

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

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.*

SUBMIT IN TRIPLICATE - Other Instructions on reverse side.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	NOV 13 2007
2. Name of Operator Black Hills Gas Resources	Bureau of Land Management Farmington Field Office
3a. Address 3200 N 1st Street PO Box 249 Bloomfield, NM 87413	3b. Phone No. (include area code) 505-634-1111 ext 27
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Surface: 775' FSL 545' FEL SE/SE Unit P Sec 04 T30N R3W Bottom Hole: ±1800' FSL ±50' FWL NW/SW Unit L Sec 04 T30N R3W	5. Lease Serial No. Contract 457 6. If Indian, Allottee, or Tribe Name Jicarilla Apache 7. If Unit or CA. Agreement Name and/or No. 8. Well Name and No. Jicarilla 457-04 #44 9. API Well No. 30-039-30100 10. Field and Pool, or Exploratory Area E. Blanco/Pictured Cliffs 11. County or Parish, State Rio Arriba, New Mexico

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Changing</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and abandon	<input type="checkbox"/> Temporarily Abandon	<u>Bottom Hole</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug back	<input type="checkbox"/> Water Disposal	

13. 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 recompleat horizontally, give subsurface locations and measured and true vertical depths or pertinent markers and sands. Attach the Bond under which the work will be performed or provide the Bond No. on file with the 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 recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamantion, have been completed, and the operator has determined that the site is ready for final inspection.)

Black Hills Gas Resources is submitting an updated drilling plan and a revised NM State Form C-102, to change the well's bottom hole. Black Hills Gas Resources also request that if tests of the tertiary and PC formations are favorable that we will also complete these formations and submit comingle applications if needed.

The surface location of the well remains the same but the new bottom hole will be ±1800' FSL ±50' FWL NW/SW Unit L

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

RCVD NOV 27 '07
OIL CONS. DIV.
DIST. 3

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct.
Name (Printed/ Typed)

Lynn H. Benally

Signature

Title

Regulatory Specialist

Date

Nov 13, 2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L Salvors

Title Petroleum Eng.

Date 11/21/2007

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 FFO

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 any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCD

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this

form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or

present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c); and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3 - 2, 3162.3 - 3, 3162.3 - 4.

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau information Collection Clearance Officer, (WO-630), Mail Stop 401 LS, 1849 C St., N.W., Washington D.C. 20240

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

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 30-039-30100	² Pool Code 72400	³ Pool Name East Blanco Pictured Cliffs
⁴ Property Code 25327	⁵ Property Name JICARILLA 457-04	⁶ Well Number 44
⁷ OGRID No. 013925	⁸ Operator Name BLACK HILLS GAS RESOURCES	⁹ Elevation 7122

¹⁰ Surface Location

UL or lot no. P	Section 4	Township 30-N	Range 3-W	Lot Idn	Feet from the 775	North/South line SOUTH	Feet from the 545	East/West line EAST	County RIO ARRIBA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. L	Section 4	Township 30-N	Range 3-W	Lot Idn	Feet from the 1800	North/South line SOUTH	Feet from the 50	East/West line WEST	County RIO ARRIBA
¹² Dedicated Acres 320.00			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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

16	LOT 4	LOT 3	LOT 2	LOT 1	CALC'D. CORNER BY SINGLE PROP.
					17 OPERATOR CERTIFICATION <p>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.</p> <p><i>[Signature]</i> 11/13/2007 Signature Date Lynn H. Benally Printed Name</p>
					18 SURVEYOR CERTIFICATION <p>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.</p> <p>Date of Survey Signature and Seal of Professional Surveyor: Certificate Number</p>



Black Hills Gas Resources

Black Hills Gas Resources (BHGR)

Jicarilla 457-04 #44

Surface Location: 775' FSL 545' FEL Unit P (SE/SE)

Bottom Hole Location: $\pm 1,800'$ FSL $\pm 50'$ FWL Unit L (NW/SW)

Sec.04 T30N R3W

Rio Arriba County, New Mexico

Contract 457

DRILLING PROGRAM

(Per Rule 320)

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 APD process includes an onsite meeting which was held on February 15, 2006 as determined by Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA) and Jicarilla Oil & Gas Administration (JOGA), and at which time the specific concerns of Black Hills Gas Resources (BHGR) were discussed.

