



COMPANY: Mewbourne Oil Company
WELL: Red Hills West 21 W1BO Fed Com #3H
COUNTY: Lea County N. M. Nad (83)
DATUM: North American Datum 1983

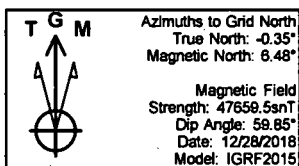


OFFICE: 936.582.7296

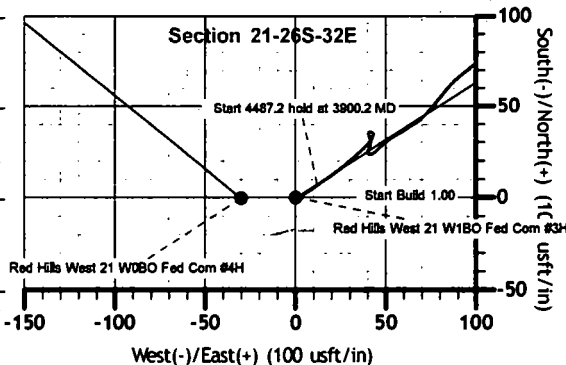
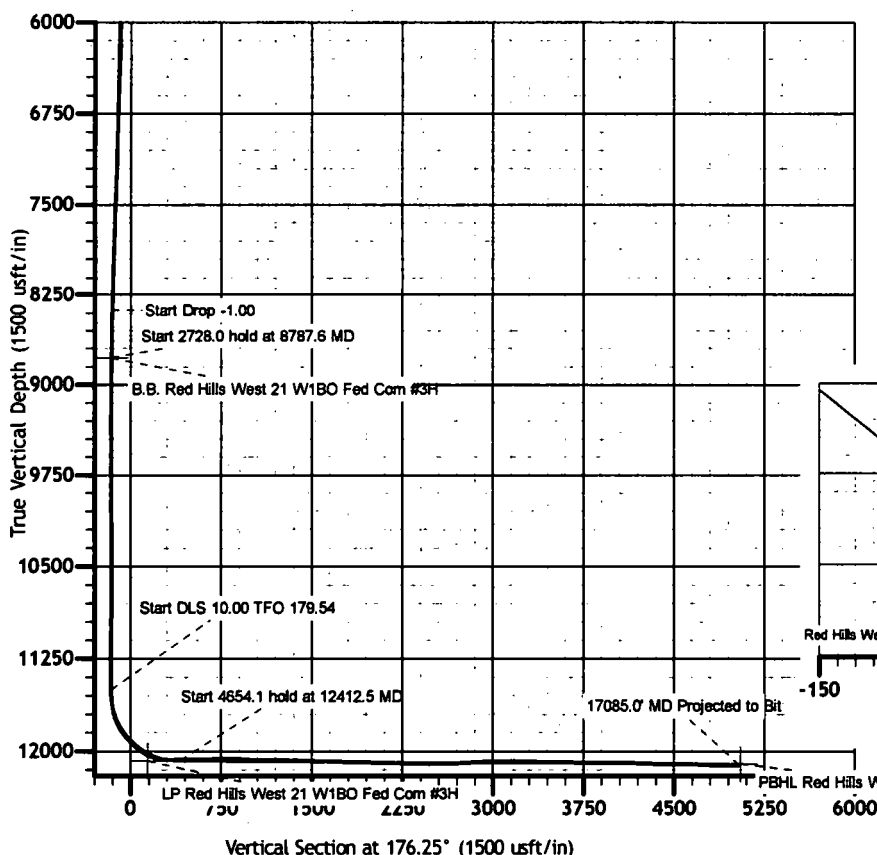
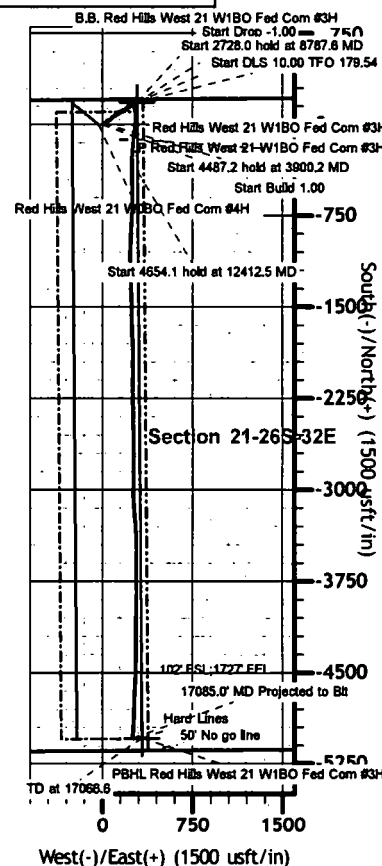
RIG: Patterson 217
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.48°

GEODETIC ZONE: New Mexico Eastern Zone										
3158 + 27 @ 3185.0ust (Patterson 217)										
GROUND ELEVATION: 3158.0										
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot			
	0.0	0.0	377088.70	744505.20	32° 2' 6.006 N	103° 40' 39.668 W				
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3500.0	0.00	0.00	3500.0	0.0	0.0	0.00	0.00	0.0	
3	3900.2	4.00	57.77	3899.9	7.5	11.8	1.00	57.77	-8.7	
4	8387.4	4.00	57.77	8376.2	174.5	276.7	0.00	0.00	-156.0	
5	8787.6	0.00	0.00	8778.1	181.9	288.5	1.00	180.00	-162.7	B.B. Red Hills West 21 W1BO Fed Com #3H
6	11515.6	0.00	0.00	11504.0	181.9	288.5	0.00	0.00	-162.7	
7	12412.5	89.69	179.54	12077.0	-387.9	293.1	10.00	179.54	408.2	
8	17066.6	89.69	179.54	12102.0	-5041.8	330.0	0.00	0.00	5052.6	PBHL Red Hills West 21 W1BO Fed Com #3H

SHL: 205' FNL; 1950' FEL
Section 21-26S-32E
PBHL: 100' FSL; 1650' FEL
Section 21-26S-32E



