



MEWBOURNE
OIL COMPANY

Mewbourne Oil Company

Eddy County, New Mexico

Section 3-24S-28E Yardbirds 3 W0AP Fee 2H

Yardbirds 3 W0AP Fee #2H

30-015-43949

Original Hole

Survey: MWD Survey Vertical

Standard Survey Report

13 April, 2017





Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 3-24S-28E Yardbirds 3 W0AP Fee 2H
Well: Yardbirds 3 W0AP Fee #2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Yardbirds 3 W0AP Fee #2H
TVD Reference: 3018 +27 @ 3045.0usft (Patterson 242)
MD Reference: 3018 +27 @ 3045.0usft (Patterson 242)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

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

Site Section 3-24S-28E Yardbirds 3 W0AP Fee 2H

Site Position: Northing: 456,087.20 usft Latitude: 32° 15' 13.036 N
From: Map Easting: 582,151.60 usft Longitude: 104° 4' 3.324 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.14 °

Well Yardbirds 3 W0AP Fee #2H

Well Position +N/-S 0.0 usft Northing: 456,087.20 usft Latitude: 32° 15' 13.036 N
 +E/-W 0.0 usft Easting: 582,151.60 usft Longitude: 104° 4' 3.324 W
Position Uncertainty 0.0 usft Wellhead Elevation: 27.0 usft Ground Level: 3,018.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/22/2017	7.22	60.01	47,937.75530042

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	275.18

Survey Program Date 4/13/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200.0	14,275.0	MWD Survey Vertical (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
200.0	1.00	298.40	200.0	0.8	-1.5	1.6	0.50	0.50	0.00
381.0	1.20	302.50	381.0	2.6	-4.5	4.7	0.12	0.11	2.27
565.0	1.10	300.80	564.9	4.5	-7.7	8.0	0.06	-0.05	-0.92
758.0	1.10	269.00	757.9	5.5	-11.1	11.6	0.31	0.00	-16.48
948.0	2.10	291.30	947.8	6.7	-16.2	16.7	0.61	0.53	11.74
1,138.0	1.50	246.40	1,137.7	7.0	-21.7	22.2	0.78	-0.32	-23.63
1,328.0	2.50	257.70	1,327.6	5.1	-28.0	28.4	0.56	0.53	5.95
1,518.0	2.90	265.30	1,517.4	3.8	-36.9	37.1	0.28	0.21	4.00
1,613.0	3.00	274.40	1,612.3	3.8	-41.7	41.9	0.50	0.11	9.58

