



NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 25 2016

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30-015-43684

Mewbourne Oil Company .

Eddy County, New Mexico

Section 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H

Owl Draw 27-22 W2NC Fed Com #2H

Original Hole

Design: Original Hole

Standard Survey Report

17 June, 2016





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Owl Draw 27-22 W2NC Fed Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Site:	Section 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H	MD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Well:	Owl Draw 27-22 W2NC Fed Com #2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H		
Site Position:		Northing:	365,994.60 usft
From:	Map	Easting:	547,971.30 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 0' 22.098 N
		Longitude:	104° 10' 42.868 W
		Grid Convergence:	0.08 °

Well	Owl Draw 27-22 W2NC Fed Com #2H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	27.0 usft
		Latitude:	32° 0' 22.098 N
		Longitude:	104° 10' 42.868 W
		Ground Level:	3,176.0 usft

Wellbore	Original Hole		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/25/2016	7.34	59.78	47,861

Design	Original Hole		
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Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.96

Survey Program	Date 6/17/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	9,122.0	Phoenix Tech Services Survey #1 (Original)	SRG-GYRO-MS
9,257.0	19,850.0	MWD Survey (Original Hole)	MWD
			Description
			surface readout gyro multishot
			MWD v3:standard declination

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
	100.0	0.25	337.71	100.0	0.2	-0.1	0.2	0.25	0.25	0.00
	200.0	0.35	248.25	200.0	0.3	-0.4	0.3	0.43	0.10	-89.46
	300.0	0.85	11.15	300.0	0.9	-0.6	0.9	1.08	0.50	122.90
	400.0	1.40	246.46	400.0	1.1	-1.6	1.1	2.01	0.55	-124.69
	500.0	1.33	243.77	500.0	0.1	-3.7	0.1	0.09	-0.07	-2.69
	600.0	1.46	241.58	599.9	-1.0	-5.9	-1.0	0.14	0.13	-2.19
	700.0	1.97	243.61	699.9	-2.3	-8.5	-2.3	0.51	0.51	2.03
	800.0	2.22	246.15	799.8	-3.9	-11.9	-3.9	0.27	0.25	2.54



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Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
900.0	0.99	326.56	899.8	-4.0	-14.1	-3.9	2.28	-1.23	80.41
1,000.0	1.39	207.62	999.8	-4.3	-15.1	-4.3	2.06	0.40	-118.94
1,100.0	1.12	213.52	1,099.7	-6.2	-16.2	-6.2	0.30	-0.27	5.90
1,200.0	1.67	201.19	1,199.7	-8.4	-17.3	-8.4	0.62	0.55	-12.33
1,300.0	0.98	80.22	1,299.7	-9.6	-17.0	-9.6	2.33	-0.69	-120.97
1,400.0	1.26	14.89	1,399.7	-8.4	-15.9	-8.4	1.23	0.28	-65.33
1,500.0	1.75	12.67	1,499.7	-5.8	-15.3	-5.8	0.49	0.49	-2.22
1,600.0	0.25	71.72	1,599.6	-4.3	-14.7	-4.3	1.64	-1.50	59.05
1,700.0	0.39	265.62	1,699.6	-4.2	-14.8	-4.2	0.64	0.14	-166.10
1,800.0	0.88	256.46	1,799.6	-4.4	-15.9	-4.4	0.50	0.49	-9.16
1,900.0	0.42	109.03	1,899.6	-4.7	-16.3	-4.7	1.25	-0.46	-147.43
2,000.0	0.50	110.04	1,999.6	-5.0	-15.6	-5.0	0.08	0.08	1.01
2,100.0	0.36	213.81	2,099.6	-5.4	-15.3	-5.4	0.68	-0.14	103.77
2,200.0	0.36	84.27	2,199.6	-5.6	-15.2	-5.6	0.65	0.00	-129.54
2,300.0	0.28	99.06	2,299.6	-5.6	-14.6	-5.6	0.11	-0.08	14.79
2,400.0	0.41	206.60	2,399.6	-6.0	-14.6	-6.0	0.56	0.13	107.54
2,500.0	0.32	118.76	2,499.6	-6.5	-14.5	-6.4	0.51	-0.09	-87.84
2,600.0	0.45	53.01	2,599.6	-6.4	-13.9	-6.3	0.43	0.13	-65.75
2,700.0	0.62	201.76	2,699.6	-6.6	-13.8	-6.6	1.03	0.17	148.75
2,800.0	0.22	340.66	2,799.6	-6.9	-14.1	-6.9	0.80	-0.40	138.90
2,900.0	0.49	191.15	2,899.6	-7.2	-14.2	-7.2	0.69	0.27	-149.51
3,000.0	0.94	244.94	2,999.6	-7.9	-15.0	-7.9	0.76	0.45	53.79
3,100.0	0.41	298.26	3,099.6	-8.1	-16.1	-8.1	0.77	-0.53	53.32
3,200.0	0.88	4.60	3,199.6	-7.2	-16.4	-7.2	0.81	0.47	66.34
3,300.0	0.67	351.28	3,299.6	-5.8	-16.4	-5.8	0.28	-0.21	-13.32
3,400.0	0.95	23.95	3,399.6	-4.5	-16.1	-4.5	0.53	0.28	32.67
3,500.0	0.44	100.29	3,499.6	-3.8	-15.4	-3.8	0.95	-0.51	76.34
3,600.0	0.42	256.36	3,599.6	-4.0	-15.4	-4.0	0.84	-0.02	156.07
3,700.0	0.98	257.06	3,699.6	-4.3	-16.6	-4.2	0.56	0.56	0.70
3,800.0	1.00	297.93	3,799.5	-4.0	-18.2	-4.0	0.69	0.02	40.87
3,900.0	0.43	226.55	3,899.5	-3.9	-19.2	-3.9	0.95	-0.57	-71.38
4,000.0	0.39	250.33	3,999.5	-4.3	-19.8	-4.2	0.17	-0.04	23.78
4,100.0	0.80	291.29	4,099.5	-4.1	-20.8	-4.1	0.57	0.41	40.96
4,200.0	0.99	253.32	4,199.5	-4.1	-22.3	-4.1	0.61	0.19	-37.97
4,300.0	0.35	220.21	4,299.5	-4.6	-23.3	-4.6	0.72	-0.64	-33.11
4,400.0	0.45	178.00	4,399.5	-5.2	-23.5	-5.2	0.30	0.10	-42.21
4,500.0	0.54	305.17	4,499.5	-5.3	-23.9	-5.3	0.89	0.09	127.17
4,600.0	0.88	236.43	4,599.5	-5.5	-24.9	-5.5	0.85	0.34	-68.74
4,700.0	0.43	276.20	4,699.5	-5.9	-25.9	-5.9	0.61	-0.45	39.77
4,800.0	0.46	101.76	4,799.5	-5.9	-25.9	-5.9	0.89	0.03	-174.44
4,900.0	0.89	201.04	4,899.5	-6.7	-25.8	-6.7	1.07	0.43	99.28
5,000.0	0.48	222.03	4,999.5	-7.8	-26.3	-7.7	0.47	-0.41	20.99