HOBBS OCD
MAY 10 2019
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MEWBOURNE
OIL COMPANY

Mewbourne Oil Company

Lea County N. M. Nad (83)

Section 21-26S-32E Red Hills West 21W1BO Fed Com

Red Hills West 21W1BO Fed Com #3H

Orginal Hole

Design: Orginal Hole

Standard Survey Report

19 February, 2019

STRYKER
DIRECTIONAL

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West 21 W1BO Fed Com #3H
Project:	Lea County N. M. Nad (83)	TVD Reference:	3158 + 27 @ 3185.0usft (Patterson 217)
Site:	Section 21-26S-32E Red Hills West 21 W1BO Fed Com	MD Reference:	3158 + 27 @ 3185.0usft (Patterson 217)
Well:	Red Hills West 21 W1BO Fed Com #3H	North Reference:	Grid
Wellbore:	Orginal Hole	Survey Calculation Method:	Minimum Curvature
Design:	Orginal Hole	Database:	Stryker_EDM

Project	Lea County N. M. Nad (83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Section 21-26S-32E Red Hills West 21 W1BO Fed Com			
Site Position:		Northing:	377,088.70 usft	Latitude:	32° 2' 6.006 N
From:	Map	Easting:	744,505.20 usft	Longitude:	103° 40' 39.668 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.35 °

Well	Red Hills West 21 W1BO Fed Com #3H					
Well Position	+N/-S	0.0 usft	Northing:	377,088.70 usft	Latitude:	32° 2' 6.006 N
	+E/-W	0.0 usft	Easting:	744,505.20 usft	Longitude:	103° 40' 39.668 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,158.0 usft

Wellbore	Orginal Hole				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/28/18	6.82	59.85	47,659.47247076

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

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	58.41

Survey Program	Date 01/30/19				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	17,085.0	MWD Survey (Orginal 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	0.57	101.15	100.0	-0.1	0.5	0.4	0.57	0.57	0.00
200.0	1.44	58.98	200.0	0.5	2.1	2.0	1.09	0.87	-42.17
300.0	2.18	58.09	299.9	2.1	4.7	5.1	0.74	0.74	-0.89
400.0	2.63	56.70	399.8	4.4	8.3	9.3	0.45	0.45	-1.39
500.0	3.42	54.96	499.7	7.3	12.6	14.6	0.80	0.79	-1.74
600.0	4.65	56.86	599.5	11.3	18.5	21.6	1.24	1.23	1.90
634.0	4.99	55.19	633.3	12.9	20.8	24.5	1.08	1.00	-4.91
756.0	4.20	49.80	754.9	18.8	28.6	34.2	0.74	-0.65	-4.42
929.0	3.60	47.80	927.5	26.5	37.5	45.8	0.36	-0.35	-1.16

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Site:	Section 21-26S-32E Red Hills West 21 W1BO Fed Com	MD Reference:	3158 + 27 @ 3185.0usft (Patterson 217)
Well:	Red Hills West 21 W1BO Fed Com #3H	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)
1,119.0	1.00	16.10	1,117.4	32.1	42.4	52.9	1.47	-1.37	-16.68
1,309.0	0.60	26.30	1,307.4	34.6	43.3	55.0	0.22	-0.21	5.37
1,497.0	0.70	280.30	1,495.4	35.7	42.6	54.9	0.55	0.05	-56.38
1,687.0	0.40	270.90	1,685.3	35.9	40.8	53.5	0.16	-0.16	-4.95
1,877.0	1.10	157.80	1,875.3	34.2	40.8	52.7	0.69	0.37	-59.53
2,066.0	0.80	174.90	2,064.3	31.2	41.6	51.8	0.22	-0.16	9.05
2,256.0	0.40	191.80	2,254.3	29.3	41.6	50.7	0.23	-0.21	8.89
2,445.0	0.40	197.60	2,443.3	28.0	41.2	49.8	0.02	0.00	3.07
2,635.0	0.40	213.10	2,633.3	26.8	40.7	48.7	0.06	0.00	8.16
2,825.0	0.40	195.70	2,823.3	25.6	40.1	47.6	0.06	0.00	-9.16
3,015.0	0.40	160.60	3,013.3	24.4	40.2	47.0	0.13	0.00	-18.47
3,205.0	0.20	106.50	3,203.3	23.6	40.7	47.1	0.17	-0.11	-28.47
3,395.0	0.60	77.00	3,393.3	23.8	42.0	48.2	0.23	0.21	-15.53
3,584.0	1.50	47.40	3,582.2	25.7	44.8	51.6	0.54	0.48	-15.66
3,773.0	2.10	49.00	3,771.1	29.6	49.2	57.4	0.32	0.32	0.85
3,963.0	1.70	60.70	3,961.0	33.3	54.3	63.7	0.29	-0.21	6.16
4,153.0	3.00	57.40	4,150.9	37.3	60.9	71.5	0.69	0.68	-1.74
4,335.0	1.60	57.50	4,332.7	41.3	67.1	78.8	0.77	-0.77	0.05
4,480.0	1.50	48.20	4,477.7	43.6	70.2	82.7	0.19	-0.07	-6.41
4,668.0	3.90	39.60	4,665.4	50.2	76.1	91.1	1.29	1.28	-4.57
4,858.0	3.60	39.70	4,855.0	59.7	84.1	102.9	0.16	-0.16	0.05
5,048.0	4.40	51.30	5,044.6	68.9	93.6	115.8	0.60	0.42	6.11
5,237.0	3.70	49.50	5,233.1	77.4	103.9	129.0	0.38	-0.37	-0.95
5,427.0	3.30	58.70	5,422.8	84.2	113.2	140.5	0.36	-0.21	4.84
5,617.0	3.20	59.70	5,612.4	89.7	122.4	151.3	0.06	-0.05	0.53
5,806.0	3.10	54.10	5,801.2	95.4	131.1	161.7	0.17	-0.05	-2.96
5,996.0	3.10	52.40	5,990.9	101.5	139.4	171.9	0.05	0.00	-0.89
6,185.0	3.60	67.10	6,179.6	107.0	148.9	182.8	0.52	0.26	7.78
6,375.0	2.90	68.40	6,369.3	111.0	158.8	193.5	0.37	-0.37	0.68
6,564.0	2.60	71.60	6,558.0	114.2	167.4	202.4	0.18	-0.16	1.69
6,755.0	2.90	53.70	6,748.8	118.4	175.4	211.4	0.47	0.16	-9.37
6,944.0	3.10	62.80	6,937.6	123.6	183.8	221.3	0.27	0.11	4.81
7,133.0	2.60	73.50	7,126.3	127.1	192.4	230.5	0.39	-0.26	5.66
7,322.0	3.60	41.60	7,315.1	132.8	200.5	240.3	1.03	0.53	-16.88
7,512.0	3.20	41.70	7,504.7	141.2	208.0	251.1	0.21	-0.21	0.05
7,701.0	3.20	42.90	7,693.4	149.0	215.1	261.2	0.04	0.00	0.63
7,890.0	3.80	51.20	7,882.1	156.8	223.5	272.5	0.41	0.32	4.39
8,080.0	2.70	50.50	8,071.8	163.6	231.9	283.2	0.58	-0.58	-0.37
8,269.0	1.50	39.30	8,260.6	168.3	238.9	290.0	0.67	-0.63	-5.93
8,458.0	1.20	50.40	8,449.6	171.5	240.0	294.3	0.21	-0.16	5.87
8,648.0	0.20	335.50	8,639.6	173.1	241.4	296.3	0.81	-0.53	-39.42
8,783.7	1.70	299.65	8,775.2	174.3	239.5	295.3	1.13	1.10	-26.42



