



Mewbourne Oil Company

Eddy County, New Mexico

Section 27-24S-28E Rock Spur 27 W0CN St Com 2H

Rock Spur 27 W0CN St Com 2H

Original Hole

Design: Original Hole

Standard Survey Report

08 May, 2017

30-015-44064





Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 27-24S-28E Rock Spur 27 W0CN St Com 2H
Well: Rock Spur 27 W0CN St Com 2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Rock Spur 27 W0CN St Com 2H
TVD Reference: 2991 + 27 @ 3018.0usft (Patterson 245)
MD Reference: 2991 + 27 @ 3018.0usft (Patterson 245)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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 27-24S-28E Rock Spur 27 W0CN St Com 2H

Site Position:		Northing:	434,833.30 usft	Latitude:	32° 11' 42.781 N
From:	Map	Easting:	578,845.30 usft	Longitude:	104° 4' 42.413 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.14 °

Well Rock Spur 27 W0CN St Com 2H

Well Position	+N/-S	0.0 usft	Northing:	434,833.30 usft	Latitude:	32° 11' 42.781 N
	+E/-W	0.0 usft	Easting:	578,845.30 usft	Longitude:	104° 4' 42.413 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	27.0 usft	Ground Level:	2,991.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/16/2017	7.21	59.96	47,895.83511854

Design Original Hole

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
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Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	57.71

Survey Program Date 5/8/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
70.0	353.0	Teledrift Survey from Rig (Original Hole)	MWD+IGRF	OWSG MWD + IGRF or WMM
459.0	14,380.0	MWD Survey (Original Hole)	MWD+IGRF	OWSG MWD + IGRF or WMM

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
70.0	0.30	159.00	70.0	-0.2	0.1	0.0	0.43	0.43	0.00
135.0	1.20	61.00	135.0	0.0	0.7	0.6	1.96	1.38	-150.77
198.0	2.10	59.00	198.0	0.9	2.3	2.4	1.43	1.43	-3.17
260.0	2.50	52.00	259.9	2.3	4.3	4.9	0.79	0.65	-11.29
323.0	2.40	54.00	322.9	4.0	6.5	7.6	0.21	-0.16	3.17
353.0	2.20	50.00	352.8	4.7	7.4	8.8	0.85	-0.67	-13.33
353' MD Survey Depth									
459.0	1.90	58.90	458.8	6.9	10.5	12.6	0.41	-0.28	8.40



