

RECEIVED

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Farmington Field Office
Bureau of Land Management

OCT 04 2011

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

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 page 2.

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other		6. If Indian, Allottee, or Tribe Name Jicarilla Apache Tribe
2. Name of Operator Black Hills Gas Resources		7. If Unit or CA Agreement Name and/or No
3a. Address 3200 N 1st Street Bloomfield, NM 87413	3b. Phone No (include area code) (505) 634-5104	8. Well Name and No Jicarilla 459-19 #724A
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2,373' FNL & 386' FEL SE/NE Section 19 T30N R3W Unit H 2,188' FSL & 2,250' FEL NW/SE Section 21 T30N R3W Unit J		9. API Well No 30-039-31078
		10. Field and Pool, or Exploratory Area Basin Mancos
		11. County or Parish, State Rio Arriba County, New Mexico

12. CHECK APPROPRIATE BOX(S) 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	☐ Altering Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Extending horizontal lateral leg
	☒ Change Plans	☐ Plug and abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug back	☐ 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 of all pertinent markers and zones Attach the Bond under which the work will 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)

The Jicarilla 459-9 #724A was approved on August 1, 2011 and given an API number of 30-039-31078. After a recent drill, Black Hills Gas Resources feels the best way to develop the minerals is by extending the horizontal lateral. Therefore Black Hills intends to extend the original horizontal lateral which will change the bottom hole from 1,634' FSL & 8' FEL NE/SE in Section 20 T30N R3W to 2,188' FSL & 2,250' FEL NW/SE in Section 21 T30N R3W. Black Hills is submitting a new drilling plan, deviation plan, BOP, and C102.

The surface plans will not be modify or change for the original plans.

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

Daniel Manus

Regulatory Technician

Title

Signature

Date

Oct 3, 2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Original Signed: Stephen Mason

Title

Date

OCT 05 2011

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

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)

NMCCD A



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

RECEIVED
OCT 04 2011
Farmington Field Office
Bureau of Land Management

Form C-102
Revised July, 16, 2010
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31078	² Pool Code 71599	³ Pool Name BASIN MANCOS
⁴ Property Code 22210	⁵ Property Name JICARILLA 459-19	⁶ Well Number 724A
⁷ OGRID No. 013925	⁸ Operator Name BLACK HILLS GAS RESOURCES	⁹ Elevation 7204'

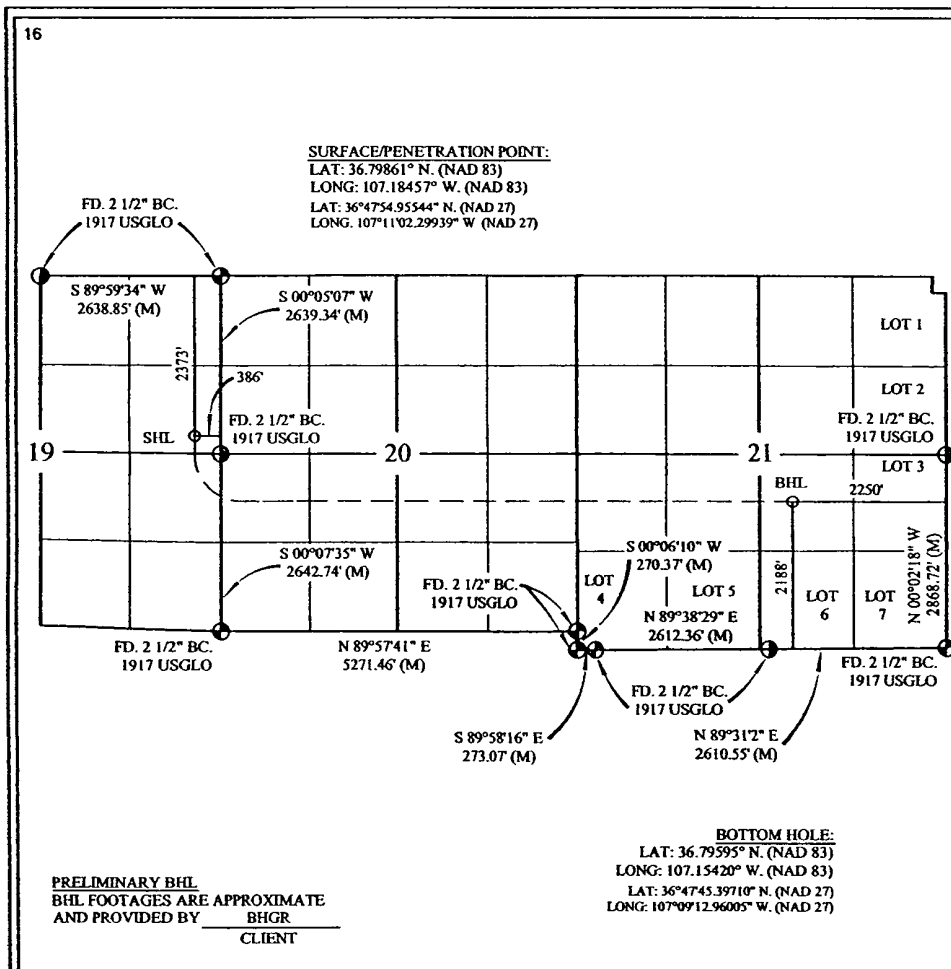
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	19	30-N	3-W		2373	NORTH	386	EAST	RIO ARRIBA

