



HOBBS OCD

DEC 23 2015

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Mewbourne Oil Company .

Lea County N.M.

Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H

Lone Wolf 36 B2DM St Com #1H

Original Hole

Design: Original Hole

Standard Survey Report

09 November, 2015



JAN 27 2016

MY



Stryker Directional Survey Report



Company:	Mewbourne Oil Company .	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Project	Lea County N.M.		
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 36-18S-32E Lone Wolf 36 B2DM St Com 1H		
Site Position:		Northing:	622,735.80 usft
From:	Map	Easting:	686,415.90 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 42' 37.920 N
		Longitude:	103° 43' 38.158 W
		Grid Convergence:	0.33 °

Well	Lone Wolf 36 B2DM St Com #1H		
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° 42' 37.920 N
		Longitude:	103° 43' 38.158 W
		Ground Level:	3,734.0 usft

Wellbore	Original Hole		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/12/2015	7.24	60.51	48,382

Design	Original 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	279.05

Survey Program	Date	11/9/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	8,631.0	VES Gyro Survey (Original Hole)	GyroFlex	
8,776.0	14,107.0	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	0.15	48.07	100.0	0.1	0.1	-0.1	0.15	0.15	0.00
200.0	0.13	6.08	200.0	0.3	0.2	-0.2	0.10	-0.02	-41.99
300.0	0.18	10.84	300.0	0.6	0.2	-0.2	0.05	0.05	4.76
400.0	0.32	78.89	400.0	0.8	0.6	-0.4	0.30	0.14	68.05
500.0	0.32	103.76	500.0	0.8	1.1	-1.0	0.14	0.00	24.87
600.0	0.34	116.51	600.0	0.6	1.6	-1.5	0.08	0.02	12.75
700.0	0.33	118.29	700.0	0.3	2.2	-2.1	0.01	-0.01	1.78
800.0	0.39	123.84	800.0	0.0	2.7	-2.7	0.07	0.06	5.55