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520.0	1.00	82.90	519.7	7.7	11.8	14.1	1.48	-1.48	6.56
583.0	0.70	233.00	582.7	7.7	12.0	14.3	2.69	-0.48	270.00
645.0	1.70	233.20	644.7	6.9	11.0	13.0	1.61	1.61	0.32
705.0	2.10	238.70	704.7	5.8	9.3	11.0	0.73	0.67	9.17
767.0	1.40	232.60	766.7	4.8	7.7	9.1	1.17	-1.13	-9.84
833.0	0.80	223.90	832.7	3.9	6.8	7.8	0.94	-0.91	-13.18
897.0	0.70	243.20	896.7	3.4	6.1	7.0	0.42	-0.16	30.16
960.0	0.90	247.50	959.6	3.1	5.3	6.1	0.33	0.32	6.83
1,024.0	0.90	257.70	1,023.6	2.8	4.4	5.2	0.25	0.00	15.94
1,087.0	0.70	274.70	1,086.6	2.7	3.5	4.4	0.49	-0.32	26.98
1,150.0	0.70	291.90	1,149.6	2.9	2.8	3.9	0.33	0.00	27.30
1,214.0	0.60	312.90	1,213.6	3.3	2.2	3.6	0.40	-0.16	32.81
1,277.0	0.60	328.50	1,276.6	3.8	1.7	3.5	0.26	0.00	24.76
1,341.0	0.80	345.60	1,340.6	4.5	1.5	3.6	0.45	0.31	26.72
1,404.0	0.90	353.30	1,403.6	5.4	1.3	4.0	0.24	0.16	12.22
1,468.0	1.00	359.30	1,467.6	6.5	1.2	4.5	0.22	0.16	9.38
1,531.0	0.70	358.80	1,530.6	7.4	1.2	5.0	0.48	-0.48	-0.79
1,595.0	0.80	24.70	1,594.6	8.2	1.4	5.5	0.55	0.16	40.47
1,658.0	1.30	44.30	1,657.6	9.1	2.1	6.6	0.97	0.79	31.11
1,721.0	0.70	85.50	1,720.6	9.6	3.0	7.6	1.43	-0.95	65.40
1,785.0	0.80	123.30	1,784.6	9.4	3.7	8.2	0.77	0.16	59.06
1,817.0	0.80	132.40	1,816.6	9.1	4.1	8.3	0.40	0.00	28.44
1,914.0	1.00	126.70	1,913.5	8.2	5.2	8.8	0.23	0.21	-5.88
2,009.0	1.50	102.90	2,008.5	7.4	7.1	10.0	0.75	0.53	-25.05
2,105.0	1.50	122.20	2,104.5	6.5	9.4	11.4	0.52	0.00	20.10
2,200.0	0.40	146.80	2,199.5	5.5	10.6	11.9	1.21	-1.16	25.89
2,295.0	0.70	136.50	2,294.5	4.8	11.2	12.1	0.33	0.32	-10.84
2,390.0	0.80	129.10	2,389.5	4.0	12.1	12.4	0.15	0.11	-7.79
2,448.0	1.10	122.70	2,447.5	3.4	12.9	12.8	0.55	0.52	-11.03
2,509.0	0.90	102.90	2,508.4	3.0	13.9	13.3	0.65	-0.33	-32.46
2,573.0	0.50	34.20	2,572.4	3.1	14.5	14.0	1.34	-0.63	-107.34
2,668.0	2.10	352.60	2,667.4	5.2	14.5	15.1	1.85	1.68	-43.79
2,763.0	2.10	351.20	2,762.4	8.6	14.0	16.5	0.05	0.00	-1.47
2,858.0	2.40	344.40	2,857.3	12.3	13.2	17.8	0.42	0.32	-7.16
2,954.0	2.20	342.10	2,953.2	16.0	12.1	18.8	0.23	-0.21	-2.40
3,049.0	1.90	337.50	3,048.1	19.2	11.0	19.5	0.36	-0.32	-4.84
3,145.0	2.10	348.10	3,144.1	22.3	10.0	20.4	0.44	0.21	11.04
3,239.0	2.00	346.20	3,238.0	25.6	9.3	21.5	0.13	-0.11	-2.02
3,335.0	1.60	338.80	3,334.0	28.5	8.4	22.3	0.48	-0.42	-7.71
3,430.0	2.20	331.00	3,428.9	31.3	7.0	22.7	0.69	0.63	-8.21
3,523.0	2.20	330.60	3,521.9	34.4	5.3	22.9	0.02	0.00	-0.43
3,619.0	2.20	329.10	3,617.8	37.6	3.4	23.0	0.06	0.00	-1.56



