

15-42489

Mewbourne Oil Company .

Eddy County, New Mexico

Section 13-24S-26E Maverick 13 DM

Maverick 13 DM Fed Com #1H

Original Hole

Design: Original Hole

Standard Survey Report

08 May, 2014

Please provide signature page for survey

Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Maverick 13 DM Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3253 + 20 @ 3273.0usft (Patterson 41)
Site:	Section 13-24S-26E Maverick 13 DM	MD Reference:	GL 3253 + 20 @ 3273.0usft (Patterson 41)
Well:	Maverick 13 DM Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db Todd

Project:	Eddy County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Section 13-24S-26E Maverick 13 DM			
Site Position:		Northing:	445,215.10 usft	Latitude:	32° 13' 26.355 N
From:	Map	Easting:	525,007.40 usft	Longitude:	104° 15' 8.877 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.04 °

Well:	Maverick 13 DM Fed Com #1H					
Well Position	+N/-S	0.0 usft	Northing:	445,215.10 usft	Latitude:	32° 13' 26.355 N
	+E/-W	0.0 usft	Easting:	525,007.40 usft	Longitude:	104° 15' 8.877 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,253.0 usft	

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/13/2013	7.59	60.01	48,293

Design:	Original Hole				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	172.16	

Survey Program		Date	5/8/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
200.0	6,365.0	VES Gyro Survey (Original Hole)	GyroFlex		
6,441.0	11,490.0	Stryker MWD Survey (Original Hole)	MWD	MWD - Standard	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.40	293.05	200.0	0.3	-0.6	-0.4	0.20	0.20	0.00
400.0	0.50	237.16	400.0	0.1	-2.0	-0.3	0.21	0.05	-27.95
600.0	0.89	160.85	600.0	-1.9	-2.2	1.5	0.45	0.19	-38.16
800.0	0.83	158.72	800.0	-4.7	-1.2	4.5	0.03	-0.03	-1.06
1,000.0	1.20	128.78	999.9	-7.3	1.0	7.4	0.32	0.18	-14.97
1,200.0	2.80	109.10	1,199.8	-10.3	7.2	11.1	0.86	0.80	-9.84
1,400.0	3.19	104.15	1,399.5	-13.2	17.2	15.4	0.24	0.20	-2.48
1,600.0	4.16	94.57	1,599.1	-15.2	29.9	19.1	0.57	0.48	-4.79
1,800.0	2.90	104.20	1,798.7	-17.0	42.0	22.5	0.69	-0.63	4.82

Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Maverick 13 DM Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3253 + 20 @ 3273.0usft (Patterson 41)
Site:	Section 13-24S-26E, Maverick 13 DM	MD Reference:	GL 3253 + 20 @ 3273.0usft (Patterson 41)
Well:	Maverick 13 DM Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db Todd

