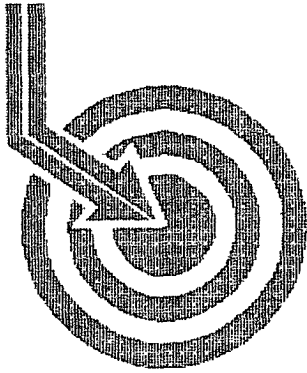




Scientific Drilling

MACK ENERGY

Field: Four Mile Draw
Site: Eddy County, NM
Well: Fuzzy State #1H
Wellpath: DH - Job #32D0706545
Survey: 07/08/06-07/26/06

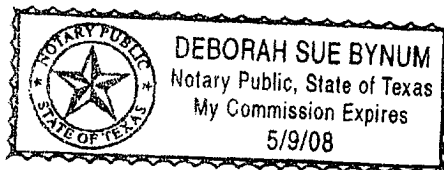
This survey is correct to the best of my knowledge
and is supported by actual field data.

Blwharta.....Company Representative

Notorized this date 7th of September, 2006.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 08/25/2006	Time: 11:38:10	Page: 1
Field: Four Mile Draw	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Fuzzy State #1H	Section (VS) Reference:	Well (0.00N,0.00E,58.69Azi)	
Wellpath: VH - Job#32K0706540	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 07/06/06	Start Date: 07/06/2006
Company: Scientific Drilling Internatio	Engineer: Guebara w/Signal
Tool: Keeper;Keeper Gyro	Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.47	15.52	100.00	0.30	0.40	0.11	0.47	0.41	15.52
200.00	1.18	15.14	199.99	1.34	1.78	0.49	0.71	1.85	15.31
300.00	1.58	11.20	299.96	3.02	4.13	1.03	0.41	4.26	13.94
400.00	2.43	12.19	399.90	5.41	7.56	1.74	0.85	7.75	12.97
500.00	3.04	11.36	499.78	8.67	12.23	2.71	0.61	12.52	12.50
600.00	3.16	11.27	599.64	12.33	17.53	3.77	0.12	17.93	12.14
700.00	3.09	15.80	699.49	16.17	22.83	5.04	0.26	23.38	12.46
800.00	2.70	16.81	799.36	19.90	27.67	6.46	0.39	28.42	13.14
900.00	2.80	20.05	899.24	23.56	32.22	7.98	0.18	33.20	13.91
1000.00	3.44	30.43	999.10	28.11	37.11	10.33	0.85	38.52	15.56
1100.00	3.37	32.52	1098.92	33.39	42.17	13.43	0.14	44.26	17.67
1200.00	3.26	34.43	1198.75	38.62	46.99	16.62	0.16	49.85	19.48
1300.00	2.66	34.10	1298.62	43.33	51.26	19.53	0.60	54.86	20.86
1400.00	1.89	36.00	1398.54	46.96	54.52	21.80	0.77	58.71	21.80
1500.00	0.75	40.97	1498.51	49.10	56.34	23.20	1.14	60.93	22.38
1600.00	0.19	40.29	1598.51	49.88	56.97	23.74	0.56	61.71	22.62
