



COMPANY: Mewbourne Oil Company
 WELL: Burton 4 PM Federal Com #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson 41

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.39°

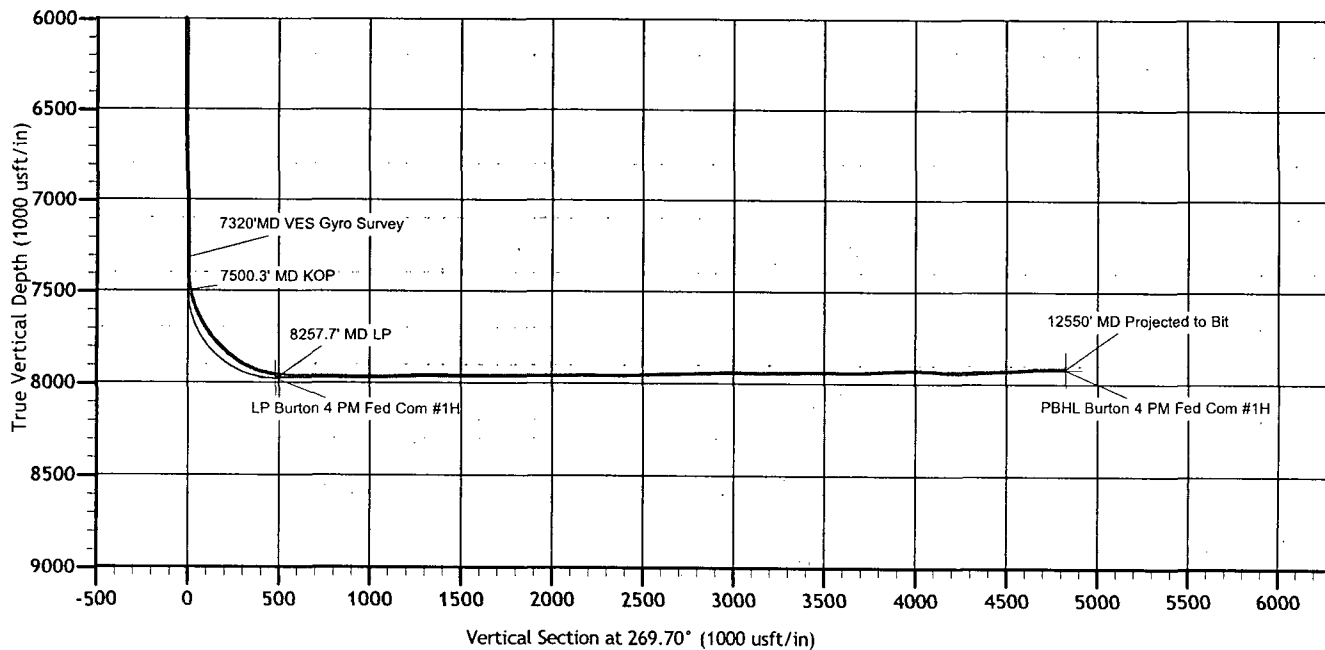
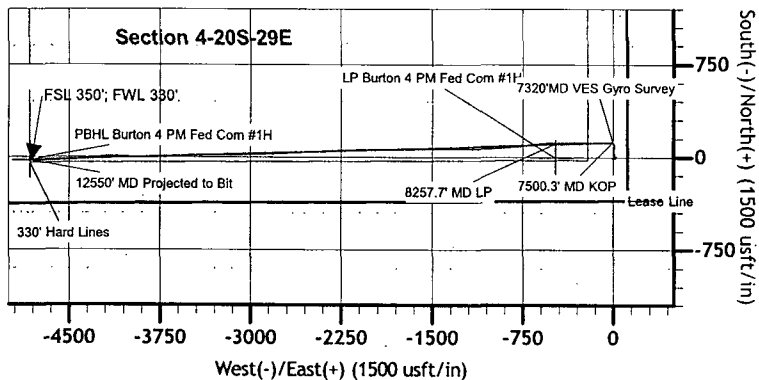
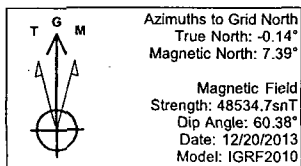
15-41827

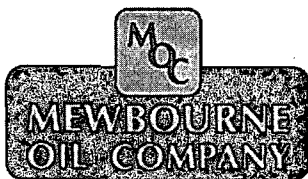


OFFICE: 936.582.7296

GEODETIC ZONE: New Mexico East 3001 GL3306 + 20 @ 3326.0usft (Patterson 41) GROUND ELEVATION: 3306.0							
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
0.0	0.0	580674.16	580685.63	32° 35' 45.980 N	104° 4' 16.838 W		

PLAN SECTIONS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
1	7320.0	0.18	116.00	7316.9	126.9	-4.4	0.00	0.00	3.8		
2	7500.3	0.18	116.00	7497.2	126.6	-3.9	0.00	0.00	3.3		
3	8257.7	90.73	268.20	7976.0	110.8	-487.2	12.00	152.20	486.6		
4	12598.5	90.73	268.20	7921.0	-25.2	-4825.6	0.00	0.00	4825.6	PBHL Burton 4 PM Fed Com #1H	





Mewbourne Oil Company .

Eddy County, New Mexico

Section 4-20S-29E Burton 4 PM Federal Com #1H

Burton 4 PM Federal Com #1H

Original Hole

Design: Original Hole

Standard Survey Report

30 December, 2013





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E Burton 4 PM Federal Com #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM:5000.1 Single User Db

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 4-20S-29E Burton 4 PM Federal Com #1H				
Site Position:		Northing:	580,674.16 usft	Latitude:	32° 35' 45.980 N
From:	Map	Easting:	580,685.63 usft	Longitude:	104° 4' 16.838 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.14 °

Well	Burton 4 PM Federal Com #1H					
Well Position	+N/-S	0.0 usft	Northing:	580,674.16 usft	Latitude:	32° 35' 45.980 N
	+E/-W	0.0 usft	Easting:	580,685.63 usft	Longitude:	104° 4' 16.838 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,306.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/20/2013	7.54	60.38	48,535

Survey Program	Date 12/30/2013			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,320.0	VES Gyro Survey #1 (Original Hole)	GyroFlex	
7,383.0	12,550.0	MWD Survey #2 (Original Hole)	MWD	MWD - Standard

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
100.0	0.30	303.72	100.0	0.1	-0.2	0.2	0.30	0.30	0.00
200.0	0.43	245.17	200.0	0.1	-0.8	0.8	0.37	0.13	-58.55
300.0	0.94	223.04	300.0	-0.6	-1.7	1.7	0.57	0.51	-22.13
400.0	1.16	220.62	400.0	-2.0	-2.9	2.9	0.22	0.22	-2.42
500.0	1.29	219.09	500.0	-3.6	-4.3	4.3	0.13	0.13	-1.53
600.0	0.82	228.87	599.9	-5.0	-5.5	5.5	0.50	-0.47	9.78
700.0	0.39	125.30	699.9	-5.6	-5.8	5.8	0.99	-0.43	-103.57
800.0	1.23	80.90	799.9	-5.7	-4.4	4.5	0.99	0.84	-44.40
900.0	2.54	80.95	899.9	-5.2	-1.2	1.2	1.31	1.31	0.05
1,000.0	2.70	83.52	999.8	-4.5	3.3	-3.3	0.20	0.16	2.57
1,100.0	1.96	68.52	1,099.7	-3.6	7.3	-7.3	0.95	-0.74	-15.00
1,200.0	1.99	61.37	1,199.6	-2.2	10.4	-10.4	0.25	0.03	-7.15
1,300.0	1.82	53.73	1,299.6	-0.4	13.2	-13.2	0.31	-0.17	-7.64
1,400.0	1.49	46.75	1,399.5	1.4	15.4	-15.4	0.39	-0.33	-6.98
1,500.0	1.64	46.99	1,499.5	3.3	17.4	-17.4	0.15	0.15	0.24



