

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, 19915 LEASE DESIGNATION AND SERIAL NO
NMNM-112877

6 IF INDIAN ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL

OIL WELL ☐GAS WELL ☒DRY ☐

Other

7 UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO

Lion Federal #1

9 API WELL NO.

30-015-35438

10. FIELD AND POOL, OR WILDCAT

Box Canyon Permo-Penn

11 SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA

Sec. 14 T21S R21E

12. COUNTY OR
PARISH

Eddy

13 STATE

NM

b TYPE OF COMPLETION:

NEW WELL ☒WORK OVER ☐DEEPEN ☐PLUG BACK ☐DIFF RESVR ☐

Other

2 NAME OF OPERATOR

Mack Energy Corporation

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

2490 FSL & 815 FEL

At top prod. interval reported below

1961 FNL & 672 FEL

At total depth

AUG 13 2007

1973 FNL & 674 FEL

OCD-ARTESIA

14. PERMIT NO

DATE ISSUED

15. DATE SPUDDED

4/3/07

16 DATE TD REACHED

5/1/07

17. DATE COMPL. (Ready to prod.)

6/4/07

18. ELEVATIONS (DF, RKB, RT, GR, ETC)*

4572' RKB

19 ELEV CASING HEAD

4555' GR

20 TOTAL DEPTH, MD & TVD

8600

21. PLUG, BACK TD, MD & TVD

6805

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)*

6053-6131.5', Cisco

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	339	17 1/2	830sx	None
9 5/8, J-55	36	1573	12 1/4	1580sx	None
7", J-55	26	6850	8 3/4	1370sx	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8	6143	

31. PERFORATION RECORD (Interval, size and number)

6228-6351', .41, 46 CIBP @ 6214' w/35' cement cap
6053-6131.5', .41, 38

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6228-6351'	2400 gals 15% NEFE
6053-6131.5'	1600 gals 15% NEFE

33. PRODUCTION

DATE FIRST PRODUCTION N/A		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) 2 1/2 x 2 x 16' pump				WELL STATUS (Producing or shut-in) Shut-in	
DATE OF TEST 6/8/07	HOURS TESTED 24 hours	CHOKE SIZE	PROD'N FOR TEST PERIOD →	OIL-BBL. 0	GAS-MCF. 0	WATER-BBL. 87	GAS-OIL RATIO 0
FLOW TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL-BBL. 0	GAS-MCF. 0	WATER - BBL. 87	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

Jerry W. Shenell

TITLE

Production Clerk

AUG 9 2007

DATE 7/26/07

JERRY FANT

PETROLEUM GEOLOGIST

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

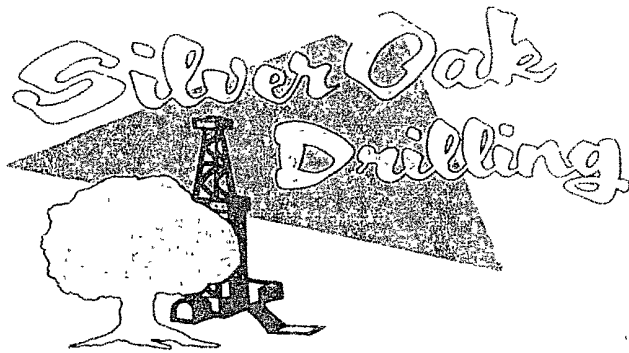
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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
Box Canyon Permo-Penn	6053	6131.5		Glorietta	1430	
				Tubb	2822	
				Abo	3488	
				Wolfcamp	4676	
				Cisco	6021	
				Atoka	7804	
				Morrow	8040	
				Chester	8480	

RECEIVED
OCT 27 PM 3:01
1958



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

May 11, 2007

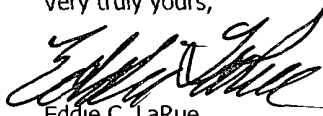
Mack Energy Corporation
PO Box 960
Artesia, NM 88211-0960

RE: Lion Federal #1
1650' FNL & 660' FEL
Sec. 14, T21S, R21E
Eddy County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned well located in Eddy County, New Mexico.