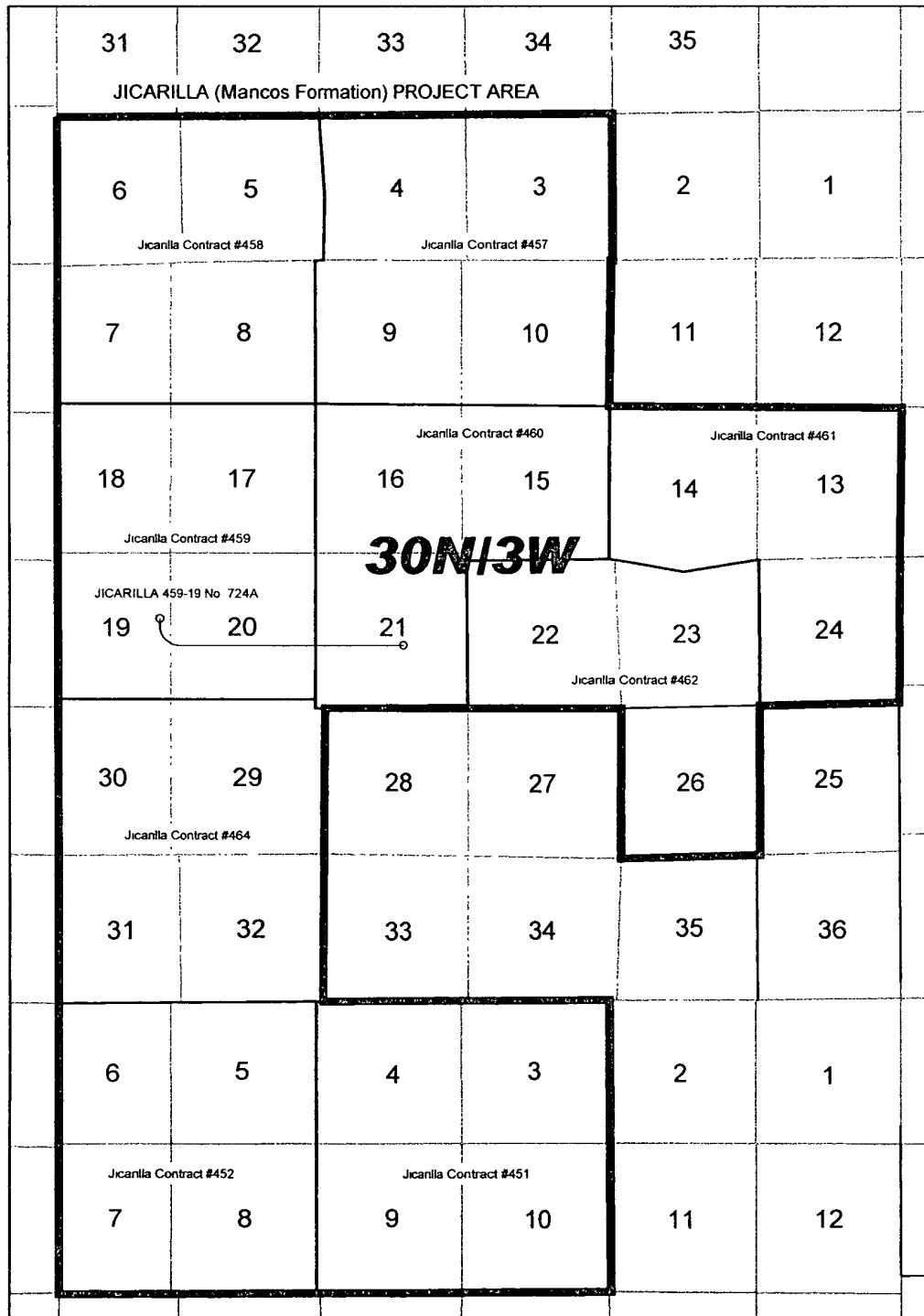
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	21	30-N	3-W		2188	SOUTH	2250	EAST	RIO ARRIBA
¹² Dedicated Acres			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. R-13449		