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E Burton 4 PM Federal Com #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

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)
1,600.0	1.73	48.19	1,599.4	5.3	19.6	-19.6	0.10	0.09	1.20
1,700.0	1.92	66.28	1,699.4	6.9	22.2	-22.3	0.60	0.19	18.09
1,800.0	0.37	166.65	1,799.4	7.3	23.9	-23.9	2.02	-1.55	100.37
1,900.0	1.17	200.78	1,899.4	6.0	23.6	-23.6	0.89	0.80	34.13
2,000.0	1.23	196.60	1,999.3	4.0	22.9	-22.9	0.11	0.06	-4.18
2,100.0	1.12	187.60	2,099.3	-2.1	22.5	-22.5	0.21	-0.11	-9.00
2,200.0	1.31	195.14	2,199.3	0.0	22.0	-22.0	0.25	0.19	7.54
2,300.0	1.12	202.10	2,299.3	-2.0	21.4	-21.4	0.24	-0.19	6.96
2,400.0	0.48	194.03	2,399.3	-3.3	20.9	-20.9	0.65	-0.64	-8.07
2,500.0	0.23	304.59	2,499.3	-3.6	20.6	-20.6	0.60	-0.25	110.56
2,600.0	0.18	291.64	2,599.3	-3.5	20.3	-20.3	0.07	-0.05	-12.95
2,700.0	0.18	15.68	2,699.3	-3.3	20.2	-20.2	0.24	0.00	84.04
2,800.0	1.16	355.46	2,799.3	-2.1	20.2	-20.2	0.99	0.98	-20.22
2,900.0	2.63	346.01	2,899.2	1.1	19.5	-19.5	1.50	1.47	-9.45
3,000.0	2.81	341.04	2,999.1	5.7	18.2	-18.2	0.30	0.18	-4.97
3,100.0	2.96	338.12	3,099.0	10.4	16.4	-16.5	0.21	0.15	-2.92
3,200.0	2.85	338.08	3,198.8	15.1	14.5	-14.6	0.11	-0.11	-0.04
3,300.0	2.58	339.22	3,298.7	19.5	12.8	-12.9	0.28	-0.27	1.14
3,400.0	2.46	336.64	3,398.6	23.6	11.2	-11.3	0.17	-0.12	-2.58
3,500.0	2.64	343.36	3,498.5	27.8	9.7	-9.8	0.35	0.18	6.72
3,600.0	2.34	340.57	3,598.4	31.9	8.3	-8.5	0.32	-0.30	-2.79
3,700.0	2.08	341.91	3,698.4	35.5	7.1	-7.3	0.27	-0.26	1.34
3,800.0	2.16	343.34	3,798.3	39.1	6.0	-6.2	0.10	0.08	1.43
3,900.0	1.77	350.92	3,898.2	42.4	5.2	-5.4	0.47	-0.39	7.58
4,000.0	1.29	7.31	3,998.2	45.1	5.1	-5.3	0.64	-0.48	16.39
4,100.0	1.15	356.39	4,098.2	47.2	5.2	-5.4	0.27	-0.14	-10.92
4,200.0	1.43	6.81	4,198.1	49.4	5.2	-5.5	0.36	0.28	10.42
4,300.0	1.53	5.73	4,298.1	52.0	5.5	-5.8	0.10	0.10	-1.08
4,400.0	1.56	9.21	4,398.1	54.6	5.9	-6.2	0.10	0.03	3.48
4,500.0	1.42	6.37	4,498.0	57.2	6.2	-6.5	0.16	-0.14	-2.84
4,600.0	1.48	3.42	4,598.0	59.7	6.5	-6.8	0.10	0.06	-2.95
4,700.0	1.56	1.70	4,698.0	62.4	6.6	-6.9	0.09	0.08	-1.72
4,800.0	1.35	357.30	4,797.9	64.9	6.6	-6.9	0.24	-0.21	-4.40
4,900.0	1.35	358.92	4,897.9	67.3	6.5	-6.8	0.04	0.00	1.62
5,000.0	1.59	3.56	4,997.9	69.8	6.5	-6.9	0.27	0.24	4.64
5,100.0	1.53	19.24	5,097.8	72.5	7.1	-7.4	0.43	-0.06	15.68
5,200.0	1.20	17.99	5,197.8	74.7	7.8	-8.2	0.33	-0.33	-1.25
5,300.0	1.58	22.65	5,297.8	77.0	8.7	-9.1	0.40	0.38	4.66
5,400.0	1.63	25.05	5,397.7	79.6	9.8	-10.2	0.08	0.05	2.40
5,500.0	1.52	9.99	5,497.7	82.2	10.6	-11.1	0.43	-0.11	-15.06
5,600.0	1.71	347.46	5,597.7	84.9	10.6	-11.0	0.66	0.19	-22.53
5,700.0	1.99	353.67	5,697.6	88.1	10.0	-10.5	0.34	0.28	6.21
5,800.0	1.90	348.33	5,797.6	91.5	9.5	-10.0	0.20	-0.09	-5.34



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E-Burton 4 PM Federal Com #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

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)
5,900.0	1.86	4.28	5,897.5	94.7	9.3	-9.8	0.52	-0.04	15.95
6,000.0	2.10	7.09	5,997.4	98.1	9.6	-10.2	0.26	0.24	2.81
6,100.0	2.12	4.69	6,097.4	101.8	10.0	-10.6	0.09	0.02	-2.40
6,200.0	1.91	4.26	6,197.3	105.3	10.3	-10.9	0.21	-0.21	-0.43
6,300.0	1.86	336.15	6,297.3	108.5	9.8	-10.3	0.92	-0.05	-28.11
6,400.0	1.45	305.70	6,397.2	110.7	8.1	-8.7	0.95	-0.41	-30.45
6,500.0	1.69	305.75	6,497.2	112.3	5.9	-6.4	0.24	0.24	0.05
6,600.0	1.96	316.52	6,597.1	114.4	3.5	-4.1	0.44	0.27	10.77
6,700.0	2.16	321.08	6,697.1	117.1	1.1	-1.7	0.26	0.20	4.56
6,800.0	1.68	332.93	6,797.0	119.9	-0.7	0.1	0.62	-0.48	11.85
6,900.0	1.25	329.67	6,897.0	122.1	-1.9	1.3	0.44	-0.43	-3.26
7,000.0	1.19	320.32	6,997.0	123.8	-3.2	2.5	0.21	-0.06	-9.35
7,100.0	1.18	330.27	7,096.9	125.5	-4.3	3.7	0.21	-0.01	9.95
7,200.0	0.31	15.66	7,196.9	126.7	-4.8	4.1	0.99	-0.87	45.39
7,300.0	0.23	103.30	7,296.9	126.9	-4.5	3.8	0.38	-0.08	87.64
7,320.0	0.18	116.00	7,316.9	126.9	-4.4	3.8	0.34	-0.25	63.50