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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)	
5,100.0	0.65	226.57	5,099.5	-8.5	-27.0	-8.4	0.18	0.17	4.54	
5,200.0	0.79	229.35	5,199.5	-9.3	-28.0	-9.3	0.14	0.14	2.78	
5,300.0	0.88	208.05	5,299.5	-10.4	-28.8	-10.4	0.32	0.09	-21.30	
5,400.0	1.33	250.97	5,399.4	-11.5	-30.3	-11.5	0.91	0.45	42.92	
5,500.0	1.53	221.80	5,499.4	-12.9	-32.3	-12.8	0.75	0.20	-29.17	
5,600.0	1.98	212.27	5,599.4	-15.3	-34.1	-15.3	0.53	0.45	-9.53	
5,700.0	1.89	207.12	5,699.3	-18.2	-35.8	-18.2	0.20	-0.09	-5.15	
5,800.0	1.33	217.43	5,799.3	-20.6	-37.2	-20.6	0.63	-0.56	10.31	
5,900.0	2.08	226.79	5,899.2	-22.8	-39.3	-22.8	0.80	0.75	9.36	
6,000.0	1.50	244.83	5,999.2	-24.6	-41.8	-24.6	0.80	-0.58	18.04	
6,100.0	1.22	268.89	6,099.1	-25.2	-44.0	-25.1	0.63	-0.28	24.06	
6,200.0	1.25	236.45	6,199.1	-25.8	-46.0	-25.8	0.69	0.03	-32.44	
6,300.0	1.43	226.85	6,299.1	-27.3	-47.8	-27.2	0.29	0.18	-9.60	
6,400.0	1.85	274.25	6,399.1	-28.0	-50.3	-28.0	1.37	0.42	47.40	
6,500.0	1.60	268.04	6,499.0	-27.9	-53.3	-27.9	0.31	-0.25	-6.21	
6,600.0	0.82	348.84	6,599.0	-27.3	-54.9	-27.2	1.68	-0.78	80.80	
6,700.0	0.86	299.67	6,699.0	-26.2	-55.7	-26.2	0.70	0.04	-49.17	
6,800.0	0.91	216.59	6,799.0	-26.5	-56.8	-26.4	1.17	0.05	-83.08	
6,900.0	1.52	241.26	6,899.0	-27.7	-58.4	-27.7	0.79	0.61	24.67	
7,000.0	1.31	228.19	6,998.9	-29.1	-60.4	-29.1	0.38	-0.21	-13.07	
7,100.0	1.83	232.37	7,098.9	-30.9	-62.5	-30.8	0.53	0.52	4.18	
7,200.0	1.53	237.52	7,198.8	-32.6	-64.9	-32.5	0.34	-0.30	5.15	
7,300.0	0.31	247.60	7,298.8	-33.4	-66.3	-33.3	1.23	-1.22	10.08	
7,400.0	0.87	165.43	7,398.8	-34.2	-66.4	-34.2	0.88	0.56	-82.17	
7,500.0	3.07	131.76	7,498.8	-36.7	-64.2	-36.7	2.39	2.20	-33.67	
7,600.0	4.59	117.19	7,598.5	-40.4	-58.6	-40.3	1.79	1.52	-14.57	
7,700.0	4.38	113.96	7,698.2	-43.7	-51.6	-43.7	0.33	-0.21	-3.23	
7,800.0	4.79	117.93	7,797.9	-47.2	-44.4	-47.2	0.52	0.41	3.97	
7,900.0	4.57	126.02	7,897.6	-51.5	-37.5	-51.5	0.70	-0.22	8.09	
8,000.0	2.40	104.71	7,997.4	-54.4	-32.2	-54.4	2.49	-2.17	-21.31	
8,100.0	1.96	151.84	8,097.3	-56.4	-29.4	-56.4	1.79	-0.44	47.13	
8,200.0	2.69	141.57	8,197.2	-59.8	-27.1	-59.8	0.84	0.73	-10.27	
8,300.0	1.72	162.37	8,297.2	-63.1	-25.2	-63.0	1.24	-0.97	20.80	
8,400.0	1.78	170.73	8,397.1	-66.0	-24.5	-66.0	0.26	0.06	8.36	
8,500.0	1.59	178.05	8,497.1	-68.9	-24.2	-68.9	0.29	-0.19	7.32	
8,600.0	1.42	155.48	8,597.0	-71.5	-23.7	-71.4	0.61	-0.17	-22.57	
8,700.0	1.17	140.29	8,697.0	-73.4	-22.5	-73.4	0.42	-0.25	-15.19	
8,800.0	1.20	148.85	8,797.0	-75.1	-21.3	-75.0	0.18	0.03	8.56	
8,900.0	0.66	111.33	8,897.0	-76.2	-20.2	-76.1	0.79	-0.54	-37.52	
9,000.0	0.21	119.49	8,997.0	-76.5	-19.5	-76.4	0.45	-0.45	8.16	
9,122.0	0.60	125.59	9,119.0	-76.9	-18.8	-76.9	0.32	0.32	5.00	
9122.0' MD Phoenix Gyro										
9,257.0	0.50	165.70	9,254.0	-77.9	-18.1	-77.9	0.29	-0.07	29.71	



