



HOBBS OCD

JUL 05 2017

RECEIVED

Mewbourne Oil Company

Lea County N.M.

Section 8-26S-32E Red Hills West 008H

Red Hills West Unit 008H

Original Hole

Design: Original Hole

Standard Survey Report

17 May, 2017



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West Unit 008H
Project:	Lea County N.M.	TVD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Site:	Section 8-26S-32E Red Hills West 008H	MD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Well:	Red Hills West Unit 008H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Project	Lea County N.M.		
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 8-26S-32E Red Hills West 008H			
Site Position:		Northing:	382,678.18 usft	Latitude:	32° 3' 1.821 N
From:	Map	Easting:	696,810.00 usft	Longitude:	103° 41' 53.192 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.34 °

Well	Red Hills West Unit 008H					
Well Position	+N/-S	0.0 usft	Northing:	382,678.18 usft	Latitude:	32° 3' 1.821 N
	+E/-W	0.0 usft	Easting:	696,810.00 usft	Longitude:	103° 41' 53.192 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,186.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/30/2017	7.02	59.89	47,845.41571000

Design	Original Hole				
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	151.71	

Survey Program	Date	5/17/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	1,100.0	Phoenix Gyro Survey (Original Hole)	NSG-CT_WL	Continuous north-seeking gyro on wireline	
1,100.0	16,860.0	MWD Vertical Survey (Original Hole)	MWD	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	0.15	269.44	100.0	0.0	-0.1	-0.1	0.15	0.15	0.00	
200.0	0.23	306.17	200.0	0.1	-0.4	-0.3	0.14	0.08	36.73	
300.0	0.17	256.63	300.0	0.2	-0.7	-0.5	0.18	-0.06	-49.54	
400.0	0.32	322.82	400.0	0.4	-1.0	-0.8	0.30	0.15	66.19	
500.0	0.25	276.12	500.0	0.6	-1.4	-1.2	0.23	-0.07	-46.70	
600.0	0.18	52.60	600.0	0.8	-1.5	-1.4	0.40	-0.07	136.48	
700.0	0.20	70.24	700.0	0.9	-1.2	-1.4	0.06	0.02	17.64	
800.0	0.31	154.25	800.0	0.7	-1.0	-1.1	0.35	0.11	84.01	
900.0	0.45	194.44	900.0	0.1	-0.9	-0.5	0.29	0.14	40.19	

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West Unit 008H
Project:	Lea County N.M.	TVD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Site:	Section 8-26S-32E Red Hills West 008H	MD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Well:	Red Hills West Unit 008H	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)
1,000.0	0.43	193.34	1,000.0	-0.6	-1.1	0.0	0.02	-0.02	-1.10
1,100.0	0.23	138.00	1,100.0	-1.2	-1.1	0.5	0.35	-0.20	-55.34
1,131.0	0.50	156.60	1,131.0	-1.3	-1.0	0.7	0.94	0.87	60.00
1,258.0	0.50	130.60	1,258.0	-2.2	-0.3	1.8	0.18	0.00	-20.47
1,385.0	0.50	158.70	1,385.0	-3.1	0.3	2.8	0.19	0.00	22.13
1,511.0	0.20	131.80	1,511.0	-3.7	0.7	3.6	0.27	-0.24	-21.35
1,638.0	0.40	158.60	1,638.0	-4.3	1.0	4.2	0.19	0.16	21.10
1,764.0	0.20	213.70	1,764.0	-4.9	1.0	4.8	0.26	-0.16	43.73
1,891.0	0.10	173.80	1,891.0	-5.2	0.9	5.0	0.11	-0.08	-31.42
2,018.0	0.40	121.80	2,018.0	-5.5	1.3	5.5	0.27	0.24	-40.94
2,081.0	0.70	141.90	2,081.0	-5.9	1.7	6.1	0.56	0.48	31.90
2,176.0	0.40	146.30	2,176.0	-6.7	2.3	7.0	0.32	-0.32	4.63
2,271.0	0.40	108.50	2,271.0	-7.1	2.8	7.5	0.27	0.00	-39.79
2,365.0	0.30	183.10	2,365.0	-7.4	3.1	8.0	0.46	-0.11	79.36
2,461.0	0.40	140.50	2,461.0	-7.9	3.3	8.5	0.28	0.10	-44.38
2,555.0	0.30	176.60	2,555.0	-8.4	3.5	9.1	0.25	-0.11	38.40
2,650.0	0.30	123.40	2,650.0	-8.8	3.7	9.5	0.28	0.00	-56.00
2,745.0	0.20	30.00	2,745.0	-8.8	4.0	9.6	0.39	-0.11	-98.32
2,839.0	0.30	117.90	2,839.0	-8.8	4.3	9.8	0.38	0.11	93.51
2,934.0	0.50	119.00	2,934.0	-9.1	4.9	10.3	0.21	0.21	1.16
3,029.0	0.70	123.10	3,028.9	-9.6	5.7	11.2	0.22	0.21	4.32
3,124.0	0.40	137.20	3,123.9	-10.2	6.4	12.0	0.34	-0.32	14.84
3,218.0	0.30	99.80	3,217.9	-10.4	6.9	12.5	0.26	-0.11	-39.79
3,313.0	0.60	62.10	3,312.9	-10.3	7.6	12.6	0.43	0.32	-39.68
3,408.0	0.70	66.50	3,407.9	-9.8	8.6	12.7	0.12	0.11	4.63
3,503.0	0.70	62.20	3,502.9	-9.3	9.6	12.7	0.06	0.00	-4.53
3,598.0	0.60	46.20	3,597.9	-8.7	10.5	12.6	0.22	-0.11	-16.84
3,693.0	0.90	63.90	3,692.9	-8.0	11.5	12.5	0.40	0.32	18.63
3,787.0	0.80	76.80	3,786.9	-7.5	12.8	12.7	0.23	-0.11	13.72
3,882.0	0.70	86.40	3,881.9	-7.3	14.0	13.1	0.17	-0.11	10.11
3,977.0	0.80	130.60	3,976.9	-7.7	15.1	14.0	0.60	0.11	46.53
4,071.0	1.40	141.30	4,070.9	-9.1	16.3	15.7	0.67	0.64	11.38
4,166.0	1.40	136.30	4,165.8	-10.8	17.9	18.0	0.13	0.00	-5.26
4,260.0	1.30	136.90	4,259.8	-12.4	19.4	20.1	0.11	-0.11	0.64
4,290.0	1.00	135.20	4,289.8	-12.8	19.8	20.7	1.01	-1.00	-5.67
4,358.0	0.70	133.90	4,357.8	-13.6	20.5	21.7	0.44	-0.44	-1.91
4,452.0	0.70	142.30	4,451.8	-14.4	21.3	22.8	0.11	0.00	8.94
4,547.0	0.80	157.40	4,546.8	-15.5	21.9	24.0	0.23	0.11	15.89
4,642.0	0.80	143.30	4,641.8	-16.6	22.5	25.3	0.21	0.00	-14.84
4,737.0	0.90	152.00	4,736.8	-17.8	23.3	26.7	0.17	0.11	9.16
4,831.0	0.60	132.80	4,830.8	-18.8	24.0	27.9	0.41	-0.32	-20.43
4,926.0	0.80	131.60	4,925.7	-19.6	24.9	29.0	0.21	0.21	-1.26
5,021.0	0.90	128.10	5,020.7	-20.5	25.9	30.3	0.12	0.11	-3.68