7320 MD VES Gyro Survey

7,383.0	0.80	194.20	7,379.9	126.4	-4.5	3.8	1.24	0.98	124.13
7,415.0	1.30	223.90	7,411.9	125.9	-4.8	4.1	2.26	1.56	92.81
7,447.0	4.40	252.70	7,443.9	125.3	-6.2	5.5	10.38	9.69	90.00
7,479.0	9.30	260.00	7,475.6	124.5	-9.9	9.3	15.52	15.31	22.81
7,510.0	13.50	264.20	7,506.0	123.7	-16.0	15.3	13.80	13.55	13.55
7,542.0	16.00	266.70	7,537.0	123.1	-24.1	23.4	8.06	7.81	7.81
7,573.0	19.00	267.30	7,566.5	122.6	-33.4	32.8	9.69	9.68	1.94
7,605.0	22.40	267.80	7,596.5	122.1	-44.7	44.1	10.64	10.63	1.56
7,636.0	25.30	268.50	7,624.8	121.7	-57.2	56.6	9.40	9.35	2.26
7,668.0	27.40	270.40	7,653.5	121.6	-71.4	70.8	7.07	6.56	5.94
7,700.0	29.90	269.50	7,681.6	121.6	-86.8	86.1	7.93	7.81	-2.81
7,731.0	33.30	269.00	7,708.0	121.3	-103.0	102.4	11.00	10.97	-1.61
7,763.0	36.90	269.70	7,734.1	121.1	-121.4	120.8	11.32	11.25	2.19
7,794.0	39.60	269.60	7,758.5	121.0	-140.6	140.0	8.71	8.71	-0.32
7,826.0	41.10	269.60	7,782.9	120.9	-161.3	160.7	4.69	4.69	0.00
7,857.0	43.90	270.30	7,805.7	120.9	-182.3	181.6	9.16	9.03	2.26
7,889.0	47.10	271.70	7,828.1	121.3	-205.1	204.4	10.48	10.00	4.38
7,920.0	50.30	272.20	7,848.6	122.1	-228.3	227.7	10.39	10.32	1.61
7,952.0	53.50	272.10	7,868.3	123.0	-253.5	252.9	10.00	10.00	-0.31
7,983.0	57.80	271.40	7,885.8	123.8	-279.1	278.4	14.00	13.87	-2.26
8,015.0	63.40	269.90	7,901.5	124.1	-306.9	306.3	17.97	17.50	-4.69
8,046.0	67.10	269.40	7,914.5	123.9	-335.1	334.4	12.02	11.94	-1.61
8,078.0	69.50	268.90	7,926.3	123.5	-364.8	364.2	7.64	7.50	-1.56
8,109.0	72.10	268.40	7,936.5	122.8	-394.1	393.4	8.52	8.39	-1.61
8,141.0	76.00	267.90	7,945.3	121.8	-424.8	424.2	12.28	12.19	-1.56



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E Burton 4 PM Federal Com #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

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)
8,172.0	79.10	268.10	7,952.0	120.7	-455.1	454.4	10.02	10.00	0.65
8,204.0	81.10	268.30	7,957.5	119.7	-486.6	485.9	6.28	6.25	0.63
8,236.0	83.80	268.00	7,961.7	118.7	-518.3	517.7	8.49	8.44	-0.94
8,258.0	85.70	267.90	7,963.7	117.9	-540.2	539.6	8.65	8.64	-0.45
8,333.0	90.10	264.00	7,966.5	112.6	-614.9	614.3	7.84	5.87	-5.20
8,364.0	90.40	263.60	7,966.3	109.3	-645.7	645.1	1.61	0.97	-1.29
8,427.0	90.20	263.40	7,966.0	102.2	-708.3	707.8	0.45	-0.32	-0.32
8,490.0	89.50	263.40	7,966.2	94.9	-770.9	770.4	1.11	-1.11	0.00
8,554.0	89.60	264.90	7,966.7	88.4	-834.6	834.1	2.35	0.16	2.34
8,617.0	89.70	265.50	7,967.1	83.1	-897.3	896.9	0.97	0.16	0.95
8,680.0	89.50	265.20	7,967.5	78.0	-960.1	959.7	0.57	-0.32	-0.48
8,744.0	89.70	267.10	7,968.0	73.7	-1,024.0	1,023.6	2.99	0.31	2.97
8,807.0	91.00	269.50	7,967.6	71.9	-1,086.9	1,086.6	4.33	2.06	3.81
8,870.0	91.60	270.50	7,966.1	71.9	-1,149.9	1,149.5	1.85	0.95	1.59
8,934.0	92.70	269.60	7,963.7	71.9	-1,213.9	1,213.5	2.22	1.72	-1.41
8,997.0	92.40	269.60	7,960.9	71.5	-1,276.8	1,276.4	0.48	-0.48	0.00
9,060.0	89.90	270.30	7,959.7	71.4	-1,339.8	1,339.4	4.12	-3.97	1.11
9,123.0	89.00	270.50	7,960.3	71.9	-1,402.8	1,402.4	1.46	-1.43	0.32
9,186.0	89.10	270.00	7,961.3	72.1	-1,465.8	1,465.4	0.81	0.16	-0.79
9,250.0	89.90	269.60	7,961.9	71.9	-1,529.8	1,529.4	1.40	1.25	-0.63
9,313.0	90.30	268.50	7,961.8	70.9	-1,592.8	1,592.4	1.86	0.63	-1.75
9,376.0	90.40	267.60	7,961.4	68.7	-1,655.7	1,655.4	1.44	0.16	-1.43
9,440.0	90.50	268.50	7,960.9	66.5	-1,719.7	1,719.3	1.41	0.16	1.41
9,503.0	89.80	269.80	7,960.7	65.6	-1,782.7	1,782.3	2.34	-1.11	2.06
9,566.0	90.10	269.50	7,960.8	65.2	-1,845.7	1,845.3	0.67	0.48	-0.48
9,629.0	90.60	269.20	7,960.4	64.5	-1,908.7	1,908.3	0.93	0.79	-0.48
9,692.0	90.90	269.30	7,959.6	63.7	-1,971.7	1,971.3	0.50	0.48	0.16
9,756.0	91.30	269.10	7,958.3	62.8	-2,035.7	2,035.3	0.70	0.63	-0.31
9,819.0	91.60	268.30	7,956.7	61.4	-2,098.6	2,098.3	1.36	0.48	-1.27
9,914.0	89.40	269.00	7,955.9	59.1	-2,193.6	2,193.2	2.43	-2.32	0.74
10,009.0	88.90	268.00	7,957.3	56.6	-2,288.5	2,288.2	1.18	-0.53	-1.05
10,104.0	91.00	267.60	7,957.4	53.0	-2,383.5	2,383.1	2.25	2.21	-0.42
10,198.0	91.30	266.90	7,955.5	48.5	-2,477.3	2,477.0	0.81	0.32	-0.74
10,293.0	92.20	266.60	7,952.6	43.1	-2,572.1	2,571.9	1.00	0.95	-0.32
10,388.0	91.20	267.80	7,949.8	38.5	-2,667.0	2,666.7	1.64	-1.05	1.26
10,483.0	92.20	267.20	7,947.0	34.3	-2,761.8	2,761.6	1.23	1.05	-0.63
10,578.0	92.60	267.80	7,943.0	30.2	-2,856.7	2,856.5	0.76	0.42	0.63
10,673.0	90.50	267.40	7,940.4	26.2	-2,951.5	2,951.4	2.25	-2.21	-0.42
10,767.0	89.50	269.10	7,940.4	23.3	-3,045.5	3,045.3	2.10	-1.06	1.81
10,862.0	88.30	269.10	7,942.3	21.8	-3,140.5	3,140.3	1.26	-1.26	0.00
10,956.0	92.30	269.70	7,941.8	20.9	-3,234.4	3,234.3	4.30	4.26	0.64
11,051.0	90.50	270.40	7,939.4	20.9	-3,329.4	3,329.2	2.03	-1.89	0.74
11,146.0	90.10	269.50	7,938.9	20.9	-3,424.4	3,424.2	1.04	-0.42	-0.95