This well was sundry from a vertical well to a horizontal well. This new drilling plan addresses changing the un-drilled well bottom hole.

SURFACE FORMATION – San Jose

GROUND ELEVATION – ~~7,122'~~ **7,112'**

ESTIMATED FORMATION TOPS - (mineral-bearing formations)

San Jose	Surface	Sandstone, shales & siltstones
Nacimiento	1990'	Sandstone, shales & siltstones
Ojo Alamo	3110'	Sandstone, shales & siltstones
Kirtland	3375'	Sandstone, shales & siltstones
Fruitland	3700'	Sandstone, shales & siltstones
Pictured Cliffs	4180'	Sandstone, shales & siltstones

TOTAL DEPTH 8024'

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

Tertiary

San Jose	surface	Gas
Nacimiento	1990'	Gas
Ojo Alamo	3110'	Gas
Kirtland	3375'	Gas
Fruitland	3700'	Gas
Pictured Cliffs	4180'	Gas

HORIZONTAL DRILLING PROGRAM

Kick Off Point is estimated to be $\pm 2835'$ TVD

CASING PROGRAM

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0' to 250'	12 1/4"	9 5/8"	J-55 36# ST&C	To surface (± 175 sxs classB)
0' to 4249'	8 3/4"	7"	J-55 23# ST & C	TD to surface (± 630 sxs lite or 65:35 poz and ± 270 sxs 50:50 poz)*
4249' to 7911'	6 1/4 "	Open hole***	none	none

* Actual cement volume to be determined by caliper log.

** Cement will be circulated to surface

*** If hole instability is encountered, a 4 1/2", 10.5#, J-55 uncemented liner may be run in the 6 1/4" open hole section

Yields:

Surface: Standard cement yield = 1.2 ft³/sx (mixed at 15.6 lb/gal)

Production: Lite Standard Cement yield: = 1.59 ft³/sx (mixed at 13.4 lb/gal)

50:50 poz yield = 1.27 ft³/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'	-	250'	Fresh water – M.W. 8.5 ppg, Vis 30-33
250'	-	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) H₂S: See attached H₂S plan in event H₂S is encountered.
- D) Estimated bottomhole pressure: 1,147 psi

ANTICIPATED START DATE

November 19, 2007

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.



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

Job Number: 71xxx
Company: Black Hills Gas Resources
Lease/Well: Jicarilla 457-04 #144
Location: Rio Arriba Co., NM
Rig Name: Patterson 744
RKB: 13'
G.L. or M.S.L.: 7112'

State/Country: NM/USA
Declination: □
Grid: □
File name: Z:\BLACKH-1\NEWWEL-1\457-04-1\45704#44.SVY
Date/Time: 08-Nov-07 / 13:58
Curve Name: Jic 457-04 #144 plan 11-08-07

Jic 457-04 #144 plan 11-08-07

WINSERVE PROPOSAL REPORT
Minimum Curvature Method
Vertical Section Plane 282.54
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
KOP-> 2835 TVD Begin Build @ 7.00° 100', 282.54° Azi									
2835.00	.00	282.54	2835.00	.00	.00	.00	.00	.00	.00
2865.00	2.10	282.54	2864.99	.55	.12	-.54	.55	282.54	7.00
2895.00	4.20	282.54	2894.95	2.20	.48	-2.15	2.20	282.54	7.00
2925.00	6.30	282.54	2924.82	4.95	1.07	-4.83	4.95	282.54	7.00
2955.00	8.40	282.54	2954.57	8.78	1.91	-8.58	8.78	282.54	7.00
2985.00	10.51	282.54	2984.16	13.71	2.98	-13.39	13.71	282.54	7.00
3015.00	12.61	282.54	3013.55	19.72	4.28	-19.25	19.72	282.54	7.00
3045.00	14.71	282.54	3042.70	26.80	5.82	-26.16	26.80	282.54	7.00
3075.00	16.81	282.54	3071.57	34.95	7.59	-34.12	34.95	282.54	7.00
3105.00	18.91	282.54	3100.13	44.15	9.59	-43.10	44.15	282.54	7.00
3135.00	21.01	282.54	3128.32	54.39	11.81	-53.09	54.39	282.54	7.00
3165.00	23.11	282.54	3156.12	65.66	14.26	-64.09	65.66	282.54	7.00
3195.00	25.21	282.54	3183.49	77.94	16.92	-76.08	77.94	282.54	7.00
3225.00	27.31	282.54	3210.40	91.21	19.81	-89.03	91.21	282.54	7.00
3255.00	29.41	282.54	3236.79	105.46	22.90	-102.95	105.46	282.54	7.00
3285.00	31.52	282.54	3262.65	120.67	26.20	-117.79	120.67	282.54	7.00
3315.00	33.62	282.54	3287.93	136.82	29.71	-133.55	136.82	282.54	7.00
3345.00	35.72	282.54	3312.60	153.88	33.42	-150.21	153.88	282.54	7.00
3375.00	37.82	282.54	3336.63	171.84	37.32	-167.74	171.84	282.54	7.00
3405.00	39.92	282.54	3359.99	190.66	41.40	-186.11	190.66	282.54	7.00
3435.00	42.02	282.54	3382.64	210.33	45.67	-205.31	210.33	282.54	7.00
3465.00	44.12	282.54	3404.56	230.82	50.12	-225.31	230.82	282.54	7.00
3495.00	46.22	282.54	3425.70	252.09	54.74	-246.08	252.09	282.54	7.00

