FORM APPROVED OMB No. 1004-0135

Expires: March 31, 2007

UNITED STATES

DEPARTMENT OF THE INTER	5. LEASE SERIAL NO.				
BUREAU OF LAND MANAGEM	MDA 79/1-98-0013, Tract 2				
SUNDRY NOTICES AND REPORTS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME				
Do not use this form for proposals to drill, or to	Jigarilla Apache Nation				
abandoned well. Use Form 3160-3 (APD) for Su	7. IF UNIT OR CA, AGREEMENT DESIGNATION				
SUBMIT IN TRIPLICATE					
1 TYPE OF WELL	3	8. WELL NAME AND NO			
Oil Well Gas Well X Other:	3	Jicarilla 29-02-28 1			
2. NAME OF OPERATOR		9. API WELL NO.			
Black Hills Gas Resources, Inc.		30-039-27066			
	Chuck Maybee	10. FIELD AND POOL, OR EXPLORATOR	/ AREA		
·	720.210.1300				
Golden CO 80401 Fax:	720.210.1301	East Blanco Pictured Clif	fs		
4. LOCATION OF WELL (Footage, T, R, M, or Survey Description) 884' FNL 535' FWL Sec. 28	T 29N R 2W	11. COUNTY OR PARISH, STATE RIO Arriba Ne	w Mexico		
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATU		<u> </u>			
TYPE OF SUBMISSION	TY	PE OF ACTION	· ·		
X Notice of Intent Acidize	X Deepen	Production (start/resume)	Water Shut-Off		
Alter Casing	Reclamation	Reclamation	Well Integrity		
Subsequent Report Casing Repair	New Construction	Recomplete X	Other		
Change Plans	Plug and Abandon	Temorarily Abandon	Change to original APD		
Final Abandonment Notice Convert to Injection	Plug Back	Water Disposal			
approximate duration thereof. If the proposal is to deepen directi true vertical depths of all pertinent markers and zones. Attach the with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion or recompletion in a new interval, a form 3160-4 shall filed only after all requirements, including reclamation, have been inspection.) Please find in an Adobe file: Revised Drilling Program permitted for Black Hills Gas Resources, Inc. (Black Holland) in Farmington, New Mexico and the New Mexico proposes to re-enter and horizontally drill this location 884' FNL 660' FEL (NE/4 NE/4) of Section 28 T29N Rieglewood, CO 80112-5849. Please contact David Badavid@banko1.com or kathys@banko1.com, respect Thank you.	e Bond under which the working completion of the involved be filed once testing has be n completed, and the operator, BOP Diagram, Horizon bills) with an APD submitted Oil Conservation Divis with an east lateral bore 2W. NMB# 000230. etroleum Management Iranko or Kathy Schneebe	twill be performed or provide the Bond operations. If the operation results in en completed. Final Abandonment Nor has determined that the site is read stall Drilling Plan. The location where the Bureau of Land Manakion (NMOCD) on July 9, 2002. End of lateral bore is anticipated. at 385 Inverness Parkway, Sck at 303-870-4480, or at the supplementation of the Bureau of Land Manakion (NMOCD) on July 9, 2002.	d No. on file a multiple otices shall be y for final as gement Black Hills		
CPL 3102.3-2. 14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)	MA FOR DILEUT	tional Survey an	I revised En		
Name (Printed/Typed) David F. Banko Signature	Title: Permit A	Agent for Black Hills Gas Resou	rces, Inc.		
Dollar	Date: Februar				
	FEDERAL OR STATE (B-4-			
151 Autientie Drunney	Pet. Enq	Date 41	4/02		
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	Office				
applicant to conduct operations thereon.	1 1				

Black Hills Gas Resources, Inc. Jicarilla 29-02-28 1 API #30-039-27066

Surface: 884' FNL 535' FWL (NW/4 NW/4)

T29N R2W Sec. 28

End of Horizontal Hole: 1,200' FNL 660' FEL (NE/4 NE/4)

T29N R2W Sec. 28 Rio Arriba County, New Mexico Lease: MDA 701-98-0013, Tract 2

DRILLING PROGRAM

This Sundry Notice is submitted per CFR 3162.3-2. The existing well pad and reserve pit will be utilized "as is."

This is a horizontal entry into and a deepening of the existing well Jicarilla 29-02-28 1 to the Pictured Cliffs Formation. See also the attached Horizontal Re-completion Plan.

SURFACE FORMATION – San Jose

Surface water protection plan: Surface casing will be cemented to surface.

