Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

2007 JUL 19 AM 8 41

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
070 FARMINGTON NM

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

2. Name of Operator
Black Hills Gas Resources, Inc. Contact: Lynn H. Benally/Daniel Manus

3a. Address
3200 N 1st Street/PO Box 249 Bloomfield, NM 87413

3b. Phone No. *(include area code)*
505-634-1111 ext 27, ext 28

4. Location of Well *(Footage, Sec., T, R., M., or Survey Description)*
Surface Location: 1565' FSL 795' FWL NW/SW Unit L Sec. 32 T31N R03W
Bottom Hole Location: 1880' FSL 50' FEL NE/SE Unit I Sec. 32 T31N R03W

5. Lease Serial No.
MDA 701-90-0002

6. If Indian, Allottee or Tribe Name
Jicarilla Apache Tribe

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
Jicarilla 31-03-32 #1

9. API Well No.
30-039-25050

10. Field and Pool, or Exploratory Area
East Blanco/Pictured Cliffs

11. County or Parish, State
Rio Arriba, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Re-enter Well and Convert to a horizontal well
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The initial APD to drill a Picture Cliffs (PC) well was approved on January 23, 1991. The well was given API number 30-039-25050. After evaluation of drilling data in the imediate area, BHGR has determined to re-enter the well and horizontally drill to maximize production of the well. BHGR is submitting an updated drilling plan, Nevis Report, and a revised C-102 to change the well from a vertical PC to a horizontal PC. Since the well was drilled several years ago included will be BHGRs updated H2S and BOP.

BHGR is planning to plug back the existing well bore, cut and pull 500 ft of existing 4-1/2 production casing. A cement plug will be set from ±500 ft to the bottom of the surface casing at 159 ft. KOP for re-entry will be ±200 ft. See attached Plug Back Procedure, Casing and Directional Plans.

Surface disturbance will not change from the initial APD, therefore the Surface Use Plan will not be updated or modified.

The bottom hole footage will be 1880 FSL and 50 FEL.

RCVD JUL24'07
OIL CONS. DIV.
DIST. 3

HOLD C104 FOR Directional survey

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Lynn H. Benally — Title Regulatory Specialist

Signature for Daniel Manus — Date 7-18-07

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *(Signature)* Lumbdata — Name *(Printed/Typed)* — Title Petr. Eng

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office — Date 7/24/07

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.

(Continued on next page)

NMOCD

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

DISTRICT II
1301 W. Grand Ave., Artesia, N.M. 88210

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

2007 OCT 19 AM 8 41
RECEIVED
070 FARMINGTON NM

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-25050	72400	East Blanco Pictured Cliffs

[4] Property Code	[5] Property Name	[6] Well Number
20460	JICARILLA 31-3-32	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
013925	BLACK HILLS GAS RESOURCES	7096

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	32	31-N	3-W		1565	SOUTH	795	WEST	RIO ARRIBA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	32	31-N	3-W		1880	SOUTH	50	EAST	RIO ARRIBA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320 - S/2			