Microsoft Survey Report



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Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
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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)
B.B. Red Hills West 21 W1BO Fed Com #3H									
8,837.0	2.30	298.50	8,828.5	175.2	237.9	294.4	1.13	1.13	-2.15
9,027.0	1.10	279.00	9,018.4	177.3	232.8	291.1	0.69	-0.63	-10.26
9,216.0	2.50	294.10	9,207.3	179.2	227.2	287.4	0.78	0.74	7.99
9,406.0	0.70	220.80	9,397.3	180.1	222.7	284.0	1.26	-0.95	-38.58
9,595.0	1.20	128.40	9,586.3	178.0	223.5	283.6	0.75	0.26	-48.89
9,785.0	0.50	125.90	9,776.2	176.2	225.7	284.6	0.37	-0.37	-1.32
9,974.0	0.40	28.40	9,965.2	176.3	226.7	285.4	0.36	-0.05	-51.59
10,165.0	1.20	91.90	10,156.2	176.8	229.0	287.7	0.57	0.42	33.25
10,354.0	1.10	178.90	10,345.2	175.0	231.0	288.4	0.84	-0.05	46.03
10,543.0	0.80	158.70	10,534.2	171.9	231.5	287.3	0.24	-0.16	-10.69
10,733.0	2.50	51.30	10,724.1	173.3	235.2	291.1	1.50	0.89	-56.53
10,922.0	1.10	51.20	10,913.0	177.0	239.9	297.0	0.74	-0.74	-0.05
11,112.0	0.40	35.50	11,103.0	178.7	241.7	299.4	0.38	-0.37	-8.26
11,301.0	0.50	142.10	11,292.0	178.6	242.6	300.1	0.38	0.05	56.40
11,452.0	1.40	61.70	11,443.0	178.9	244.6	302.1	0.93	0.60	-53.25
11,525.0	2.20	107.70	11,515.9	178.9	246.7	303.9	2.17	1.10	63.01
11,557.0	4.60	128.60	11,547.9	177.9	248.3	304.7	8.32	7.50	65.31
11,588.0	6.00	137.80	11,578.7	175.9	250.4	305.4	5.27	4.52	29.68
11,620.0	8.10	144.70	11,610.5	172.9	252.8	305.9	7.06	6.56	21.56
11,651.0	10.80	153.00	11,641.1	168.5	255.4	305.8	9.73	8.71	26.77
11,683.0	12.30	159.50	11,672.4	162.6	257.9	304.9	6.20	4.69	20.31
11,714.0	15.60	157.70	11,702.5	155.7	260.7	303.6	10.74	10.65	-5.81
11,746.0	20.50	162.80	11,732.9	146.3	263.9	301.5	16.08	15.31	15.94
11,777.0	24.50	165.80	11,761.6	134.9	267.1	298.2	13.42	12.90	9.68
11,809.0	27.00	167.10	11,790.4	121.4	270.4	293.9	8.01	7.81	4.06
11,840.0	30.60	168.90	11,817.5	108.8	273.5	288.9	11.94	11.61	5.81
11,872.0	35.10	172.90	11,844.4	89.7	276.2	282.2	15.61	14.06	12.50
11,903.0	39.10	177.00	11,869.1	71.0	277.8	273.9	15.16	12.90	13.23
11,935.0	42.10	181.30	11,893.4	50.2	278.1	263.2	12.82	9.38	13.44
11,966.0	44.50	184.30	11,916.0	29.0	277.0	251.2	10.20	7.74	9.68
11,998.0	47.30	186.50	11,938.3	6.1	274.9	237.4	10.05	8.75	6.88
12,029.0	49.80	186.00	11,958.8	-17.0	272.3	223.1	8.15	8.06	-1.61
12,060.0	51.60	185.70	11,978.4	-40.8	269.9	208.5	5.85	5.81	-0.97
12,092.0	55.10	185.40	11,997.5	-66.4	267.4	193.0	10.96	10.94	-0.94
12,123.0	60.00	186.60	12,014.2	-92.4	264.7	177.1	16.14	15.81	3.87
12,155.0	65.00	186.70	12,028.9	-120.6	261.4	159.5	15.63	15.63	0.31
12,173.2	67.17	186.70	12,036.3	-137.1	259.4	149.2	11.92	11.92	0.00
LP Red Hills West 21 W1BO Fed Com #3H									
12,181.0	68.10	186.70	12,039.3	-144.2	258.6	144.7	11.92	11.92	0.00
12,234.0	73.40	186.40	12,056.7	-193.9	252.9	113.8	10.01	10.00	-0.57
12,266.0	79.30	183.70	12,064.3	-224.9	250.2	95.3	20.18	18.44	-8.44
12,297.0	84.70	182.00	12,068.6	-255.5	248.6	78.0	18.25	17.42	-5.48

