

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTSUBMIT IN DUPLICATE*
(See other in-
struction on
reverse side)FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____		5. LEASE DESIGNATION AND SERIAL NO NM-97850					
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME					
2. NAME OF OPERATOR Mack Energy Corporation		7. UNIT AGREEMENT NAME					
3. ADDRESS AND TELEPHONE NO. P.O. Box 960, Artesia, NM 88211-0960 (505) 748-1288		8. FARM OR LEASE NAME, WELL NO Southgate Federal #1					
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 735 FNL & 760 FWL At top prod. interval reported below 1114 FNL & 713 FWL At total depth 722 FSL & 654 FWL		9. API WELL NO 30-015-35203					
10. FIELD AND POOL, OR WILDCAT Wildcat Wolfcamp		11. SEC., T, R, M, OR BLOCK AND SURVEY OR AREA Sec. 35 T18S R23E					
12. COUNTY OR PARISH Eddy		13. STATE NM					
14. PERMIT NO.		DATE ISSUED					
15. DATE SPUEDDED 10/22/06		16. DATE T.D. REACHED 12/2/06					
17. DATE COMPL. (Ready to prod.) 1/11/07		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3910' RKB					
19. ELEV CASING HEAD 3894' GR		20. TOTAL DEPTH, MD & TVD 8416					
21. PLUG, BACK T.D., MD & TVD 8399		22. IF MULTIPLE COMPL., HOW MANY*					
23. INTERVALS DRILLED BY →		ROTARY TOOLS Yes					
24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* 4916-8094', Wolfcamp		25. WAS DIRECTIONAL SURVEY MADE Yes					
26. TYPE ELECTRIC AND OTHER LOGS RUN Gamma Ray, Neutron, Density, Lateralog, Spectral Gamma Ray		27. WAS WELL CORED No					
28. CASING RECORD (Report all strings set in well)							
CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED		
13 3/8, H-40	48	479	17 1/2	980sx	None		
9 5/8, J-55	36	1409	12 1/4	800sx	None		
5 1/2, L-80	17	8416	7 7/8	1940sx	None		
29. LINER RECORD				30. TUBING RECORD			
SIZE	T O P (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4140	4140
31. PERFORATION RECORD (Interval, size and number) 4916-8094', .41, 180				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC			
				DEPTH INTERVAL (MD)			
				AMOUNT AND KIND OF MATERIAL USED			
				4916-8094'			
				See 3160-5 for detail			
33. PRODUCTION							
DATE FIRST PRODUCTION N/A		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) Flowing				WELL STATUS (Producing or shut-in) Shut-in	
DATE OF TEST N/A	HOURS TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD →	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO 0
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL-BBL.	GAS-MCF.	WATER - BBL.	OIL GRAVITY - API (CORR)	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Shut-in							

35. LIST OF ATTACHMENTS

Deviation Survey and Logs

36 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE

Production Clerk

AUG 9 2007

DATE 7/6/07

*(See Instructions and spaces for Additional Data on Reverse Side) JERRY FANT
PETROLEUM GEOLOGIST

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES- (Show all important zones of porosity and contents thereof, cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)

38.

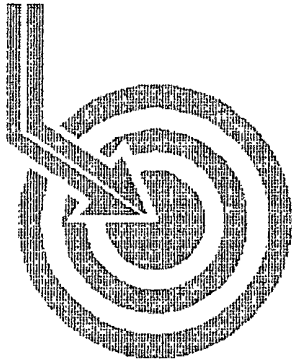
GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC	NAME	TOP	
					MEAS DEPTH	TRUE VERT DEPTH
Wildcat Wolfcamp	4916	8094		Glorietta	1536	
				Tubb	2855	
				Abo	3520	
				Wolfcamp	4628	

RECEIVED

2017 JUL 10 PM 2:04

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Scientific Drilling

MACK ENERGY

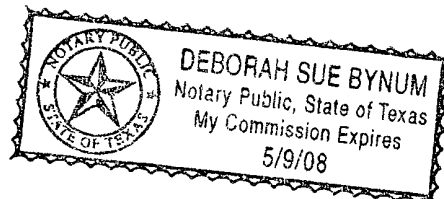
Field: Wildcat
Site: Eddy County, NM
Well: Southgate Federal #1H
Wellpath: DH - Job #32D1006873/993
Survey: 11/02/06-12/01/06

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

.....*Wharton*.....Company Representative

Notorized this date 4th of April, 2007.