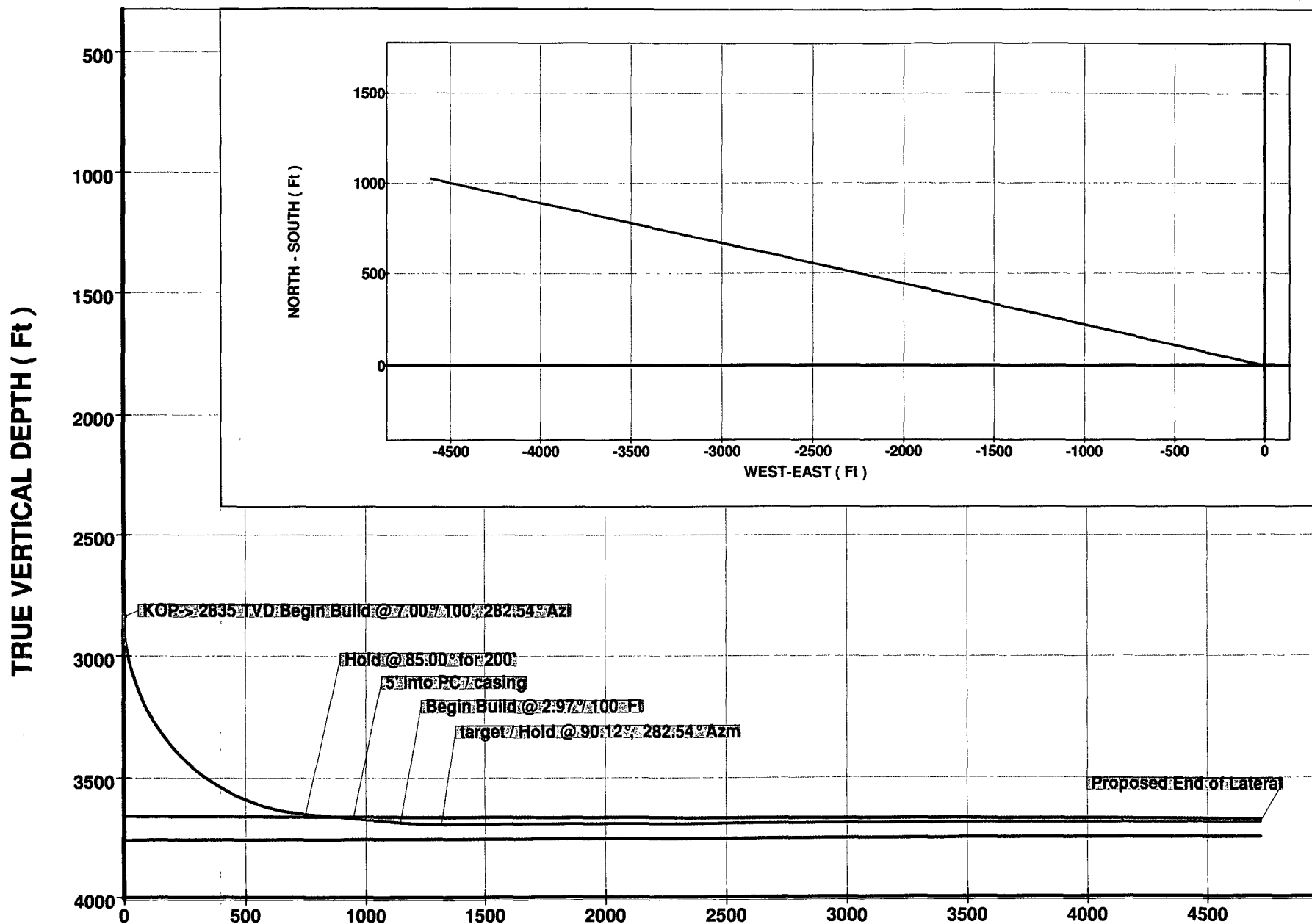
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
3525.00	48.32	282.54	3446.06	274.13	59.53	-267.59	274.13	282.54	7.00
3555.00	50.42	282.54	3465.59	296.90	64.47	-289.81	296.90	282.54	7.00
3585.00	52.53	282.54	3484.27	320.37	69.57	-312.72	320.37	282.54	7.00
3615.00	54.63	282.54	3502.09	344.50	74.81	-336.28	344.50	282.54	7.00
3645.00	56.73	282.54	3519.00	369.28	80.19	-360.47	369.28	282.54	7.00
3675.00	58.83	282.54	3535.00	394.66	85.70	-385.24	394.66	282.54	7.00
3705.00	60.93	282.54	3550.05	420.61	91.34	-410.57	420.61	282.54	7.00
3735.00	63.03	282.54	3564.14	447.09	97.09	-436.42	447.09	282.54	7.00
3765.00	65.13	282.54	3577.26	474.07	102.95	-462.76	474.07	282.54	7.00
3795.00	67.23	282.54	3589.37	501.51	108.91	-489.54	501.51	282.54	7.00
3825.00	69.33	282.54	3600.47	529.38	114.96	-516.75	529.38	282.54	7.00
3855.00	71.43	282.54	3610.54	557.64	121.09	-544.33	557.64	282.54	7.00
3885.00	73.54	282.54	3619.57	586.25	127.31	-572.26	586.25	282.54	7.00
3915.00	75.64	282.54	3627.54	615.17	133.59	-600.49	615.17	282.54	7.00
3945.00	77.74	282.54	3634.45	644.36	139.93	-628.98	644.36	282.54	7.00
3975.00	79.84	282.54	3640.28	673.78	146.32	-657.70	673.78	282.54	7.00
4005.00	81.94	282.54	3645.03	703.40	152.75	-686.62	703.40	282.54	7.00
4035.00	84.04	282.54	3648.69	733.18	159.21	-715.68	733.18	282.54	7.00
Hold @ 85.00° for 200'									
4048.70	85.00	282.54	3650.00	746.81	162.17	-728.99	746.81	282.54	7.00
4148.70	85.00	282.54	3658.72	846.43	183.81	-826.23	846.43	282.54	.00
5' into PC / casing									
4248.70	85.00	282.54	3667.43	946.05	205.44	-923.47	946.05	282.54	.00
4348.70	85.00	282.54	3676.15	1045.67	227.07	-1020.72	1045.67	282.54	.00
Begin Build @ 2.97° 100 Ft									