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Well:	Lone Wolf 36 B2DM St Com #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	0.40	117.40	900.0	-0.4	3.3	-3.3	0.05	0.01	-6.44
1,000.0	0.19	82.23	1,000.0	-0.5	3.8	-3.8	0.27	-0.21	-35.17
1,100.0	0.32	342.86	1,100.0	-0.2	3.8	-3.8	0.40	0.13	-99.37
1,200.0	0.47	333.60	1,200.0	0.4	3.6	-3.5	0.16	0.15	-9.26
1,300.0	0.66	337.38	1,300.0	1.3	3.2	-2.9	0.19	0.19	3.78
1,400.0	1.09	340.59	1,400.0	2.7	2.6	-2.2	0.43	0.43	3.21
1,500.0	1.34	345.30	1,499.9	4.7	2.0	-1.2	0.27	0.25	4.71
1,600.0	1.49	345.70	1,599.9	7.1	1.4	-0.3	0.15	0.15	0.40
1,700.0	1.74	346.03	1,699.9	9.9	0.7	0.8	0.25	0.25	0.33
1,800.0	1.90	348.00	1,799.8	13.0	0.0	2.0	0.17	0.16	1.97
1,900.0	0.59	300.55	1,899.8	14.8	-0.8	3.1	1.56	-1.31	-47.45
2,000.0	1.50	192.36	1,999.8	13.8	-1.5	3.7	1.77	0.91	-108.19
2,100.0	1.95	191.12	2,099.7	10.9	-2.1	3.8	0.45	0.45	-1.24
2,200.0	0.27	180.49	2,199.7	9.0	-2.4	3.8	1.69	-1.68	-10.63
2,300.0	0.74	31.74	2,299.7	9.3	-2.1	3.5	0.98	0.47	-148.75
2,400.0	1.14	51.41	2,399.7	10.5	-1.0	2.6	0.51	0.40	19.67
2,500.0	1.34	75.25	2,499.7	11.4	0.9	0.9	0.55	0.20	23.84
2,600.0	0.48	105.18	2,599.7	11.6	2.5	-0.6	0.95	-0.86	29.93
2,700.0	0.64	185.40	2,699.7	10.9	2.8	-1.1	0.73	0.16	80.22
2,800.0	0.59	188.90	2,799.7	9.8	2.7	-1.1	0.06	-0.05	3.50
2,900.0	0.62	200.80	2,899.7	8.8	2.4	-1.0	0.13	0.03	11.90
3,000.0	0.54	203.58	2,999.6	7.9	2.0	-0.8	0.08	-0.08	2.78
3,100.0	0.41	201.23	3,099.6	7.1	1.7	-0.6	0.13	-0.13	-2.35
3,200.0	0.25	222.86	3,199.6	6.6	1.4	-0.4	0.20	-0.16	21.63
3,300.0	0.37	258.97	3,299.6	6.4	1.0	0.1	0.22	0.12	36.11
3,400.0	0.82	259.92	3,399.6	6.2	-0.1	1.0	0.45	0.45	0.95
3,500.0	1.47	254.57	3,499.6	5.8	-2.0	2.9	0.66	0.65	-5.35
3,600.0	1.89	254.40	3,599.6	5.0	-4.8	5.6	0.42	0.42	-0.17
3,700.0	1.51	262.88	3,699.5	4.4	-7.7	8.3	0.45	-0.38	8.48
3,800.0	1.06	279.65	3,799.5	4.4	-9.9	10.5	0.58	-0.45	16.77
3,900.0	1.09	314.34	3,899.5	5.2	-11.5	12.2	0.64	0.03	34.69
4,000.0	0.92	336.04	3,999.5	6.6	-12.5	13.4	0.41	-0.17	21.70
4,100.0	1.32	347.16	4,099.5	8.4	-13.1	14.3	0.45	0.40	11.12
4,200.0	0.96	327.75	4,199.4	10.3	-13.8	15.3	0.52	-0.36	-19.41
4,300.0	0.90	330.35	4,299.4	11.7	-14.7	16.3	0.07	-0.06	2.60
4,400.0	1.17	324.41	4,399.4	13.2	-15.6	17.5	0.29	0.27	-5.94
4,500.0	1.05	323.48	4,499.4	14.7	-16.8	18.9	0.12	-0.12	-0.93
4,600.0	0.91	310.57	4,599.4	16.0	-17.9	20.2	0.26	-0.14	-12.91
4,700.0	1.16	290.57	4,699.4	16.9	-19.5	21.9	0.44	0.25	-20.00
4,800.0	1.12	307.20	4,799.3	17.8	-21.2	23.7	0.33	-0.04	16.63
4,900.0	1.31	284.81	4,899.3	18.7	-23.1	25.7	0.51	0.19	-22.39
5,000.0	1.41	284.35	4,999.3	19.3	-25.4	28.1	0.10	0.10	-0.46