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (%/100usft)	Build Rate (%/100usft)	Turn Rate (%/100usft)
2,000.0	2.09	106.52	1,998.5	-19.3	50.4	25.9	0.41	-0.41	1.16
2,200.0	1.68	104.00	2,198.4	-21.0	56.7	28.5	0.21	-0.20	-1.26
2,400.0	1.46	104.04	2,398.4	-22.3	62.1	30.6	0.11	-0.11	0.02
2,600.0	1.37	99.50	2,598.3	-23.3	66.9	32.2	0.07	-0.05	-2.27
2,800.0	1.06	113.43	2,798.3	-24.5	70.9	33.9	0.21	-0.15	6.96
3,000.0	1.01	115.03	2,998.2	-26.0	74.2	35.8	0.03	-0.03	0.80
3,200.0	0.64	118.76	3,198.2	-27.2	76.8	37.5	0.19	-0.18	1.87
3,400.0	0.66	132.53	3,398.2	-28.5	78.6	39.0	0.08	0.01	6.89
3,600.0	0.69	151.15	3,598.2	-30.4	80.1	41.0	0.11	0.02	9.31
3,800.0	0.77	147.49	3,798.2	-32.6	81.4	43.4	0.05	0.04	-1.83
4,000.0	0.81	140.51	3,998.1	-34.8	83.0	45.8	0.05	0.02	-3.49
4,200.0	0.75	155.65	4,198.1	-37.1	84.4	48.3	0.11	-0.03	7.57
4,400.0	0.69	176.18	4,398.1	-39.5	85.0	50.7	0.13	-0.03	10.27
4,600.0	0.70	171.87	4,598.1	-41.9	85.3	53.1	0.03	0.00	-2.16
4,800.0	0.78	189.60	4,798.1	-44.5	85.2	55.7	0.12	0.04	8.86
5,000.0	1.01	182.58	4,998.0	-47.6	84.9	58.7	0.12	0.11	-3.51
5,200.0	1.24	196.81	5,198.0	-51.4	84.2	62.4	0.18	0.12	7.12
5,400.0	1.30	197.36	5,398.0	-55.6	82.9	66.4	0.03	0.03	0.28
5,600.0	1.04	210.82	5,597.9	-59.3	81.3	69.9	0.19	-0.13	6.73
5,800.0	1.19	205.25	5,797.9	-62.8	79.5	73.0	0.09	0.07	-2.78
6,000.0	0.63	140.16	5,997.9	-65.5	79.3	75.7	0.54	-0.28	-32.55
6,200.0	1.06	37.44	6,197.8	-64.9	81.1	75.4	0.67	0.21	-51.36
6,365.0	1.44	1.91	6,362.8	-61.6	82.1	72.2	0.51	0.24	-21.53
6365' VES Gyro Survey Tie-In									
6,441.0	0.60	306.70	6,438.8	-60.4	81.9	71.0	1.59	-1.11	-72.65
6,473.0	4.00	191.90	6,470.8	-61.4	81.5	71.9	13.39	10.63	-358.75
6,505.0	9.00	186.60	6,502.6	-65.0	81.0	75.4	15.72	15.63	-16.56
6,537.0	14.30	182.50	6,533.9	-71.4	80.5	81.7	16.75	16.56	-12.81
6,568.0	16.70	181.70	6,563.8	-79.7	80.2	89.9	7.77	7.74	-2.58
6,600.0	18.70	179.00	6,594.2	-89.4	80.2	99.5	6.75	6.25	-8.44
6,631.0	20.60	178.70	6,623.4	-99.9	80.4	109.9	6.14	6.13	-0.97
6,663.0	22.40	178.00	6,653.2	-111.6	80.7	121.5	5.68	5.63	-2.19
6,695.0	25.10	178.90	6,682.5	-124.5	81.1	134.3	8.51	8.44	2.81
6,727.0	27.30	179.60	6,711.2	-138.6	81.2	148.4	6.94	6.88	2.19
6,758.0	31.30	180.10	6,738.2	-153.8	81.3	163.4	12.93	12.90	1.61
6,790.0	34.90	179.00	6,765.0	-171.2	81.4	180.7	11.41	11.25	-3.44
6,822.0	36.60	178.40	6,791.0	-189.9	81.8	199.3	5.42	5.31	-1.88
6,853.0	39.50	178.60	6,815.4	-209.0	82.3	218.3	9.36	9.35	0.65
6,885.0	44.00	179.10	6,839.3	-230.3	82.8	239.4	14.10	14.06	1.56
6,917.0	45.80	179.40	6,861.9	-252.9	83.1	261.9	5.66	5.63	0.94
6,948.0	48.50	179.50	6,883.0	-275.6	83.3	284.4	8.71	8.71	0.32
6,980.0	53.00	179.80	6,903.3	-300.4	83.4	309.0	14.08	14.06	0.94
7,012.0	55.80	180.40	6,921.9	-326.4	83.4	334.7	8.88	8.75	1.88

Survey Report

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Well:	Maverick 13 DM Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db Todd

