



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: 365,994.60 usft
	+E/-W	0.0 usft	Easting: 547,971.30 usft
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
	IGRF2015	4/25/2016	(°) 7.34	(°) 59.78	(nT) 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)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	359.96

Survey Program	Date 6/17/2016		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
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	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate	
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/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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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)	
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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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)
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									
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)
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



PHOENIX

TECHNOLOGY SERVICES USA INC.

Celebrating 20 Years of Focused Solutions

3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

May 18, 2016

Mewbourne Oil
Attention: Regulatory Department
701 S Cecil St
Hobbs, New Mexico 88240

NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 25 2016

RECEIVED

Re: Mewbourne Oil
Owl Draw 27 W2NC Fed Com #2H
Eddy County, NM
API #30-015-43684
Job No. 1610282

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the Survey Data Certification, Surveys, and Lease Plat for the above referenced well with the State of New Mexico Oil Conservation Division – District 2 via certified mail. A copy of the filing is attached for your records.

Name of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Roger Hill	2H	0	9122	05/12/16	05/12/16	Gyro

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Best Regards,

Claudia Carreon
Operations Administrator

SURVEY CERTIFICATION FORM

3610 Elkins Road Midland, TX 79705 t:432-684-0057 f: 432-686-7964



PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne
Well Name: Owl Draw 27 W2NC Fed Com # 2H
Survey Instrument Type: North Seek Rate Gyro

Job #: 1610282
County/State: Eddy Co., NM
API #: 30-015-43684

TIE-IN DATA

Measure Depth (ft)	Vertical Depth (ft)	Inclination (°)	Azimuth (°)	N-S Coordinates	E-W Coordinates	Data Source
0	0	0	0	0	0	Surface

First Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2016-05-12	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2016-05-12	9122	0.6	125.59

Projected TD Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
0	0	0	0

Grid Correction
-0.08

Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Jaime Stephenson

To the best of my knowledge I certify this survey data to be correct and true

Date:

05/12/16

Print Name: Roger Hill

Signature:

[Signature]



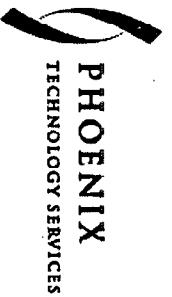
PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne
Well: Owl Draw 27 W2NC Fed Com2H
Location: Eddy Co., NM
Rig: Patterson 250

Job Number: 1610282
Grid Corr.: -0.08
Lat: 32.01
Long: -104.18

Date: 05-12-16
Calculation Method: Minimum Curvature
Proposed Azimuth: 359.96
RKB - MSL in feet: 27 Feet
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)		
FIELD COPY, NON-DEFINITIVE												
TIE IN	0			0	0	0	0	0				
Gyro	100.00	0.25	337.71	100	100.00	0.20	0.20 N	0.08 W	0.22	337.71	0.25	337.71
	200.00	0.35	248.25	100	200.00	0.29	0.29 N	0.45 W	0.53	302.90	0.43	-89.46
	300.00	0.85	11.15	100	300.00	0.91	0.91 N	0.59 W	1.08	326.93	1.08	-237.10
	400.00	1.40	246.46	100	399.98	1.15	1.14 N	1.57 W	1.94	306.17	2.01	235.31
	500.00	1.33	243.77	100	499.96	0.15	0.14 N	3.73 W	3.73	272.22	0.09	-2.69
	600.00	1.46	241.58	100	599.93	-0.97	0.98 S	5.89 W	5.97	260.60	0.14	-2.19
	700.00	1.97	243.61	100	699.88	-2.34	2.35 S	8.55 W	8.86	254.66	0.51	2.03
	800.00	2.22	246.15	100	799.81	-3.88	3.89 S	11.86 W	12.48	251.83	0.27	2.54
	900.00	0.99	326.56	100	899.78	-3.94	3.95 S	14.11 W	14.65	254.34	2.28	-1.23
	1000.00	1.39	207.62	100	999.77	-4.30	4.31 S	15.15 W	15.75	254.12	2.06	-118.94
	1100.00	1.12	213.52	100	1099.75	-6.19	6.20 S	16.25 W	17.39	249.12	0.30	-0.27
	1200.00	1.67	201.19	100	1199.72	-8.36	8.37 S	17.31 W	19.23	244.20	0.62	0.55
	1300.00	0.98	80.22	100	1299.70	-9.57	9.58 S	17.00 W	19.51	240.58	2.33	-120.97
	1400.00	1.26	14.89	100	1399.69	-8.37	8.38 S	15.87 W	17.95	242.18	1.23	0.28
	1500.00	1.75	12.67	100	1499.65	-5.81	5.82 S	15.26 W	16.33	249.10	0.49	0.49
	1600.00	0.25	71.72	100	1599.64	-4.26	4.27 S	14.71 W	15.32	253.83	1.64	-1.50
	1700.00	0.39	265.62	100	1699.63	-4.21	4.22 S	14.85 W	15.43	254.12	0.64	0.14
	1800.00	0.88	256.46	100	1799.63	-4.42	4.43 S	15.93 W	16.54	254.46	0.50	0.49
	1900.00	0.42	109.03	100	1899.63	-4.72	4.73 S	16.33 W	17.00	253.85	1.25	-0.46
	2000.00	0.50	110.04	100	1999.62	-4.99	5.00 S	15.58 W	16.36	252.21	0.08	0.08
	2100.00	0.36	213.81	100	2099.62	-5.40	5.41 S	15.34 W	16.27	250.58	0.68	-0.14
	2200.00	0.36	84.27	100	2199.62	-5.63	5.64 S	15.20 W	16.21	249.65	0.65	0.00
	2300.00	0.28	99.06	100	2299.62	-5.64	5.65 S	14.65 W	15.70	248.92	0.11	-0.08
	2400.00	0.41	206.60	100	2399.62	-5.99	6.00 S	14.57 W	15.76	247.60	0.56	0.13
	2500.00	0.32	118.76	100	2499.62	-6.45	6.46 S	14.48 W	15.86	245.97	0.51	-0.09
	2600.00	0.45	53.01	100	2599.61	-6.35	6.36 S	13.92 W	15.31	245.46	0.43	0.13
	2700.00	0.62	201.76	100	2699.61	-6.61	6.62 S	13.81 W	15.32	244.38	1.03	0.17



PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne
Well: Owl Draw 27 W2NC Fed Com2H
Location: Eddy Co., NM
Rig: Patterson 250

Job Number: 1610282
Grid Corr.: -0.08
Lat: 32.01
Long: -104.18

Calculation Method: Minimum Curvature
Proposed Azimuth: 359.96
RKB - MSL in feet: 27 Feet
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	2800.00	0.22	340.66	100	2799.61	-6.93	6.94 S	14.08 W	15.70	243.74	0.80	-0.40	138.90
	2900.00	0.49	191.15	100	2899.61	-7.17	7.18 S	14.22 W	15.93	243.21	0.69	0.27	-149.51
	3000.00	0.94	244.94	100	2999.60	-7.94	7.95 S	15.05 W	17.02	242.15	0.76	0.45	53.79
	3100.00	0.41	298.26	100	3099.60	-8.12	8.13 S	16.11 W	18.04	243.22	0.77	-0.53	53.32
	3200.00	0.88	4.60	100	3199.59	-7.18	7.19 S	16.36 W	17.87	246.27	0.81	0.47	-293.66
	3300.00	0.67	351.28	100	3299.58	-5.84	5.85 S	16.39 W	17.40	250.36	0.28	-0.21	346.68
	3400.00	0.95	23.95	100	3399.57	-4.50	4.51 S	16.14 W	16.76	254.38	0.53	0.28	-327.33
	3500.00	0.44	100.29	100	3499.57	-3.81	3.82 S	15.42 W	15.89	256.07	0.95	-0.51	76.34
	3600.00	0.42	256.36	100	3599.56	-3.97	3.98 S	15.40 W	15.91	255.51	0.84	-0.02	156.07
	3700.00	0.98	257.06	100	3699.56	-4.25	4.26 S	16.59 W	17.13	255.61	0.56	0.56	0.70
	3800.00	1.00	297.93	100	3799.54	-4.03	4.04 S	18.20 W	18.64	257.48	0.69	0.02	40.87
	3900.00	0.43	226.55	100	3899.54	-3.88	3.89 S	19.24 W	19.63	258.57	0.95	-0.57	-71.38
	4000.00	0.39	250.33	100	3999.53	-4.25	4.26 S	19.83 W	20.29	257.87	0.17	-0.04	23.78
	4100.00	0.80	291.29	100	4099.53	-4.11	4.12 S	20.80 W	21.21	258.79	0.57	0.41	40.96
	4200.00	0.99	253.32	100	4199.52	-4.10	4.12 S	22.28 W	22.66	259.53	0.61	0.19	-37.97
	4300.00	0.35	220.21	100	4299.51	-4.58	4.60 S	23.31 W	23.76	258.84	0.72	-0.64	-33.11
	4400.00	0.45	178.00	100	4399.51	-5.21	5.22 S	23.49 W	24.06	257.46	0.30	0.10	-42.21
	4500.00	0.54	305.17	100	4499.51	-5.33	5.35 S	23.86 W	24.45	257.37	0.89	0.09	127.17
	4600.00	0.88	236.43	100	4599.50	-5.48	5.50 S	24.89 W	25.49	257.54	0.85	0.34	-68.74
	4700.00	0.43	276.20	100	4699.49	-5.86	5.88 S	25.90 W	26.56	257.20	0.61	-0.45	39.77
	4800.00	0.46	101.76	100	4799.49	-5.91	5.92 S	25.88 W	26.55	257.11	0.89	0.03	-174.44
	4900.00	0.89	201.04	100	4899.49	-6.71	6.73 S	25.77 W	26.63	255.36	1.07	0.43	99.28
	5000.00	0.48	222.03	100	4999.48	-7.75	7.77 S	26.32 W	27.45	253.56	0.47	-0.41	20.99
	5100.00	0.65	226.57	100	5099.48	-8.45	8.47 S	27.02 W	28.31	252.60	0.18	0.17	4.54
	5200.00	0.79	229.35	100	5199.47	-9.29	9.31 S	27.95 W	29.46	251.58	0.14	0.14	2.78
	5300.00	0.88	208.05	100	5299.46	-10.41	10.43 S	28.84 W	30.67	250.11	0.32	0.09	-21.30
	5400.00	1.33	250.97	100	5399.44	-11.47	11.49 S	30.29 W	32.40	249.23	0.91	0.45	42.92
	5500.00	1.53	221.80	100	5499.41	-12.84	12.86 S	32.28 W	34.75	248.27	0.75	0.20	-29.17
	5600.00	1.98	212.27	100	5599.36	-15.30	15.32 S	34.09 W	37.38	245.80	0.53	0.45	-9.53
	5700.00	1.89	207.12	100	5699.31	-18.22	18.25 S	35.77 W	40.15	242.97	0.20	-0.09	-5.15



PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne
Well: OWL Draw 27 W2NC Fed Com2H
Location: Eddy Co., NM
Rig: Patterson 250

Job Number: 1610282
Grid Corr.: -0.08
Lat: 32.01
Long: -104.18

Calculation Method: Minimum Curvature
Proposed Azimuth: 359.96
RKB - MSL in feet: 27 Feet
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	5800.00	1.33	217.43	100	5799.27	-20.61	20.64 S	37.22 W	42.56	241.00	0.63	-0.56	10.31
	5900.00	2.08	226.79	100	5899.22	-22.77	22.80 S	39.25 W	45.39	239.85	0.80	0.75	9.36
	6000.00	1.50	244.83	100	5999.17	-24.57	24.60 S	41.76 W	48.47	239.50	0.80	-0.58	18.04
	6100.00	1.22	268.89	100	6099.15	-25.15	25.18 S	44.01 W	50.70	240.23	0.63	-0.28	24.06
	6200.00	1.25	236.45	100	6199.12	-25.77	25.80 S	45.98 W	52.73	240.70	0.69	0.03	-32.44
	6300.00	1.43	226.85	100	6299.10	-27.22	27.26 S	47.80 W	55.03	240.31	0.29	0.18	-9.60
	6400.00	1.85	274.25	100	6399.06	-27.96	27.99 S	50.32 W	57.58	240.92	1.37	0.42	47.40
	6500.00	1.60	268.04	100	6499.01	-27.88	27.92 S	53.33 W	60.19	242.37	0.31	-0.25	-6.21
	6600.00	0.82	348.84	100	6599.00	-27.23	27.27 S	54.86 W	61.26	243.57	1.68	-0.78	80.80
	6700.00	0.86	299.67	100	6698.99	-26.15	26.19 S	55.65 W	61.51	244.80	0.70	0.04	-49.17
	6800.00	0.91	216.59	100	6798.98	-26.42	26.46 S	56.78 W	62.64	245.01	1.17	0.05	-83.08
	6900.00	1.52	241.26	100	6898.96	-27.69	27.73 S	58.41 W	64.66	244.60	0.79	0.61	24.67
	7000.00	1.31	228.19	100	6998.93	-29.09	29.13 S	60.43 W	67.08	244.26	0.38	-0.21	-13.07
	7100.00	1.83	232.37	100	7098.89	-30.83	30.87 S	62.54 W	69.75	243.73	0.53	0.52	4.18
	7200.00	1.53	237.52	100	7198.84	-32.52	32.56 S	64.94 W	72.64	243.37	0.34	-0.30	5.15
	7300.00	0.31	247.60	100	7298.83	-33.34	33.38 S	66.31 W	74.24	243.28	1.23	-1.22	10.08
	7400.00	0.87	165.43	100	7398.83	-34.17	34.22 S	66.37 W	74.67	242.73	0.88	0.56	-82.17
	7500.00	3.07	131.76	100	7498.76	-36.69	36.74 S	64.18 W	73.95	240.21	2.39	2.20	-33.67
	7600.00	4.59	117.19	100	7598.54	-40.31	40.35 S	58.63 W	71.17	235.46	1.79	1.52	-14.57
	7700.00	4.38	113.96	100	7698.23	-43.69	43.73 S	51.58 W	67.62	229.71	0.33	-0.21	-3.23
	7800.00	4.79	117.93	100	7797.91	-47.20	47.24 S	44.40 W	64.83	223.23	0.52	0.41	3.97