1700.00	0.16	283.60	1698.51	49.94	57.12	23.71	0.30	61.85	22.54
1800.00	0.36	262.26	1798.51	49.55	57.12	23.26	0.22	61.67	22.16
1900.00	0.29	257.81	1898.50	49.03	57.02	22.70	0.07	61.37	21.71
2000.00	0.30	263.06	1998.50	48.55	56.93	22.19	0.03	61.11	21.30
2100.00	0.29	271.98	2098.50	48.10	56.91	21.68	0.05	60.90	20.86
2200.00	0.25	261.00	2198.50	47.69	56.89	21.21	0.07	60.71	20.45
2300.00	0.22	232.11	2298.50	47.29	56.73	20.85	0.12	60.44	20.17
2400.00	0.24	229.65	2398.50	46.90	56.48	20.53	0.02	60.10	19.98
2500.00	0.38	223.85	2498.50	46.37	56.11	20.15	0.14	59.61	19.75
2600.00	0.39	196.07	2598.50	45.80	55.54	19.82	0.19	58.97	19.64
2700.00	0.34	221.26	2698.49	45.26	54.99	19.53	0.17	58.36	19.55
2800.00	0.52	228.76	2798.49	44.53	54.47	18.99	0.19	57.68	19.23
2900.00	0.66	227.49	2898.49	43.52	53.78	18.23	0.14	56.78	18.72
3000.00	0.66	227.93	2998.48	42.39	53.00	17.38	0.01	55.78	18.15
3100.00	0.54	222.03	3098.47	41.37	52.27	16.63	0.13	54.85	17.65
3200.00	0.45	198.02	3198.47	40.63	51.54	16.20	0.22	54.03	17.44
3300.00	0.57	136.97	3298.47	40.43	50.81	16.41	0.53	53.39	17.90
3400.00	0.82	126.49	3398.46	40.80	50.02	17.33	0.28	52.94	19.11
3500.00	1.03	114.29	3498.45	41.58	49.22	18.72	0.29	52.66	20.83
3600.00	1.61	105.80	3598.42	43.04	48.47	20.89	0.61	52.78	23.32
3700.00	2.15	106.75	3698.36	45.25	47.55	24.04	0.54	53.28	26.82
3800.00	3.26	107.51	3798.25	48.38	46.15	28.55	1.11	54.27	31.74
3900.00	3.50	109.42	3898.08	52.18	44.28	34.14	0.27	55.91	37.63
4000.00	3.22	109.64	3997.91	55.88	42.32	39.67	0.28	58.00	43.14
4100.00	2.98	110.87	4097.76	59.25	40.45	44.74	0.25	60.32	47.88
4200.00	2.79	110.44	4197.63	62.35	38.68	49.45	0.19	62.78	51.97
4300.00	2.43	112.92	4297.53	65.09	37.00	53.68	0.38	65.20	55.42
4400.00	2.62	97.71	4397.43	68.11	35.87	57.90	0.69	68.11	58.22
4420.00	2.73	92.67	4417.41	68.86	35.79	58.83	1.30	68.86	58.69



Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 08/25/2006	Time: 16:08:36	Page: 1
Field: Four Mile Draw	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Fuzzy State #1H	Section (VS) Reference:	Well (0.00N,0.00E,58.69Azi)	
Wellpath: DH - Job #32D0706545	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 07/08/06-07/26/06	Start Date: 07/08/2006
MWD 3900'-8073'	
Company: Scientific Drilling Internatio	Engineer: Johns/Stutzman
Tool: Keeper;Keeper Gyro	Tied-to: User Defined

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
3900.00	3.50	109.42	3898.08	52.18	44.28	34.14	0.00	55.91	37.63
3950.00	5.99	41.88	3947.94	55.65	45.72	37.32	11.33	59.02	39.23
4000.00	11.58	31.87	3997.33	62.63	51.93	41.72	11.55	66.61	38.78
4050.00	17.43	33.55	4045.72	73.90	62.44	48.51	11.73	79.07	37.85
4100.00	23.17	33.99	4092.59	89.63	76.85	58.16	11.48	96.37	37.12
4150.00	28.84	30.91	4137.51	109.25	95.37	69.86	11.65	118.22	36.23
4200.00	34.47	22.14	4180.08	131.32	118.85	81.41	14.52	144.06	34.41
4250.00	39.82	15.03	4219.94	154.29	147.45	90.90	13.70	173.22	31.65
4300.00	45.68	8.55	4256.66	177.37	180.65	97.72	14.64	205.38	28.41
4363.00	51.91	3.29	4298.16	205.93	227.75	102.50	11.71	249.75	24.23
4413.00	57.62	358.44	4327.00	227.61	268.55	103.06	13.89	287.64	20.99
4463.00	63.22	352.29	4351.69	247.05	311.83	99.48	15.48	327.32	17.69
4513.00	69.40	350.42	4371.77	264.67	357.07	92.59	12.83	368.88	14.54
4563.00	87.11	350.64	4381.91	282.82	405.17	84.57	35.42	413.90	11.79
4713.00	87.24	350.73	4389.30	338.93	553.01	60.32	0.11	556.29	6.22
4723.00	88.20	350.75	4389.70	342.68	562.87	58.71	9.60	565.93	5.95
4746.00	88.31	353.90	4390.40	351.90	585.65	55.64	13.70	588.29	5.43
4778.00	87.77	357.40	4391.50	366.40	617.54	53.21	11.06	619.83	4.93
4809.00	86.90	358.00	4392.94	381.42	648.48	51.97	3.41	650.56	4.58
4841.00	86.53	356.70	4394.77	396.74	680.39	50.49	4.22	682.26	4.24
4873.00	88.89	357.30	4396.05	411.90	712.32	48.82	7.61	713.99	3.92
4905.00	90.76	358.20	4396.15	427.45	744.29	47.56	6.49	745.81	3.66
4937.00	90.67	358.70	4395.75	443.33	776.28	46.70	1.59	777.68	3.44
4968.00	91.01	359.30	4395.29	458.97	807.27	46.16	2.22	808.59	3.27
5000.00	91.42	359.70	4394.62	475.36	839.26	45.88	1.79	840.51	3.13
5032.00	89.37	359.60	4394.39	491.82	871.26	45.68	6.41	872.45	3.00
5064.00	88.95	359.30	4394.86	508.19	903.25	45.38	1.61	904.39	2.88
5095.00	88.48	358.70	4395.56	523.83	934.24	44.84	2.46	935.32	2.75
5159.00	88.75	359.70	4397.11	556.31	998.21	43.94	1.62	999.18	2.52
5192.00	88.58	359.80	4397.87	573.34	1031.21	43.80	0.60	1032.13	2.43
5223.00	88.42	359.80	4398.69	589.35	1062.19	43.69	0.52	1063.09	2.36
5254.00	87.75	359.30	4399.72	605.24	1093.18	43.45	2.70	1094.04	2.28
5286.00	89.66	358.00	4400.45	621.22	1125.16	42.69	7.22	1125.97	2.17
5315.00	89.29	358.80	4400.71	635.59	1154.14	41.88	3.04	1154.90	2.08
5350.00	90.64	358.20	4400.73	652.99	1189.13	40.97	4.22	1189.84	1.97
5445.00	90.88	357.60	4399.47	699.35	1284.06	37.49	0.68	1284.61	1.67
5509.00	90.87	357.20	4398.50	730.10	1347.98	34.58	0.63	1348.43	1.47
5572.00	88.82	357.60	4398.67	760.36	1410.92	31.73	3.32	1411.27	1.29
5668.00	89.02	356.80	4400.47	806.18	1506.78	27.04	0.86	1507.03	1.03
5763.00	89.71	355.10	4401.53	849.69	1601.54	20.33	1.93	1601.67	0.73
5858.00	89.06	358.80	4402.55	894.66	1696.38	15.27	3.95	1696.45	0.52
5953.00	88.96	358.00	4404.19	941.74	1791.33	12.62	0.85	1791.37	0.40
5985.00	88.89	357.70	4404.79	957.33	1823.30	11.42	0.96	1823.33	0.36
6017.00	88.92	357.70	4405.40	972.85	1855.27	10.14	0.09	1855.30	0.31
6049.00	90.10	358.72	4405.67	988.61	1887.25	9.14	4.87	1887.27	0.28
6081.00	90.07	358.50	4405.63	1004.58	1919.24	8.36	0.69	1919.26	0.25
6113.00	90.20	358.50	4405.55	1020.48	1951.23	7.52	0.41	1951.24	0.22
6145.00	91.81	359.12	4404.99	1036.54	1983.22	6.86	5.39	1983.23	0.20
6176.00	91.10	359.44	4404.20	1052.31	2014.20	6.47	2.51	2014.21	0.18



Scientific Drilling International Survey Report

Company: MACK ENERGY
Field: Four Mile Draw
Site: Eddy County, NM
Well: Fuzzy State #1H
Wellpath: DH - Job #32D0706545

