



NM OIL CONSERVATION  
ARTESIA DISTRICT

JAN 31 2019

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## Mewbourne Oil Company

Eddy County, N.M. Nad (83)

Section 28-23S-28E Night Ranger 28 W0AP Fee #2H

Night Ranger 28 W0AP Fee #2H

Original Hole

30-015-44285

Design: Original Hole

## Standard Survey Report

30 July, 2018





# Microsoft Survey Report



<b>Company:</b>	Mewbourne Oil Company	<b>Local Co-ordinate Reference:</b>	Well Night Ranger 28 W0AP Fee #2H
<b>Project:</b>	Eddy County, N.M. Nad (83)	<b>TVD Reference:</b>	3036 +27 @ 3063.0usft (Patterson 560)
<b>Site:</b>	Section 28-23S-28E Night Ranger 28 W0AP Fee #2H	<b>MD Reference:</b>	3036 +27 @ 3063.0usft (Patterson 560)
<b>Well:</b>	Night Ranger 28 W0AP Fee #2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Hole	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Original Hole	<b>Database:</b>	Stryker_EDM

<b>Project</b>	Eddy County, N.M. Nad (83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

<b>Site</b>	Section 28-23S-28E Night Ranger 28 W0AP Fee #2H				
<b>Site Position:</b>		<b>Northing:</b>	466,693.40 usft	<b>Latitude:</b>	32° 16' 57.978 N
<b>From:</b>	Map	<b>Easting:</b>	617,823.40 usft	<b>Longitude:</b>	104° 5' 8.998 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.13 °

<b>Well</b>	Night Ranger 28 W0AP Fee #2H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	466,693.40 usft	<b>Latitude:</b>	32° 16' 57.978 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	617,823.40 usft	<b>Longitude:</b>	104° 5' 8.998 W
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>	27.0 usft	<b>Ground Level:</b>	3,036.0 usft

<b>Wellbore</b>	Original Hole				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	6/6/2018	7.09	60.02	47,821.23443795

<b>Design</b>	Original Hole				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	49.91	

<b>Survey Program</b>	Date 7/30/2018			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
100.0	14,285.0	MWD Survey (Original Hole)	MWD	MWD v3:standard declination

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	1.09	355.79	100.0	0.9	-0.1	0.6	1.09	1.09	0.00	
200.0	1.40	359.62	200.0	3.1	-0.1	1.9	0.32	0.31	3.83	
382.0	2.40	348.90	381.9	9.1	-0.9	5.2	0.58	0.55	-5.89	
471.0	0.40	327.10	470.8	11.2	-1.4	6.1	2.29	-2.25	-24.49	
559.0	0.40	309.00	558.8	11.6	-1.8	6.1	0.14	0.00	-20.57	
649.0	0.50	306.20	648.8	12.1	-2.4	5.9	0.11	0.11	-3.11	
741.0	0.60	311.10	740.8	12.6	-3.1	5.8	0.12	0.11	5.33	
836.0	0.50	341.70	835.8	13.3	-3.6	5.8	0.32	-0.11	32.21	
1,025.0	0.50	30.60	1,024.8	14.8	-3.4	6.9	0.22	0.00	25.87	



# Microsoft Survey Report



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<b>Project:</b>	Eddy County, N.M. Nad (83)	<b>TVD Reference:</b>	3036 +27 @ 3063.0usft (Patterson 560)
<b>Site:</b>	Section 28-23S-28E Night Ranger 28 W0AP Fee #2H	<b>MD Reference:</b>	3036 +27 @ 3063.0usft (Patterson 560)
<b>Well:</b>	Night Ranger 28 W0AP Fee #2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Hole	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Original Hole	<b>Database:</b>	Stryker_EDM