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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	1.51	292.23	5,099.3	20.1	-27.8	30.6	0.22	0.10	7.88
5,200.0	1.76	298.81	5,199.2	21.3	-30.4	33.3	0.31	0.25	6.58
5,300.0	2.21	291.27	5,299.2	22.8	-33.5	36.7	0.52	0.45	-7.54
5,400.0	2.54	288.80	5,399.1	24.2	-37.4	40.7	0.35	0.33	-2.47
5,500.0	2.57	289.87	5,499.0	25.7	-41.6	45.1	0.06	0.03	1.07
5,600.0	2.96	285.34	5,598.9	27.1	-46.2	49.9	0.45	0.39	-4.53
5,700.0	3.24	275.44	5,698.7	28.0	-51.5	55.3	0.60	0.28	-9.90
5,800.0	3.95	273.47	5,798.5	28.5	-57.8	61.5	0.72	0.71	-1.97
5,900.0	3.47	272.68	5,898.3	28.9	-64.2	68.0	0.48	-0.48	-0.79
6,000.0	2.76	274.74	5,998.1	29.2	-69.6	73.4	0.72	-0.71	2.06
6,100.0	2.10	279.60	6,098.1	29.7	-73.9	77.6	0.69	-0.66	4.86
6,200.0	1.56	280.55	6,198.0	30.3	-77.0	80.8	0.54	-0.54	0.95
6,300.0	1.22	283.15	6,298.0	30.8	-79.4	83.2	0.35	-0.34	2.60
6,400.0	1.28	293.01	6,398.0	31.4	-81.4	85.4	0.22	0.06	9.86
6,500.0	1.00	292.16	6,497.9	32.2	-83.3	87.3	0.28	-0.28	-0.85
6,600.0	0.98	299.73	6,597.9	33.0	-84.8	89.0	0.13	-0.02	7.57
6,700.0	0.76	294.20	6,697.9	33.7	-86.2	90.4	0.24	-0.22	-5.53
6,800.0	0.89	300.90	6,797.9	34.3	-87.4	91.8	0.16	0.13	6.70
6,900.0	0.86	286.78	6,897.9	34.9	-88.8	93.2	0.22	-0.03	-14.12
7,000.0	0.55	276.05	6,997.9	35.2	-90.0	94.4	0.34	-0.31	-10.73
7,100.0	0.64	298.88	7,097.9	35.5	-91.0	95.4	0.25	0.09	22.83
7,200.0	0.41	270.99	7,197.9	35.8	-91.8	96.3	0.34	-0.23	-27.89
7,300.0	0.30	318.98	7,297.9	36.0	-92.4	96.9	0.31	-0.11	47.99
7,400.0	0.49	294.40	7,397.9	36.4	-92.9	97.5	0.25	0.19	-24.58
7,500.0	0.51	277.41	7,497.9	36.6	-93.8	98.4	0.15	0.02	-16.99
7,600.0	0.87	306.24	7,597.9	37.1	-94.8	99.5	0.49	0.36	28.83
7,700.0	0.79	292.82	7,697.8	37.8	-96.1	100.8	0.21	-0.08	-13.42
7,800.0	3.02	229.89	7,797.8	36.4	-98.7	103.2	2.75	2.23	-62.93
7,900.0	3.29	224.91	7,897.6	32.7	-102.8	106.6	0.38	0.27	-4.98
8,000.0	2.22	227.03	7,997.5	29.3	-106.2	109.5	1.07	-1.07	2.12
8,100.0	2.09	231.83	8,097.4	26.9	-109.0	111.9	0.22	-0.13	4.80
8,200.0	2.37	254.74	8,197.4	25.2	-112.5	115.0	0.93	0.28	22.91
8,300.0	3.04	259.00	8,297.3	24.2	-117.1	119.4	0.70	0.67	4.26
8,400.0	3.26	264.95	8,397.1	23.4	-122.5	124.7	0.39	0.22	5.95
8,500.0	2.99	259.43	8,497.0	22.7	-127.9	129.9	0.40	-0.27	-5.52
8,600.0	2.49	255.69	8,596.8	21.7	-132.6	134.3	0.53	-0.50	-3.74
8,631.0	2.31	253.25	8,627.8	21.3	-133.8	135.5	0.67	-0.58	-7.87
8631' MD VES Gyro									
8,776.0	1.20	251.20	8,772.8	20.0	-138.1	139.5	0.77	-0.77	-1.41
8,871.0	1.10	241.40	8,867.7	19.2	-139.8	141.1	0.23	-0.11	-10.32
8,965.0	1.60	133.20	8,961.7	17.9	-139.6	140.7	2.35	0.53	-115.11
8,997.0	4.90	119.20	8,993.7	16.9	-138.1	139.1	10.53	10.31	-43.75
9,029.0	6.50	106.60	9,025.5	15.7	-135.2	136.0	6.32	5.00	-39.38