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,044.0	59.20	180.50	6,939.1	-353.4	83.2	361.4	10.63	10.63	0.31
7,075.0	62.20	180.30	6,954.3	-380.4	83.0	388.2	9.69	9.68	-0.65
7,107.0	65.10	180.40	6,968.5	-409.1	82.8	416.6	9.07	9.06	0.31
7,139.0	67.80	181.20	6,981.2	-438.4	82.4	445.6	8.74	8.44	2.50
7,170.0	71.20	184.30	6,992.1	-467.4	81.0	474.1	14.42	10.97	10.00
7,202.0	73.50	184.80	7,001.8	-497.8	78.6	503.9	7.34	7.19	1.56
7,234.0	78.60	184.40	7,009.5	-528.8	76.1	534.2	15.98	15.94	-1.25
7,250.0	80.80	184.00	7,012.4	-544.5	74.9	549.6	13.97	13.75	-2.50
7,340.0	90.60	183.00	7,019.1	-633.9	69.5	637.5	10.94	10.89	-1.11
7,435.0	90.00	181.90	7,018.6	-728.8	65.4	730.9	1.32	-0.63	-1.16
7,499.0	89.30	181.60	7,019.0	-792.8	63.4	794.1	1.19	-1.09	-0.47
7,562.0	90.10	179.80	7,019.3	-855.8	62.7	856.4	3.13	1.27	-2.86
7,625.0	89.30	178.80	7,019.7	-918.8	63.4	918.9	2.03	-1.27	-1.59
7,721.0	91.30	178.60	7,019.2	-1,014.8	65.6	1,014.2	2.09	2.08	-0.21
7,815.0	90.80	179.80	7,017.4	-1,108.7	66.9	1,107.5	1.38	-0.53	1.28
7,910.0	89.10	180.60	7,017.5	-1,203.7	66.6	1,201.6	1.98	-1.79	0.84
8,005.0	88.70	179.50	7,019.4	-1,298.7	66.5	1,295.6	1.23	-0.42	-1.16
8,100.0	89.10	179.80	7,021.2	-1,393.7	67.1	1,389.8	0.53	0.42	0.32
8,195.0	88.10	178.90	7,023.5	-1,488.7	68.2	1,484.0	1.42	-1.05	-0.95
8,290.0	90.30	180.30	7,024.8	-1,583.6	68.8	1,578.2	2.74	2.32	1.47
8,385.0	89.10	179.10	7,025.3	-1,678.6	69.3	1,672.4	1.79	-1.26	-1.26
8,480.0	90.60	180.20	7,025.6	-1,773.6	69.9	1,766.6	1.96	1.58	1.16
8,575.0	90.50	180.10	7,024.7	-1,868.6	69.7	1,860.7	0.15	-0.11	-0.11
8,670.0	90.10	179.00	7,024.2	-1,963.6	70.4	1,954.9	1.23	-0.42	-1.16
8,765.0	89.30	179.60	7,024.7	-2,058.6	71.6	2,049.1	1.05	-0.84	0.63
8,860.0	89.30	181.40	7,025.8	-2,153.6	70.8	2,143.1	1.89	0.00	1.89
8,955.0	88.70	181.50	7,027.5	-2,248.5	68.3	2,236.9	0.64	-0.63	0.11
9,050.0	88.20	180.70	7,030.0	-2,343.5	66.5	2,330.7	0.99	-0.53	-0.84
9,146.0	90.50	181.80	7,031.1	-2,439.4	64.4	2,425.5	2.66	2.40	1.15
9,241.0	90.30	181.40	7,030.5	-2,534.4	61.8	2,519.2	0.47	-0.21	-0.42
9,335.0	89.80	180.40	7,030.4	-2,628.4	60.3	2,612.1	1.19	-0.53	-1.06
9,430.0	89.10	180.00	7,031.3	-2,723.4	60.0	2,706.1	0.85	-0.74	-0.42
9,525.0	87.80	179.20	7,033.9	-2,818.3	60.6	2,800.3	1.61	-1.37	-0.84
9,620.0	88.50	181.00	7,036.9	-2,913.3	60.5	2,894.3	2.03	0.74	1.89
9,715.0	89.80	181.50	7,038.3	-3,008.3	58.4	2,988.1	1.47	1.37	0.53
9,810.0	90.10	181.20	7,038.4	-3,103.2	56.2	3,081.9	0.45	0.32	-0.32
9,905.0	92.10	180.80	7,036.6	-3,198.2	54.5	3,175.8	2.15	2.11	-0.42
9,999.0	91.80	179.90	7,033.4	-3,292.1	53.9	3,268.7	1.01	-0.32	-0.96
10,094.0	91.30	179.30	7,030.8	-3,387.1	54.6	3,362.9	0.82	-0.53	-0.63
10,189.0	90.40	180.80	7,029.4	-3,482.1	54.5	3,457.0	1.84	-0.95	1.58
10,284.0	89.20	181.10	7,029.8	-3,577.1	52.9	3,550.9	1.30	-1.26	0.32
10,379.0	88.40	181.60	7,031.7	-3,672.0	50.7	3,644.6	0.99	-0.84	0.53
10,474.0	87.30	180.80	7,035.3	-3,766.9	48.7	3,738.4	1.43	-1.16	-0.84

