



30-015-41309

Mewbourne Oil Company .

Eddy County, New Mexico

Section 34-23S-28E Yardbirds 34 W2NC Fee 1H

Yardbirds 34 W2NC Fee 1H

Original Hole

Design: Original Hole

Standard Survey Report

26 April, 2016

NM OIL CONSERVATION

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Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Yardbirds 34 W2NC Fee 1H
Project:	Eddy County, New Mexico	TVD Reference:	3034 +27 @ 3061.0usft (Patterson 250)
Site:	Section 34-23S-28E Yardbirds 34 W2NC Fee 1H	MD Reference:	3034 +27 @ 3061.0usft (Patterson 250)
Well:	Yardbirds 34 W2NC Fee 1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	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 34-23S-28E Yardbirds 34 W2NC Fee 1H			
Site Position:		Northings:	456,416.20 usft	Latitude:	32° 15' 16.356 N
From:	Map	Easting:	579,507.20 usft	Longitude:	104° 4' 34.109 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.14 °

Well:	Yardbirds 34 W2NC Fee 1H					
Well Position	+N/-S	0.0 usft	Northings:	456,416.20 usft	Latitude:	32° 15' 16.356 N
	+E/-W	0.0 usft	Easting:	579,507.20 usft	Longitude:	104° 4' 34.109 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,034.0 usft	

Wellbore:	Original Hole
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Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2015	3/18/2016	(°) 7.32	(°) 60.02	(nT) 48,033

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

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	0.78

Survey Program		Date: 4/26/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,680.0	Stryker Gyro Survey (Original Hole)	SRG-GYRO-MS	surface readout gyro mulishot
9,752.0	15,100.0	MWD 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	0.68	122.13	100.0	-0.3	0.5	-0.3	0.68	0.68	0.00
200.0	0.96	133.67	200.0	-1.2	1.6	-1.2	0.32	0.28	11.54
300.0	1.10	145.25	300.0	-2.6	2.8	-2.5	0.25	0.14	11.58
400.0	1.15	139.42	400.0	-4.1	4.0	-4.1	0.12	0.05	-5.83
500.0	1.56	134.85	499.9	-5.8	5.6	-5.8	0.42	0.41	-4.57
600.0	1.16	116.21	599.9	-7.3	7.5	-7.2	0.59	-0.40	-18.64
700.0	1.27	137.43	699.9	-8.5	9.1	-8.4	0.46	0.11	21.22
800.0	0.38	295.21	799.9	-9.2	9.6	-9.1	1.63	-0.89	157.78