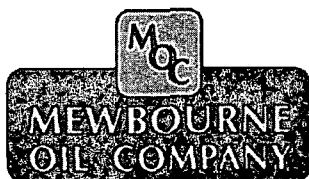
Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well: Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 +.20 @ 3326.0usft (Patterson.41)
Site:	Section 4-20S-29E-Burton 4 PM Federal Com #1H	MD Reference:	GL3306 +.20 @ 3326.0usft (Patterson.41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM:5000:1 Single User Db

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)
11,241.0	89.90	267.80	7,938.9	18.6	-3,519.4	3,519.2	1.80	-0.21	-1.79
11,336.0	88.40	265.90	7,940.4	13.4	-3,614.2	3,614.1	2.55	-1.58	-2.00
11,430.0	91.70	266.10	7,940.3	6.8	-3,708.0	3,707.9	3.52	3.51	0.21
11,525.0	94.10	266.50	7,935.5	0.7	-3,802.6	3,802.6	2.56	2.53	0.42
11,620.0	93.00	270.90	7,929.6	-1.4	-3,897.4	3,897.4	4.77	-1.16	4.63
11,715.0	89.30	273.40	7,927.7	2.1	-3,992.3	3,992.2	4.70	-3.89	2.63
11,809.0	86.80	272.10	7,930.9	6.6	-4,086.1	4,086.0	3.00	-2.66	-1.38
11,904.0	85.80	267.50	7,937.0	6.3	-4,180.9	4,180.8	4.95	-1.05	-4.84
11,999.0	91.60	263.80	7,939.2	-0.9	-4,275.5	4,275.5	7.24	6.11	-3.89
12,063.0	92.40	264.70	7,936.9	-7.3	-4,339.2	4,339.2	1.88	1.25	1.41
12,126.0	93.50	266.20	7,933.7	-12.3	-4,401.9	4,401.9	2.95	1.75	2.38
12,189.0	92.20	265.20	7,930.6	-17.0	-4,464.6	4,464.7	2.60	-2.06	-1.59
12,284.0	94.20	267.20	7,925.2	-23.3	-4,559.3	4,559.3	2.97	2.11	2.11
12,379.0	92.70	267.60	7,919.5	-27.6	-4,654.0	4,654.1	1.63	-1.58	0.42
12,410.0	90.80	270.00	7,918.6	-28.2	-4,685.0	4,685.1	9.87	-6.13	7.74
12,490.0	90.60	270.00	7,917.6	-28.2	-4,765.0	4,765.1	0.25	-0.25	0.00
12,550.0	90.00	270.00	7,917.3	-28.2	-4,825.0	4,825.1	1.00	-1.00	0.00
12550' MD Projected to Bit									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,320.0	7,316.9	126.9	-4.4	7320' MD VES Gyro Survey
12,550.0	7,917.3	-28.2	-4,825.0	12550' MD Projected to Bit



Mewbourne Oil Company .

Eddy County, New Mexico

Section 4-20S-29E Burton 4 PM Federal Com #1H

Burton 4 PM Federal Com #1H

Original Hole

Design: Original Hole

Survey Report - Geographic

30 December, 2013





Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well: Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E: Burton 4 PM Federal Com #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey/Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

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 4-20S-29E: Burton 4 PM Federal Com #1H		
Site Position:		Northing:	580,674.16 usft
From:	Map	Easting:	580,685.63 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 35' 45.980 N
		Longitude:	104° 4' 16.838 W
		Grid Convergence:	0.14 °

Well	Burton 4 PM Federal Com #1H		
Well Position	+N/-S	0.0 usft	Northing: 580,674.16 usft
	+E/-W	0.0 usft	Easting: 580,685.63 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 35' 45.980 N
		Longitude:	104° 4' 16.838 W
		Ground Level:	3,306.0 usft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	12/20/2013	(°)
			7.54
			Dip Angle (°)
			60.38
			Field Strength (nT)
			48,535

Design	Original Hole		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°)
			269.70

Survey Program	Date: 12/30/2013		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	7,320.0	VES Gyro Survey #1 (Original Hole)	GyroFlex
7,383.0	12,550.0	MWD Survey #2 (Original Hole)	MWD
			Description
			MWD - Standard

Survey										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Map Northing	Map Easting	Latitude	Longitude	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.0	0.00	0.00	0.0	0.0	0.0	580,674.16	580,685.63	32° 35' 45.980 N	104° 4' 16.838 W	
100.0	0.30	303.72	100.0	0.1	-0.2	580,674.31	580,685.41	32° 35' 45.981 N	104° 4' 16.841 W	
200.0	0.43	245.17	200.0	0.1	-0.8	580,674.30	580,684.85	32° 35' 45.981 N	104° 4' 16.847 W	
300.0	0.94	223.04	300.0	-0.6	-1.7	580,673.54	580,683.95	32° 35' 45.973 N	104° 4' 16.858 W	
400.0	1.16	220.62	400.0	-2.0	-2.9	580,672.17	580,682.74	32° 35' 45.960 N	104° 4' 16.872 W	
500.0	1.29	219.09	500.0	-3.6	-4.3	580,670.53	580,681.37	32° 35' 45.944 N	104° 4' 16.888 W	
600.0	0.82	228.87	599.9	-5.0	-5.5	580,669.19	580,680.12	32° 35' 45.930 N	104° 4' 16.903 W	
700.0	0.39	125.30	699.9	-5.6	-5.8	580,668.52	580,679.86	32° 35' 45.924 N	104° 4' 16.906 W	
800.0	1.23	80.90	799.9	-5.7	-4.4	580,668.49	580,681.19	32° 35' 45.924 N	104° 4' 16.890 W	
900.0	2.54	80.95	899.9	-5.2	-1.2	580,669.01	580,684.44	32° 35' 45.929 N	104° 4' 16.852 W	