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West Unit 008H
Project:	Lea County N.M.	TVD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Site:	Section 8-26S-32E Red Hills West 008H	MD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Well:	Red Hills West Unit 008H	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)
5,115.0	1.00	144.60	5,114.7	-21.6	27.0	31.8	0.31	0.11	17.55
5,210.0	1.00	165.20	5,209.7	-23.1	27.7	33.4	0.38	0.00	21.68
5,305.0	1.00	154.40	5,304.7	-24.6	28.3	35.1	0.20	0.00	-11.37
5,400.0	0.80	157.50	5,399.7	-26.0	28.9	36.6	0.22	-0.21	3.26
5,495.0	1.00	171.40	5,494.7	-27.4	29.2	38.0	0.31	0.21	14.63
5,590.0	0.80	145.00	5,589.7	-28.8	29.8	39.4	0.48	-0.21	-27.79
5,685.0	0.40	227.00	5,684.7	-29.6	29.9	40.2	0.89	-0.42	86.32
5,780.0	1.10	144.10	5,779.7	-30.5	30.2	41.2	1.18	0.74	-87.26
5,874.0	0.90	148.70	5,873.6	-31.9	31.1	42.8	0.23	-0.21	4.89
5,969.0	0.80	145.90	5,968.6	-33.1	31.9	44.2	0.11	-0.11	-2.95
6,064.0	0.90	159.40	6,063.6	-34.3	32.5	45.6	0.23	0.11	14.21
6,159.0	0.70	157.20	6,158.6	-35.6	33.0	46.9	0.21	-0.21	-2.32
6,254.0	0.80	159.70	6,253.6	-36.7	33.4	48.2	0.11	0.11	2.63
6,348.0	0.60	163.50	6,347.6	-37.8	33.8	49.3	0.22	-0.21	4.04
6,443.0	0.70	161.80	6,442.6	-38.8	34.1	50.4	0.11	0.11	-1.79
6,538.0	0.80	155.30	6,537.6	-40.0	34.6	51.6	0.14	0.11	-6.84
6,632.0	0.70	156.90	6,631.6	-41.1	35.1	52.8	0.11	-0.11	1.70
6,727.0	0.70	166.00	6,726.6	-42.2	35.4	54.0	0.12	0.00	9.58
6,821.0	0.70	177.10	6,820.6	-43.3	35.6	55.0	0.14	0.00	11.81
6,916.0	0.70	154.30	6,915.5	-44.4	35.9	56.1	0.29	0.00	-24.00
7,010.0	0.70	140.50	7,009.5	-45.4	36.5	57.3	0.18	0.00	-14.68
7,105.0	0.80	143.90	7,104.5	-46.4	37.3	58.5	0.12	0.11	3.58
7,200.0	1.10	187.20	7,199.5	-47.8	37.5	59.9	0.79	0.32	45.58
7,294.0	1.40	183.20	7,293.5	-49.9	37.4	61.6	0.33	0.32	-4.26
7,389.0	1.60	189.10	7,388.5	-52.3	37.1	63.7	0.27	0.21	6.21
7,483.0	1.30	180.80	7,482.4	-54.7	36.9	65.6	0.39	-0.32	-8.83
7,578.0	1.80	215.60	7,577.4	-57.0	36.0	67.2	1.10	0.53	36.63
7,675.0	1.70	209.40	7,674.4	-59.5	34.4	68.7	0.22	-0.10	-6.39
7,770.0	1.60	210.80	7,769.3	-61.8	33.0	70.1	0.11	-0.11	1.47
7,865.0	1.80	204.40	7,864.3	-64.3	31.7	71.7	0.29	0.21	-6.74
7,959.0	1.70	194.80	7,958.2	-67.0	30.8	73.6	0.33	-0.11	-10.21
8,054.0	2.00	195.70	8,053.2	-70.0	30.0	75.8	0.32	0.32	0.95
8,148.0	2.00	198.40	8,147.1	-73.1	29.0	78.1	0.10	0.00	2.87
8,243.0	2.10	201.40	8,242.1	-76.3	27.8	80.4	0.15	0.11	3.16
8,337.0	2.20	199.00	8,336.0	-79.6	26.6	82.7	0.14	0.11	-2.55
8,432.0	2.00	200.50	8,430.9	-82.9	25.4	85.1	0.22	-0.21	1.58
8,526.0	1.90	207.50	8,524.9	-85.8	24.2	87.0	0.27	-0.11	7.45
8,621.0	1.40	204.10	8,619.8	-88.3	22.9	88.6	0.54	-0.53	-3.58
8,716.0	1.60	185.50	8,714.8	-90.7	22.3	90.4	0.55	0.21	-19.58
8,811.0	1.50	182.70	8,809.8	-93.2	22.2	92.6	0.13	-0.11	-2.95
8,906.0	1.50	172.40	8,904.7	-95.7	22.3	94.8	0.28	0.00	-10.84
9,001.0	1.70	200.40	8,999.7	-98.2	21.9	96.9	0.84	0.21	29.47
9,096.0	2.20	232.60	9,094.7	-100.7	20.0	98.1	1.25	0.53	33.89