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3,714.0	2.10	329.50	3,712.7	40.7	1.6	23.1	0.11	-0.11	0.42
3,809.0	2.10	320.90	3,807.7	43.5	-0.4	22.9	0.33	0.00	-9.05
3,904.0	2.20	325.90	3,902.6	46.4	-2.5	22.7	0.22	0.11	5.26
3,999.0	1.90	318.90	3,997.5	49.1	-4.6	22.4	0.41	-0.32	-7.37
4,095.0	2.50	345.30	4,093.5	52.3	-6.1	22.8	1.21	0.63	27.50
4,188.0	2.30	343.40	4,186.4	56.1	-7.2	23.9	0.23	-0.22	-2.04
4,283.0	2.20	337.50	4,281.3	59.6	-8.4	24.7	0.27	-0.11	-6.21
4,379.0	2.50	337.10	4,377.2	63.2	-9.9	25.4	0.31	0.31	-0.42
4,474.0	2.50	337.00	4,472.1	67.0	-11.6	26.0	0.00	0.00	-0.11
4,569.0	2.20	326.20	4,567.1	70.5	-13.4	26.3	0.56	-0.32	-11.37
4,665.0	1.90	327.40	4,663.0	73.3	-15.3	26.3	0.32	-0.31	1.25
4,760.0	2.40	338.40	4,757.9	76.5	-16.8	26.6	0.68	0.53	11.58
4,856.0	1.80	335.20	4,853.9	79.7	-18.2	27.2	0.64	-0.63	-3.33
4,951.0	2.10	352.00	4,948.8	82.8	-19.1	28.1	0.68	0.32	17.68
5,046.0	1.60	347.70	5,043.8	85.8	-19.6	29.3	0.55	-0.53	-4.53
5,142.0	1.30	340.60	5,139.7	88.2	-20.3	30.0	0.36	-0.31	-7.40
5,237.0	2.20	357.90	5,234.7	91.0	-20.7	31.1	1.09	0.95	18.21
5,332.0	2.70	358.60	5,329.6	95.1	-20.8	33.2	0.53	0.53	0.74
5,429.0	2.50	350.30	5,426.5	99.4	-21.2	35.2	0.44	-0.21	-8.56
5,524.0	2.00	345.50	5,521.4	103.1	-22.0	36.5	0.56	-0.53	-5.05
5,620.0	2.50	6.40	5,617.3	106.8	-22.2	38.3	0.99	0.52	21.77
5,717.0	2.40	3.90	5,714.3	110.9	-21.8	40.8	0.15	-0.10	-2.58
5,810.0	2.50	2.30	5,807.2	114.9	-21.6	43.1	0.13	0.11	-1.72
5,904.0	2.80	358.40	5,901.1	119.2	-21.6	45.5	0.37	0.32	-4.15
6,000.0	2.40	358.50	5,997.0	123.6	-21.7	47.7	0.42	-0.42	0.10
6,095.0	2.00	349.40	6,091.9	127.2	-22.0	49.3	0.56	-0.42	-9.58
6,190.0	1.80	340.80	6,186.9	130.2	-22.8	50.3	0.37	-0.21	-9.05
6,285.0	1.90	2.00	6,281.8	133.2	-23.3	51.5	0.72	0.11	22.32
6,380.0	2.80	346.60	6,376.7	137.1	-23.8	53.1	1.15	0.95	-16.21
6,475.0	1.90	343.30	6,471.6	140.8	-24.7	54.3	0.96	-0.95	-3.47
6,571.0	1.60	341.70	6,567.6	143.6	-25.6	55.1	0.32	-0.31	-1.67
6,665.0	3.60	339.90	6,661.5	147.6	-27.0	56.0	2.13	2.13	-1.91
6,761.0	4.00	341.20	6,757.3	153.6	-29.2	57.4	0.43	0.42	1.35
6,857.0	3.50	328.10	6,853.1	159.3	-31.8	58.2	1.03	-0.52	-13.65
6,952.0	2.40	305.90	6,948.0	162.9	-34.9	57.5	1.65	-1.16	-23.37
7,047.0	2.70	333.30	7,042.9	166.1	-37.6	57.0	1.31	0.32	28.84
7,143.0	2.00	350.20	7,138.8	169.8	-38.9	57.8	1.02	-0.73	17.60
7,238.0	1.50	348.00	7,233.7	172.6	-39.4	58.9	0.53	-0.53	-2.32
7,334.0	1.80	358.20	7,329.7	175.4	-39.7	60.1	0.44	0.31	10.63
7,429.0	2.50	333.20	7,424.6	178.7	-40.7	61.1	1.22	0.74	-26.32
7,525.0	0.70	349.90	7,520.6	181.1	-41.7	61.5	1.92	-1.88	17.40
7,620.0	1.50	344.20	7,615.6	182.9	-42.2	62.0	0.85	0.84	-6.00
7,716.0	2.20	356.60	7,711.5	186.0	-42.6	63.3	0.84	0.73	12.92