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Well:	Yardbirds 34 W2NC Fee 1H	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)	
900.0	0.84	317.56	899.9	-8.5	8.8	-8.4	0.51	0.46	22.35	
1,000.0	0.91	309.30	999.8	-7.5	7.7	-7.4	0.14	0.07	-8.26	
1,100.0	0.99	314.80	1,099.8	-6.4	6.4	-6.3	0.12	0.08	5.50	
1,200.0	1.06	315.80	1,199.8	-5.1	5.2	-5.0	0.07	0.07	1.00	
1,300.0	1.12	316.90	1,299.8	-3.7	3.9	-3.7	0.06	0.06	1.10	
1,400.0	1.21	331.28	1,399.8	-2.1	2.7	-2.0	0.30	0.09	14.38	
1,500.0	1.03	215.78	1,499.8	-1.9	1.7	-1.8	1.90	-0.18	-115.50	
1,600.0	0.53	296.89	1,599.8	-2.4	0.7	-2.4	1.08	-0.50	81.11	
1,700.0	0.51	302.17	1,699.8	-1.9	-0.1	-1.9	0.05	-0.02	5.28	
1,800.0	0.28	314.97	1,799.8	-1.5	-0.6	-1.5	0.24	-0.23	12.80	
1,900.0	0.45	101.20	1,899.8	-1.4	-0.4	-1.4	0.70	0.17	146.23	
2,000.0	1.24	92.93	1,999.7	-1.8	1.1	-1.6	0.80	0.79	-8.27	
2,100.0	1.46	97.70	2,099.7	-1.8	3.4	-1.8	0.25	0.22	4.77	
2,200.0	1.76	105.56	2,199.7	-2.4	6.1	-2.3	0.37	0.30	7.86	
2,300.0	1.40	110.12	2,299.6	-3.2	8.8	-3.1	0.38	-0.36	4.56	
2,400.0	1.39	105.42	2,399.6	-4.0	11.1	-3.8	0.11	-0.01	-4.70	
2,500.0	1.26	89.48	2,499.6	-4.3	13.4	-4.1	0.39	-0.13	-15.94	
2,600.0	1.25	91.68	2,599.6	-4.3	15.5	-4.1	0.05	-0.01	2.20	
2,700.0	0.75	89.39	2,699.5	-4.3	17.3	-4.1	0.50	-0.50	-2.29	
2,800.0	0.74	78.53	2,799.5	-4.2	18.6	-3.9	0.14	-0.01	-10.86	
2,900.0	0.71	81.99	2,899.5	-4.0	19.8	-3.7	0.05	-0.03	3.46	
3,000.0	0.57	71.38	2,999.5	-3.7	20.9	-3.4	0.18	-0.14	-10.61	
3,100.0	0.62	28.96	3,099.5	-3.1	21.6	-2.8	0.43	0.05	-42.42	
3,200.0	0.56	43.04	3,199.5	-2.3	22.2	-2.0	0.16	-0.06	14.08	
3,300.0	0.54	14.57	3,299.5	-1.4	22.7	-1.1	0.27	-0.02	-28.47	
3,400.0	0.47	10.18	3,399.5	-0.6	22.9	-0.3	0.08	-0.07	-4.39	
3,500.0	0.30	354.00	3,499.5	0.1	22.9	0.4	0.20	-0.17	-16.18	
3,600.0	0.35	357.64	3,599.5	0.6	22.9	1.0	0.05	0.05	3.64	
3,700.0	0.44	352.89	3,699.5	1.3	22.8	1.6	0.10	0.09	-4.75	
3,800.0	0.46	342.67	3,799.5	2.1	22.7	2.4	0.08	0.02	-10.22	
3,900.0	0.79	321.26	3,899.5	3.0	22.1	3.3	0.40	0.33	-21.41	
4,000.0	0.88	308.67	3,999.5	4.0	21.1	4.3	0.20	0.09	-12.59	
4,100.0	0.83	314.34	4,099.5	5.0	20.0	5.3	0.10	-0.05	5.67	
4,200.0	0.76	310.86	4,199.5	6.0	18.9	6.2	0.09	-0.07	-3.48	
4,300.0	0.50	308.79	4,299.5	6.7	18.1	6.9	0.26	-0.26	-2.07	
4,400.0	0.48	280.76	4,399.4	7.0	17.3	7.3	0.24	-0.02	-28.03	
4,500.0	0.57	256.53	4,499.4	7.0	16.4	7.2	0.24	0.09	-24.23	
4,600.0	0.64	247.55	4,599.4	6.7	15.4	6.9	0.12	0.07	-8.98	
4,700.0	0.57	239.89	4,699.4	6.2	14.5	6.4	0.11	-0.07	-7.66	
4,800.0	0.91	242.85	4,799.4	5.6	13.4	5.8	0.34	0.34	2.96	
4,900.0	0.63	245.92	4,899.4	5.0	12.2	5.2	0.28	-0.28	3.07	
5,000.0	0.72	235.62	4,999.4	4.4	11.1	4.6	0.15	0.09	-10.30	