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Survey									
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9,352.0	2.40	15.20	9,349.0	-76.4	-17.5	-76.4	3.00	2.00	-158.42
9,384.0	5.70	2.10	9,380.9	-74.2	-17.2	-74.2	10.64	10.31	-40.94
9,416.0	8.90	357.10	9,412.6	-70.1	-17.3	-70.1	10.19	10.00	-15.63
9,447.0	11.50	356.80	9,443.1	-64.6	-17.6	-64.6	8.39	8.39	-0.97
9,479.0	13.80	359.30	9,474.3	-57.6	-17.8	-57.6	7.39	7.19	7.81
9,510.0	17.00	0.40	9,504.2	-49.4	-17.8	-49.4	10.37	10.32	3.55
9,542.0	19.90	1.00	9,534.6	-39.3	-17.7	-39.3	9.08	9.06	1.88
9,574.0	22.80	2.10	9,564.4	-27.6	-17.4	-27.6	9.15	9.06	3.44
9,605.0	25.60	1.50	9,592.6	-14.9	-17.0	-14.9	9.07	9.03	-1.94
9,637.0	28.30	2.20	9,621.2	-0.4	-16.5	-0.4	8.50	8.44	2.19
9,669.0	31.30	2.30	9,648.9	15.5	-15.9	15.5	9.38	9.38	0.31
9,700.0	34.60	1.50	9,674.9	32.3	-15.3	32.3	10.74	10.65	-2.58
9,732.0	37.80	0.50	9,700.8	51.2	-15.0	51.2	10.17	10.00	-3.13
9,764.0	41.00	2.20	9,725.5	71.5	-14.5	71.5	10.55	10.00	5.31
9,795.0	43.80	2.90	9,748.4	92.4	-13.6	92.4	9.16	9.03	2.26
9,827.0	45.90	1.90	9,771.1	114.9	-12.7	114.9	6.92	6.56	-3.13
9,860.0	48.00	2.30	9,793.6	139.0	-11.8	139.0	6.42	6.36	1.21
9,891.0	50.20	1.70	9,813.9	162.4	-11.0	162.4	7.25	7.10	-1.94
9,923.0	54.00	359.70	9,833.5	187.7	-10.7	187.7	12.86	11.88	-6.25
9,954.0	57.90	358.80	9,850.9	213.4	-11.0	213.4	12.81	12.58	-2.90
9,986.0	60.40	358.90	9,867.3	240.8	-11.5	240.8	7.82	7.81	0.31
10,017.0	62.30	359.00	9,882.2	268.0	-12.0	268.0	6.14	6.13	0.32
10,049.0	64.70	358.90	9,896.4	296.7	-12.6	296.7	7.51	7.50	-0.31
10,080.0	66.70	358.80	9,909.2	324.9	-13.1	324.9	6.46	6.45	-0.32
10,112.0	68.00	358.60	9,921.5	354.4	-13.8	354.4	4.10	4.06	-0.63
10,144.0	68.70	358.90	9,933.3	384.2	-14.5	384.2	2.35	2.19	0.94
10,176.0	71.00	359.40	9,944.3	414.2	-14.9	414.2	7.34	7.19	1.56
10,207.0	73.00	359.70	9,953.9	443.7	-15.1	443.7	6.52	6.45	0.97
10,239.0	74.90	359.50	9,962.8	474.4	-15.3	474.4	5.97	5.94	-0.63
10,270.0	77.80	359.90	9,970.1	504.5	-15.5	504.6	9.44	9.35	1.29
10,302.0	80.80	0.40	9,976.0	536.0	-15.4	536.0	9.50	9.38	1.56
10,333.0	83.80	0.50	9,980.2	566.7	-15.2	566.7	9.68	9.68	0.32
10,366.0	86.80	359.80	9,982.9	599.6	-15.1	599.6	9.33	9.09	-2.12
10,395.0	88.10	0.50	9,984.2	628.6	-15.0	628.6	5.09	4.48	2.41
10,443.0	87.80	0.10	9,985.9	676.5	-14.8	676.5	1.04	-0.63	-0.83
10,475.0	87.20	0.20	9,987.3	708.5	-14.7	708.5	1.90	-1.88	0.31
10,569.0	88.50	0.50	9,990.8	802.4	-14.1	802.4	1.42	1.38	0.32
10,667.0	86.20	359.50	9,995.3	900.3	-14.1	900.3	2.56	-2.35	-1.02
10,762.0	90.10	0.70	9,998.4	995.2	-13.9	995.3	4.29	4.11	1.26
10,856.0	91.10	0.80	9,997.4	1,089.2	-12.7	1,089.2	1.07	1.06	0.11
10,950.0	91.50	1.50	9,995.3	1,183.2	-10.8	1,183.2	0.86	0.43	0.74
11,046.0	90.80	0.80	9,993.4	1,279.1	-8.9	1,279.2	1.03	-0.73	-0.73



