

SCANNED



Scientific Drilling

SUR: K-14-16s-35e, 1650/S & 1650/W
BHL: K-14-16s-35e, 1643/S & 1594/W
API # 30-025-36568

E.O.G. (Enron Oil & Gas)

Field: Shoebar, NW
Site: Lea County, NM
Well: Mayflower 14 State #10
Wellpath: VH - Job #32K0404239
Survey: 04/13/04

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

End Mady Company Representative

Notorized this date 6th of May, 2004.

Deborah Sue Bynum

Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling Survey Report

Company: E.O.G. (Enron Oil & Gas)
Field: Shoebar, NW
Site: Lea County, NM
Well: Mayflower 14 State #10
Wellpath: VH - Job #32K0404239

Date: 5/6/2004 Time: 11:35:37 Page: 1
Co-ordinate(NE) Reference: Site: Lea County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,262.39Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 04/13/04
KSRG 0-11455
Company: Scientific Drilling
Tool: Keeper, Keeper Surface Readout Gyro

Start Date: 4/13/2004
Engineer: Gonzales/Stahl
Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	Chd ft	Chd deg
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.00
100.0	0.54	319.42	100.0	0.3	0.4	-0.3	0.54	0.5	319.42
200.0	0.42	337.98	200.0	0.6	1.1	-0.8	0.19	1.3	324.59
300.0	0.54	11.85	300.0	0.5	1.9	-0.8	0.30	2.0	336.89
400.0	1.16	16.91	400.0	0.0	3.3	-0.4	0.63	3.3	353.04
500.0	1.68	2.95	499.9	-0.7	5.7	0.0	0.62	5.7	359.69
600.0	1.74	0.62	599.9	-1.2	8.7	0.1	0.09	8.7	0.40
700.0	1.74	2.47	699.9	-1.7	11.7	0.1	0.06	11.7	0.70
800.0	1.73	3.14	799.8	-2.2	14.8	0.3	0.02	14.8	1.13
900.0	1.74	357.91	899.8	-2.7	17.8	0.3	0.16	17.8	1.02
1000.0	1.67	359.76	999.7	-3.0	20.8	0.3	0.09	20.8	0.71
1100.0	1.64	1.33	1099.7	-3.4	23.6	0.3	0.05	23.6	0.69
1200.0	1.63	2.34	1199.6	-3.9	26.5	0.4	0.03	26.5	0.81
1300.0	1.40	4.54	1299.6	-4.4	29.1	0.5	0.23	29.1	1.04
1400.0	1.27	10.57	1399.6	-5.0	31.4	0.8	0.19	31.5	1.51
1500.0	1.13	6.20	1499.6	-5.6	33.5	1.1	0.17	33.5	1.95
1600.0	1.06	4.78	1599.5	-6.0	35.4	1.3	0.08	35.4	2.14
1700.0	0.90	8.73	1699.5	-6.4	37.1	1.5	0.17	37.2	2.34
1800.0	0.67	4.38	1799.5	-6.8	38.5	1.7	0.24	38.5	2.51
1900.0	0.56	12.20	1899.5	-7.1	39.5	1.8	0.14	39.6	2.65
2000.0	0.48	4.35	1999.5	-7.3	40.4	2.0	0.11	40.5	2.79
2100.0	0.52	357.75	2099.5	-7.4	41.3	2.0	0.07	41.4	2.75
2200.0	0.36	0.48	2199.5	-7.5	42.1	2.0	0.16	42.1	2.68
2300.0	0.40	358.71	2299.5	-7.6	42.7	2.0	0.04	42.6	2.63
2400.0	0.41	352.58	2399.5	-7.6	43.4	1.9	0.04	43.5	2.51
2500.0	0.49	357.04	2499.5	-7.7	44.2	1.8	0.09	44.3	2.38
2600.0	0.70	23.03	2599.5	-8.0	45.2	2.1	0.34	45.3	2.60
2700.0	0.80	30.95	2699.5	-8.8	46.4	2.7	0.15	46.5	3.27
2800.0	0.92	44.33	2799.5	-9.8	47.5	3.6	0.23	47.7	4.30
2900.0	1.09	57.52	2899.4	-11.3	48.6	4.9	0.29	48.9	5.79
3000.0	1.30	61.94	2999.4	-13.3	49.7	6.7	0.23	50.1	7.72
3100.0	1.33	60.49	3099.4	-15.4	50.8	8.7	0.05	51.5	9.77
3200.0	1.30	60.61	3199.4	-17.5	51.9	10.7	0.03	53.0	11.69
3300.0	1.13	55.50	3299.4	-19.5	53.0	12.5	0.20	54.5	13.31
3400.0	1.19	55.90	3399.3	-21.3	54.2	14.2	0.06	56.0	14.71
3500.0	1.10	53.52	3499.3	-23.0	55.3	15.9	0.10	57.5	15.99
3600.0	0.95	55.48	3599.3	-24.6	56.4	17.3	0.15	59.0	17.07
3700.0	0.78	48.16	3699.3	-25.9	57.3	18.5	0.20	60.2	17.90
3800.0	0.57	47.70	3799.3	-26.9	58.1	19.4	0.21	61.2	18.45
3900.0	0.47	45.51	3899.3	-27.6	58.7	20.0	0.10	62.0	18.85
4000.0	0.38	28.48	3999.3	-28.2	59.3	20.5	0.16	62.7	19.07
4100.0	0.39	19.20	4099.3	-28.5	59.9	20.8	0.06	63.4	19.12
4200.0	0.37	3.87	4199.3	-28.7	60.5	20.9	0.10	64.0	19.04
4300.0	0.35	342.36	4299.3	-28.7	61.1	20.8	0.14	64.6	18.81
4400.0	0.41	326.12	4399.3	-28.5	61.7	20.5	0.12	65.1	18.40
4500.0	0.47	318.16	4499.3	-28.1	62.3	20.1	0.09	65.5	17.84
4600.0	0.59	301.92	4599.3	-27.5	62.9	19.4	0.19	65.8	17.10
4700.0	0.64	294.43	4699.2	-26.6	63.4	18.4	0.10	66.0	16.19
4800.0	0.71	286.91	4799.2	-25.6	63.8	17.3	0.11	66.1	15.17