Deborah Sue Bynum
Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International Survey Report

Company: MACK ENERGY
Field: Wildcat
Site: Eddy County, NM
Well: Southgate Federal #1H
Wellpath: VH- Job #32K1106923

Date: 04/04/2007 Time: 11:06:46 Page: 1
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,181.47Az)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 11/11/06 Start Date: 11/11/2006
Company: Scientific Drilling Internatio Engineer: Gonzales w/P&M
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	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	1.48	18.30	99.99	-1.24	1.23	0.41	1.48	1.29	18.30
200.00	1.72	15.67	199.95	-3.93	3.90	1.22	0.25	4.08	17.33
300.00	2.62	15.01	299.88	-7.60	7.55	2.21	0.90	7.87	16.34
400.00	4.16	13.36	399.70	-13.38	13.29	3.64	1.54	13.78	15.34
500.00	5.04	10.82	499.38	-21.26	21.13	5.31	0.90	21.79	14.10
600.00	5.66	8.95	598.94	-30.48	30.32	6.90	0.64	31.09	12.82
700.00	6.91	6.27	698.34	-41.37	41.17	8.32	1.28	42.00	11.43
800.00	8.56	3.84	797.42	-54.80	54.57	9.48	1.68	55.39	9.85
900.00	8.80	359.90	896.28	-69.88	69.65	9.96	0.64	70.36	8.14
1000.00	8.25	349.99	995.18	-84.56	84.36	8.70	1.57	84.81	5.89
1100.00	7.03	344.27	1094.29	-97.44	97.32	5.80	1.44	97.49	3.41
1200.00	3.28	323.64	1193.88	-105.55	105.52	2.44	4.12	105.55	1.32
1300.00	1.92	288.99	1293.78	-108.31	108.37	-0.84	2.02	108.37	359.56
1400.00	1.44	261.09	1393.74	-108.59	108.72	-3.67	0.93	108.78	358.07
1500.00	1.46	264.24	1493.70	-108.20	108.40	-6.17	0.08	108.57	356.74
1600.00	1.39	263.78	1593.67	-107.88	108.14	-8.65	0.07	108.48	355.43
1700.00	1.31	263.55	1693.65	-107.56	107.88	-10.99	0.08	108.43	354.18
1800.00	1.24	264.53	1793.62	-107.27	107.64	-13.20	0.07	108.45	353.01
1900.00	0.99	253.49	1893.60	-106.87	107.30	-15.11	0.33	108.35	351.98
2000.00	0.99	256.79	1993.59	-106.39	106.85	-16.78	0.06	108.16	351.08
2100.00	1.02	249.53	2093.57	-105.84	106.34	-18.45	0.13	107.93	350.16
2200.00	0.94	243.66	2193.56	-105.12	105.67	-20.02	0.13	107.55	349.27
2300.00	0.88	244.07	2293.54	-104.38	104.97	-21.45	0.06	107.14	348.45
2400.00	0.89	242.14	2393.53	-103.65	104.27	-22.82	0.03	106.74	347.65
2500.00	0.88	246.75	2493.52	-102.95	103.60	-24.22	0.07	106.40	346.84
2600.00	0.91	244.04	2593.51	-102.26	102.95	-25.64	0.05	106.10	346.02
2700.00	0.87	238.33	2693.50	-101.48	102.21	-27.00	0.10	105.71	345.20
2800.00	0.81	236.86	2793.49	-100.66	101.42	-28.23	0.06	105.28	344.44
2900.00	1.00	230.54	2893.47	-99.69	100.48	-29.50	0.21	104.72	343.64
3000.00	0.97	223.87	2993.46	-98.49	99.32	-30.76	0.12	103.97	342.79
3100.00	0.96	221.23	3093.44	-97.23	98.08	-31.90	0.05	103.13	341.98
3200.00	0.89	220.02	3193.43	-95.97	96.85	-32.95	0.07	102.30	341.21
3300.00	0.99	219.17	3293.42	-94.68	95.59	-34.00	0.10	101.45	340.42
3400.00	1.00	214.15	3393.40	-93.27	94.20	-35.03	0.09	100.50	339.60
3500.00	1.04	215.08	3493.39	-91.78	92.73	-36.04	0.04	99.49	338.76
3600.00	0.89	249.89	3593.37	-90.73	91.72	-37.29	0.59	99.01	337.87
3700.00	1.01	248.40	3693.36	-90.10	91.13	-38.84	0.12	99.06	336.91
3800.00	0.96	249.85	3793.34	-89.45	90.52	-40.45	0.06	99.14	335.92
3900.00	0.89	246.35	3893.33	-88.81	89.92	-41.95	0.09	99.22	334.99
4000.00	0.66	230.61	3993.32	-88.10	89.24	-43.10	0.31	99.10	334.22
4100.00	0.41	209.11	4093.32	-87.41	88.56	-43.72	0.32	98.77	333.73
4200.00	0.32	195.91	4193.32	-86.82	87.98	-43.97	0.12	98.36	333.44
4300.00	0.32	179.01	4293.31	-86.27	87.43	-44.04	0.09	97.90	333.26
4400.00	0.24	208.45	4393.31	-85.81	86.97	-44.14	0.16	97.53	333.09
4500.00	0.30	201.99	4493.31	-85.38	86.54	-44.34	0.07	97.24	332.87
4600.00	0.24	217.49	4593.31	-84.96	86.13	-44.56	0.09	96.98	332.64
4700.00	0.32	196.18	4693.31	-84.52	85.70	-44.77	0.13	96.69	332.42
4800.00	0.31	228.44	4793.31	-84.07	85.25	-45.05	0.18	96.42	332.15



