

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*
(See other in-
struction on
reverse side)

FOR APPROVED
OMB NO. 1004-0137
Expires December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.
NM-97850

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other HH 10 2007

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Southgate Federal #1

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

2. NAME OF OPERATOR
Mack Energy Corporation

OCD-ARTESIA

3. ADDRESS AND TELEPHONE NO.
P.O. Box 960, Artesia, NM 88211-0960 (505) 748-1288

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**

14. PERMIT NO. DATE ISSUED

12. COUNTY OR PARISH **Eddy** 13 STATE **NM**

15. DATE SPUDDED **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** CABLE TOOLS

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)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC	
				DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
				4916-8094'	See 3160-5 for detail

4916-8094', .41, 180

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	HOURS TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO
N/A							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

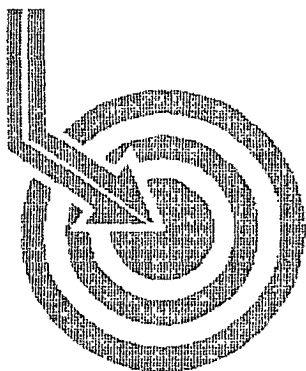
Deviation Survey and Logs

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

SIGNED *Jimmy W. Shendell* TITLE Production Clerk DATE 7/6/07

*(See Instructions and spaces for Additional Data on Reverse Side)

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.



Scientific Drilling

JUL 10 2007
OCD-ARTESIA

MACK ENERGY

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

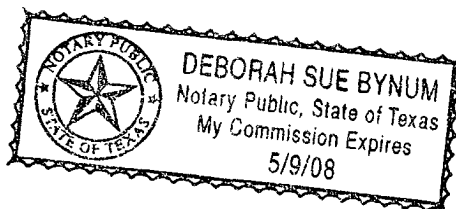
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*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	Date: 04/04/2007	Time: 11:06:46	Page: 1
Field: Wildcat	Co-ordinate(NE) 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,181.47Az)	
Wellpath: VH - Job #32K1106923	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(NE) 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

Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 04/04/2007	Time: 11:05:56	Page: 1
Field: Wildcat	Co-ordinate(NE) 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: 11/02/06-12/01/06 MWD 4192'-8354'	Start Date: 11/02/2006
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

Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 04/04/2007	Time: 11:05:56	Page: 2
Field: Wildcat	Co-ordinate(NE) 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

Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 04/04/2007	Time: 11:05:56	Page: 3
Field: Wildcat	Co-ordinate(NE) 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

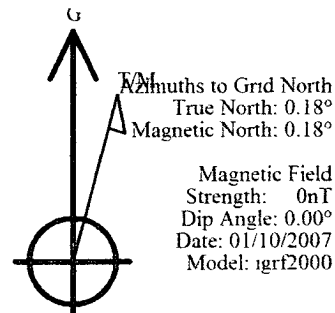
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
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

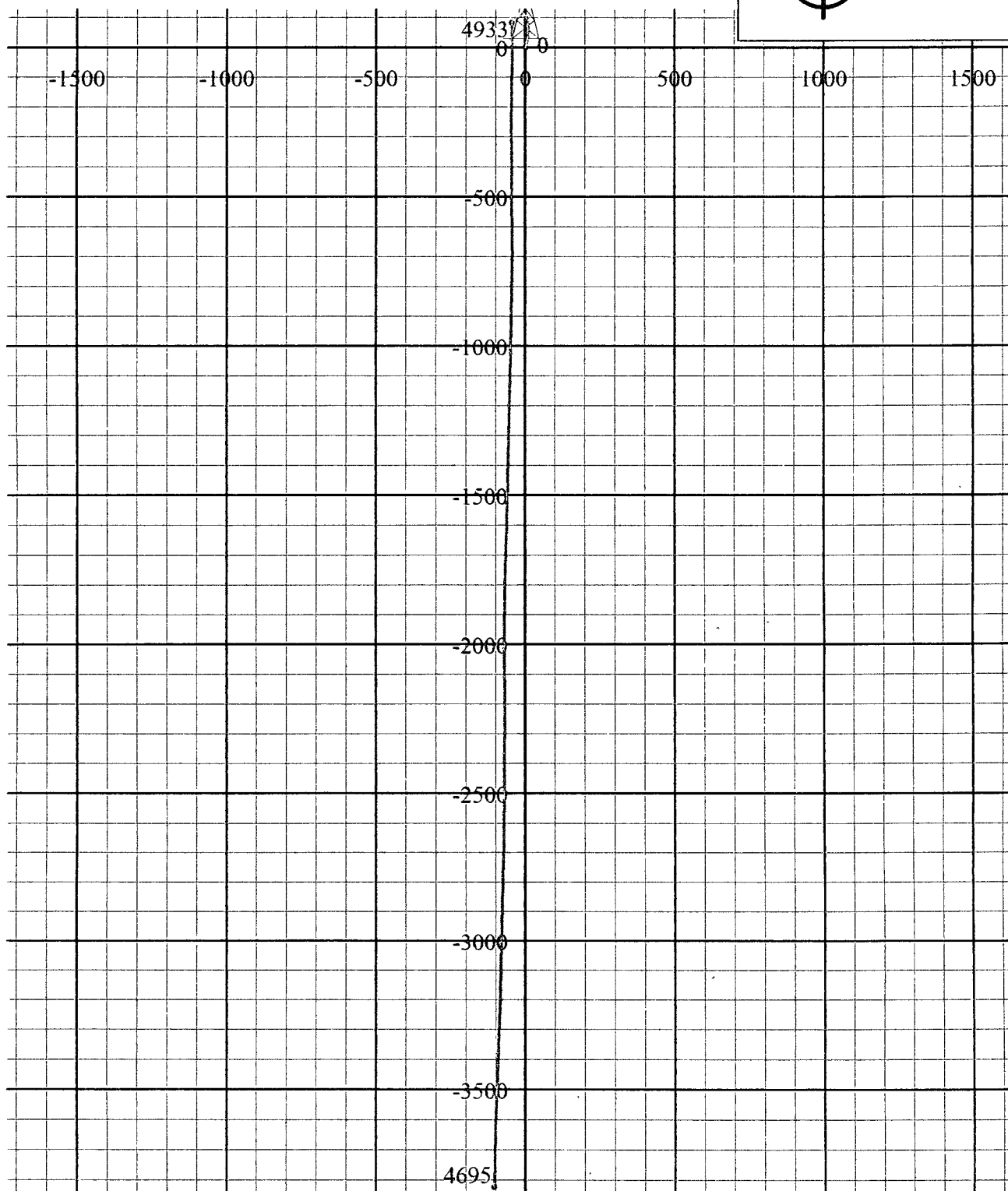


**Scientific
Drilling**

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]