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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)
7,810.0	0.70	329.70	7,805.5	188.3	-43.0	64.2	1.71	-1.60	-28.62
7,906.0	2.40	350.40	7,901.5	190.7	-43.6	65.0	1.84	1.77	21.56
8,001.0	1.80	337.80	7,996.4	194.1	-44.5	66.0	0.79	-0.63	-13.26
8,097.0	2.50	7.40	8,092.3	197.6	-44.8	67.6	1.34	0.73	30.83
8,192.0	2.00	357.90	8,187.3	201.3	-44.6	69.8	0.65	-0.53	-10.00
8,288.0	2.20	23.10	8,283.2	204.6	-44.0	72.1	0.98	0.21	26.25
8,384.0	2.50	8.30	8,379.1	208.4	-43.0	75.0	0.70	0.31	-15.42
8,479.0	2.60	0.50	8,474.0	212.6	-42.6	77.5	0.38	0.11	-8.21
8,574.0	2.30	352.80	8,568.9	216.7	-42.9	79.5	0.47	-0.32	-8.11
8,670.0	3.00	353.00	8,664.8	221.1	-43.4	81.4	0.73	0.73	0.21
8,765.0	2.10	347.10	8,759.7	225.2	-44.1	83.0	0.99	-0.95	-6.21
8,860.0	1.40	340.50	8,854.7	228.0	-44.9	83.9	0.77	-0.74	-6.95
8,955.0	1.00	310.90	8,949.7	229.6	-45.9	83.9	0.76	-0.42	-31.16
8,988.0	0.90	303.70	8,982.7	230.0	-46.3	83.7	0.47	-0.30	-21.82
9,005.4	0.60	309.50	9,000.1	230.1	-46.5	83.6	1.80	-1.75	33.31
BB Rock Spur 27 W0CN St Com 2H									
9,017.0	0.40	318.20	9,011.7	230.2	-46.6	83.6	1.80	-1.68	75.11
9,049.0	0.40	311.00	9,043.7	230.3	-46.7	83.5	0.16	0.00	-22.50
9,081.0	2.10	162.10	9,075.7	229.9	-46.6	83.4	7.66	5.31	-465.31
9,113.0	5.70	166.60	9,107.6	227.8	-46.1	82.7	11.28	11.25	14.06
9,145.0	8.20	176.00	9,139.3	223.9	-45.6	81.1	8.56	7.81	29.38
9,177.0	10.50	183.50	9,170.9	218.7	-45.6	78.3	8.12	7.19	23.44
9,208.0	14.20	185.50	9,201.2	212.1	-46.1	74.3	12.01	11.94	6.45
9,240.0	17.50	183.60	9,232.0	203.4	-46.8	69.1	10.44	10.31	-5.94
9,271.0	20.80	184.00	9,261.2	193.3	-47.5	63.1	10.65	10.65	1.29
9,303.0	24.00	184.30	9,290.8	181.1	-48.4	55.9	10.01	10.00	0.94
9,335.0	28.00	181.60	9,319.6	167.1	-49.1	47.8	13.03	12.50	-8.44
9,367.0	32.00	177.50	9,347.3	151.1	-48.9	39.4	14.04	12.50	-12.81
9,398.0	35.60	174.30	9,373.1	133.9	-47.6	31.3	12.95	11.61	-10.32
9,430.0	40.20	173.50	9,398.3	114.4	-45.5	22.6	14.46	14.38	-2.50
9,461.0	44.40	171.80	9,421.2	93.7	-42.9	13.8	14.04	13.55	-5.48
9,493.0	47.90	171.10	9,443.4	70.9	-39.4	4.5	11.05	10.94	-2.19
9,525.0	50.20	172.70	9,464.4	47.0	-36.0	-5.4	8.12	7.19	5.00
9,556.0	54.10	173.30	9,483.4	22.7	-33.1	-15.8	12.67	12.58	1.94
9,588.0	58.90	174.60	9,501.0	-3.9	-30.2	-27.6	15.38	15.00	4.06
9,620.0	64.50	175.10	9,516.2	-31.9	-27.7	-40.5	17.55	17.50	1.56
9,652.0	69.00	175.70	9,528.8	-61.2	-25.4	-54.1	14.17	14.06	1.88
9,683.0	72.20	176.00	9,539.1	-90.4	-23.3	-67.9	10.36	10.32	0.97
9,715.0	75.30	176.50	9,548.1	-121.0	-21.2	-82.6	9.80	9.69	1.56
9,748.0	78.30	176.60	9,555.6	-153.1	-19.3	-98.1	9.10	9.09	0.30
9,779.0	81.30	176.50	9,561.1	-183.5	-17.5	-112.8	9.68	9.68	-0.32
9,796.0	83.00	176.50	9,563.4	-200.3	-16.4	-120.9	10.00	10.00	0.00
9,900.0	87.00	177.70	9,572.5	-303.8	-11.2	-171.7	4.01	3.85	1.15