Survey Report

Company:	Mewbourne Oil Company.	Local Co-ordinate Reference:	Well Maverick 13 DM Fed.Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3253 + 20 @ 3273.0usft (Patterson 41)
Site:	Section 13-24S-26E Maverick 13 DM	MD Reference:	GL 3253 + 20 @ 3273.0usft (Patterson 41)
Well:	Maverick 13 DM Fed.Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db Todd

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,569.0	89.00	181.20	7,038.4	-3,861.9	47.0	3,832.2	1.84	1.79	0.42
10,664.0	88.40	180.80	7,040.5	-3,956.8	45.4	3,926.1	0.76	-0.63	-0.42
10,759.0	90.50	181.00	7,041.4	-4,051.8	43.9	4,020.0	2.22	2.21	0.21
10,854.0	89.50	181.00	7,041.4	-4,146.8	42.2	4,113.8	1.05	-1.05	0.00
10,949.0	88.90	180.80	7,042.8	-4,241.8	40.7	4,207.7	0.67	-0.63	-0.21
11,044.0	90.20	180.70	7,043.5	-4,336.8	39.5	4,301.6	1.37	1.37	-0.11
11,139.0	88.50	180.20	7,044.6	-4,431.7	38.8	4,395.6	1.87	-1.79	-0.53
11,235.0	90.70	180.10	7,045.3	-4,527.7	38.5	4,490.7	2.29	2.29	-0.10
11,330.0	89.90	179.80	7,044.8	-4,622.7	38.6	4,584.8	0.90	-0.84	-0.32
11,425.0	88.80	179.20	7,045.8	-4,717.7	39.4	4,679.0	1.32	-1.16	-0.63
11,447.0	88.60	178.80	7,046.3	-4,739.7	39.8	4,700.9	2.03	-0.91	-1.82
11,490.0	88.20	178.20	7,047.5	-4,782.7	40.9	4,743.6	1.68	-0.93	-1.40
11490' MD Projected to Bit									

Design/Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,365.0	6,362.8	-61.6	82.1	6365' VES Gyro Survey Tie-In
11,490.0	7,047.5	-4,782.7	40.9	11490' MD Projected to Bit



Company: Mewbourne Oil
Well: Maverick 13 DM Fed Com No 001H

Rig Name: Patterson 160
State/County: New Mexico/Eddy
Latitude: 32.224, Longitude: -104.252
GRID North is 0.040 Degrees East of True North
VS-Azi: 0.000 Degrees



Depth Reference : RKB= 32'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: h gyro-de_01.ut

