



Mewbourne Oil Company

Eddy County, New Mexico

Section 34-27-23S-28E Speedwagon 27 W0PA Fee 2H

Speedwagon 27 W0PA Fee 2H

Original Hole

30-015-44115

Design: Original Hole

Standard Survey Report

28 September, 2017





Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 34-27-23S-28E Speedwagon 27 W0PA Fee 2H
Well: Speedwagon 27 W0PA Fee 2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Speedwagon 27 W0PA Fee 2H
TVD Reference: 3038 + 27 @ 3065.0usft (Patterson 245)
MD Reference: 3038 + 27 @ 3065.0usft (Patterson 245)
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 34-27-23S-28E Speedwagon 27 W0PA Fee 2H

Site Position:		Northing:	461,330.00 usft	Latitude:	32° 16' 4.919 N
From:	Map	Easting:	582,182.40 usft	Longitude:	104° 4' 2.814 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.14 °

Well Speedwagon 27 W0PA Fee 2H

Well Position	+N/-S	0.0 usft	Northing:	461,330.00 usft	Latitude:	32° 16' 4.919 N
	+E/-W	0.0 usft	Easting:	582,182.40 usft	Longitude:	104° 4' 2.814 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,038.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/29/2017	7.17	60.02	47,893.39705230

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	155.09

Survey Program	Date 9/28/2017				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
142.0	512.0	Rig Survey (Original Hole)	MWD	MWD v3:standard declination	
579.0	14,775.0	MWD Survey #2 (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
142.0	0.60	310.00	142.0	0.5	-0.6	-0.7	0.42	0.42	0.00
203.0	0.70	311.00	203.0	0.9	-1.1	-1.3	0.16	0.16	1.64
265.0	1.00	298.00	265.0	1.4	-1.9	-2.1	0.57	0.48	-20.97
326.0	1.00	282.00	326.0	1.8	-2.8	-2.8	0.46	0.00	-26.23
389.0	1.50	275.00	389.0	2.0	-4.2	-3.6	0.83	0.79	-11.11
451.0	1.70	272.00	450.9	2.1	-5.9	-4.4	0.35	0.32	-4.84
512.0	2.20	269.00	511.9	2.1	-8.0	-5.3	0.84	0.82	-4.92