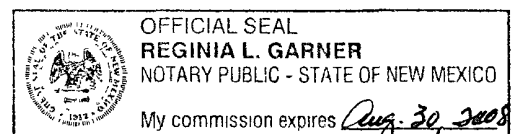
Very truly yours,


Eddie C. LaRue
Operations Manager

State of New Mexico }
County of Eddy }

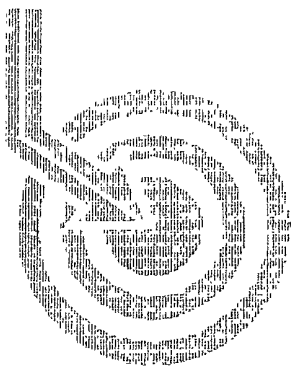
The foregoing was acknowledged before me this 28th day of March, 2007.


Notary Public



Date	Depth	Deviation	Direction	TVD	Horiz Disp
04/04/2007	128.00	1.00	0.00	0.00	0.00
04/04/2007	235.00	0.50	0.00	0.00	0.00
04/06/2007	508.00	1.25	0.00	548.00	0.00
04/07/2007	691.00	1.25	0.00	733.00	0.00
04/07/2007	1004.00	1.50	0.00	1044.00	0.00
04/08/2007	1316.00	2.00	0.00	1356.00	40.00
04/09/2007	1534.00	0.00	0.00	1570.00	0.00
04/13/2007	1849.00	6.72	2.54	1901.00	0.00
04/13/2007	1945.00	8.98	0.15	1995.00	0.00
04/13/2007	2038.00	11.07	9.43	2088.00	0.00
04/13/2007	2162.00	11.48	9.50	2212.00	0.00
04/14/2007	2391.00	14.91	9.09	2430.00	0.00
04/14/2007	2442.00	14.45	8.34	2492.00	0.00
04/14/2007	2536.00	14.42	8.29	2586.00	0.00
04/14/2007	2661.00	15.17	7.20	2711.00	0.00
04/15/2007	2827.00	15.94	6.99	2835.00	0.00
04/15/2007	2951.00	13.65	6.06	2959.00	0.00
04/15/2007	3034.00	12.27	8.89	3084.00	0.00
04/15/2007	3159.00	12.93	11.39	3209.00	0.00
04/15/2007	3283.00	14.42	13.04	3333.00	0.00
04/15/2007	3408.00	13.33	8.89	3458.00	0.00
04/15/2007	3532.00	13.11	7.37	3582.00	0.00
04/16/2007	3687.00	12.74	6.37	0.00	0.00
04/16/2007	3782.00	13.20	10.04	0.00	0.00
04/17/2007	3917.00	13.88	11.81	3925.00	0.00
04/17/2007	4000.00	15.30	10.32	4050.00	0.00
04/17/2007	4125.00	15.11	3.41	4175.00	0.00
04/17/2007	4250.00	14.11	3.91	0.00	0.00
04/18/2007	4374.00	14.63	5.81	4424.00	0.00
04/18/2007	4498.00	14.57	10.27	0.00	0.00
04/18/2007	4623.00	15.82	11.02	0.00	0.00
04/19/2007	4789.00	14.81	8.04	4798.00	0.00
04/19/2007	4871.00	11.67	6.78	4921.00	0.00
04/19/2007	4996.00	8.60	9.68	5046.00	0.00
04/20/2007	5162.00	5.53	9.75	5170.00	0.00
04/20/2007	5287.00	3.71	7.78	5295.00	0.00
04/20/2007	5369.00	3.33	12.60	5419.00	0.00
04/20/2007	5494.00	4.21	13.71	5544.00	0.00
04/21/2007	5661.00	4.36	19.51	5669.00	0.00
04/21/2007	5785.00	3.76	26.24	5792.00	0.00
04/22/2007	5900.00	0.99	350.03	5950.00	0.00
04/22/2007	6025.00	0.81	329.79	6075.00	0.00
04/22/2007	6149.00	0.86	293.10	6199.00	0.00
04/23/2007	6316.00	0.64	207.10	6324.00	0.00
04/23/2007	6503.00	1.52	187.8	6511.00	0.00
04/23/2007	6586.00	0.38	186.80	6636.00	0.00
04/23/2007	6679.00	0.71	176.4	0.00	0.00
04/24/2007	6804.00	0.64	97.66	6854.00	0.00
04/24/2007	6929.00	1.32	124.82	6979.00	0.00
04/24/2007	7053.00	0.68	106.6	0.00	0.00
04/25/2007	7240.00	0.51	88.86	7290.00	0.00
04/25/2007	7365.00	1.01	238.70	0.00	0.00
04/26/2007	7400.00	0.99	238.0	7450.00	0.00
04/27/2007	7519.00	0.44	19.27	7569.00	0.00
04/27/2007	7644.00	0.27	93.32	7694.00	0.00
04/27/2007	7737.00	0.60	120.68	0.00	0.00
04/28/2007	7873.00	0.03	236.30	7880.00	0.00
04/28/2007	7955.00	0.11	310.80	8005.00	0.00
04/28/2007	8048.00	0.38	207.90	0.00	0.00
04/30/2007	8213.00	0.51	200.80	8222.00	0.00
04/30/2007	8297.00	1.36	285.10	8347.00	0.00
04/30/2007	8359.00	1.10	268.70	8409.00	0.00
04/30/2007	8453.00	0.50	250.10	0.00	0.00
05/01/2007	8588.00	0.82	155.10	8596.00	0.00