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Owl Draw 27-22 W2NC Fed Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Site:	Section 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H	MD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Well:	Owl Draw 27-22 W2NC Fed Com #2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
11,141.0	91.40	0.40	9,991.5	1,374.1	-7.9	1,374.1	0.76	0.63	-0.42
11,204.0	90.90	0.10	9,990.3	1,437.1	-7.6	1,437.1	0.93	-0.79	-0.48
11,235.0	90.50	359.50	9,989.9	1,468.1	-7.7	1,468.1	2.33	-1.29	-1.94
11,267.0	88.70	359.00	9,990.1	1,500.1	-8.2	1,500.1	5.84	-5.63	-1.56
11,298.0	88.50	359.00	9,990.9	1,531.1	-8.7	1,531.1	0.65	-0.65	0.00
11,330.0	88.50	359.20	9,991.7	1,563.1	-9.2	1,563.1	0.62	0.00	0.63
11,361.0	88.70	358.90	9,992.5	1,594.1	-9.7	1,594.1	1.16	0.65	-0.97
11,392.0	88.00	358.00	9,993.4	1,625.0	-10.6	1,625.0	3.68	-2.26	-2.90
11,424.0	85.90	357.10	9,995.1	1,657.0	-11.9	1,657.0	7.14	-6.56	-2.81
11,455.0	85.70	356.80	9,997.3	1,687.8	-13.6	1,687.8	1.16	-0.65	-0.97
11,486.0	87.30	356.90	9,999.2	1,718.7	-15.3	1,718.7	5.17	5.16	0.32
11,517.0	88.40	356.40	10,000.4	1,749.7	-17.1	1,749.7	3.90	3.55	-1.61
11,549.0	88.80	355.70	10,001.2	1,781.6	-19.3	1,781.6	2.52	1.25	-2.19
11,581.0	90.10	355.00	10,001.5	1,813.5	-21.9	1,813.5	4.61	4.06	-2.19
11,612.0	90.50	355.20	10,001.3	1,844.3	-24.5	1,844.4	1.44	1.29	0.65
11,644.0	91.70	356.90	10,000.7	1,876.3	-26.7	1,876.3	6.50	3.75	5.31
11,676.0	91.60	356.50	9,999.8	1,908.2	-28.6	1,908.2	1.29	-0.31	-1.25
11,708.0	91.60	357.50	9,998.9	1,940.1	-30.2	1,940.2	3.12	0.00	3.13
11,739.0	91.60	356.80	9,998.0	1,971.1	-31.8	1,971.1	2.26	0.00	-2.26
11,771.0	90.70	357.50	9,997.4	2,003.0	-33.4	2,003.1	3.56	-2.81	2.19
11,803.0	90.10	357.60	9,997.2	2,035.0	-34.7	2,035.0	1.90	-1.88	0.31
11,835.0	88.80	358.80	9,997.5	2,067.0	-35.7	2,067.0	5.53	-4.06	3.75
11,867.0	88.50	359.20	9,998.2	2,099.0	-36.3	2,099.0	1.56	-0.94	1.25
11,898.0	89.10	0.05	9,998.9	2,130.0	-36.5	2,130.0	3.36	1.94	2.74
11,928.0	90.40	2.30	9,999.0	2,160.0	-35.9	2,160.0	8.66	4.33	7.50
11,960.0	91.40	3.20	9,998.5	2,191.9	-34.4	2,191.9	4.20	3.13	2.81
11,992.0	90.80	3.20	9,997.9	2,223.9	-32.6	2,223.9	1.88	-1.88	0.00
12,024.0	90.10	3.50	9,997.6	2,255.8	-30.7	2,255.8	2.38	-2.19	0.94
12,055.0	90.10	4.70	9,997.6	2,286.7	-28.5	2,286.7	3.87	0.00	3.87
12,086.0	89.90	3.90	9,997.6	2,317.6	-26.2	2,317.7	2.66	-0.65	-2.58
12,118.0	89.50	4.40	9,997.8	2,349.6	-23.8	2,349.6	2.00	-1.25	1.56
12,149.0	89.70	5.20	9,998.0	2,380.4	-21.2	2,380.5	2.66	0.65	2.58
12,181.0	89.80	4.50	9,998.1	2,412.3	-18.5	2,412.3	2.21	0.31	-2.19
12,213.0	89.00	3.40	9,998.4	2,444.3	-16.3	2,444.3	4.25	-2.50	-3.44
12,245.0	88.20	2.60	9,999.2	2,476.2	-14.7	2,476.2	3.53	-2.50	-2.50
12,276.0	86.90	2.00	10,000.6	2,507.1	-13.4	2,507.2	4.62	-4.19	-1.94
12,308.0	87.50	1.20	10,002.1	2,539.1	-12.5	2,539.1	3.12	1.88	-2.50
12,339.0	88.80	0.50	10,003.1	2,570.1	-12.1	2,570.1	4.76	4.19	-2.26
12,371.0	89.00	359.50	10,003.7	2,602.1	-12.1	2,602.1	3.19	0.63	-3.13
12,403.0	89.10	358.70	10,004.3	2,634.1	-12.6	2,634.1	2.52	0.31	-2.50
12,434.0	88.00	359.20	10,005.0	2,665.0	-13.1	2,665.0	3.90	-3.55	1.61
12,466.0	87.40	359.30	10,006.3	2,697.0	-13.6	2,697.0	1.90	-1.88	0.31
12,498.0	88.40	358.70	10,007.5	2,729.0	-14.1	2,729.0	3.64	3.13	-1.88