512.0' MD Rig Surveys



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 34-27-23S-28E Speedwagon 27 W0PA Fee 2H
Well: Speedwagon 27 W0PA Fee 2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Speedwagon 27 W0PA Fee 2H
TVD Reference: 3038 + 27 @ 3065.0usft (Patterson 245)
MD Reference: 3038 + 27 @ 3065.0usft (Patterson 245)
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)
579.0	2.80	265.80	578.8	1.9	-10.9	-6.4	0.92	0.90	-4.78
641.0	1.20	281.70	640.8	2.0	-13.1	-7.3	2.71	-2.58	25.65
702.0	0.40	306.60	701.8	2.2	-13.9	-7.9	1.40	-1.31	40.82
764.0	0.70	90.60	763.8	2.4	-13.7	-7.9	1.69	0.48	232.26
830.0	1.40	91.00	829.8	2.3	-12.5	-7.4	1.06	1.06	0.61
894.0	1.00	139.70	893.8	1.9	-11.3	-6.5	1.65	-0.63	76.09
957.0	1.20	213.80	956.8	0.9	-11.3	-5.6	2.12	0.32	117.62
1,021.0	0.60	147.20	1,020.8	0.1	-11.5	-4.9	1.73	-0.94	-104.06
1,084.0	1.20	106.10	1,083.7	-0.4	-10.7	-4.2	1.34	0.95	-65.24
1,148.0	1.40	108.20	1,147.7	-0.8	-9.3	-3.2	0.32	0.31	3.28
1,211.0	1.20	115.60	1,210.7	-1.3	-8.0	-2.2	0.41	-0.32	11.75
1,274.0	1.20	122.70	1,273.7	-2.0	-6.8	-1.1	0.24	0.00	11.27
1,338.0	1.50	122.60	1,337.7	-2.8	-5.6	0.2	0.47	0.47	-0.16
1,401.0	1.50	134.50	1,400.7	-3.8	-4.3	1.6	0.49	0.00	18.89
1,465.0	0.50	288.40	1,464.7	-4.3	-4.0	2.2	3.06	-1.56	240.47
1,528.0	1.40	313.10	1,527.6	-3.7	-4.8	1.3	1.54	1.43	39.21
1,592.0	1.40	302.60	1,591.6	-2.7	-6.0	0.0	0.40	0.00	-16.41
1,655.0	0.20	49.40	1,654.6	-2.3	-6.6	-0.7	2.33	-1.90	169.52
1,718.0	1.00	139.50	1,717.6	-2.6	-6.1	-0.2	1.62	1.27	143.02
1,782.0	1.50	149.30	1,781.6	-3.7	-5.3	1.1	0.85	0.78	15.31
1,814.0	1.40	151.30	1,813.6	-4.4	-4.9	2.0	0.35	-0.31	6.25
1,911.0	0.90	113.50	1,910.6	-5.8	-3.7	3.7	0.91	-0.52	-38.97
2,007.0	1.80	114.40	2,006.5	-6.7	-1.6	5.4	0.94	0.94	0.94
2,102.0	0.40	74.70	2,101.5	-7.2	0.1	6.6	1.59	-1.47	-41.79
2,197.0	1.10	95.80	2,196.5	-7.2	1.3	7.1	0.78	0.74	22.21
2,292.0	0.40	127.40	2,291.5	-7.5	2.5	7.9	0.83	-0.74	33.26
2,387.0	1.50	120.40	2,386.5	-8.4	3.8	9.2	1.16	1.16	-7.37
2,482.0	0.70	320.40	2,481.5	-8.6	4.5	9.7	2.29	-0.84	-168.42
2,556.0	1.40	310.90	2,555.5	-7.6	3.5	8.4	0.97	0.95	-12.84
2,666.0	1.60	300.80	2,665.4	-5.9	1.2	5.9	0.30	0.18	-9.18
2,761.0	0.30	90.40	2,760.4	-5.3	0.3	4.9	1.96	-1.37	157.47
2,855.0	0.30	105.10	2,854.4	-5.3	0.8	5.2	0.08	0.00	15.64
2,951.0	0.20	135.20	2,950.4	-5.5	1.2	5.5	0.17	-0.10	31.35
3,046.0	0.10	71.30	3,045.4	-5.6	1.3	5.7	0.19	-0.11	-67.26
3,141.0	0.10	210.80	3,140.4	-5.7	1.4	5.7	0.20	0.00	146.84
3,236.0	0.10	262.30	3,235.4	-5.7	1.3	5.7	0.09	0.00	54.21
3,331.0	0.10	269.70	3,330.4	-5.7	1.1	5.7	0.01	0.00	7.79
3,426.0	0.30	25.80	3,425.4	-5.5	1.1	5.5	0.37	0.21	122.21
3,521.0	0.30	354.50	3,520.4	-5.1	1.2	5.1	0.17	0.00	-32.95
3,615.0	0.40	358.80	3,614.4	-4.5	1.2	4.6	0.11	0.11	4.57
3,711.0	0.40	346.00	3,710.4	-3.8	1.1	3.9	0.09	0.00	-13.33
3,805.0	0.40	348.20	3,804.4	-3.2	0.9	3.3	0.02	0.00	2.34