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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)	
5,100.0	0.21	262.71	5,099.4	4.0	10.4	4.2	0.54	-0.51	27.09	
5,200.0	0.20	3.10	5,199.4	4.2	10.3	4.3	0.32	-0.01	100.39	
5,300.0	0.38	244.75	5,299.4	4.2	10.0	4.4	0.51	0.18	-118.35	
5,400.0	0.80	216.60	5,399.4	3.5	9.3	3.6	0.50	0.42	-28.15	
5,500.0	1.09	223.44	5,499.4	2.3	8.2	2.4	0.31	0.29	6.84	
5,600.0	1.19	224.33	5,599.4	0.8	6.8	0.9	0.10	0.10	0.89	
5,700.0	1.45	218.13	5,699.3	-0.9	5.3	-0.8	0.30	0.26	-6.20	
5,800.0	1.53	211.37	5,799.3	-3.0	3.8	-3.0	0.19	0.08	-6.76	
5,900.0	1.26	215.51	5,899.3	-5.1	2.5	-5.0	0.29	-0.27	4.14	
6,000.0	1.33	208.27	5,999.2	-7.0	1.3	-7.0	0.18	0.07	-7.24	
6,100.0	1.06	231.27	6,099.2	-8.6	0.0	-8.6	0.54	-0.27	23.00	
6,200.0	1.49	197.37	6,199.2	-10.4	-1.1	-10.4	0.85	0.43	-33.90	
6,300.0	1.91	203.76	6,299.2	-13.2	-2.1	-13.2	0.46	0.42	6.39	
6,400.0	2.34	215.69	6,399.1	-16.4	-4.0	-16.4	0.61	0.43	11.93	
6,500.0	2.01	220.10	6,499.0	-19.4	-6.3	-19.4	0.37	-0.33	4.41	
6,600.0	1.10	223.09	6,599.0	-21.4	-8.1	-21.5	0.91	-0.91	2.99	
6,700.0	0.82	221.13	6,699.0	-22.6	-9.2	-22.8	0.28	-0.28	-1.96	
6,800.0	0.64	207.72	6,799.0	-23.7	-10.0	-23.8	0.25	-0.18	-13.41	
6,900.0	0.31	202.00	6,899.0	-24.4	-10.3	-24.6	0.33	-0.33	-5.72	
7,000.0	0.28	25.30	6,999.0	-24.5	-10.3	-24.6	0.59	-0.03	-176.70	
7,100.0	0.54	113.40	7,099.0	-24.4	-9.8	-24.6	0.60	0.26	88.10	
7,200.0	0.81	168.27	7,198.9	-25.3	-9.2	-25.4	0.67	0.27	54.87	
7,300.0	0.87	182.40	7,298.9	-26.7	-9.1	-26.9	0.22	0.06	14.13	
7,400.0	0.64	178.05	7,398.9	-28.1	-9.1	-28.2	0.24	-0.23	-4.35	
7,500.0	0.52	146.75	7,498.9	-29.0	-8.8	-29.1	0.33	-0.12	-31.30	
7,600.0	2.16	148.19	7,598.9	-31.0	-7.6	-31.1	1.64	1.64	1.44	
7,700.0	3.33	162.65	7,698.8	-35.4	-5.7	-35.4	1.35	1.17	14.46	
7,800.0	4.35	151.50	7,798.6	-41.5	-3.1	-41.5	1.26	1.02	-11.15	
7,900.0	5.22	140.72	7,898.2	-48.3	1.6	-48.3	1.25	0.87	-10.78	
8,000.0	5.42	138.44	7,997.8	-55.4	7.6	-55.3	0.29	0.20	-2.28	
8,100.0	5.78	141.28	8,097.3	-62.8	13.9	-62.6	0.45	0.36	2.84	
8,200.0	4.93	140.73	8,196.9	-70.1	19.8	-69.8	0.85	-0.85	-0.55	
8,300.0	4.46	141.45	8,296.5	-76.5	24.9	-76.1	0.47	-0.47	0.72	
8,400.0	3.73	142.85	8,396.3	-82.1	29.3	-81.7	0.74	-0.73	1.40	
8,500.0	3.34	135.74	8,496.1	-86.8	33.3	-86.3	0.59	-0.39	-7.11	
8,600.0	3.57	137.31	8,595.9	-91.1	37.5	-90.6	0.25	0.23	1.57	
8,700.0	4.42	158.52	8,695.7	-97.0	41.0	-96.5	1.69	0.85	21.21	
8,800.0	3.53	153.82	8,795.4	-103.4	43.8	-102.8	0.95	-0.89	-4.70	
8,900.0	3.07	142.95	8,895.3	-108.3	46.7	-107.6	0.77	-0.46	-10.87	
9,000.0	1.97	142.25	8,995.2	-111.8	49.4	-111.1	1.10	-1.10	-0.70	
9,100.0	1.61	131.16	9,095.1	-114.0	51.5	-113.3	0.50	-0.36	-11.09	
9,200.0	1.87	135.89	9,195.1	-116.1	53.7	-115.4	0.30	0.26	4.73	
9,300.0	1.65	142.57	9,295.0	-118.5	55.7	-117.7	0.30	-0.22	6.68	