	7900.00	4.57	126.02	100	7897.58	-51.51	51.53 S	37.49 W	63.73	216.03	0.70	-0.22	8.09
	8000.00	2.40	104.71	100	7997.39	-54.39	54.41 S	32.24 W	63.24	210.65	2.49	-2.17	-21.31
	8100.00	1.96	151.84	100	8097.33	-56.43	56.45 S	29.41 W	63.65	207.52	1.79	-0.44	47.13
	8200.00	2.69	141.57	100	8197.25	-59.78	59.79 S	27.14 W	65.67	204.41	0.84	0.73	-10.27
	8300.00	1.72	162.37	100	8297.17	-63.05	63.06 S	25.23 W	67.92	201.80	1.24	-0.97	20.80
	8400.00	1.78	170.73	100	8397.13	-66.01	66.03 S	24.52 W	70.43	200.38	0.26	0.06	8.36
	8500.00	1.59	178.05	100	8497.08	-68.93	68.95 S	24.23 W	73.08	199.36	0.29	-0.19	7.32
	8600.00	1.42	155.48	100	8597.05	-71.44	71.46 S	23.66 W	75.28	198.32	0.61	-0.17	-22.57
	8700.00	1.17	140.29	100	8697.02	-73.36	73.37 S	22.50 W	76.74	197.05	0.42	-0.25	-15.19



PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne
Well: Owl Draw 27 WZNC Fed Com2H
Location: Eddy Co., NM
Rig: Patterson 250

Job Number: 1610282
Grid Corr.: -0.08
Lat: 32.01
Long: -104.18

Calculation Method: Minimum Curvature
Proposed Azimuth: 359.96
RKB - MSL in feet: 27 Feet
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
	8800.00	1.20	148.85	100	8797.00	-75.04	75.05 S	21.30 W	78.02	195.85	0.18	0.03	8.56
	8900.00	0.66	111.33	100	8896.99	-76.15	76.16 S	20.23 W	78.80	194.87	0.79	-0.54	-37.52
	9000.00	0.21	119.49	100	8996.99	-76.45	76.46 S	19.53 W	78.91	194.33	0.45	-0.45	8.16
	9122.00	0.60	125.59	122	9118.98	-76.93	76.94 S	18.82 W	79.21	193.74	0.32	0.32	5.00



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

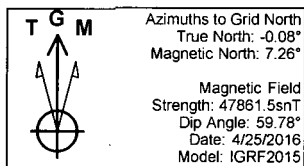


OFFICE: 936.582.7296

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

GEODETIC ZONE: New Mexico East 3001 3176 + 27 @ 3203.0usft (Patterson 250) GROUND ELEVATION: 3176.0										Slot
+N-S	+E-W	North	East	Latitude	Longitude					
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	Dleg	TFace	VSec	Target
1	9122.0	0.60	125.59	9119.0	-76.9	-18.8	0.00	0.00	-76.9	
2	9416.6	0.60	125.59	9413.6	-78.7	-16.3	0.00	0.00	-78.7	
3	10316.5	89.64	0.02	9990.0	490.6	-11.2	10.00	-125.57	490.6	
4	19907.2	89.64	0.02	10050.0	10081.2	-7.8	0.00	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



338.8' FNL; 2976' FEL

Please West of
Hardline