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

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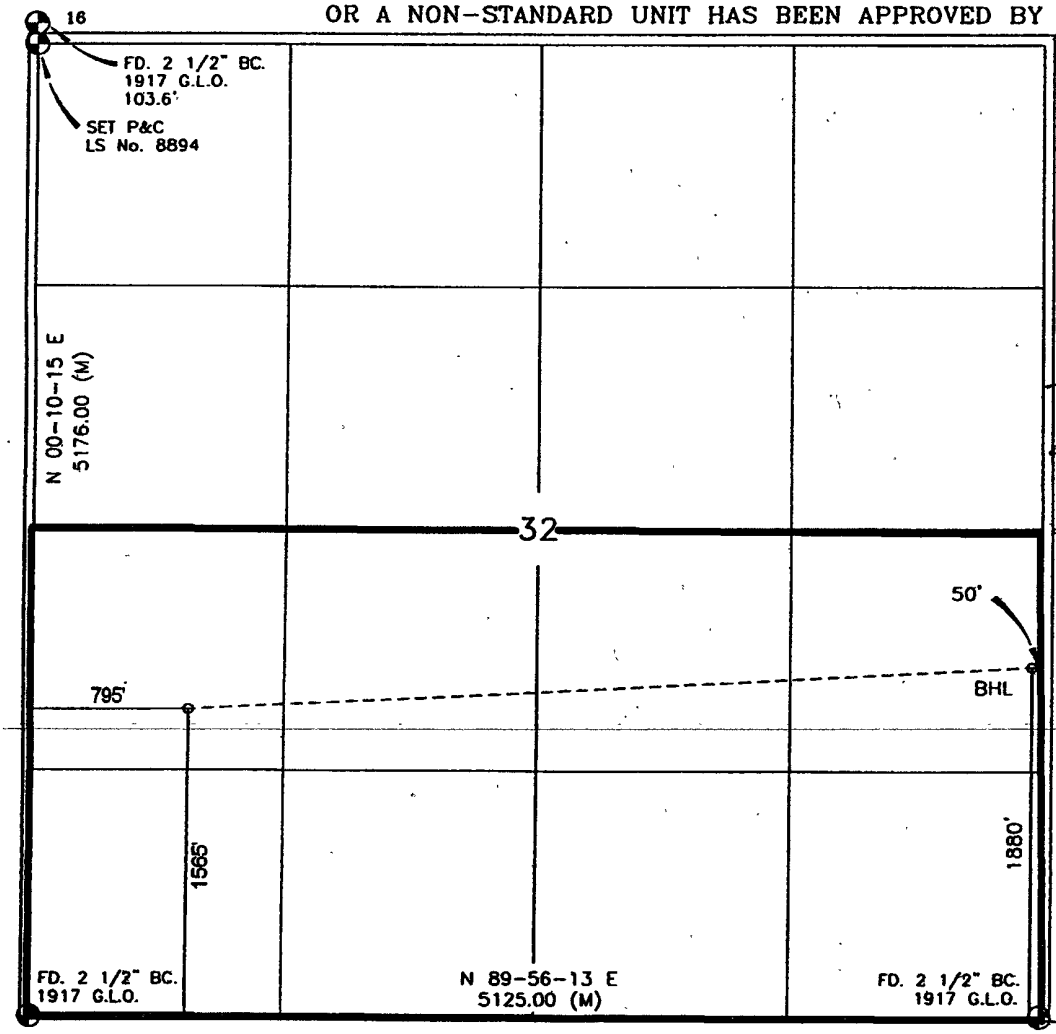

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OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 7/18/07

Printed Name: Daniel Manus

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SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: JULY 22, 1999

Signature and Seal of Professional Surveyor:

ROY A. RUSH
NEW MEXICO
8894
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number: 8894

Black Hills Gas Resources

July 10, 2007

Jicarilla 31-03-32 #1

API # 30-039-25050
1565' FSL & 795' FWL, Section 32, T31N, R03W
Rio Arriba County, New Mexico
GL: 7083', KB: 7093', PBTD: 3960'

Surface casing:	**8-5/8", 24.0 lb/ft, J-55, Casing at 159'; TOC at surface**
Production casing:	**4-1/2", 11.6 lb/ft, J-55, Casing at 4002'; TOC at surface**
Current prod tubing:	**2-3/8", 4.6 lb/ft, J-55, Tubing at 3793"**
Current pump/ rods:	N/A

Current Perforated Zones:

	Pictured Cliffs:	**3789-3920'**

Formation Tops:	**Nacimiento:**	**2220'**
	Ojo Alamo:	**3221'**
	Kirtland:	**3412'**
	Fruitland:	**3439'**
	Pictured Cliffs:	**3780'**

PLUG BACK PROCDURE: Plan to plug back the well for use as re-entry.

Note: All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Type III, mixed at 14.8 ppg with a 1.32 cf/sx yield.

1. This project will use a lined reserve pit for holding waste fluids.

2. Install and test location rig anchors. Comply with all NMOCD, BLM, and Black Hills safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line and blow down well; kill with water as necessary. ND wellhead and NU BOP. Test BOP.

3. TOH and tally 2.375" tubing, 3793'. Visually inspect tubing and if necessary LD and PU workstring. Round trip 4.5" casing scraper or gauge ring to 3739'.

4. **Plug #1 (Pictured Cliffs perforations and Fruitland, Kirtland and Ojo Alamo tops, 3739' – 3171'):** TIH and set a 4.5" CR at 3739'. Pressure test tubing to 1000#. Load the casing with water and circulate the well clean. *Pressure test casing to 800#. If casing does not test, then spot or tag subsequent plugs as appropriate.* Mix 42 sxs Type III cement and spot a balanced plug above the CR to isolate the Pictured Cliffs perforation and cover through the Ojo Alamo top. PUH 2270'.