Scientific
Drilling

Scientific Drilling International

Survey Report

Company:	MACK ENERGY	Date:	04/04/2007	Time:	11:06:46	Page:	2
Field:	Wildcat	Co-ordinate(N/E) Reference:	Site: Eddy County NM: Grd North				
Site:	Eddy County NM	Vertical (TVD) Reference:	SITE 0.0				
Well:	Southgate Federal #1H	Section (VS) Reference:	Well (0.00N,0.00E,181.47Azi)				
Wellpath:	VH - Job #32K1106923	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
4900.00	0.66	218.09	4893.30	-83.42	84.62	-45.61	0.36	96.13	331.68
4940.00	0.82	203.90	4933.30	-82.97	84.18	-45.86	0.61	95.86	331.42



Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 04/04/2007	Time: 11:05:56	Page: 1
Field: Wildcat	Co-ordinate(N/E) Reference: Site: Eddy County, NM; Grid: North		
Site: Eddy County, NM	Vertical (TVD) Reference: SITE 0.0		
Well: Southgate Federal #1H	Section (V/S) Reference: Well (0.00N 0.00E 181.47Azi)		
Wellpath: DH: Job #32D1006873/993	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 11/02/06-12/01/06	Start Date: 11/02/2006
MWD 4192'-8354'	
Company: Scientific Drilling Internatio	Engineer: Johns/Barbre/Boyd/Lopez
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
4100.00	0.41	209 11	4093.32	-87.41	88.56	-43.72	0.00	98.77	333.73
4192.00	0.33	197 22	4185.32	-86.86	88.02	-43.96	0.12	98.39	333.46
4248.00	13.06	179.68	4240.82	-80.36	81.51	-43.97	22.76	92.62	331.66
4283.00	16.92	180.40	4274.62	-71.31	72.46	-43.99	11.04	84.77	328.74
4310.00	19.98	179.16	4300.23	-62.77	63.92	-43.95	11.43	77.57	325.49
4341.00	23.21	180.02	4329.05	-51.37	52.51	-43.87	10.47	68.43	320.12
4373.00	25.99	180.26	4358.15	-38.05	39.19	-43.90	8.69	58.85	311.75
4405.00	29.98	180.88	4386.40	-23.04	24.18	-44.06	12.50	50.26	298.76
4436.00	33.40	180.57	4412.77	-6.76	7.90	-44.26	11.04	44.96	280.12
4468.00	37 18	180.30	4438.89	11.72	-10.58	-44.40	11.82	45.65	256.59
4500.00	40.39	180.00	4463.83	31.76	-30.63	-44.45	10.05	53.98	235.43
4530.00	43.46	180.30	4486.15	51.79	-50.67	-44.51	10.26	67.44	221.29
4562.00	46.03	181.50	4508.87	74.32	-73.19	-44.86	8.45	85.85	211.51
4593.00	48.86	181 23	4529.84	97.15	-96.02	-45.41	9.15	106 21	205.31
4623.00	51.92	181.23	4548.96	120.26	-119.12	-45.90	10.20	127.66	201.07
4654.00	55.15	180.97	4567.38	145.19	-144.04	-46.38	10.44	151.33	197.85
4686.00	59.53	180.46	4584.65	172.12	-170.98	-46.71	13.75	177 24	195.28
