



October 3, 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  
Ghostrider 25 36 W0DM Federal Com #002H  
Wolfcamp Y Sand  
Eddy County, New Mexico  
API# 30-015-44302**

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 &amp; Title</u>	<u>Drainhole No.</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Keith Broussard	Original Hole	563ft. to 18,801ft.	08-02-17 to 08-27-17	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\Ghostrider 25 36 W0DM Federal Com#2H\M171058

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



October 3, 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 August 02, 2017, through August 27, 2017 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 563 feet to a depth of 18,801 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 Ghost rider 25 36 W0DM Federal Com #002H well, API # 30-015-44302 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.

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

**Todd Estes**

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MWD Surveys



**Company:** Mewbourne Oil Company  
**Project:** Eddy County, New Mexico  
**Site:** Section 25-36-23S-26E Ghost rider 25 WODM Fed  
**Well:** Ghost rider 25-36 WODM Fed Com 2H  
**Wellbore:** Original Hole  
**Design:** Original Hole

**Local Co-ordinate Reference:** Well Ghost rider 25-36 WODM Fed Com 2H  
**TVD Reference:** 3240 + 27 @ 3267.0usft (Patterson 231)  
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**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** Stryker\_EDM

<b>Project</b>	Eddy County, New Mexico		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

**Site** Section 25-36-23S-26E Ghost rider 25 WODM Fed Com2H

<b>Site Position:</b>		<b>Northing:</b>	466,383.60 usft	<b>Latitude:</b>	32° 16' 55.847 N
<b>From:</b>	Map	<b>Easting:</b>	524,810.50 usft	<b>Longitude:</b>	104° 15' 10.985 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.04 °

**Well** Ghost rider 25-36 WODM Fed Com 2H

<b>Well Position</b>	<b>+N-S</b>	0.0 usft	<b>Northing:</b>	466,383.60 usf	<b>Latitude:</b>	32° 16' 55.847 N
	<b>+E-W</b>	0.0 usft	<b>Easting:</b>	524,810.50 usf	<b>Longitude:</b>	104° 15' 10.985 W
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>	3,267.0 usft	<b>Ground Level:</b>	3,240.0 usft

**Wellbore** Original Hole

<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	7/13/2017	7.26	60.00	47,893.13464751

**Design** Original Hole

**Audit Notes:**

**Version:** 1.0      **Phase:** ACTUAL      **Tie On Depth:** 0.0

<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N-S (usft)</b>	<b>+E-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	66.47

**Survey Program** Date 8/28/2017

<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
150.0	18,852.0	MWD Survey (Original Hole)	MWD+IGRF	OWSG MWD + IGRF or WMM



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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0
150.0	1.10	125.30	150.0	-0.8	1.2	1.4	125.30
210.0	1.30	101.80	210.0	-1.3	2.3	2.7	119.43
282.0	1.60	97.10	282.0	-1.6	4.1	4.4	111.22
341.0	1.50	62.10	340.9	-1.3	5.6	5.8	103.40
406.0	1.30	66.00	405.9	-0.6	7.0	7.1	95.18
485.0	1.80	67.00	484.9	0.2	9.0	9.0	88.65
<b>485' MD Rig Surveys</b>							
563.0	2.20	63.80	562.8	1.4	11.5	11.5	83.28
624.0	1.90	51.00	623.8	2.5	13.3	13.5	79.34
682.0	1.10	354.30	681.8	3.7	14.0	14.5	75.33
740.0	1.40	340.70	739.8	4.9	13.7	14.5	70.38
836.0	1.40	334.70	835.7	7.1	12.8	14.6	61.17
931.0	1.80	330.00	930.7	9.4	11.6	14.9	50.93
1,026.0	1.20	300.30	1,025.7	11.2	10.0	15.0	41.70
1,121.0	0.90	287.20	1,120.7	11.9	8.4	14.6	35.18
1,216.0	0.20	162.40	1,215.7	12.0	7.7	14.3	32.86
1,312.0	1.20	99.00	1,311.6	11.7	8.8	14.6	36.98
1,407.0	2.20	101.80	1,406.6	11.1	11.5	16.0	46.05
1,502.0	1.30	111.30	1,501.6	10.4	14.3	17.7	54.13
1,597.0	1.50	142.00	1,596.5	9.0	16.1	18.4	60.82
1,679.0	1.30	123.70	1,678.5	7.6	17.5	19.1	66.49
1,759.0	1.40	125.60	1,758.5	6.6	19.1	20.2	71.04
1,823.0	1.30	122.70	1,822.5	5.7	20.3	21.1	74.31
1,917.0	0.50	315.70	1,916.5	5.4	20.9	21.6	75.47
2,013.0	0.70	304.70	2,012.5	6.1	20.2	21.1	73.27
2,107.0	0.70	308.90	2,106.4	6.7	19.3	20.4	70.68