Stryker Directional Survey Report



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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)
9,400.0	1.09	154.62	9,395.0	-120.5	57.0	-119.7	0.63	-0.56	12.05
9,500.0	1.11	152.32	9,495.0	-122.2	57.8	-121.4	0.05	0.02	-2.30
9,600.0	0.94	163.27	9,594.9	-123.8	58.5	-123.0	0.26	-0.17	10.95
9,680.0	1.20	172.08	9,674.9	-125.3	58.8	-124.5	0.36	0.33	11.01
9680' MD Stryker Gyro Survey									
9,752.0	0.20	186.80	9,746.9	-126.2	58.9	-125.3	1.40	-1.39	20.44
9,784.0	1.90	343.60	9,778.9	-125.7	58.8	-124.9	6.52	5.31	490.00
9,815.0	4.40	358.00	9,809.9	-124.0	58.6	-123.2	8.40	8.06	46.45
9,847.0	7.60	0.20	9,841.7	-120.7	58.5	-119.9	10.02	10.00	6.88
9,878.0	12.00	3.00	9,872.2	-115.4	58.7	-114.6	14.27	14.19	9.03
9,909.0	16.70	1.20	9,902.3	-107.7	59.0	-106.9	15.23	15.16	-5.81
9,941.0	21.60	359.80	9,932.5	-97.2	59.1	-96.4	15.38	15.31	-4.38
9,973.0	26.20	357.30	9,961.7	-84.3	58.7	-83.5	14.72	14.38	-7.81
10,004.0	28.70	355.60	9,989.2	-70.0	57.8	-69.2	8.45	8.06	-5.48
10,036.0	31.10	354.50	10,017.0	-54.1	56.4	-53.4	7.89	7.50	-3.44
10,067.0	33.60	353.50	10,043.2	-37.6	54.7	-36.9	8.25	8.06	-3.23
10,098.0	36.80	353.80	10,068.5	-19.9	52.7	-19.2	10.34	10.32	0.97
10,130.0	39.40	353.50	10,093.7	-0.3	50.5	0.4	8.15	8.13	-0.94
10,161.0	41.00	354.90	10,117.3	19.6	48.5	20.3	5.93	5.16	4.52
10,193.0	42.90	355.60	10,141.1	41.0	46.7	41.6	6.11	5.94	2.19
10,224.0	44.20	355.60	10,163.6	62.3	45.1	62.9	4.19	4.19	0.00
10,256.0	44.50	355.20	10,186.5	84.6	43.3	85.1	1.28	0.94	-1.25
10,288.0	45.00	355.20	10,209.2	107.0	41.4	107.6	1.56	1.56	0.00
10,319.0	45.00	355.20	10,231.1	128.9	39.6	129.4	0.00	0.00	0.00
10,350.0	45.40	354.90	10,253.0	150.8	37.7	151.3	1.46	1.29	-0.97
10,382.0	47.00	354.50	10,275.1	173.8	35.6	174.2	5.08	5.00	-1.25
10,414.0	48.70	354.20	10,296.6	197.4	33.2	197.8	5.36	5.31	-0.94
10,445.0	50.30	354.20	10,316.7	220.8	30.8	221.2	5.16	5.16	0.00
10,476.0	51.20	354.20	10,336.4	244.7	28.4	245.1	2.90	2.90	0.00
10,508.0	52.60	354.50	10,356.1	269.8	25.9	270.1	4.44	4.38	0.94
10,540.0	54.20	354.90	10,375.2	295.3	23.6	295.6	5.10	5.00	1.25
10,571.0	56.10	354.20	10,392.9	320.7	21.1	320.9	6.40	6.13	-2.26
10,603.0	58.40	353.80	10,410.2	347.4	18.3	347.6	7.26	7.19	-1.25
10,634.0	60.70	353.80	10,425.9	374.0	15.4	374.2	7.42	7.42	0.00
10,666.0	62.30	354.90	10,441.2	402.0	12.7	402.1	5.84	5.00	3.44
10,697.0	64.20	354.90	10,455.1	429.6	10.2	429.7	6.13	6.13	0.00
10,729.0	66.70	354.90	10,468.4	458.5	7.6	458.6	7.81	7.81	0.00
10,747.0	68.10	354.90	10,475.3	475.1	6.2	475.1	7.78	7.78	0.00
10,823.0	73.70	355.90	10,500.2	546.6	0.4	546.6	7.47	7.37	1.32
10,855.0	77.20	356.60	10,508.2	577.6	-1.6	577.5	11.14	10.94	2.19
10,886.0	79.40	358.40	10,514.5	607.9	-2.9	607.8	9.09	7.10	5.81
10,918.0	79.20	358.00	10,520.5	639.3	-3.9	639.2	1.38	-0.63	-1.25