4448.70	85.00	282.54	3684.86	1145.29	248.71	-1117.96	1145.29	282.54	.00
4478.70	85.89	282.54	3687.25	1175.19	255.20	-1147.15	1175.19	282.54	2.97
4508.70	86.78	282.54	3689.16	1205.13	261.70	-1176.37	1205.13	282.54	2.97
4538.70	87.67	282.54	3690.62	1235.10	268.21	-1205.62	1235.10	282.54	2.97
4568.70	88.56	282.54	3691.60	1265.08	274.72	-1234.89	1265.08	282.54	2.97
4598.70	89.45	282.54	3692.12	1295.07	281.23	-1264.17	1295.07	282.54	2.97
target / Hold @ 90.12°, 282.54° Azm									
4621.30	90.12	282.54	3692.21	1317.68	286.14	-1286.24	1317.68	282.54	2.97
4621.33	90.12	282.54	3692.21	1317.71	286.15	-1286.26	1317.71	282.54	.93
4721.33	90.12	282.54	3692.00	1417.71	307.86	-1383.88	1417.71	282.54	.00
4821.33	90.12	282.54	3691.79	1517.71	329.58	-1481.49	1517.71	282.54	.00
4921.33	90.12	282.54	3691.58	1617.71	351.29	-1579.10	1617.71	282.54	.00
5021.33	90.12	282.54	3691.37	1717.71	373.01	-1676.72	1717.71	282.54	.00
5121.33	90.12	282.54	3691.16	1817.71	394.72	-1774.33	1817.71	282.54	.00
5221.33	90.12	282.54	3690.95	1917.71	416.44	-1871.94	1917.71	282.54	.00
5321.33	90.12	282.54	3690.73	2017.70	438.15	-1969.56	2017.70	282.54	.00
5421.33	90.12	282.54	3690.52	2117.70	459.87	-2067.17	2117.70	282.54	.00
5521.33	90.12	282.54	3690.31	2217.70	481.59	-2164.78	2217.70	282.54	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
5621.33	90.12	282.54	3690.10	2317.70	503.30	-2262.40	2317.70	282.54	.00
5721.33	90.12	282.54	3689.89	2417.70	525.02	-2360.01	2417.70	282.54	.00
5821.33	90.12	282.54	3689.68	2517.70	546.73	-2457.62	2517.70	282.54	.00
5921.33	90.12	282.54	3689.47	2617.70	568.45	-2555.24	2617.70	282.54	.00
6021.33	90.12	282.54	3689.26	2717.70	590.16	-2652.85	2717.70	282.54	.00
