

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTMonth - Year
FEB 26 2007
OCD - ARTESIA, NMFORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
COG Operating LLC3a. Address
550 W. Texas Ave., Suite 1300 Midland, TX 797013b. Phone No. (include area code)
432-685-4340

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Surface: 675' FSL & 1120' FEL SEC. 20, T17S, R30E, UNIT P
BHL: 996' FSL & 970' FEL SEC. 20, T17S, R30E, UNIT P

5. Lease Serial No.

LC-054280

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

McINTYRE A EAST #19

9. API Well No.

30-015-34806

10. Field and Pool, or Exploratory Area

LOCO HILLS; Glorieta Yeso

11. County or Parish, State

EDDY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Completion
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

12-18-06 Perf w/ 2 SPF @ 7057' - 7086'. 14 holes.

12-19-06 Acidize w/ 1500 gals acid.

12-20-06 Set CIBP @ 7010' & perf w/ 2 SPF @ 6868' - 6955'. 20 holes. Acidize w/ 1500 gals.

12-21-06 Set CIBP @ 6840' & perf w/ 2 SPF @ 6462.5' - 6656.5'. 68 holes.

12-22-06 Acidize w/ 2500 gals acid.

12-27-06 Frac perfs w/ 90,266 gals gel, 8531# LiteProp, & 83,568# 16/30 sand.

12-28-06 Perf Yeso w/ 2 SPF @ 6120.5' - 6330'. 54 holes. Acidize w/ 2500 gals acid.

01-02-07 Frac perfs w/ 97,415 gals gel, 8133# LiteProp, & 87,867# 16/30 sand.

01-03-07 Perf Yeso w/ 2 SPF @ 5876' - 6019'. 70 holes.

01-04-07 Acidize w/ 2500 gals acid.

01-05-07 Frac perfs w/ 105,524 gals gel, 8327# LiteProp, & 86,872# 16/30 sand.

01-06-07 RIH w/ 209 jts 2-7/8" tbg set @ 6688'. RIH w/ 2-1/2" x 2" x 24' pump. Turn to production.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Phyllis Edwards

Title Regulatory Analyst

Signature



Date

02/20/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

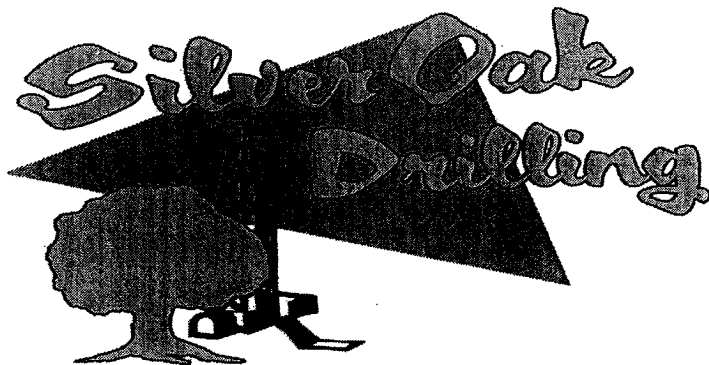
Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)



PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288



November 29, 2006

COG, LLC
Fasken Center, Tower II
550 West Texas Ave, Suite 1300
Midland, TX 79701

RE: McIntyre A East #19
890' FSL & 990' FEL
Sec. 20, T17S, R30E
Eddy County, New Mexico

Dear Sir,

The following is the Deviation Survey for the above captioned well.

<u>DEPTH</u>	<u>DEVIATION</u>	<u>DEPTH</u>	<u>DEVIATION</u>
190'	1/2°	1042'	1 1/4°
497'	1/2°	1205'	1°
796'	1°		

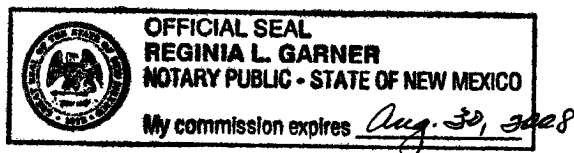
The remainder of the well was drilled directionally and supplied by another company.