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West Unit 008H
Project:	Lea County N.M.	TVD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Site:	Section 8-26S-32E Red Hills West 008H	MD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Well:	Red Hills West Unit 008H	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)
9,190.0	2.30	230.50	9,188.6	-103.0	17.1	98.8	0.14	0.11	-2.23
9,284.0	2.00	216.60	9,282.5	-105.5	14.7	99.8	0.64	-0.32	-14.79
9,379.0	2.00	219.10	9,377.5	-108.1	12.6	101.2	0.09	0.00	2.63
9,474.0	1.90	218.70	9,472.4	-110.6	10.6	102.4	0.11	-0.11	-0.42
9,568.0	2.00	204.50	9,566.3	-113.3	9.0	104.0	0.52	0.11	-15.11
9,662.0	2.00	220.40	9,660.3	-116.1	7.2	105.6	0.59	0.00	16.91
9,756.0	2.50	222.40	9,754.2	-118.8	4.8	106.9	0.54	0.53	2.13
9,850.0	2.20	228.90	9,848.1	-121.5	2.0	108.0	0.43	-0.32	6.91
9,945.0	1.50	179.80	9,943.1	-124.0	0.7	109.5	1.75	-0.74	-51.68
10,040.0	1.70	167.20	10,038.1	-126.6	1.0	111.9	0.42	0.21	-13.26
10,134.0	1.00	184.40	10,132.0	-128.8	1.2	114.0	0.85	-0.74	18.30
10,229.0	1.20	176.90	10,227.0	-130.6	1.2	115.6	0.26	0.21	-7.89
10,324.0	1.20	151.80	10,322.0	-132.5	1.7	117.5	0.55	0.00	-26.42
10,419.0	0.30	151.70	10,417.0	-133.6	2.3	118.7	0.95	-0.95	-0.11
10,513.0	0.40	302.60	10,511.0	-133.6	2.2	118.7	0.72	0.11	160.53
10,609.0	0.80	316.40	10,607.0	-132.9	1.4	117.7	0.44	0.42	14.38
10,704.0	0.40	329.60	10,702.0	-132.2	0.8	116.8	0.44	-0.42	13.89
10,799.0	0.50	126.70	10,797.0	-132.1	1.0	116.8	0.93	0.11	165.37
10,893.0	0.40	164.70	10,891.0	-132.7	1.4	117.5	0.33	-0.11	40.43
10,988.0	0.60	148.20	10,986.0	-133.4	1.7	118.3	0.26	0.21	-17.37
11,082.0	0.30	159.40	11,080.0	-134.1	2.1	119.0	0.33	-0.32	11.91
11,177.0	0.40	174.00	11,175.0	-134.6	2.2	119.6	0.14	0.11	15.37
11,272.0	0.90	198.50	11,270.0	-135.7	2.0	120.4	0.59	0.53	25.79
11,366.0	1.40	184.80	11,363.9	-137.5	1.7	121.9	0.60	0.53	-14.57
11,402.1	1.27	185.32	11,400.1	-138.4	1.6	122.6	0.36	-0.36	1.44
B.B. Red Hills West 008H									
11,450.0	1.10	186.20	11,447.9	-139.3	1.5	123.4	0.36	-0.36	1.84
11,482.0	0.90	194.20	11,479.9	-139.9	1.4	123.8	0.76	-0.63	25.00
11,514.0	1.70	327.20	11,511.9	-139.7	1.1	123.6	7.52	2.50	415.63
11,546.0	6.30	347.50	11,543.8	-137.6	0.4	121.4	14.82	14.38	63.44
11,577.0	9.50	1.10	11,574.5	-133.4	0.1	117.5	11.89	10.32	43.87
11,609.0	12.00	1.00	11,606.0	-127.4	0.2	112.3	7.81	7.81	-0.31
11,640.0	14.20	358.20	11,636.2	-120.4	0.2	106.1	7.38	7.10	-9.03
11,672.0	16.30	357.40	11,667.0	-112.0	-0.2	98.5	6.60	6.56	-2.50
11,703.0	18.50	358.50	11,696.6	-102.7	-0.5	90.2	7.18	7.10	3.55
11,735.0	20.60	358.70	11,726.8	-92.0	-0.7	80.7	6.57	6.56	0.63
11,767.0	21.90	358.20	11,756.6	-80.4	-1.1	70.3	4.10	4.06	-1.56
11,798.0	24.20	357.90	11,785.1	-68.3	-1.5	59.5	7.43	7.42	-0.97
11,830.0	27.40	357.60	11,813.9	-54.4	-2.0	46.9	10.01	10.00	-0.94
11,861.0	31.20	356.10	11,840.9	-39.3	-2.9	33.2	12.48	12.26	-4.84
11,892.0	34.20	355.40	11,867.0	-22.6	-4.1	17.9	9.75	9.68	-2.26
11,924.0	36.50	355.10	11,893.1	-4.1	-5.7	0.9	7.21	7.19	-0.94
11,956.0	39.40	355.30	11,918.4	15.5	-7.3	-17.1	9.07	9.06	0.63
11,987.0	42.40	356.50	11,941.8	35.7	-8.7	-35.6	10.00	9.68	3.87