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



BLACK HILLS GAS RESOURCES
JICARILLA (MANCOS FORMATION) PROJECT AREA
JICARILLA 459-19 No. 734A
EXHIBIT "A"
 EAST BLANCO FIELD - SAN JUAN BASIN
 RIO ARriba COUNTY, NEW MEXICO



JICARILLA (Mancos Formation) PROJECT AREA



ORDER # R-13449

REVISION'S

REV. BY DATE



Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 510 Farmington, NM 87499
 Phone (505) 328-1772 Fax (505) 328-6019
 REGISTERED LAND SURVEYOR
 NEW MEXICO No. 8894

PAGE 1 OF 1

CADFILE: PRJ AREA TEMPLATE

DRAWN BY G.V.

NOT TO SCALE

DATE: 9/29/11



Black Hills Gas Resources

Jicarilla 459-19 #724A

API # 30-039-31078

Surface Location: 2,373' FNL 386' FEL (SE/NE)

Sec.19 T30N R3W

Bottom Hole Location: 2,188' FSL 2,250' FEL (NW/SE)

Sec.21 T30N R3W

Rio Arriba County, New Mexico

Lease: Contract 459

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 NOS process includes an onsite meeting which was held on November 18, 2010 as determined by Bureau of Indian Affairs (BIA) and Jicarilla Oil & Gas Administration (JOGA) and at which time the specific concerns of Black Hills Gas Resources (BHGR), BIA, and JOGA were discussed.

SURFACE FORMATION – San Jose

GROUND ELEVATION – 7,204'

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

San Jose	Surface	Sandstone, shales & siltstones
Nacimiento	2,021'	Sandstone, shales & siltstones
Ojo Alamo	3,257'	Sandstone, shales & siltstones
Fruitland Coal	3,736'	Sandstone, shales, siltstones & coal
Pictured Cliffs	3,788'	Sandstone, shales & siltstones
Lewis	3,869'	Sandstone, shales & siltstones
Mesaverde	5,749'	Sandstone, shales & siltstones
Mancos	6,623'	Sandstone, shales & siltstones

TOTAL DEPTH **7,646' TVD**
 16,685' MD

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

Nacimiento	2021'	Gas, water, sand
Ojo Alamo	3357'	Gas, water, sand
Fruitland Coal	3736'	Gas, water, sand
Pictured Cliffs	3788'	Gas, water, sand
Lewis	3869'	Gas, water, sand
Mesaverde	5749'	Gas, water, sand
Mancos	6623'	Gas, water, sand