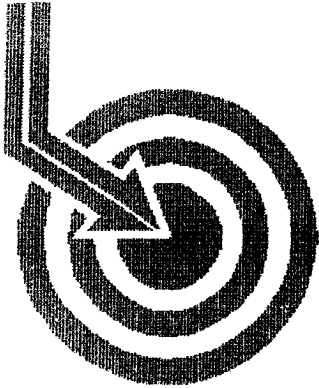
Very truly yours,

Eddie C. LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 29th day of November, 2006.

Notary Public



Scientific Drilling



MACK ENERGY

Field: Loco Hills
Site: Eddy County, NM
Well: McIntyre A East #19
Wellpath: DH - Job #32D1106916
Survey: 11/09/06-11/22/06

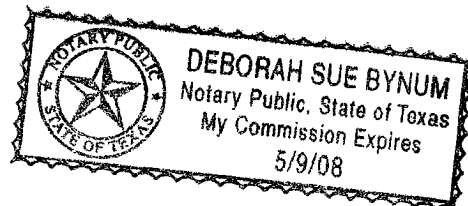
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*Richard*.....Company Representative

Notarized this date 11th of January, 2007.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas





Scientific Drilling International

Survey Report

Company: MACK ENERGY
Field: Loco Hills
Site: Eddy County, NM
Well: McIntyre A East #19
Wellpath: VH - Job #32K1106921

Date: 01/08/2007 Time: 22:01:20 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,22.43Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 11/10/06 Start Date: 11/10/2006
KSRG 0'-1155'
Company: Scientific Drilling Internatio Engineer: Guebara/Pena w/GeoGyro
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	359.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.06	153.25	100.00	-0.03	-0.05	0.02	0.06	0.05	153.25
200.00	0.32	122.85	200.00	-0.12	-0.24	0.28	0.27	0.37	131.01
300.00	0.64	151.01	300.00	-0.52	-0.88	0.79	0.39	1.18	138.35
400.00	0.61	146.41	399.99	-1.16	-1.82	1.35	0.06	2.26	143.34
500.00	0.49	272.93	499.99	-1.60	-2.24	1.22	0.98	2.55	151.42
600.00	0.64	274.00	599.98	-1.92	-2.18	0.24	0.15	2.19	173.83
700.00	0.72	276.60	699.98	-2.27	-2.07	-0.95	0.09	2.27	204.59
800.00	0.61	285.83	799.97	-2.50	-1.85	-2.08	0.15	2.78	228.39
900.00	0.26	6.80	899.97	-2.35	-1.48	-2.57	0.62	2.96	240.06
1000.00	0.69	59.21	999.96	-1.65	-0.95	-2.02	0.57	2.23	244.96
1100.00	0.99	63.16	1099.95	-0.51	-0.25	-0.74	0.31	0.78	251.44
1155.00	1.04	62.08	1154.94	0.24	0.20	0.13	0.10	0.24	32.81



Scientific Drilling International

Survey Report

Company: MACK ENERGY
Field: Loco Hills
Site: Eddy County, NM
Well: McIntyre A East #19
Wellpath: DH - Job #32D1106916

Date: 01/08/2007 **Time:** 22:04:43 **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,22.43Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

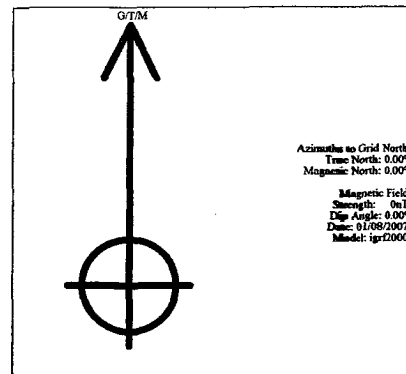
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
5983.00	0.52	301.60	5950.69	340.73	315.08	129.69	0.38	340.73	22.37
6109.00	0.95	61.67	6076.68	341.63	315.88	130.12	1.02	341.63	22.39
6203.00	1.44	65.44	6170.66	343.10	316.74	131.88	0.53	343.10	22.61
6296.00	1.03	68.54	6263.64	344.53	317.53	133.73	0.45	344.54	22.84
6359.00	0.93	96.34	6326.63	345.06	317.68	134.76	0.76	345.08	22.99
6420.00	1.31	152.50	6387.62	344.75	317.01	135.57	1.81	344.78	23.16
6544.00	0.96	69.08	6511.60	344.55	316.12	137.20	1.24	344.61	23.46
6606.00	1.35	68.40	6573.59	345.42	316.57	138.36	0.63	345.49	23.61

