

RCVD JUN 13 '08
OIL CONS. DIV.
DIST. 3

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 30-039-30172	² Pool Code 72400	³ Pool Name EAST BLANCO/PICTURED CLIFFS
⁴ Property Code 22211	⁵ Property Name JICARILLA 459-17	⁶ Well Number 741
⁷ OGRID No. 013925	⁸ Operator Name BLACK HILLS GAS RESOURCES	⁹ Elevation 7180'

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
M	17	30-N	3-W		165	SOUTH	1155	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
N	18	30-N	3-W	4	205	SOUTH	684-251	WEST	RIO ARRIBA
¹² Dedicated Acres 246.24 AC.			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

Interval with seal 57/E 187/S Sec 18
M 4587

FD. 2 1/2" BC.
1917 GLO

LOT 1
44.01 AC

LOT 2
43.38 AC

LOT 3
42.95 AC

LOT 4
43.29 AC

FD. 2 1/2" BC.
1917 GLO

FD. 2 1/2" BC.
1917 GLO

FD. 2 1/2" BC.
1917 GLO

FD. 2 1/2" BC.
1917 GLO

FD. NAIL IN
STONE MOUND

N 89-56-02 W
1439.46' (M)

S 89-59-34 W
2638.85' (M)

S 89-57-13 W
2628.69' (M)

BOTTOM HOLE
AS-DRILLED B.H.L. FOOTAGES
PROVIDED BY B.H.G.R.
CLIENT

BOTTOM HOLE LOCATION
LAT: 36.80853° N. (NAD 83)
LONG: 107.19481° W. (NAD 83)

SURFACE LOCATION
LAT: 36.80558° N. (NAD 83)
LONG: 107.17928° W. (NAD 83)

17

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] 6/13/08
Signature Date
[Signature] Lynn H. Benally
Printed Name

18 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
Signature and Seal of Professional Surveyor:

Certificate Number



Job Number: 810161
 Company: Black Hills Gas Resources
 Lease/Well: Jicarilla 459-17 #741
 Location: Rio Arriba County, NM
 Rig Name:
 RKB: 13'
 G.L. or M.S.L.: 7180'

State/Country: NM/USA
 Declination: 10.48927
 Grid: 0.84
 File name: C:\CURREN~1\810161~1\45917741.SVY
 Date/Time: 30-May-08 / 08:03
 Curve Name: Jicarilla 459-17 #741 ST surveys

API: 30-039-30172

Jicarilla 459-17 #741 ST surveys

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 270.44
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

RCUD JUN 6 '08
 OIL CONS. DIV.
 DIST. 3

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
Nevis Survey Tie-In, begin ST									
2857.00	6.60	276.80	2856.20	9.59	-27.60	-9.80	29.29	199.55	.00
2898.00	8.50	273.50	2896.84	14.96	-27.14	-15.16	31.09	209.20	4.75
2928.00	10.50	272.30	2926.43	19.90	-26.89	-20.11	33.58	216.79	6.70
2959.00	10.40	271.60	2956.92	25.52	-26.70	-25.73	37.08	223.94	.52
2989.00	12.10	275.10	2986.34	31.36	-26.34	-31.57	41.12	230.15	6.10
3019.00	15.20	285.30	3015.49	38.30	-25.03	-38.50	45.92	236.97	13.05
3047.00	16.80	287.30	3042.41	45.72	-22.85	-45.90	51.28	243.53	6.04
3077.00	18.30	286.80	3071.01	54.39	-20.20	-54.55	58.17	249.68	5.03
3106.00	19.80	285.20	3098.42	63.51	-17.60	-63.65	66.04	254.54	5.48
3136.00	21.30	281.00	3126.51	73.78	-15.23	-73.90	75.45	258.36	7.01
3165.00	22.70	278.10	3153.40	84.51	-13.43	-84.61	85.67	260.98	6.11
3195.00	24.00	276.40	3180.94	96.31	-11.94	-96.41	97.14	262.94	4.88
3226.00	25.90	276.30	3209.05	109.32	-10.49	-109.40	109.90	264.52	6.13
3256.00	28.20	275.00	3235.77	122.90	-9.16	-122.98	123.32	265.74	7.92
3286.00	30.60	276.70	3261.90	137.56	-7.65	-137.63	137.84	266.82	8.47
3317.00	32.70	276.00	3288.29	153.74	-5.85	-153.79	153.90	267.82	6.88
3347.00	34.80	273.90	3313.23	170.35	-4.42	-170.39	170.45	268.51	8.01
3377.00	37.10	274.20	3337.52	187.93	-3.18	-187.96	187.99	269.03	7.69
3408.00	39.30	274.30	3361.88	207.06	-1.75	-207.08	207.09	269.51	7.10
3439.00	41.50	273.90	3385.48	227.11	-.32	-227.12	227.12	269.92	7.15
3471.00	43.10	271.30	3409.15	248.62	.65	-248.63	248.63	270.15	7.41
3502.00	44.80	269.80	3431.47	270.14	.85	-270.14	270.14	270.18	6.43
3533.00	47.40	270.30	3452.96	292.47	.87	-292.47	292.48	270.17	8.47

