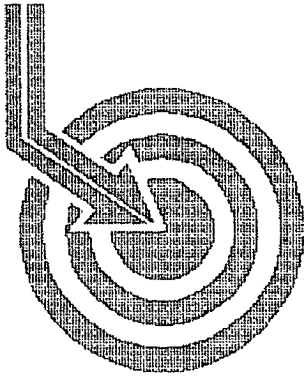


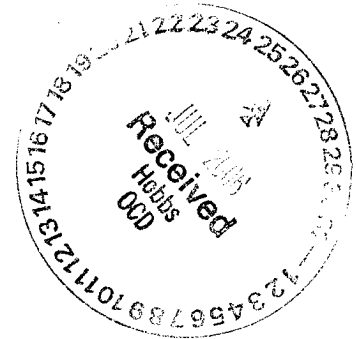


Scientific Drilling

SUR @ C-24-16s-33e, 75/N & 1650/W
BHL @ C-24-16s-33e, 305/N & 1625/W
API # 30-025-37813

MACK ENERGY

Field: Hume
Site: Lea County, NM
Well: Black Bass State #1
Wellpath: DH - Job #32D0506368
Survey: 05/08/06-05/17/06



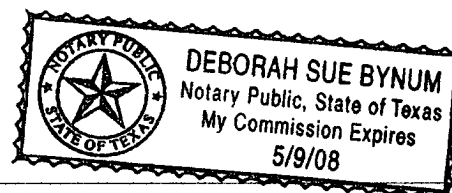
This survey is correct to the best of my knowledge
and is supported by actual field data.

Shanton Company Representative

Notorized this date 10th of July, 2006.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 06/20/2006	Time: 20:35:06	Page: 1
Field: Hume	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Black Bass State #1	Section (VS) Reference:	Well (0.00N,0.00E,180.00Azi)	
Wellpath: VH - Job #32K0506372	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 05/09/06 KSRG 0'-1621'	Start Date: 05/09/2006
Company: Scientific Drilling Internatio	Engineer: Guebara/Carter 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	359.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.46	234.93	100.00	0.23	-0.23	-0.33	0.46	0.40	234.93
200.00	0.50	221.66	200.00	0.79	-0.79	-0.95	0.12	1.23	230.27
300.00	0.40	222.27	299.99	1.37	-1.37	-1.47	0.10	2.01	227.02
400.00	0.53	220.20	399.99	1.98	-1.98	-2.01	0.13	2.82	225.32
500.00	0.21	241.77	499.99	2.42	-2.42	-2.47	0.34	3.46	225.49
600.00	0.17	157.32	599.99	2.65	-2.65	-2.57	0.26	3.69	224.15
700.00	1.02	234.31	699.98	3.30	-3.30	-3.24	1.00	4.62	224.41
800.00	1.40	245.27	799.96	4.33	-4.33	-5.07	0.44	6.67	229.47
900.00	1.09	254.85	899.93	5.09	-5.09	-7.10	0.37	8.73	234.33
1000.00	0.68	265.78	999.92	5.38	-5.38	-8.61	0.44	10.15	237.96
1100.00	0.65	240.54	1099.92	5.71	-5.71	-9.69	0.29	11.25	239.50
1200.00	0.40	252.13	1199.91	6.09	-6.09	-10.52	0.27	12.15	239.91
1300.00	0.43	234.10	1299.91	6.42	-6.42	-11.15	0.13	12.87	240.07
1400.00	0.43	260.80	1399.91	6.70	-6.70	-11.83	0.20	13.59	240.47
1500.00	0.33	223.70	1499.90	6.97	-6.97	-12.40	0.26	14.22	240.66
1600.00	0.64	215.88	1599.90	7.63	-7.63	-12.92	0.32	15.01	239.44
1621.00	0.73	217.29	1620.90	7.83	-7.83	-13.07	0.44	15.24	239.08



Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 07/10/2006	Time: 11:54:15	Page: 1
Field: Hume	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Black Bass State #1	Section (VS) Reference:	Well (0.00N,0.00E,180.00Azi)	
Wellpath: DH - Job #32D0506368	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 05/08/06-05/17/06 MWD 1652'-5220'	Start Date: 05/08/2006
Company: Scientific Drilling Internatio	Engineer: Pratka/Hernandez
Tool: MWD;MWD	Tied-to: From: Definitive Path