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Speedwagon 27 W0PA Fee 2H
Project:	Eddy County, New Mexico	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 245)
Site:	Section 34-27-23S-28E Speedwagon 27 W0PA Fee 2H	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 245)
Well:	Speedwagon 27 W0PA Fee 2H	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)
3,900.0	0.50	336.30	3,899.4	-2.5	0.7	2.5	0.14	0.11	-12.53
3,996.0	0.40	312.00	3,995.4	-1.9	0.3	1.8	0.22	-0.10	-25.31
4,092.0	0.50	303.00	4,091.4	-1.4	-0.3	1.2	0.13	0.10	-9.38
4,188.0	0.50	299.40	4,187.4	-1.0	-1.0	0.5	0.03	0.00	-3.75
4,283.0	0.50	280.80	4,282.4	-0.7	-1.8	-0.1	0.17	0.00	-19.58
4,378.0	0.50	272.40	4,377.4	-0.6	-2.6	-0.6	0.08	0.00	-8.84
4,474.0	0.60	264.60	4,473.4	-0.6	-3.5	-0.9	0.13	0.10	-8.13
4,569.0	0.70	254.50	4,568.4	-0.8	-4.6	-1.2	0.16	0.11	-10.63
4,663.0	0.70	259.80	4,662.4	-1.1	-5.7	-1.4	0.07	0.00	5.64
4,757.0	0.90	253.60	4,756.4	-1.4	-7.0	-1.7	0.23	0.21	-6.60
4,852.0	1.10	250.90	4,851.4	-1.9	-8.6	-1.9	0.22	0.21	-2.84
4,947.0	0.50	349.00	4,946.3	-1.8	-9.5	-2.4	1.34	-0.63	103.26
5,042.0	0.20	41.40	5,041.3	-1.3	-9.5	-2.8	0.43	-0.32	55.16
5,136.0	0.10	198.10	5,135.3	-1.2	-9.4	-2.8	0.31	-0.11	166.70
5,231.0	0.50	236.90	5,230.3	-1.5	-9.8	-2.7	0.45	0.42	40.84
5,326.0	0.80	243.40	5,325.3	-2.1	-10.7	-2.6	0.32	0.32	6.84
5,421.0	0.90	231.50	5,420.3	-2.8	-11.9	-2.4	0.21	0.11	-12.53
5,516.0	0.60	49.90	5,515.3	-3.0	-12.1	-2.4	1.58	-0.32	187.79
5,611.0	0.60	63.30	5,610.3	-2.4	-11.3	-2.5	0.15	0.00	14.11
5,707.0	0.80	90.00	5,706.3	-2.2	-10.1	-2.3	0.39	0.21	27.81
5,803.0	1.00	112.00	5,802.3	-2.5	-8.7	-1.4	0.41	0.21	22.92
5,897.0	1.30	126.50	5,896.3	-3.4	-7.1	0.1	0.44	0.32	15.43
5,992.0	1.10	120.90	5,991.3	-4.6	-5.4	1.8	0.24	-0.21	-5.89
6,087.0	1.20	133.90	6,086.2	-5.7	-3.9	3.5	0.29	0.11	13.68
6,182.0	1.40	162.10	6,181.2	-7.5	-2.9	5.6	0.70	0.21	29.68
6,277.0	1.00	209.80	6,276.2	-9.3	-2.9	7.2	1.09	-0.42	50.21
6,372.0	0.60	199.90	6,371.2	-10.5	-3.5	8.1	0.44	-0.42	-10.42
6,467.0	0.70	212.60	6,466.2	-11.5	-4.0	8.7	0.18	0.11	13.37
6,562.0	0.70	188.40	6,561.2	-12.5	-4.4	9.5	0.31	0.00	-25.47
6,657.0	0.90	115.00	6,656.2	-13.4	-3.8	10.6	1.02	0.21	-77.26
6,752.0	1.70	120.30	6,751.1	-14.5	-1.9	12.3	0.85	0.84	5.58
6,847.0	0.40	148.80	6,846.1	-15.4	-0.5	13.8	1.43	-1.37	30.00
6,942.0	1.50	280.40	6,941.1	-15.5	-1.5	13.4	1.88	1.16	138.53
7,036.0	1.10	295.20	7,035.1	-14.9	-3.6	12.0	0.55	-0.43	15.74
7,132.0	0.30	351.20	7,131.1	-14.3	-4.4	11.1	1.01	-0.83	58.33
7,227.0	1.00	113.70	7,226.1	-14.3	-3.7	11.4	1.25	0.74	128.95
7,322.0	0.50	187.50	7,321.1	-15.1	-3.0	12.4	1.04	-0.53	77.68
7,417.0	1.20	218.00	7,416.1	-16.3	-3.7	13.2	0.85	0.74	32.11
7,512.0	1.80	214.80	7,511.0	-18.3	-5.1	14.4	0.64	0.63	-3.37
7,606.0	0.70	220.50	7,605.0	-19.9	-6.4	15.4	1.18	-1.17	6.06
7,702.0	1.60	338.50	7,701.0	-19.1	-7.2	14.3	2.11	0.94	122.92
7,797.0	1.80	347.40	7,796.0	-16.5	-8.0	11.5	0.35	0.21	9.37
7,892.0	0.70	340.00	7,890.9	-14.5	-8.6	9.5	1.17	-1.16	-7.79