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
1,214.0	0.80	7.60	1,213.8	16.8	-2.8	8.7	0.21	0.16	-12.17
1,404.0	0.80	15.60	1,403.8	19.4	-2.3	10.8	0.06	0.00	4.21
1,593.0	0.80	4.90	1,592.8	22.0	-1.8	12.8	0.08	0.00	-5.66
1,782.0	0.90	1.90	1,781.7	24.8	-1.7	14.7	0.06	0.05	-1.59
1,972.0	1.30	85.90	1,971.7	26.5	0.5	17.4	0.79	0.21	44.21
2,161.0	2.00	99.20	2,160.6	26.1	5.9	21.3	0.42	0.37	7.04
2,350.0	1.10	131.50	2,349.6	24.4	10.5	23.8	0.65	-0.48	17.09
2,504.0	1.50	130.50	2,503.5	22.1	13.2	24.3	0.26	0.26	-0.65
2,555.0	1.70	133.30	2,554.5	21.1	14.2	24.5	0.42	0.39	5.49
2,745.0	1.50	112.20	2,744.4	18.2	18.6	26.0	0.33	-0.11	-11.11
2,934.0	3.40	72.80	2,933.3	19.0	26.2	32.3	1.29	1.01	-20.85
3,029.0	3.50	50.40	3,028.1	21.6	31.2	37.8	1.41	0.11	-23.58
3,123.0	3.70	45.50	3,121.9	25.6	35.5	43.7	0.39	0.21	-5.21
3,218.0	3.60	47.60	3,216.7	29.8	39.9	49.7	0.18	-0.11	2.21
3,312.0	3.60	50.60	3,310.5	33.6	44.4	55.6	0.20	0.00	3.19
3,407.0	3.40	46.20	3,405.4	37.5	48.7	61.4	0.35	-0.21	-4.63
3,502.0	3.20	48.30	3,500.2	41.2	52.7	66.9	0.25	-0.21	2.21
3,596.0	2.90	45.70	3,594.1	44.6	56.4	71.9	0.35	-0.32	-2.77
3,691.0	3.00	50.80	3,688.9	47.8	60.0	76.7	0.30	0.11	5.37
3,786.0	3.00	51.30	3,783.8	51.0	63.9	81.7	0.03	0.00	0.53
3,880.0	2.60	45.60	3,877.7	54.0	67.4	86.3	0.52	-0.43	-6.06
3,975.0	2.80	49.80	3,972.6	57.0	70.7	90.8	0.30	0.21	4.42
4,070.0	2.30	44.80	4,067.5	59.8	73.8	95.0	0.58	-0.53	-5.26
4,164.0	3.60	44.10	4,161.4	63.3	77.2	99.8	1.38	1.38	-0.74
4,259.0	3.30	50.60	4,256.2	67.2	81.4	105.5	0.52	-0.32	6.84
4,354.0	3.60	52.00	4,351.0	70.8	85.8	111.2	0.33	0.32	1.47
4,448.0	3.70	49.20	4,444.8	74.6	90.4	117.2	0.22	0.11	-2.98
4,543.0	3.30	47.00	4,539.7	78.4	94.8	123.0	0.44	-0.42	-2.32
4,638.0	3.20	49.70	4,634.5	82.0	98.8	128.4	0.19	-0.11	2.84
4,732.0	3.00	47.70	4,728.4	85.4	102.6	133.5	0.24	-0.21	-2.13
4,827.0	2.80	37.20	4,823.3	88.9	105.8	138.2	0.60	-0.21	-11.05
4,922.0	3.00	57.50	4,918.1	92.1	109.3	142.9	1.10	0.21	21.37
5,016.0	2.80	57.60	5,012.0	94.6	113.4	147.6	0.21	-0.21	0.11
5,111.0	2.50	57.00	5,106.9	97.0	117.1	152.0	0.32	-0.32	-0.63
5,205.0	2.70	60.10	5,200.8	99.2	120.7	156.2	0.26	0.21	3.30
5,300.0	2.30	57.50	5,295.7	101.3	124.2	160.3	0.44	-0.42	-2.74
5,395.0	3.20	49.10	5,390.6	104.1	127.9	164.8	1.04	0.95	-8.84
5,489.0	3.10	54.60	5,484.5	107.3	131.9	170.0	0.34	-0.11	5.85
5,584.0	3.10	50.60	5,579.3	110.4	136.0	175.1	0.23	0.00	-4.21
5,678.0	2.90	57.00	5,673.2	113.3	139.9	180.0	0.41	-0.21	6.81
5,773.0	2.60	56.10	5,768.1	115.8	143.7	184.6	0.32	-0.32	-0.95
5,867.0	2.40	59.40	5,862.0	118.0	147.2	188.6	0.26	-0.21	3.51