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Owl Draw 27-22 W2NC Fed Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Site:	Section 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H	MD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Well:	Owl Draw 27-22 W2NC Fed Com #2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
12,529.0	88.60	357.50	10,008.3	2,760.0	-15.1	2,760.0	3.92	0.65	-3.87
12,561.0	88.60	357.20	10,009.1	2,791.9	-16.6	2,791.9	0.94	0.00	-0.94
12,593.0	86.70	355.60	10,010.4	2,823.8	-18.6	2,823.8	7.76	-5.94	-5.00
12,650.0	88.90	355.50	10,012.6	2,880.6	-23.0	2,880.6	3.86	3.86	-0.18
12,681.0	91.30	356.50	10,012.5	2,911.5	-25.2	2,911.5	8.39	7.74	3.23
12,713.0	92.40	358.10	10,011.5	2,943.5	-26.7	2,943.5	6.07	3.44	5.00
12,744.0	92.00	358.50	10,010.3	2,974.4	-27.6	2,974.5	1.82	-1.29	1.29
12,776.0	92.00	358.20	10,009.2	3,006.4	-28.6	3,006.4	0.94	0.00	-0.94
12,807.0	87.30	355.30	10,009.4	3,037.3	-30.3	3,037.4	17.81	-15.16	-9.35
12,839.0	87.80	355.90	10,010.8	3,069.2	-32.8	3,069.2	2.44	1.56	1.88
12,870.0	90.60	357.30	10,011.2	3,100.2	-34.6	3,100.2	10.10	9.03	4.52
12,902.0	88.00	355.70	10,011.6	3,132.1	-36.6	3,132.1	9.54	-8.13	-5.00
12,934.0	89.80	356.80	10,012.2	3,164.0	-38.6	3,164.0	6.59	5.63	3.44
12,966.0	91.60	358.00	10,011.8	3,196.0	-40.1	3,196.0	6.76	5.63	3.75
12,997.0	92.50	358.30	10,010.7	3,226.9	-41.1	3,227.0	3.06	2.90	0.97
13,028.0	91.80	357.90	10,009.5	3,257.9	-42.1	3,257.9	2.60	-2.26	-1.29
13,061.0	91.70	357.90	10,008.5	3,290.9	-43.3	3,290.9	0.30	-0.30	0.00
13,092.0	92.90	358.60	10,007.3	3,321.8	-44.3	3,321.9	4.48	3.87	2.26
13,123.0	93.10	359.10	10,005.7	3,352.8	-44.9	3,352.8	1.74	0.65	1.61
13,155.0	92.60	359.80	10,004.1	3,384.7	-45.2	3,384.8	2.69	-1.56	2.19
13,187.0	91.30	0.00	10,003.0	3,416.7	-45.3	3,416.7	4.11	-4.06	0.63
13,219.0	90.00	0.10	10,002.6	3,448.7	-45.2	3,448.7	4.07	-4.06	0.31
13,250.0	89.50	359.30	10,002.8	3,479.7	-45.4	3,479.7	3.04	-1.61	-2.58
13,282.0	88.80	359.60	10,003.2	3,511.7	-45.7	3,511.7	2.38	-2.19	0.94
13,314.0	89.20	358.90	10,003.8	3,543.7	-46.1	3,543.7	2.52	1.25	-2.19
13,346.0	90.90	359.40	10,003.8	3,575.7	-46.6	3,575.7	5.54	5.31	1.56
13,377.0	92.40	0.80	10,002.9	3,606.7	-46.5	3,606.7	6.62	4.84	4.52
13,410.0	92.10	1.50	10,001.6	3,639.6	-45.9	3,639.7	2.31	-0.91	2.12
13,441.0	90.10	1.20	10,001.0	3,670.6	-45.2	3,670.7	6.52	-6.45	-0.97
13,473.0	87.90	359.30	10,001.5	3,702.6	-45.0	3,702.6	9.08	-6.88	-5.94
13,504.0	86.20	359.40	10,003.1	3,733.6	-45.4	3,733.6	5.49	-5.48	0.32
13,536.0	86.30	359.40	10,005.2	3,765.5	-45.7	3,765.5	0.31	0.31	0.00
13,567.0	85.50	359.80	10,007.4	3,796.4	-45.9	3,796.5	2.88	-2.58	1.29
13,599.0	86.30	359.90	10,009.7	3,828.3	-46.0	3,828.4	2.52	2.50	0.31
13,631.0	87.00	359.40	10,011.6	3,860.3	-46.2	3,860.3	2.69	2.19	-1.56
13,663.0	85.90	358.00	10,013.6	3,892.2	-46.9	3,892.2	5.56	-3.44	-4.38
13,694.0	88.10	358.10	10,015.2	3,923.2	-48.0	3,923.2	7.10	7.10	0.32
13,726.0	87.70	356.20	10,016.4	3,955.1	-49.6	3,955.1	6.06	-1.25	-5.94
13,758.0	90.50	357.10	10,016.9	3,987.0	-51.4	3,987.1	9.19	8.75	2.81
13,790.0	95.50	0.20	10,015.2	4,019.0	-52.2	4,019.0	18.38	15.63	9.69
13,821.0	95.10	359.00	10,012.3	4,049.8	-52.4	4,049.9	4.06	-1.29	-3.87
13,853.0	95.10	359.10	10,009.5	4,081.7	-52.9	4,081.7	0.31	0.00	0.31