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West Unit 008H
Project:	Lea County N.M.	TVD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Site:	Section 8-26S-32E Red Hills West 008H	MD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Well:	Red Hills West Unit 008H	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)
12,019.0	46.00	0.60	11,964.7	58.0	-9.3	-55.5	14.36	11.25	12.81
12,050.0	49.30	0.40	11,985.6	80.9	-9.1	-75.6	10.66	10.65	-0.65
12,082.0	52.50	0.20	12,005.8	105.8	-9.0	-97.4	10.01	10.00	-0.63
12,113.0	57.50	1.40	12,023.6	131.2	-8.6	-119.6	16.44	16.13	3.87
12,145.0	61.10	0.90	12,039.9	158.7	-8.0	-143.5	11.33	11.25	-1.56
12,176.0	64.00	359.70	12,054.2	186.2	-7.9	-167.7	9.97	9.35	-3.87
12,208.0	68.30	359.00	12,067.1	215.4	-8.2	-193.6	13.59	13.44	-2.19
12,220.0	69.80	358.70	12,071.4	226.6	-8.5	-203.6	12.72	12.50	-2.50
12,263.0	74.90	359.00	12,084.4	267.6	-9.3	-240.0	11.88	11.86	0.70
12,295.0	78.00	358.50	12,091.9	298.7	-10.0	-267.7	9.81	9.69	-1.56
12,326.0	80.70	358.30	12,097.7	329.1	-10.8	-294.9	8.73	8.71	-0.65
12,358.0	82.00	358.30	12,102.5	360.7	-11.8	-323.2	4.06	4.06	0.00
12,390.0	83.10	358.60	12,106.6	392.5	-12.6	-351.6	3.56	3.44	0.94
12,421.0	84.90	359.40	12,109.9	423.3	-13.1	-379.0	6.35	5.81	2.58
12,453.0	87.40	359.60	12,112.0	455.2	-13.4	-407.2	7.84	7.81	0.63
12,485.0	90.60	359.80	12,112.6	487.2	-13.6	-435.4	10.02	10.00	0.63
12,570.1	89.60	359.35	12,112.4	572.3	-14.2	-510.7	1.29	-1.17	-0.53
LP Red Hills West 008H									
12,579.0	89.50	359.30	12,112.5	581.2	-14.3	-518.6	1.29	-1.17	-0.53
12,674.0	89.50	359.70	12,113.3	676.2	-15.2	-602.6	0.42	0.00	0.42
12,769.0	89.50	359.70	12,114.2	771.2	-15.7	-686.5	0.00	0.00	0.00
12,864.0	89.40	359.50	12,115.1	866.2	-16.3	-770.4	0.24	-0.11	-0.21
12,958.0	90.80	359.40	12,114.9	960.2	-17.2	-853.6	1.49	1.49	-0.11
13,053.0	92.50	1.10	12,112.2	1,055.1	-16.8	-937.1	2.53	1.79	1.79
13,148.0	91.40	359.80	12,108.9	1,150.1	-16.1	-1,020.3	1.79	-1.16	-1.37
13,243.0	89.50	359.80	12,108.2	1,245.1	-16.4	-1,104.1	2.00	-2.00	0.00
13,338.0	88.90	358.80	12,109.5	1,340.0	-17.6	-1,188.3	1.23	-0.63	-1.05
13,433.0	88.00	357.70	12,112.1	1,435.0	-20.5	-1,273.2	1.50	-0.95	-1.16
13,528.0	88.30	357.80	12,115.2	1,529.8	-24.2	-1,358.5	0.33	0.32	0.11
13,623.0	89.90	357.30	12,116.6	1,624.7	-28.2	-1,444.0	1.76	1.68	-0.53
13,717.0	91.10	358.50	12,115.8	1,718.7	-31.7	-1,528.4	1.81	1.28	1.28
13,813.0	90.00	357.30	12,114.9	1,814.6	-35.2	-1,614.5	1.70	-1.15	-1.25
13,907.0	91.70	0.40	12,113.5	1,908.5	-37.1	-1,698.1	3.76	1.81	3.30
14,002.0	90.60	358.80	12,111.6	2,003.5	-37.8	-1,782.1	2.04	-1.16	-1.68
14,097.0	90.50	358.90	12,110.7	2,098.5	-39.7	-1,866.6	0.15	-0.11	0.11
14,191.0	91.20	359.60	12,109.3	2,192.5	-40.9	-1,950.0	1.05	0.74	0.74
14,287.0	90.50	359.70	12,107.9	2,288.5	-41.5	-2,034.7	0.74	-0.73	0.10
14,382.0	90.40	359.70	12,107.1	2,383.5	-42.0	-2,118.6	0.11	-0.11	0.00
14,476.0	88.30	359.70	12,108.2	2,477.4	-42.5	-2,201.6	2.23	-2.23	0.00
14,570.0	88.10	359.20	12,111.1	2,571.4	-43.4	-2,284.8	0.57	-0.21	-0.53
14,665.0	87.30	358.90	12,115.0	2,666.3	-44.9	-2,369.1	0.90	-0.84	-0.32
14,760.0	89.30	358.50	12,117.8	2,761.2	-47.1	-2,453.7	2.15	2.11	-0.42
14,855.0	89.80	359.00	12,118.5	2,856.2	-49.2	-2,538.3	0.74	0.53	0.53