5. **Plug #2 (Nacimiento top, 2270' – 2170'):** Mix 11 sxs cement and spot a balanced plug inside the casing to cover the Nacimiento top. PUH to 650'.

6. **Plug #3 (650' – 500'):** Mix 12 sxs cement and spot a balanced plug inside the casing for the sidetrack kick off point. Pull tubing up to 500' and reverse circulate the well clean. TOH and LD tubing.

7. Connect the pump line to the bradenhead valve. Load the bradenhead annulus with water, note volume to fill, and then attempt to pressure test the BH annulus to 800 PSI. If the BH annulus took a volume to fill, then calculate the BH annulus top of cement.

8. ND the BOP and tubing head. Weld a slip on collar on the 4.5" casing stub and pick up on the 4.5" casing to attempt to remove the wellhead slips. Note: use a 4.5" 11.6#, N-80 LTC slip on collar and an N-80 (or L-80) pick up joint. If the slips are free then determine the free point by stretch calculation.

9. If the slips can be pulled up enough, then remove them from the 4.5" casing. If the free point calculates to be of sufficient depth (by stretch or BH annulus filling volume), then RU Wireline Specialties and run a free point in the 4.5" casing. Then chemical cut the 4.5" casing as deep as possible. Pull and LD any casing cut. Install a steel plate cover on the casing head. RD and move off location.

10. If the 4.5" casing slips will not unseat, (Maximum pull on the 4.5" 11.6# J-55 casing is 162,000#) [**Maximum rig pull on 4 lines**: 7/8" swedged – 115,900#; 1" swedged line – 150,300#] Then dig out the surface casing head and cut both the 8.625" and 4.5" casing below the head. Weld an 8.625" casing extension onto the casing stub to bring a new casing head up to ground level or the desired height for the drilling rig to work with.

11. Install a steel plate cover on the 8.625" casing extension or a new surface casing head. RD and move off location.

Jicarilla 31-03-32 #1

Current

East Blanco Pictured Cliffs

1565' FSL & 795' FWL, SW, Section 32, T-31-N, R-3-W

Rio Arriba County, NM / API #30-039-25050

Today's Date: **7/10/07**

Spud: 2/4/91

Completion: 10/14/93

Elevation: 7083' Gl
7093' KB

12.25" hole

8.625" 24#, J-55 Casing set @ 159'
Cement with 125 sxs (Circulated to Surface)

2.375" tubing at 3793'

Nacimiento @ 2220'

DV Tool @ 2500'
Stage 2: Cemented with 450 sxs (839 cf)
Circulated 3 bbls to surface

TOC @ DV tool (Calc, 75%)

Ojo Alamo @ 3221'

Kirtland @ 3412'

Fruitland @ 3439'

Pictured Cliffs @ 3780'

Pictured Cliffs Perforations:
3789' – 3920'

7.875" hole

4.5" 11.6#, J-55 Casing set @ 4002'
Stage 1: Cemented with 500 sxs (750 cf)

TD 4120'
PBTD 3960'