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2,202.0	0.80	306.00	2,201.4	7.5	18.3	19.7	67.66
2,298.0	0.90	307.20	2,297.4	8.4	17.1	19.1	63.99
2,393.0	0.60	304.80	2,392.4	9.1	16.1	18.5	60.58
2,488.0	0.80	301.30	2,487.4	9.7	15.1	18.0	57.31
2,583.0	0.60	299.20	2,582.4	10.3	14.1	17.5	53.92
2,677.0	0.80	278.90	2,676.4	10.6	13.1	16.9	50.82
2,772.0	0.80	292.90	2,771.4	11.0	11.8	16.1	46.99
2,868.0	1.00	296.40	2,867.4	11.6	10.4	15.6	41.86
2,963.0	0.90	293.00	2,962.4	12.3	9.0	15.2	36.20
3,057.0	0.80	279.10	3,056.4	12.7	7.7	14.8	31.16
3,152.0	0.90	293.70	3,151.3	13.1	6.3	14.5	25.82
3,247.0	1.00	291.90	3,246.3	13.7	4.9	14.6	19.61
3,342.0	0.90	285.50	3,341.3	14.2	3.4	14.6	13.43
3,437.0	1.00	284.90	3,436.3	14.6	1.9	14.7	7.31
3,532.0	1.00	279.20	3,531.3	15.0	0.3	15.0	0.98
3,626.0	0.80	281.40	3,625.3	15.2	-1.2	15.3	355.51
3,721.0	0.50	278.10	3,720.3	15.4	-2.3	15.6	351.67
3,816.0	0.20	225.10	3,815.3	15.4	-2.8	15.6	349.72
3,911.0	0.30	192.40	3,910.3	15.0	-3.0	15.3	348.85
4,006.0	0.40	194.50	4,005.3	14.4	-3.1	14.8	347.91
4,101.0	0.60	253.50	4,100.3	14.0	-3.7	14.4	345.36
4,197.0	0.80	246.60	4,196.3	13.6	-4.8	14.4	340.70
4,291.0	1.00	257.00	4,290.2	13.2	-6.2	14.5	334.90
4,386.0	0.90	258.10	4,385.2	12.8	-7.7	15.0	329.00
4,481.0	0.90	259.10	4,480.2	12.5	-9.2	15.5	323.81
4,577.0	1.00	256.90	4,576.2	12.2	-10.7	16.2	318.68
4,672.0	1.00	258.50	4,671.2	11.8	-12.3	17.1	313.82