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West Unit 008H
Project:	Lea County N.M.	TVD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Site:	Section 8-26S-32E Red Hills West 008H	MD Reference:	3186 + 27 @ 3213.0usft (Patterson 220)
Well:	Red Hills West Unit 008H	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)
14,949.0	90.90	359.30	12,117.9	2,950.2	-50.6	-2,621.7	1.21	1.17	0.32
15,044.0	90.90	359.10	12,116.5	3,045.2	-51.9	-2,706.0	0.21	0.00	-0.21
15,138.0	89.80	358.50	12,115.9	3,139.2	-53.9	-2,789.7	1.33	-1.17	-0.64
15,233.0	91.00	0.30	12,115.2	3,234.1	-54.9	-2,873.8	2.28	1.26	1.89
15,328.0	90.40	359.60	12,114.1	3,329.1	-54.9	-2,957.5	0.97	-0.63	-0.74
15,422.0	90.50	359.10	12,113.3	3,423.1	-56.0	-3,040.7	0.54	0.11	-0.53
15,517.0	91.60	0.60	12,111.6	3,518.1	-56.3	-3,124.5	1.96	1.16	1.58
15,612.0	91.20	0.90	12,109.3	3,613.1	-55.0	-3,207.5	0.53	-0.42	0.32
15,706.0	90.70	1.70	12,107.7	3,707.0	-52.9	-3,289.3	1.00	-0.53	0.85
15,801.0	89.10	1.10	12,107.9	3,802.0	-50.6	-3,371.8	1.80	-1.68	-0.63
15,896.0	89.10	1.10	12,109.4	3,897.0	-48.7	-3,454.5	0.00	0.00	0.00
15,990.0	88.40	1.40	12,111.4	3,990.9	-46.7	-3,536.3	0.81	-0.74	0.32
16,085.0	88.30	1.90	12,114.1	4,085.8	-43.9	-3,618.6	0.54	-0.11	0.53
16,180.0	87.00	1.30	12,118.0	4,180.7	-41.3	-3,700.9	1.51	-1.37	-0.63
16,274.0	88.00	359.70	12,122.1	4,274.6	-40.5	-3,783.2	2.01	1.06	-1.70
16,369.0	90.80	0.00	12,123.1	4,369.6	-40.7	-3,866.9	2.96	2.95	0.32
16,462.0	90.60	359.00	12,122.0	4,462.6	-41.5	-3,949.2	1.10	-0.22	-1.08
16,557.0	92.30	358.60	12,119.6	4,557.5	-43.5	-4,033.7	1.84	1.79	-0.42
16,652.0	90.50	357.70	12,117.3	4,652.5	-46.6	-4,118.8	2.12	-1.89	-0.95
16,746.0	90.70	358.20	12,116.3	4,746.4	-50.0	-4,203.1	0.57	0.21	0.53
16,809.0	90.60	358.60	12,115.6	4,809.4	-51.7	-4,259.4	0.65	-0.16	0.63
16,860.0	90.60	358.60	12,115.0	4,860.3	-53.0	-4,304.8	0.00	0.00	0.00

16860' MD Projected to Bit - PBHL Red Hills West 008H

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
16,860.0	12,115.0	4,860.3	-53.0	16860' MD Projected to Bit



May 17, 2017

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

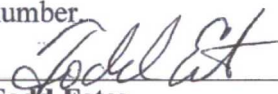
Attn: Jackie Lathan

Re: Mewbourne Oil Company
Red Hills West Unit #008H
WC-025 G-08 S263205N; Upper Wolfcamp
Lea County, New Mexico
API# 30-025-42901

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>
John Bult	Original Hole	1,131ft. to 16,809ft.	04-09-17 to 04-30-17	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\Red Hills West Unit #008H\M171027

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



May 17, 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 09, 2017, through April 30, 2017 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 1,131 feet to a depth of 16,809 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 Red Hills West Unit #008H well, API # **30-025-42901** in Lea 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**



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project	Lea County N.M.		
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 8-26S-32E Red Hills West 008H		
Site Position:		Northing: 382,678.18 usft	Latitude: 32° 3' 1.821 N
From: Map		Easting: 696,810.00 usft	Longitude: 103° 41' 53.192 W
Position Uncertainty: 0.0 usft		Slot Radius: 13-3/16 "	Grid Convergence: 0.34 °

Well	Red Hills West Unit 008H		
Well Position	+N/-S 0.0 usft	Northing: 382,678.18 usft	Latitude: 32° 3' 1.821 N
	+E/-W 0.0 usft	Easting: 696,810.00 usft	Longitude: 103° 41' 53.192 W
Position Uncertainty	0.0 usft	Wellhead Elevation: 27.0 usft	Ground Level: 3,186.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/30/2017	7.02	59.89	47,845.41571000

Design	Original Hole			
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	151.71



Microsoft MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey Program Date 5/17/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	1,100.0	Phoenix Gyro Survey (Original Hole)	NSG-CT_WL	Continuous north-seeking gyro on wireline
1,100.0	16,860.0	MWD Vertical Survey (Original Hole)	MWD	MWD v3:standard declination

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
1,100.0	0.23	138.00	1,100.0	-1.2	-1.1	1.6	222.59	Tie-In
1,131.0	0.50	156.60	1,131.0	-1.3	-1.0	1.6	216.13	
1,258.0	0.50	130.60	1,258.0	-2.2	-0.3	2.2	188.56	
1,385.0	0.50	158.70	1,385.0	-3.1	0.3	3.1	174.60	
1,511.0	0.20	131.80	1,511.0	-3.7	0.7	3.8	170.07	
1,638.0	0.40	158.60	1,638.0	-4.3	1.0	4.4	167.13	
1,764.0	0.20	213.70	1,764.0	-4.9	1.0	5.0	168.22	
1,891.0	0.10	173.80	1,891.0	-5.2	0.9	5.3	170.06	
2,018.0	0.40	121.80	2,018.0	-5.5	1.3	5.7	166.79	
2,081.0	0.70	141.90	2,081.0	-5.9	1.7	6.2	163.85	
2,176.0	0.40	146.30	2,176.0	-6.7	2.3	7.1	161.27	
2,271.0	0.40	108.50	2,271.0	-7.1	2.8	7.6	158.63	
2,365.0	0.30	183.10	2,365.0	-7.4	3.1	8.0	157.56	
2,461.0	0.40	140.50	2,461.0	-7.9	3.3	8.6	157.63	
2,555.0	0.30	176.60	2,555.0	-8.4	3.5	9.1	157.52	
2,650.0	0.30	123.40	2,650.0	-8.8	3.7	9.6	157.17	
2,745.0	0.20	30.00	2,745.0	-8.8	4.0	9.7	155.57	
2,839.0	0.30	117.90	2,839.0	-8.8	4.3	9.8	153.90	
2,934.0	0.50	119.00	2,934.0	-9.1	4.9	10.3	151.77	
3,029.0	0.70	123.10	3,028.9	-9.6	5.7	11.2	149.20	
3,124.0	0.40	137.20	3,123.9	-10.2	6.4	12.0	147.65	