GROUND ELEVATION - 7,148' GL

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

All Depths are True Vertical Depth (TVD)

San Jose	Surface	Sandstone, shales and siltstones
Naimiento	2,022'	Sandstone, shales and siltstones
Ojo Alamo	3,135'	Sandstone, shales and siltstones
Kirtland	3,352'	Sandstone, shales and siltstones
Pictured Cliffs	3,510'	Sandstone, shales and siltstones
Lewis	3,612'	Sandstone, shales and siltstones

TOTAL DEPTH 3,496.39' TVD (end of horizontal hole) 4085' (anticipated horizontal section) 7,663' MD

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

Tertiary

Pictured Cliffs 3,510' Gas

RE-ENTRY - HORIZONTAL DRILLING PROGRAM

- A) A 2,000-psi WP double-gated BOP will be installed on the tubing head with blind rams on bottom and pipe rams on top controlled by an accumulator placed within easy access to drill and other crew members.
- B) No annular preventor with a 2,500-psi WP will be placed above BOP stack.
- C) Retrievable whipstock to be set at $\pm 3,524$.
- D) Window to be milled out of 5-1/2" csg at $\pm 3,510$ ' -3,524'.

C	A	2	N	G	P	R	()	GF	2 A	M
•		v.	шv	\sim		7.	•	v	<u> </u>	~~~

True Vertical Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0'-270'	12-1/4"	8-5/8"	K-55 24# ST&C	To surface (previously set)
0'-3,718'	7-7/8"	5-1/2"	K-55 15.5# ST&C	To surface (previously set)
3,510' – 7663' (MD)	4-3/4"	Open hole	None	None

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

3,510' - 7,663' MD

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

None

A) Logging: B)

Coring: None

C) None anticipated. Testing:

ABNORMAL CONDITIONS

A) Pressures: No abnormal conditions are anticipated

Bottom hole pressure gradient – 0.31 psi/ft

No abnormal conditions are anticipated B) Temperatures:

C) See Hydrogen Sulfide Drilling Operations Plan.

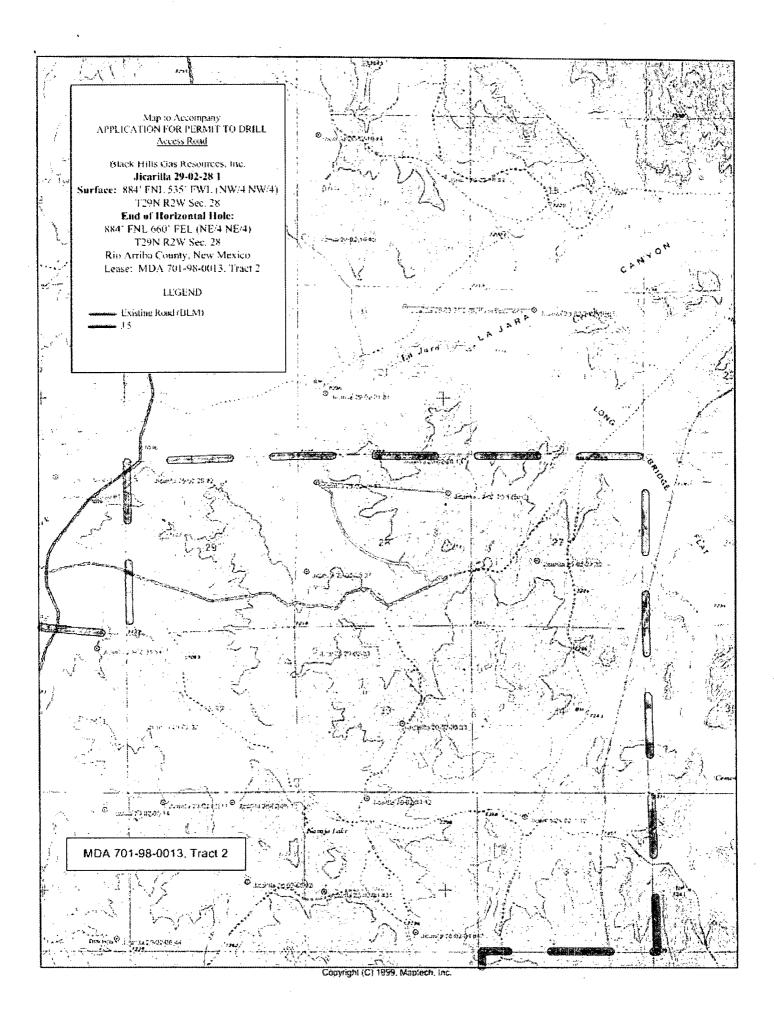
Estimated bottomhole pressure: 1,060 psi D)