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<b>Design:</b>	Original Hole	<b>Database:</b>	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)
5,962.0	2.70	57.00	5,956.9	120.3	150.8	192.8	0.34	0.32	-2.53
6,057.0	3.20	41.10	6,051.8	123.5	154.4	197.6	1.00	0.53	-16.74
6,151.0	3.10	39.10	6,145.6	127.4	157.7	202.7	0.16	-0.11	-2.13
6,246.0	2.60	40.10	6,240.5	131.1	160.8	207.4	0.53	-0.53	1.05
6,341.0	3.40	46.60	6,335.4	134.6	164.2	212.3	0.91	0.84	6.84
6,436.0	2.60	43.30	6,430.3	138.1	167.7	217.3	0.86	-0.84	-3.47
6,531.0	3.20	31.10	6,525.1	142.0	170.6	221.9	0.90	0.63	-12.84
6,625.0	3.60	36.20	6,619.0	146.6	173.7	227.3	0.53	0.43	5.43
6,720.0	3.80	46.20	6,713.8	151.2	177.7	233.3	0.71	0.21	10.53
6,814.0	2.90	31.80	6,807.6	155.4	181.2	238.7	1.30	-0.96	-15.32
6,909.0	2.90	50.20	6,902.5	159.0	184.3	243.4	0.98	0.00	19.37
7,003.0	3.90	73.80	6,996.3	161.4	189.2	248.7	1.81	1.06	25.11
7,098.0	4.40	70.60	7,091.1	163.5	195.7	255.0	0.58	0.53	-3.37
7,193.0	2.70	51.60	7,185.9	166.1	200.9	260.7	2.15	-1.79	-20.00
7,287.0	2.40	51.80	7,279.8	168.7	204.2	264.9	0.32	-0.32	0.21
7,382.0	2.10	42.80	7,374.7	171.2	207.0	268.6	0.49	-0.32	-9.47
7,476.0	3.00	62.50	7,468.7	173.6	210.3	272.7	1.32	0.96	20.96
7,571.0	3.00	74.70	7,563.5	175.4	214.9	277.4	0.67	0.00	12.84
7,665.0	2.80	66.40	7,657.4	177.0	219.4	281.8	0.49	-0.21	-8.83
7,760.0	2.90	68.70	7,752.3	178.8	223.8	286.3	0.16	0.11	2.42
7,855.0	3.00	59.00	7,847.2	180.9	228.1	291.0	0.54	0.11	-10.21
7,949.0	1.20	74.90	7,941.1	182.4	231.2	294.4	1.99	-1.91	16.91
8,044.0	3.30	50.80	8,036.0	184.4	234.3	298.0	2.38	2.21	-25.37
8,138.0	3.00	50.00	8,129.9	187.7	238.2	303.2	0.32	-0.32	-0.85
8,233.0	2.70	55.60	8,224.8	190.6	242.0	307.9	0.43	-0.32	5.89
8,327.0	1.60	39.70	8,318.7	192.8	244.7	311.4	1.32	-1.17	-16.91
8,421.0	3.10	39.40	8,412.6	195.8	247.1	315.2	1.60	1.60	-0.32
8,516.0	3.30	41.00	8,507.5	199.9	250.5	320.4	0.23	0.21	1.68
8,610.0	1.90	70.30	8,601.4	202.4	253.8	324.5	2.01	-1.49	31.17
8,704.0	2.60	100.60	8,695.3	202.6	257.3	327.3	1.44	0.74	32.23
8,798.0	1.80	131.90	8,789.2	201.2	260.5	328.9	1.51	-0.85	33.30
8,893.0	1.80	149.70	8,884.2	198.9	262.4	328.8	0.59	0.00	18.74
8,908.4	1.77	150.60	8,899.6	198.5	262.6	328.7	0.29	-0.22	5.87
<b>B.B. Night Ranger 28 W0AP Fee #2H</b>									
8,987.0	1.60	155.80	8,978.1	196.4	263.7	328.2	0.29	-0.21	6.61
9,009.0	1.10	146.90	9,000.1	196.0	263.9	328.1	2.46	-2.27	-40.45
9,093.0	1.80	145.10	9,084.1	194.2	265.1	327.9	0.83	0.83	-2.14
9,125.0	6.20	162.30	9,116.0	192.1	265.9	327.2	14.10	13.75	53.75
9,156.0	10.70	166.70	9,146.7	187.8	267.1	325.3	14.65	14.52	14.19
9,188.0	14.40	170.50	9,177.9	180.9	268.4	321.9	11.84	11.56	11.88
9,219.0	19.10	175.20	9,207.6	172.1	269.5	317.0	15.77	15.16	15.16
9,251.0	25.10	177.50	9,237.2	160.1	270.2	309.8	18.94	18.75	7.19
9,282.0	29.20	179.00	9,264.8	145.9	270.7	301.0	13.41	13.23	4.84