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4,767.0	0.80	251.40	4,766.2	11.5	-13.8	17.9	309.76
4,862.0	0.80	254.50	4,861.2	11.1	-15.1	18.7	306.36
4,956.0	1.10	255.80	4,955.2	10.7	-16.6	19.7	302.83
5,051.0	0.70	265.20	5,050.1	10.4	-18.0	20.8	300.01
5,146.0	1.00	346.40	5,145.1	11.2	-18.8	21.9	300.72
5,241.0	1.60	351.00	5,240.1	13.3	-19.2	23.3	304.68
5,336.0	2.40	11.50	5,335.1	16.5	-19.0	25.2	311.03
5,431.0	3.60	18.50	5,429.9	21.3	-17.7	27.7	320.36
5,526.0	2.80	28.10	5,524.8	26.2	-15.6	30.5	329.18
5,621.0	2.10	11.20	5,619.7	30.0	-14.2	33.1	334.64
5,716.0	3.60	6.20	5,714.6	34.6	-13.5	37.2	338.65
5,810.0	4.00	23.00	5,808.4	40.6	-11.9	42.3	343.61
5,905.0	2.80	19.10	5,903.2	45.8	-9.9	46.9	347.83
5,999.0	2.70	12.70	5,997.1	50.1	-8.6	50.9	350.22
6,094.0	3.60	8.30	6,091.9	55.3	-7.7	55.8	352.05
6,190.0	3.40	12.90	6,187.8	61.0	-6.7	61.4	353.78
6,284.0	2.90	13.70	6,281.6	66.1	-5.5	66.3	355.27
6,379.0	3.10	356.40	6,376.5	71.0	-5.1	71.1	355.92
6,474.0	2.50	346.80	6,471.4	75.5	-5.7	75.8	355.69
6,569.0	3.70	354.30	6,566.2	80.6	-6.5	80.9	355.41
6,664.0	3.20	359.20	6,661.1	86.3	-6.8	86.6	355.49
6,759.0	2.60	3.90	6,755.9	91.1	-6.7	91.4	355.79
6,854.0	3.90	0.30	6,850.8	96.5	-6.5	96.7	356.12
6,949.0	3.30	357.30	6,945.6	102.5	-6.7	102.7	356.29
7,044.0	2.30	346.10	7,040.5	107.0	-7.2	107.3	356.13
7,139.0	3.40	358.20	7,135.4	111.7	-7.8	112.0	356.01
7,234.0	2.30	341.50	7,230.3	116.3	-8.5	116.6	355.83



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7,328.0	3.20	358.40	7,324.1	120.7	-9.1	121.1	355.67
7,424.0	3.90	3.00	7,420.0	126.7	-9.1	127.0	355.91
7,518.0	2.40	327.10	7,513.8	131.5	-10.0	131.9	355.67
7,614.0	2.30	1.20	7,609.8	135.1	-11.0	135.6	355.34
7,708.0	2.70	16.70	7,703.7	139.1	-10.3	139.5	355.75
7,804.0	3.00	15.30	7,799.5	143.7	-9.0	144.0	356.41
7,899.0	3.90	0.00	7,894.4	149.4	-8.4	149.6	356.80
7,994.0	3.80	344.20	7,989.2	155.6	-9.2	155.9	356.61
8,089.0	3.30	332.80	8,084.0	161.1	-11.3	161.5	355.98
8,182.0	2.70	319.30	8,176.9	165.1	-14.0	165.7	355.16
8,204.9	2.25	314.76	8,199.8	165.9	-14.6	166.5	354.95
<b>B.B. Ghost rider</b>							
8,309.0	1.00	238.90	8,303.8	166.8	-16.9	167.7	354.22
8,340.0	6.00	174.60	8,334.7	165.1	-17.0	165.9	354.13
8,372.0	13.00	168.20	8,366.3	159.9	-16.1	160.7	354.26
8,404.0	17.90	164.50	8,397.1	151.6	-14.0	152.3	354.72
8,435.0	19.90	159.10	8,426.4	142.1	-10.9	142.5	355.63
8,467.0	23.60	158.60	8,456.2	131.0	-6.6	131.2	357.13
8,499.0	25.90	162.80	8,485.2	118.4	-2.2	118.4	358.95
8,530.0	27.50	167.40	8,512.9	104.9	1.4	104.9	0.76
8,562.0	31.30	174.70	8,540.8	89.4	3.8	89.5	2.42
8,594.0	33.60	176.00	8,567.8	72.3	4.9	72.5	3.84
8,625.0	36.00	179.00	8,593.3	54.6	5.3	54.9	5.55
8,656.0	38.00	179.00	8,618.0	36.0	5.6	36.4	8.91
8,687.0	40.30	182.80	8,642.1	16.4	5.3	17.2	17.94
8,719.0	45.70	185.30	8,665.5	-5.3	3.7	6.5	144.96
8,750.0	51.10	183.60	8,686.0	-28.5	2.0	28.5	176.05