Minimum Curvature Method

Report Date/Time: 5/13/2014 / 08:50

VES Survey International

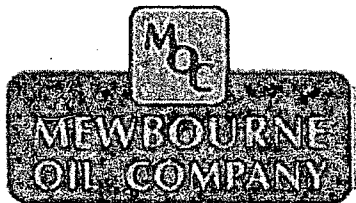
Midland, Texas

432-563-5444

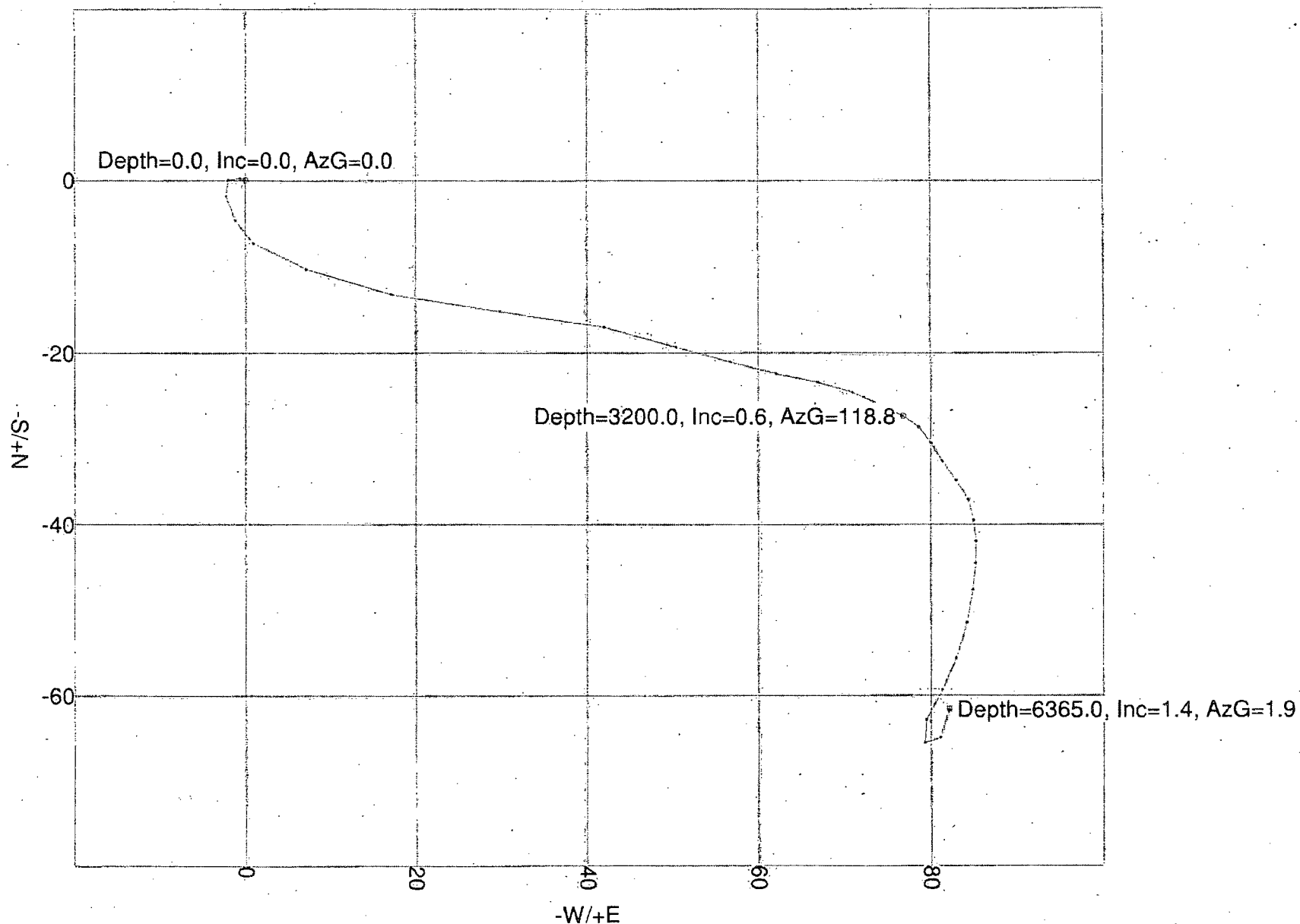
Surveyor: Mark Simmons

Maverick 13 DM Fed Com No 001H / API 30-015-42089

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	****
200.000	0.398	293.054	199.998	0.272	-0.639	0.272	0.695	293.054	0.199
400.000	0.499	237.161	399.993	0.072	-2.011	0.072	2.012	272.039	0.215
600.000	0.888	160.847	599.982	-1.865	-2.235	-1.865	2.911	230.153	0.455
800.000	0.832	158.722	799.959	-4.681	-1.199	-4.681	4.833	194.370	0.032
1000.000	1.200	128.782	999.929	-7.345	0.959	-7.345	7.408	172.559	0.317
1200.000	2.799	109.104	1199.802	-10.255	7.205	-10.255	12.533	144.907	0.859
1400.000	3.194	104.151	1399.529	-13.215	17.222	-13.215	21.708	127.500	0.236
1600.000	4.163	94.567	1599.116	-15.155	29.863	-15.155	33.488	116.908	0.572
1800.000	2.904	104.198	1798.734	-16.976	42.012	-16.976	45.312	112.003	0.694
2000.000	2.085	106.522	1998.543	-19.254	50.412	-19.254	53.963	110.903	0.413
2200.000	1.677	104.004	2198.434	-20.996	56.738	-20.996	60.499	110.307	0.208
2400.000	1.462	104.038	2398.359	-22.323	62.053	-22.323	65.946	109.786	0.107
2600.000	1.365	99.504	2598.298	-23.335	66.877	-23.335	70.831	109.235	0.074
2800.000	1.062	113.426	2798.254	-24.465	70.926	-24.465	75.027	109.031	0.210
3000.000	1.010	115.026	2998.221	-25.948	74.224	-25.948	78.629	109.269	0.030
3200.000	0.641	118.759	3198.200	-27.232	76.803	-27.232	81.488	109.523	0.187
3400.000	0.657	132.529	3398.187	-28.546	78.629	-28.546	83.650	109.953	0.078
3600.000	0.693	151.152	3598.174	-30.380	80.058	-30.380	85.628	110.781	0.111
3800.000	0.770	147.488	3798.157	-32.573	81.364	-32.573	87.641	111.818	0.045
4000.000	0.809	140.511	3998.138	-34.796	82.984	-34.796	89.984	112.749	0.052



VES Survey International
Midland, Texas
432-563-5444
Surveyor: Mark Simmons
Maverick 13 DM Fed Com No 001H / API 30-015-42089



VES Survey Date: 04/26/2014

Operating Company Mewbourne Oil Co.
 Well Name & Number Averick 13 DM FED COM 1H
 Sales Ticket Number 6357144-1
 Date 5/5/2014

Company Rep Art Hillard
 Field 0
 BOT Service Rep MIKE MARTINEZ