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Burton 4 PM Federal Corn #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E Burton 4 PM Federal Corn #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Corn #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,000.0	2.70	83.52	999.8	-4.5	3.3	580,669.63	580,688.97	32° 35' 45.935 N	104° 4' 16.799 W
1,100.0	1.96	68.52	1,099.7	-3.6	7.3	580,670.52	580,692.90	32° 35' 45.943 N	104° 4' 16.753 W
1,200.0	1.99	61.37	1,199.6	-2.2	10.4	580,671.98	580,696.02	32° 35' 45.958 N	104° 4' 16.717 W
1,300.0	1.82	53.73	1,299.6	-0.4	13.2	580,673.75	580,698.82	32° 35' 45.975 N	104° 4' 16.684 W
1,400.0	1.49	46.75	1,399.5	1.4	15.4	580,675.58	580,701.05	32° 35' 45.993 N	104° 4' 16.658 W
1,500.0	1.64	46.99	1,499.5	3.3	17.4	580,677.44	580,703.04	32° 35' 46.012 N	104° 4' 16.635 W
1,600.0	1.73	48.19	1,599.4	5.3	19.6	580,679.43	580,705.21	32° 35' 46.031 N	104° 4' 16.609 W
1,700.0	1.92	66.28	1,699.4	6.9	22.2	580,681.11	580,707.87	32° 35' 46.048 N	104° 4' 16.578 W
1,800.0	0.37	166.65	1,799.4	7.3	23.9	580,681.47	580,709.48	32° 35' 46.051 N	104° 4' 16.559 W
1,900.0	1.17	200.78	1,899.4	6.0	23.6	580,680.20	580,709.19	32° 35' 46.039 N	104° 4' 16.563 W
2,000.0	1.23	196.60	1,999.3	4.0	22.9	580,678.21	580,708.53	32° 35' 46.019 N	104° 4' 16.570 W
2,100.0	1.12	187.60	2,099.3	2.1	22.5	580,676.22	580,708.09	32° 35' 45.999 N	104° 4' 16.576 W
2,200.0	1.31	195.14	2,199.3	0.0	22.0	580,674.15	580,707.66	32° 35' 45.979 N	104° 4' 16.581 W
2,300.0	1.12	202.10	2,299.3	-2.0	21.4	580,672.14	580,707.00	32° 35' 45.959 N	104° 4' 16.589 W
2,400.0	0.48	194.03	2,399.3	-3.3	20.9	580,670.82	580,706.53	32° 35' 45.946 N	104° 4' 16.594 W
2,500.0	0.23	304.59	2,499.3	-3.6	20.6	580,670.53	580,706.26	32° 35' 45.943 N	104° 4' 16.597 W
2,600.0	0.18	291.64	2,599.3	-3.5	20.3	580,670.70	580,705.95	32° 35' 45.945 N	104° 4' 16.601 W
2,700.0	0.18	15.68	2,699.3	-3.3	20.2	580,670.91	580,705.84	32° 35' 45.947 N	104° 4' 16.602 W
2,800.0	1.16	355.46	2,799.3	-2.1	20.2	580,672.07	580,705.81	32° 35' 45.958 N	104° 4' 16.602 W
2,900.0	2.63	346.01	2,899.2	1.1	19.5	580,675.31	580,705.17	32° 35' 45.990 N	104° 4' 16.610 W
3,000.0	2.81	341.04	2,999.1	5.7	18.2	580,679.85	580,703.82	32° 35' 46.035 N	104° 4' 16.625 W
3,100.0	2.96	338.12	3,099.0	10.4	16.4	580,684.57	580,702.06	32° 35' 46.082 N	104° 4' 16.646 W
3,200.0	2.85	338.08	3,198.8	15.1	14.5	580,689.27	580,700.17	32° 35' 46.129 N	104° 4' 16.668 W
3,300.0	2.58	339.22	3,298.7	19.5	12.8	580,693.68	580,698.45	32° 35' 46.172 N	104° 4' 16.688 W
3,400.0	2.46	336.64	3,398.6	23.6	11.2	580,697.75	580,696.80	32° 35' 46.213 N	104° 4' 16.707 W
3,500.0	2.64	343.36	3,498.5	27.8	9.7	580,701.93	580,695.29	32° 35' 46.254 N	104° 4' 16.725 W
3,600.0	2.34	340.57	3,598.4	31.9	8.3	580,706.06	580,693.95	32° 35' 46.295 N	104° 4' 16.740 W
3,700.0	2.08	341.91	3,698.4	35.5	7.1	580,709.71	580,692.70	32° 35' 46.331 N	104° 4' 16.754 W
3,800.0	2.16	343.34	3,798.3	39.1	6.0	580,713.24	580,691.60	32° 35' 46.366 N	104° 4' 16.767 W
3,900.0	1.77	350.92	3,898.2	42.4	5.2	580,716.57	580,690.82	32° 35' 46.399 N	104° 4' 16.776 W
4,000.0	1.29	7.31	3,998.2	45.1	5.1	580,719.22	580,690.72	32° 35' 46.425 N	104° 4' 16.777 W
4,100.0	1.15	356.39	4,098.2	47.2	5.2	580,721.33	580,690.80	32° 35' 46.446 N	104° 4' 16.776 W
4,200.0	1.43	6.81	4,198.1	49.4	5.2	580,723.57	580,690.88	32° 35' 46.468 N	104° 4' 16.775 W
4,300.0	1.53	5.73	4,298.1	52.0	5.5	580,726.14	580,691.16	32° 35' 46.494 N	104° 4' 16.772 W
4,400.0	1.56	9.21	4,398.1	54.6	5.9	580,728.81	580,691.51	32° 35' 46.520 N	104° 4' 16.768 W
4,500.0	1.42	6.37	4,498.0	57.2	6.2	580,731.39	580,691.87	32° 35' 46.546 N	104° 4' 16.764 W
4,600.0	1.48	3.42	4,598.0	59.7	6.5	580,733.91	580,692.08	32° 35' 46.571 N	104° 4' 16.761 W
4,700.0	1.56	1.70	4,698.0	62.4	6.6	580,736.56	580,692.20	32° 35' 46.597 N	104° 4' 16.760 W
4,800.0	1.35	357.30	4,797.9	64.9	6.6	580,739.10	580,692.19	32° 35' 46.622 N	104° 4' 16.760 W
4,900.0	1.35	358.92	4,897.9	67.3	6.5	580,741.45	580,692.11	32° 35' 46.645 N	104° 4' 16.761 W
5,000.0	1.59	3.56	4,997.9	69.8	6.5	580,744.01	580,692.17	32° 35' 46.671 N	104° 4' 16.760 W
5,100.0	1.53	19.24	5,097.8	72.5	7.1	580,746.66	580,692.70	32° 35' 46.697 N	104° 4' 16.754 W
5,200.0	1.20	17.99	5,197.8	74.7	7.8	580,748.91	580,693.46	32° 35' 46.719 N	104° 4' 16.745 W
5,300.0	1.58	22.65	5,297.8	77.0	8.7	580,751.18	580,694.32	32° 35' 46.741 N	104° 4' 16.734 W
5,400.0	1.63	25.05	5,397.7	79.6	9.8	580,753.74	580,695.45	32° 35' 46.767 N	104° 4' 16.721 W
5,500.0	1.52	9.99	5,497.7	82.2	10.6	580,756.34	580,696.28	32° 35' 46.792 N	104° 4' 16.711 W
5,600.0	1.71	347.46	5,597.7	84.9	10.6	580,759.10	580,696.19	32° 35' 46.820 N	104° 4' 16.712 W
5,700.0	1.99	353.67	5,697.6	88.1	10.0	580,762.28	580,695.67	32° 35' 46.851 N	104° 4' 16.718 W
5,800.0	1.90	348.33	5,797.6	91.5	9.5	580,765.63	580,695.14	32° 35' 46.884 N	104° 4' 16.724 W
5,900.0	1.86	4.28	5,897.5	94.7	9.3	580,768.87	580,694.93	32° 35' 46.917 N	104° 4' 16.727 W
6,000.0	2.10	7.09	5,997.4	98.1	9.6	580,772.31	580,695.28	32° 35' 46.951 N	104° 4' 16.723 W