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8,782.0	54.10	182.30	8,705.5	-53.8	0.7	53.8	179.29
8,814.0	58.90	180.20	8,723.1	-80.5	0.1	80.5	179.93
8,845.0	63.20	179.20	8,738.1	-107.6	0.2	107.6	179.87
8,877.0	69.10	177.60	8,751.1	-136.9	1.1	136.9	179.55
8,900.0	73.90	178.00	8,758.4	-158.7	1.9	158.7	179.31
8,967.0	80.00	180.00	8,773.5	-223.9	3.0	223.9	179.22
8,999.0	82.90	180.40	8,778.2	-255.5	2.9	255.5	179.35
9,031.0	84.10	179.90	8,781.9	-287.3	2.8	287.3	179.43
9,062.0	85.60	180.20	8,784.6	-318.2	2.8	318.2	179.49
9,094.0	88.00	180.50	8,786.4	-350.1	2.6	350.1	179.57
9,188.0	90.60	181.80	8,787.6	-444.1	0.7	444.1	179.91
9,224.1	91.20	181.91	8,787.0	-480.2	-0.4	480.2	180.05
<b>LP Ghost rider 25/36 WODM Fed Com 2H</b>							
9,284.0	92.20	182.10	8,785.2	-540.0	-2.5	540.0	180.27
9,380.0	90.00	182.40	8,783.4	-635.9	-6.3	635.9	180.57
9,475.0	91.40	182.80	8,782.2	-730.8	-10.6	730.9	180.83
9,570.0	86.20	181.00	8,784.2	-825.7	-13.8	825.8	180.96
9,668.0	87.30	180.60	8,789.7	-921.5	-15.1	921.7	180.94
9,761.0	92.10	181.00	8,790.1	-1,016.5	-16.4	1,016.6	180.93
9,856.0	90.40	179.60	8,788.1	-1,111.5	-16.9	1,111.6	180.87
9,951.0	90.40	179.90	8,787.4	-1,206.5	-16.5	1,206.6	180.78
10,046.0	89.80	180.30	8,787.2	-1,301.5	-16.7	1,301.6	180.73
10,141.0	90.70	180.40	8,786.8	-1,396.5	-17.3	1,396.6	180.71
10,235.0	88.30	180.00	8,787.7	-1,490.4	-17.6	1,490.5	180.68
10,329.0	90.20	178.70	8,788.9	-1,584.4	-16.5	1,584.5	180.60
10,425.0	91.20	179.30	8,787.7	-1,680.4	-14.8	1,680.5	180.51
10,520.0	93.80	179.90	8,783.6	-1,775.3	-14.2	1,775.4	180.46





Microsoft  
MWD Surveys



Company: Mewbourne Oil Company  
 Project: Eddy County, New Mexico  
 Site: Section 25-36-23S-26E Ghost rider 25 WODM Fed  
 Well: Ghost rider 25-36 WODM Fed Com 2H  
 Wellbore: Original Hole  
 Design: Original Hole