EOF



Scientific Drilling

MACK ENERGY

Field: Little Box Canyon
Site: Eddy County, NM
Well: Lion Federal #1
Wellpath: DH - Job #32D0407299
Survey: 04/11/07-05/01/07

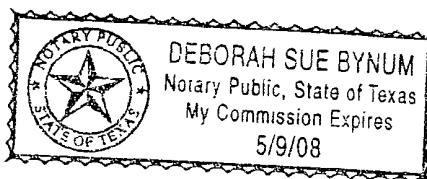
This survey is correct to the best of my knowledge
and is supported by actual field data.

[Signature] Company Representative

Notorized this date 25th of June, 2007.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International

Survey Report

Company: MACK ENERGY	Date: 06/20/2007	Time: 15 49 01	Page: 1
Field: Little Box Canyon	Co-ordinate(NE) Reference:	Site. Eddy County NM. Grid North	
Site: Eddy County NM	Vertical (TVD) Reference:	SITE 0 0	
Well: Lion Federal #1	Section (VS) Reference:	Well (0 00N 0 00E 9 63Az)	
Wellpath: VH - Job #32K0407305	Survey Calculation Method:	Minimum Curvature	Db Sybase

Survey: 04/12/07	Start Date: 04/12/2007
KSRG 0'-1428'	
Company: Scientific Drilling Internatio	Engineer: 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/V ft	DLS deg/100ft	ClsD ft	ClsA deg
0 00	0 00	0 23	0 00	0 00	0 00	0 00	0 00	0 00	0.00
100 00	0.34	30 96	100.00	0 28	0 25	0 15	0 34	0 30	30.96
200 00	0 90	114 79	199 99	0 35	0 18	1 02	0 93	1 03	80 00
300 00	1 03	121 47	299 98	-0 19	-0 62	2 50	0 17	2 57	103.92
400 00	1.03	111 16	399.96	-0 71	-1 41	4 10	0 19	4.34	109 00
500 00	1 06	99 63	499.95	-0 89	-1 89	5 85	0 21	6.15	107 91
600 00	1 13	81 50	599.93	-0 58	-1 90	7 74	0 35	7.97	103 80
700 00	1.26	79 59	699.91	0 10	-1 56	9 80	0 14	9.92	99.03
800 00	0.96	73 69	799.89	0 85	-1.12	11.68	0 32	11 74	95.49
900 00	0 80	53 97	899 88	1 71	-0 48	13 05	0 34	13 06	92.09
1000 00	1.07	42.06	999.86	3 00	0 63	14 24	0 33	14.25	87 48
1100 00	1.39	27 35	1099.84	4 94	2 40	15 42	0 45	15 61	81 16
1200 00	1.41	29.32	1199 81	7 26	4 55	16 58	0 05	17.20	74 66
1300 00	1.99	21 96	1299 77	10 11	7 23	17 83	0 62	19 24	67 93
1400 00	2.48	20.00	1399 69	13 94	10 87	19.22	0.50	22.09	60.50
1428 00	2.52	16.72	1427.66	15 14	12.03	19 61	0 53	23.01	58 46