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Owl Draw 27-22 W2NC Fed Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Site:	Section 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H	MD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Well:	Owl Draw 27-22 W2NC Fed Com #2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
13,885.0	94.90	0.50	10,006.7	4,113.6	-53.0	4,113.6	4.40	-0.63	4.38
13,917.0	92.70	359.50	10,004.6	4,145.5	-53.0	4,145.5	7.55	-6.88	-3.13
13,948.0	88.70	357.80	10,004.2	4,176.5	-53.8	4,176.5	14.02	-12.90	-5.48
13,979.0	87.70	358.30	10,005.2	4,207.4	-54.8	4,207.5	3.61	-3.23	1.61
14,011.0	87.40	358.00	10,006.5	4,239.4	-55.9	4,239.4	1.33	-0.94	-0.94
14,042.0	88.10	357.50	10,007.8	4,270.4	-57.1	4,270.4	2.77	2.26	-1.61
14,075.0	93.10	1.90	10,007.4	4,303.3	-57.2	4,303.4	20.18	15.15	13.33
14,107.0	95.10	3.00	10,005.1	4,335.2	-55.9	4,335.3	7.13	6.25	3.44
14,138.0	93.80	2.80	10,002.7	4,366.1	-54.3	4,366.1	4.24	-4.19	-0.65
14,170.0	91.40	3.10	10,001.3	4,398.0	-52.7	4,398.0	7.56	-7.50	0.94
14,201.0	90.60	4.30	10,000.7	4,428.9	-50.7	4,429.0	4.65	-2.58	3.87
14,233.0	88.80	3.90	10,000.9	4,460.9	-48.4	4,460.9	5.76	-5.63	-1.25
14,265.0	86.80	3.20	10,002.1	4,492.8	-46.4	4,492.8	6.62	-6.25	-2.19
14,296.0	86.60	3.10	10,003.9	4,523.7	-44.7	4,523.7	0.72	-0.65	-0.32
14,328.0	86.40	3.10	10,005.9	4,555.6	-43.0	4,555.6	0.63	-0.63	0.00
14,360.0	85.60	2.60	10,008.1	4,587.4	-41.4	4,587.5	2.95	-2.50	-1.56
14,392.0	85.40	2.40	10,010.6	4,619.3	-40.0	4,619.3	0.88	-0.63	-0.63
14,424.0	87.10	2.00	10,012.7	4,651.2	-38.8	4,651.3	5.46	5.31	-1.25
14,456.0	87.40	2.60	10,014.2	4,683.2	-37.5	4,683.2	2.09	0.94	1.88
14,487.0	87.40	2.80	10,015.6	4,714.1	-36.0	4,714.1	0.64	0.00	0.65
14,518.0	90.00	2.80	10,016.3	4,745.0	-34.5	4,745.1	8.39	8.39	0.00
14,550.0	89.90	3.00	10,016.4	4,777.0	-32.9	4,777.0	0.70	-0.31	0.63
14,582.0	90.00	3.40	10,016.4	4,809.0	-31.1	4,809.0	1.29	0.31	1.25
14,613.0	89.30	2.30	10,016.6	4,839.9	-29.6	4,839.9	4.21	-2.26	-3.55
14,645.0	88.80	1.20	10,017.1	4,871.9	-28.6	4,871.9	3.78	-1.56	-3.44
14,676.0	88.60	1.90	10,017.8	4,902.9	-27.8	4,902.9	2.35	-0.65	2.26
14,708.0	88.50	1.90	10,018.6	4,934.8	-26.7	4,934.9	0.31	-0.31	0.00
14,739.0	89.00	3.00	10,019.3	4,965.8	-25.4	4,965.8	3.90	1.61	3.55
14,771.0	90.70	3.70	10,019.4	4,997.8	-23.5	4,997.8	5.75	5.31	2.19
14,802.0	90.90	4.00	10,019.0	5,028.7	-21.4	5,028.7	1.16	0.65	0.97
14,834.0	90.30	2.30	10,018.6	5,060.6	-19.7	5,060.6	5.63	-1.88	-5.31
14,865.0	89.90	1.80	10,018.6	5,091.6	-18.6	5,091.6	2.07	-1.29	-1.61
14,897.0	89.40	1.10	10,018.8	5,123.6	-17.7	5,123.6	2.69	-1.56	-2.19
14,960.0	89.90	2.20	10,019.2	5,186.6	-15.9	5,186.6	1.92	0.79	1.75
15,054.0	88.20	1.90	10,020.7	5,280.5	-12.6	5,280.5	1.84	-1.81	-0.32
15,148.0	87.40	2.10	10,024.3	5,374.4	-9.3	5,374.4	0.88	-0.85	0.21
15,242.0	89.20	0.30	10,027.1	5,468.3	-7.3	5,468.3	2.71	1.91	-1.91
15,333.0	89.50	359.10	10,028.1	5,559.3	-7.8	5,559.3	1.36	0.33	-1.32
15,428.0	90.30	359.00	10,028.3	5,654.3	-9.4	5,654.3	0.85	0.84	-0.11
15,523.0	91.00	357.90	10,027.2	5,749.2	-11.9	5,749.2	1.37	0.74	-1.16
15,617.0	90.60	357.60	10,025.9	5,843.2	-15.6	5,843.2	0.53	-0.43	-0.32
15,712.0	89.80	358.40	10,025.6	5,938.1	-19.0	5,938.1	1.19	-0.84	0.84
15,807.0	91.30	0.80	10,024.7	6,033.1	-19.6	6,033.1	2.98	1.58	2.53