Local Co-ordinate Reference: Well Ghost rider 25-36 WODM Fed Com 2H  
 TVD Reference: 3240 + 27 @ 3267.0usft (Patterson 231)  
 MD Reference: 3240 + 27 @ 3267.0usft (Patterson 231)  
 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 (°)
10.614.0	90.70	179.10	8.779.9	-1,869.2	-13.4	1,869.3	180.41
10.710.0	89.60	178.20	8.779.6	-1,965.2	-11.1	1,965.2	180.32
10.805.0	90.30	178.30	8.779.7	-2,060.1	-8.2	2,060.2	180.23
10.900.0	86.90	179.30	8.782.0	-2,155.1	-6.2	2,155.1	180.17
10.995.0	91.30	180.10	8.783.5	-2,250.0	-5.7	2,250.0	180.15
11.090.0	89.10	179.20	8.783.2	-2,345.0	-5.1	2,345.0	180.13
11.185.0	91.50	179.40	8.782.7	-2,440.0	-4.0	2,440.0	180.09
11.280.0	92.00	180.80	8.779.8	-2,535.0	-4.1	2,535.0	180.09
11.374.0	90.90	180.40	8.777.4	-2,628.9	-5.1	2,628.9	180.11
11.469.0	87.50	181.00	8.778.7	-2,723.9	-6.3	2,723.9	180.13
11.564.0	89.50	181.00	8.781.2	-2,818.8	-7.9	2,818.9	180.16
11.658.0	90.20	180.80	8.781.5	-2,912.8	-9.4	2,912.8	180.19
11.754.0	91.10	180.20	8.780.4	-3,008.8	-10.3	3,008.8	180.20
11.848.0	88.90	180.20	8.780.4	-3,102.8	-10.6	3,102.8	180.20
11.944.0	88.80	181.10	8.782.3	-3,198.8	-11.7	3,198.8	180.21
12.039.0	89.80	181.70	8.783.5	-3,293.7	-14.0	3,293.8	180.24
12.134.0	90.10	182.90	8.783.6	-3,388.7	-17.8	3,388.7	180.30
12.229.0	90.80	183.20	8.782.8	-3,483.5	-22.9	3,483.6	180.38
12.324.0	88.70	182.80	8.783.2	-3,578.4	-27.8	3,578.5	180.45
12.419.0	92.30	183.40	8.782.4	-3,673.2	-33.0	3,673.4	180.51
12.515.0	90.40	182.20	8.780.1	-3,769.1	-37.7	3,769.3	180.57
12.610.0	89.50	179.40	8.780.2	-3,864.1	-39.0	3,864.3	180.58
12.706.0	89.50	177.90	8.781.1	-3,960.0	-36.7	3,960.2	180.53
12.801.0	88.60	178.10	8.782.6	-4,055.0	-33.4	4,055.1	180.47
12.896.0	88.90	176.70	8.784.7	-4,149.8	-29.1	4,149.9	180.40
12.991.0	89.10	177.70	8.786.4	-4,244.7	-24.5	4,244.8	180.33
13.086.0	90.50	176.70	8.786.7	-4,339.6	-19.8	4,339.6	180.26



Microsoft  
MWD Surveys



**Company:** Mewbourne Oil Company  
**Project:** Eddy County, New Mexico  
**Site:** Section 25-36-23S-26E Ghost rider 25 W0DM Fed  
**Well:** Ghost rider 25-36 W0DM Fed Com 2H  
**Wellbore:** Original Hole  
**Design:** Original Hole

