

WE

 NEVIS 1724-B Townhurst Dr, Houston, Tx 77043 (713) 827-8302 www.nevisenergy.com	Job Number: 205-210	State/Country:
	Company: BHEP / mallon Oil Corp.	Declination:
	Lease/Well: Jicarilla 457-09 # 2	Grid:
	Location: Rio Arriba Co., NM	File name: N:\JOB DAT-1\BLACKH-1\2005\205-21-1\45709#2.S
	Rig Name: Key 44	Date/Time: 27-Jun-05 / 09:28
RKB:	Curve Name: Actual Surveys	
G.L. or M.S.L.:		

Pict. Cliffs R/c 30-039-26064

AS

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 93.92
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
Tie in									
3732.00	1.62	146.80	3731.70	-32.50	17.20	19.38	36.77	152.11	.00
3780.00	17.40	88.40	3778.92	-32.87	24.80	26.99	41.18	142.97	34.60
3811.00	37.00	74.30	3806.39	-30.19	38.56	40.53	48.97	128.06	66.15
3842.00	54.40	76.80	3827.96	-24.74	59.98	61.53	64.88	112.42	56.42
3873.00	74.30	73.90	3841.31	-17.65	86.86	87.86	88.63	101.49	64.74
3902.00	89.60	73.20	3845.36	-9.54	114.31	114.70	114.71	94.77	52.81
3933.00	95.50	74.60	3843.98	-.96	144.05	143.78	144.06	90.38	19.56
3965.00	99.20	77.50	3839.89	6.69	174.85	173.98	174.97	87.81	14.64
3996.00	100.50	81.30	3834.58	12.31	204.86	203.54	205.23	86.56	12.78
4028.00	101.70	85.50	3828.42	15.92	236.05	234.41	236.58	86.14	13.41
4059.00	101.00	86.90	3822.32	17.94	266.37	264.52	266.98	86.15	4.97
4091.00	100.70	86.90	3816.29	19.64	297.75	295.72	298.40	86.23	.94
4122.00	100.50	87.70	3810.59	21.07	328.19	325.98	328.87	86.33	2.62
4154.00	100.10	88.40	3804.87	22.14	359.66	357.30	360.34	86.48	2.49
4186.00	99.90	89.10	3799.31	22.83	391.16	388.69	391.83	86.66	2.24
4217.00	100.10	89.40	3793.93	23.23	421.69	419.11	422.33	86.85	1.15
4248.00	96.30	89.80	3789.51	23.44	452.37	449.70	452.97	87.03	12.32
4280.00	96.10	90.00	3786.05	23.50	484.18	481.44	484.75	87.22	.88
4312.00	95.50	88.70	3782.82	23.86	516.01	513.17	516.56	87.35	4.46

