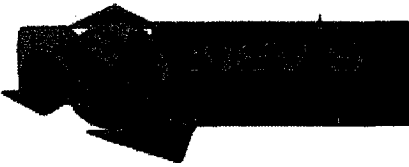


30-039-25781



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

Job Number: 204-xxx
Company: BHEP / Mallon Oil
Lease/Well: Jicarilla 458-5 # 2
Location: Rio Blanco Co., NM
Rig Name: Key
RKB:
G.L. or M.S.L.:

State/Country:
Declination:
Grid:
File name: C:\WINSERVE\458-5#2.SVY
Date/Time: 08-Jul-04 / 12:04
Curve Name: Plan 1

WINSERVE PROPOSAL REPORT
Minimum Curvature Method
Vertical Section Plane 107.26
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-> 3760 TVD Begin Build @ 56.51°/ 100'									
3760.00	.00	107.26	3760.00	.00	.00	.00	.00	.00	.00
3765.00	2.83	107.26	3765.00	.12	-.04	.12	.12	107.25	56.51
3770.00	5.65	107.26	3769.98	.49	-.15	.47	.49	107.26	56.51
3775.00	8.48	107.26	3774.95	1.11	-.33	1.06	1.11	107.26	56.51
3780.00	11.30	107.26	3779.87	1.97	-.58	1.88	1.97	107.26	56.51
3785.00	14.13	107.26	3784.75	3.07	-.91	2.93	3.07	107.26	56.51
3790.00	16.95	107.26	3789.56	4.41	-1.31	4.21	4.41	107.26	56.51
3795.00	19.78	107.26	3794.31	5.98	-1.77	5.71	5.98	107.26	56.51
3800.00	22.61	107.26	3798.97	7.79	-2.31	7.44	7.79	107.26	56.51
3805.00	25.43	107.26	3803.54	9.82	-2.91	9.38	9.82	107.26	56.51
3810.00	28.26	107.26	3808.00	12.08	-3.58	11.54	12.08	107.26	56.51
3815.00	31.08	107.26	3812.34	14.56	-4.32	13.90	14.56	107.26	56.51
3820.00	33.91	107.26	3816.56	17.24	-5.12	16.47	17.24	107.26	56.51
3825.00	36.73	107.26	3820.64	20.13	-5.97	19.23	20.13	107.26	56.51
3830.00	39.56	107.26	3824.57	23.22	-6.89	22.17	23.22	107.26	56.51
3835.00	42.38	107.26	3828.34	26.50	-7.86	25.31	26.50	107.26	56.51
3840.00	45.21	107.26	3831.95	29.96	-8.89	28.61	29.96	107.26	56.51
3845.00	48.04	107.26	3835.39	33.59	-9.97	32.08	33.59	107.26	56.51
3850.00	50.86	107.26	3838.64	37.39	-11.09	35.71	37.39	107.26	56.51
3855.00	53.69	107.26	3841.70	41.35	-12.27	39.48	41.35	107.26	56.51