Date: 08/25/2006 **Time:** 16:08:36 **Page:** 2
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,58.69Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
6208.00	91.08	359.40	4403.59	1068.66	2046.20	6.15	0.14	2046.21	0.17
6240.00	91.15	359.58	4402.97	1085.04	2078.19	5.86	0.60	2078.20	0.16
6272.00	91.05	359.81	4402.36	1101.53	2110.18	5.69	0.78	2110.19	0.15
6304.00	89.73	0.67	4402.14	1118.27	2142.18	5.83	4.92	2142.19	0.16
6335.00	89.63	0.80	4402.31	1134.72	2173.18	6.22	0.53	2173.19	0.16
6367.00	89.63	0.49	4402.52	1151.66	2205.17	6.58	0.97	2205.18	0.17
6399.00	89.46	0.42	4402.77	1168.50	2237.17	6.84	0.57	2237.18	0.18
6431.00	89.46	0.36	4403.08	1185.32	2269.17	7.06	0.19	2269.18	0.18
6463.00	89.09	0.16	4403.48	1202.07	2301.17	7.20	1.31	2301.18	0.18
6494.00	89.19	359.80	4403.95	1218.17	2332.16	7.19	1.21	2332.17	0.18
6526.00	88.82	0.38	4404.50	1234.84	2364.16	7.24	2.15	2364.17	0.18
6558.00	89.26	0.50	4405.04	1251.68	2396.15	7.49	1.43	2396.16	0.18
6590.00	89.19	0.49	4405.47	1268.54	2428.15	7.76	0.22	2428.16	0.18
6621.00	89.43	0.65	4405.84	1284.92	2459.15	8.07	0.93	2459.16	0.19
6653.00	89.06	359.70	4406.27	1301.63	2491.14	8.17	3.19	2491.16	0.19
6685.00	88.95	0.15	4406.82	1318.22	2523.14	8.13	1.45	2523.15	0.18
6717.00	89.23	0.17	4407.33	1334.92	2555.13	8.22	0.88	2555.15	0.18
6748.00	89.50	358.90	4407.67	1350.82	2586.13	7.96	4.19	2586.14	0.18
6780.00	89.49	359.10	4407.95	1366.97	2618.12	7.41	0.63	2618.13	0.16
6812.00	89.26	359.30	4408.30	1383.21	2650.12	6.96	0.95	2650.13	0.15
6844.00	89.09	359.00	4408.76	1399.44	2682.11	6.48	1.08	2682.12	0.14
6876.00	89.97	358.91	4409.03	1415.56	2714.10	5.90	2.76	2714.11	0.12
6907.00	90.27	358.77	4408.96	1431.13	2745.10	5.27	1.07	2745.10	0.11
6939.00	89.97	358.41	4408.90	1447.09	2777.09	4.49	1.46	2777.09	0.09
6971.00	90.03	358.36	4408.90	1462.94	2809.08	3.58	0.24	2809.08	0.07
7003.00	90.03	358.01	4408.88	1478.70	2841.06	2.57	1.09	2841.06	0.05
7034.00	89.56	359.45	4408.99	1494.22	2872.05	1.88	4.89	2872.05	0.04
7066.00	89.33	359.23	4409.30	1510.53	2904.05	1.52	0.99	2904.05	0.03
7098.00	89.49	358.70	4409.63	1526.66	2936.04	0.94	1.73	2936.04	0.02
7130.00	89.83	359.47	4409.82	1542.85	2968.04	0.43	2.63	2968.04	0.01
7162.00	90.30	0.36	4409.78	1559.44	3000.03	0.38	3.15	3000.03	0.01
7193.00	90.27	0.28	4409.63	1575.70	3031.03	0.55	0.28	3031.03	0.01
7225.00	90.44	0.24	4409.43	1592.46	3063.03	0.70	0.55	3063.03	0.01
7257.00	91.21	0.30	4408.97	1609.21	3095.03	0.85	2.41	3095.03	0.02
7289.00	91.41	0.09	4408.24	1625.93	3127.02	0.96	0.91	3127.02	0.02
7320.00	91.51	0.50	4407.45	1642.17	3158.01	1.12	1.36	3158.01	0.02
7352.00	91.38	0.34	4406.64	1659.00	3190.00	1.35	0.64	3190.00	0.02
7384.00	90.98	0.15	4405.98	1675.74	3221.99	1.49	1.38	3221.99	0.03
7416.00	90.44	359.60	4405.59	1692.31	3253.99	1.42	2.41	3253.99	0.02
7447.00	90.10	359.10	4405.44	1708.12	3284.99	1.07	1.95	3284.99	0.02
7479.00	89.83	358.40	4405.46	1724.15	3316.98	0.37	2.34	3316.98	0.01
7511.00	89.53	358.60	4405.64	1740.06	3348.97	-0.47	1.13	3348.97	359.99
7543.00	89.16	358.20	4406.00	1755.92	3380.95	-1.36	1.70	3380.95	359.98
7574.00	89.80	358.70	4406.28	1771.31	3411.94	-2.20	2.62	3411.94	359.96
7606.00	89.87	359.00	4406.38	1787.38	3443.93	-2.84	0.96	3443.93	359.95
7638.00	89.90	358.80	4406.44	1803.49	3475.93	-3.46	0.63	3475.93	359.94
7670.00	89.76	358.20	4406.54	1819.40	3507.92	-4.30	1.93	3507.92	359.93
7701.00	89.73	357.91	4406.67	1834.60	3538.90	-5.35	0.94	3538.90	359.91
7733.00	90.17	359.20	4406.70	1850.53	3570.89	-6.15	4.26	3570.89	359.90
7765.00	90.27	359.40	4406.58	1866.83	3602.88	-6.55	0.70	3602.89	359.90
7797.00	90.20	359.91	4406.45	1883.29	3634.88	-6.74	1.61	3634.89	359.89
7828.00	90.20	358.90	4406.34	1899.13	3665.88	-7.06	3.26	3665.89	359.89