6,100.0	2.12	4.69	6,097.4	101.8	10.0	580,775.97	580,695.66	32° 35' 46.987 N	104° 4' 16.718 W
6,200.0	1.91	4.26	6,197.3	105.3	10.3	580,779.48	580,695.93	32° 35' 47.021 N	104° 4' 16.715 W
6,300.0	1.86	336.15	6,297.3	108.5	9.8	580,782.62	580,695.40	32° 35' 47.053 N	104° 4' 16.721 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well: Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E, Burton 4 PM Federal Com #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,400.0	1.45	305.70	6,397.2	110.7	8.1	580,784.85	580,693.71	32° 35' 47.075 N	104° 4' 16.741 W
6,500.0	1.69	305.75	6,497.2	112.3	5.9	580,786.45	580,691.49	32° 35' 47.091 N	104° 4' 16.766 W
6,600.0	1.96	316.52	6,597.1	114.4	3.5	580,788.55	580,689.12	32° 35' 47.111 N	104° 4' 16.794 W
6,700.0	2.16	321.08	6,697.1	117.1	1.1	580,791.26	580,686.76	32° 35' 47.138 N	104° 4' 16.822 W
6,800.0	1.68	332.93	6,797.0	119.9	-0.7	580,794.03	580,684.90	32° 35' 47.166 N	104° 4' 16.843 W
6,900.0	1.25	329.67	6,897.0	122.1	-1.9	580,796.27	580,683.69	32° 35' 47.188 N	104° 4' 16.857 W
7,000.0	1.19	320.32	6,997.0	123.8	-3.2	580,798.01	580,682.47	32° 35' 47.205 N	104° 4' 16.872 W
7,100.0	1.18	330.27	7,096.9	125.5	-4.3	580,799.71	580,681.30	32° 35' 47.222 N	104° 4' 16.885 W
7,200.0	0.31	15.66	7,196.9	126.7	-4.8	580,800.86	580,680.86	32° 35' 47.233 N	104° 4' 16.890 W
7,300.0	0.23	103.30	7,296.9	126.9	-4.5	580,801.08	580,681.13	32° 35' 47.236 N	104° 4' 16.887 W
7,320.0	0.18	116.00	7,316.9	126.9	-4.4	580,801.05	580,681.20	32° 35' 47.235 N	104° 4' 16.886 W
7320 MD VES Gyro Survey									
7,383.0	0.80	194.20	7,379.9	126.4	-4.5	580,800.58	580,681.18	32° 35' 47.231 N	104° 4' 16.887 W
7,415.0	1.30	223.90	7,411.9	125.9	-4.8	580,800.11	580,680.87	32° 35' 47.226 N	104° 4' 16.890 W
7,447.0	4.40	252.70	7,443.9	125.3	-6.2	580,799.48	580,679.45	32° 35' 47.220 N	104° 4' 16.907 W
7,479.0	9.30	260.00	7,475.6	124.5	-9.9	580,798.66	580,675.73	32° 35' 47.212 N	104° 4' 16.950 W
7,510.0	13.50	264.20	7,506.0	123.7	-16.0	580,797.86	580,669.66	32° 35' 47.204 N	104° 4' 17.021 W
7,542.0	16.00	266.70	7,537.0	123.1	-24.1	580,797.23	580,661.54	32° 35' 47.198 N	104° 4' 17.116 W
7,573.0	19.00	267.30	7,566.5	122.6	-33.4	580,796.75	580,652.23	32° 35' 47.193 N	104° 4' 17.225 W
7,605.0	22.40	267.80	7,596.5	122.1	-44.7	580,796.27	580,640.93	32° 35' 47.189 N	104° 4' 17.357 W
7,636.0	25.30	268.50	7,624.8	121.7	-57.2	580,795.87	580,628.40	32° 35' 47.185 N	104° 4' 17.504 W
7,668.0	27.40	270.40	7,653.5	121.6	-71.4	580,795.74	580,614.20	32° 35' 47.184 N	104° 4' 17.670 W
7,700.0	29.90	269.50	7,681.6	121.6	-86.8	580,795.72	580,598.86	32° 35' 47.185 N	104° 4' 17.849 W
7,731.0	33.30	269.00	7,708.0	121.3	-103.0	580,795.51	580,582.62	32° 35' 47.183 N	104° 4' 18.039 W
7,763.0	36.90	269.70	7,734.1	121.1	-121.4	580,795.30	580,564.23	32° 35' 47.181 N	104° 4' 18.254 W
7,794.0	39.60	269.60	7,758.5	121.0	-140.6	580,795.19	580,545.04	32° 35' 47.181 N	104° 4' 18.478 W
7,826.0	41.10	269.60	7,782.9	120.9	-161.3	580,795.04	580,524.32	32° 35' 47.180 N	104° 4' 18.720 W
7,857.0	43.90	270.30	7,805.7	120.9	-182.3	580,795.03	580,503.38	32° 35' 47.180 N	104° 4' 18.965 W
7,889.0	47.10	271.70	7,828.1	121.3	-205.1	580,795.43	580,480.56	32° 35' 47.185 N	104° 4' 19.232 W
7,920.0	50.30	272.20	7,848.6	122.1	-228.3	580,796.23	580,457.29	32° 35' 47.193 N	104° 4' 19.504 W
7,952.0	53.50	272.10	7,868.3	123.0	-253.5	580,797.17	580,432.13	32° 35' 47.203 N	104° 4' 19.798 W
7,983.0	57.80	271.40	7,885.8	123.8	-279.1	580,797.95	580,406.55	32° 35' 47.211 N	104° 4' 20.097 W
8,015.0	63.40	269.90	7,901.5	124.1	-306.9	580,798.25	580,378.69	32° 35' 47.215 N	104° 4' 20.423 W
8,046.0	67.10	269.40	7,914.5	123.9	-335.1	580,798.08	580,350.54	32° 35' 47.214 N	104° 4' 20.752 W
8,078.0	69.50	268.90	7,926.3	123.5	-364.8	580,797.64	580,320.81	32° 35' 47.210 N	104° 4' 21.099 W
8,109.0	72.10	268.40	7,936.5	122.8	-394.1	580,796.95	580,291.55	32° 35' 47.204 N	104° 4' 21.441 W
8,141.0	76.00	267.90	7,945.3	121.8	-424.8	580,795.95	580,260.80	32° 35' 47.195 N	104° 4' 21.801 W
8,172.0	79.10	268.10	7,952.0	120.7	-455.1	580,794.90	580,230.56	32° 35' 47.185 N	104° 4' 22.154 W
8,204.0	81.10	268.30	7,957.5	119.7	-486.6	580,793.91	580,199.05	32° 35' 47.176 N	104° 4' 22.523 W
8,236.0	83.80	268.00	7,961.7	118.7	-518.3	580,792.88	580,167.35	32° 35' 47.167 N	104° 4' 22.893 W
8,258.0	85.70	267.90	7,963.7	117.9	-540.2	580,792.10	580,145.45	32° 35' 47.160 N	104° 4' 23.149 W
8,333.0	90.10	264.00	7,966.5	112.6	-614.9	580,786.80	580,070.72	32° 35' 47.109 N	104° 4' 24.023 W
8,364.0	90.40	263.60	7,966.3	109.3	-645.7	580,783.46	580,039.91	32° 35' 47.077 N	104° 4' 24.383 W
8,427.0	90.20	263.40	7,966.0	102.2	-708.3	580,776.33	579,977.31	32° 35' 47.008 N	104° 4' 25.115 W
8,490.0	89.50	263.40	7,966.2	94.9	-770.9	580,769.08	579,914.73	32° 35' 46.938 N	104° 4' 25.847 W
8,554.0	89.60	264.90	7,966.7	88.4	-834.6	580,762.56	579,851.07	32° 35' 46.875 N	104° 4' 26.591 W
8,617.0	89.70	265.50	7,967.1	83.1	-897.3	580,757.29	579,788.29	32° 35' 46.824 N	104° 4' 27.325 W
8,680.0	89.50	265.20	7,967.5	78.0	-960.1	580,752.18	579,725.50	32° 35' 46.775 N	104° 4' 28.059 W