 District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	7,297.00	7,240	5,410		
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,358.37	5,350	4,960		
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-		
TVD		7047.00		KOP		6440.00		Open Hole	6.125	Casing Vol. (bbl)	270.1	
Carry Fluid Weight (ppg)			8.4		Propan Content (ppa)				Max Drill Out Size			0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seal ID	Shear Press	Max Rate (BPM)	Displ (BSL)
Liner Top	1	10292414	JR slv with 4.750" ALTI seal bore ID	7058.54	4.00	5.750	3.938			



Zone Length

Zone 20

418.4

Zone 19

230.9

Zone 18

186.8

zone 17

230.4

Zone 16

186.4

H409400008	S-3 CASING HANGER	7062.54	4.66	5.875	3.875		1670			
H299900281	COMBO COLLAR	7067.20	0.59	4.500	3.938					
H299710014	SPACER NIPPLE	7067.79	7.41	4.500	3.938					
	7 Joints of 4-1/2-13.5 LTC Casing	7075.20	314.72	4.500	3.920					
H810090200	3.500 Express Frac Slv. zone 20	7389.92	2.40	5.750		3.448	2286			
	2 Joints of 4-1/2-13.5 LTC Casing	7392.32	89.38	4.500	3.920					
H409360008	Baker Chron Hole Packer 19	7481.70	3.09	5.820	3.875		2154			
	2 Joints of 4-1/2-13.5 LTC Casing	7485.59	89.67	4.500	3.920					
H810090199	3.438 Express Frac Sleeve zone 19	7575.26	2.40	5.750		3.385	2286			
	3 Joints of 4-1/2-13.5 LTC Casing	7577.66	134.96	4.500	3.920					
H409360008	Baker Chron Hole Packer 18	7712.02	3.89	5.820	3.875		2154			
	2 Joints of 4-1/2-13.5 LTC Casing	7716.51	89.88	4.500	3.920					
H810090198	3.375 Express Frac Sleeve zone 18	7806.39	2.40	5.750		3.323	2286			
	2 Joints of 4-1/2-13.5 LTC Casing	7808.79	90.67	4.500	3.920					
H409360008	Baker Chron Hole Packer 17	7889.46	3.38	5.820	3.875		2154			
	2 Joints of 4-1/2-13.5 LTC Casing	7903.35	90.67	4.500	3.920					
H810090197	3.313 Express Frac Sleeve zone 17	7994.02	2.40	5.750		3.260	2286			
	3 Joints of 4-1/2-13.5 LTC Casing	7996.42	133.48	4.500	3.920					
H409360008	Baker Chron Hole Packer 16	8128.86	3.89	5.820	3.875		2154			
	2 Joints of 4-1/2-13.5 LTC Casing	8133.79	90.40	4.500	3.920					
H810090196	3.250 Express Frac Sleeve zone 16	8224.19	2.40	5.750		3.198	2286			
	2 Joints of 4-1/2-13.5 LTC Casing	8226.59	89.72	4.500	3.920					