ANTICIPATED START DATE

March 15, 2005

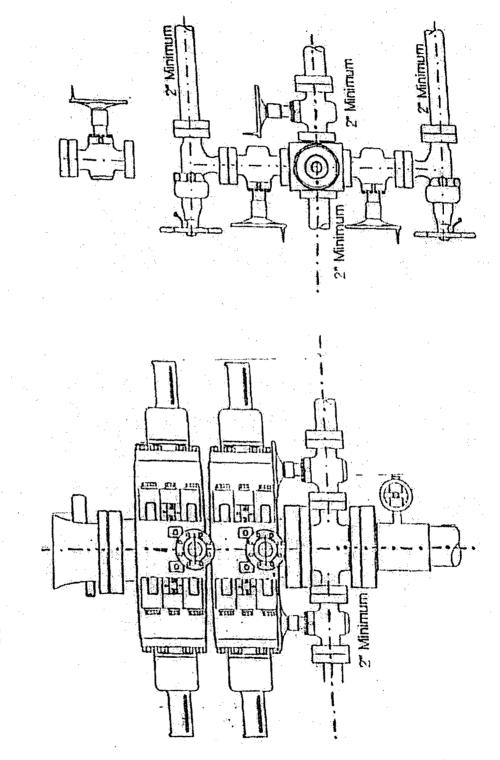
COMPLETION

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



Hydrogen Sulfide Drilling Operations Plan

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:

- The hazards and characteristics of hydrogen sulfide (H₂S).
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H₂S 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 H₂S on metal components. If high tensile tubulars 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 H₂S 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 session shall 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 be 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 will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetrating the first zone containing or reasonably 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 Surviveair 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

C. H₂S detection and monitoring equipment:

1. Two portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 10 ppm are reached.

D. Visual warning systems:

- 1. Wind direction indicators as shown on well site diagram.
- 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 program 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 preventors, drilling spools, 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 H₂S trim.

G. Communication:

1. Cellular telephone communications in company vehicles.

H. Well testing:

 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 testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H₂S environment will use the closed chamber method of testing.



1724-B Townhurst Dr, Houston, Tx 77043 (713) 827-8302 www.nevisenergy.com Job Number: 2-14-05

Company: BHEP / Mallon Oil

Lease/Well: Jicarilla 29-02-28 # 1

Location: Rio Arriba Co., NM

Rig Name: Key 44

RKB:

G.L. or M.S.L.:

State/Country:

Declination:

Grid:

