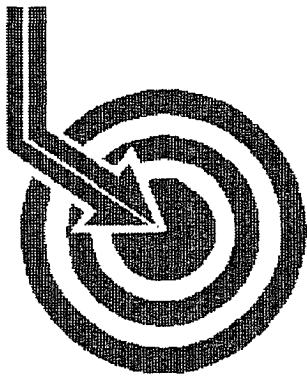




Scientific Drilling

MEWBOURNE OIL

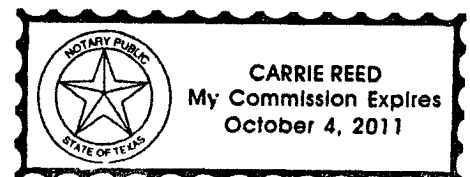
Field: Grayburg Morrow
Site: Eddy County, NM
Well: Orca 11 Federal Com #1
Wellpath: VH - Job #32K0509195
Survey: 05/29/09

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

.....*L. Hartman*..... Company Representative

Notorized this date 7th of July, 2009.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific
Drilling

Scientific Drilling International Survey Report

Company: MEWBORNE OIL	Date: 06/04/2009	Time: 09:03:56	Page: 1
Field: Grayburg Morrow	Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North		
Site: Eddy County, NM	Vertical (TVD) Reference: SITE: 0.0		
Well: Orca 11 Federal Com #1	Section (VS) Reference: Well (0.00N, 0.00E, 261.99Azi)		
Wellpath: VH - Job #32K0509195	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 05/29/09	Start Date: 05/29/2009
Company: KSRG 0'-9380'	
Tool: Scientific Drilling Internatio	Engineer: Madrid/Williams
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.73	92.91	100.00	-0.63	-0.03	0.64	0.73	0.64	92.91
200.00	0.85	85.50	199.99	-1.99	-0.01	2.01	0.16	2.01	90.18
300.00	1.18	77.97	299.97	-3.76	0.27	3.76	0.36	3.77	85.95
400.00	1.21	61.83	399.95	-5.78	0.98	5.70	0.34	5.78	80.24
500.00	1.33	57.26	499.93	-7.82	2.11	7.60	0.16	7.89	74.52
600.00	1.35	51.06	599.90	-9.89	3.47	9.50	0.15	10.11	69.91
700.00	1.87	42.67	699.86	-12.16	5.41	11.52	0.57	12.73	64.83
800.00	2.57	41.00	799.78	-15.11	8.31	14.09	0.70	16.36	59.49
900.00	2.61	40.11	899.68	-18.50	11.74	17.03	0.06	20.69	55.43
1000.00	2.48	38.85	999.58	-21.78	15.17	19.86	0.14	24.99	52.63
1100.00	2.13	41.80	1099.50	-24.77	18.24	22.45	0.37	28.92	50.92
1200.00	1.68	41.95	1199.45	-27.32	20.71	24.67	0.45	32.21	49.99
1300.00	1.42	35.77	1299.41	-29.30	22.81	26.37	0.31	34.87	49.15
1400.00	1.21	31.84	1399.38	-30.83	24.71	27.66	0.23	37.09	48.22
1500.00	0.90	26.48	1499.37	-31.95	26.31	28.56	0.32	38.83	47.35
1600.00	0.60	34.82	1599.36	-32.75	27.44	29.21	0.32	40.08	46.79