HORIZONTAL DRILLING PROGRAMKick-Off Point is estimated to be $\pm 6,615'$ TVD**CASING PROGRAM**

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0' - 250'	17-1/2"	13-3/8"	54# & J-55	150 sks Class G cement (yield 1.15 ft ³ /sk ; wt. 15.8 lbm/gal)
0' MD – 3,200' MD	12 1/4"	9 5/8"	36# & J-55	Lead: ± 700 sxs Lite Premium cement w/ 0.5 lbm/sxs Gilsonite & 0.125 lbm/sxs Poly-E-Flake (yield 1.82 ft ³ /sxs : wt 12.50 lbm/gal)* Tail: ± 100 sxs Premium cement w/ 0.125 lbm/sxs Poly-E-Fake & 2% Halad®-9 (yield 1.15 ft ³ /sxs : wt 15.80 lbm/gal)*
3,000' MD – 8,472' MD	8 3/4"	7"	23# & N-80	Lead: ± 515 sxs 50/50 Poz Premium cement w/ 0.4% Halad®-413, 0.5% Halad®-344, 0.1% CFR-3, 0.2% Versaset & 0.2% HR-5 (yield 1.44 ft ³ /sxs : wt 13 lbm/gal)* Tail: ± 125 sxs 50/50 Poz Premium cement w/ 0.4% Halad®-413, 0.5% Halad®, 0.015% CRF-3, 0.2% Versaset & 0.4% HR-5 (yield 1.1 ft ³ /sxs : Wt. 15.80/gal)*
0' MD – 16,685' MD	6 1/8"	4 1/2"	11.6# & HCP-110	850 sxs Poz Premium w/ 0.4% Halad®-413, 0.5% Halad®-344, .01% Versaset, 0.4% HR-5 & 0.3% Supe CBL (yield 1.44 ft ³ /sxs : Wt 13.0/gal)*

* Actual cement volume to be determined by caliper log.

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 1,500 psi. Annular type preventor will be pressure tested to 50% of the rated working pressure, not to exceed 2,500 psi. All casing strings will be pressure tested to 0.22 psi/ft. or 1,500 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 5M 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

	Interval to	Type	M.W.	Vis	W.L.	Sld's
Surface	0' – 3,200'	Fresh Water / Spud Mud	$\pm 8.4 - 9.0$ ppg	28 - 32 sec	$\geq 6 - 8$ cc	$\geq 6\%$
Intermediate to KOP	3,000' MD – 8,472' MD	Low solids non-dispersed	$\pm 9.2 - 9.4$ ppg	40 - 50 sec	$\geq 4 - 6$ cc	$\geq 6\%$
BIC to TD of Lateral	8,472' MD – 16,685' MD	Invert OBM	$\pm 10.0 - 10.3$ ppg	28 - 32 sec	n/c	1 - 2%

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: | Mud log | 2-Man Unit | 3,500' to 16,685' |
| | | OpenHole | Tripel Combo w/Spectral GR | |
| | | | DIL/FDC/CNL-SONIC | 1,000' to 8,472' |
| | | Lateral | MWD/GR | 8,472' to 16,685' |
| | | | Measurement while drilling-GR | |
| B) | Coring: | None | | |
| C) | Testing: | DST – None anticipated. Drill stem tests may be run on shows of interest | | |
| | | Manned mudlogging unit from 3,500' to 13,313' | | |
| | | Samples | 100 ft samples from 400' to 4,200' | |
| | | | 30 ft samples from 4,200' to 6,000' | |
| | | | 10 ft samples from 6,300' to 6,530' | |
| | | | 10 ft samples from 9,526' to 9,719' | |

ABNORMAL CONDITIONS

- | | | |
|----|--------------------------------|--|
| A) | Pressures: | No abnormal conditions are anticipated |
| | | Bottom hole pressure gradient – 0.49 psi/ft |
| B) | Temperatures: | No abnormal conditions are anticipated |
| C) | H ₂ S: | See attached H ₂ S plan in event H ₂ S is encountered. |
| D) | Estimated bottomhole pressure: | 3,747 psi |