**Local Co-ordinate Reference:** Well Ghost rider 25-36 W0DM Fed Com 2H  
**TVD Reference:** 3240 + 27 @ 3267 0usft (Patterson 231)  
**MD Reference:** 3240 + 27 @ 3267 0usft (Patterson 231)  
**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 (°)
13,181.0	88.70	176.90	8,787.4	-4,434.4	-14.5	4,434.5	180.19
13,276.0	94.20	178.70	8,784.9	-4,529.3	-10.9	4,529.3	180.14
13,371.0	94.90	179.30	8,777.4	-4,624.0	-9.2	4,624.0	180.11
13,466.0	93.90	180.40	8,770.1	-4,718.7	-9.0	4,718.7	180.11
13,561.0	84.70	180.50	8,771.3	-4,813.6	-9.7	4,813.6	180.12
13,666.0	84.20	181.00	8,780.5	-4,908.1	-10.9	4,908.1	180.13
13,762.0	85.40	181.50	8,789.2	-5,003.7	-13.0	5,003.7	180.15
13,783.0	85.30	181.70	8,791.7	-5,034.6	-13.9	5,034.6	180.16
13,815.0	85.30	182.20	8,794.3	-5,066.5	-15.0	5,066.5	180.17
13,847.0	87.50	182.50	8,796.3	-5,098.4	-16.3	5,098.4	180.18
13,878.0	88.50	182.50	8,797.4	-5,129.3	-17.6	5,129.4	180.20
13,910.0	88.70	182.50	8,798.2	-5,161.3	-19.0	5,161.3	180.21
13,942.0	88.20	182.30	8,799.0	-5,193.3	-20.4	5,193.3	180.22
13,973.0	88.60	181.80	8,799.9	-5,224.2	-21.5	5,224.3	180.24
14,005.0	88.20	180.50	8,800.8	-5,256.2	-22.1	5,256.2	180.24
14,037.0	88.90	181.00	8,801.6	-5,288.2	-22.5	5,288.2	180.24
14,069.0	91.30	181.30	8,801.6	-5,320.2	-23.2	5,320.2	180.25
14,100.0	91.20	181.30	8,800.9	-5,351.2	-23.9	5,351.2	180.26
14,131.0	91.30	181.20	8,800.2	-5,382.1	-24.6	5,382.2	180.26
14,227.0	91.60	181.90	8,797.8	-5,478.1	-27.2	5,478.2	180.28
14,256.0	91.70	181.90	8,796.9	-5,507.1	-28.1	5,507.1	180.29
14,319.0	91.30	182.00	8,795.3	-5,570.0	-30.3	5,570.1	180.31
14,414.0	90.50	183.10	8,793.8	-5,664.9	-34.5	5,665.0	180.35
14,509.0	87.50	178.40	8,795.5	-5,759.8	-35.7	5,759.9	180.36
14,604.0	92.30	179.10	8,795.6	-5,854.8	-33.7	5,854.9	180.33
14,699.0	91.00	177.80	8,792.9	-5,949.7	-31.1	5,949.8	180.30
14,794.0	89.40	177.40	8,792.6	-6,044.6	-27.1	6,044.7	180.28



Microsoft  
MWD Surveys



Company: Mewbourne Oil Company  
 Project: Eddy County, New Mexico  
 Site: Section 25-36-23S-26E Ghost rider 25 WODM Fed  
 Well: Ghost rider 25-36 WODM Fed Com 2H  
 Wellbore: Original Hole  
 Design: Original Hole