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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)
9,060.0	8.80	97.30	9,056.2	14.9	-131.2	131.9	8.40	7.42	-30.00
9,092.0	12.10	87.60	9,087.7	14.8	-125.4	126.1	11.65	10.31	-30.31
9,123.0	16.00	91.50	9,117.8	14.8	-117.9	118.7	12.94	12.58	12.58
9,155.0	18.70	91.80	9,148.3	14.5	-108.3	109.3	8.44	8.44	0.94
9,187.0	21.10	97.80	9,178.4	13.6	-97.5	98.4	9.84	7.50	18.75
9,218.0	22.70	97.70	9,207.2	12.0	-86.0	86.8	5.16	5.16	-0.32
9,250.0	23.90	101.50	9,236.5	9.9	-73.6	74.2	6.01	3.75	11.88
9,281.0	27.00	102.50	9,264.5	7.1	-60.5	60.9	10.10	10.00	3.23
9,313.0	30.30	103.60	9,292.6	3.6	-45.6	45.6	10.44	10.31	3.44
9,344.0	33.40	104.20	9,318.9	-0.3	-29.7	29.3	10.05	10.00	1.94
9,376.0	36.80	106.10	9,345.1	-5.1	-12.0	11.0	11.16	10.63	5.94
9,407.0	40.00	108.50	9,369.4	-10.8	6.4	-8.0	11.39	10.32	7.74
9,439.0	42.80	108.70	9,393.4	-17.6	26.5	-28.9	8.76	8.75	0.63
9,470.0	45.80	107.60	9,415.6	-24.3	47.0	-50.3	9.99	9.68	-3.55
9,502.0	49.10	106.70	9,437.2	-31.3	69.6	-73.6	10.52	10.31	-2.81
9,533.0	51.70	106.30	9,457.0	-38.1	92.5	-97.3	8.45	8.39	-1.29
9,565.0	53.20	106.10	9,476.5	-45.1	116.8	-122.5	4.71	4.69	-0.63
9,597.0	55.60	106.00	9,495.1	-52.3	141.8	-148.3	7.50	7.50	-0.31
9,628.0	59.90	105.40	9,511.7	-59.4	167.1	-174.3	13.97	13.87	-1.94
9,660.0	63.30	104.90	9,526.9	-66.8	194.2	-202.3	10.71	10.63	-1.56
9,692.0	65.80	105.40	9,540.6	-74.3	222.1	-231.1	7.94	7.81	1.56
9,723.0	68.30	105.70	9,552.7	-82.0	249.6	-259.4	8.11	8.06	0.97
9,755.0	70.80	105.80	9,563.9	-90.1	278.5	-289.2	7.82	7.81	0.31
9,786.0	72.70	105.60	9,573.6	-98.1	306.8	-318.4	6.16	6.13	-0.65
9,818.0	74.60	104.90	9,582.6	-106.2	336.4	-349.0	6.30	5.94	-2.19
9,850.0	77.10	104.50	9,590.4	-114.0	366.5	-379.8	7.91	7.81	-1.25
9,881.0	79.30	104.20	9,596.8	-121.6	395.9	-410.0	7.16	7.10	-0.97
9,913.0	81.00	104.10	9,602.2	-129.3	426.4	-441.4	5.32	5.31	-0.31
9,927.0	82.00	104.40	9,604.3	-132.7	439.8	-455.2	7.45	7.14	2.14
10,003.0	87.10	102.40	9,611.5	-150.2	513.4	-530.6	7.20	6.71	-2.63
10,035.0	88.90	99.40	9,612.6	-156.2	544.8	-562.6	10.93	5.63	-9.38
10,052.6	89.10	98.90	9,613.0	-159.0	562.2	-580.2	3.07	1.11	-2.86
LP Lone Wolf 36B2DM st Com1H									
10,098.0	89.60	97.60	9,613.5	-165.5	607.1	-625.6	3.07	1.11	-2.86
10,193.0	90.90	97.40	9,613.1	-177.9	701.3	-720.6	1.38	1.37	-0.21
10,288.0	90.20	95.50	9,612.1	-188.6	795.7	-815.5	2.13	-0.74	-2.00
10,383.0	90.70	98.70	9,611.4	-200.4	889.9	-910.4	3.41	0.53	3.37
10,478.0	90.10	97.90	9,610.7	-214.1	983.9	-1,005.4	1.05	-0.63	-0.84
10,573.0	89.70	96.30	9,610.9	-225.8	1,078.2	-1,100.3	1.74	-0.42	-1.68
10,668.0	89.10	95.30	9,611.9	-235.4	1,172.7	-1,195.1	1.23	-0.63	-1.05
10,763.0	91.40	96.60	9,611.5	-245.3	1,267.2	-1,290.0	2.78	2.42	1.37
10,858.0	92.70	100.00	9,608.1	-259.0	1,361.1	-1,384.9	3.83	1.37	3.58
10,952.0	92.60	98.70	9,603.7	-274.2	1,453.8	-1,478.8	1.39	-0.11	-1.38