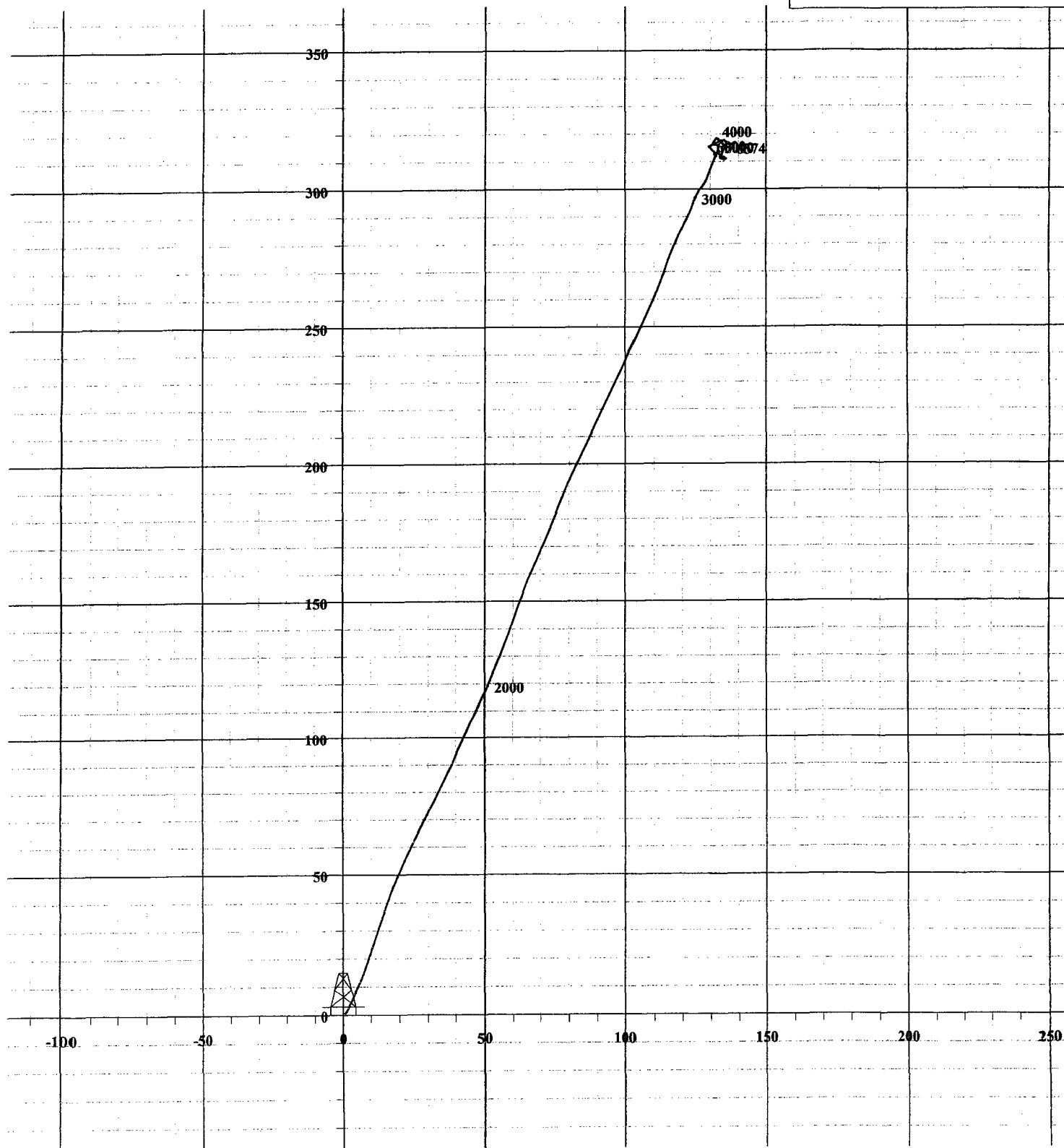


Scientific
Drilling

Field: Loco Hills
Site: Eddy County, NM
Well: McIntyre A East #19
Wellpath: DH - Job #32D1106916
Survey: 11/09/06-11/22/06