ANTICIPATED START DATE

January 1, 2012

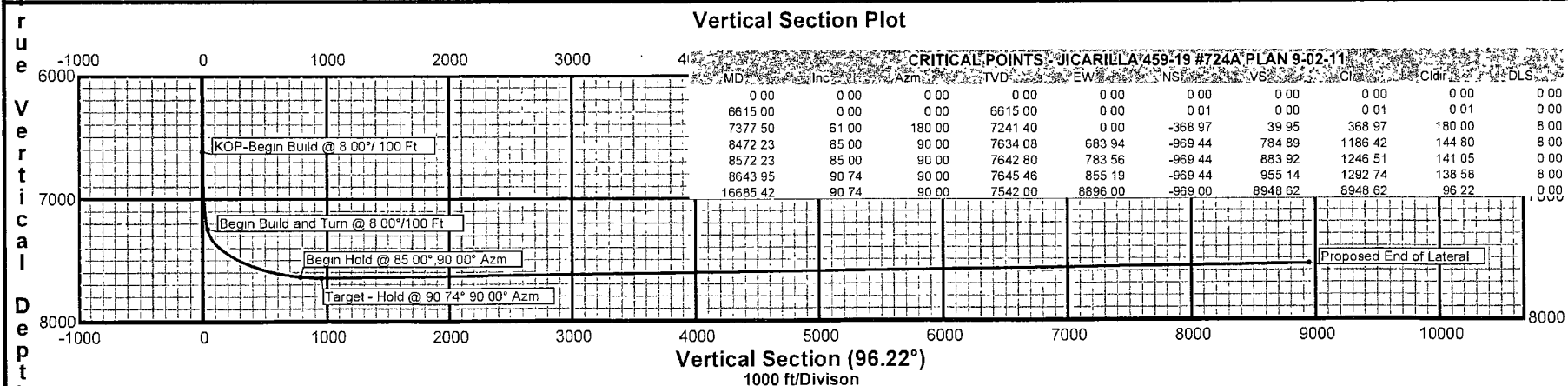
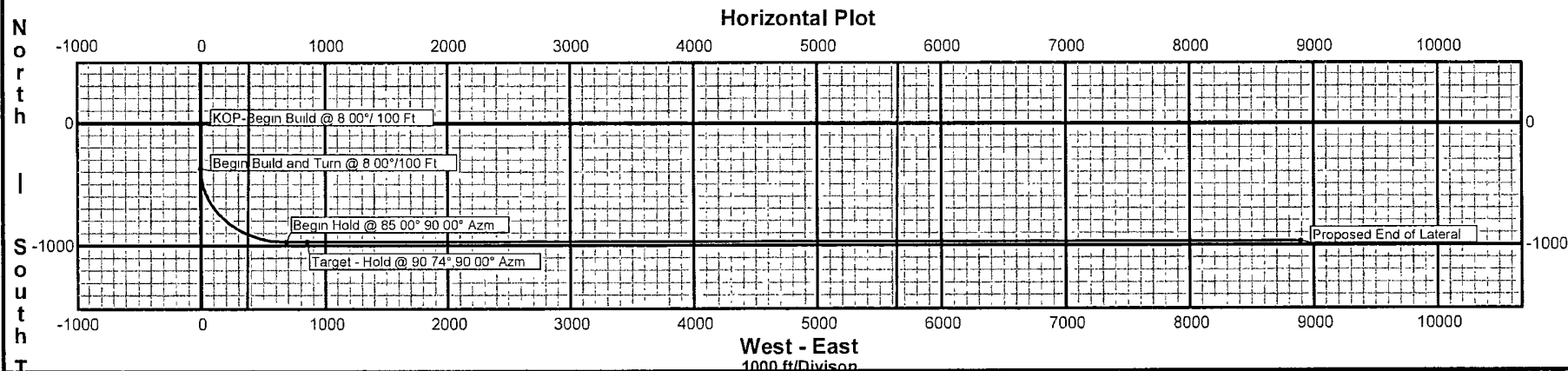
COMPLETION

The location pad will be of sufficient size to accommodate all completion activities and equipment. BHGR plans to complete the well as follows: Perforate and perform multi-stage slickwater frac in lateral section using plug & perf method for each stage. Perforation intervals and frac volumes will be determined once well logs are run. A sundry notice will be submitted with a revised completion program if warranted.