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Owl Draw 27-22 W2NC Fed Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Site:	Section 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H	MD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Well:	Owl Draw 27-22 W2NC Fed Com #2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
15,901.0	89.30	0.80	10,024.2	6,127.1	-18.3	6,127.1	2.13	-2.13	0.00
15,996.0	89.70	0.20	10,025.0	6,222.1	-17.5	6,222.1	0.76	0.42	-0.63
16,091.0	88.40	0.10	10,026.6	6,317.0	-17.2	6,317.0	1.37	-1.37	-0.11
16,185.0	88.80	359.70	10,028.9	6,411.0	-17.4	6,411.0	0.60	0.43	-0.43
16,279.0	87.90	358.10	10,031.6	6,504.9	-19.2	6,505.0	1.95	-0.96	-1.70
16,373.0	88.90	357.50	10,034.2	6,598.8	-22.8	6,598.9	1.24	1.06	-0.64
16,468.0	90.70	358.80	10,034.5	6,693.8	-25.9	6,693.8	2.34	1.89	1.37
16,563.0	89.30	357.70	10,034.5	6,788.7	-28.8	6,788.8	1.87	-1.47	-1.16
16,658.0	90.20	358.20	10,035.0	6,883.7	-32.2	6,883.7	1.08	0.95	0.53
16,753.0	90.30	357.90	10,034.5	6,978.6	-35.4	6,978.6	0.33	0.11	-0.32
16,847.0	89.80	357.20	10,034.5	7,072.5	-39.4	7,072.6	0.92	-0.53	-0.74
16,941.0	87.70	356.40	10,036.5	7,166.4	-44.7	7,166.4	2.39	-2.23	-0.85
17,037.0	87.40	356.10	10,040.6	7,262.1	-50.9	7,262.1	0.44	-0.31	-0.31
17,131.0	90.10	358.20	10,042.7	7,355.9	-55.6	7,355.9	3.64	2.87	2.23
17,227.0	90.80	358.70	10,041.9	7,451.9	-58.2	7,451.9	0.90	0.73	0.52
17,322.0	89.70	358.60	10,041.5	7,546.8	-60.4	7,546.9	1.16	-1.16	-0.11
17,416.0	91.00	359.30	10,040.9	7,640.8	-62.2	7,640.9	1.57	1.38	0.74
17,511.0	89.80	358.60	10,040.3	7,735.8	-63.9	7,735.8	1.46	-1.26	-0.74
17,606.0	89.30	356.70	10,041.0	7,830.7	-67.8	7,830.8	2.07	-0.53	-2.00
17,700.0	92.30	358.20	10,039.7	7,924.6	-72.0	7,924.6	3.57	3.19	1.60
17,794.0	90.50	357.70	10,037.4	8,018.5	-75.3	8,018.6	1.99	-1.91	-0.53
17,890.0	89.00	356.10	10,037.8	8,114.4	-80.5	8,114.4	2.28	-1.56	-1.67
17,985.0	90.70	359.30	10,038.1	8,209.3	-84.3	8,209.3	3.81	1.79	3.37
18,080.0	91.20	359.30	10,036.5	8,304.2	-85.5	8,304.3	0.53	0.53	0.00
18,175.0	90.20	359.00	10,035.3	8,399.2	-86.9	8,399.3	1.10	-1.05	-0.32
18,269.0	90.10	0.70	10,035.1	8,493.2	-87.2	8,493.3	1.81	-0.11	1.81
18,364.0	90.00	1.40	10,035.0	8,588.2	-85.4	8,588.3	0.74	-0.11	0.74
18,458.0	89.80	2.30	10,035.2	8,682.2	-82.4	8,682.2	0.98	-0.21	0.96
18,554.0	88.30	2.20	10,036.8	8,778.1	-78.6	8,778.1	1.57	-1.56	-0.10
18,650.0	88.00	1.50	10,039.9	8,874.0	-75.5	8,874.0	0.79	-0.31	-0.73
18,744.0	88.10	2.30	10,043.1	8,967.9	-72.4	8,967.9	0.86	0.11	0.85
18,839.0	90.90	7.70	10,043.9	9,062.4	-64.1	9,062.5	6.40	2.95	5.68
18,934.0	91.60	5.00	10,041.8	9,156.8	-53.6	9,156.9	2.94	0.74	-2.84
19,029.0	89.20	2.30	10,041.1	9,251.6	-47.6	9,251.7	3.80	-2.53	-2.84
19,123.0	88.50	0.60	10,043.0	9,345.6	-45.2	9,345.6	1.96	-0.74	-1.81
19,220.0	87.30	0.01	10,046.6	9,442.5	-44.7	9,442.5	1.38	-1.24	-0.61
19,315.0	87.70	1.10	10,050.7	9,537.4	-43.8	9,537.4	1.23	0.42	1.15
19,411.0	87.30	359.30	10,054.9	9,633.3	-43.4	9,633.3	1.92	-0.42	-1.88
19,506.0	88.50	0.50	10,058.4	9,728.2	-43.6	9,728.3	1.79	1.26	1.26
19,602.0	91.60	3.40	10,058.3	9,824.2	-40.3	9,824.2	4.42	3.23	3.02
19,697.0	91.60	3.70	10,055.7	9,918.9	-34.5	9,919.0	0.32	0.00	0.32
19,791.0	88.30	3.90	10,055.7	10,012.7	-28.2	10,012.7	3.52	-3.51	0.21