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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)
9,995.0	89.70	177.10	9,575.2	-398.6	-6.9	-218.8	2.91	2.84	-0.63
10,077.1	90.97	176.93	9,574.7	-480.7	-2.6	-259.0	1.56	1.55	-0.21
LP Rock Spur 27 W0CN St Com 2H									
10,092.0	91.20	176.90	9,574.5	-495.5	-1.8	-266.2	1.56	1.55	-0.21
10,187.0	90.80	175.80	9,572.8	-590.3	4.2	-311.7	1.23	-0.42	-1.16
10,282.0	90.30	175.70	9,571.9	-685.0	11.3	-356.4	0.54	-0.53	-0.11
10,377.0	88.00	176.50	9,573.3	-779.8	17.7	-401.5	2.56	-2.42	0.84
10,472.0	89.60	177.90	9,575.3	-874.6	22.4	-448.3	2.24	1.68	1.47
10,567.0	90.00	178.60	9,575.6	-969.6	25.3	-496.6	0.85	0.42	0.74
10,663.0	89.20	178.80	9,576.3	-1,065.6	27.4	-548.0	0.86	-0.83	0.21
10,758.0	89.60	179.20	9,577.3	-1,160.6	29.1	-595.3	0.60	0.42	0.42
10,853.0	89.00	177.50	9,578.4	-1,255.5	31.8	-643.7	1.90	-0.63	-1.79
10,947.0	91.30	179.20	9,578.2	-1,349.5	34.5	-691.6	3.04	2.45	1.81
11,042.0	87.90	177.60	9,578.9	-1,444.4	37.2	-740.1	3.96	-3.58	-1.68
11,138.0	91.50	178.60	9,579.4	-1,540.3	40.4	-788.6	3.89	3.75	1.04
11,233.0	87.70	179.40	9,580.0	-1,635.3	42.0	-838.0	4.09	-4.00	0.84
11,329.0	92.00	180.30	9,580.3	-1,731.3	42.3	-889.0	4.58	4.48	0.94
11,425.0	88.70	179.00	9,579.7	-1,827.3	42.9	-939.8	3.69	-3.44	-1.35
11,520.0	87.40	179.10	9,582.9	-1,922.2	44.4	-989.2	1.37	-1.37	0.11
11,615.0	90.30	181.10	9,584.8	-2,017.1	44.3	-1,040.0	3.71	3.05	2.11
11,710.0	92.30	181.30	9,582.7	-2,112.1	42.3	-1,092.4	2.12	2.11	0.21
11,805.0	89.50	178.90	9,581.2	-2,207.1	42.1	-1,143.3	3.88	-2.95	-2.53
11,901.0	88.60	178.60	9,582.8	-2,303.0	44.2	-1,192.8	0.99	-0.94	-0.31
11,996.0	91.60	180.00	9,582.6	-2,398.0	45.4	-1,242.5	3.48	3.16	1.47
12,092.0	93.10	180.30	9,578.7	-2,493.9	45.1	-1,294.0	1.59	1.56	0.31
12,186.0	92.20	179.60	9,574.3	-2,587.8	45.2	-1,344.1	1.21	-0.96	-0.74
12,281.0	88.80	178.40	9,573.5	-2,682.8	46.9	-1,393.4	3.80	-3.58	-1.26
12,379.0	87.80	178.50	9,576.4	-2,780.7	49.5	-1,443.5	1.03	-1.02	0.10
12,472.0	88.30	178.70	9,579.6	-2,873.6	51.8	-1,491.2	0.58	0.54	0.22
12,567.0	90.90	180.10	9,580.2	-2,968.6	52.8	-1,541.1	3.11	2.74	1.47
12,662.0	88.00	179.60	9,581.1	-3,063.6	53.0	-1,591.6	3.10	-3.05	-0.53
12,757.0	88.90	179.00	9,583.7	-3,158.6	54.2	-1,641.3	1.14	0.95	-0.63
12,852.0	91.30	178.90	9,583.6	-3,253.5	55.9	-1,690.6	2.53	2.53	-0.11
12,949.0	89.50	177.90	9,582.9	-3,350.5	58.6	-1,740.1	2.12	-1.86	-1.03
13,044.0	90.00	178.50	9,583.3	-3,445.4	61.6	-1,788.3	0.82	0.53	0.63
13,139.0	89.80	179.50	9,583.5	-3,540.4	63.3	-1,837.6	1.07	-0.21	1.05
13,234.0	88.50	178.70	9,584.9	-3,635.4	64.8	-1,887.1	1.61	-1.37	-0.84
13,328.0	91.60	180.00	9,584.8	-3,729.4	65.8	-1,936.4	3.58	3.30	1.38
13,423.0	91.30	179.00	9,582.4	-3,824.3	66.7	-1,986.4	1.10	-0.32	-1.05
13,518.0	90.60	178.50	9,580.8	-3,919.3	68.7	-2,035.4	0.91	-0.74	-0.53
13,613.0	86.90	177.10	9,582.9	-4,014.2	72.4	-2,083.0	4.16	-3.89	-1.47
13,708.0	91.00	179.30	9,584.6	-4,109.1	75.4	-2,131.2	4.90	4.32	2.32