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Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
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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)
12,329.0	89.40	181.10	12,070.2	-287.5	247.8	60.5	14.95	14.69	-2.81
12,392.0	93.40	179.60	12,068.7	-350.4	247.4	27.2	6.78	6.35	-2.38
12,485.0	89.30	178.70	12,066.5	-443.4	248.8	-20.3	4.51	-4.41	-0.97
12,579.0	90.10	177.50	12,067.0	-537.3	251.9	-66.9	1.53	0.85	-1.28
12,674.0	91.40	181.10	12,065.8	-632.3	253.0	-115.6	4.03	1.37	3.79
12,769.0	93.90	185.10	12,061.4	-727.0	247.9	-169.6	4.96	2.63	4.21
12,863.0	87.90	184.50	12,059.9	-820.7	240.1	-225.3	6.41	-6.38	-0.64
12,957.0	86.20	181.50	12,064.7	-914.4	235.1	-278.6	3.66	-1.81	-3.19
13,052.0	88.40	180.60	12,069.2	-1,009.3	233.4	-329.8	2.50	2.32	-0.95
13,146.0	90.10	179.80	12,070.4	-1,103.2	233.1	-379.3	2.00	1.81	-0.85
13,240.0	90.00	180.30	12,070.4	-1,197.2	233.0	-428.6	0.54	-0.11	0.53
13,335.0	88.20	177.30	12,071.9	-1,292.2	235.0	-476.6	3.68	-1.89	-3.16
13,428.0	87.60	178.30	12,075.3	-1,385.1	238.6	-522.2	1.25	-0.65	1.08
13,522.0	87.60	178.10	12,079.2	-1,478.9	241.5	-568.9	0.21	0.00	-0.21
13,617.0	90.00	178.70	12,081.2	-1,573.9	244.2	-616.4	2.60	2.53	0.63
13,711.0	88.50	177.60	12,082.4	-1,667.8	247.2	-663.0	1.98	-1.60	-1.17
13,806.0	90.30	178.30	12,083.4	-1,762.7	250.6	-709.8	2.03	1.89	0.74
13,900.0	88.20	178.90	12,084.6	-1,856.7	252.9	-757.1	2.32	-2.23	0.64
13,995.0	88.40	180.10	12,087.5	-1,951.6	253.7	-806.1	1.28	0.21	1.26
14,090.0	88.00	180.00	12,090.4	-2,046.6	253.6	-855.9	0.43	-0.42	-0.11
14,184.0	88.90	181.90	12,093.0	-2,140.5	252.1	-906.4	2.24	0.96	2.02
14,278.0	88.20	178.50	12,095.4	-2,234.5	251.7	-955.9	3.69	-0.74	-3.62
14,373.0	90.10	178.70	12,096.8	-2,329.5	254.1	-1,003.7	2.01	2.00	0.21
14,468.0	90.10	178.50	12,096.6	-2,424.4	256.4	-1,051.4	0.21	0.00	-0.21
14,563.0	88.30	177.70	12,097.9	-2,519.4	259.5	-1,098.5	2.07	-1.89	-0.84
14,657.0	93.50	181.10	12,096.5	-2,613.3	260.5	-1,146.8	6.61	5.53	3.62
14,751.0	92.40	180.90	12,091.6	-2,707.2	258.9	-1,197.4	1.19	-1.17	-0.21
14,845.0	92.80	180.00	12,087.4	-2,801.1	258.1	-1,247.2	1.05	0.43	-0.86
14,940.0	93.20	180.90	12,082.4	-2,895.9	257.4	-1,297.5	1.04	0.42	0.95
15,034.0	90.80	179.50	12,079.1	-2,989.9	257.1	-1,347.0	2.86	-2.55	-1.49
15,129.0	88.00	176.60	12,080.1	-3,084.8	260.3	-1,394.0	4.24	-2.95	-3.05
15,224.0	90.30	175.20	12,081.5	-3,179.5	267.1	-1,437.8	2.83	2.42	-1.47
15,318.0	90.20	175.60	12,081.1	-3,273.2	274.6	-1,480.5	0.44	-0.11	0.43
15,413.0	88.30	176.90	12,082.3	-3,368.0	280.8	-1,524.8	2.42	-2.00	1.37
15,507.0	89.10	179.00	12,084.5	-3,461.9	284.2	-1,571.1	2.39	0.85	2.23
15,602.0	89.40	178.90	12,085.7	-3,556.9	285.9	-1,619.4	0.33	0.32	-0.11
15,696.0	88.40	180.20	12,087.5	-3,650.9	286.7	-1,668.0	1.74	-1.06	1.38
15,791.0	89.30	180.10	12,089.4	-3,745.8	286.4	-1,717.9	0.95	0.95	-0.11
15,886.0	89.60	180.20	12,090.3	-3,840.8	286.2	-1,767.9	0.33	0.32	0.11
15,980.0	90.50	182.20	12,090.3	-3,934.8	284.2	-1,818.8	2.33	0.96	2.13
16,075.0	90.40	182.30	12,089.5	-4,029.7	280.5	-1,871.7	0.15	-0.11	0.11
16,169.0	87.60	180.20	12,091.2	-4,123.7	278.4	-1,922.7	3.72	-2.98	-2.23