4718.00	62.23	180.40	4600.22	200.07	-198.93	-46.92	8.44	204.39	193.27
4749.00	64.39	180.10	4614.14	227.75	-226.62	-47.04	7.02	231.45	191.73
4780.00	67.62	180.07	4626.75	256.06	-254.94	-47.09	10 42	259.25	190.46
4813.00	70.95	180.07	4638.42	286.92	-285.80	-47.12	10.09	289.66	189.36
4844.00	75.56	179.78	4647.35	316.58	-315.48	-47.08	14.90	318.97	188.49
4875.00	79.85	179.84	4653.95	346.85	-345.76	-46.98	13.84	348.94	187.74
4909.00	82.79	178.93	4659.08	380.44	-379.37	-46.62	9.04	382.22	187.01
4939.00	84.85	179.89	4662.31	410.24	-409.19	-46.32	7.57	411.80	186.46
4970.00	87.65	180.13	4664.33	441.16	-440.12	-46.32	9.07	442.55	186.01
5001.00	90.13	180.04	4664.93	472.14	-471.11	-46.37	8.01	473.39	185.62
5032.00	90.54	179.47	4664.75	503.13	-502.11	-46.23	2.26	504.23	185.26
5064.00	90.67	179.33	4664.41	535.11	-534.10	-45.90	0.60	536.07	184 91
5097.00	90.17	178.45	4664.17	568.07	-567.10	-45.26	3.07	568.90	184.56
5125.00	90.30	178.58	4664.06	596.03	-595.09	-44.53	0.66	596.75	184.28
5155.00	90 98	179.50	4663.72	626.01	-625.08	-44.03	3.81	626.63	184 03
5186.00	90.44	179.56	4663.34	656.98	-656.08	-43.78	1.75	657.54	183 82
5216.00	89.83	179.98	4663.27	686.97	-686.08	-43.66	2.47	687.46	183.64
5248.00	89.80	181.03	4663.37	718.97	-718.08	-43.94	3.28	719.42	183.50
5279.00	90 10	181.44	4663.40	749.97	-749.07	-44.61	1.64	750 39	183 41
5311.00	89 87	181.33	4663.41	781.97	-781.06	-45.38	0.80	782.38	183.33
5342.00	89.50	181.64	4663.58	812.97	-812.05	-46.18	1.56	813.36	183.26
5374.00	89 26	181.13	4663.92	844.96	-844.04	-46.96	1.76	845.34	183.18
5405.00	88.96	180 66	4664.40	875 96	-875.03	-47.44	1.80	876.31	183.10
5437.00	89.06	180.77	4664.96	907.95	-907.02	-47.84	0.46	908.28	183.02
5468.00	89.33	180.82	4665.39	938.94	-938.02	-48.27	0.89	939.26	182.95
5498.00	89.60	181.07	4665.67	968.94	-968.01	-48.77	1 23	969.24	182 88
5529.00	89.83	180.88	4665.83	999.94	-999.00	-49.29	0.96	1000.22	182.82
5561.00	90.00	180.79	4665.87	1031.94	-1031 00	-49.76	0 60	1032.20	182.76
5592.00	89.43	181.40	4666.03	1062.94	-1062.00	-50.35	2.69	1063.19	182.71
5623.00	89 53	181.97	4666.31	1093.94	-1092.98	-51.26	1.87	1094.18	182.69
5654.00	89.93	181.89	4666.46	1124.93	-1123.96	-52.31	1.32	1125.18	182.66
5685.00	89.60	181.22	4666.58	1155.93	-1154.95	-53.15	2.41	1156.17	182.63