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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)
1,803.0	3.20	283.60	1,802.0	5.4	-51.9	52.1	0.28	0.11	4.84
1,990.0	2.20	275.00	1,988.8	7.0	-60.5	60.9	0.58	-0.53	-4.60
2,177.0	1.70	236.90	2,175.7	5.8	-66.4	66.6	0.73	-0.27	-20.37
2,365.0	3.50	171.30	2,363.5	-1.4	-67.9	67.5	1.70	0.96	-34.89
2,510.0	5.50	170.00	2,508.1	-12.7	-66.0	64.6	1.38	1.38	-0.90
2,646.0	6.50	176.40	2,643.3	-26.8	-64.4	61.7	0.88	0.74	4.71
2,833.0	4.20	177.90	2,829.5	-44.2	-63.5	59.2	1.23	-1.23	0.80
3,020.0	0.70	121.20	3,016.3	-51.6	-62.2	57.3	2.06	-1.87	-30.32
3,208.0	0.70	117.40	3,204.3	-52.7	-60.2	55.2	0.02	0.00	-2.02
3,395.0	0.70	145.80	3,391.3	-54.2	-58.6	53.4	0.18	0.00	15.19
3,582.0	0.50	150.90	3,578.3	-55.9	-57.5	52.3	0.11	-0.11	2.73
3,769.0	0.40	185.70	3,765.3	-57.2	-57.2	51.8	0.15	-0.05	18.61
3,956.0	0.40	219.60	3,952.3	-58.4	-57.7	52.2	0.12	0.00	18.13
4,143.0	1.30	241.60	4,139.2	-59.9	-60.0	54.3	0.50	0.48	11.76
4,330.0	1.00	246.20	4,326.2	-61.5	-63.3	57.5	0.17	-0.16	2.46
4,517.0	2.30	339.70	4,513.1	-58.7	-66.1	60.5	1.37	0.70	50.00
4,704.0	2.10	323.10	4,700.0	-52.4	-69.5	64.5	0.36	-0.11	-8.88
4,891.0	2.00	306.70	4,886.9	-47.7	-74.2	69.5	0.32	-0.05	-8.77
5,078.0	1.60	345.60	5,073.8	-43.3	-77.4	73.2	0.67	-0.21	20.80
5,265.0	1.70	328.70	5,260.7	-38.4	-79.5	75.7	0.26	0.05	-9.04
5,451.0	1.30	331.10	5,446.7	-34.2	-82.0	78.5	0.22	-0.22	1.29
5,638.0	3.00	1.60	5,633.5	-27.4	-82.8	80.0	1.07	0.91	16.31
5,825.0	2.10	1.30	5,820.3	-19.1	-82.6	80.6	0.48	-0.48	-0.16
6,012.0	1.40	357.10	6,007.2	-13.4	-82.7	81.1	0.38	-0.37	-2.25
6,200.0	1.10	318.90	6,195.2	-9.7	-84.0	82.8	0.46	-0.16	-20.32
6,293.0	2.50	333.50	6,288.2	-7.2	-85.5	84.5	1.57	1.51	15.70
6,387.0	2.40	332.10	6,382.1	-3.7	-87.3	86.6	0.12	-0.11	-1.49
6,480.0	2.00	1.80	6,475.0	-0.3	-88.2	87.8	1.28	-0.43	31.94
6,574.0	3.00	13.10	6,568.9	3.7	-87.6	87.5	1.18	1.06	12.02
6,667.0	2.70	339.00	6,661.8	8.1	-87.8	88.2	1.82	-0.32	-36.67
6,761.0	3.70	358.90	6,755.7	13.2	-88.6	89.5	1.57	1.06	21.17
6,947.0	1.70	327.50	6,941.5	21.6	-90.2	91.8	1.30	-1.08	-16.88
7,041.0	3.20	5.30	7,035.4	25.3	-90.7	92.7	2.26	1.60	40.21
7,134.0	6.40	11.10	7,128.0	33.0	-89.5	92.1	3.48	3.44	6.24
7,228.0	5.50	20.10	7,221.5	42.4	-86.9	90.4	1.38	-0.96	9.57
7,321.0	3.90	23.60	7,314.2	49.5	-84.2	88.3	1.75	-1.72	3.76
7,415.0	2.70	16.50	7,408.1	54.5	-82.2	86.8	1.35	-1.28	-7.55
7,508.0	4.50	6.60	7,500.9	60.3	-81.2	86.3	2.04	1.94	-10.65
7,602.0	5.30	12.80	7,594.5	68.1	-79.8	85.6	1.02	0.85	6.60
7,695.0	6.80	16.00	7,687.0	77.6	-77.3	84.0	1.65	1.61	3.44
7,789.0	6.30	18.60	7,780.4	87.9	-74.2	81.8	0.62	-0.53	2.77
7,883.0	5.40	21.20	7,873.9	96.9	-70.9	79.4	1.00	-0.96	2.77
7,976.0	5.10	9.50	7,966.5	105.0	-68.7	77.9	1.19	-0.32	-12.58
8,070.0	4.40	358.60	8,060.2	112.8	-68.1	78.0	1.21	-0.74	-11.60