Operating Company Mewbourne Oil Co.
 Well Name & Number Maverick 13 DM FED COM 1H
 Sales Ticket Number 6357144-1
 Date 5/5/2014

Company Rep Art Hillard
 Field 0
 BOT Service Rep MIKE MARTINEZ
 District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	7,297.00	7,240	5,410		
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,358.37	5,350	4,960		
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-		
TVD		7047.00		KOP		6440.00		Open Hole		6.125	Casing Vol. (bbl)	270.1
Carry Fluid Weight (ppg)			8.4		Propan Content (ppa)						Max Drill Out Size	0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (OPM)	Displ (BBL)
Zone 15 230.9	H409360008	Baker Open Hole Packer 15	8316.83	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8320.20	89.94	4.500	3.920				
	H810090195	3.188 Express Frac sleeve zone 15	8410.14	2.40	5.750		3.135	2286		
Zone 14 187.7		3 Joints of 4-1/2-13.5 LTC Casing	8412.54	134.68	4.500	3.920				
	H409360008	Baker Open Hole Packer 14	8557.22	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8551.11	90.79	4.500	3.920				
Zone 13 232.5	H810090194	3.125 Express Frac Sleeve zone 14	8641.90	2.40	5.750		3.073	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	8644.30	90.65	4.500	3.920				
	H409360008	Baker Open Hole Packer 13	8734.80	3.89	5.820	3.875		2154		
Zone 12 187.2		2 Joints of 4-1/2-13.5 LTC Casing	8738.84	90.71	4.500	3.920				
	H810090193	3.083 Express Frac Sleeve zone 13	8829.55	2.40	5.750		3.010	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	8831.95	135.46	4.500	3.920				
Zone 11 232.7	H409360008	Baker Open Hole Packer 12	8957.41	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8971.30	90.70	4.500	3.920				
	H810090192	3.000 Express Frac Sleeve zone 12	9062.00	2.40	5.750		2.948	2286		
Zone 10 232.7		2 Joints of 4-1/2-13.5 LTC Casing	9064.40	90.19	4.500	3.920				
	H409360008	Baker Open Hole Packer 11	9151.89	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9158.48	90.20	4.500	3.920				
Zone 9	H810090191	2.938 Express Frac Sleeve zone 11	9248.68	2.40	5.750		2.885	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	9251.08	136.23	4.500	3.920				
	H409360008	Baker Open Hole Packer 10	9387.31	3.89	5.820	3.875		2154		
Zone 10 232.7		2 Joints of 4-1/2-13.5 LTC Casing	9391.20	90.66	4.500	3.920				
	H810090190	2.875 Express Frac Sleeve zone 10	9481.86	2.40	5.750		2.823	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	9484.26	135.73	4.500	3.920				
Zone 9	H409360008	Baker Open Hole Packer 9	9618.88	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9623.88	90.66	4.500	3.920				

Operating Company Mewbourne Oil Co.
Well Name & Number Maverick 13 DM FED COM 1H
Sales Ticket Number 6357144-1
Date 5/5/2014