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	CLOSURE				Dogleg Severity Deg/100
					N-S FT	E-W FT	Distance FT	Direction Deg	
3565.00	47.90	269.60	3474.52	316.12	.85	-316.12	316.12	270.15	2.25
3595.00	48.50	269.40	3494.52	338.48	.66	-338.49	338.49	270.11	2.06
3626.00	48.90	269.40	3514.98	361.77	.41	-361.77	361.77	270.07	1.29
3657.00	50.70	269.80	3534.99	385.44	.25	-385.45	385.45	270.04	5.89
3689.00	51.30	268.60	3555.12	410.30	-.10	-410.32	410.32	269.99	3.47
3720.00	54.00	269.20	3573.93	434.93	-.57	-434.95	434.95	269.92	8.84
3752.00	57.00	269.60	3592.05	461.30	-.85	-461.32	461.32	269.90	9.43
3783.00	58.90	270.80	3608.50	487.57	-.75	-487.59	487.59	269.91	6.95
3814.00	60.10	270.60	3624.24	514.28	-.42	-514.30	514.30	269.95	3.91
3845.00	61.10	270.90	3639.45	541.29	-.07	-541.31	541.31	269.99	3.33
3876.00	63.10	271.80	3653.96	568.68	.58	-568.69	568.69	270.06	6.94
3907.00	64.90	272.00	3667.55	596.53	1.50	-596.54	596.54	270.14	5.84
3938.00	66.50	271.90	3680.30	624.78	2.46	-624.77	624.78	270.23	5.17
3969.00	68.30	272.20	3692.22	653.38	3.49	-653.37	653.38	270.31	5.87
4001.00	69.40	272.50	3703.76	683.21	4.71	-683.19	683.21	270.40	3.55
4032.00	72.00	272.10	3714.01	712.45	5.88	-712.43	712.45	270.47	8.48
4064.00	73.90	272.10	3723.39	743.03	7.00	-743.00	743.03	270.54	5.94
4096.00	75.90	273.10	3731.73	773.90	8.41	-773.86	773.90	270.62	6.94
4127.00	76.50	272.00	3739.12	803.98	9.75	-803.93	803.99	270.69	3.95
4158.00	79.30	273.20	3745.62	834.27	11.12	-834.21	834.28	270.76	9.79
4189.00	82.30	271.70	3750.58	864.85	12.43	-864.78	864.87	270.82	10.79
4221.00	85.20	271.40	3754.06	896.65	13.29	-896.57	896.67	270.85	9.11
4250.00	85.80	272.00	3756.33	925.55	14.15	-925.47	925.58	270.88	2.92
4281.00	86.60	272.10	3758.39	956.47	15.25	-956.38	956.50	270.91	2.60
4312.00	87.40	271.90	3760.01	987.42	16.33	-987.32	987.46	270.95	2.66
4344.00	87.80	271.60	3761.35	1019.38	17.31	-1019.28	1019.42	270.97	1.56
4376.00	87.60	271.30	3762.63	1051.35	18.12	-1051.24	1051.40	270.99	1.13
4407.00	87.80	271.20	3763.88	1082.32	18.79	-1082.21	1082.37	270.99	.72
4439.00	86.40	271.40	3765.50	1114.28	19.52	-1114.16	1114.33	271.00	4.42
4470.00	86.60	271.60	3767.39	1145.21	20.33	-1145.09	1145.27	271.02	.91
4537					21.9	-1211.6			
4581.00	88.20	271.10	3772.43	1256.08	22.94	-1255.94	1256.15	271.05	1.51
4612.00	88.40	271.10	3773.35	1287.07	23.54	-1286.92	1287.14	271.05	.65
4643.00	88.60	270.80	3774.16	1318.05	24.05	-1317.91	1318.13	271.05	1.16
4675.00	86.90	271.00	3775.41	1350.03	24.55	-1349.88	1350.10	271.04	5.35
4706.00	86.80	270.80	3777.12	1380.98	25.04	-1380.83	1381.05	271.04	.72
4738.00	87.00	270.60	3778.85	1412.93	25.43	-1412.78	1413.01	271.03	.88
4770.00	87.40	270.70	3780.41	1444.89	25.79	-1444.74	1444.97	271.02	1.29
4801.00	87.80	270.10	3781.71	1475.87	26.01	-1475.71	1475.94	271.01	2.32
4831.00	88.10	269.80	3782.78	1505.85	25.98	-1505.69	1505.91	270.99	1.41
4862.00	87.10	269.50	3784.08	1536.81	25.79	-1536.66	1536.88	270.96	3.37
4893.00	86.90	269.40	3785.70	1567.77	25.50	-1567.62	1567.83	270.93	.72
4925.00	86.20	270.70	3787.63	1599.71	25.52	-1599.56	1599.76	270.91	4.61
4955.00	86.30	271.00	3789.59	1629.64	25.97	-1629.49	1629.70	270.91	1.05
4987.00	86.60	270.50	3791.57	1661.58	26.39	-1661.43	1661.64	270.91	1.82
5017.00	86.50	270.70	3793.38	1691.53	26.70	-1691.37	1691.58	270.90	.74