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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)
8,163.0	5.40	355.80	8,152.9	120.7	-68.5	79.1	1.11	1.08	-3.01
8,257.0	5.20	357.90	8,246.4	129.4	-68.9	80.3	0.30	-0.21	2.23
8,350.0	4.70	351.70	8,339.1	137.3	-69.6	81.8	0.79	-0.54	-6.67
8,444.0	3.10	351.70	8,432.9	143.7	-70.6	83.3	1.70	-1.70	0.00
8,537.0	5.00	2.90	8,525.6	150.2	-70.7	84.0	2.20	2.04	12.04
8,631.0	3.30	27.80	8,619.4	156.7	-69.3	83.1	2.60	-1.81	26.49
8,724.0	3.30	25.40	8,712.3	161.5	-66.9	81.2	0.15	0.00	-2.58
8,818.0	2.30	5.50	8,806.1	165.8	-65.5	80.2	1.47	-1.06	-21.17
8,911.0	1.50	341.50	8,899.1	168.8	-65.7	80.7	1.20	-0.86	-25.81
8,957.0	1.10	335.10	8,945.1	169.8	-66.1	81.2	0.92	-0.87	-13.91
9,012.1	1.23	152.94	9,000.2	169.7	-66.1	81.1	4.22	0.24	322.57
BB Yardbirds 3 W0AP Fee 2H									
9,028.0	1.90	153.30	9,016.1	169.3	-65.9	80.9	4.22	4.22	2.27
9,059.0	5.50	153.20	9,047.0	167.6	-65.0	79.8	11.61	11.61	-0.32
9,090.0	9.60	155.20	9,077.7	163.9	-63.2	77.8	13.25	13.23	6.45
9,121.0	13.40	155.80	9,108.1	158.3	-60.7	74.7	12.26	12.26	1.94
9,152.0	14.90	153.00	9,138.2	151.4	-57.4	70.8	5.32	4.84	-9.03
9,184.0	17.10	147.10	9,168.9	143.8	-52.9	65.7	8.54	6.88	-18.44
9,215.0	20.60	143.10	9,198.2	135.6	-47.2	59.3	12.03	11.29	-12.90
9,246.0	22.20	143.70	9,227.1	126.5	-40.5	51.7	5.21	5.16	1.94
9,277.0	25.20	147.10	9,255.5	116.3	-33.4	43.8	10.63	9.68	10.97
9,308.0	29.50	150.10	9,283.0	104.1	-26.0	35.3	14.56	13.87	9.68
9,339.0	33.80	152.30	9,309.4	89.9	-18.2	26.2	14.36	13.87	7.10
9,371.0	37.00	154.20	9,335.5	73.3	-9.9	16.4	10.57	10.00	5.94
9,402.0	38.60	153.90	9,360.0	56.2	-1.5	6.6	5.20	5.16	-0.97
9,433.0	41.10	154.20	9,383.8	38.4	7.1	-3.7	8.09	8.06	0.97
9,464.0	45.80	156.50	9,406.3	19.0	16.0	-14.2	15.99	15.16	7.42
9,495.0	48.70	159.00	9,427.3	-2.1	24.6	-24.7	11.07	9.35	8.06
9,526.0	50.50	160.90	9,447.4	-24.3	32.7	-34.8	7.45	5.81	6.13
9,558.0	53.60	162.10	9,467.1	-48.2	40.7	-44.9	10.13	9.69	3.75
9,589.0	57.50	165.00	9,484.6	-72.7	47.9	-54.3	14.76	12.58	9.35
9,620.0	61.30	167.50	9,500.4	-98.6	54.3	-63.0	14.09	12.26	8.06
9,651.0	65.00	168.70	9,514.4	-125.7	60.0	-71.1	12.42	11.94	3.87
9,682.0	67.60	170.60	9,526.9	-153.6	65.1	-78.7	10.09	8.39	6.13
9,713.0	69.10	172.70	9,538.3	-182.1	69.2	-85.4	7.94	4.84	6.77
9,745.0	70.90	175.30	9,549.2	-212.0	72.4	-91.2	9.48	5.63	8.13
9,776.0	73.90	178.00	9,558.6	-241.5	74.1	-95.6	12.75	9.68	8.71
9,807.0	77.50	181.70	9,566.3	-271.5	74.2	-98.4	16.39	11.61	11.94
9,894.0	84.00	184.20	9,580.3	-357.2	69.7	-101.7	7.99	7.47	2.87
9,987.0	89.20	182.40	9,585.8	-449.9	64.4	-104.8	5.92	5.59	-1.94
10,019.9	88.92	182.19	9,586.3	-482.7	63.1	-106.4	1.06	-0.85	-0.64
LP Yardbirds 3 W0AP Fee 2H									
10,081.0	88.40	181.80	9,587.7	-543.8	61.0	-109.8	1.06	-0.85	-0.64