File name: N:\JOBDAT~1\BLACKH~1\29-02-~2\2902281.SVY

Date/Time: 14-Feb-05 / 09:33

Curve Name: Plan 1

WINSERVE PROPOSAL REPORT

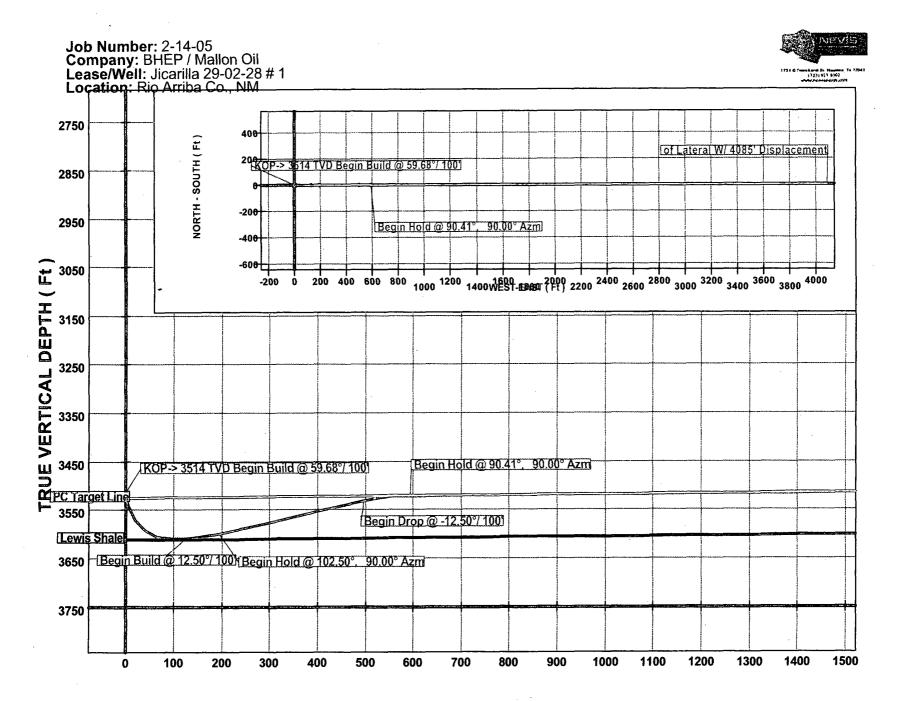
Minimum Curvature Method
Vertical Section Plane 90.00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured	Incl	Drift	True	Vertical			SURE	Dogleg	
Depth FT	Angle Deg	Direction Deg	Vertical Depth	Section FT	N-S FT	E-W FT	Distance FT	Direction Deg	Severity Deg/100
KOP-> 3514	TVD Begin Bu	uild @ 59.68°/ 10	0'						
3514.00	.00	90.00	3514.00	.00	.00	.00	.00	.00	.00
3544.00	17.90	90.00	3543.51	4.65	.00	4.65	4.65	90.00	59.68
3574.00	35.81	90.00	3570.17	18.15	.00	18.15	18.15	90.00	59.68
3604.00	53.71	90.00	3591.38	39.19	.00	39.19	39.19	90.00	59.68
3634.00	71.62	90.00	3605.10	65.73	.00	65.73	65.73	90.00	59.68
3664.00	89.52	90.00	3610.00	95.20	.00	95.20	95.20	90.00	59.68
3664.77	90.00	90.00	3610.00	95.98	.00	95.98	95.98	90.00	61.42
3664.80	90.00	90.00	3610.00	96.00	.00	96.00	96.00	90.00	1.14

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	C L C Distance FT	SURE Direction Deg	Dogleg Severity Deg/100		
Begin Build	Begin Build @ 12.50°/ 100'										
3694.80	93.74	90.00	3609.02	125.98	.00	125.98	125.98	90.00	12.46		
3724.80 3754.80	97.49 101.24	90.00 90.00	3606.09 3601.21	155.83 185.42	.00 .00	155.83 185.42	155.83 185.42	90.00 90.00	12.50 12.50		
Begin Hold	@ 102.50°, 90).00° Azm									
3764.90	102.50	90.00	3599.13	195.31	.00	195.31	195.31	90.00	12.50		
3864.90 3964.90 4064.90	102.50 102.50 102.50	90.00 90.00 90.00	3577.49 3555.85 3534.21	292.94 390.57 488.20	.00 .00 .00	292.94 390.57 488.20	292.94 390.57 488.20	90.00 90.00 90.00	.00 .00 .00		
Begin Drop	@ -12.50°/ 100	•									
4074.90	102.50	90.00	3532.04	497.96	.00	497.96	497.96	90.00	.00		
4104.90 4134.90 4164.90	98.75 95.00 91.25	90.00 90.00 90.00	3526.51 3522.92 3521.29	527.44 557.22 587.17	.00 .00 .00	527.44 557.22 587.17	527.44 557.22 587.17	90.00 90.00 90.00	12.50 12.50 12.50		
Begin Hold	@ 90.41°, 90.	00° Azm							11		
4171.70	90.41	90.00	3521.19	593.97	.00	593.97	593.97	90.00	12.38		
4271.70 4371.70 4471.70 4571.70	90.41 90.41 90.41 90.41	90.00 90.00 90.00 90.00	3520.48 3519.77 3519.06 3518.35	693.97 793.97 893.96 993.96	.00 .00 .00	693.97 793.97 893.96 993.96	693.97 793.97 893.96 993.96	90.00 90.00 90.00 90.00	.00 .00 .00 .00		
4671.70 4771.70 4871.70 4971.70 5071.70	90.41 90.41 90.41 90.41 90.41	90.00 90.00 90.00 90.00 90.00	3517.64 3516.93 3516.22 3515.51 3514.80	1093.96 1193.96 1293.95 1393.95 1493.95	.00 .00 .00 .00	1093.96 1193.96 1293.95 1393.95 1493.95	1093.96 1193.96 1293.95 1393.95 1493.95	90.00 90.00 90.00 90.00 90.00	.00 .00 .00 .00		
5171.70 5271.70 5371.70	90.41 90.41 90.41	90.00 90.00 90.00	3514.09 3513.37 3512.66	1593.95 1693.94 1793.94	.00 .00 .00	1593.95 1693.94 1793.94	1593.95 1693.94 1793.94	90.00 90.00 90.00	.00 .00 .00		