Local Co-ordinate Reference: Well Ghost rider 25-36 WODM Fed Com 2H  
 TVD Reference: 3240 + 27 @ 3267.0usft (Patterson 231)  
 MD Reference: 3240 + 27 @ 3267.0usft (Patterson 231)  
 North Reference: Gnd  
 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 (°)
14,826.0	87.50	177.50	8,793.4	-6,076.6	-25.7	6,076.6	180.24
14,889.0	87.00	178.30	8,796.4	-6,139.5	-23.4	6,139.5	180.22
14,921.0	86.70	178.70	8,798.2	-6,171.4	-22.6	6,171.4	180.21
14,953.0	88.40	178.30	8,799.6	-6,203.4	-21.7	6,203.4	180.20
14,984.0	88.60	178.30	8,800.4	-6,234.3	-20.8	6,234.4	180.19
15,016.0	88.80	178.00	8,801.1	-6,266.3	-19.8	6,266.3	180.18
15,048.0	89.80	179.00	8,801.5	-6,298.3	-18.9	6,298.3	180.17
15,080.0	88.20	179.70	8,802.1	-6,330.3	-18.6	6,330.3	180.17
15,111.0	87.90	179.50	8,803.1	-6,361.3	-18.3	6,361.3	180.17
15,143.0	89.90	179.60	8,803.7	-6,393.3	-18.1	6,393.3	180.16
15,175.0	90.70	179.90	8,803.6	-6,425.3	-18.0	6,425.3	180.16
15,207.0	90.50	180.40	8,803.2	-6,457.2	-18.0	6,457.3	180.16
15,270.0	89.80	180.50	8,803.1	-6,520.2	-18.5	6,520.3	180.16
15,366.0	88.50	179.90	8,804.5	-6,616.2	-18.9	6,616.3	180.16
15,461.0	90.30	181.60	8,805.5	-6,711.2	-20.1	6,711.2	180.17
15,556.0	90.70	181.60	8,804.7	-6,806.2	-22.8	6,806.2	180.19
15,651.0	89.20	181.20	8,804.7	-6,901.1	-25.1	6,901.2	180.21
15,747.0	88.40	177.60	8,806.7	-6,997.1	-24.1	6,997.1	180.20
15,779.0	87.70	177.80	8,807.8	-7,029.1	-22.8	7,029.1	180.19
15,811.0	89.90	179.10	8,808.5	-7,061.0	-21.9	7,061.1	180.18
15,843.0	92.70	179.70	8,807.8	-7,093.0	-21.6	7,093.1	180.17
15,938.0	92.40	179.60	8,803.6	-7,187.9	-21.0	7,188.0	180.17
16,034.0	92.00	180.40	8,799.9	-7,283.9	-21.0	7,283.9	180.17
16,128.0	89.50	179.70	8,798.6	-7,377.8	-21.1	7,377.9	180.16
16,223.0	92.70	179.80	8,796.8	-7,472.8	-20.7	7,472.8	180.16
16,319.0	93.30	180.40	8,791.8	-7,568.7	-20.9	7,568.7	180.16
16,414.0	92.40	180.80	8,787.1	-7,663.5	-21.8	7,663.6	180.16



Microsoft  
MWD Surveys



Company: Mewbourne Oil Company  
 Project: Eddy County, New Mexico  
 Site: Section 25-36-23S-26E Ghost rider 25 WODM Fac  
 Well: Ghost rider 25-36 WODM Fed Com 2H  
 Wellbore: Original Hole  
 Design: Original Hole

Local Co-ordinate Reference: Well: Ghost rider 25-36 WODM Fed Com 2H  
 TVD Reference: 3240 + 27 @ 3267.0usft (Patterson 231)  
 MD Reference: 3240 + 27 @ 3267.0usft (Patterson 231)  
 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 (°)
16.508.0	91.40	181.60	8.783.9	-7.757.5	-23.8	7.757.5	180.18
16.603.0	89.80	181.00	8.783.0	-7.852.4	-26.0	7.852.5	180.19
16.697.0	87.40	180.60	8.785.3	-7.946.4	-27.3	7.946.4	180.20
16.729.0	87.20	180.50	8.786.8	-7.978.4	-27.6	7.978.4	180.20
16.792.0	88.70	181.60	8.789.0	-8.041.3	-28.7	8.041.4	180.20
16.890.0	89.20	182.30	8.790.8	-8.139.2	-32.1	8.139.3	180.23
16.985.0	89.20	183.40	8.792.1	-8.234.1	-36.8	8.234.2	180.26
17.080.0	94.50	185.60	8.789.1	-8.328.7	-44.2	8.328.8	180.30
17.112.0	93.80	185.60	8.786.8	-8.360.5	-47.4	8.360.6	180.32
17.176.0	92.00	184.40	8.783.5	-8.424.2	-52.9	8.424.3	180.36
17.271.0	91.50	182.70	8.780.6	-8.518.9	-58.8	8.519.1	180.40
17.367.0	89.50	182.00	8.779.8	-8.614.8	-62.7	8.615.1	180.42
17.462.0	88.80	182.90	8.781.2	-8.709.7	-66.8	8.710.0	180.44
17.557.0	87.60	181.30	8.784.2	-8.804.6	-70.3	8.804.9	180.46
17.589.0	87.60	182.00	8.785.5	-8.836.6	-71.2	8.836.9	180.46
17.620.0	87.00	180.30	8.787.0	-8.867.5	-71.8	8.867.8	180.46
17.652.0	86.40	179.50	8.788.8	-8.899.5	-71.8	8.899.8	180.46
17.684.0	87.50	179.50	8.790.5	-8.931.4	-71.5	8.931.7	180.46
17.716.0	86.20	179.60	8.792.3	-8.963.4	-71.2	8.963.7	180.46
17.748.0	85.50	179.70	8.794.6	-8.995.3	-71.0	8.995.6	180.45
17.779.0	86.80	178.30	8.796.7	-9.026.2	-70.5	9.026.5	180.45
17.811.0	87.70	178.30	8.798.2	-9.058.2	-69.6	9.058.4	180.44
17.843.0	87.30	178.30	8.799.6	-9.090.1	-68.6	9.090.4	180.43
17.874.0	88.60	178.30	8.800.7	-9.121.1	-67.7	9.121.3	180.43
17.906.0	88.90	178.30	8.801.4	-9.153.1	-66.7	9.153.3	180.42
17.938.0	92.80	179.10	8.800.9	-9.185.1	-66.0	9.185.3	180.41
17.970.0	93.20	179.20	8.799.3	-9.217.0	-65.5	9.217.2	180.41