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Speedwagon 27 W0PA Fee 2H
Project:	Eddy County, New Mexico	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 245)
Site:	Section 34-27-23S-28E Speedwagon 27 W0PA Fee 2H	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 245)
Well:	Speedwagon 27 W0PA Fee 2H	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)
7,986.0	1.00	308.50	7,984.9	-13.4	-9.4	8.2	0.58	0.32	-33.51
8,082.0	1.00	285.00	8,080.9	-12.7	-10.9	6.9	0.42	0.00	-24.48
8,177.0	1.20	276.50	8,175.9	-12.3	-12.7	5.9	0.27	0.21	-8.95
8,272.0	0.70	11.30	8,270.9	-11.7	-13.5	4.9	1.51	-0.53	99.79
8,367.0	0.50	343.40	8,365.9	-10.7	-13.5	4.0	0.37	-0.21	-29.37
8,462.0	0.70	311.60	8,460.9	-9.9	-14.1	3.0	0.40	0.21	-33.47
8,557.0	1.00	331.60	8,555.9	-8.8	-14.9	1.7	0.44	0.32	21.05
8,652.0	1.20	316.50	8,650.8	-7.3	-16.0	-0.1	0.37	0.21	-15.89
8,748.0	1.80	10.60	8,746.8	-5.1	-16.4	-2.3	1.53	0.63	56.35
8,843.0	3.00	25.10	8,841.7	-1.4	-15.1	-5.1	1.41	1.26	15.26
8,937.0	1.90	48.10	8,935.6	1.9	-12.9	-7.1	1.55	-1.17	24.47
9,033.0	1.40	42.40	9,031.6	3.8	-10.9	-8.0	0.55	-0.52	-5.94
9,100.0	1.10	54.60	9,098.6	4.8	-9.8	-8.5	0.60	-0.45	18.21
9,125.0	0.90	64.60	9,123.6	5.0	-9.5	-8.5	1.06	-0.80	40.00
9,156.0	0.60	33.10	9,154.6	5.2	-9.2	-8.6	1.61	-0.97	-101.61
9,188.0	2.10	17.20	9,186.6	5.9	-8.9	-9.1	4.79	4.69	-49.69
9,220.0	5.10	16.50	9,218.5	7.9	-8.3	-10.6	9.38	9.38	-2.19
9,252.0	8.60	8.60	9,250.3	11.6	-7.5	-13.7	11.30	10.94	-24.69
9,283.0	12.70	8.70	9,280.7	17.2	-6.7	-18.5	13.23	13.23	0.32
9,315.0	16.70	9.10	9,311.7	25.3	-5.4	-25.2	12.50	12.50	1.25
9,347.0	20.70	8.20	9,342.0	35.4	-3.9	-33.8	12.53	12.50	-2.81
9,378.0	24.40	9.00	9,370.6	47.2	-2.1	-43.7	11.98	11.94	2.58
9,410.0	29.10	9.00	9,399.2	61.4	0.1	-55.6	14.69	14.69	0.00
9,442.0	33.10	8.40	9,426.6	77.7	2.6	-69.4	12.54	12.50	-1.88
9,474.0	37.10	7.50	9,452.7	95.9	5.2	-84.8	12.60	12.50	-2.81
9,506.0	41.60	6.70	9,477.5	116.1	7.7	-102.0	14.15	14.06	-2.50
9,537.0	45.80	5.20	9,499.9	137.4	9.9	-120.4	13.95	13.55	-4.84
9,569.0	50.10	3.70	9,521.3	161.0	11.7	-141.1	13.88	13.44	-4.69
9,601.0	52.80	0.30	9,541.3	186.0	12.6	-163.4	11.84	8.44	-10.63
9,633.0	55.70	357.80	9,560.0	212.0	12.1	-187.2	11.06	9.06	-7.81
9,664.0	60.20	356.50	9,576.4	238.2	10.8	-211.5	14.94	14.52	-4.19
9,696.0	65.10	357.20	9,591.1	266.6	9.3	-237.9	15.44	15.31	2.19
9,728.0	67.90	357.90	9,603.9	295.9	8.0	-265.0	8.98	8.75	2.19
9,760.0	69.80	358.90	9,615.4	325.8	7.2	-292.4	6.61	5.94	3.13
9,792.0	72.80	359.60	9,625.7	356.1	6.8	-320.1	9.60	9.38	2.19
9,823.0	78.00	358.30	9,633.5	386.0	6.2	-347.5	17.26	16.77	-4.19
9,855.0	83.30	358.50	9,638.7	417.6	5.4	-376.5	16.57	16.56	0.63
9,874.0	86.20	358.10	9,640.4	436.5	4.8	-393.9	15.41	15.26	-2.11
9,914.3	88.48	357.47	9,642.3	476.8	3.2	-431.1	5.88	5.67	-1.56
LP Speedwagon 27 W0PA 2H									
9,964.0	91.30	356.70	9,642.4	526.4	0.7	-477.1	5.88	5.67	-1.55
10,059.0	90.60	355.80	9,640.8	621.1	-5.5	-565.7	1.20	-0.74	-0.95
10,155.0	90.60	357.90	9,639.8	717.0	-10.8	-654.9	2.19	0.00	2.19