1700.00	0.41	32.41	1699.35	-33.34	28.17	29.70	0.19	40.94	46.51
1800.00	0.24	18.15	1799.35	-33.66	28.67	29.96	0.19	41.47	46.26
1900.00	0.12	8.25	1899.35	-33.79	28.98	30.04	0.12	41.74	46.03
2000.00	0.14	324.34	1999.35	-33.76	29.18	29.98	0.10	41.84	45.78
2100.00	0.23	306.95	2099.35	-33.56	29.40	29.75	0.11	41.83	45.34
2200.00	0.27	293.70	2199.35	-33.22	29.62	29.38	0.07	41.71	44.77
2300.00	0.14	257.45	2299.35	-32.89	29.68	29.04	0.18	41.53	44.37
2400.00	0.19	305.13	2399.35	-32.65	29.75	28.79	0.14	41.40	44.05
2500.00	0.24	284.61	2499.35	-32.34	29.90	28.45	0.09	41.27	43.57
2600.00	0.19	280.74	2599.35	-31.99	29.98	28.08	0.05	41.08	43.12
2700.00	0.11	290.90	2699.35	-31.75	30.05	27.83	0.08	40.96	42.80
2800.00	0.28	278.14	2799.35	-31.43	30.12	27.50	0.17	40.78	42.40
2900.00	0.29	241.86	2899.35	-30.96	30.03	27.03	0.18	40.41	41.99
3000.00	0.18	209.29	2999.34	-30.62	29.78	26.73	0.17	40.02	41.92
3100.00	0.22	190.92	3099.34	-30.46	29.45	26.62	0.08	39.70	42.11
3200.00	0.29	178.99	3199.34	-30.37	29.01	26.59	0.09	39.35	42.51
3300.00	0.22	145.17	3299.34	-30.43	28.60	26.70	0.16	39.13	43.04
3400.00	0.17	157.18	3399.34	-30.55	28.31	26.87	0.06	39.03	43.51
3500.00	0.22	148.30	3499.34	-30.67	28.01	27.03	0.06	38.92	43.98
3600.00	0.28	162.16	3599.34	-30.79	27.61	27.20	0.08	38.76	44.58
3700.00	0.34	153.22	3699.34	-30.92	27.11	27.41	0.08	38.56	45.32
3800.00	0.31	142.70	3799.34	-31.15	26.63	27.71	0.07	38.43	46.14
3900.00	0.28	128.08	3899.34	-31.45	26.27	28.07	0.08	38.44	46.90
4000.00	0.30	132.06	3999.33	-31.79	25.94	28.45	0.03	38.50	47.65
4100.00	0.37	138.38	4099.33	-32.14	25.52	28.86	0.08	38.53	48.51
4200.00	0.35	134.61	4199.33	-32.50	25.07	29.29	0.03	38.55	49.45
4300.00	0.31	165.46	4299.33	-32.72	24.59	29.58	0.18	38.47	50.26
4400.00	0.37	180.88	4399.33	-32.70	24.01	29.64	0.11	38.14	51.00
4500.00	0.40	172.77	4499.32	-32.64	23.34	29.68	0.06	37.76	51.82
4600.00	0.41	186.49	4599.32	-32.55	22.64	29.68	0.10	37.33	52.67
4700.00	0.45	205.12	4699.32	-32.25	21.92	29.48	0.14	36.74	53.36
4800.00	0.48	213.69	4799.32	-31.75	21.22	29.08	0.08	36.00	53.88