Stryker Directional Survey Report



Company:	Mewbourne Oil Company .	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #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)
11,047.0	89.50	99.20	9,602.0	-289.0	1,547.6	-1,573.8	3.31	-3.26	0.53
11,142.0	88.90	97.30	9,603.3	-302.6	1,641.6	-1,668.8	2.10	-0.63	-2.00
11,236.0	88.80	98.40	9,605.2	-315.5	1,734.7	-1,762.7	1.17	-0.11	1.17
11,331.0	90.10	98.40	9,606.1	-329.3	1,828.7	-1,857.7	1.37	1.37	0.00
11,426.0	93.20	97.60	9,603.4	-342.5	1,922.7	-1,952.6	3.37	3.26	-0.84
11,520.0	93.10	98.00	9,598.2	-355.3	2,015.7	-2,046.5	0.44	-0.11	0.43
11,615.0	93.70	98.30	9,592.6	-368.7	2,109.6	-2,141.3	0.71	0.63	0.32
11,710.0	91.30	102.80	9,588.4	-386.1	2,202.8	-2,236.1	5.36	-2.53	4.74
11,804.0	87.80	103.20	9,589.2	-407.2	2,294.4	-2,329.9	3.75	-3.72	0.43
11,899.0	88.00	103.90	9,592.7	-429.5	2,386.7	-2,424.5	0.77	0.21	0.74
11,994.0	86.70	100.40	9,597.1	-449.5	2,479.5	-2,519.3	3.93	-1.37	-3.68
12,089.0	86.90	101.00	9,602.4	-467.1	2,572.7	-2,614.1	0.66	0.21	0.63
12,152.0	87.50	99.80	9,605.4	-478.4	2,634.5	-2,677.0	2.13	0.95	-1.90
12,184.0	88.40	99.10	9,606.6	-483.7	2,666.1	-2,709.0	3.56	2.81	-2.19
12,216.0	89.20	98.20	9,607.3	-488.5	2,697.7	-2,741.0	3.76	2.50	-2.81
12,247.0	90.50	98.10	9,607.3	-492.9	2,728.4	-2,772.0	4.21	4.19	-0.32
12,279.0	90.50	97.40	9,607.1	-497.2	2,760.1	-2,804.0	2.19	0.00	-2.19
12,374.0	92.00	95.00	9,605.0	-507.5	2,854.5	-2,898.8	2.98	1.58	-2.53
12,469.0	91.50	94.00	9,602.1	-514.9	2,949.2	-2,993.5	1.18	-0.53	-1.05
12,563.0	91.60	93.30	9,599.5	-520.9	3,043.0	-3,087.0	0.75	0.11	-0.74
12,658.0	90.30	94.00	9,598.0	-526.9	3,137.8	-3,181.6	1.55	-1.37	0.74
12,753.0	94.30	94.20	9,594.1	-533.7	3,232.4	-3,276.1	4.22	4.21	0.21
12,848.0	93.70	94.40	9,587.5	-540.8	3,326.9	-3,370.6	0.67	-0.63	0.21
12,943.0	91.50	95.50	9,583.2	-549.0	3,421.5	-3,465.2	2.59	-2.32	1.16
13,038.0	90.50	96.20	9,581.6	-558.7	3,515.9	-3,560.1	1.28	-1.05	0.74
13,133.0	88.60	94.10	9,582.3	-567.2	3,610.5	-3,654.8	2.98	-2.00	-2.21
13,228.0	88.00	93.70	9,585.1	-573.7	3,705.3	-3,749.4	0.76	-0.63	-0.42
13,323.0	90.50	92.70	9,586.4	-579.0	3,800.1	-3,843.9	2.83	2.63	-1.05
13,418.0	91.50	93.40	9,584.7	-584.0	3,895.0	-3,938.3	1.28	1.05	0.74
13,513.0	92.40	98.10	9,581.5	-593.5	3,989.4	-4,033.1	5.03	0.95	4.95
13,607.0	88.90	100.00	9,580.4	-608.3	4,082.2	-4,127.1	4.24	-3.72	2.02
13,703.0	88.80	100.30	9,582.3	-625.2	4,176.7	-4,223.0	0.33	-0.10	0.31
13,798.0	91.10	100.50	9,582.4	-642.4	4,270.1	-4,318.0	2.43	2.42	0.21
13,893.0	90.10	101.10	9,581.4	-660.2	4,363.4	-4,413.0	1.23	-1.05	0.63
13,988.0	90.50	101.70	9,580.9	-679.0	4,456.6	-4,507.9	0.76	0.42	0.63
14,049.0	90.40	101.80	9,580.4	-691.4	4,516.3	-4,568.8	0.23	-0.16	0.16
14,107.0	90.40	101.80	9,580.0	-703.2	4,573.1	-4,626.7	0.00	0.00	0.00