Scientific Drilling International

Survey Report

Company: MACK ENERGY	Date: 04/04/2007	Time: 11:05:56	Page: 2
Field: Wildcat	Co-ordinate(N/E) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE: 0.0	
Well: Southgate Federal #1H	Section (VS) Reference:	Well: (0.00N, 0.00E, 181.47Azi)	
Wellpath: DH - Job #32D1006873/993	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
5717.00	89.53	181.08	4666.83	1187.93	-1186.94	-53.79	0.49	1188.16	182.59
5748.00	89.83	180.69	4667.00	1218.93	-1217.94	-54.27	1.59	1219.15	182.55
5779.00	88.86	181.35	4667.35	1249.93	-1248.93	-54.82	3.78	1250.13	182.51
5812.00	88.12	181.54	4668.22	1282.91	-1281.91	-55.65	2.32	1283.12	182.49
5842.00	88.25	181.53	4669.17	1312.90	-1311.88	-56.46	0.43	1313.10	182.46
5872.00	88.19	181.56	4670.11	1342.89	-1341.86	-57.26	0.22	1343.08	182.44
5903.00	88.32	181.41	4671.05	1373.87	-1372.83	-58.07	0.64	1374.06	182.42
5934.00	88.42	181.28	4671.93	1404.86	-1403.81	-58.80	0.53	1405.04	182.40
5965.00	88.52	181.09	4672.76	1435.85	-1434.79	-59.44	0.69	1436.02	182.37
5996.00	88.65	180.97	4673.52	1466.84	-1465.78	-59.99	0.57	1467.01	182.34
6029.00	88.89	181.06	4674.23	1499.83	-1498.77	-60.58	0.78	1499.99	182.31
6061.00	89.03	181.50	4674.81	1531.82	-1530.75	-61.29	1.44	1531.98	182.29
6091.00	88.79	182.07	4675.38	1561.82	-1560.73	-62.23	2.06	1561.97	182.28
6124.00	88.99	181.70	4676.02	1594.81	-1593.71	-63.31	1.27	1594.97	182.27
6155.00	90.10	181.78	4676.27	1625.81	-1624.69	-64.25	3.59	1625.96	182.26
6186.00	90.87	182.06	4676.01	1656.80	-1655.67	-65.29	2.64	1656.96	182.26
6218.00	90.77	181.68	4675.55	1688.80	-1687.65	-66.34	1.23	1688.96	182.25
6249.00	90.98	181.74	4675.08	1719.80	-1718.64	-67.26	0.70	1719.95	182.24
6279.00	90.87	181.83	4674.59	1749.79	-1748.62	-68.19	0.47	1749.95	182.23
6310.00	90.10	181.23	4674.33	1780.79	-1779.61	-69.02	3.15	1780.94	182.22
6343.00	90.17	180.84	4674.25	1813.79	-1812.60	-69.62	1.20	1813.94	182.20
6372.00	90.77	180.50	4674.01	1842.79	-1841.60	-69.96	2.38	1842.93	182.18
6403.00	90.07	180.37	4673.79	1873.78	-1872.60	-70.19	2.30	1873.91	182.15