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 34-27-23S-28E Speedwagon 27 W0PA Fee 2H
Well: Speedwagon 27 W0PA Fee 2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Speedwagon 27 W0PA Fee 2H
TVD Reference: 3038 + 27 @ 3065.0usft (Patterson 245)
MD Reference: 3038 + 27 @ 3065.0usft (Patterson 245)
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)
10,250.0	87.60	358.80	9,641.3	811.9	-13.5	-742.1	3.30	-3.16	0.95
10,345.0	92.80	0.60	9,641.0	906.9	-14.0	-828.4	5.79	5.47	1.89
10,440.0	91.00	359.40	9,637.8	1,001.8	-14.0	-914.6	2.28	-1.89	-1.26
10,535.0	87.60	358.80	9,639.0	1,096.8	-15.5	-1,001.3	3.63	-3.58	-0.63
10,630.0	86.60	358.10	9,643.8	1,191.6	-18.1	-1,088.4	1.28	-1.05	-0.74
10,726.0	90.00	359.90	9,646.6	1,287.6	-19.7	-1,176.1	4.01	3.54	1.88
10,821.0	90.50	359.30	9,646.2	1,382.6	-20.4	-1,262.6	0.82	0.53	-0.63
10,917.0	89.00	357.40	9,646.6	1,478.5	-23.2	-1,350.8	2.52	-1.56	-1.98
11,012.0	89.90	358.00	9,647.5	1,573.4	-27.0	-1,438.5	1.14	0.95	0.63
11,107.0	89.30	356.60	9,648.2	1,668.3	-31.5	-1,526.4	1.60	-0.63	-1.47
11,203.0	92.40	358.70	9,646.8	1,764.2	-35.4	-1,615.0	3.90	3.23	2.19
11,298.0	89.70	356.90	9,645.0	1,859.1	-39.0	-1,702.7	3.42	-2.84	-1.89
11,394.0	89.90	358.80	9,645.4	1,955.0	-42.6	-1,791.2	1.99	0.21	1.98
11,488.0	90.30	359.80	9,645.2	2,049.0	-43.8	-1,876.9	1.15	0.43	1.06
11,584.0	89.80	359.40	9,645.1	2,145.0	-44.5	-1,964.3	0.67	-0.52	-0.42
11,679.0	91.30	359.80	9,644.2	2,240.0	-45.1	-2,050.7	1.63	1.58	0.42
11,774.0	92.00	359.60	9,641.5	2,335.0	-45.6	-2,137.0	0.77	0.74	-0.21
11,870.0	90.60	359.70	9,639.3	2,430.9	-46.2	-2,224.3	1.46	-1.46	0.10
11,964.0	88.30	1.40	9,640.2	2,524.9	-45.3	-2,309.2	3.04	-2.45	1.81
12,060.0	89.80	1.70	9,641.8	2,620.9	-42.7	-2,395.1	1.59	1.56	0.31
12,156.0	91.50	3.20	9,640.7	2,716.8	-38.6	-2,480.4	2.36	1.77	1.56
12,251.0	87.10	359.20	9,641.9	2,811.7	-36.6	-2,565.6	6.26	-4.63	-4.21
12,346.0	87.70	359.20	9,646.2	2,906.6	-37.9	-2,652.3	0.63	0.63	0.00
12,442.0	90.10	0.10	9,648.0	3,002.6	-38.5	-2,739.6	2.67	2.50	0.94
12,537.0	88.50	358.90	9,649.2	3,097.6	-39.4	-2,826.1	2.11	-1.68	-1.26
12,631.0	90.60	358.80	9,649.9	3,191.5	-41.2	-2,912.1	2.24	2.23	-0.11
12,726.0	90.30	357.90	9,649.2	3,286.5	-44.0	-2,999.4	1.00	-0.32	-0.95
12,822.0	89.80	357.00	9,649.1	3,382.4	-48.2	-3,088.2	1.07	-0.52	-0.94
12,918.0	89.10	358.30	9,650.0	3,478.3	-52.2	-3,176.8	1.54	-0.73	1.35
13,013.0	88.10	357.70	9,652.3	3,573.2	-55.5	-3,264.3	1.23	-1.05	-0.63
13,109.0	90.40	0.10	9,653.6	3,669.2	-57.3	-3,352.1	3.46	2.40	2.50
13,204.0	90.20	0.20	9,653.1	3,764.2	-57.1	-3,438.2	0.24	-0.21	0.11
13,299.0	91.20	0.50	9,651.9	3,859.2	-56.5	-3,524.1	1.10	1.05	0.32
13,394.0	89.90	359.60	9,651.0	3,954.2	-56.4	-3,610.2	1.66	-1.37	-0.95
13,489.0	90.50	359.90	9,650.7	4,049.2	-56.8	-3,696.5	0.71	0.63	0.32
13,585.0	91.40	359.80	9,649.1	4,145.1	-57.1	-3,783.7	0.94	0.94	-0.10
13,680.0	89.10	0.20	9,648.7	4,240.1	-57.1	-3,869.8	2.46	-2.42	0.42
13,775.0	89.30	359.80	9,650.0	4,335.1	-57.1	-3,956.0	0.47	0.21	-0.42
13,870.0	89.30	358.80	9,651.2	4,430.1	-58.3	-4,042.6	1.05	0.00	-1.05
13,966.0	91.60	359.30	9,650.4	4,526.1	-59.8	-4,130.4	2.45	2.40	0.52
14,061.0	90.70	357.90	9,648.5	4,621.0	-62.2	-4,217.5	1.75	-0.95	-1.47
14,156.0	91.20	0.40	9,646.9	4,716.0	-63.6	-4,304.2	2.68	0.53	2.63