14107' MD Projected to Bit - PBHL Lone Wolf 36 B2DM St Com 1H



Stryker Directional Survey Report



Company:	Mewbourne Oil Company .	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,631.0	8,627.8	21.3	-133.8	8631' MD VES Gyro
14,107.0	9,580.0	-703.2	4,573.1	14107' MD Projected to Bit



Mewbourne Oil Company .

Lea County N.M.

Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H

Lone Wolf 36 B2DM St Com #1H

Original Hole

Design: Original Hole

Survey Report - Geographic

09 November, 2015





Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company .	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Project	Lea County N.M.		
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 36-18S-32E Lone Wolf 36 B2DM St Com 1H			
Site Position:		Northing:	622,735.80 usft	Latitude:	32° 42' 37.920 N
From:	Map	Easting:	686,415.90 usft	Longitude:	103° 43' 38.158 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.33 °

Well	Lone Wolf 36 B2DM St Com #1H					
Well Position	+N/-S	0.0 usft	Northing:	622,735.80 usft	Latitude:	32° 42' 37.920 N
	+E/-W	0.0 usft	Easting:	686,415.90 usft	Longitude:	103° 43' 38.158 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,734.0 usft

Wellbore	Original Hole				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/12/2015	7.24	60.51	48,382

Design	Original 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	279.05

Survey Program	Date	11/9/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	8,631.0	VES Gyro Survey (Original Hole)	GyroFlex		
8,776.0	14,107.0	MWD Survey (Original Hole)	MWD	MWD v3:standard declination	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	622,735.80	686,415.90	32° 42' 37.920 N	103° 43' 38.158 W	
100.0	0.15	48.07	100.0	0.1	0.1	622,735.89	686,415.99	32° 42' 37.921 N	103° 43' 38.156 W	
200.0	0.13	6.08	200.0	0.3	0.2	622,736.09	686,416.10	32° 42' 37.923 N	103° 43' 38.155 W	
300.0	0.18	10.84	300.0	0.6	0.2	622,736.36	686,416.14	32° 42' 37.925 N	103° 43' 38.155 W	
400.0	0.32	78.89	400.0	0.8	0.6	622,736.57	686,416.45	32° 42' 37.927 N	103° 43' 38.151 W	
500.0	0.32	103.76	500.0	0.8	1.1	622,736.55	686,416.99	32° 42' 37.927 N	103° 43' 38.145 W	
600.0	0.34	116.51	600.0	0.6	1.6	622,736.36	686,417.53	32° 42' 37.925 N	103° 43' 38.138 W	
700.0	0.33	118.29	700.0	0.3	2.2	622,736.09	686,418.05	32° 42' 37.922 N	103° 43' 38.132 W	
800.0	0.39	123.84	800.0	0.0	2.7	622,735.76	686,418.58	32° 42' 37.919 N	103° 43' 38.126 W	
900.0	0.40	117.40	900.0	-0.4	3.3	622,735.41	686,419.18	32° 42' 37.916 N	103° 43' 38.119 W	