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 27-24S-28E Rock Spur 27 W0CN St Com 2H
Well: Rock Spur 27 W0CN St Com 2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Rock Spur 27 W0CN St Com 2H
TVD Reference: 2991 + 27 @ 3018.0usft (Patterson 245)
MD Reference: 2991 + 27 @ 3018.0usft (Patterson 245)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
13,803.0	89.20	178.60	9,584.5	-4,204.1	77.1	-2,180.4	2.03	-1.89	-0.74
13,898.0	89.70	179.20	9,585.4	-4,299.1	78.9	-2,229.6	0.82	0.53	0.63
13,994.0	88.30	177.70	9,587.0	-4,395.0	81.5	-2,278.7	2.14	-1.46	-1.56
14,088.0	90.70	177.90	9,587.9	-4,488.9	85.1	-2,325.8	2.56	2.55	0.21
14,183.0	92.10	178.50	9,585.5	-4,583.8	88.1	-2,374.0	1.60	1.47	0.63
14,278.0	90.70	177.70	9,583.2	-4,678.8	91.3	-2,422.0	1.70	-1.47	-0.84
14,332.0	91.30	178.10	9,582.3	-4,732.7	93.2	-2,449.1	1.34	1.11	0.74
14,380.0	91.30	178.10	9,581.2	-4,780.7	94.8	-2,473.4	0.00	0.00	0.00