Scientific
Drilling

Scientific Drilling International Survey Report

Company: MACK ENERGY
Field: Little Box Canyon
Site: Eddy County, NM
Well: Lion Federal #1
Wellpath: DH - Job #32D0407299

Date: 06/20/2007 Time: 15:55:11 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 9.63Az)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 04/11/07-05/01/07
MWD 1588'-8546' w/projection @ 8600'

Start Date: 04/11/2007

Company: Scientific Drilling Internatio
Tool: MWD MWD

Engineer: Barbre/Beccue
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
1428.00	2.52	16.72	1427.66	15.14	12.03	19.61	0.00	23.01	58.46
1588.00	1.20	11.28	1587.58	20.31	17.05	20.95	0.83	27.01	50.87
1665.00	1.81	12.55	1664.55	22.33	19.02	21.37	0.79	28.61	48.33
1758.00	3.89	4.69	1757.43	26.94	23.60	21.95	2.27	32.23	42.92
1849.00	6.72	2.54	1848.03	35.30	32.00	22.44	3.12	39.08	35.04
1945.00	8.98	0.15	1943.13	48.27	45.10	22.70	2.38	50.50	26.72
2038.00	11.07	9.43	2034.71	64.36	61.17	24.19	2.83	65.78	21.57
2162.00	12.88	12.45	2156.00	90.07	86.41	29.12	1.54	91.19	18.62
2342.00	14.91	9.09	2330.73	133.27	128.88	37.10	1.21	134.11	16.06
2442.00	14.45	8.34	2427.47	158.60	153.92	40.94	0.50	159.28	14.90
2536.00	14.58	7.33	2518.47	182.15	177.26	44.15	0.30	182.68	13.99
2661.00	15.62	7.33	2639.15	214.69	209.56	48.31	0.83	215.06	12.98
2785.00	15.94	6.99	2758.47	248.38	243.02	52.51	0.27	248.63	12.19
2909.00	13.65	6.06	2878.36	279.99	274.47	56.13	1.86	280.15	11.56
3034.00	12.27	8.89	3000.17	308.00	302.26	59.74	1.21	308.11	11.18
3159.00	12.93	11.39	3122.16	335.26	329.10	64.55	0.68	335.37	11.10
3283.00	14.42	13.04	3242.64	364.54	357.74	70.78	1.24	364.67	11.19
3408.00	13.33	8.89	3364.00	394.48	387.14	76.52	1.18	394.63	11.18
3532.00	13.11	7.37	3484.71	422.83	415.21	80.53	0.33	422.95	10.98
3687.00	12.74	6.37	3635.78	457.46	449.63	84.68	0.28	457.53	10.67
3781.00	13.20	10.04	3727.39	478.54	470.50	87.70	1.00	478.60	10.56
3874.00	13.88	11.81	3817.80	500.30	491.87	91.83	0.86	500.37	10.58
4000.00	15.30	10.32	3939.74	532.03	523.02	97.91	1.17	532.11	10.60
4124.00	15.11	3.41	4059.40	564.46	555.25	101.80	1.47	564.51	10.39
4249.00	14.11	3.91	4180.36	595.82	586.72	103.81	0.81	595.83	10.03
4374.00	14.80	4.46	4301.40	626.88	617.84	106.09	0.56	626.88	9.74
4498.00	14.57	10.27	4421.36	658.25	648.98	110.10	1.20	658.25	9.63
4623.00	15.82	11.02	4541.99	691.01	681.17	116.16	1.01	691.01	9.68
4748.00	14.81	8.04	4662.55	724.01	713.72	121.65	1.02	724.01	9.67
4871.00	11.67	6.78	4782.26	752.16	741.64	125.32	2.56	752.16	9.59
4996.00	8.60	9.68	4905.30	774.13	763.42	128.38	2.49	774.14	9.55
5120.00	5.53	9.75	5028.34	789.38	778.45	130.96	2.48	789.38	9.55
5245.00	3.71	7.78	5152.93	799.45	788.39	132.52	1.46	799.45	9.54
5369.00	3.33	12.60	5276.70	807.06	795.88	133.85	0.39	807.06	9.55
5494.00	4.21	13.71	5401.43	815.26	803.88	135.73	0.71	815.26	9.58
5618.00	4.36	19.51	5525.08	824.44	812.75	138.38	0.37	824.44	9.66
5742.00	3.76	26.24	5648.77	832.98	820.83	141.76	0.62	832.99	9.80
5900.00	0.99	350.03	5806.62	839.23	826.83	143.81	1.91	839.24	9.87
6025.00	0.81	329.79	5931.61	840.93	828.65	143.18	0.29	840.93	9.80
6149.00	0.86	293.15	6055.60	841.82	829.78	141.88	0.43	841.82	9.70
6274.00	0.64	207.14	6180.59	841.37	829.53	140.70	0.83	841.37	9.63
6461.00	1.52	187.80	6367.55	837.90	826.14	139.89	0.50	837.90	9.61
6586.00	0.38	186.87	6492.54	835.83	824.08	139.61	0.91	835.83	9.62
6679.00	0.71	176.41	6585.53	834.96	823.20	139.61	0.37	834.96	9.63
6804.00	0.64	97.66	6710.52	834.23	822.34	140.35	0.69	834.23	9.69
6929.00	1.32	124.82	6835.51	833.64	821.42	142.23	0.64	833.64	9.82
7053.00	0.50	72.69	6959.49	833.28	820.77	143.92	0.88	833.29	9.95
7240.00	0.51	88.86	7146.48	833.80	821.03	145.53	0.08	833.82	10.05
7365.00	1.01	238.72	7271.48	833.18	820.47	145.14	1.18	833.20	10.03



