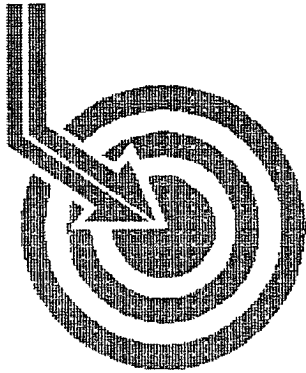




Scientific Drilling

SUR: C-27-21s-37e, 990/N & 2375/W
BHL: C-27-21s-37e, 966/N & 2288/W
API #30-025-39114

APACHE CORPORATION

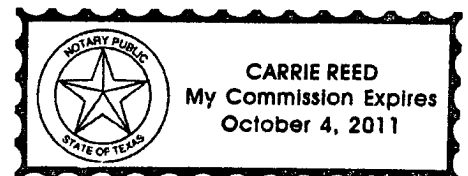
Field: Eunice
Site: Lea County, NM
Well: Lockhart A27 #23
Wellpath: DH - Job #32D1008781
Survey: 10/06/08-10/12/08

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

Lockhart.....Company Representative

Notorized this date 24th of November, 2008.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: APACHE CORPORATION	Date: 10/28/2008	Time: 16:19:23	Page: 1
Field: Eunice	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Lockhart A27 #23	Section (VS) Reference:	Well (0.00N,0.00E,286.83Azi)	
Wellpath: VH - Job #32K1008785	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 10/06/08	Start Date: 10/06/2008
Company: Scientific Drilling Internatio	Engineer: Madrid/Lopez/Paredes
Tool: Keeper;Keeper Gyro	Tied-to: From Surface

Survey

MD ft	Incl deg	Azlm deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	359.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.79	222.37	100.00	0.30	-0.51	-0.46	0.79	0.69	222.37
200.00	0.98	221.24	199.98	0.95	-1.66	-1.49	0.19	2.23	221.94
300.00	1.08	218.03	299.97	1.64	-3.05	-2.64	0.12	4.03	220.88
400.00	1.05	214.15	399.95	2.26	-4.55	-3.73	0.08	5.88	219.38
500.00	0.80	217.41	499.94	2.77	-5.86	-4.67	0.26	7.49	218.55
600.00	0.72	229.97	599.93	3.36	-6.82	-5.58	0.18	8.81	219.27
700.00	0.63	234.59	699.92	4.04	-7.54	-6.51	0.11	9.96	220.78
800.00	0.51	238.18	799.92	4.67	-8.09	-7.33	0.13	10.92	222.17
900.00	0.42	224.18	899.91	5.14	-8.59	-7.96	0.14	11.72	222.83
1000.00	0.45	219.66	999.91	5.46	-9.16	-8.47	0.05	12.47	222.77
1100.00	0.40	161.74	1099.91	5.41	-9.79	-8.61	0.41	13.04	221.33
1200.00	0.34	205.48	1199.91	5.25	-10.39	-8.63	0.28	13.51	219.71
1300.00	0.09	15.78	1299.91	5.30	-10.58	-8.74	0.43	13.72	219.54
1400.00	0.13	333.25	1399.91	5.38	-10.41	-8.77	0.09	13.61	220.11
1500.00	0.12	11.26	1499.91	5.47	-10.20	-8.80	0.08	13.47	220.77
1600.00	0.49	59.56	1599.90	5.19	-9.88	-8.41	0.42	12.98	220.39
1700.00	1.12	77.93	1699.89	4.04	-9.46	-7.08	0.67	11.82	216.82
1800.00	1.27	73.31	1799.87	2.26	-8.94	-5.07	0.18	10.28	209.54
1900.00	1.78	72.52	1899.84	0.05	-8.15	-2.52	0.51	8.54	197.20
2000.00	2.09	66.52	1999.78	-2.62	-6.96	0.63	0.37	6.99	174.83
2100.00	2.15	65.94	2099.71	-5.43	-5.47	4.02	0.06	6.79	143.72
2200.00	2.17	65.51	2199.64	-8.27	-3.92	7.45	0.03	8.42	117.75
2300.00	2.25	65.92	2299.57	-11.17	-2.33	10.97	0.08	11.21	102.02
2400.00	1.89	65.90	2399.50	-13.90	-0.86	14.26	0.36	14.29	93.45
2500.00	1.67	68.62	2499.45	-16.29	0.34	17.13	0.24	17.13	88.85
2600.00	1.46	68.23	2599.42	-18.43	1.35	19.67	0.21	19.71	86.08
2700.00	1.28	68.60	2699.39	-20.31	2.23	21.89	0.18	22.00	84.19
2800.00	0.92	68.22	2799.37	-21.81	2.93	23.67	0.36	23.86	82.94
2900.00	0.81	66.34	2899.36	-22.98	3.51	25.07	0.11	25.31	82.02
3000.00	0.76	66.60	2999.35	-24.02	4.06	26.32	0.05	26.64	81.23
3100.00	0.73	65.13	3099.34	-25.00	4.59	27.51	0.04	27.89	80.52
3200.00	0.49	64.46	3199.33	-25.79	5.05	28.47	0.24	28.92	79.95
3300.00	0.42	55.85	3299.33	-26.34	5.44	29.16	0.10	29.67	79.44
3400.00	0.47	66.75	3399.33	-26.88	5.80	29.84	0.10	30.40	79.00
3500.00	0.28	74.81	3499.32	-27.41	6.03	30.46	0.20	31.05	78.80
3600.00	0.47	41.51	3599.32	-27.78	6.40	30.96	0.28	31.62	78.32
3700.00	0.31	23.66	3699.32	-27.99	6.96	31.34	0.20	32.11	77.49
3800.00	0.34	42.55	3799.32	-28.15	7.42	31.65	0.11	32.51	76.80
3900.00	0.44	51.22	3899.32	-28.49	7.88	32.15	0.12	33.10	76.23
3976.00	0.31	31.04	3975.31	-28.71	8.24	32.49	0.24	33.52	75.77