14380' MD Projected to Bit - PBHL Rock Spur 27 W0CN St Com 2H

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
353.0	352.8	4.7	7.4	353' MD Survey Depth
14,380.0	9,581.2	-4,780.7	94.8	14380' MD Projected to Bit



May 22, 2017

New Mexico Energy, Minerals and Natural Resources Department
Attn: Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attn: Jackie Lathan

Re: Mewbourne Oil Company
Rock Spur 27 W0CN State Com #002H
Purple Sage; Wolfcamp (Gas)
Eddy County, New Mexico
API# 30-015-44064

Enclosed please find the original and one (1) copy of the survey performed on the reference well by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C. Other information required by your office is as follows:

<u>Name & Title</u>	<u>Drainhole No.</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Jimmy Walker	Original Hole	459ft. to 14,332ft.	04-20-17 to 05-06-17	MWD Survey

A certified plat on which the bottom-hole location is oriented to both surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Todd Estes

Enclosures

CC:

Mewbourne Oil Company
Attn: Frosty Lathan
P.O. Box 5720
Hobbs, NM 88241

Mewbourne Oil Company
Attn: Robin Terrell
P.O. Box 5720
Hobbs, NM 88241

NMEMaNRD\Mewbourne Oil Company\Rock Spur 27 W0CN State Com #2H\M171030

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.
P.O. Box 1250
Montgomery, TX 77356
Office (936) 582-7296 * Fax (936)-588-4163



May 22, 2017

Survey Certification Report

STATE OF TEXAS

COUNTY OF Montgomery

I, Todd Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of April 20, 2017, through May 06, 2017 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 459 feet to a depth of 14,332 feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Rock Spur 27 W0CN State Com #002H well, API # **30-015-44064** in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

Todd Estes

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

P.O. Box 1250

Montgomery, TX 77356

Office (936) 582-7296 * Fax (936)-588-4163



COMPANY: Mewbourne Oil Company
WELL: Rock Spur 27 W0CN St Com 2H
COUNTY: Eddy County, New Mexico
DATUM: NAD 1927 (NADCON CONUS)
RIG: Patterson 245



OFFICE: 936.582.7296

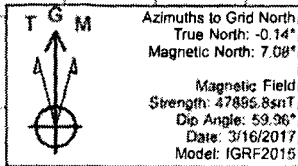
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.08°

GEODETTIC ZONE: New Mexico East 3001
2991 + 27 @ 3018.0usft (Patterson 245)
GROUND ELEVATION: 2991.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Spot
0.0	0.0	434833.30	578846.30	32° 11' 42.781 N	104° 4' 42.413 W	

PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2570.0	0.00	0.00	2570.0	0.0	0.0	0.00	0.00	0.0	
3	2718.7	2.23	348.62	2718.7	2.8	-0.6	1.50	348.62	-2.8	
4	8856.0	2.23	348.62	8851.3	237.0	-47.7	0.00	0.00	-237.8	
5	9004.7	0.00	0.00	9000.0	239.9	-48.3	1.50	180.00	-240.7	BB Rock Spur 27 W0CN St Com 2H
6	9092.4	0.00	0.00	9087.6	239.9	-48.3	0.00	0.00	-240.7	
7	9839.4	89.65	174.50	9585.1	-232.5	-2.8	12.00	174.50	232.4	
8	10066.7	89.66	179.05	9566.4	-459.4	10.0	2.00	89.87	459.5	
9	14394.1	89.56	179.05	9592.0	-4786.0	82.1	0.00	0.00	4786.7	PBHL Rock Spur 27 W0CN St Com 2H



SHL: 250' FNL: 1590' FWL
Section 27-24S-28E
PBHL: 330' FSL: 1590' FWL
Section 27-24S-28E