8,744.0	89.70	267.10	7,968.0	73.7	-1,024.0	580,747.89	579,661.65	32° 35' 46.734 N	104° 4' 28.806 W
8,807.0	91.00	269.50	7,967.6	71.9	-1,086.9	580,746.02	579,598.68	32° 35' 46.717 N	104° 4' 29.542 W
8,870.0	91.60	270.50	7,966.1	71.9	-1,149.9	580,746.02	579,535.70	32° 35' 46.718 N	104° 4' 30.278 W
8,934.0	92.70	269.60	7,963.7	71.9	-1,213.9	580,746.07	579,471.75	32° 35' 46.721 N	104° 4' 31.026 W
8,997.0	92.40	269.60	7,960.9	71.5	-1,276.8	580,745.63	579,408.81	32° 35' 46.718 N	104° 4' 31.761 W
9,060.0	89.90	270.30	7,959.7	71.4	-1,339.8	580,745.58	579,345.83	32° 35' 46.719 N	104° 4' 32.497 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E Burton 4 PM Federal Com #1H	MD Reference:	GL3306 + 20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,123.0	89.00	270.50	7,960.3	71.9	-1,402.8	580,746.02	579,282.83	32° 35' 46.725 N	104° 4' 33.234 W
9,186.0	89.10	270.00	7,961.3	72.1	-1,465.8	580,746.29	579,219.84	32° 35' 46.729 N	104° 4' 33.970 W
9,250.0	89.90	269.60	7,961.9	71.9	-1,529.8	580,746.07	579,155.85	32° 35' 46.728 N	104° 4' 34.718 W
9,313.0	90.30	268.50	7,961.8	70.9	-1,592.8	580,745.03	579,092.86	32° 35' 46.719 N	104° 4' 35.455 W
9,376.0	90.40	267.60	7,961.4	68.7	-1,655.7	580,742.88	579,029.89	32° 35' 46.700 N	104° 4' 36.191 W
9,440.0	90.50	268.50	7,960.9	66.5	-1,719.7	580,740.70	578,965.93	32° 35' 46.679 N	104° 4' 36.938 W
9,503.0	89.80	269.80	7,960.7	65.6	-1,782.7	580,739.77	578,902.94	32° 35' 46.672 N	104° 4' 37.675 W
9,566.0	90.10	269.50	7,960.8	65.2	-1,845.7	580,739.38	578,839.94	32° 35' 46.669 N	104° 4' 38.411 W
9,629.0	90.60	269.20	7,960.4	64.5	-1,908.7	580,738.67	578,776.95	32° 35' 46.664 N	104° 4' 39.147 W
9,692.0	90.90	269.30	7,959.6	63.7	-1,971.7	580,737.85	578,713.96	32° 35' 46.657 N	104° 4' 39.884 W
9,756.0	91.30	269.10	7,958.3	62.8	-2,035.7	580,736.95	578,649.98	32° 35' 46.650 N	104° 4' 40.632 W
9,819.0	91.60	268.30	7,956.7	61.4	-2,098.6	580,735.52	578,587.02	32° 35' 46.637 N	104° 4' 41.368 W
9,914.0	89.40	269.00	7,955.9	59.1	-2,193.6	580,733.29	578,492.05	32° 35' 46.617 N	104° 4' 42.478 W
10,009.0	88.90	268.00	7,957.3	56.6	-2,288.5	580,730.80	578,397.10	32° 35' 46.595 N	104° 4' 43.588 W
10,104.0	91.00	267.60	7,957.4	53.0	-2,383.5	580,727.15	578,302.17	32° 35' 46.561 N	104° 4' 44.698 W
10,198.0	91.30	266.90	7,955.5	48.5	-2,477.3	580,722.64	578,208.30	32° 35' 46.519 N	104° 4' 45.795 W
10,293.0	92.20	266.60	7,952.6	43.1	-2,572.1	580,717.26	578,113.50	32° 35' 46.468 N	104° 4' 46.903 W
10,388.0	91.20	267.80	7,949.8	38.5	-2,667.0	580,712.62	578,018.66	32° 35' 46.424 N	104° 4' 48.012 W
10,483.0	92.20	267.20	7,947.0	34.3	-2,761.8	580,708.48	577,923.79	32° 35' 46.385 N	104° 4' 49.121 W
10,578.0	92.60	267.80	7,943.0	30.2	-2,856.7	580,704.34	577,828.96	32° 35' 46.347 N	104° 4' 50.230 W
10,673.0	90.50	267.40	7,940.4	26.2	-2,951.5	580,700.36	577,734.09	32° 35' 46.309 N	104° 4' 51.339 W
10,767.0	89.50	269.10	7,940.4	23.3	-3,045.5	580,697.49	577,640.14	32° 35' 46.283 N	104° 4' 52.437 W
10,862.0	88.30	269.10	7,942.3	21.8	-3,140.5	580,696.00	577,545.17	32° 35' 46.271 N	104° 4' 53.547 W
10,956.0	92.30	269.70	7,941.8	20.9	-3,234.4	580,695.02	577,451.19	32° 35' 46.263 N	104° 4' 54.646 W
11,051.0	90.50	270.40	7,939.4	20.9	-3,329.4	580,695.10	577,356.23	32° 35' 46.266 N	104° 4' 55.756 W
11,146.0	90.10	269.50	7,938.9	20.9	-3,424.4	580,695.02	577,261.23	32° 35' 46.268 N	104° 4' 56.866 W
11,241.0	89.90	267.80	7,938.9	18.6	-3,519.4	580,692.78	577,166.26	32° 35' 46.248 N	104° 4' 57.976 W
11,336.0	88.40	265.90	7,940.4	13.4	-3,614.2	580,687.56	577,071.42	32° 35' 46.198 N	104° 4' 59.085 W
11,430.0	91.70	266.10	7,940.3	6.8	-3,708.0	580,681.00	576,977.66	32° 35' 46.136 N	104° 5' 0.181 W
11,525.0	94.10	266.50	7,935.5	0.7	-3,802.6	580,674.88	576,882.99	32° 35' 46.077 N	104° 5' 1.288 W
11,620.0	93.00	270.90	7,929.6	-1.4	-3,897.4	580,672.73	576,788.22	32° 35' 46.058 N	104° 5' 2.396 W
11,715.0	89.30	273.40	7,927.7	2.1	-3,992.3	580,676.30	576,693.33	32° 35' 46.096 N	104° 5' 3.505 W
11,809.0	86.80	272.10	7,930.9	6.6	-4,086.1	580,680.80	576,599.50	32° 35' 46.142 N	104° 5' 4.602 W
11,904.0	85.80	267.50	7,937.0	6.3	-4,180.9	580,680.48	576,504.73	32° 35' 46.141 N	104° 5' 5.710 W
11,999.0	91.60	263.80	7,939.2	-0.9	-4,275.5	580,673.27	576,410.08	32° 35' 46.072 N	104° 5' 6.816 W
12,063.0	92.40	264.70	7,936.9	-7.3	-4,339.2	580,666.86	576,346.44	32° 35' 46.010 N	104° 5' 7.560 W
12,126.0	93.50	266.20	7,933.7	-12.3	-4,401.9	580,661.87	576,283.73	32° 35' 45.962 N	104° 5' 8.293 W
12,189.0	92.20	265.20	7,930.6	-17.0	-4,464.6	580,657.15	576,220.99	32° 35' 45.917 N	104° 5' 9.027 W
12,284.0	94.20	267.20	7,925.2	-23.3	-4,559.3	580,650.87	576,126.35	32° 35' 45.857 N	104° 5' 10.133 W
12,379.0	92.70	267.60	7,919.5	-27.6	-4,654.0	580,646.57	576,031.63	32° 35' 45.817 N	104° 5' 11.241 W
12,410.0	90.80	270.00	7,918.6	-28.2	-4,685.0	580,645.92	576,000.65	32° 35' 45.811 N	104° 5' 11.603 W
12,490.0	90.60	270.00	7,917.6	-28.2	-4,765.0	580,645.92	575,920.66	32° 35' 45.813 N	104° 5' 12.538 W
12,550.0	90.00	270.00	7,917.3	-28.2	-4,825.0	580,645.92	575,860.66	32° 35' 45.814 N	104° 5' 13.239 W