Job ID : 11xxx
Company : Black Hills Gas Resources
Lease/Well : Jicarilla 459-19 #724A
Location : Rio Arriba County, NM.
Rig Name :

Elevation (To MSL) : 7204 ft
RKB : 13 ft
North Reference : True North
Latitude : 36°47'55.0233" N
Longitude : -107°11'4.6827" W





Job Number: 11xxx
Company: Black Hills Gas Resources
Lease/Well: Jicarilla 459-19 #724A
Location: Rio Arriba County, NM
Rig Name:
State/Country: NM/ Rio Arriba
Country: USA
API Number:

Elevation (To MSL): 7204.00 ft
RKB: 13.00 ft
Projection System: US State Plane 1983
Projection Group: New Mexico Central Zone
Projection Datum: GRS80
Magnetic Declination: 9.67
Grid Convergence: -0.55988 W
Date: Friday, September 02, 2011

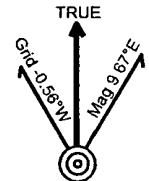
NOVA Directional, Inc.
Directional Survey Report

Calculated by HawkEye Software
Minimum Curvature Method
Vertical Section Plane 96.22°

Northing: 2111318.85 Easting: 1366778.96

Latitude: 36°47'55.0233" N Longitude: -107°11'4.6827" W

Well Location: 2372.99 FNL, 386.01 FEL, Section 19, T30N, R3W, Meridian 23, Rio Arriba County, NM
Direction Reference: True North



Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS °/100Ft
Surface									
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.04	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.03	0.00
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.03	0.00
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.02	0.00
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.02	0.00
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.02	0.00
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.01	0.00
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	0.01	0.00
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.01	0.00
6000.00	0.00	0.00	6000.00	0.01	0.00	0.00	0.01	0.01	0.00
6500.00	0.00	0.00	6500.00	0.01	0.00	0.00	0.01	0.01	0.00
KOP-Begin Build @ 8.00°/ 100 Ft									
6615.00	0.00	0.00	6615.00	0.01	0.00	0.00	0.01	0.01	0.00
6645.00	2.40	180.00	6644.99	-0.62	0.00	0.07	0.62	180.00	8.00
6675.00	4.80	180.00	6674.93	-2.51	0.00	0.27	2.51	180.00	8.00
6705.00	7.20	180.00	6704.76	-5.64	0.00	0.61	5.64	180.00	8.00
6735.00	9.60	180.00	6734.44	-10.02	0.00	1.09	10.02	180.00	8.00
6765.00	12.00	180.00	6763.91	-15.64	0.00	1.69	15.64	180.00	8.00
6795.00	14.40	180.00	6793.11	-22.49	0.00	2.44	22.49	180.00	8.00
6825.00	16.80	180.00	6822.00	-30.56	0.00	3.31	30.56	180.00	8.00
6855.00	19.20	180.00	6850.53	-39.83	0.00	4.31	39.83	180.00	8.00
6885.00	21.60	180.00	6878.65	-50.29	0.00	5.45	50.29	180.00	8.00
6915.00	24.00	180.00	6906.30	-61.91	0.00	6.70	61.91	180.00	8.00
6945.00	26.40	180.00	6933.45	-74.68	0.00	8.09	74.68	180.00	8.00
6975.00	28.80	180.00	6960.03	-88.58	0.00	9.59	88.58	180.00	8.00
7005.00	31.20	180.00	6986.01	-103.58	0.00	11.22	103.58	180.00	8.00
7035.00	33.60	180.00	7011.34	-119.66	0.00	12.96	119.66	180.00	8.00
7065.00	36.00	180.00	7035.97	-136.77	0.00	14.81	136.77	180.00	8.00
7095.00	38.40	180.00	7059.86	-154.91	0.00	16.77	154.91	180.00	8.00
7125.00	40.80	180.00	7082.98	-174.03	0.00	18.84	174.03	180.00	8.00
7155.00	43.20	180.00	7105.27	-194.11	0.00	21.02	194.11	180.00	8.00
7185.00	45.60	180.00	7126.71	-215.10	0.00	23.29	215.10	180.00	8.00
7215.00	48.00	180.00	7147.24	-236.96	0.00	25.66	236.96	180.00	8.00
7245.00	50.40	180.00	7166.84	-259.67	0.00	28.12	259.67	180.00	8.00
7275.00	52.80	180.00	7185.47	-283.18	0.00	30.66	283.18	180.00	8.00
7305.00	55.20	180.00	7203.10	-307.45	0.00	33.29	307.45	180.00	8.00