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
				FT	FT	FT	Distance FT	Direction Deg	
4343.00	92.00	88.70	3780.79	24.56	546.93	543.97	547.48	87.43	11.29
4374.00	91.00	88.40	3779.98	25.35	577.91	574.83	578.47	87.49	3.37
4405.00	88.20	87.70	3780.20	26.40	608.89	605.66	609.46	87.52	9.31
4436.00	87.30	86.90	3781.41	27.86	639.83	636.43	640.44	87.51	3.88
4465.00	86.20	86.60	3783.06	29.50	668.74	665.16	669.39	87.47	3.93
4496.00	86.00	86.30	3785.17	31.42	699.61	695.82	700.31	87.43	1.16
4528.00	85.70	86.30	3787.48	33.48	731.46	727.46	732.22	87.38	.94
4559.00	85.50	86.30	3789.86	35.47	762.30	758.09	763.12	87.34	.65
4591.00	87.40	87.30	3791.84	37.25	794.19	789.78	795.06	87.31	6.71
4622.00	88.20	88.40	3793.03	38.41	825.14	820.58	826.04	87.33	4.39
4654.00	88.00	88.40	3794.09	39.31	857.11	852.42	858.01	87.37	.62
4685.00	88.00	88.40	3795.17	40.17	888.08	883.26	888.99	87.41	.00
4717.00	89.00	89.10	3796.01	40.87	920.06	915.11	920.97	87.46	3.81
4749.00	88.30	88.40	3796.77	41.57	952.04	946.98	952.95	87.50	3.09
4780.00	89.70	89.40	3797.31	42.16	983.03	977.85	983.94	87.54	5.55
4811.00	90.30	89.80	3797.31	42.38	1014.03	1008.76	1014.92	87.61	2.33
4906.00	90.30	90.50	3796.81	42.13	1109.03	1103.55	1109.83	87.82	.74
4937.00	90.60	92.20	3796.57	41.40	1140.02	1134.52	1140.77	87.92	5.57
4968.00	90.30	92.60	3796.32	40.10	1170.99	1165.51	1171.68	88.04	1.61
5000.00	90.30	92.60	3796.16	38.65	1202.96	1197.50	1203.58	88.16	.00
5031.00	89.70	92.60	3796.16	37.24	1233.93	1228.49	1234.49	88.27	1.94
5063.00	90.10	93.60	3796.21	35.51	1265.88	1260.49	1266.38	88.39	3.37
5094.00	89.40	93.60	3796.35	33.57	1296.82	1291.49	1297.25	88.52	2.26
5125.00	88.90	93.60	3796.81	31.62	1327.75	1322.48	1328.13	88.64	1.61
5157.00	89.20	94.70	3797.34	29.31	1359.66	1354.48	1359.98	88.77	3.56
5188.00	88.70	94.00	3797.90	26.96	1390.57	1385.47	1390.83	88.89	2.77
5220.00	88.50	94.30	3798.69	24.64	1422.47	1417.46	1422.69	89.01	1.13
5250.00	89.20	95.40	3799.29	22.10	1452.36	1447.45	1452.53	89.13	4.35
5282.00	88.50	95.70	3799.93	19.01	1484.20	1479.43	1484.33	89.27	2.38
5313.00	88.00	96.10	3800.88	15.83	1515.02	1510.40	1515.11	89.40	2.07
5345.00	89.00	96.10	3801.72	12.43	1546.83	1542.36	1546.88	89.54	3.12
5439.00	90.60	95.40	3802.04	3.01	1640.36	1636.31	1640.36	89.89	1.86
5470.00	90.30	94.70	3801.80	.28	1671.23	1667.30	1671.23	89.99	2.46
5502.00	89.70	94.30	3801.80	-2.23	1703.13	1699.30	1703.14	90.08	2.25
5533.00	89.20	94.70	3802.10	-4.66	1734.04	1730.30	1734.04	90.15	2.07
5565.00	90.40	95.00	3802.21	-7.37	1765.92	1762.29	1765.94	90.24	3.87
5596.00	90.30	95.00	3802.02	-10.07	1796.80	1793.29	1796.83	90.32	.32
5628.00	89.60	95.00	3802.05	-12.86	1828.68	1825.28	1828.73	90.40	2.19
5658.00	89.70	94.70	3802.23	-15.40	1858.57	1855.28	1858.64	90.47	1.05
5690.00	89.40	96.10	3802.48	-18.41	1890.43	1887.27	1890.52	90.56	4.47

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
5721.00	89.00	95.40	3802.92	-21.51	1921.27	1918.25	1921.39	90.64	2.60
5784.00	90.80	96.10	3803.03	-27.82	1983.95	1981.21	1984.15	90.80	3.07
5847.00	93.10	95.70	3800.88	-34.30	2046.58	2044.13	2046.86	90.96	3.71
5910.00	92.60	95.70	3797.75	-40.55	2109.19	2107.02	2109.58	91.10	.79
5973.00	92.00	95.40	3795.22	-46.63	2171.84	2169.95	2172.34	91.23	1.06
6035.00	90.60	94.70	3793.81	-52.09	2233.58	2231.92	2234.19	91.34	2.52
6098.00	89.60	94.70	3793.70	-57.25	2296.37	2294.91	2297.08	91.43	1.59
6160.00	91.70	93.30	3793.00	-61.58	2358.21	2356.90	2359.01	91.50	4.07
6223.00	91.10	93.30	3791.46	-65.20	2421.09	2419.88	2421.96	91.54	.95
6285.00	90.30	92.20	3790.70	-68.18	2483.01	2481.86	2483.94	91.57	2.19
6348.00	90.30	92.20	3790.37	-70.59	2545.96	2544.83	2546.94	91.59	.00
6411.00	89.40	91.50	3790.54	-72.63	2608.93	2607.79	2609.94	91.59	1.81
6473.00	89.20	92.60	3791.30	-74.84	2670.88	2669.75	2671.93	91.61	1.80
6598.00	88.00	92.20	3794.35	-80.08	2795.73	2794.67	2796.88	91.64	1.01
6724.00	86.20	92.20	3800.73	-84.91	2921.47	2920.44	2922.71	91.66	1.43
6851.00	87.40	92.60	3807.81	-90.22	3048.16	3047.20	3049.50	91.70	1.00
6976.00	87.30	93.60	3813.59	-96.97	3172.84	3172.05	3174.32	91.75	.80
7102.00	85.50	93.60	3821.51	-104.87	3298.34	3297.79	3300.01	91.82	1.43
7230.00	83.60	91.90	3833.66	-110.98	3425.61	3425.18	3427.40	91.86	1.99
7261.00	82.90	91.20	3837.31	-111.82	3456.38	3455.94	3458.19	91.85	3.18

Projected @ Bit									
7306.00	82.20	91.20	3843.14	-112.75	3500.99	3500.51	3502.80	91.84	1.56

30-039-26064 JIC 457-9 #2 PC

SURF: 695 FN -731 FW
 113 -3501
 808 FN 1048 FE