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
3,218.0	0.30	99.80	3,217.9	-10.4	6.9	12.5	146.55
3,313.0	0.60	62.10	3,312.9	-10.3	7.6	12.8	143.51
3,408.0	0.70	66.50	3,407.9	-9.8	8.6	13.0	138.84
3,503.0	0.70	62.20	3,502.9	-9.3	9.6	13.4	134.05
3,598.0	0.60	46.20	3,597.9	-8.7	10.5	13.6	129.63
3,693.0	0.90	63.90	3,692.9	-8.0	11.5	14.0	124.82
3,787.0	0.80	76.80	3,786.9	-7.5	12.8	14.9	120.45
3,882.0	0.70	86.40	3,881.9	-7.3	14.0	15.8	117.62
3,977.0	0.80	130.60	3,976.9	-7.7	15.1	17.0	117.10
4,071.0	1.40	141.30	4,070.9	-9.1	16.3	18.7	119.02
4,166.0	1.40	136.30	4,165.8	-10.8	17.9	20.9	121.17
4,260.0	1.30	136.90	4,259.8	-12.4	19.4	23.0	122.64
4,290.0	1.00	135.20	4,289.8	-12.8	19.8	23.6	122.98
4,358.0	0.70	133.90	4,357.8	-13.6	20.5	24.6	123.46
4,452.0	0.70	142.30	4,451.8	-14.4	21.3	25.7	124.10
4,547.0	0.80	157.40	4,546.8	-15.5	21.9	26.8	125.27
4,642.0	0.80	143.30	4,641.8	-16.6	22.5	28.0	126.41
4,737.0	0.90	152.00	4,736.8	-17.8	23.3	29.3	127.41
4,831.0	0.60	132.80	4,830.8	-18.8	24.0	30.5	128.08
4,926.0	0.80	131.60	4,925.7	-19.6	24.9	31.6	128.23
5,021.0	0.90	128.10	5,020.7	-20.5	25.9	33.1	128.29
5,115.0	1.00	144.60	5,114.7	-21.6	27.0	34.6	128.67
5,210.0	1.00	165.20	5,209.7	-23.1	27.7	36.0	129.82
5,305.0	1.00	154.40	5,304.7	-24.6	28.3	37.5	131.08
5,400.0	0.80	157.50	5,399.7	-26.0	28.9	38.8	132.00
5,495.0	1.00	171.40	5,494.7	-27.4	29.2	40.1	133.16
5,590.0	0.80	145.00	5,589.7	-28.8	29.8	41.4	134.05



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
5,685.0	0.40	227.00	5,684.7	-29.6	29.9	42.0	134.68
5,780.0	1.10	144.10	5,779.7	-30.5	30.2	42.9	135.32
5,874.0	0.90	148.70	5,873.6	-31.9	31.1	44.5	135.72
5,969.0	0.80	145.90	5,968.6	-33.1	31.9	45.9	136.07
6,064.0	0.90	159.40	6,063.6	-34.3	32.5	47.3	136.57
6,159.0	0.70	157.20	6,158.6	-35.6	33.0	48.5	137.15
6,254.0	0.80	159.70	6,253.6	-36.7	33.4	49.6	137.67
6,348.0	0.60	163.50	6,347.6	-37.8	33.8	50.7	138.19
6,443.0	0.70	161.80	6,442.6	-38.8	34.1	51.7	138.69
6,538.0	0.80	155.30	6,537.6	-40.0	34.6	52.9	139.14
6,632.0	0.70	156.90	6,631.6	-41.1	35.1	54.0	139.52
6,727.0	0.70	166.00	6,726.6	-42.2	35.4	55.1	139.97
6,821.0	0.70	177.10	6,820.6	-43.3	35.6	56.1	140.58
6,916.0	0.70	154.30	6,915.5	-44.4	35.9	57.1	141.06
7,010.0	0.70	140.50	7,009.5	-45.4	36.5	58.3	141.19
7,105.0	0.80	143.90	7,104.5	-46.4	37.3	59.5	141.21
7,200.0	1.10	187.20	7,199.5	-47.8	37.5	60.8	141.86
7,294.0	1.40	183.20	7,293.5	-49.9	37.4	62.3	143.15
7,389.0	1.60	189.10	7,388.5	-52.3	37.1	64.1	144.67
7,483.0	1.30	180.80	7,482.4	-54.7	36.9	66.0	146.01
7,578.0	1.80	215.60	7,577.4	-57.0	36.0	67.4	147.72
7,675.0	1.70	209.40	7,674.4	-59.5	34.4	68.7	149.96
7,770.0	1.60	210.80	7,769.3	-61.8	33.0	70.1	151.89
7,865.0	1.80	204.40	7,864.3	-64.3	31.7	71.7	153.75
7,959.0	1.70	194.80	7,958.2	-67.0	30.8	73.8	155.35
8,054.0	2.00	195.70	8,053.2	-70.0	30.0	76.1	156.83
8,148.0	2.00	198.40	8,147.1	-73.1	29.0	78.7	158.37