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,000.0	0.19	82.23	1,000.0	-0.5	3.8	622,735.27	686,419.65	32° 42' 37.914 N	103° 43' 38.114 W
1,100.0	0.32	342.86	1,100.0	-0.2	3.8	622,735.56	686,419.73	32° 42' 37.917 N	103° 43' 38.113 W
1,200.0	0.47	333.60	1,200.0	0.4	3.6	622,736.20	686,419.47	32° 42' 37.923 N	103° 43' 38.116 W
1,300.0	0.66	337.38	1,300.0	1.3	3.2	622,737.09	686,419.06	32° 42' 37.932 N	103° 43' 38.120 W
1,400.0	1.09	340.59	1,400.0	2.7	2.6	622,738.52	686,418.53	32° 42' 37.947 N	103° 43' 38.127 W
1,500.0	1.34	345.30	1,499.9	4.7	2.0	622,740.55	686,417.91	32° 42' 37.967 N	103° 43' 38.134 W
1,600.0	1.49	345.70	1,599.9	7.1	1.4	622,742.94	686,417.30	32° 42' 37.990 N	103° 43' 38.141 W
1,700.0	1.74	346.03	1,699.9	9.9	0.7	622,745.68	686,416.61	32° 42' 38.017 N	103° 43' 38.149 W
1,800.0	1.90	348.00	1,799.8	13.0	0.0	622,748.77	686,415.90	32° 42' 38.048 N	103° 43' 38.157 W
1,900.0	0.59	300.55	1,899.8	14.8	-0.8	622,750.65	686,415.11	32° 42' 38.067 N	103° 43' 38.166 W
2,000.0	1.50	192.36	1,999.8	13.8	-1.5	622,749.64	686,414.39	32° 42' 38.057 N	103° 43' 38.174 W
2,100.0	1.95	191.12	2,099.7	10.9	-2.1	622,746.69	686,413.78	32° 42' 38.028 N	103° 43' 38.182 W
2,200.0	0.27	180.49	2,199.7	9.0	-2.4	622,744.78	686,413.45	32° 42' 38.009 N	103° 43' 38.186 W
2,300.0	0.74	31.74	2,299.7	9.3	-2.1	622,745.10	686,413.79	32° 42' 38.012 N	103° 43' 38.182 W
2,400.0	1.14	51.41	2,399.7	10.5	-1.0	622,746.27	686,414.90	32° 42' 38.023 N	103° 43' 38.169 W
2,500.0	1.34	75.25	2,499.7	11.4	0.9	622,747.18	686,416.81	32° 42' 38.032 N	103° 43' 38.146 W
2,600.0	0.48	105.18	2,599.7	11.6	2.5	622,747.37	686,418.35	32° 42' 38.034 N	103° 43' 38.128 W
2,700.0	0.64	185.40	2,699.7	10.9	2.8	622,746.71	686,418.70	32° 42' 38.028 N	103° 43' 38.124 W
2,800.0	0.59	188.90	2,799.7	9.8	2.7	622,745.64	686,418.57	32° 42' 38.017 N	103° 43' 38.126 W
2,900.0	0.62	200.80	2,899.7	8.8	2.4	622,744.63	686,418.29	32° 42' 38.007 N	103° 43' 38.129 W
3,000.0	0.54	203.58	2,999.6	7.9	2.0	622,743.69	686,417.91	32° 42' 37.998 N	103° 43' 38.133 W