Scientific
Drilling

Scientific Drilling Survey Report

Company: E.O.G. (Enron Oil & Gas)
Field: Shober, NVV
Site: Lea County, NM
Well: Mayflower 14 State #10
Wellpath: VH - Job #32K0404239

Date: 5/6/2004 Time: 11:35:37 Page: 2
Co-ordinate(N/E) Reference: SRS: Lea County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,262.39Az)
Survey Calculation Method: Minimum Curvature Dth: 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
4900.0	0.77	279.76	4899.2	-24.4	64.1	16.1	0.11	66.1	14.05
5000.0	0.76	278.03	4999.2	-23.1	64.3	14.7	0.03	66.0	12.89
5100.0	0.85	275.25	5099.2	-21.7	64.5	13.3	0.08	65.9	11.66
5200.0	0.86	273.16	5199.2	-20.3	64.6	11.8	0.03	65.7	10.37
5300.0	0.84	269.34	5299.2	-18.8	64.6	10.3	0.06	65.5	9.06
5400.0	0.85	272.10	5399.2	-17.3	64.7	8.9	0.04	65.3	7.80
5500.0	0.83	269.47	5499.2	-15.9	64.7	7.4	0.04	65.1	6.52
5600.0	0.86	267.90	5599.2	-14.4	64.6	5.9	0.04	64.9	5.23
5700.0	0.72	261.42	5699.2	-13.1	64.5	4.6	0.17	64.7	4.03
5800.0	0.71	261.52	5799.1	-11.8	64.3	3.3	0.01	64.4	2.95
5900.0	0.66	253.68	5899.1	-10.6	64.1	2.2	0.11	64.1	1.92
6000.0	0.68	244.65	5999.1	-9.5	63.7	1.1	0.11	63.7	0.95
6100.0	0.68	241.32	6099.1	-8.4	63.1	0.0	0.04	63.1	0.00
6200.0	0.80	244.98	6199.1	-7.1	62.5	-1.1	0.13	62.6	358.95
6300.0	0.68	239.41	6299.1	-5.9	61.9	-2.3	0.14	62.0	357.88
6400.0	0.64	236.54	6399.1	-4.9	61.3	-3.3	0.05	61.4	356.95
6500.0	0.65	229.91	6499.1	-3.9	60.7	-4.2	0.08	60.8	356.07
6600.0	0.62	231.56	6599.1	-3.0	60.0	-5.0	0.03	60.2	355.21
6700.0	0.62	234.38	6699.1	-2.0	59.3	-5.9	0.03	59.6	354.33
6800.0	0.62	230.80	6799.1	-1.1	58.7	-6.8	0.04	59.0	353.43
6900.0	0.64	237.74	6899.1	-0.1	58.0	-7.6	0.08	58.5	352.49
7000.0	0.47	232.00	6999.1	0.8	57.5	-8.4	0.18	58.1	351.64
7100.0	0.70	240.80	7099.1	1.7	56.9	-9.3	0.24	57.7	350.73
7200.0	0.83	239.44	7199.0	2.9	56.2	-10.4	0.13	57.2	349.48
7300.0	0.87	243.17	7299.0	4.3	55.5	-11.7	0.07	56.8	348.06
7400.0	0.85	246.03	7399.0	5.7	54.9	-13.1	0.05	56.4	346.57
7500.0	0.94	256.80	7499.0	7.2	54.4	-14.6	0.19	56.3	345.00
7600.0	0.86	258.64	7599.0	8.8	54.1	-16.1	0.08	56.4	343.41
7700.0	0.92	256.98	7699.0	10.4	53.7	-17.6	0.06	56.6	341.64
7800.0	0.91	260.76	7799.0	12.0	53.4	-19.2	0.06	56.8	340.24
7900.0	0.88	264.22	7899.0	13.5	53.2	-20.7	0.06	57.1	338.71
8000.0	0.91	265.59	7999.0	15.1	53.1	-22.3	0.04	57.6	337.22
8100.0	0.88	261.57	8099.9	16.6	52.9	-23.9	0.07	58.0	335.74
8200.0	0.76	274.63	8199.9	18.1	52.9	-25.3	0.22	58.6	334.45
8300.0	0.78	266.16	8299.9	19.4	52.9	-26.6	0.12	59.2	333.28
8400.0	0.80	274.86	8399.9	20.7	52.9	-28.0	0.12	59.8	332.11
8500.0	0.85	269.12	8499.9	22.2	52.9	-29.4	0.10	60.6	330.93
8600.0	1.07	266.05	8599.9	23.8	52.9	-31.1	0.22	61.3	329.53
8700.0	1.07	262.04	8699.9	25.7	52.7	-32.9	0.07	62.1	327.97
8800.0	1.11	263.19	8799.9	27.6	52.4	-34.8	0.05	62.9	326.39
8900.0	1.10	263.94	8899.8	29.5	52.2	-36.7	0.02	63.8	324.85
9000.0	0.95	250.93	8999.8	31.3	51.8	-38.5	0.27	64.6	323.40
9100.0	1.80	164.35	9099.8	31.9	50.0	-38.8	1.99	63.4	322.18
9200.0	2.34	156.17	9199.7	31.1	46.7	-37.6	0.61	59.9	321.14
9300.0	2.42	154.75	9299.6	29.9	42.9	-35.9	0.10	55.9	320.09
9400.0	2.34	156.02	9399.6	28.7	39.1	-34.1	0.09	51.9	318.86
9500.0	2.37	154.74	9499.5	27.5	35.4	-32.4	0.06	48.0	317.49
9600.0	2.30	156.63	9599.4	26.3	31.7	-30.8	0.10	44.1	315.84
9700.0	2.27	159.40	9699.3	25.3	28.0	-29.3	0.11	40.5	313.71
9800.0	2.26	158.26	9799.2	24.4	24.3	-27.8	0.05	36.9	311.10
9900.0	2.29	160.34	9899.2	23.5	20.6	-26.4	0.09	33.5	307.89
10000.0	2.25	160.31	9999.1	22.7	16.8	-25.1	0.04	30.2	303.86