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	
5047.00	86.90	270.20	3795.10	1721.48	26.93	-1721.32	1721.53	270.90	2.13
5077.00	87.10	269.90	3796.67	1751.43	26.96	-1751.28	1751.49	270.88	1.20
5107.00	86.20	270.00	3798.43	1781.38	26.93	-1781.23	1781.43	270.87	3.02
5138.00	86.20	270.00	3800.48	1812.31	26.93	-1812.16	1812.36	270.85	.00
5167.00	86.20	269.60	3802.40	1841.25	26.83	-1841.10	1841.29	270.84	1.38
5197.00	86.40	269.40	3804.34	1871.18	26.57	-1871.03	1871.22	270.81	.94
5227.00	86.40	269.20	3806.22	1901.12	26.21	-1900.97	1901.15	270.79	.67
5257.00	86.60	269.10	3808.05	1931.05	25.76	-1930.91	1931.08	270.76	.75
5288.00	86.50	269.10	3809.92	1961.99	25.28	-1961.85	1962.01	270.74	.32
5318.00	86.70	268.70	3811.70	1991.92	24.70	-1991.79	1991.95	270.71	1.49
5349.00	87.70	269.10	3813.21	2022.87	24.11	-2022.75	2022.89	270.68	3.47
5379.00	88.10	269.30	3814.31	2052.85	23.69	-2052.73	2052.86	270.66	1.49
5409.00	88.20	268.80	3815.28	2082.82	23.19	-2082.71	2082.84	270.64	1.70
5438.00	88.00	268.70	3816.24	2111.79	22.56	-2111.68	2111.80	270.61	.77
5469.00	88.30	268.60	3817.24	2142.76	21.83	-2142.66	2142.77	270.58	1.02
5498.00	88.70	268.30	3818.00	2171.74	21.04	-2171.64	2171.74	270.56	1.72
5528.00	88.90	268.20	3818.63	2201.71	20.13	-2201.62	2201.71	270.52	.75
5558.00	89.40	268.30	3819.08	2231.68	19.21	-2231.60	2231.68	270.49	1.70
5588.00	89.70	268.50	3819.31	2261.66	18.37	-2261.59	2261.66	270.47	1.20
5619.00	90.00	268.50	3819.39	2292.64	17.56	-2292.58	2292.64	270.44	.97
5648.00	89.70	269.10	3819.47	2321.63	16.96	-2321.57	2321.63	270.42	2.31
5678.00	90.00	269.10	3819.55	2351.62	16.48	-2351.57	2351.62	270.40	1.00
5709.00	89.20	269.40	3819.76	2382.62	16.08	-2382.56	2382.62	270.39	2.76
5739.00	89.30	268.90	3820.16	2412.61	15.63	-2412.56	2412.61	270.37	1.70
5770.00	87.60	269.20	3820.99	2443.58	15.12	-2443.54	2443.59	270.35	5.57
5800.00	87.40	269.20	3822.30	2473.55	14.70	-2473.51	2473.55	270.34	.67
5829.00	87.40	269.50	3823.62	2502.51	14.37	-2502.48	2502.52	270.33	1.03
5858.00	88.10	269.10	3824.76	2531.48	14.02	-2531.45	2531.49	270.32	2.78
5888.00	88.20	269.60	3825.73	2561.46	13.68	-2561.43	2561.47	270.31	1.70
5917.00	88.50	269.60	3826.56	2590.45	13.48	-2590.42	2590.46	270.30	1.03
6006.00	88.90	270.80	3828.58	2679.42	13.79	-2679.40	2679.43	270.29	1.42
6036.00	90.30	271.10	3828.79	2709.42	14.28	-2709.39	2709.43	270.30	4.77
6067.00	90.70	271.20	3828.52	2740.42	14.91	-2740.38	2740.42	270.31	1.33
6097.00	90.80	270.80	3828.13	2770.41	15.43	-2770.38	2770.42	270.32	1.37
6127.00	91.00	271.40	3827.66	2800.41	16.01	-2800.37	2800.41	270.33	2.11
6157.00	91.20	271.10	3827.08	2830.40	16.66	-2830.35	2830.40	270.34	1.20
6188.00	89.90	271.90	3826.78	2861.39	17.47	-2861.34	2861.39	270.35	4.92
6219.00	89.60	272.20	3826.92	2892.38	18.58	-2892.32	2892.38	270.37	1.37
6249.00	88.00	272.90	3827.55	2922.35	19.92	-2922.28	2922.35	270.39	5.82
6280.00	87.70	273.00	3828.71	2953.30	21.51	-2953.22	2953.30	270.42	1.02
6312.00	87.70	272.90	3829.99	2985.24	23.15	-2985.15	2985.24	270.44	.31
6343.00	88.00	273.00	3831.16	3016.19	24.75	-3016.09	3016.19	270.47	1.02
6375.00	88.30	273.10	3832.19	3048.14	26.45	-3048.03	3048.14	270.50	.99
6406.00	88.20	273.40	3833.14	3079.09	28.21	-3078.96	3079.09	270.52	1.02
6437.00	88.50	273.10	3834.03	3110.04	29.96	-3109.90	3110.04	270.55	1.37