Scientific Drilling International Survey Report

Company: APACHE CORPORATION	Date: 11/14/2008	Time: 16:07:49	Page: 1
Field: Eunice	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Lockhart A27 #23	Section (VS) Reference:	Well (0.00N,0.00E,286.83Azi)	
Wellpath: DH - Job #32D1008781	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 10/06/08-10/12/08 MWD 4030'-6315'	Start Date: 10/06/2008
Company: Scientific Drilling Internatio	Engineer: Smith/Hernandez/Ramirez
Tool: MWD;MWD	Tied-to: From: Definitive Path

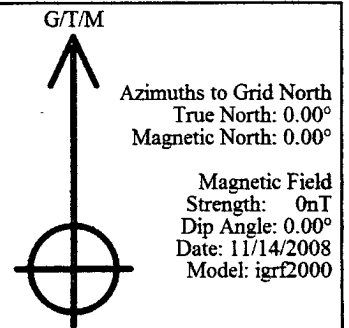
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
3976.00	0.31	31.04	3975.31	-28.71	8.24	32.49	0.00	33.52	75.77
4030.00	1.45	328.37	4029.31	-28.23	8.95	32.20	2.47	33.42	74.47
4093.00	3.13	313.31	4092.26	-26.10	10.81	30.53	2.81	32.39	70.51
4156.00	4.02	307.98	4155.13	-22.50	13.34	27.54	1.51	30.60	64.15
4218.00	5.96	303.23	4216.90	-17.38	16.45	23.14	3.20	28.39	54.59
4312.00	7.35	294.98	4310.26	-6.75	21.66	13.60	1.79	25.58	32.13
4375.00	8.35	285.43	4372.67	1.81	24.58	5.54	2.60	25.20	12.70
4437.00	8.27	283.93	4434.02	10.77	26.85	-3.13	0.37	27.03	353.36
4502.00	8.64	277.95	4498.32	20.26	28.65	-12.50	1.47	31.26	336.43
4595.00	7.81	271.60	4590.36	33.26	29.79	-25.74	1.32	39.37	319.18
4658.00	6.20	268.89	4652.89	40.63	29.85	-33.42	2.61	44.80	311.77
4720.00	6.88	266.37	4714.49	47.29	29.55	-40.47	1.19	50.11	306.13
4814.00	6.97	266.66	4807.80	57.92	28.86	-51.78	0.10	59.28	299.13
4908.00	6.90	266.57	4901.11	68.57	28.19	-63.11	0.08	69.12	294.07
4970.00	6.86	267.10	4962.67	75.55	27.78	-70.53	0.12	75.80	291.50
5031.00	6.83	266.14	5023.23	82.37	27.35	-77.79	0.19	82.45	289.37
5093.00	5.59	268.87	5084.87	88.69	27.04	-84.48	2.06	88.71	287.75
5125.00	5.26	270.03	5116.72	91.58	27.01	-87.51	1.09	91.58	287.15
5187.00	4.29	271.71	5178.51	96.54	27.08	-92.67	1.58	96.54	286.29
5219.00	3.81	272.48	5210.43	98.73	27.16	-94.93	1.51	98.74	285.97
5250.00	2.96	276.29	5241.37	100.51	27.30	-96.75	2.83	100.53	285.76
5281.00	1.50	295.18	5272.35	101.70	27.56	-97.91	5.21	101.72	285.72
5311.00	1.14	15.57	5302.34	102.09	28.01	-98.19	5.75	102.11	285.92
5404.00	0.91	43.48	5395.33	101.78	29.44	-97.43	0.58	101.78	286.81
5467.00	0.72	49.41	5458.32	101.35	30.06	-96.79	0.33	101.35	287.25
5562.00	0.87	47.59	5553.31	100.66	30.93	-95.80	0.16	100.67	287.89
5687.00	1.04	43.97	5678.30	99.65	32.39	-94.31	0.14	99.72	288.95
5814.00	0.38	170.81	5805.29	98.94	32.80	-93.45	1.03	99.04	289.34
5941.00	0.48	155.15	5932.29	98.40	31.91	-93.16	0.12	98.47	288.91
6067.00	0.75	135.34	6058.28	97.33	30.84	-92.35	0.27	97.37	288.47
6189.00	0.68	143.90	6180.27	96.05	29.69	-91.37	0.10	96.07	288.00
6315.00	0.66	143.58	6306.26	94.87	28.50	-90.50	0.02	94.88	287.48