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 Distance FT	Direction Deg	Dogleg Severity Deg/100
3860.00	56.51	107.26	3844.56	45.45	-13.48	43.40	45.45	107.26	56.51
3865.00	59.34	107.26	3847.21	49.68	-14.74	47.45	49.68	107.26	56.51
3870.00	62.16	107.26	3849.65	54.04	-16.04	51.61	54.04	107.26	56.51
3875.00	64.99	107.26	3851.88	58.52	-17.36	55.89	58.52	107.26	56.51
3880.00	67.82	107.26	3853.88	63.10	-18.72	60.26	63.10	107.26	56.51
3885.00	70.64	107.26	3855.65	67.78	-20.11	64.73	67.78	107.26	56.51
3890.00	73.47	107.26	3857.19	72.53	-21.52	69.27	72.53	107.26	56.51
3895.00	76.29	107.26	3858.50	77.36	-22.95	73.88	77.36	107.26	56.51
3900.00	79.12	107.26	3859.56	82.25	-24.40	78.54	82.25	107.26	56.51
3905.00	81.94	107.26	3860.38	87.18	-25.87	83.25	87.18	107.26	56.51
3910.00	84.77	107.26	3860.96	92.14	-27.34	87.99	92.14	107.26	56.51
3915.00	87.60	107.26	3861.30	97.13	-28.82	92.76	97.13	107.26	56.51
Begin Build @ 12.00°/ 100 '									
3920.00	90.42	107.26	3861.38	102.13	-30.30	97.53	102.13	107.26	56.51
3925.00	91.02	107.26	3861.32	107.13	-31.79	102.31	107.13	107.26	12.00
3930.00	91.62	107.26	3861.20	112.13	-33.27	107.08	112.13	107.26	12.00
3935.00	92.22	107.26	3861.04	117.13	-34.75	111.85	117.13	107.26	12.00
3940.00	92.82	107.26	3860.82	122.12	-36.23	116.62	122.12	107.26	12.00
3945.00	93.42	107.26	3860.54	127.11	-37.72	121.39	127.11	107.26	12.00
3950.00	94.02	107.26	3860.22	132.10	-39.20	126.15	132.10	107.26	12.00
3955.00	94.62	107.26	3859.84	137.09	-40.68	130.91	137.09	107.26	12.00
3960.00	95.22	107.26	3859.41	142.07	-42.15	135.67	142.07	107.26	12.00
3965.00	95.82	107.26	3858.93	147.05	-43.63	140.42	147.05	107.26	12.00
3970.00	96.42	107.26	3858.40	152.02	-45.10	145.17	152.02	107.26	12.00
3975.00	97.02	107.26	3857.82	156.98	-46.58	149.91	156.98	107.26	12.00
3980.00	97.62	107.26	3857.18	161.94	-48.05	154.65	161.94	107.26	12.00
3985.00	98.22	107.26	3856.49	166.89	-49.52	159.38	166.89	107.26	12.00
3990.00	98.82	107.26	3855.75	171.84	-50.99	164.10	171.84	107.26	12.00
3995.00	99.42	107.26	3854.96	176.78	-52.45	168.82	176.78	107.26	12.00
Begin Hold @ 100.00°, 107.26° Azm									
4000.00	100.00	107.26	3854.11	181.70	-53.91	173.52	181.70	107.26	11.59
4100.00	100.00	107.26	3836.75	280.19	-83.13	267.57	280.19	107.26	.00
4200.00	100.00	107.26	3819.38	378.67	-112.35	361.61	378.67	107.26	.00
4300.00	100.00	107.26	3802.02	477.15	-141.57	455.66	477.15	107.26	.00
4350.00	100.00	107.26	3793.34	526.39	-156.18	502.68	526.39	107.26	.00
4400.00	100.00	107.26	3784.65	575.63	-170.79	549.71	575.63	107.26	.00
Begin Drop @ -12.00°/ 100'									
4410.00	100.00	107.26	3782.92	585.48	-173.72	559.11	585.48	107.26	.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	
4415.00	99.40	107.26	3782.07	590.40	-175.18	563.82	590.40	107.26	12.00
4420.00	98.80	107.26	3781.28	595.34	-176.64	568.53	595.34	107.26	12.00
4425.00	98.20	107.26	3780.54	600.29	-178.11	573.25	600.29	107.26	12.00
4430.00	97.60	107.26	3779.86	605.24	-179.58	577.98	605.24	107.26	12.00
4435.00	97.00	107.26	3779.22	610.20	-181.05	582.72	610.20	107.26	12.00
4440.00	96.40	107.26	3778.64	615.16	-182.52	587.46	615.16	107.26	12.00
4445.00	95.80	107.26	3778.11	620.14	-184.00	592.21	620.14	107.26	12.00
4450.00	95.20	107.26	3777.63	625.11	-185.48	596.96	625.11	107.26	12.00
4455.00	94.60	107.26	3777.20	630.09	-186.95	601.72	630.09	107.26	12.00
4460.00	94.00	107.26	3776.83	635.08	-188.43	606.48	635.08	107.26	12.00
4465.00	93.40	107.26	3776.50	640.07	-189.91	611.25	640.07	107.26	12.00
4470.00	92.80	107.26	3776.23	645.06	-191.40	616.01	645.06	107.26	12.00
4475.00	92.20	107.26	3776.01	650.06	-192.88	620.78	650.06	107.26	12.00
4480.00	91.60	107.26	3775.85	655.06	-194.36	625.56	655.06	107.26	12.00
4485.00	91.00	107.26	3775.74	660.05	-195.84	630.33	660.05	107.26	12.00