6121.33	90.12	282.54	3689.05	2817.70	611.88	-2750.46	2817.70	282.54	.00
6221.33	90.12	282.54	3688.84	2917.70	633.59	-2848.08	2917.70	282.54	.00
6321.33	90.12	282.54	3688.63	3017.70	655.31	-2945.69	3017.70	282.54	.00
6421.33	90.12	282.54	3688.42	3117.70	677.03	-3043.31	3117.70	282.54	.00
6521.33	90.12	282.54	3688.21	3217.70	698.74	-3140.92	3217.70	282.54	.00
6621.33	90.12	282.54	3688.00	3317.70	720.46	-3238.53	3317.70	282.54	.00
6721.33	90.12	282.54	3687.79	3417.70	742.17	-3336.15	3417.70	282.54	.00
6821.33	90.12	282.54	3687.58	3517.70	763.89	-3433.76	3517.70	282.54	.00
6921.33	90.12	282.54	3687.37	3617.70	785.60	-3531.37	3617.70	282.54	.00
7021.33	90.12	282.54	3687.16	3717.70	807.32	-3628.99	3717.70	282.54	.00
7121.33	90.12	282.54	3686.95	3817.70	829.03	-3726.60	3817.70	282.54	.00
7221.33	90.12	282.54	3686.74	3917.70	850.75	-3824.21	3917.70	282.54	.00
7321.33	90.12	282.54	3686.53	4017.70	872.46	-3921.83	4017.70	282.54	.00
7421.33	90.12	282.54	3686.31	4117.70	894.18	-4019.44	4117.70	282.54	.00
7521.33	90.12	282.54	3686.10	4217.70	915.90	-4117.05	4217.70	282.54	.00
7621.33	90.12	282.54	3685.89	4317.70	937.61	-4214.67	4317.70	282.54	.00
7721.33	90.12	282.54	3685.68	4417.70	959.33	-4312.28	4417.70	282.54	.00
7821.33	90.12	282.54	3685.47	4517.70	981.04	-4409.89	4517.70	282.54	.00
7921.33	90.12	282.54	3685.26	4617.70	1002.76	-4507.51	4617.70	282.54	.00
8021.33	90.12	282.54	3685.05	4717.70	1024.47	-4605.12	4717.70	282.54	.00

Proposed End of Lateral

8023.76	90.12	282.54	3685.05	4720.13	1025.00	-4607.49	4720.13	282.54	.01
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Job Number: 71xxx
Company: Black Hills Gas Resources
Lease/Well: Jicarilla 457-04 #144



VERTICAL SECTION (Ft) @ 282.54°