Scientific
Drilling

Scientific Drilling International

Survey Report

Company: MEWBOURNE OIL
Field: Grayburg Morrow
Site: Eddy County, NM
Well: Orca 11 Federal Com #1
Wellpath: VH - Job #32K0509195

Date: 06/04/2009 Time: 09:03:56 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,261.99Azi)
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	0.44	199.27	4899.31	-31.30	20.51	28.72	0.12	35.29	54.47
5000.00	0.52	205.20	4999.31	-30.87	19.74	28.40	0.09	34.58	55.20
5100.00	0.57	200.69	5099.30	-30.39	18.86	28.03	0.07	33.78	56.07
5200.00	0.49	197.61	5199.30	-29.96	17.99	27.73	0.08	33.05	57.03
5300.00	0.09	256.78	5299.30	-29.70	17.56	27.52	0.45	32.65	57.46
5400.00	0.10	204.53	5399.30	-29.57	17.46	27.41	0.08	32.50	57.49
5500.00	0.13	205.76	5499.30	-29.46	17.28	27.32	0.03	32.33	57.68
5600.00	0.06	215.72	5599.30	-29.36	17.14	27.24	0.07	32.18	57.83
5700.00	0.09	196.15	5699.30	-29.30	17.02	27.19	0.04	32.08	57.95
5800.00	0.08	222.95	5799.30	-29.21	16.89	27.12	0.04	31.95	58.08
5900.00	0.09	235.33	5899.30	-29.08	16.80	27.01	0.02	31.81	58.12
6000.00	0.17	217.32	5999.30	-28.91	16.64	26.85	0.09	31.59	58.22
6100.00	0.26	203.03	6099.30	-28.69	16.31	26.67	0.10	31.26	58.56
6200.00	0.39	214.46	6199.30	-28.34	15.82	26.39	0.14	30.77	59.06
6300.00	0.47	209.36	6299.29	-27.86	15.18	26.00	0.09	30.11	59.72
6400.00	0.54	212.66	6399.29	-27.30	14.43	25.54	0.08	29.34	60.54
6500.00	0.62	214.36	6499.28	-26.63	13.58	24.98	0.08	28.44	61.47
6600.00	0.66	210.63	6599.28	-25.91	12.64	24.39	0.06	27.47	62.60
6700.00	0.64	210.37	6699.27	-25.20	11.66	23.81	0.02	26.51	63.90
6800.00	0.68	203.18	6799.26	-24.55	10.64	23.29	0.09	25.61	65.46
6900.00	0.64	202.93	6899.26	-23.95	9.58	22.84	0.04	24.77	67.25
7000.00	0.74	200.43	6999.25	-23.36	8.46	22.40	0.10	23.94	69.32
7100.00	0.73	198.96	7099.24	-22.76	7.25	21.97	0.02	23.13	71.74
7200.00	0.74	202.50	7199.23	-22.15	6.05	21.51	0.05	22.35	74.29
7300.00	0.75	193.56	7299.23	-21.58	4.82	21.11	0.12	21.65	77.15
7400.00	0.79	197.45	7399.22	-21.04	3.52	20.75	0.07	21.05	80.36
7500.00	0.76	196.83	7499.21	-20.47	2.23	20.35	0.03	20.48	83.74
7600.00	0.85	210.61	7599.20	-19.72	0.96	19.78	0.21	19.81	87.23
7700.00	0.98	214.03	7699.19	-18.69	-0.39	18.93	0.14	18.93	91.18
7800.00	1.12	229.18	7799.17	-17.29	-1.74	17.71	0.31	17.79	95.60
7900.00	1.25	231.84	7899.15	-15.53	-3.05	16.11	0.14	16.40	100.72
8000.00	1.51	235.53	7999.12	-13.41	-4.47	14.17	0.27	14.86	107.51
8100.00	1.71	240.32	8099.08	-10.84	-5.95	11.79	0.24	13.20	116.80
8200.00	2.03	243.60	8199.03	-7.77	-7.48	8.90	0.34	11.63	130.04
8300.00	2.14	244.34	8298.96	-4.31	-9.08	5.63	0.11	10.68	148.17
8400.00	2.17	243.64	8398.89	-0.74	-10.73	2.25	0.04	10.96	168.13
8500.00	2.17	243.20	8498.82	2.85	-12.42	-1.13	0.02	12.47	185.21
8600.00	2.01	234.89	8598.75	6.21	-14.28	-4.26	0.34	14.90	196.60
8700.00	1.86	239.36	8698.69	9.26	-16.12	-7.09	0.21	17.61	203.74
8800.00	2.12	255.07	8798.63	12.60	-17.42	-10.27	0.60	20.22	210.52
8900.00	2.50	260.26	8898.55	16.61	-18.27	-14.21	0.43	23.14	217.88
9000.00	3.49	287.47	8998.42	21.54	-17.72	-19.26	1.71	26.17	227.38
9100.00	5.09	289.16	9098.14	28.24	-15.35	-26.35	1.60	30.50	239.78
9200.00	6.95	282.69	9197.58	37.84	-12.57	-36.45	1.98	38.55	250.98
9300.00	8.10	276.99	9298.72	50.31	-10.38	-49.34	1.37	50.42	258.12
9380.00	8.51	281.16	9375.88	61.34	-8.55	-60.75	0.91	61.34	261.99