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Yardbirds 34 W2NC Fee 1H
Project:	Eddy County, New Mexico	TVD Reference:	3034 +27 @ 3061.0usft (Patterson 250)
Site:	Section 34-23S-28E Yardbirds 34 W2NC Fee 1H	MD Reference:	3034 +27 @ 3061.0usft (Patterson 250)
Well:	Yardbirds 34 W2NC Fee 1H	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)	
10,950.0	81.30	359.10	10,525.9	670.8	-4.7	670.7	7.39	6.56	3.44	
10,982.0	83.60	359.80	10,530.1	702.5	-5.0	702.4	7.51	7.19	2.19	
11,014.0	85.30	0.90	10,533.2	734.4	-4.8	734.3	6.32	5.31	3.44	
11,046.0	85.20	0.90	10,535.8	766.3	-4.3	766.2	0.31	-0.31	0.00	
11,077.0	87.60	0.90	10,537.8	797.2	-3.8	797.1	7.74	7.74	0.00	
11,109.0	89.90	1.20	10,538.5	829.2	-3.3	829.1	7.25	7.19	0.94	
11,140.0	89.90	0.90	10,538.5	860.2	-2.7	860.1	0.97	0.00	-0.97	
11,236.0	87.60	0.20	10,540.5	956.2	-1.8	956.1	2.31	-2.19	-0.73	
11,330.0	89.90	1.90	10,542.3	1,050.1	0.0	1,050.0	2.87	2.23	1.81	
11,426.0	90.10	0.90	10,542.3	1,146.1	2.3	1,146.0	1.06	0.21	-1.04	
11,520.0	90.30	1.90	10,542.0	1,240.1	4.6	1,240.0	1.08	0.21	1.06	
11,615.0	92.70	2.60	10,539.5	1,334.9	8.3	1,334.9	2.63	2.53	0.74	
11,709.0	90.40	1.20	10,537.0	1,428.9	11.4	1,428.9	2.86	-2.45	-1.49	
11,804.0	89.40	359.80	10,537.2	1,523.8	12.3	1,523.9	1.81	-1.05	-1.47	
11,900.0	87.80	359.50	10,539.5	1,619.8	11.7	1,619.8	1.70	-1.67	-0.31	
11,994.0	91.00	1.20	10,540.5	1,713.8	12.3	1,713.8	3.85	3.40	1.81	
12,087.0	90.30	0.90	10,539.4	1,806.8	14.0	1,806.8	0.82	-0.75	-0.32	
12,182.0	90.40	1.60	10,538.8	1,901.7	16.0	1,901.8	0.74	0.11	0.74	
12,276.0	89.60	1.20	10,538.8	1,995.7	18.3	1,995.8	0.95	-0.85	-0.43	
12,370.0	88.30	358.00	10,540.6	2,089.7	17.7	2,089.7	3.67	-1.38	-3.40	
12,465.0	89.40	0.20	10,542.5	2,184.6	16.2	2,184.7	2.59	1.16	2.32	
12,561.0	88.90	1.60	10,543.9	2,280.6	17.7	2,280.6	1.55	-0.52	1.46	
12,657.0	89.90	3.00	10,544.9	2,376.5	21.5	2,376.6	1.79	1.04	1.46	
12,751.0	89.60	2.30	10,545.3	2,470.4	25.9	2,470.6	0.81	-0.32	-0.74	
12,847.0	88.70	359.10	10,546.7	2,566.4	27.1	2,566.5	3.46	-0.94	-3.33	
12,942.0	89.90	359.10	10,547.9	2,661.4	25.6	2,661.5	1.26	1.26	0.00	
13,036.0	91.30	359.80	10,546.9	2,755.4	24.7	2,755.4	1.67	1.49	0.74	
13,130.0	90.10	358.40	10,545.8	2,849.3	23.2	2,849.4	1.96	-1.28	-1.49	
13,224.0	89.90	357.70	10,545.8	2,943.3	20.0	2,943.3	0.77	-0.21	-0.74	
13,319.0	90.30	357.70	10,545.6	3,038.2	16.2	3,038.1	0.42	0.42	0.00	
13,413.0	91.10	358.80	10,544.5	3,132.2	13.3	3,132.0	1.45	0.85	1.17	
13,508.0	89.90	358.00	10,543.6	3,227.1	10.7	3,227.0	1.52	-1.26	-0.84	
13,602.0	88.90	359.10	10,544.6	3,321.1	8.3	3,320.9	1.58	-1.06	1.17	
13,696.0	91.50	0.90	10,544.3	3,415.1	8.3	3,414.9	3.36	2.77	1.91	
13,790.0	89.40	1.90	10,543.5	3,509.0	10.6	3,508.8	2.47	-2.23	1.06	
13,885.0	88.90	5.40	10,545.0	3,603.8	16.6	3,603.7	3.72	-0.53	3.68	
13,979.0	90.10	4.40	10,545.8	3,697.5	24.6	3,697.5	1.66	1.28	-1.06	
14,074.0	88.30	1.60	10,547.1	3,792.3	29.6	3,792.4	3.50	-1.89	-2.95	
14,169.0	88.30	359.50	10,549.9	3,887.3	30.5	3,887.3	2.21	0.00	-2.21	
14,263.0	91.50	1.20	10,550.1	3,981.2	31.1	3,981.3	3.85	3.40	1.81	
14,358.0	89.40	0.20	10,549.3	4,076.2	32.3	4,076.3	2.45	-2.21	-1.05	
14,454.0	91.50	0.90	10,548.6	4,172.2	33.2	4,172.3	2.31	2.19	0.73	
14,549.0	89.40	0.50	10,547.8	4,267.2	34.3	4,267.3	2.25	-2.21	-0.42	