6434.00	88.02	180.25	4674.30	1904.77	-1903.59	-70.36	6.62	1904.89	182.12
6466.00	87.41	180.69	4675.58	1936.74	-1935.56	-70.62	2.35	1936.85	182.09
6497.00	87.54	180.34	4676.94	1967.70	-1966.53	-70.90	1.20	1967.81	182.06
6519.04	88.00	180.24	4677.80	1989.72	-1988.55	-71.01	2.14	1989.82	182.05
6528.00	88.18	180.20	4678.10	1998.67	-1997.51	-71.05	2.06	1998.77	182.04
6559.00	88.12	179.10	4679.10	2029.64	-2028.49	-70.86	3.55	2029.73	182.00
6590.00	88.11	179.90	4680.12	2060.61	-2059.47	-70.59	2.58	2060.68	181.96
6621.00	88.15	179.72	4681.13	2091.58	-2090.46	-70.48	0.59	2091.64	181.93
6649.00	88.15	179.69	4682.04	2119.55	-2118.44	-70.34	0.11	2119.61	181.90
6683.00	88.05	179.80	4683.16	2153.51	-2152.42	-70.19	0.44	2153.57	181.87
6713.00	88.96	179.76	4683.95	2183.49	-2182.41	-70.07	3.04	2183.54	181.84
6746.00	88.92	180.00	4684.56	2216.47	-2215.41	-70.01	0.74	2216.51	181.81
6777.00	89.13	180.23	4685.08	2247.46	-2246.40	-70.07	1.00	2247.49	181.79
6808.00	89.76	179.99	4685.39	2278.45	-2277.40	-70.13	2.17	2278.48	181.76
6839.00	89.87	180.69	4685.49	2309.44	-2308.40	-70.31	2.29	2309.47	181.74
6870.00	90.03	181.06	4685.51	2340.44	-2339.40	-70.78	1.30	2340.47	181.73
6901.00	90.37	180.74	4685.40	2371.44	-2370.39	-71.27	1.51	2371.46	181.72
6932.00	90.13	180.52	4685.27	2402.44	-2401.39	-71.61	1.05	2402.46	181.71
6964.00	90.03	179.99	4685.22	2434.43	-2433.39	-71.75	1.69	2434.45	181.69
6995.00	90.20	179.93	4685.16	2465.42	-2464.39	-71.73	0.58	2465.43	181.67
7026.00	90.37	180.09	4685.01	2496.41	-2495.39	-71.74	0.75	2496.42	181.65
7057.00	90.34	180.50	4684.82	2527.40	-2526.39	-71.90	1.33	2527.41	181.63
7088.00	90.64	180.53	4684.55	2558.39	-2557.38	-72.18	0.97	2558.40	181.62
7118.00	90.03	179.94	4684.38	2588.39	-2587.38	-72.30	2.83	2588.39	181.60
7151.00	88.49	180.51	4684.80	2621.38	-2620.38	-72.43	4.98	2621.38	181.58
7182.00	88.15	180.79	4685.71	2652.36	-2651.36	-72.78	1.42	2652.36	181.57
7213.00	88.25	181.32	4686.68	2683.34	-2682.34	-73.35	1.74	2683.35	181.57
7244.00	89.13	181.72	4687.39	2714.33	-2713.32	-74.17	3.12	2714.34	181.57
7276.00	89.43	181.50	4687.79	2746.33	-2745.31	-75.07	1.16	2746.34	181.57