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Plan 1 File: N:\JOBDAT~1\BLACKH~1\29-02-~2\2902281.SVY

Measured Depth FT	inci Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	C L C Distance FT	SURE Direction Deg	Dogleg Severity Deg/100
5471.70	90.41	90.00	3511.95	1893.94	.00	1893.94	1893.94	90.00	.00
5571.70	90.41	90.00	3511.24	1993.94	.00	1993.94	1993.94	90.00	.00
5671.70	90.41	90.00	3510.53	2093.93	.00	2093.93	2093.93	90.00	.00
5771.70	90.41	90.00	3509.82	2193.93	.00	2193.93	2193.93	90.00	.00
5871.70	90.41	90.00	3509.11	2293.93	.00	2293.93	2293.93	90.00	.00
5971.70	90.41	90.00	3508.40	2393.93	.00	2393.93	2393.93	90.00	.00
6071.70	90.41	90.00	3507.69	2493.92	.00	2493.92	2493.92	90.00	.00
6171.70	90.41	90.00	3506.98	2593.92	.00	2593.92	2593.92	90.00	.00
6271.70	90.41	90.00	3506.27	2693.92	.00	2693.92	2693.92	90.00	.00
6371.70	90.41	90.00	3505.56	2793.91	.00	2793.91	2793.91	90.00	.00
6471.70	90.41	90.00	3504.85	2893.91	.00	2893.91	2893.91	90.00	.00
6571.70	90.41	90.00	3504.14	2993.91	.00	2993.91	2993.91	90.00	.00
6671.70	90.41	90.00	3503.43	3093.91	.00	3093.91	3093.91	90.00	.00
6771.70	90.41	90.00	3502.72	3193.90	.00	3193.90	3193.90	90.00	.00
6871.70	90.41	90.00	3502.01	3293.90	.00	3293.90	3293.90	90.00	.00
6971.70	90.41	90.00	3501,30	3393.90	.00	3393.90	3393.90	90.00	.00
7071.70	90.41	90.00	3500.59	3493.90	.00	3493.90	3493.90	90.00	.00
7171.70	90.41	90.00	3499.88	3593.89	.00	3593.89	3593.89	90.00	.00
7271.70	90.41	90.00	3499.17	3693.89	.00	3693.89	3693.89	90.00	.00
7371.70	90.41	90.00	3498.46	3793.89	.00	3793.89	3793.89	90.00	.00
7471.70	90.41	90.00	3497.75	3893.89	.00	3893.89	3893.89	90.00	.00
7571.70	90.41	90.00	3497.04	3993.88	.00	3993.88	3993.88	90.00	.00
End of Late	ral w/ 4085' Dis	splacement							
7662.81	90.41	90.00	3496.39	4085.00	.00	4085.00	4085.00	90.00	.00



Black Hills Exploration & Production

Jicarilla 29-02-28 #1

API No. 3003927066 884' FNL & 535' FWL (NW/NW) Unit D Section 28 T29N - R02W East Blanco Field, Rio Arriba County, New Mexico

Top of Coal:	3441		Ground Elevation:		7148'
Bottom of Coal:	3498		KB Elevation:		7161' (13' KB)
KOP:	3514		Surface	Casing:	8-5/8" 24# K-55 ST&C @ 270'
At Well -			5 655 1 1 4 4 E		5-1/2" 15.5# K-55 LT&C @ 3718'
Top of PC Target:	3510		Plugback	cTD:	3673'
PC Target TVD:	3525	- 2000 在 前	Perfs:	San Jose:	
Bottom of PC Target:	3530		Perfs:	Nacimiento:	
Bottom of PC:	3612		Perfs:	Ojo Alamo:	
At BHL -	er tot		Perfs:	Pictured Cliffs:	
Proposed BHL:	884 FNL & 660 FEL		Completi	ion:	No tubing or perforations
Azimuth	90.0	FOR A CONTROL	•		
Top of PC Target:	3481		Ì		Casing collar at 3495' (OH log) - 3496' (CBL)
PC Target TVD:	3496				
Bottom of PC Target:	3501				

Note: We will start our window cut at 3510' and it will end at 3524' The kick-off point should be about 3512' to 3514'.