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
8,243.0	2.10	201.40	8,242.1	-76.3	27.8	81.2	159.96
8,337.0	2.20	199.00	8,336.0	-79.6	26.6	84.0	161.51
8,432.0	2.00	200.50	8,430.9	-82.9	25.4	86.7	162.94
8,526.0	1.90	207.50	8,524.9	-85.8	24.2	89.2	164.28
8,621.0	1.40	204.10	8,619.8	-88.3	22.9	91.2	165.43
8,716.0	1.60	185.50	8,714.8	-90.7	22.3	93.4	166.15
8,811.0	1.50	182.70	8,809.8	-93.2	22.2	95.8	166.63
8,906.0	1.50	172.40	8,904.7	-95.7	22.3	98.2	166.90
9,001.0	1.70	200.40	8,999.7	-98.2	21.9	100.7	167.41
9,096.0	2.20	232.60	9,094.7	-100.7	20.0	102.6	168.76
9,190.0	2.30	230.50	9,188.6	-103.0	17.1	104.4	170.56
9,284.0	2.00	216.60	9,282.5	-105.5	14.7	106.5	172.08
9,379.0	2.00	219.10	9,377.5	-108.1	12.6	108.8	173.33
9,474.0	1.90	218.70	9,472.4	-110.6	10.6	111.1	174.52
9,568.0	2.00	204.50	9,566.4	-113.3	9.0	113.7	175.48
9,662.0	2.00	220.40	9,660.3	-116.1	7.2	116.3	176.44
9,756.0	2.50	222.40	9,754.2	-118.8	4.8	118.9	177.70
9,850.0	2.20	228.90	9,848.1	-121.5	2.0	121.5	179.04
9,945.0	1.50	179.80	9,943.1	-124.0	0.7	124.0	179.69
10,040.0	1.70	167.20	10,038.1	-126.6	1.0	126.6	179.56
10,134.0	1.00	184.40	10,132.0	-128.8	1.2	128.8	179.46
10,229.0	1.20	176.90	10,227.0	-130.6	1.2	130.6	179.47
10,324.0	1.20	151.80	10,322.0	-132.5	1.7	132.5	179.25
10,419.0	0.30	151.70	10,417.0	-133.6	2.3	133.6	179.00
10,513.0	0.40	302.60	10,511.0	-133.6	2.2	133.6	179.07
10,609.0	0.80	316.40	10,607.0	-132.9	1.4	132.9	179.39
10,704.0	0.40	329.60	10,702.0	-132.2	0.8	132.2	179.65



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
10,799.0	0.50	126.70	10,797.0	-132.1	1.0	132.1	179.58
10,893.0	0.40	164.70	10,891.0	-132.7	1.4	132.7	179.41
10,988.0	0.60	148.20	10,986.0	-133.4	1.7	133.4	179.26
11,082.0	0.30	159.40	11,080.0	-134.1	2.1	134.1	179.11
11,177.0	0.40	174.00	11,175.0	-134.6	2.2	134.7	179.07
11,272.0	0.90	198.50	11,270.0	-135.7	2.0	135.7	179.16
11,366.0	1.40	184.80	11,363.9	-137.5	1.7	137.5	179.31
11,402.1	1.27	185.32	11,400.1	-138.4	1.6	138.4	179.34
B.B. Red Hills West 008H							
11,450.0	1.10	186.20	11,447.9	-139.3	1.5	139.4	179.39
11,482.0	0.90	194.20	11,479.9	-139.9	1.4	139.9	179.43
11,514.0	1.70	327.20	11,511.9	-139.7	1.1	139.7	179.56
11,546.0	6.30	347.50	11,543.8	-137.6	0.4	137.6	179.82
11,577.0	9.50	1.10	11,574.5	-133.4	0.1	133.4	179.95
11,609.0	12.00	1.00	11,606.0	-127.4	0.2	127.4	179.90
11,640.0	14.20	358.20	11,636.2	-120.4	0.2	120.4	179.92
11,672.0	16.30	357.40	11,667.0	-112.0	-0.2	112.0	180.08
11,703.0	18.50	358.50	11,696.6	-102.7	-0.5	102.7	180.27
11,735.0	20.60	358.70	11,726.8	-92.0	-0.7	92.0	180.47
11,767.0	21.90	358.20	11,756.6	-80.4	-1.1	80.5	180.76
11,798.0	24.20	357.90	11,785.1	-68.3	-1.5	68.3	181.24
11,830.0	27.40	357.60	11,813.9	-54.4	-2.0	54.4	182.14
11,861.0	31.20	356.10	11,840.9	-39.3	-2.9	39.4	184.19
11,892.0	34.20	355.40	11,867.0	-22.6	-4.1	22.9	190.35
11,924.0	36.50	355.10	11,893.1	-4.1	-5.7	7.0	233.99
11,956.0	39.40	355.30	11,918.4	15.5	-7.3	17.1	334.79
11,987.0	42.40	356.50	11,941.8	35.7	-8.7	36.8	346.25