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



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



Scientific
Drilling

Scientific Drilling International Survey Report

Company: MACKENERGY	Date: 02/07/2007	Time: 11:29:15	Page: 1
Field: Loco Hills	Co-ordinate (NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: McIntyre A East #19	Section (A/S) Reference:	Well: 0.00N 0.00E 2246.42	
Wellpath: DH- Job #3251106916	Survey Calculation Method:	Minimum Curvature	Dr. Sybase

Survey: 11/09/06-11/22/06	Start Date: 11/09/2006
MWD 1282'-6606'	
Company: Scientific Drilling Internatio	Engineer: Calvert/Puntney/Foster
Tool: MWD;MWD	Tied-to: From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	NS ft	N/S ft	E/W ft	DLS deg/100ft	Grid ft	Grid deg
1155.00	1.04	62.08	1154.94	0.24	0.20	0.13	0.00	0.24	32.81
1282.00	1.92	22.67	1281.90	3.25	2.70	1.97	1.02	3.34	36.05
1407.00	5.02	25.77	1406.66	10.81	9.56	5.15	2.48	10.86	28.32
1500.00	8.67	18.30	1498.98	21.86	19.89	9.13	4.03	21.88	24.65
1592.00	12.73	17.99	1589.36	38.89	36.12	14.44	4.41	38.90	21.79
1686.00	12.89	23.99	1681.03	59.70	55.55	21.90	1.42	59.71	21.51
1777.00	13.23	26.70	1769.67	80.23	74.12	30.70	0.77	80.23	22.50
1871.00	12.09	23.84	1861.39	100.80	92.74	39.52	1.38	100.81	23.08
1965.00	11.43	23.46	1953.42	119.95	110.29	47.20	0.71	119.96	23.17
2058.00	12.12	21.17	2044.46	138.93	127.84	54.40	0.90	138.94	23.05
2151.00	11.55	18.81	2135.48	157.98	145.76	60.92	0.80	157.98	22.68
2244.00	11.57	23.95	2226.60	176.60	163.10	67.71	1.11	176.60	22.55
2347.00	12.65	19.71	2327.31	198.19	183.16	75.71	1.36	198.19	22.46
2440.00	12.49	25.27	2418.08	218.41	201.84	83.44	1.31	218.41	22.46
2532.00	11.86	24.26	2508.01	237.79	219.45	91.57	0.72	237.79	22.65
2627.00	12.22	24.55	2600.92	257.60	237.50	99.76	0.38	257.60	22.78
2722.00	11.99	23.26	2693.81	277.51	255.71	107.83	0.37	277.52	22.86
2816.00	9.97	18.94	2786.08	295.40	272.38	114.33	2.32	295.40	22.77
2908.00	7.91	26.13	2876.96	309.66	285.60	119.70	2.54	309.67	22.74
3002.00	4.46	18.41	2970.40	319.77	294.88	123.71	3.77	319.77	22.76
3094.00	2.43	40.46	3062.24	325.19	299.75	126.10	2.60	325.20	22.82
3188.00	1.79	26.57	3156.17	328.55	302.58	128.05	0.87	328.56	22.94
3282.00	2.81	19.73	3250.10	332.32	306.07	129.49	1.12	332.33	22.93
3343.00	2.60	21.25	3311.03	335.19	308.76	130.49	0.36	335.21	22.91
3405.00	3.08	19.97	3372.95	338.26	311.64	131.57	0.78	338.28	22.89
3436.00	2.89	25.18	3403.91	339.88	313.13	132.19	1.07	339.89	22.89
3500.00	1.32	357.80	3467.87	342.16	315.33	132.85	2.85	342.17	22.85
3561.00	0.82	274.60	3528.86	342.66	316.06	132.38	2.41	342.67	22.73
3621.00	0.83	266.50	3588.85	342.34	316.07	131.52	0.19	342.34	22.59
3682.00	0.56	343.50	3649.85	342.38	316.33	131.00	1.46	342.38	22.50
3745.00	0.71	23.49	3712.85	343.01	316.98	131.07	0.72	343.01	22.46
3807.00	0.55	44.02	3774.84	343.67	317.55	131.43	0.44	343.67	22.48
3868.00	0.63	14.55	3835.84	344.28	318.08	131.71	0.51	344.28	22.49
3963.00	0.28	111.70	3930.84	344.80	318.50	132.06	0.76	344.80	22.52
4055.00	1.45	124.90	4022.82	344.55	317.76	133.22	1.28	344.55	22.75
4149.00	1.26	160.30	4116.80	343.52	316.10	134.55	0.90	343.54	23.06
4244.00	1.31	197.10	4211.78	341.67	314.08	134.58	0.86	341.70	23.19
4337.00	1.11	216.90	4304.76	339.74	312.34	133.73	0.49	339.77	23.18
4430.00	0.36	122.80	4397.75	338.81	311.47	133.43	1.28	338.84	23.19
4554.00	0.30	112.20	4521.75	338.74	311.13	134.06	0.07	338.78	23.31
4710.00	0.54	109.10	4677.74	338.79	310.74	135.13	0.15	338.85	23.50
4866.00	0.50	322.70	4833.74	339.17	311.04	135.41	0.64	339.24	23.53
5021.00	0.74	292.40	4988.73	339.51	311.96	134.08	0.26	339.55	23.26
5147.00	0.41	344.60	5114.73	339.87	312.70	133.21	0.47	339.89	23.07
5299.00	0.71	269.90	5266.72	339.94	313.22	132.12	0.47	339.95	22.87
5451.00	0.45	163.70	5418.72	339.11	312.65	131.35	0.62	339.12	22.79
5608.00	0.30	99.80	5575.71	338.72	311.99	131.92	0.27	338.73	22.92
5734.00	0.68	331.60	5701.71	339.27	312.59	131.89	0.71	339.28	22.88
5859.00	0.95	318.40	5826.70	340.19	314.02	130.85	0.26	340.19	22.62