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Coordinate Reference:	Well Yardbirds 34 W2NC Fee 1H
Project:	Eddy County, New Mexico	TVD Reference:	3034 +27 @ 3061.0usft (Patterson 250)
Site:	Section 34-23S-28E Yardbirds 34 W2NC Fee 1H	MD Reference:	3034 +27 @ 3061.0usft (Patterson 250)
Well:	Yardbirds 34 W2NC Fee 1H	North Reference:	Grid
Wallbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
14,643.0	91.50	0.90	10,547.1	4,361.2	35.5	4,361.3	2.27	2.23	0.43
14,738.0	91.00	358.80	10,545.0	4,456.1	35.2	4,456.2	2.27	-0.53	-2.21
14,833.0	90.30	358.00	10,544.0	4,551.1	32.6	4,551.1	1.12	-0.74	-0.84
14,928.0	90.30	358.40	10,543.5	4,646.1	29.6	4,646.0	0.42	0.00	0.42
15,023.0	89.90	358.80	10,543.3	4,741.0	27.3	4,741.0	0.60	-0.42	0.42
15,049.0	90.10	358.40	10,543.3	4,767.0	26.7	4,766.9	1.72	0.77	-1.54
15,100.0	90.10	358.40	10,543.2	4,818.0	25.2	4,817.9	0.00	0.00	0.00