Scientific
Drilling

Scientific Drilling Survey Report

Company: E.O.G. (Enron Oil & Gas)
Field: Shobar, NV
Site: Lea County, NM
Well: Mayflower 14 State #10
Wellpath: VH - Job #32K0404239

Date: 5/6/2004 Time: 11:35:37 Page: 3
Co-ordinate(N/E) Reference: Site: Lea County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (N/S) Reference: Well (0.00N,0.00E,262.39Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

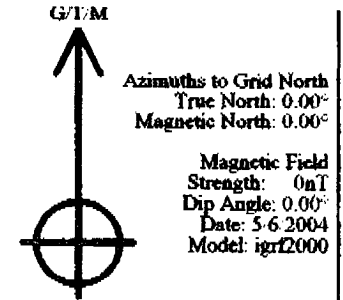
Survey

MD ft	Incl deg	Azimuth deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
10100.0	2.05	159.40	10098.0	21.8	13.3	-23.8	0.20	27.3	299.22
10200.0	2.03	161.55	10197.9	21.1	10.0	-22.6	0.08	24.7	293.78
10300.0	1.93	164.74	10297.9	20.5	6.7	-21.6	0.15	22.6	287.12
10400.0	1.77	174.69	10397.8	20.4	3.5	-21.0	0.36	21.3	279.44
10500.0	1.68	184.11	10497.8	20.7	0.5	-21.0	0.30	21.0	271.36
10600.0	1.64	197.83	10597.7	21.7	-2.3	-21.5	0.40	21.7	263.83
10700.0	1.38	225.21	10697.7	23.2	-4.5	-22.8	0.76	23.3	258.76
10800.0	1.78	251.73	10797.7	25.7	-5.9	-25.2	0.82	25.8	256.86
10900.0	2.42	259.55	10897.6	29.3	-6.7	-28.7	0.70	29.5	256.78
11000.0	3.21	264.16	10997.5	34.3	-7.4	-33.6	0.83	34.4	257.55
11100.0	2.77	258.34	11097.3	39.5	-8.2	-38.7	0.53	39.6	258.07
11200.0	2.70	265.09	11197.2	44.2	-8.9	-43.4	0.33	44.3	258.45
11300.0	2.33	281.17	11297.1	48.5	-8.7	-47.8	0.79	48.6	259.70
11400.0	2.28	286.28	11397.1	52.3	-7.7	-51.7	0.21	52.3	261.49
11455.0	2.28	282.47	11452.0	54.3	-7.2	-53.8	0.28	54.3	262.39