12550' MD Projected to Bit

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,320.0	7,316.9	126.9	-4.4	7320' MD VES Gyro Survey
12,550.0	7,917.3	-28.2	-4,825.0	12550' MD Projected to Bit



Stryker Directional

Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well: Burton 4 PM Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL3306 +20 @ 3326.0usft (Patterson 41)
Site:	Section 4-20S-29E Burton 4 PM Federal Com #1H	MD Reference:	GL3306 +20 @ 3326.0usft (Patterson 41)
Well:	Burton 4 PM Federal Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.1 Single User Db

Operating Company Mewbourne Oil Co.
Well Name & Number Burton 4 PM Fed Com #1H
Sales Ticket Number 0006050654-1

Company Rep Brian Reede
Field 0
BOT Service Rep John Davis
Date 12/28/2013
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LTC / 8RD	0.03826	8,321.00	9,960	6,230
Top Liner	4.500	13.50	P-110	3.920	3.795	LTC / 8RD	0.01492	4,478.82	12,410	10,680
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-
TVD	7925.00		KOP	7432.00		Open Hole	6.125	Casing Vol. (bbl)		308.4
Carry Fluid Weight (ppg)		8.8		Propant Content (ppa)				Max Drill Out Size		0

Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ (BBL)
Liner Top		8059.18							

Zone Length										
20	JR Sleeve S3 Hyd Set Packer		8059.18	9.55	5.313	3.875				
	4-1/2-13.5 LTC Nipple		8068.73	8.09	5.000	3.920				
	8 Joints of 4-1/2-13.5 LTC Casing		8076.82	316.94	5.000	3.920				
	3.625 EX Frac Sleeve		8393.76	2.40	5.750		3.525	2286		
19	3 Joint of 4-1/2-13.5 LTC Casing		8396.16	118.22	5.000	3.920				
	Baker Open Hole Packer		8514.38	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		8518.27	79.59	5.000	3.920				
	3.500 EX Frac Sleeve		8597.86	2.40			3.400	2286		
18	3 Joint of 4-1/2-13.5 LTC Casing		8600.26	119.22	5.000	3.920				
	Baker Open Hole Packer		8719.48	3.89		3.875		2154		
	3 Joints of 4-1/2-13.5 LTC Casing		8723.37	119.44	5.000	3.920				
	3.375 EX Frac Sleeve		8842.81	2.40			3.275	2286		
17	3 Joint of 4-1/2-13.5 LTC Casing		8845.21	119.70	5.000	3.920				
	Baker Open Hole Packer		8964.91	3.89		3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		8968.80	81.45	5.000	3.920				
	3.250 EX Frac Sleeve		9050.25	2.40			3.150	2286		
16	3 Joint of 4-1/2-13.5 LTC Casing		9052.65	117.82	5.000	3.920				
	Baker Open Hole Packer		9170.47	3.89		3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		9174.36	79.66	5.000	3.920				
	3.125 EX Frac Sleeve		9254.02	2.40			3.025	2286		
	3 Joints of 4-1/2-13.5 LTC Casing		9256.42	118.49	5.000	3.920				
	Baker Open Hole Packer		9374.91	3.89		3.875		2154		

Operating Company Mewbourne Oil Co.
Well Name & Number Burton 4 PM Fed Com #1H
Sales Ticket Number 0006050654-1
Date 12/28/2013

Company Rep Brian Reede
Field 0
BOT Service Rep John Davis
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151	LTC / 8RD	0.03826	8,321.00	9,960	6,230	
Top Liner	4.500	13.50	P-110	3.920	3.795	LTC / 8RD	0.01492	4,478.82	12,410	10,680	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD	7925.00		KOP		7432.00		Open Hole		6.125	Casing Vol. (bbl)	308.4

Carry Fluid Weight (ppg)	8.8	Propanant Content (ppa)		Max Drill Out Size	0
--------------------------	-----	-------------------------	--	--------------------	---

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
15		3 Joints of 4-1/2-13.5 LTC Casing	9378.80	118.86	5.000	3.920				
		3.000 EX Frac Sleeve	9497.66	2.40			2.900	2286		
		3 Joint of 4-1/2-13.5 LTC Casing	9500.06	119.48	5.000	3.920				
14		Baker Open Hole Packer	9619.34	3.89		3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9623.43	79.25	5.000	3.920				
		2.875 EX Frac Sleeve	9702.68	2.40			2.775	2286		
13		3 Joints of 4-1/2-13.5 LTC Casing	9705.08	117.58	5.000	3.920				
		Baker Open Hole Packer	9822.68	3.89		3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9826.55	81.01	5.000	3.920				
12		2.750 EX Frac Sleeve	9907.56	2.40			2.650	2286		
		3 Joint of 4-1/2-13.5 LTC Casing	9909.96	118.98	5.000	3.920				
		Baker Open Hole Packer	10025.94	3.89		3.875		2154		
11		3 Joints of 4-1/2-13.5 LTC Casing	10032.83	117.25	5.000	3.920				
		2.625 EX Frac Sleeve	10150.08	2.40			2.525	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10152.48	119.72	5.000	3.920				
10		Baker Open Hole Packer	10272.20	3.89		3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10276.09	81.62	5.000	3.920				
		2.500 EX Frac Sleeve	10357.74	2.40			2.400	2286		
9		3 Joint of 4-1/2-13.5 LTC Casing	10360.11	117.80	5.000	3.920				
		Baker Open Hole Packer	10427.91	3.89		3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10481.80	79.06	5.000	3.920				
		2.375 EX Frac Sleeve	10560.86	2.40			2.275	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10563.26	120.06	5.000	3.920				
		Baker Open Hole Packer	10633.32	3.89		3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	10687.21	79.09	5.000	3.920				
		2.250 EX Frac Sleeve	10766.30	2.40			2.150	2286		

Operating Company Mewbourne Oil Co.
Well Name & Number Burton 4 PM Fed Com #1H
Sales Ticket Number 0006050654-1

Company Rep Brian Reede
Field 0
BOT Service Rep John Davis
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	P-110	6.276	6.151	LTC / 8RD	0.03826	8,321.00	19,960	6,230		
Top Liner	4.500	13.50	P-110	3.920	3.795	LTC / 8RD	0.01492	4,478.82	12,410	10,680		
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-		
TVD		7925.00		KOP		7432.00		Open Hole		6.125	Casing Vol. (bbl)	308.4
Carry Fluid Weight (ppg)			8.8		Propant Content (ppa)				Max Drill Out Size		0	

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
8		3 Joints of 4-1/2-13.5 LTC Casing	10768.70	119.64	5.000	3.920				
		Baker Open Hole Packer	10888.34	3.89		3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	10892.23	118.31	5.000	3.920				
7		2.125 EX Frac Sleeve	11010.54	2.40			2.025	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11012.94	119.14	5.000	3.920				
		Baker Open Hole Packer	11132.08	3.89		3.875		2154		
6		2 Joint of 4-1/2-13.5 LTC Casing	11135.97	79.21	5.000	3.920				
		2.000 EX Frac Sleeve	11215.18	2.40			1.900	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11217.58	117.73	5.000	3.920				
5		Baker Open Hole Packer	11335.31	3.89		3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	11339.20	121.57	5.000	3.920				
		1.875 EX Frac Sleeve	11460.77	2.40			1.775	2286		
4		3 Joints of 4-1/2-13.5 LTC Casing	11463.17	119.70	5.000	3.920				
		Baker Open Hole Packer	11582.87	3.89		3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11586.76	80.14	5.000	3.920				
3		1.750 EX Frac Sleeve	11666.90	2.40			1.650	2286		
		3 Joint of 4-1/2-13.5 LTC Casing	11669.30	119.94	5.000	3.920				
		Baker Open Hole Packer	11789.24	3.89		3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11793.13	78.56	5.000	3.920				
		1.625 EX Frac Sleeve	11871.69	2.40			1.525	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11874.09	119.23	5.000	3.920				
		Baker Open Hole Packer	11993.32	3.89		3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11997.21	78.54	5.000	3.920				
		1.500 DBL Ball Frac Sleeve	12075.75	2.40			1.400	2286		
		3 Joint of 4-1/2-13.5 LTC Casing	12078.15	119.49	5.000	3.920				
		Baker Open Hole Packer	12197.64	3.89		3.875		2154		

Company Rep	Brian Reede
Field	0
BOT Service Rep	John Davis
District Location	Odessa, TX

[illegible]