15100' MD Projected to Bit

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,680.0	9,674.9	-125.3	58.8	9680' MD Stryker Gyro Survey
15,100.0	10,543.2	4,818.0	25.2	15100' MD Projected to Bit



May 9, 2016

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
Yardbirds 34 W2NC Fee #001H
Culebra Bluff; Wolfcamp, South (Gas)
Eddy County, New Mexico
API# 30-015-41309

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>
Chris Alley	Original Hole	Surface to 9,680ft.	04/14/2016	Gyro Survey
T Wedemeier	Original Hole	9,752ft. to 15,049ft.	04-15-16 to 04-26-16	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\Yardbirds 34 W2NC Fee #1H\M161025

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



May 9, 2016

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 14, 2016 conduct or supervise the taking of a SEDS Gyro Survey from Surface to a depth of 9,680 feet; and that I did on the day(s) of April 15, 2016, through April 26, 2016 conduct or supervise the taking of a SEDS Original MWD Survey from a depth of 9,752 feet to a depth of 15,049 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 Yardbirds 34 W2NC Fee #001H well, API # 30-015-41309 in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

Todd Estes

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

P.O. Box 1250

Montgomery, TX 77356

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



COMPANY: Mewbourne Oil Company
 WELL: Yardbirds 34 W2NC Fee 1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson 250

GRID CORRECTION: -To convert a Magnetic Direction to a Grid Direction, Add 7.19°



OFFICE: 936.582.7294

GEODETTIC ZONE: New Mexico East 3001						
3034 +27 @ 3061.0usft (Patterson 250)						
GROUND ELEVATION: 3034.0						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Spot
0.0	0.0	456418.20	579507.20	32° 15' 16.356 N	104° 4' 34.109 W	

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	9680.0	1.20	172.08	9674.9	-125.3	58.8	0.00	0.00	-124.5	
2	9850.0	1.20	172.08	9844.9	-128.8	59.3	0.00	0.00	-128.0	
3	10855.0	83.78	355.40	10532.7	473.4	11.6	8.46	-176.69	473.5	
4	10951.2	89.89	0.77	10538.0	569.3	8.4	8.46	41.46	569.3	LP Yardbirds 34 W2NC Fee 1H
5	15214.5	89.89	0.77	10546.0	4832.1	65.9	0.00	0.00	4832.6	PBHL Yardbirds 34 W2NC Fee 1H

SHL- 150' FSL ; 2240' FWL
 Section 34-23S-28E
 PBHL- 330' FNL ; 2240' FWL
 Section 34-23S-28E

342' FNL; 2,200' FWL