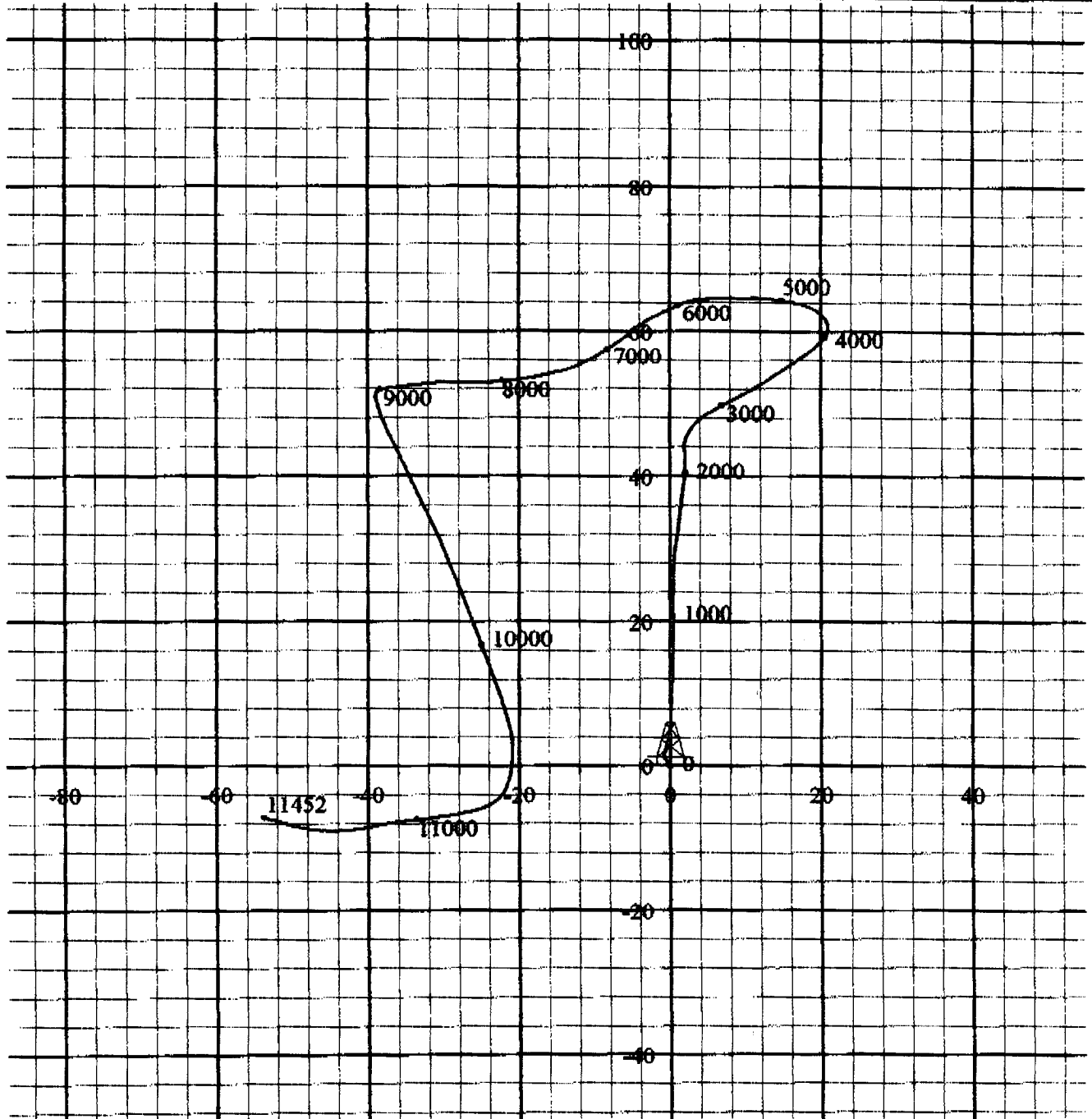


**Scientific
Drilling**

Field: Shoebar, NW
Site: Lea County, NM
Well: Mayflower 14 State #10
Wellpath: VH - Job #32K0404239
Survey: 04/13/04



South(-)/North(+) [10ft/in]



West(-)/East(+) [10ft/in]