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Speedwagon 27 W0PA Fee 2H
Project:	Eddy County, New Mexico	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 245)
Site:	Section 34-27-23S-28E Speedwagon 27 W0PA Fee 2H	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 245)
Well:	Speedwagon 27 W0PA Fee 2H	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)
14,251.0	90.40	359.30	9,645.6	4,811.0	-63.8	-4,390.5	1.43	-0.84	-1.16
14,346.0	90.80	3.20	9,644.6	4,905.9	-61.8	-4,475.7	4.13	0.42	4.11
14,441.0	90.80	3.70	9,643.3	5,000.8	-56.0	-4,559.3	0.53	0.00	0.53
14,534.0	89.20	2.50	9,643.3	5,093.6	-51.0	-4,641.4	2.15	-1.72	-1.29
14,629.0	87.60	0.90	9,645.9	5,188.5	-48.2	-4,726.3	2.38	-1.68	-1.68
14,727.0	91.40	2.50	9,646.8	5,286.5	-45.3	-4,813.9	4.21	3.88	1.63
14,775.0	91.40	2.50	9,645.6	5,334.4	-43.2	-4,856.5	0.00	0.00	0.00

14775' MD Projected to Bit - PBHL Speedwagon 27 W0PA Fee #2H

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
512.0	511.9	2.1	-8.0	512.0' MD Rig Surveys
14,775.0	9,645.6	5,334.4	-43.2	14775' MD Projected to Bit



October 12, 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

Speedwagon 27 WOPA Fee #002H

Purple Sage; Wolfcamp

Eddy County, New Mexico

API# 30-015-44115

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>
Jimmy Walker	Original Hole	579ft. to 14,727ft.	09-09-17 to 09-28-17	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\Speedwagon 27 WOPA Fee #2H\M171079

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: Speedwagon 27 WOPA Fee 2H
COUNTY: Eddy County, New Mexico
DATUM: NAD 1927 (NADCON CONUS)
RIG: Patterson Patterson 245



Grid Correction MWD: To convert a Magnetic Direction to a Grid Direction, Add 7.02°

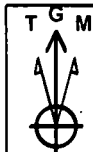
OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001
3038 + 27 @ 3065.0usft (Patterson 245)
GROUND ELEVATION: 3038.0

+N-S	+E-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	461330.00	582182.40	32° 16' 4.919 N	104° 4' 2.814 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	9164.5	0.00	0.00	9164.5	0.0	0.0	0.00	0.00	0.0	
3	9913.5	89.87	359.47	9642.0	476.4	-4.4	12.00	359.47	476.4	
4	14777.5	89.87	359.47	9653.0	5340.2	-49.0	0.00	0.00	5340.4	PBHL Speedwagon 27 WOPA Fee #2H



Azimuths to Grid North
True North: -0.14°
Magnetic North: 7.02°

Magnetic Field
Strength: 47893.4snT
Dip Angle: 60.02°
Date: 8/29/2017
Model: IGRF2015

SHL 260' FNL; 430' FEL
Section 34-23S-28E
PBHL 330' FNL; 430' FEL
Section 27-23S-28E