Jicarilla 31-03-32 #1

Proposed Plugback

East Blanco Pictured Cliffs

1565' FSL & 795' FWL, SW, Section 32, T-31-N, R-3-W

Rio Arriba County, NM / API #30-039-25050

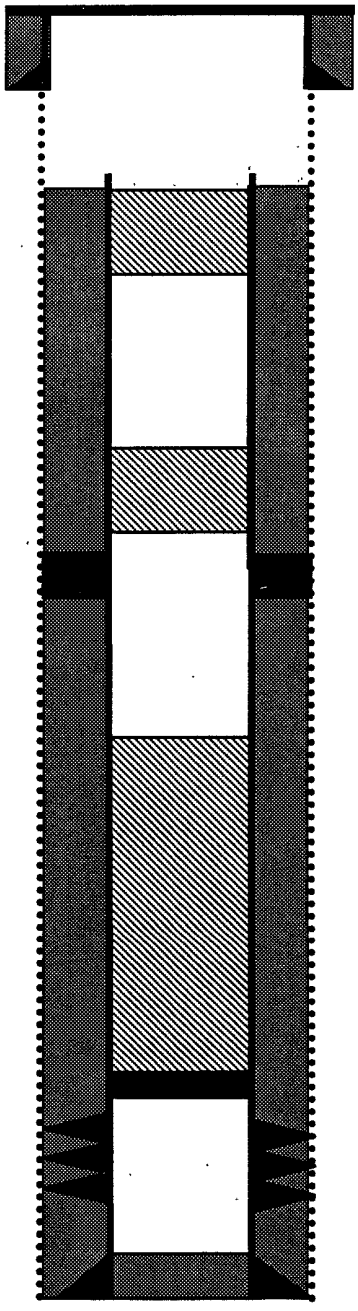
Today's Date: **7/10/07**

Spud: 2/4/91

Completion: 10/14/93

Elevation: 7083' Gl
7093' KB

12.25" hole



8.625" 24#, J-55 Casing set @ 159'
Cement with 125 sxs (Circulated to Surface)

Cut the 4.5" casing at 500'
To sidetrack and drill a
horizontal well into the PC.

Plug #3: 650' – 500'
Type III cement, 12 sxs

Plug #2: 2270' – 2170'
Type III cement, 11 sxs

Nacimiento @ 2220'

DV Tool @ 2500'
Stage 2: Cemented with 450 sxs (839 cf)
Circulated 3 bbls to surface

TOC @ DV tool (Calc, 75%)

Ojo Alamo @ 3221'

Plug #1: 3739' – 3171'
Type III cement, 42 sxs

Kirtland @ 3412'

Fruitland @ 3439'

Set CR @ 3739'

Pictured Cliffs @ 3780'

Pictured Cliffs Perforations:
3789' – 3920'

7.875" hole

4.5" 11.6#, J-55 Casing set @ 4002'
Stage 1: Cemented with 500 sxs (750 cf)

TD 4120'
PBTD 3960'

HORIZONTAL DRILLING PROGRAM
Kick Off Point (KOP) is estimated to be ± 200' TVD

CASING PROGRAM

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0-159' TVD	11"	8 5/8"	Existing Casing J-55 24#	Cemented to surface
159' - ±3784' TVD	7-7/8	5-1/2 "	J-55 15.5# LT&C New	TD to surface (Lead: ± 375 sxs lite standard cement. Tail: 500 sxs 50:50 poz containing 0.25 lb/sx LCM) * **
±3779' TVD-End of Lateral Bore	4-3/4"	2-7/8"	N-80 7.9# DSS liner	None

* Actual cement volume to be determined by caliper log.
** Cement will be circulated to surface

Yields:

Surface: Standard cement yield = 1.2 ft^3/sx (mixed at 15.6 lb/gal)

Production: Lite Standard Cement yield: = 1.59 ft^3/sx (mixed at 13.4 lb/gal)
50:50 poz yield = 1.27 ft^3/sx (mixed at 14.15 lb/gal)

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 conditions. 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'	-	125'	Fresh water – M.W. 8.5 ppg, Vis 30-33
125'	-	TD'	Clean Faze - 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 well site.

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:	See attached H_2S plan in event H_2S is encountered.
D)	Estimated bottomhole pressure:	1,178 psi