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
6468.00	88.50	272.00	3834.84	3141.01	31.34	-3140.86	3141.01	270.57	3.55
6500.00	88.60	272.00	3835.65	3172.98	32.46	-3172.83	3172.99	270.59	.31
6532.00	88.60	272.10	3836.43	3204.96	33.60	-3204.80	3204.97	270.60	.31
6563.00	88.60	271.80	3837.19	3235.94	34.66	-3235.77	3235.96	270.61	.97
6595.00	88.60	271.80	3837.97	3267.92	35.66	-3267.75	3267.94	270.63	.00
6626.00	88.80	269.70	3838.67	3298.91	36.07	-3298.73	3298.93	270.63	6.80
6658.00	88.90	269.60	3839.32	3330.90	35.87	-3330.73	3330.92	270.62	.44
6689.00	89.10	269.60	3839.86	3361.90	35.66	-3361.72	3361.91	270.61	.65
6721.00	89.00	269.70	3840.39	3393.89	35.46	-3393.72	3393.90	270.60	.44
6753.00	89.70	269.70	3840.75	3425.88	35.29	-3425.71	3425.89	270.59	2.19
6784.00	89.70	270.10	3840.91	3456.88	35.24	-3456.71	3456.89	270.58	1.29
6816.00	89.90	270.00	3841.02	3488.88	35.27	-3488.71	3488.89	270.58	.70
6847.00	90.20	270.00	3841.00	3519.88	35.27	-3519.71	3519.89	270.57	.97
6879.00	90.40	270.00	3840.83	3551.88	35.27	-3551.71	3551.89	270.57	.62
6910.00	90.40	270.40	3840.61	3582.88	35.38	-3582.71	3582.89	270.57	1.29
6942.00	90.80	270.40	3840.28	3614.87	35.60	-3614.71	3614.88	270.56	1.25
6973.00	91.00	270.30	3839.79	3645.87	35.79	-3645.70	3645.88	270.56	.72
7004.00	91.00	270.50	3839.25	3676.87	36.01	-3676.70	3676.87	270.56	.65
7035.00	91.00	270.00	3838.71	3707.86	36.14	-3707.69	3707.87	270.56	1.61
7067.00	91.30	270.00	3838.07	3739.85	36.14	-3739.69	3739.86	270.55	.94
7098.00	88.60	270.80	3838.09	3770.85	36.36	-3770.68	3770.86	270.55	9.08
7130.00	88.60	270.20	3838.88	3802.84	36.64	-3802.67	3802.85	270.55	1.87
7160.00	88.70	271.00	3839.58	3832.83	36.95	-3832.66	3832.84	270.55	2.69