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<b>Design:</b>	Original Hole	<b>Database:</b>	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)	
9,314.0	32.50	174.80	9,292.3	129.6	271.6	291.2	12.31	10.31	-13.13	
9,345.0	36.00	179.00	9,317.9	112.1	272.5	280.7	13.62	11.29	13.55	
9,377.0	39.30	178.10	9,343.2	92.6	273.0	268.5	10.45	10.31	-2.81	
9,408.0	41.50	177.80	9,366.8	72.5	273.7	256.1	7.12	7.10	-0.97	
9,440.0	44.10	177.60	9,390.3	50.8	274.6	242.8	8.14	8.13	-0.63	
9,471.0	49.10	178.50	9,411.6	28.3	275.3	228.9	16.27	16.13	2.90	
9,503.0	52.20	178.70	9,431.9	3.6	275.9	213.4	9.70	9.69	0.63	
9,534.0	54.30	178.30	9,450.4	-21.3	276.6	197.9	6.85	6.77	-1.29	
9,566.0	56.30	178.30	9,468.7	-47.6	277.4	181.6	6.25	6.25	0.00	
9,597.0	58.60	177.00	9,485.3	-73.7	278.5	165.6	8.22	7.42	-4.19	
9,629.0	60.50	176.60	9,501.6	-101.2	280.0	149.0	6.03	5.94	-1.25	
9,660.0	63.90	175.80	9,516.0	-128.6	281.8	132.8	11.20	10.97	-2.58	
9,692.0	67.60	174.90	9,529.2	-157.6	284.2	115.9	11.84	11.56	-2.81	
9,700.0	68.60	175.40	9,532.1	-165.0	284.8	111.6	13.78	12.50	6.25	
9,732.0	70.90	175.20	9,543.2	-195.0	287.3	94.2	7.21	7.19	-0.63	
9,763.0	72.90	175.90	9,552.8	-224.3	289.6	77.0	6.80	6.45	2.26	
9,795.0	75.30	175.90	9,561.6	-255.0	291.8	58.9	7.50	7.50	0.00	
9,826.0	76.70	176.20	9,569.1	-285.0	293.8	41.2	4.61	4.52	0.97	
9,858.0	78.10	176.70	9,576.1	-316.2	295.8	22.6	4.63	4.38	1.56	
9,889.0	79.70	176.60	9,582.1	-346.6	297.5	4.4	5.17	5.16	-0.32	
9,921.0	82.50	176.70	9,587.0	-378.1	299.4	-14.5	8.76	8.75	0.31	
9,953.0	84.00	176.30	9,590.8	-409.8	301.3	-33.4	4.85	4.69	-1.25	
9,984.0	86.30	176.90	9,593.4	-440.7	303.2	-51.9	7.67	7.42	1.94	
10,016.0	88.10	176.90	9,594.9	-472.6	304.9	-71.1	5.63	5.63	0.00	
10,018.6	88.16	176.93	9,595.0	-475.2	305.0	-72.7	2.43	2.23	0.96	
<b>LP Night Ranger 28 W0AP Fee #2H</b>										
10,110.0	90.20	177.80	9,596.3	-566.5	309.2	-128.3	2.43	2.23	0.96	
10,205.0	89.10	178.50	9,596.9	-661.4	312.3	-187.1	1.37	-1.16	0.74	
10,299.0	89.50	180.00	9,598.1	-755.4	313.5	-246.7	1.65	0.43	1.60	
10,394.0	89.70	181.00	9,598.7	-850.4	312.7	-308.5	1.07	0.21	1.05	
10,489.0	89.90	181.70	9,599.1	-945.4	310.5	-371.4	0.77	0.21	0.74	
10,583.0	92.00	180.40	9,597.5	-1,039.3	308.7	-433.2	2.63	2.23	-1.38	
10,678.0	91.50	180.60	9,594.6	-1,134.3	307.9	-495.0	0.57	-0.53	0.21	
10,772.0	90.90	178.60	9,592.6	-1,228.2	308.6	-555.0	2.22	-0.64	-2.13	
10,867.0	91.00	179.80	9,591.1	-1,323.2	309.9	-615.2	1.27	0.11	1.26	
10,961.0	88.90	177.10	9,591.1	-1,417.2	312.4	-673.7	3.64	-2.23	-2.87	
11,056.0	88.80	178.10	9,593.1	-1,512.1	316.4	-731.8	1.06	-0.11	1.05	
11,150.0	89.50	178.40	9,594.4	-1,606.0	319.3	-790.1	0.81	0.74	0.32	
11,245.0	91.20	178.30	9,593.9	-1,701.0	322.0	-849.2	1.79	1.79	-0.11	
11,339.0	92.90	178.30	9,590.5	-1,794.9	324.8	-907.5	1.81	1.81	0.00	
11,434.0	93.30	178.40	9,585.4	-1,889.7	327.5	-966.5	0.43	0.42	0.11	
11,528.0	93.10	179.40	9,580.1	-1,983.5	329.3	-1,025.6	1.08	-0.21	1.06	