Scientific
Drilling

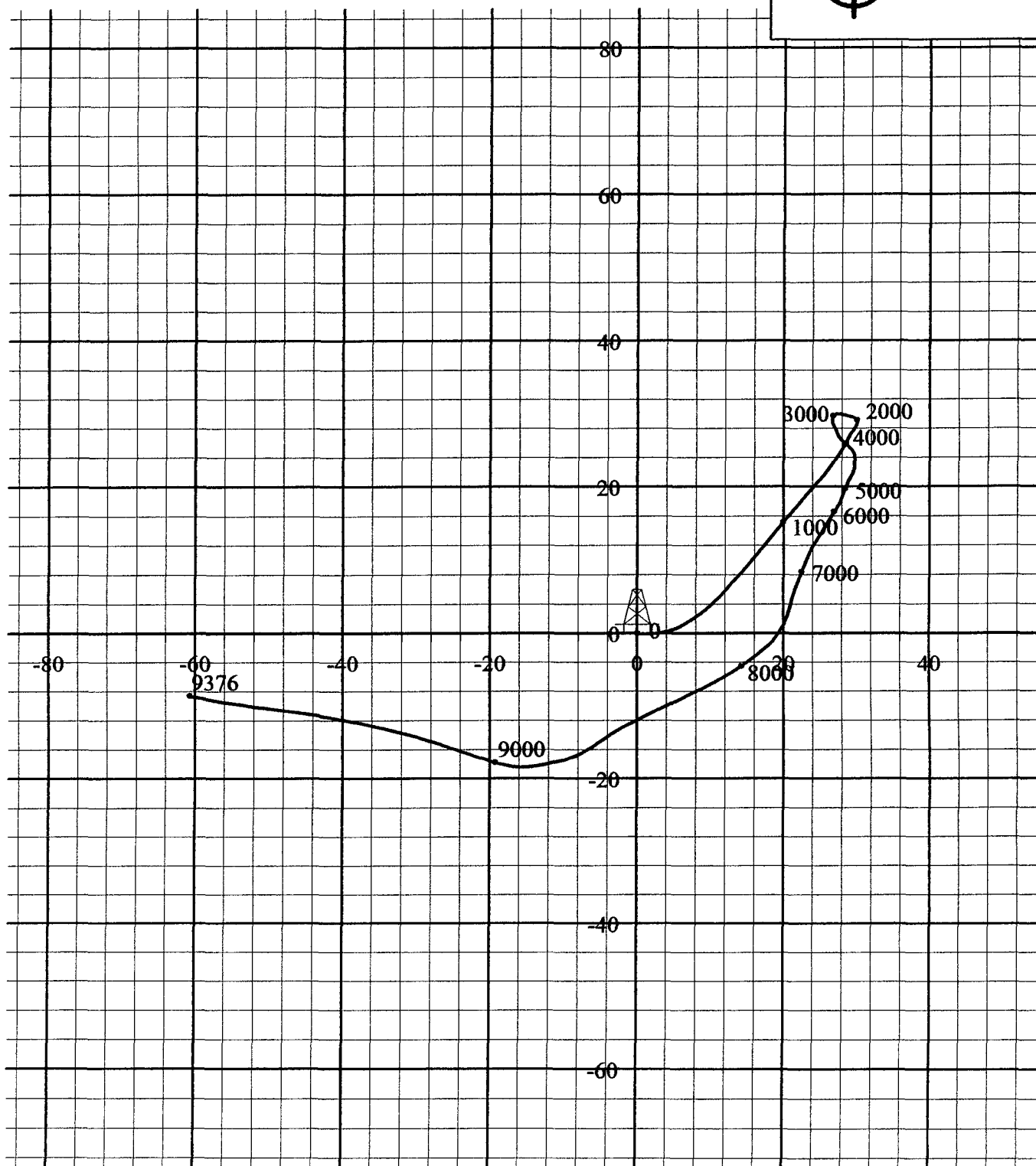
Field: Grayburg Morrow
Site: Eddy County, NM
Well: Orca 11 Federal Com #1
Wellpath: VH - Job #32K0509195
Survey: 05/29/09



Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 06/04/2009
Model: igrf2000

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



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