ANTICIPATED START DATE

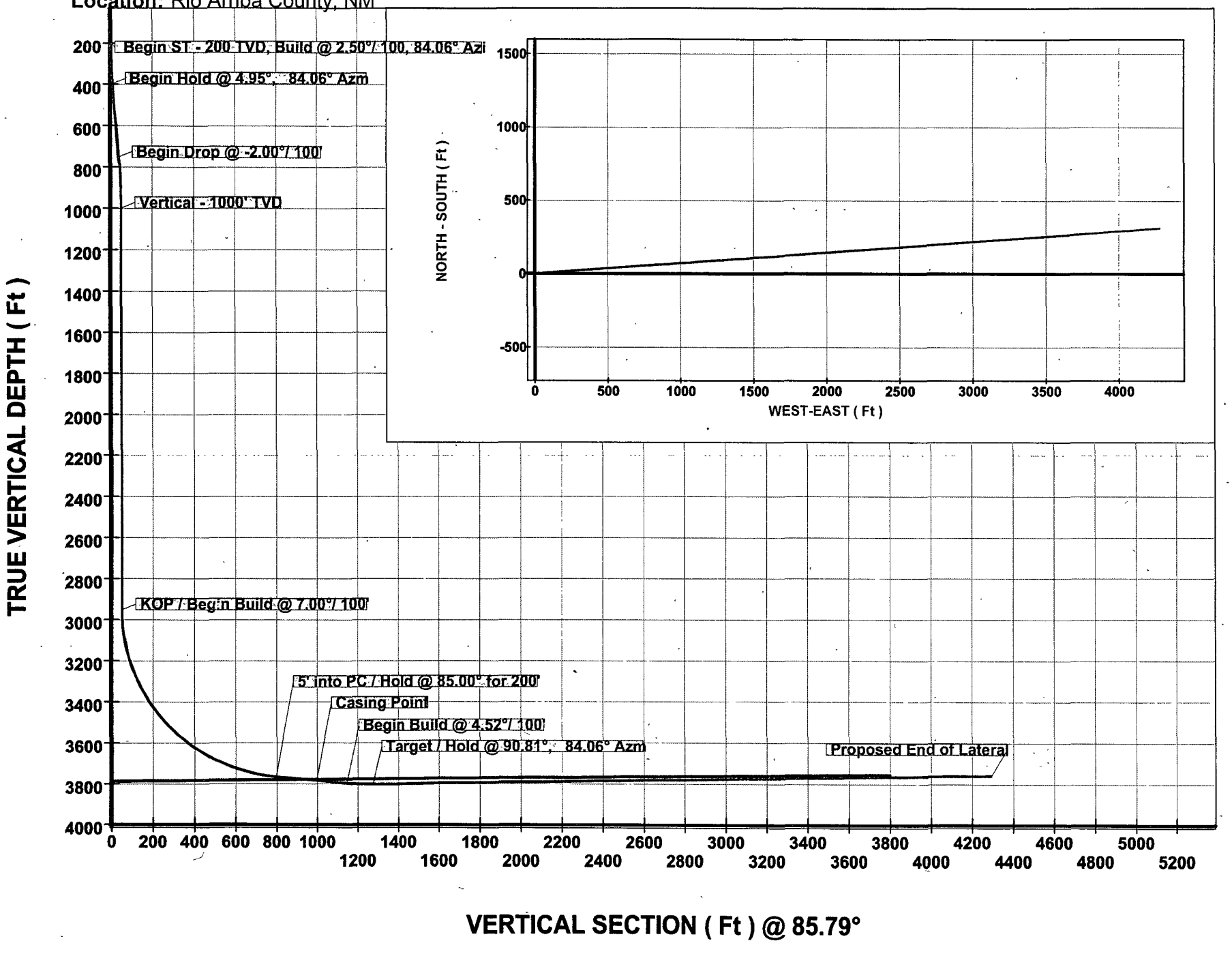
June 29, 2007

COMPLETION

The location pad will be of sufficient size to accommodate all completion activities and equipment. A string of 2-7/8" PH-6 tubing will be run for a flowing string. A Sundry Notice will be submitted with a revised completion program if warranted.

Job Number: 71xxx
Company: Black Hills Gas Resources
Lease/Well: Jicarilla 31-03-32 #1
Location: Rio Arriba County, NM