# Microsoft Survey Report



<b>Company:</b>	Mewbourne Oil Company	<b>Local Co-ordinate Reference:</b>	Well Night Ranger 28 W0AP Fee #2H
<b>Project:</b>	Eddy County, N.M. Nad (83)	<b>TVD Reference:</b>	3036 +27 @ 3063.0usft (Patterson 560)
<b>Site:</b>	Section 28-23S-28E Night Ranger 28 W0AP Fee #2H	<b>MD Reference:</b>	3036 +27 @ 3063.0usft (Patterson 560)
<b>Well:</b>	Night Ranger 28 W0AP Fee #2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Hole	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Original Hole	<b>Database:</b>	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)
11,623.0	92.20	179.20	9,575.7	-2,078.4	330.5	-1,085.8	0.97	-0.95	-0.21
11,717.0	90.30	178.90	9,573.7	-2,172.4	332.1	-1,145.1	2.05	-2.02	-0.32
11,812.0	91.80	180.30	9,571.9	-2,267.4	332.7	-1,205.8	2.16	1.58	1.47
11,906.0	91.70	179.00	9,569.1	-2,361.3	333.3	-1,265.8	1.39	-0.11	-1.38
12,001.0	89.00	179.30	9,568.5	-2,456.3	334.7	-1,325.9	2.86	-2.84	0.32
12,096.0	91.40	180.30	9,568.2	-2,551.3	335.0	-1,386.9	2.74	2.53	1.05
12,190.0	90.00	180.50	9,567.0	-2,645.3	334.4	-1,447.9	1.50	-1.49	0.21
12,285.0	88.90	180.30	9,567.9	-2,740.3	333.7	-1,509.6	1.18	-1.16	-0.21
12,379.0	89.60	179.60	9,569.1	-2,834.2	333.8	-1,570.1	1.05	0.74	-0.74
12,474.0	91.80	179.90	9,568.0	-2,929.2	334.2	-1,630.9	2.34	2.32	0.32
12,568.0	90.00	179.30	9,566.5	-3,023.2	334.9	-1,690.9	2.02	-1.91	-0.64
12,663.0	89.10	179.80	9,567.3	-3,118.2	335.6	-1,751.6	1.08	-0.95	0.53
12,757.0	94.50	182.20	9,564.3	-3,212.1	334.0	-1,813.3	6.29	5.74	2.55
12,852.0	93.80	182.20	9,557.4	-3,306.8	330.3	-1,877.0	0.74	-0.74	0.00
12,946.0	92.70	181.00	9,552.1	-3,400.6	327.7	-1,939.5	1.73	-1.17	-1.28
13,041.0	88.00	178.90	9,551.5	-3,495.6	327.8	-2,000.6	5.42	-4.95	-2.21
13,135.0	87.40	178.90	9,555.3	-3,589.5	329.6	-2,059.7	0.64	-0.64	0.00
13,230.0	93.00	181.00	9,555.0	-3,684.4	329.7	-2,120.8	6.30	5.89	2.21
13,324.0	89.60	179.70	9,552.8	-3,778.4	329.1	-2,181.7	3.87	-3.62	-1.38
13,419.0	90.50	180.10	9,552.7	-3,873.4	329.3	-2,242.8	1.04	0.95	0.42
13,513.0	89.90	179.90	9,552.4	-3,967.4	329.3	-2,303.3	0.67	-0.64	-0.21
13,608.0	91.00	181.20	9,551.7	-4,062.4	328.4	-2,365.2	1.79	1.16	1.37
13,703.0	90.70	179.80	9,550.3	-4,157.4	327.5	-2,427.0	1.51	-0.32	-1.47
13,797.0	88.40	179.00	9,551.0	-4,251.3	328.5	-2,486.8	2.59	-2.45	-0.85
13,892.0	90.10	180.50	9,552.2	-4,346.3	328.9	-2,547.6	2.39	1.79	1.58
13,986.0	88.50	179.80	9,553.4	-4,440.3	328.7	-2,608.3	1.86	-1.70	-0.74
14,081.0	90.40	181.00	9,554.3	-4,535.3	328.0	-2,670.0	2.37	2.00	1.26
14,175.0	91.60	181.70	9,552.7	-4,629.3	325.8	-2,732.2	1.48	1.28	0.74
14,233.0	87.10	180.10	9,553.3	-4,687.2	324.9	-2,770.3	8.23	-7.76	-2.76
14,285.0	87.10	180.10	9,556.0	-4,739.2	324.8	-2,803.8	0.00	0.00	0.00