Scientific
Drilling

Scientific Drilling International Survey Report

Company: MACK ENERGY
Field: Little Box Canyon
Site: Eddy County, NM
Well: Lion Federal #1
Wellpath: DH - Job #32D0407299

Date: 06/20/2007 Time: 15:55:11 Page: 2
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grd North
Vertical (TVD) Reference: SITE 00
Section (VS) Reference: Well (0.00N,0.00E,9.63Azi)
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
7395.00	0.99	238.00	7301.47	832.84	820.19	144.70	0.08	832.86	10.01
7519.00	0.44	19.27	7425.47	832.60	820.07	143.95	1.10	832.61	9.96
7644.00	0.27	93.32	7550.47	833.10	820.51	144.40	0.36	833.12	9.98
7737.00	0.60	120.68	7643.46	832.95	820.25	145.04	0.41	832.97	10.03
7830.00	0.03	236.32	7736.46	832.76	819.99	145.43	0.66	832.78	10.06
7955.00	0.11	310.84	7861.46	832.80	820.05	145.32	0.08	832.82	10.05
8048.00	0.38	207.91	7954.46	832.55	819.83	145.10	0.45	832.57	10.04
8173.00	0.51	200.89	8079.46	831.61	818.95	144.71	0.11	831.63	10.02
8297.00	1.36	285.11	8203.44	831.21	818.81	143.09	1.13	831.22	9.91
8359.00	1.10	268.77	8265.43	831.17	818.99	141.79	0.70	831.18	9.82
8453.00	0.50	250.12	8359.42	830.80	818.83	140.50	0.69	830.80	9.74
8546.00	0.82	155.16	8452.42	830.05	818.09	140.40	1.07	830.05	9.74
8600.00	0.82	155.16	8506.41	829.41	817.39	140.72	0.00	829.42	9.77