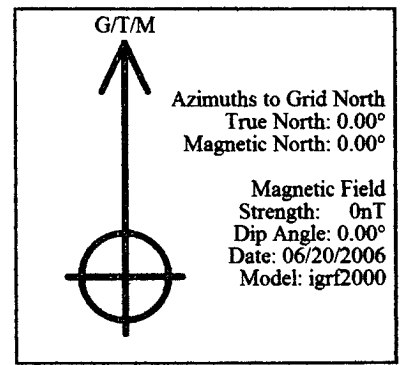
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1621.00	0.73	217.29	1620.90	7.83	-7.83	-13.07	0.00	15.24	239.08
1721.00	3.49	196.39	1720.82	11.23	-11.23	-14.41	2.82	18.27	232.06
1821.00	6.68	195.92	1820.42	19.70	-19.70	-16.77	3.18	25.87	220.41
1921.00	7.60	193.90	1919.60	32.05	-32.05	-20.11	0.96	37.84	212.11
2021.00	7.97	207.22	2018.68	44.71	-44.71	-24.68	1.84	51.07	208.90
2121.00	7.89	189.02	2117.74	57.61	-57.61	-29.08	2.50	64.53	206.78
2221.00	9.11	168.54	2216.66	72.20	-72.20	-28.43	3.24	77.59	201.49
2321.00	9.28	168.72	2315.37	87.86	-87.86	-25.29	0.18	91.42	196.06
2421.00	9.44	168.35	2414.03	103.88	-103.88	-22.04	0.17	106.19	191.98
2521.00	9.20	168.99	2512.72	119.68	-119.68	-18.77	0.26	121.15	188.91
2621.00	9.08	170.94	2611.43	135.42	-135.42	-16.13	0.33	136.37	186.79
2721.00	8.66	169.89	2710.23	150.64	-150.64	-13.53	0.45	151.25	185.13
2821.00	8.29	169.30	2809.15	165.09	-165.09	-10.89	0.39	165.45	183.77
2921.00	8.06	169.18	2908.13	179.04	-179.04	-8.20	0.23	179.23	182.62
3021.00	7.81	169.71	3007.18	192.62	-192.62	-5.66	0.26	192.71	181.68
3121.00	6.35	168.51	3106.36	205.09	-205.09	-3.35	1.46	205.12	180.93
3221.00	5.64	166.38	3205.85	214.96	-214.96	-1.13	0.75	214.96	180.30
3321.00	4.60	182.67	3305.44	223.86	-223.86	0.14	1.78	223.86	179.96
3421.00	4.75	183.63	3405.12	231.84	-231.84	-0.54	0.17	231.84	180.13
3521.00	2.76	164.50	3504.89	238.44	-238.44	-0.20	2.32	238.44	180.05
3621.00	2.52	164.46	3604.79	242.84	-242.84	1.03	0.24	242.84	179.76
3721.00	2.60	163.90	3704.69	247.17	-247.17	2.25	0.09	247.18	179.48
3821.00	2.01	163.97	3804.60	251.27	-251.27	3.47	0.59	251.30	179.21
3921.00	0.46	178.12	3904.57	253.09	-253.09	3.83	1.57	253.12	179.13
4021.00	0.25	173.72	4004.57	253.68	-253.68	3.91	0.21	253.71	179.12
4121.00	0.22	245.93	4104.57	254.01	-254.01	3.81	0.28	254.04	179.14
4221.00	0.33	295.68	4204.57	253.95	-253.95	3.24	0.25	253.97	179.27
4321.00	0.40	243.36	4304.57	253.84	-253.84	2.76	0.33	253.85	179.38
4421.00	0.81	224.28	4404.56	254.62	-254.62	1.97	0.46	254.62	179.56
4521.00	0.96	282.53	4504.55	254.94	-254.94	0.66	0.87	254.94	179.85
4621.00	1.27	298.37	4604.53	254.08	-254.08	-1.21	0.43	254.08	180.27
4721.00	1.36	299.24	4704.50	252.97	-252.97	-3.21	0.10	252.99	180.73
4821.00	1.30	306.12	4804.48	251.73	-251.73	-5.23	0.17	251.78	181.19
4921.00	1.44	313.97	4904.45	250.21	-250.21	-7.00	0.23	250.31	181.60
5021.00	1.37	310.93	5004.42	248.50	-248.50	-8.81	0.10	248.66	182.03
5121.00	1.44	319.65	5104.39	246.80	-246.80	-10.54	0.23	247.03	182.44
5220.00	1.31	317.27	5203.36	245.00	-245.00	-12.11	0.15	245.30	182.83



**Scientific
Drilling**

Field: Hume
Site: Lea County, NM
Well: Black Bass State #1
Wellpath: DH - Job #32D0506368
Survey: 05/08/06-05/17/06



West(-)/East(+) [50ft/in]

South(-)/North(+) [50ft/in]