7191.00	89.00	271.10	3840.20	3863.82	37.52	-3863.65	3863.83	270.56	1.02
7222.00	89.20	271.10	3840.69	3894.82	38.11	-3894.64	3894.83	270.56	.65
7254.00	89.40	270.80	3841.08	3926.81	38.64	-3926.63	3926.82	270.56	1.13
7286.00	89.70	270.70	3841.33	3958.81	39.06	-3958.63	3958.82	270.57	.99
7317.00	90.00	270.70	3841.42	3989.81	39.44	-3989.63	3989.82	270.57	.97
7349.00	90.00	270.50	3841.42	4021.81	39.78	-4021.63	4021.82	270.57	.63
7380.00	89.00	269.70	3841.69	4052.81	39.83	-4052.62	4052.82	270.56	4.13
7411.00	89.60	270.20	3842.06	4083.81	39.80	-4083.62	4083.82	270.56	2.52
7444.00	90.10	270.40	3842.15	4116.81	39.98	-4116.62	4116.81	270.56	1.63
7474.00	87.80	270.50	3842.70	4146.80	40.21	-4146.61	4146.81	270.56	7.67
7506.00	87.30	270.00	3844.07	4178.77	40.35	-4178.58	4178.78	270.55	2.21
7537.00	86.90	270.00	3845.64	4209.73	40.35	-4209.54	4209.74	270.55	1.29
7569.00	86.90	269.80	3847.37	4241.68	40.30	-4241.50	4241.69	270.54	.62
7601.00	86.80	269.90	3849.13	4273.63	40.21	-4273.45	4273.64	270.54	.44
7632.00	86.90	270.20	3850.83	4304.58	40.24	-4304.40	4304.59	270.54	1.02
7664.00	87.10	270.10	3852.50	4336.54	40.32	-4336.36	4336.54	270.53	.70
7695.00	87.60	269.70	3853.94	4367.50	40.27	-4367.32	4367.51	270.53	2.06
7727.00	87.70	269.70	3855.25	4399.47	40.10	-4399.30	4399.48	270.52	.31
7758.00	88.00	270.00	3856.41	4430.45	40.02	-4430.27	4430.45	270.52	1.37
7790.00	88.20	269.90	3857.47	4462.43	39.99	-4462.26	4462.44	270.51	.70
Last Nevis MWD Survey									
7821.00	88.40	269.80	3858.39	4493.42	39.91	-4493.24	4493.42	270.51	.72

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
Survey Projection to TD									
7872.00	88.80	269.80	3859.64	4544.40	39.73	-4544.23	4544.40	270.50	.78