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Owl Draw 27-22 W2NC Fed Com #2H
Project:	Eddy County, New Mexico	TVD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Site:	Section 27-26S-27E Owl Draw 27-22 W2NC Fed Com 2H	MD Reference:	3176 + 27 @ 3203.0usft (Patterson 250)
Well:	Owl Draw 27-22 W2NC Fed Com #2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
19,801.0	88.50	3.50	10,056.0	10,022.7	-27.6	10,022.7	4.47	2.00	-4.00
19,850.0	88.50	3.50	10,057.3	10,071.6	-24.6	10,071.6	0.00	0.00	0.00
19850' MD Projected to Bit									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,122.0	9,119.0	-76.9	-18.8	9122.0' MD Phoenix Gyro
19,850.0	10,057.3	10,071.6	-24.6	19850' MD Projected to Bit



COMPANY: Mewbourne Oil Company
WELL: Owl Draw 27-22 W2NC Fed Com #2H
COUNTY: Eddy County, New Mexico
DATUM: NAD 1927 (NADCON CONUS)



RIG: Patterson Patterson 250
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.26°

OFFICE: 936.582.7296

GEODEIC ZONE: New Mexico East 3001						
3176 + 27 @ 3203.0usft (Patterson 250)						
GROUND ELEVATION: 3176.0						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	365994.60	547971.30	32° 0' 22.098 N	104° 10' 42.868 W	
PLAN SECTIONS						
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W
1	9122.0	0.60	125.59	9119.0	-76.9	-18.8
2	9416.6	0.60	125.59	9413.6	-78.7	-16.3
3	10316.5	89.64	0.02	9990.0	490.6	-11.2
4	19907.2	89.64	0.02	10050.0	10081.2	-7.8
Dleg TFace VSect Target						
0.00 0.00 0.00 -76.9						
0.00 0.00 0.00 -78.7						
10.00 -125.57 490.6						
0.00 10081.2 PBHL Owl Draw 27-22 W2NC Fed Com 2H						

SHL 170' FSL; 2230' FWL
Section 27-26S-27E
PBHL 330' FNL; 2310' FWL
Section 22-26S-27E