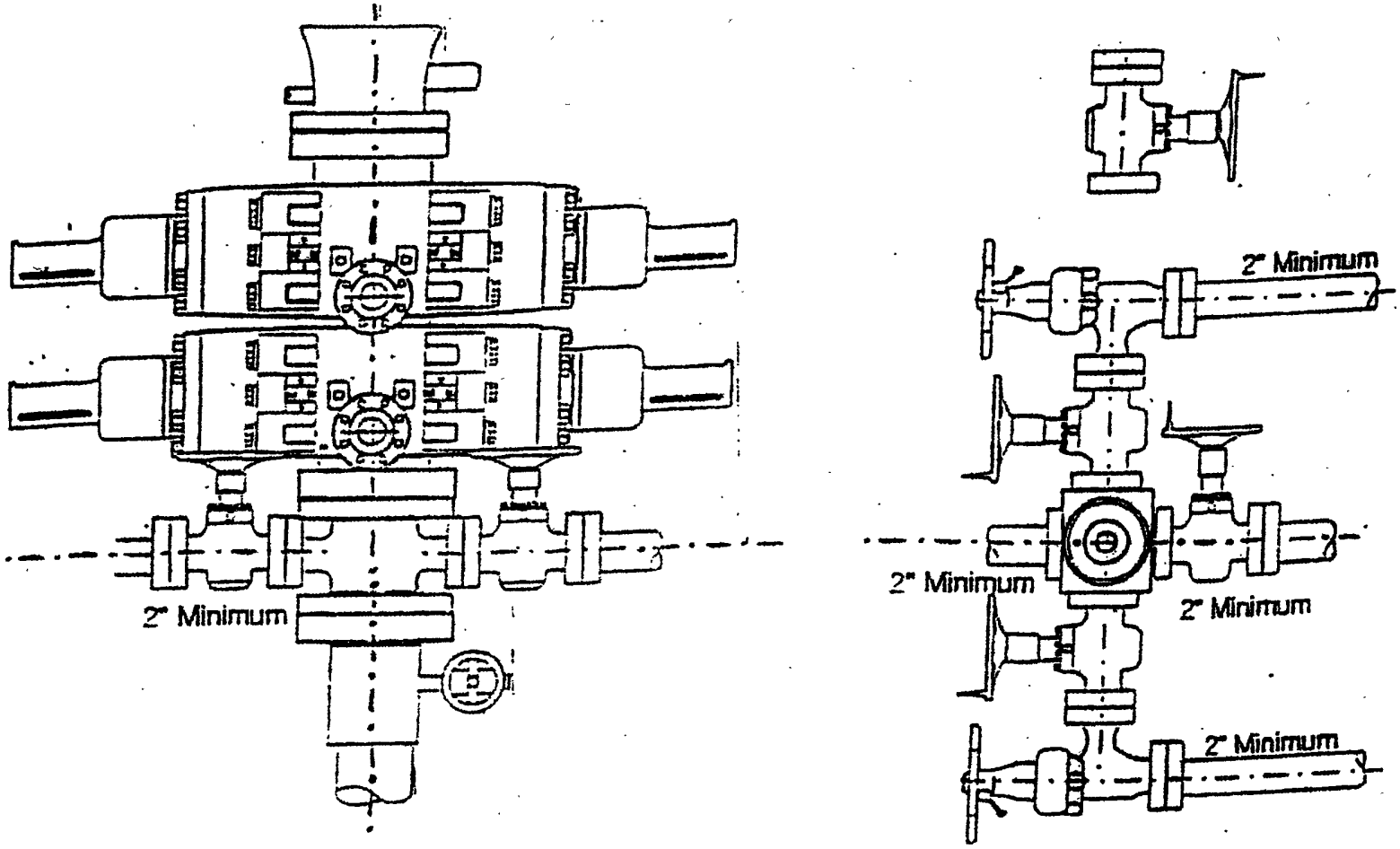
1724-B Townhurst Dr, Houston, Tx 77043
(713) 827-8302
www.nevisenergy.com



2-M SYSTEM

Black Hills Gas Resources, Inc.

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



Black Hills Gas Resources

Hydrogen Sulfide Drilling Operations Plan

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S on metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training sessions shell include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will required to carry documentation that they have received the proper training.

II. H2S safety equipment and Systems

Note: All H_2S safety equipment and systems (if necessary) will be in stalled, tested, and operational when drilling reaches a depth of 500 feet above the three days prior to penetrating the first zone containing or reason ably expected to contain H_2S.

A. Well control equipment:

1. Choke manifold with a minimum of one remote choke.
2. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

B. Protective equipment for essential personnel

1. Mark II Surniveair 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

C. H_2S detection and monitoring equipment:
   1. Two portable H_2S monitors positioned on location for best coverage and response. These units have warning lights and aqudilbesirens when H_2S levels of 10ppm.

D. Visual warning systems:

   1. Wind direction indicators as shown on well site diagram.

   2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate. See example attached.

E. Mud program:

   1. The mud programs has been designed to minimize the volume of H_2S circulated to the surface. Proper mud weight, safe drilling practices and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.

F. Metallurgy:

   1. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.

   2. All elastomers used for packing and seals shall be H_2S trim.

G. Communication:

   1. Cellular telephone communications in company vehicles.

H. Well testing:

   1. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem lesting will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H_2S environment will use the closed chamber method of testing.