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Red Hills West 21 W1BO Fed Com #3H
Project:	Lea County N. M. Nad (83)	TVD Reference:	3158 + 27 @ 3185.0usft (Patterson 217)
Site:	Section 21-26S-32E Red Hills West 21 W1BO Fed Com	MD Reference:	3158 + 27 @ 3185.0usft (Patterson 217)
Well:	Red Hills West 21 W1BO Fed Com #3H	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)
16,264.0	87.70	180.20	12,095.0	-4,218.6	278.1	-1,972.7	0.11	0.11	0.00
16,359.0	88.20	180.20	12,098.4	-4,313.5	277.8	-2,022.7	0.53	0.53	0.00
16,454.0	87.80	179.90	12,101.8	-4,408.5	277.7	-2,072.5	0.53	-0.42	-0.32
16,549.0	89.70	182.30	12,103.8	-4,503.4	275.9	-2,123.8	3.22	2.00	2.53
16,643.0	90.80	183.30	12,103.4	-4,597.3	271.3	-2,176.8	1.58	1.17	1.06
16,737.0	88.10	182.80	12,104.3	-4,691.2	266.3	-2,230.3	2.92	-2.87	-0.53
16,833.0	87.50	181.20	12,108.0	-4,787.0	262.9	-2,283.3	1.78	-0.63	-1.67
16,928.0	88.10	182.00	12,111.7	-4,881.9	260.3	-2,335.3	1.05	0.63	0.84
17,022.0	89.90	183.50	12,113.3	-4,975.8	255.8	-2,388.3	2.49	1.91	1.60
17,038.0	89.80	183.40	12,113.3	-4,991.8	254.8	-2,397.5	0.88	-0.63	-0.63
17,083.5	89.80	183.40	12,113.5	-5,037.2	252.1	-2,423.5	0.00	0.00	0.00
PBHL Red Hills West 21 W1BO Fed Com #3H									
17,085.0	89.80	183.40	12,113.5	-5,038.7	252.0	-2,424.4	0.00	0.00	0.00
17085.0' MD Projected to Bit									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
17,085.0	12,113.5	-5,038.7	252.0	17085.0' MD Projected to Bit

STRYKER

DIRECTIONAL

March 14, 2019

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

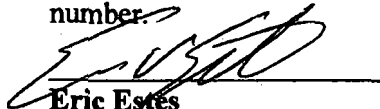
Attn: Jackie Lathan

Re: Mewbourne Oil Company
Red Hills West 21 W1BO Federal Com #3H
Wildcat; Upper Wolfcamp
Lea County, New Mexico
API# 30-025-45444

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>
James Dennehy	Original Hole	100ft. to 17,083ft.	01-10-19 to 01-30-19	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.


Eric 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 21 W1BO Fed Com #3HM191019

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



March 14, 2019

Survey Certification Report

STATE OF TEXAS

COUNTY OF Montgomery

I, Eric Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of January 10, 2019, through January 30, 2019 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 100feet to a depth of 17,083feet; 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 21 W1BO Federal Com #003H, well API # 30-025-45444 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.

A handwritten signature in black ink, appearing to read "Eric Estes", is written over a horizontal line.

Eric 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



OCD Permitting

[Home](#) > [Wells](#) > [Well Details](#)

30-025-45444 RED HILLS WEST 21 W1BO FEDERAL COM #003H [323021]

General Well Information

Operator: [14744] MEWBOURNE OIL CO
Status: New Direction: Horizontal
Well Type: Oil Multi-Lateral: No
Work Type: New Mineral Owner: Federal
Surface Owner: Federal
Surface Location: B-21-26S-32E 205 FNL 1950 FEL
Lat/Long: 32.0350018,-103.6776855 NAD83
GL Elevation: 3158
KB Elevation: Sing/Mult Compl: Single
DF Elevation: Potash Waiver: False

Proposed Formation and/or Notes

Depths

Proposed: 16849 Total Vertical Depth: 0
Measured Vertical Depth: 0 Plugback Measured: 0

Formation Tops

Formation	Top	Producing	Method Obtained
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Event Dates

Initial APD Approval: 12/07/2018
Most Recent APD Approval: 12/24/2018
APD Cancellation:
APD Extension Approval:
Spud: Gas Capture Plan Received: 12/18/2018
Approved Temporary TA Expiration:
Abandonment:
Shut In: PNR Expiration:
Plug and Abandoned Intent Last MIT/BHT:
Received:
Well Plugged:
Site Release:
Last Inspection:

History

Effective Date	Property	Well Number	Operator	C-101 Work Type	Well Type	Well Status	Apd Cancelled	Plug Date
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Quick Links

- [General Well Information](#)
- [History](#)
- [Comments](#)
- [Operator](#)
- [Pls](#)
- [Casing](#)
- [Well Completions](#)
- [Financial Assurance](#)
- [Compliance](#)
- [Complaints, Incidents and Spills](#)
- [Orders](#)
- [Production](#)
- [Transporters](#)
- [Points of Disposition](#)

Associated Images

- [Well Files](#)
- [Well Logs](#)
- [Administrative Orders](#)

New Searches

- [New Well Search](#)



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 21-26S-32E Red Hills West 21 W1BO Fe
Well: Red Hills West 21 W1BO Fed Com #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West 21 W1BO Fed Com #3H
TVD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
MD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project	Lea County N. M. Nad (83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Section 21-26S-32E Red Hills West 21 W1BO Fed Com		
Site Position:		Northing:	377,088.70 usft
From:	Map	Easting:	744,505.20 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 2' 6.006 N
		Longitude:	103° 40' 39.668 W
		Grid Convergence:	0.35 °

Well	Red Hills West 21 W1BO Fed Com #3H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	27.0 usft
		Latitude:	32° 2' 6.006 N
		Longitude:	103° 40' 39.668 W
		Ground Level:	3,158.0 usft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	12/28/18	(°)
			6.82
			Dip Angle
			(°)
			59.85
			Field Strength
			(nT)
			47,659.47247076

Design	Original Hole		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			58.41

Survey Program	Date 01/30/19		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	17,085.0	MWD Survey (Original Hole)	MWD
			Description
			MWD v3:standard declination