Scientific
Drilling

Scientific Drilling International

Survey Report

Company: MACK ENERGY
Field: Four Mile Draw
Site: Eddy County, NM
Well: Fuzzy State #1H
Wellpath: DH - Job #32D0706545

Date: 08/25/2006 Time: 16:08:36 Page: 3
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,58.69Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

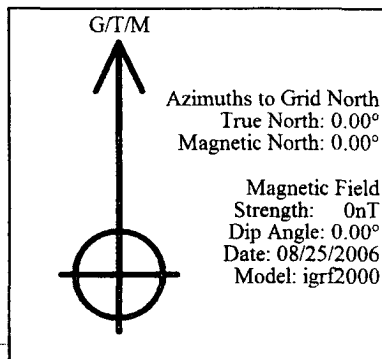
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
7860.00	90.17	359.20	4406.24	1915.30	3697.88	-7.59	0.94	3697.88	359.88
7892.00	90.17	358.60	4406.14	1931.41	3729.87	-8.21	1.87	3729.88	359.87
7924.00	90.03	358.50	4406.09	1947.34	3761.86	-9.02	0.54	3761.87	359.86
7955.00	90.13	358.30	4406.04	1962.70	3792.85	-9.88	0.72	3792.86	359.85
7987.00	90.13	357.80	4405.97	1978.39	3824.83	-10.97	1.56	3824.84	359.84
8018.00	90.17	357.75	4405.89	1993.46	3855.80	-12.17	0.21	3855.82	359.82
8050.00	90.13	357.60	4405.80	2008.97	3887.78	-13.47	0.49	3887.80	359.80
8073.00	90.13	357.60	4405.75	2020.09	3910.76	-14.43	0.00	3910.78	359.79



**Scientific
Drilling**

Field: Four Mile Draw
Site: Eddy County, NM
Well: Fuzzy State #1H
Wellpath: DH - Job #32D0706545
Survey: 07/08/06-07/26/06



South(-)/North(+) [500ft/in]