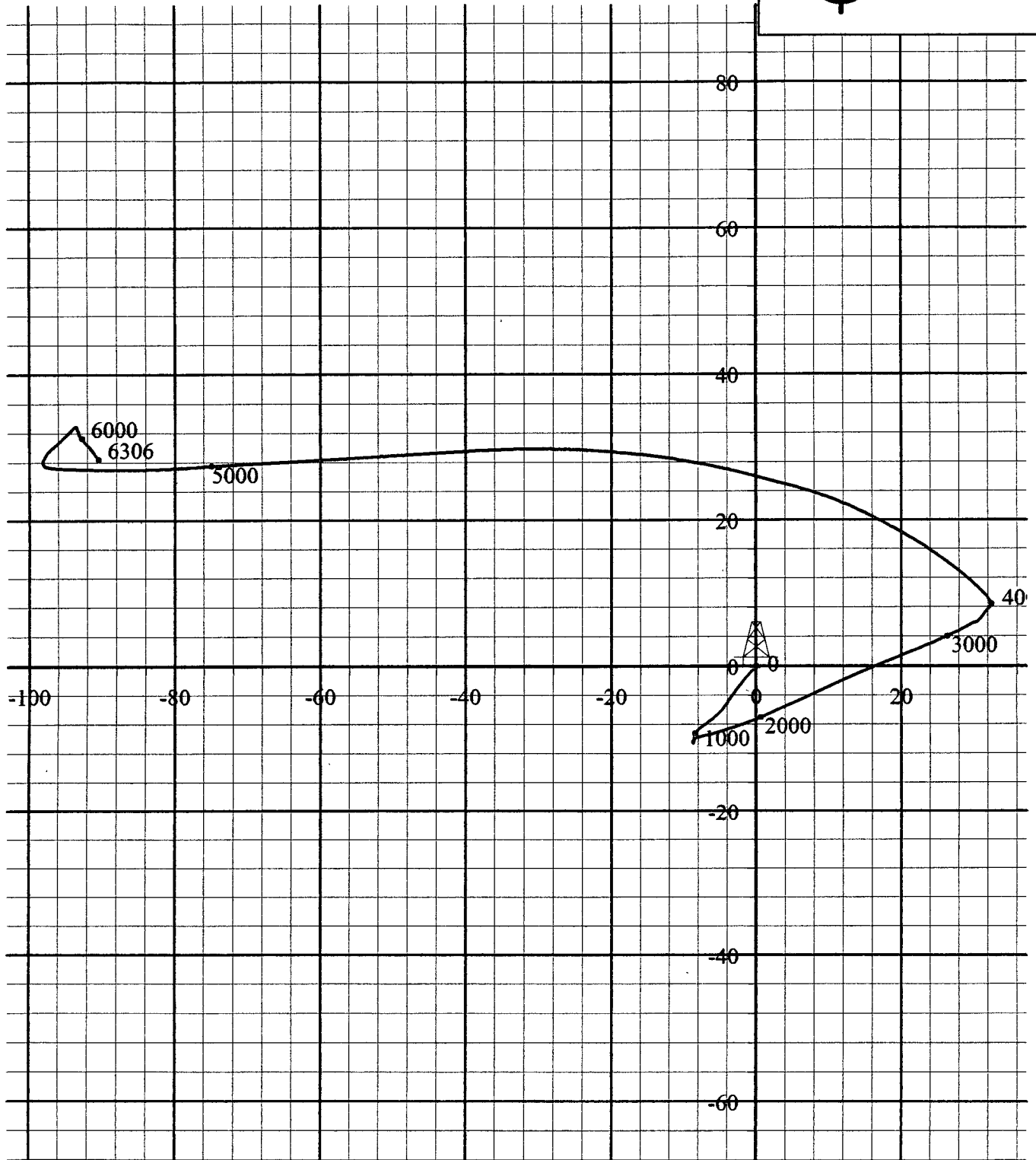


Scientific
Drilling

Field: Eunice
Site: Lea County, NM
Well: Lockhart A27 #23
Wellpath: DH - Job #32D1008781
Survey: 10/06/08-10/12/08



South(-)/North(+) [20ft/in]



West(-)/East(+) [20ft/in]