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
12,019.0	46.00	0.60	11,964.7	58.0	-9.3	58.8	350.91
12,050.0	49.30	0.40	11,985.6	80.9	-9.1	81.4	353.60
12,082.0	52.50	0.20	12,005.8	105.8	-9.0	106.1	355.16
12,113.0	57.50	1.40	12,023.6	131.2	-8.6	131.4	356.25
12,145.0	61.10	0.90	12,039.9	158.7	-8.0	158.9	357.10
12,176.0	64.00	359.70	12,054.2	186.2	-7.9	186.3	357.57
12,208.0	68.30	359.00	12,067.1	215.4	-8.2	215.6	357.81
12,220.0	69.80	358.70	12,071.4	226.6	-8.5	226.8	357.86
12,263.0	74.90	359.00	12,084.4	267.6	-9.3	267.7	358.01
12,295.0	78.00	358.50	12,091.9	298.7	-10.0	298.8	358.09
12,326.0	80.70	358.30	12,097.7	329.1	-10.8	329.3	358.12
12,358.0	82.00	358.30	12,102.5	360.7	-11.8	360.9	358.13
12,390.0	83.10	358.60	12,106.6	392.5	-12.6	392.7	358.16
12,421.0	84.90	359.40	12,109.9	423.3	-13.1	423.5	358.22
12,453.0	87.40	359.60	12,112.0	455.2	-13.4	455.4	358.31
12,485.0	90.60	359.80	12,112.6	487.2	-13.6	487.4	358.40
12,570.1	89.60	359.35	12,112.4	572.3	-14.2	572.5	358.58
LP Red Hills West 008H							
12,579.0	89.50	359.30	12,112.5	581.2	-14.3	581.4	358.59
12,674.0	89.50	359.70	12,113.3	676.2	-15.2	676.4	358.72
12,769.0	89.50	359.70	12,114.2	771.2	-15.7	771.3	358.84
12,864.0	89.40	359.50	12,115.1	866.2	-16.3	866.3	358.92
12,958.0	90.80	359.40	12,114.9	960.2	-17.2	960.3	358.97
13,053.0	92.50	1.10	12,112.2	1,055.1	-16.8	1,055.3	359.09
13,148.0	91.40	359.80	12,108.9	1,150.1	-16.1	1,150.2	359.20
13,243.0	89.50	359.80	12,108.2	1,245.1	-16.4	1,245.2	359.25
13,338.0	88.90	358.80	12,109.5	1,340.0	-17.6	1,340.2	359.25



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
13,433.0	88.00	357.70	12,112.1	1,435.0	-20.5	1,435.1	359.18
13,528.0	88.30	357.80	12,115.2	1,529.8	-24.2	1,530.0	359.09
13,623.0	89.90	357.30	12,116.6	1,624.7	-28.2	1,625.0	359.00
13,717.0	91.10	358.50	12,115.8	1,718.7	-31.7	1,719.0	358.94
13,813.0	90.00	357.30	12,114.9	1,814.6	-35.2	1,814.9	358.89
13,907.0	91.70	0.40	12,113.5	1,908.5	-37.1	1,908.9	358.89
14,002.0	90.60	358.80	12,111.6	2,003.5	-37.8	2,003.9	358.92
14,097.0	90.50	358.90	12,110.7	2,098.5	-39.7	2,098.9	358.92
14,191.0	91.20	359.60	12,109.3	2,192.5	-40.9	2,192.9	358.93
14,287.0	90.50	359.70	12,107.9	2,288.5	-41.5	2,288.8	358.96
14,382.0	90.40	359.70	12,107.1	2,383.5	-42.0	2,383.8	358.99
14,476.0	88.30	359.70	12,108.2	2,477.4	-42.5	2,477.8	359.02
14,570.0	88.10	359.20	12,111.1	2,571.4	-43.4	2,571.8	359.03
14,665.0	87.30	358.90	12,115.0	2,666.3	-44.9	2,666.7	359.03
14,760.0	89.30	358.50	12,117.8	2,761.2	-47.1	2,761.6	359.02
14,855.0	89.80	359.00	12,118.5	2,856.2	-49.2	2,856.6	359.01
14,949.0	90.90	359.30	12,117.9	2,950.2	-50.6	2,950.6	359.02
15,044.0	90.90	359.10	12,116.5	3,045.2	-51.9	3,045.6	359.02
15,138.0	89.80	358.50	12,115.9	3,139.2	-53.9	3,139.6	359.02
15,233.0	91.00	0.30	12,115.2	3,234.1	-54.9	3,234.6	359.03
15,328.0	90.40	359.60	12,114.1	3,329.1	-54.9	3,329.6	359.05
15,422.0	90.50	359.10	12,113.3	3,423.1	-56.0	3,423.6	359.06
15,517.0	91.60	0.60	12,111.6	3,518.1	-56.3	3,518.5	359.08
15,612.0	91.20	0.90	12,109.3	3,613.1	-55.0	3,613.5	359.13
15,706.0	90.70	1.70	12,107.7	3,707.0	-52.9	3,707.4	359.18
15,801.0	89.10	1.10	12,107.9	3,802.0	-50.6	3,802.3	359.24
15,896.0	89.10	1.10	12,109.4	3,897.0	-48.7	3,897.3	359.28



Microsoft MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N.M.
Site: Section 8-26S-32E Red Hills West 008H
Well: Red Hills West Unit 008H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West Unit 008H
TVD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
MD Reference: 3186 + 27 @ 3213.0usft (Patterson 220)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
15,990.0	88.40	1.40	12,111.4	3,990.9	-46.7	3,991.2	359.33
16,085.0	88.30	1.90	12,114.1	4,085.8	-43.9	4,086.1	359.38
16,180.0	87.00	1.30	12,118.0	4,180.7	-41.3	4,180.9	359.43
16,274.0	88.00	359.70	12,122.1	4,274.6	-40.5	4,274.8	359.46
16,369.0	90.80	0.00	12,123.1	4,369.6	-40.7	4,369.8	359.47
16,462.0	90.60	359.00	12,122.0	4,462.6	-41.5	4,462.8	359.47
16,557.0	92.30	358.60	12,119.6	4,557.5	-43.5	4,557.7	359.45
16,652.0	90.50	357.70	12,117.3	4,652.5	-46.6	4,652.7	359.43
16,746.0	90.70	358.20	12,116.3	4,746.4	-50.0	4,746.7	359.40
16,809.0	90.60	358.60	12,115.6	4,809.4	-51.7	4,809.6	359.38
16,860.0	90.60	358.60	12,115.0	4,860.3	-53.0	4,860.6	359.38

16860' MD Projected to Bit - PBHL Red Hills West 008H

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
16,860.0	12,115.0	4,860.4	-53.0	16860' MD Projected to Bit

Checked By: _____ Approved By: _____ Date: _____