'

### 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 ft<sup>3</sup>/sx  
 65:35 Poz yield = 1.62 ft<sup>3</sup>/sx  
 50:50 Poz yield = 1.26 ft<sup>3</sup>/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<sub>2</sub>S: None anticipated
- D) Estimated bottomhole pressure: 1,240 psi

ANTICIPATED START DATE

April 19, 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