Microsoft  
MWD Surveys



**Company:** Mewbourne Oil Company  
**Project:** Eddy County, New Mexico  
**Site:** Section 25-36-23S-26E Ghost rider 25 WODM Fed  
**Well:** Ghost rider 25-36 WODM Fed Com 2H  
**Wellbore:** Original Hole  
**Design:** Original Hole

**Local Co-ordinate Reference:** Well Ghost rider 25-36 WODM Fed Com 2H  
**TVD Reference:** 3240 + 27 @ 3267.0usft (Patterson 231)  
**MD Reference:** 3240 + 27 @ 3267.0usft (Patterson 231)  
**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 (°)
18,001.0	92.50	179.30	8,797.7	-9,248.0	-65.1	9,248.2	180.40
18,033.0	90.60	178.80	8,796.9	-9,279.9	-64.6	9,280.2	180.40
18,065.0	90.00	178.70	8,796.7	-9,311.9	-63.9	9,312.2	180.39
18,096.0	89.60	178.70	8,796.8	-9,342.9	-63.2	9,343.1	180.39
18,128.0	89.00	178.50	8,797.2	-9,374.9	-62.4	9,375.1	180.38
18,159.0	88.80	178.50	8,797.8	-9,405.9	-61.6	9,406.1	180.38
18,223.0	91.90	179.50	8,797.4	-9,469.9	-60.5	9,470.1	180.37
18,318.0	91.20	179.50	8,794.8	-9,564.8	-59.7	9,565.0	180.36
18,413.0	88.00	178.50	8,795.5	-9,659.8	-58.0	9,660.0	180.34
18,508.0	90.40	176.70	8,796.8	-9,754.7	-54.0	9,754.9	180.32
18,603.0	90.90	177.60	8,795.7	-9,849.6	-49.3	9,849.7	180.29
18,698.0	91.10	179.20	8,794.1	-9,944.5	-46.7	9,944.6	180.27
18,801.0	92.70	181.10	8,790.7	-10,047.5	-46.9	10,047.6	180.27
18,852.0	92.70	181.10	8,788.3	-10,098.4	-47.9	10,098.5	180.27

18852' MD Projected to Bit - PBHL Ghost rider 25/36 WODM Fed Com 2H

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
485.0	484.9	0.2	9.0	485' MD Rig Surveys
18,852.0	8,788.3	-10,098.4	-47.9	18852' MD Projected to Bit