Scientific Drilling International

Survey Report

Company: MACK ENERGY
Field: Wildcat
Site: Eddy County, NM
Well: Southgate Federal #1H
Wellpath: DH Job #32D1006873/993

Date: 04/04/2007 Time: 11:05:56 Page: 3
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grd North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N, 0.00E, 181.47Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

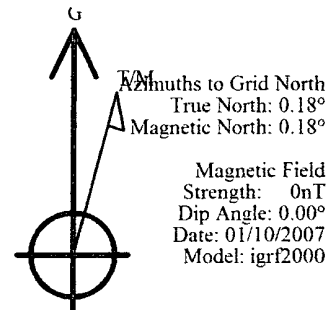
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
7307.00	89.93	181.04	4687.97	2777.33	-2776.30	-75.76	2.19	2777.33	181.56
7338.00	90.17	181.46	4687.94	2808.33	-2807.29	-76.44	1.56	2808.33	181.56
7369.00	90.50	181.09	4687.76	2839.33	-2838.28	-77.13	1.60	2839.33	181.56
7400.00	89.97	181.31	4687.63	2870.33	-2869.28	-77.77	1.85	2870.33	181.55
7432.00	89.70	181.40	4687.72	2902.33	-2901.27	-78.53	0.89	2902.33	181.55
7463.00	90.07	181.19	4687.79	2933.33	-2932.26	-79.23	1.37	2933.33	181.55
7494.00	90.37	181.67	4687.67	2964.33	-2963.25	-80.01	1.83	2964.33	181.55
7523.00	89.70	181.56	4687.65	2993.33	-2992.24	-80.82	2.34	2993.33	181.55
7554.00	89.36	181.31	4687.90	3024.33	-3023.23	-81.60	1.36	3024.33	181.55
7585.00	89.60	181.17	4688.19	3055.32	-3054.22	-82.27	0.90	3055.33	181.54
7616.00	89.76	181.00	4688.36	3086.32	-3085.21	-82.86	0.75	3086.33	181.54
7648.00	89.63	181.40	4688.53	3118.32	-3117.21	-83.53	1.31	3118.32	181.53
7679.00	89.56	181.52	4688.75	3149.32	-3148.19	-84.32	0.45	3149.32	181.53
7710.00	89.87	181.59	4688.90	3180.32	-3179.18	-85.16	1.03	3180.32	181.53
7742.00	90.27	181.55	4688.86	3212.32	-3211.17	-86.03	1.26	3212.32	181.53
7773.00	89.66	181.56	4688.88	3243.32	-3242.16	-86.88	1.97	3243.32	181.53
7804.00	89.02	182.42	4689.24	3274.32	-3273.14	-87.95	3.46	3274.32	181.54
7835.00	89.12	182.13	4689.74	3305.31	-3304.11	-89.18	0.99	3305.31	181.55
7866.00	89.50	182.17	4690.12	3336.31	-3335.09	-90.35	1.23	3336.31	181.55
7900.00	89.80	182.22	4690.32	3370.30	-3369.06	-91.65	0.89	3370.31	181.56
7931.00	90.17	182.29	4690.33	3401.30	-3400.04	-92.87	1.21	3401.30	181.56
7962.00	90.17	182.26	4690.24	3432.30	-3431.01	-94.10	0.10	3432.30	181.57
7993.00	89.56	182.05	4690.31	3463.29	-3461.99	-95.26	2.08	3463.30	181.58
8024.00	89.50	181.97	4690.57	3494.29	-3492.97	-96.35	0.32	3494.30	181.58
8055.00	89.90	182.31	4690.73	3525.29	-3523.95	-97.51	1.69	3525.30	181.58
8086.00	90.67	182.50	4690.58	3556.28	-3554.92	-98.81	2.56	3556.29	181.59
8117.00	89.93	181.80	4690.41	3587.28	-3585.90	-99.97	3.29	3587.29	181.60
8148.00	89.43	181.37	4690.59	3618.28	-3616.88	-100.83	2.13	3618.29	181.60
8179.00	88.62	180.93	4691.11	3649.27	-3647.87	-101.45	2.97	3649.28	181.59
8210.00	88.35	181.20	4691.93	3680.26	-3678.86	-102.03	1.23	3680.27	181.59
8241.00	88.49	181.53	4692.79	3711.25	-3709.84	-102.77	1.16	3711.26	181.59
8273.00	88.62	181.30	4693.59	3743.24	-3741.82	-103.56	0.83	3743.25	181.59
8304.00	88.82	181.27	4694.29	3774.23	-3772.80	-104.25	0.65	3774.24	181.58
8334.00	88.99	181.76	4694.86	3804.23	-3802.78	-105.04	1.73	3804.23	181.58
8354.00	88.19	181.63	4695.35	3824.22	-3822.77	-105.64	4.05	3824.23	181.58