Begin Hold @ 90.78°, 107.26° Azm

4486.80	90.78	107.26	3775.71	661.85	-196.38	632.05	661.85	107.26	12.00
4586.80	90.78	107.26	3774.34	761.84	-226.05	727.54	761.84	107.26	.00
4686.80	90.78	107.26	3772.97	861.84	-255.71	823.03	861.84	107.26	.00
4786.80	90.78	107.26	3771.60	961.83	-285.38	918.51	961.83	107.26	.00
4886.80	90.78	107.26	3770.23	1061.82	-315.05	1014.00	1061.82	107.26	.00
4986.80	90.78	107.26	3768.87	1161.81	-344.72	1109.49	1161.81	107.26	.00
5086.80	90.78	107.26	3767.50	1261.80	-374.39	1204.98	1261.80	107.26	.00
5186.80	90.78	107.26	3766.13	1361.79	-404.05	1300.46	1361.79	107.26	.00
5286.80	90.78	107.26	3764.76	1461.78	-433.72	1395.95	1461.78	107.26	.00
5386.80	90.78	107.26	3763.39	1561.77	-463.39	1491.44	1561.77	107.26	.00
5486.80	90.78	107.26	3762.02	1661.76	-493.06	1586.93	1661.76	107.26	.00
5586.80	90.78	107.26	3760.66	1761.75	-522.73	1682.42	1761.75	107.26	.00
5686.80	90.78	107.26	3759.29	1861.74	-552.39	1777.90	1861.74	107.26	.00
5786.80	90.78	107.26	3757.92	1961.73	-582.06	1873.39	1961.73	107.26	.00
5886.80	90.78	107.26	3756.55	2061.72	-611.73	1968.88	2061.72	107.26	.00
5986.80	90.78	107.26	3755.18	2161.71	-641.40	2064.37	2161.71	107.26	.00
6086.80	90.78	107.26	3753.81	2261.70	-671.07	2159.86	2261.70	107.26	.00
6186.80	90.78	107.26	3752.45	2361.69	-700.73	2255.34	2361.69	107.26	.00
6286.80	90.78	107.26	3751.08	2461.69	-730.40	2350.83	2461.69	107.26	.00
6386.80	90.78	107.26	3749.71	2561.68	-760.07	2446.32	2561.68	107.26	.00
6486.80	90.78	107.26	3748.34	2661.67	-789.74	2541.81	2661.67	107.26	.00
6586.80	90.78	107.26	3746.97	2761.66	-819.41	2637.29	2761.66	107.26	.00
6686.80	90.78	107.26	3745.61	2861.65	-849.07	2732.78	2861.65	107.26	.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	
6786.80	90.78	107.26	3744.24	2961.64	-878.74	2828.27	2961.64	107.26	.00
6886.80	90.78	107.26	3742.87	3061.63	-908.41	2923.76	3061.63	107.26	.00
6986.80	90.78	107.26	3741.50	3161.62	-938.08	3019.25	3161.62	107.26	.00
7086.80	90.78	107.26	3740.13	3261.61	-967.75	3114.73	3261.61	107.26	.00
7186.80	90.78	107.26	3738.76	3361.60	-997.41	3210.22	3361.60	107.26	.00
7286.80	90.78	107.26	3737.40	3461.59	-1027.08	3305.71	3461.59	107.26	.00
7386.80	90.78	107.26	3736.03	3561.58	-1056.75	3401.20	3561.58	107.26	.00
7486.80	90.78	107.26	3734.66	3661.57	-1086.42	3496.69	3661.57	107.26	.00
7586.80	90.78	107.26	3733.29	3761.56	-1116.09	3592.17	3761.56	107.26	.00
7686.80	90.78	107.26	3731.92	3861.55	-1145.75	3687.66	3861.55	107.26	.00
7786.80	90.78	107.26	3730.55	3961.54	-1175.42	3783.15	3961.54	107.26	.00
End of Lateral w/ 4010' Displacement									
7835.87	90.78	107.26	3729.88	4010.61	-1189.98	3830.01	4010.61	107.26	.00

Black Hills Exploration & Production

Jicarilla 458-5 #2

API No. 3003925781

1850' FSL & 790' FWL (NW/SW) Unit L

Section 5 T30N - R03W

East Blanco Field, Rio Arriba County, New Mexico

Top of Coal:	3672
Bottom of Coal:	3755
KOP:	3760
At Well -	
Top of PC Target:	3772
Bottom of PC Target:	3794
Bottom of PC:	3863
Top of Lewis:	3863
At BHL -	
Proposed BHL:	660 FSL & 660 FEL
Azimuth	107
Top of PC Target:	3711
Bottom of PC Target:	3745

Ground Elevation:	7147'
KB Elevation:	7161' (14' KB)
Surface Casing:	8-5/8" 24# K-55 ST&C @ 534'
Production Casing:	5-1/2" 15.5# K-55 LT&C @ 4039'
Plugback TD:	3985'
Perfs:	San Jose:
Perfs:	Nacimiento:
Perfs:	Ojo Alamo:
Perfs:	3212 - 3244' (Open)
Completion:	
	Dual Completion - San Jose / Ojo Alamo
	Long String - 3084' 1.90" IJ
	5-1/2" x 2-3/8" Uni 6 Packer @ 3084'
	Short String - 1573' 1.90" IJ

Map to Accompany
APPLICATION FOR PERMIT TO DRILL
Area Map

Mallon Oil Company
Jicarilla 458-5 2
(NW/4 SW/4) Sec. 5 T30N R3W
Rio Arriba County, New Mexico
Lease: Contract 458

LEGEND

- Existing Road
- Existing Road (J-15)
- State Highway 64