14285.0' MD Projected to Bit - PBHL Night Ranger 28 W0AP Fee #2H

## Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
14,285.0	9,556.0	-4,739.2	324.8	14285.0' MD Projected to Bit



COMPANY: Mewbourne Oil Company  
 WELL: Night Ranger 28 W0AP Fee #2H  
 COUNTY: Eddy County, N.M. Nad (83)  
 DATUM: North American Datum 1983  
 RIG: Patterson 560



OFFICE: 934.582.7294

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.96°

GEODEIC ZONE: New Mexico Eastern Zone										
3036 +27 @ 3063.0usft (Patterson 560)										
GROUND ELEVATION: 3036.0										
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot				
0.0	0.0	466693.40	617823.40	32° 16' 57.978 N	104° 5' 8.998 W					
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2725.0	0.00	0.00	2725.0	0.0	0.0	0.00	0.00	0.0	
3	2907.7	3.20	50.58	2907.6	3.2	3.9	1.75	50.58	-2.9	
4	8696.1	3.20	50.58	8687.0	208.2	253.3	0.00	0.00	-188.2	
5	8909.2	0.00	0.00	8900.0	212.0	257.9	1.50	180.00	-191.6	B.B. Night Ranger 28 W0AP Fee #2H
6	9104.7	0.00	0.00	9095.5	212.0	257.9	0.00	0.00	-191.6	
7	9858.0	90.40	174.50	9573.0	-266.6	304.0	12.00	174.50	289.0	
8	10271.5	90.40	179.46	9570.1	-679.3	325.7	1.20	89.99	702.3	
9	14333.1	90.40	179.46	9542.0	-4740.6	363.9	0.00	0.00	4754.5	PBHL Night Ranger 28 W0AP Fee #2H

SHL: 220' FNL; 650' FEL  
 Section 28-23S-28E  
 PBHL: 330' FSL; 330' FEL  
 Section 28-23S-28E