Company Rep Art Hillard
Field 0
BOT Service Rep MIKE MARTINEZ
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	7,297.00	7,240	5,410		
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,358.37	5,350	4,960		
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-		
TVD		7047.00		KOP		6440.00		Open Hole		6.125	Casing Vol. (bbl)	270.1
Carry Fluid Weight (ppg)			8.4		Proppant Content (ppa)						Max Drill Out Size	0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seal ID	Shear Strength	Max Rate (GPM)	Depth (DBL)
187.6	H810090189	2.813 Express Frac Sleeve zone 9	9714.54	2.40	5.750		2.760	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	9716.94	90.68	4.500	3.920				
Zone 8	H409360008	Baker Open Hole Packer 8	9807.62	3.89	5.820	3.875		2154		
186.7		2 Joints of 4-1/2-13.5 LTC Casing	9811.51	90.17	4.500	3.920				
	H810090188	2.750 Express Frac Sleeve zone 8	9901.68	2.40	5.750		2.698	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	9904.08	90.41	4.500	3.920				
Zone 7	H409360008	Baker Open Hole Packer 7	9994.99	3.89	5.820	3.875		2154		
232.7		2 Joints of 4-1/2-13.5 LTC Casing	9998.38	90.42	4.500	3.920				
	H810090187	2.688 Express Frac Sleeve zone 7	10086.80	2.40	5.750		2.635	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10091.20	136.01	4.500	3.920				
Zone 6	H409360008	Baker Open Hole Packer 6	10227.21	3.89	5.820	3.875		2154		
232.2		3 Joints of 4-1/2-13.5 LTC Casing	10231.10	136.03	4.500	3.920				
	H810090186	2.625 Express Frac Sleeve zone 6	10367.13	2.40	5.750		2.573	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	10369.53	89.70	4.500	3.920				
Zone 5	H409360008	Baker Open Hole Packer 5	10459.23	3.89	5.820	3.875		2154		
232.2		2 Joints of 4-1/2-13.5 LTC Casing	10463.12	89.92	4.500	3.920				
	H810090185	2.583 Express Frac Sleeve zone 5	10553.04	2.40	5.750		2.510	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10555.44	135.99	4.500	3.920				
Zone 4	H409360008	Baker Open Hole Packer 4	10691.19	3.89	5.820	3.875		2154		
187		2 Joints of 4-1/2-13.5 LTC Casing	10695.32	90.83	4.500	3.920				
	H810090184	2.500 Express Frac Sleeve zone 4	10786.15	2.40	5.750		2.448	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	10788.55	89.92	4.500	3.920				
ZONE 3	H409360008	Baker Open Hole Packer 3	10878.47	3.89	5.820	3.875		2154		
186.6		2 Joints of 4-1/2-13.5 LTC Casing	10882.36	90.40	4.500	3.920				
	H810090183	2.438 Express Frac Sleeve zone 3	10972.78	2.40	5.750		2.386	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	10975.16	89.95	4.500	3.920				



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	7,297.00	7,240	5,410	
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,358.37	5,350	4,960	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD		7047.00		KOP		6440.00	Open Hole		6.125	Casing Vol. (bbl)	270.1
Carry Fluid Weight (ppg)			8.4		Propanant Content (ppa)				Max Drill Out Size		0

[illegible]



COMPANY: Mewbourne Oil Company
 WELL: Maverick 13 DM Fed Com #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson 160

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.55°

OFFICE: 936.582.7296

GEODETC ZONE: New Mexico East 3001
 GL 3253 + 32 @ 3285.0usft (Patterson 160)
 GROUND ELEVATION: 3253.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	445215.10	525007.40	32° 13' 26.355 N	104° 15' 8.877 W	

PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSecl	Target
1	6365.0	1.40	3.73	6362.8	-81.9	82.1	0.00	0.00	62.7	
2	6531.1	1.40	3.73	6528.9	-57.9	82.4	0.00	0.00	58.7	
3	7288.1	89.43	180.42	7018.0	-530.5	79.6	12.00	176.69	531.2	
4	11545.7	89.43	180.42	7060.0	-4787.7	48.3	0.00	0.00	4788.0	PBHL Maverick 13 DM Fed Com #1H