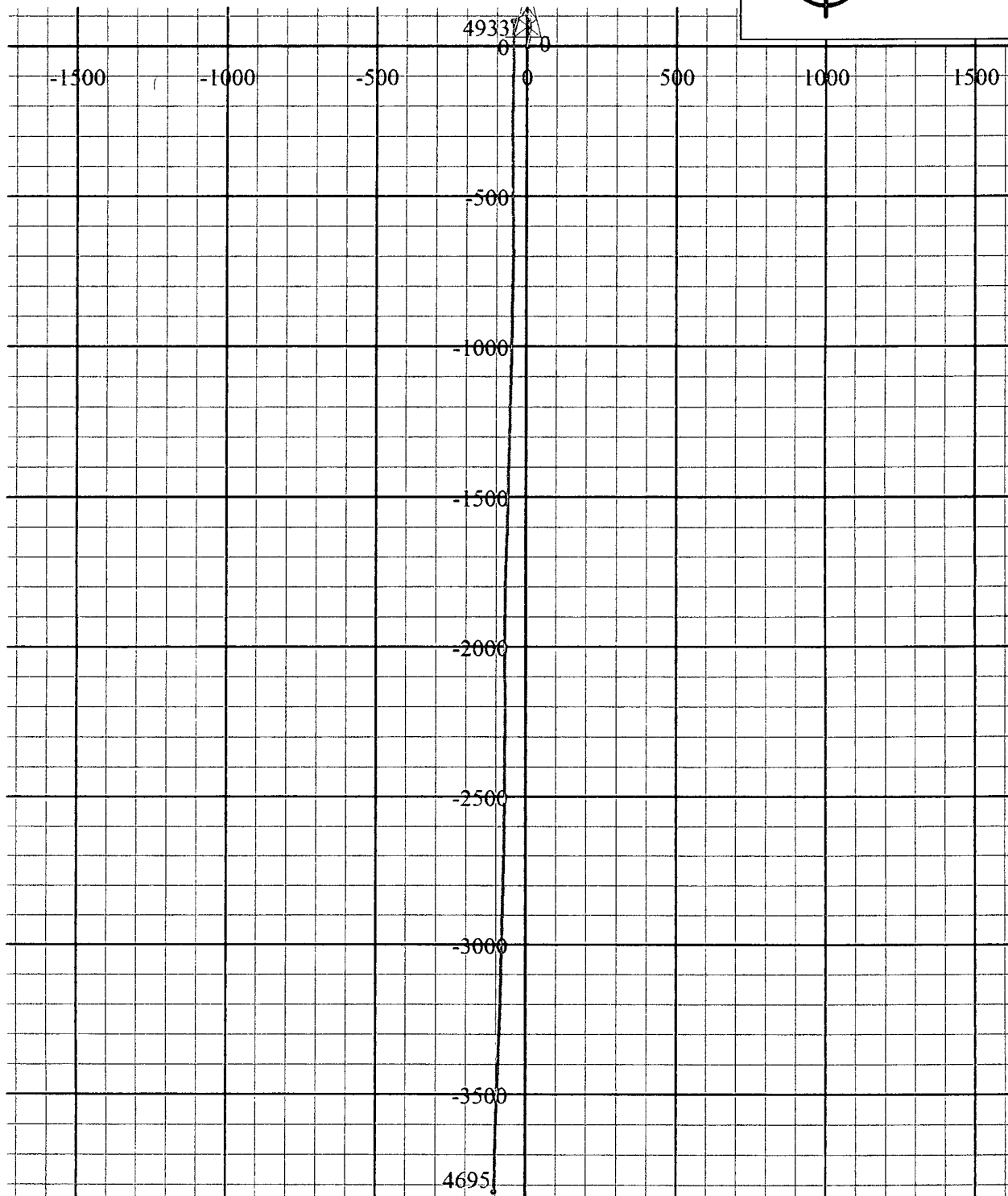


**Scientific
Drilling**

Field: Wildcat
Site: Eddy County, NM
Well: Southgate Federal #1H
Wellpath: DH - Job #32D1006873/993
Survey: 11/02/06-12/01/06



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



West(-)/East(+) [500ft/in]