Scientific
Drilling

Scientific Drilling International Survey Report

Company: MACK ENERGY	Date: 02/07/2007	Time: 1:29:15	Page: 1
Field: Loco Hills	Co-ordinate (NE) Reference:	Site: Eddy County NM, Grid North	
Site: Eddy County NM	Vertical (TVD) Reference:	STATION	
Well: McIntire A East #19	Section (S) Reference:	Well: (0.00N, 0.00E, 22.43Az)	
Wellpath: DH-Job 732D-106916	Survey Calculation Method:	Minimum Curvature	DB: S. Baser

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	FAW ft	D/S deg/100ft	CLD ft	C deg
5983.00	0.52	301.60	5950.69	340.73	315.08	129.69	0.38	340.73	22.37
6109.00	0.95	61.67	6076.68	341.63	315.88	130.12	1.02	341.63	22.39
6203.00	1.44	65.44	6170.66	343.10	316.74	131.88	0.53	343.10	22.61
6296.00	1.03	68.54	6263.64	344.53	317.53	133.73	0.45	344.54	22.84
6359.00	0.93	96.34	6326.63	345.06	317.68	134.76	0.76	345.08	22.99
6420.00	1.31	152.50	6387.62	344.75	317.01	135.57	1.81	344.78	23.16
6544.00	0.96	69.08	6511.60	344.55	316.12	137.20	1.24	344.61	23.46
6606.00	1.35	68.40	6573.59	345.42	316.57	138.36	0.63	345.49	23.61
7112.00	1.35	68.40	7079.45	353.70	320.96	149.45	0.00	354.05	24.97