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 21-26S-32E Red Hills West 21 W180 Fe
Well: Red Hills West 21 W180 Fed Com #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West 21 W180 Fed Com #3H
TVD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
MD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
0.0	0.00	0.00	0.0	3,185.0	0.0	0.0	0.0	0.00
100.0	0.57	101.15	100.0	3,085.0	-0.1	0.5	0.5	101.15
200.0	1.44	58.98	200.0	2,985.0	0.5	2.1	2.1	77.50
300.0	2.18	58.09	299.9	2,885.1	2.1	4.7	5.2	66.04
400.0	2.63	58.70	399.8	2,785.2	4.4	8.3	9.4	62.15
500.0	3.42	54.96	499.7	2,685.3	7.3	12.6	14.6	59.83
600.0	4.65	58.86	599.5	2,585.5	11.3	18.5	21.6	58.60
634.0	4.99	55.19	633.3	2,551.7	12.9	20.8	24.5	58.30
756.0	4.20	49.80	754.9	2,430.1	18.8	28.6	34.2	56.71
929.0	3.60	47.80	927.5	2,257.5	26.5	37.5	45.9	54.71
1,119.0	1.00	16.10	1,117.4	2,067.6	32.1	42.4	53.2	52.82
1,309.0	0.60	26.30	1,307.4	1,877.6	34.6	43.3	55.4	51.34
1,497.0	0.70	280.30	1,495.4	1,689.6	35.7	42.6	55.5	50.01
1,687.0	0.40	270.90	1,685.3	1,499.7	35.9	40.8	54.3	48.61
1,877.0	1.10	157.80	1,875.3	1,309.7	34.2	40.8	53.2	49.99
2,066.0	0.80	174.90	2,064.3	1,120.7	31.2	41.6	52.0	53.08
2,256.0	0.40	191.80	2,254.3	930.7	29.3	41.6	50.8	54.85
2,445.0	0.40	197.60	2,443.3	741.7	28.0	41.2	49.8	55.82
2,635.0	0.40	213.10	2,633.3	551.7	26.8	40.7	48.7	56.61
2,825.0	0.40	195.70	2,823.3	361.7	25.6	40.1	47.6	57.45
3,015.0	0.40	160.60	3,013.3	171.7	24.4	40.2	47.0	58.77
3,205.0	0.20	106.50	3,203.3	-18.3	23.6	40.7	47.1	59.86
3,395.0	0.60	77.00	3,393.3	-208.3	23.8	42.0	48.2	60.50
3,584.0	1.50	47.40	3,582.2	-397.2	25.7	44.8	51.6	60.19
3,773.0	2.10	49.00	3,771.1	-586.1	29.6	49.2	57.4	58.97
3,963.0	1.70	60.70	3,961.0	-776.0	33.3	54.3	63.7	58.51
4,153.0	3.00	57.40	4,150.9	-965.9	37.3	60.9	71.5	58.51



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 21-26S-32E Red Hills West 21 W1BO Fe
Well: Red Hills West 21 W1BO Fed Com #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West 21 W1BO Fed Com #3H
TVD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
MD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
4,335.0	1.60	57.50	4,332.7	-1,147.7	41.3	67.1	78.8	58.41
4,480.0	1.50	48.20	4,477.7	-1,292.7	43.6	70.2	82.7	58.16
4,668.0	3.90	39.60	4,665.4	-1,480.4	50.2	76.1	91.2	56.61
4,858.0	3.60	39.70	4,855.0	-1,670.0	59.7	84.1	103.1	54.60
5,048.0	4.40	51.30	5,044.8	-1,859.6	68.9	93.6	116.2	53.63
5,237.0	3.70	49.50	5,233.1	-2,048.1	77.4	103.9	129.5	53.31
5,427.0	3.30	58.70	5,422.8	-2,237.8	84.2	113.2	141.1	53.35
5,617.0	3.20	59.70	5,612.4	-2,427.4	89.7	122.4	151.8	53.77
5,806.0	3.10	54.10	5,801.2	-2,616.2	95.4	131.1	162.2	53.97
5,996.0	3.10	52.40	5,990.9	-2,805.9	101.5	139.4	172.4	53.93
6,185.0	3.60	67.10	6,179.6	-2,994.6	107.0	148.9	183.3	54.31
6,375.0	2.90	68.40	6,369.3	-3,184.3	111.0	158.8	193.8	55.04
6,564.0	2.60	71.60	6,558.0	-3,373.0	114.2	167.4	202.6	55.70
6,755.0	2.90	53.70	6,748.8	-3,563.8	118.4	175.4	211.6	55.98
6,944.0	3.10	62.80	6,937.6	-3,752.6	123.6	183.8	221.4	56.08
7,133.0	2.60	73.50	7,126.3	-3,941.3	127.1	192.4	230.6	56.55
7,322.0	3.60	41.60	7,315.1	-4,130.1	132.8	200.5	240.4	56.48
7,512.0	3.20	41.70	7,504.7	-4,319.7	141.2	208.0	251.4	55.83
7,701.0	3.20	42.90	7,693.4	-4,508.4	149.0	215.1	261.6	55.29
7,890.0	3.80	51.20	7,882.1	-4,697.1	156.8	223.5	273.0	54.96
8,080.0	2.70	50.50	8,071.8	-4,886.8	163.6	231.9	283.8	54.80
8,269.0	1.50	39.30	8,260.6	-5,075.6	168.3	236.9	290.6	54.61
8,458.0	1.20	50.40	8,449.6	-5,264.6	171.5	240.0	295.0	54.45
8,648.0	0.20	335.50	8,639.8	-5,454.6	173.1	241.4	297.0	54.36
8,783.7	1.70	299.65	8,775.2	-5,590.2	174.3	239.5	296.2	53.96
B.B. Red Hills West 21 W1BO Fed Com #3H								
8,837.0	2.30	298.50	8,828.5	-5,643.5	175.2	237.9	295.4	53.64