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10,175.0	88.20	181.80	9,590.5	-637.7	58.0	-115.4	0.21	-0.21	0.00
10,268.0	91.20	182.70	9,591.0	-730.6	54.4	-120.1	3.37	3.23	0.97
10,361.0	90.30	182.20	9,589.8	-823.5	50.4	-124.6	1.11	-0.97	-0.54
10,455.0	89.80	182.60	9,589.7	-917.4	46.4	-129.1	0.68	-0.53	0.43
10,549.0	89.70	183.30	9,590.1	-1,011.3	41.6	-132.8	0.75	-0.11	0.74
10,642.0	89.40	183.00	9,590.9	-1,104.2	36.5	-136.1	0.46	-0.32	-0.32
10,736.0	89.30	183.60	9,591.9	-1,198.0	31.1	-139.2	0.65	-0.11	0.64
10,829.0	89.80	184.30	9,592.7	-1,290.8	24.7	-141.2	0.92	0.54	0.75
10,923.0	91.60	186.50	9,591.5	-1,384.3	15.8	-140.8	3.02	1.91	2.34
11,017.0	88.30	184.50	9,591.6	-1,477.9	6.8	-140.3	4.10	-3.51	-2.13
11,111.0	88.40	185.10	9,594.3	-1,571.5	-1.0	-140.9	0.65	0.11	0.64
11,204.0	88.50	185.00	9,596.8	-1,664.1	-9.2	-141.2	0.15	0.11	-0.11
11,298.0	90.40	181.50	9,597.7	-1,758.0	-14.6	-144.3	4.24	2.02	-3.72
11,391.0	90.20	180.90	9,597.2	-1,850.9	-16.5	-150.8	0.68	-0.22	-0.65
11,485.0	89.80	181.40	9,597.2	-1,944.9	-18.4	-157.4	0.68	-0.43	0.53
11,579.0	94.20	182.00	9,593.9	-2,038.8	-21.2	-163.1	4.72	4.68	0.64
11,672.0	91.20	183.30	9,589.6	-2,131.6	-25.5	-167.2	3.51	-3.23	1.40
11,766.0	88.50	183.70	9,589.8	-2,225.4	-31.2	-170.0	2.90	-2.87	0.43
11,860.0	88.50	184.10	9,592.3	-2,319.1	-37.6	-172.1	0.43	0.00	0.43
11,953.0	89.80	186.20	9,593.7	-2,411.7	-45.9	-172.1	2.66	1.40	2.26
12,047.0	90.20	186.40	9,593.7	-2,505.2	-56.3	-170.3	0.48	0.43	0.21
12,141.0	92.00	188.00	9,591.8	-2,598.4	-68.0	-167.0	2.56	1.91	1.70
12,234.0	89.80	186.70	9,590.4	-2,690.6	-79.9	-163.5	2.75	-2.37	-1.40
12,328.0	89.00	186.20	9,591.4	-2,784.0	-90.5	-161.4	1.00	-0.85	-0.53
12,421.0	88.60	186.60	9,593.3	-2,876.4	-100.9	-159.4	0.61	-0.43	0.43
12,515.0	88.40	184.40	9,595.8	-2,970.0	-109.9	-158.9	2.35	-0.21	-2.34
12,608.0	88.00	184.70	9,598.7	-3,062.6	-117.2	-159.9	0.54	-0.43	0.32
12,702.0	88.50	183.50	9,601.6	-3,156.3	-123.9	-161.7	1.38	0.53	-1.28
12,795.0	90.20	182.30	9,602.6	-3,249.2	-128.7	-165.4	2.24	1.83	-1.29
12,889.0	90.60	185.30	9,602.0	-3,343.0	-134.9	-167.7	3.22	0.43	3.19
12,982.0	92.00	186.60	9,599.9	-3,435.5	-144.5	-166.4	2.05	1.51	1.40
13,076.0	87.40	182.20	9,600.4	-3,529.1	-151.7	-167.7	6.77	-4.89	-4.68
13,170.0	93.10	182.50	9,599.9	-3,623.0	-155.6	-172.4	6.07	6.06	0.32
13,263.0	90.80	181.50	9,596.8	-3,715.9	-158.8	-177.5	2.70	-2.47	-1.08
13,357.0	90.50	182.40	9,595.7	-3,809.8	-162.0	-182.8	1.01	-0.32	0.96
13,450.0	90.40	183.00	9,595.0	-3,902.7	-166.4	-186.9	0.65	-0.11	0.65
13,544.0	89.50	180.40	9,595.1	-3,996.7	-169.2	-192.6	2.93	-0.96	-2.77
13,637.0	83.60	178.70	9,600.7	-4,089.5	-168.5	-201.7	6.60	-6.34	-1.83
13,730.0	87.70	177.60	9,607.7	-4,182.1	-165.5	-213.0	4.56	4.41	-1.18
13,824.0	92.20	178.40	9,607.8	-4,276.0	-162.2	-224.8	4.86	4.79	0.85
13,918.0	90.50	178.60	9,605.6	-4,370.0	-159.7	-235.7	1.82	-1.81	0.21
14,011.0	89.60	177.40	9,605.5	-4,462.9	-156.5	-247.4	1.61	-0.97	-1.29
14,105.0	93.10	179.10	9,603.3	-4,556.8	-153.6	-258.7	4.14	3.72	1.81
14,199.0	90.80	178.80	9,600.1	-4,650.8	-151.9	-268.9	2.47	-2.45	-0.32



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 3-24S-28E Yardbirds 3 W0AP Fee 2H
Well: Yardbirds 3 W0AP Fee #2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Yardbirds 3 W0AP Fee #2H
TVD Reference: 3018 +27 @ 3045.0usft (Patterson 242)
MD Reference: 3018 +27 @ 3045.0usft (Patterson 242)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,220.0	88.40	177.80	9,600.2	-4,671.7	-151.3	-271.4	12.38	-11.43	-4.76
14,275.0	88.40	177.80	9,601.8	-4,726.7	-149.2	-278.5	0.00	0.00	0.00
14275' MD Projected to Bit - PBHL Yardbirds 3 W0AP Fee 2H									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
14,275.0	9,601.8	-4,726.7	-149.2	14275' MD Projected to Bit