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS /100Ft
7335.00	57.60	180.00	7219.71	-332.43	0.00	36.00	332.43	180.00	8.00
7365.00	60.00	180.00	7235.24	-358.10	0.00	38.78	358.10	180.00	8.00
Begin Build and Turn @ 8.00°/100 Ft									
7377.50	61.00	180.00	7241.40	-368.97	0.00	39.95	368.97	180.00	8.00
7407.50	60.84	177.26	7255.98	-395.18	0.63	43.42	395.18	179.91	8.00
7437.50	60.75	174.51	7270.62	-421.30	2.50	48.11	421.30	179.66	8.00
7467.50	60.70	171.76	7285.29	-447.27	5.63	54.03	447.31	179.28	8.00
7497.50	60.72	169.01	7299.97	-473.07	10.00	61.17	473.17	178.79	8.00
7527.50	60.78	166.26	7314.63	-498.63	15.60	69.51	498.88	178.21	8.00
7557.50	60.91	163.52	7329.25	-523.92	22.44	79.04	524.40	177.55	8.00
7587.50	61.09	160.78	7343.80	-548.90	30.48	89.73	549.74	176.82	8.00
7617.50	61.33	158.05	7358.25	-573.50	39.72	101.59	574.87	176.04	8.00
7647.50	61.62	155.34	7372.57	-597.70	50.15	114.57	599.80	175.20	8.00
7677.50	61.96	152.65	7386.76	-621.46	61.74	128.67	624.52	174.33	8.00
7707.50	62.36	149.97	7400.77	-644.73	74.47	143.85	649.02	173.41	8.00
7737.50	62.81	147.31	7414.59	-667.47	88.33	160.09	673.29	172.46	8.00
7767.50	63.30	144.68	7428.19	-689.63	103.29	177.35	697.32	171.48	8.00
7797.50	63.85	142.07	7441.53	-711.19	119.31	195.62	721.13	170.48	8.00
7827.50	64.44	139.49	7454.62	-732.11	136.38	214.86	744.70	169.45	8.00
7857.50	65.08	136.93	7467.41	-752.33	154.47	235.02	768.02	168.40	8.00
7887.50	65.76	134.40	7479.89	-771.84	173.53	256.09	791.11	167.33	8.00
7917.50	66.48	131.89	7492.04	-790.59	193.55	278.02	813.94	166.24	8.00
7947.50	67.24	129.42	7503.83	-808.56	214.47	300.77	836.52	165.14	8.00
7977.50	68.04	126.97	7515.25	-825.71	236.28	324.30	858.85	164.03	8.00
8007.50	68.87	124.55	7526.27	-842.02	258.92	348.57	880.93	162.91	8.00
8037.50	69.74	122.16	7536.87	-857.44	282.36	373.55	902.74	161.77	8.00
8067.50	70.64	119.79	7547.04	-871.97	306.56	399.18	924.29	160.63	8.00
8097.50	71.57	117.46	7556.75	-885.56	331.47	425.41	945.57	159.48	8.00
8127.50	72.53	115.14	7566.00	-898.21	357.05	452.21	966.57	158.32	8.00
8157.50	73.52	112.85	7574.76	-909.87	383.27	479.54	987.30	157.16	8.00
8187.50	74.53	110.59	7583.02	-920.55	410.05	507.32	1007.74	155.99	8.00
8217.50	75.56	108.35	7590.76	-930.20	437.38	535.54	1027.90	154.82	8.00
8247.50	76.61	106.13	7597.98	-938.83	465.19	564.12	1047.76	153.64	8.00