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 21-26S-32E Red Hills West 21 W1BO Fe
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Wellbore: Original Hole
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Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
9,027.0	1.10	279.00	9,018.4	-5,833.4	177.3	232.8	292.6	52.71
9,216.0	2.50	294.10	9,207.3	-6,022.3	179.2	227.2	289.4	51.73
9,406.0	0.70	220.80	9,397.3	-6,212.3	180.1	222.7	286.3	51.04
9,595.0	1.20	128.40	9,586.3	-6,401.3	178.0	223.5	285.7	51.47
9,785.0	0.50	125.90	9,776.2	-6,591.2	176.2	225.7	286.3	52.02
9,974.0	0.40	28.40	9,965.2	-6,780.2	176.3	226.7	287.2	52.12
10,165.0	1.20	91.90	10,156.2	-6,971.2	176.8	229.0	289.3	52.32
10,354.0	1.10	178.90	10,345.2	-7,160.2	175.0	231.0	289.8	52.86
10,543.0	0.80	158.70	10,534.2	-7,349.2	171.9	231.5	288.4	53.40
10,733.0	2.50	51.30	10,724.1	-7,539.1	173.3	235.2	292.2	53.62
10,922.0	1.10	51.20	10,913.0	-7,728.0	177.0	239.9	298.1	53.58
11,112.0	0.40	35.50	11,103.0	-7,918.0	178.7	241.7	300.5	53.52
11,301.0	0.50	142.10	11,292.0	-8,107.0	178.6	242.8	301.2	53.64
11,452.0	1.40	61.70	11,443.0	-8,258.0	178.9	244.6	303.0	53.81
11,525.0	2.20	107.70	11,515.9	-8,330.9	178.9	246.7	304.8	54.05
11,557.0	4.60	128.60	11,547.9	-8,362.9	177.9	248.3	305.5	54.37
11,588.0	6.00	137.80	11,578.7	-8,393.7	175.9	250.4	306.0	54.90
11,620.0	8.10	144.70	11,610.5	-8,425.5	172.9	252.8	306.2	55.63
11,651.0	10.80	153.00	11,641.1	-8,456.1	168.5	255.4	305.9	56.58
11,683.0	12.30	159.50	11,672.4	-8,487.4	162.6	257.9	304.9	57.77
11,714.0	15.60	157.70	11,702.5	-8,517.5	155.7	260.7	303.6	59.15
11,746.0	20.50	162.80	11,732.9	-8,547.9	146.3	263.9	301.8	60.99
11,777.0	24.50	165.80	11,761.6	-8,576.6	134.9	267.1	299.3	63.20
11,809.0	27.00	167.10	11,790.4	-8,605.4	121.4	270.4	296.4	65.82
11,840.0	30.60	168.90	11,817.5	-8,632.5	106.8	273.5	293.6	68.67
11,872.0	35.10	172.90	11,844.4	-8,659.4	89.7	276.2	290.4	72.01
11,903.0	39.10	177.00	11,869.1	-8,684.1	71.0	277.8	286.7	75.65



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 21-26S-32E Red Hills West 21 W1BO Fe
Well: Red Hills West 21 W1BO Fed Com #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Red Hills West 21 W1BO Fed Com #3H
TVD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
MD Reference: 3158 + 27 @ 3185.0usft (Patterson 217)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
11,935.0	42.10	181.30	11,893.4	-8,708.4	50.2	278.1	282.6	79.76
11,966.0	44.50	184.30	11,916.0	-8,731.0	29.0	277.0	278.5	84.02
11,998.0	47.30	186.50	11,938.3	-8,753.3	6.1	274.9	274.9	88.72
12,029.0	49.80	186.00	11,958.8	-8,773.8	-17.0	272.3	272.9	93.56
12,060.0	51.80	185.70	11,978.4	-8,793.4	-40.8	269.9	273.0	98.60
12,092.0	55.10	185.40	11,997.5	-8,812.5	-66.4	267.4	275.5	103.94
12,123.0	60.00	186.60	12,014.2	-8,829.2	-92.4	264.7	280.3	109.24
12,155.0	65.00	186.70	12,028.9	-8,843.9	-120.6	261.4	287.8	114.76
12,173.2	67.17	186.70	12,036.3	-8,851.3	-137.1	259.4	293.4	117.86
LP Red Hills West 21 W1BO Fed Com #3H								
12,181.0	68.10	186.70	12,039.3	-8,854.3	-144.2	258.6	296.1	119.15
12,234.0	73.40	186.40	12,056.7	-8,871.7	-193.9	252.9	318.7	127.48
12,266.0	79.30	183.70	12,064.3	-8,879.3	-224.9	250.2	336.4	131.96
12,297.0	84.70	182.00	12,068.6	-8,883.6	-255.5	248.6	356.5	135.79
12,329.0	89.40	181.10	12,070.2	-8,885.2	-287.5	247.8	379.5	139.24
12,392.0	93.40	179.60	12,068.7	-8,883.7	-350.4	247.4	429.0	144.78
12,485.0	89.30	178.70	12,066.5	-8,881.5	-443.4	248.8	508.4	150.71
12,579.0	90.10	177.50	12,067.0	-8,882.0	-537.3	251.9	593.4	154.88
12,674.0	91.40	181.10	12,065.8	-8,880.8	-632.3	253.0	681.1	158.19
12,769.0	93.90	185.10	12,061.4	-8,876.4	-727.0	247.9	768.1	161.17
12,863.0	87.90	184.50	12,059.9	-8,874.9	-820.7	240.1	855.0	163.69
12,957.0	86.20	181.50	12,064.7	-8,879.7	-914.4	235.1	944.1	165.58
13,052.0	88.40	180.60	12,069.2	-8,884.2	-1,009.3	233.4	1,035.9	166.98
13,146.0	90.10	179.80	12,070.4	-8,885.4	-1,103.2	233.1	1,127.6	168.07
13,240.0	90.00	180.30	12,070.4	-8,885.4	-1,197.2	233.0	1,219.7	168.99
13,335.0	88.20	177.30	12,071.9	-8,886.9	-1,292.2	235.0	1,313.4	169.69
13,428.0	87.60	178.30	12,075.3	-8,890.3	-1,385.1	238.6	1,405.5	170.23