Scientific
Drilling

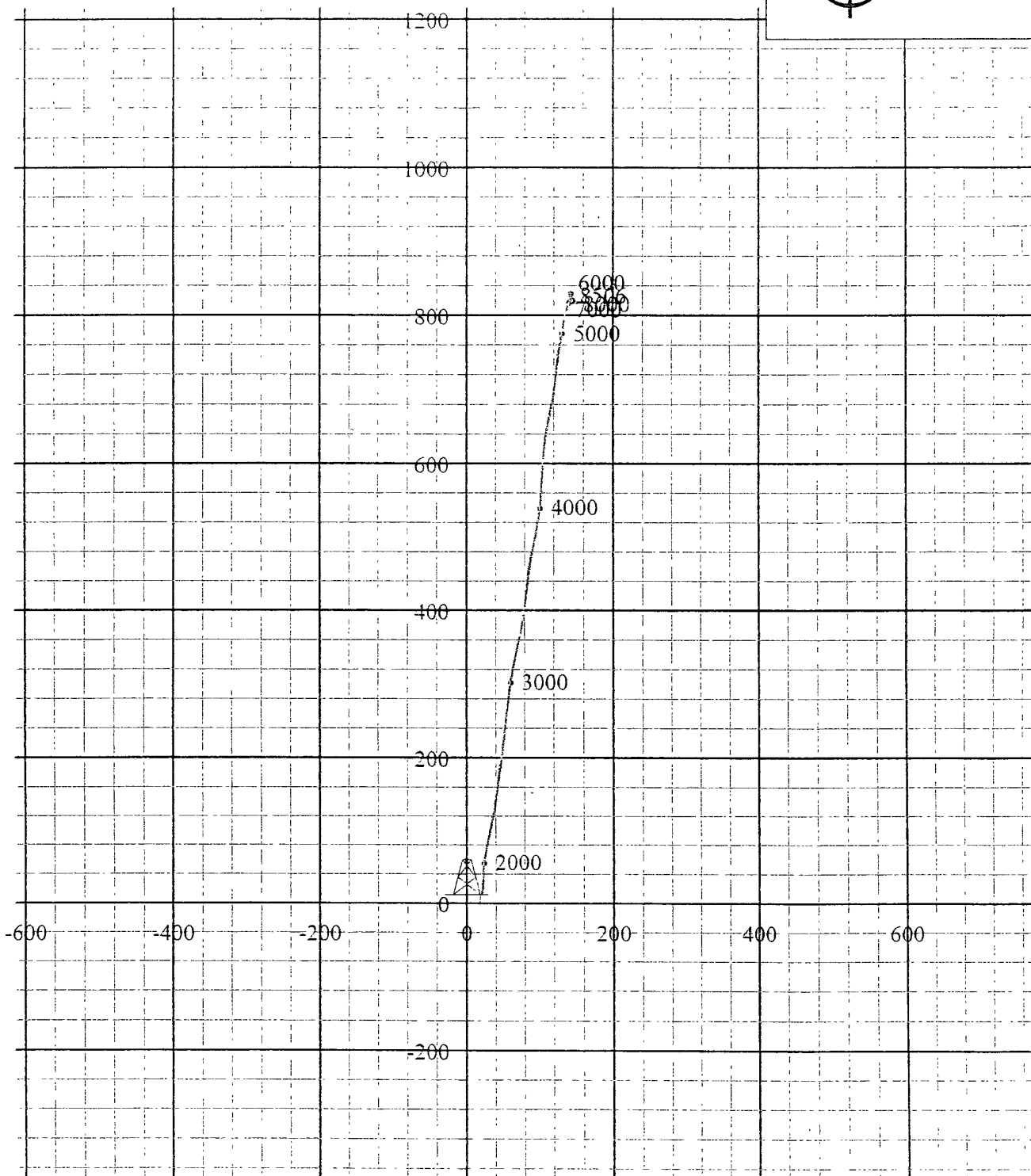
Field: Little Box Canyon
Site: Eddy County, NM
Well: Lion Federal #1
Wellpath: DH - Job #32D0407299
Survey: 04/11/07-05/01/07



Azimuths to Grid North
True North 0 00°
Magnetic North 0 00°

Magnetic Field
Strength 0nT
Dip Angle 0 00°
Date 06/20/2007
Model igrf2000

South(-)/North(+) [100ft/in]



West(-)/East(+) [100ft/in]