8277.50	77.69	103.92	7604.65	-946.41	493.44	593.02	1067.32	152.46	8.00
8307.50	78.78	101.74	7610.77	-952.93	522.07	622.19	1086.57	151.28	8.00
8337.50	79.88	99.57	7616.32	-958.38	551.04	651.58	1105.50	150.10	8.00
8367.50	81.00	97.42	7621.31	-962.75	580.30	681.14	1124.11	148.92	8.00
8397.50	82.14	95.28	7625.70	-966.03	609.79	710.81	1142.39	147.74	8.00
8427.50	83.28	93.15	7629.51	-968.22	639.47	740.55	1160.33	146.56	8.00
8457.50	84.43	91.04	7632.73	-969.31	669.27	770.30	1177.91	145.38	8.00
Begin Hold @ 85.00°, 90.00° Azm									
8472.23	85.00	90.00	7634.08	-969.44	683.94	784.89	1186.42	144.80	8.00
Begin Build @ 8.00°/ 100 Ft									
8572.23	85.00	90.00	7642.80	-969.44	783.56	883.92	1246.51	141.05	0.00
8602.23	87.40	90.00	7644.79	-969.44	813.49	913.68	1265.53	140.00	8.00
8632.23	89.80	90.00	7645.52	-969.44	843.48	943.49	1285.02	138.97	8.00
Target - Hold @ 90.74°, 90.00° Azm									
8643.95	90.74	90.00	7645.46	-969.44	855.19	955.14	1292.74	138.58	8.00
9143.95	90.74	90.00	7639.03	-969.41	1355.15	1452.15	1666.19	125.58	0.00
9643.95	90.74	90.00	7632.59	-969.39	1855.11	1949.17	2093.12	117.59	0.00
10143.95	90.74	90.00	7626.16	-969.36	2355.07	2446.18	2546.76	112.37	0.00
10643.95	90.74	90.00	7619.73	-969.33	2855.02	2943.20	3015.09	108.75	0.00
11143.95	90.74	90.00	7613.29	-969.30	3354.98	3440.22	3492.20	106.11	0.00
11643.95	90.74	90.00	7606.86	-969.28	3854.94	3937.23	3974.93	104.11	0.00
12143.95	90.74	90.00	7600.43	-969.25	4354.90	4434.25	4461.46	102.55	0.00
12643.95	90.74	90.00	7593.99	-969.22	4854.86	4931.26	4950.66	101.29	0.00
13143.95	90.74	90.00	7587.56	-969.19	5354.82	5428.28	5441.82	100.26	0.00

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	Closure (Ft)	Closure Dir Deg	DLS °/100Ft
13643.95	90.74	90.00	7581.13	-969.17	5854.78	5925.30	5934.45	99.40	0.00
14143.95	90.74	90.00	7574.69	-969.14	6354.73	6422.31	6428.21	98.67	0.00
14643.95	90.74	90.00	7568.26	-969.11	6854.69	6919.33	6922.86	98.05	0.00
15143.95	90.74	90.00	7561.83	-969.09	7354.65	7416.34	7418.22	97.51	0.00
15643.95	90.74	90.00	7555.39	-969.06	7854.61	7913.36	7914.16	97.03	0.00
16143.95	90.74	90.00	7548.96	-969.03	8354.57	8410.37	8410.58	96.62	0.00
16643.95	90.74	90.00	7542.53	-969.00	8854.53	8907.39	8907.39	96.25	0.00
Proposed End of Lateral									
16685.42	90.74	90.00	7542.00	-969.00	8896.00	8948.62	8948.62	96.22	0.00

Figure 3-3