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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
13,522.0	87.60	178.10	12,079.2	-8,894.2	-1,478.9	241.5	1,498.5	170.73
13,617.0	90.00	178.70	12,081.2	-8,896.2	-1,573.9	244.2	1,592.7	171.18
13,711.0	88.50	177.60	12,082.4	-8,897.4	-1,667.8	247.2	1,686.0	171.57
13,806.0	90.30	178.30	12,083.4	-8,898.4	-1,762.7	250.6	1,780.5	171.91
13,900.0	88.20	178.90	12,084.6	-8,899.6	-1,856.7	252.9	1,873.8	172.24
13,995.0	88.40	180.10	12,087.5	-8,902.5	-1,951.6	253.7	1,968.1	172.59
14,090.0	88.00	180.00	12,090.4	-8,905.4	-2,046.6	253.6	2,062.3	172.94
14,184.0	88.90	181.90	12,093.0	-8,908.0	-2,140.5	252.1	2,155.3	173.28
14,278.0	88.20	178.50	12,095.4	-8,910.4	-2,234.5	251.7	2,248.6	173.57
14,373.0	90.10	178.70	12,096.8	-8,911.8	-2,329.5	254.1	2,343.3	173.78
14,468.0	90.10	178.50	12,096.6	-8,911.6	-2,424.4	256.4	2,438.0	173.98
14,563.0	88.30	177.70	12,097.9	-8,912.9	-2,519.4	259.5	2,532.7	174.12
14,657.0	93.60	181.10	12,096.5	-8,911.5	-2,613.3	260.5	2,626.3	174.31
14,751.0	92.40	180.90	12,091.6	-8,906.6	-2,707.2	258.9	2,719.5	174.54
14,845.0	92.80	180.00	12,087.4	-8,902.4	-2,801.1	258.1	2,812.9	174.73
14,940.0	93.20	180.90	12,082.4	-8,897.4	-2,895.9	257.4	2,907.3	174.92
15,034.0	90.80	179.50	12,079.1	-8,894.1	-2,989.9	257.1	3,000.9	175.09
15,129.0	88.00	176.60	12,080.1	-8,895.1	-3,084.8	260.3	3,095.7	175.18
15,224.0	90.30	175.20	12,081.5	-8,896.5	-3,179.5	267.1	3,190.7	175.20
15,318.0	90.20	175.60	12,081.1	-8,896.1	-3,273.2	274.6	3,284.7	175.20
15,413.0	88.30	176.90	12,082.3	-8,897.3	-3,368.0	280.8	3,379.7	175.23
15,507.0	89.10	179.00	12,084.5	-8,899.5	-3,461.9	284.2	3,473.6	175.31
15,602.0	89.40	178.90	12,085.7	-8,900.7	-3,556.9	285.9	3,568.4	175.40
15,696.0	88.40	180.20	12,087.5	-8,902.5	-3,650.9	286.7	3,662.1	175.51
15,791.0	89.30	180.10	12,089.4	-8,904.4	-3,745.8	286.4	3,756.8	175.63
15,886.0	89.60	180.20	12,090.3	-8,905.3	-3,840.8	286.2	3,851.5	175.74
15,980.0	90.50	182.20	12,090.3	-8,905.3	-3,934.8	284.2	3,945.1	175.87



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Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
16,075.0	90.40	182.30	12,089.5	-8,904.5	-4,029.7	280.5	4,039.5	176.02
16,169.0	87.60	180.20	12,091.2	-8,906.2	-4,123.7	278.4	4,133.1	176.14
16,264.0	87.70	180.20	12,095.0	-8,910.0	-4,218.6	278.1	4,227.8	176.23
16,359.0	88.20	180.20	12,098.4	-8,913.4	-4,313.5	277.8	4,322.5	176.32
16,454.0	87.80	179.90	12,101.8	-8,916.8	-4,408.5	277.7	4,417.2	176.40
16,549.0	89.70	182.30	12,103.8	-8,918.8	-4,503.4	275.9	4,511.9	176.49
16,643.0	90.80	183.30	12,103.4	-8,918.4	-4,597.3	271.3	4,605.3	176.62
16,737.0	88.10	182.80	12,104.3	-8,919.3	-4,691.2	266.3	4,698.7	176.75
16,833.0	87.50	181.20	12,108.0	-8,923.0	-4,787.0	262.9	4,794.2	176.86
16,928.0	88.10	182.00	12,111.7	-8,926.7	-4,881.9	260.3	4,888.9	176.95
17,022.0	89.90	183.50	12,113.3	-8,928.3	-4,975.8	255.8	4,982.4	177.06
17,038.0	89.80	183.40	12,113.3	-8,928.3	-4,991.8	254.8	4,998.3	177.08
17,083.5	89.80	183.40	12,113.5	-8,928.5	-5,037.2	252.1	5,043.5	177.13
PBHL Red Hills West 21 W1BO Fed Com #3H								
17,085.0	89.80	183.40	12,113.5	-8,928.5	-5,038.7	252.0	5,045.0	177.14
17085.0' MD Projected to Bit								

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
17,085.0	12,113.5	-5,038.7	252.0	17085.0' MD Projected to Bit



COMPANY: Mewbourne Oil Company
WELL: Red Hills West 21 W1B0 Fed Com #3H
COUNTY: Lea County N. M. Nad (83)
DATUM: North American Datum 1983
RIG: Patterson 217



OFFICE: 936.582.7296

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.48°

GEODETIC ZONE: New Mexico Eastern Zone										
3158 + 27 @ 3185.0usft (Patterson 217)										
GROUND ELEVATION: 3158.0										
	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Stat			
	0.0	0.0	377088.70	744505.20	32° 2' 6.006 N	103° 40' 39.668 W				
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSeet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3500.0	0.00	0.00	3500.0	0.0	0.0	0.00	0.00	0.0	
3	3900.2	4.00	57.77	3899.9	7.5	11.8	1.00	57.77	-6.7	
4	8387.4	4.00	57.77	8378.2	174.5	278.7	0.00	0.00	-158.0	
5	8787.6	0.00	0.00	8776.1	181.9	288.5	1.00	180.00	-162.7	B.B. Red Hills West 21 W1B0 Fed Com #3H
6	11515.6	0.00	0.00	11504.0	181.9	288.5	0.00	0.00	-162.7	
7	12412.5	89.69	179.54	12077.0	-387.9	293.1	10.00	179.54	405.2	
8	17088.8	89.69	179.54	12102.0	-5041.8	330.0	0.00	0.00	5052.6	PBHL Red Hills West 21 W1B0 Fed Com #3H

SHL: 205' FNL; 1950' FEL
Section 21-26S-32E
PBHL: 100' FSL; 1650' FEL
Section 21-26S-32E