3,100.0	0.41	201.23	3,099.6	7.1	1.7	622,742.93	686,417.59	32° 42' 37.990 N	103° 43' 38.137 W
3,200.0	0.25	222.86	3,199.6	6.6	1.4	622,742.43	686,417.32	32° 42' 37.985 N	103° 43' 38.141 W
3,300.0	0.37	258.97	3,299.6	6.4	1.0	622,742.21	686,416.85	32° 42' 37.983 N	103° 43' 38.146 W
3,400.0	0.82	259.92	3,399.6	6.2	-0.1	622,742.02	686,415.83	32° 42' 37.981 N	103° 43' 38.158 W
3,500.0	1.47	254.57	3,499.6	5.8	-2.0	622,741.56	686,413.89	32° 42' 37.977 N	103° 43' 38.181 W
3,600.0	1.89	254.40	3,599.6	5.0	-4.8	622,740.77	686,411.06	32° 42' 37.969 N	103° 43' 38.214 W
3,700.0	1.51	262.88	3,699.5	4.4	-7.7	622,740.16	686,408.17	32° 42' 37.963 N	103° 43' 38.248 W
3,800.0	1.06	279.65	3,799.5	4.4	-9.9	622,740.16	686,405.95	32° 42' 37.963 N	103° 43' 38.274 W
3,900.0	1.09	314.34	3,899.5	5.2	-11.5	622,740.98	686,404.36	32° 42' 37.972 N	103° 43' 38.292 W
4,000.0	0.92	336.04	3,999.5	6.6	-12.5	622,742.37	686,403.35	32° 42' 37.986 N	103° 43' 38.304 W
4,100.0	1.32	347.16	4,099.5	8.4	-13.1	622,744.23	686,402.77	32° 42' 38.004 N	103° 43' 38.311 W
4,200.0	0.96	327.75	4,199.4	10.3	-13.8	622,746.06	686,402.07	32° 42' 38.022 N	103° 43' 38.319 W
4,300.0	0.90	330.35	4,299.4	11.7	-14.7	622,747.45	686,401.23	32° 42' 38.036 N	103° 43' 38.328 W
4,400.0	1.17	324.41	4,399.4	13.2	-15.6	622,748.97	686,400.25	32° 42' 38.051 N	103° 43' 38.340 W
4,500.0	1.05	323.48	4,499.4	14.7	-16.8	622,750.53	686,399.11	32° 42' 38.067 N	103° 43' 38.353 W
4,600.0	0.91	310.57	4,599.4	16.0	-17.9	622,751.79	686,397.96	32° 42' 38.079 N	103° 43' 38.366 W
4,700.0	1.16	290.57	4,699.4	16.9	-19.5	622,752.66	686,396.41	32° 42' 38.088 N	103° 43' 38.385 W
4,800.0	1.12	307.20	4,799.3	17.8	-21.2	622,753.60	686,394.68	32° 42' 38.097 N	103° 43' 38.405 W
4,900.0	1.31	284.81	4,899.3	18.7	-23.1	622,754.49	686,392.80	32° 42' 38.106 N	103° 43' 38.427 W
5,000.0	1.41	284.35	4,999.3	19.3	-25.4	622,755.09	686,390.50	32° 42' 38.112 N	103° 43' 38.454 W
5,100.0	1.51	292.23	5,099.3	20.1	-27.8	622,755.89	686,388.09	32° 42' 38.120 N	103° 43' 38.482 W
5,200.0	1.76	298.81	5,199.2	21.3	-30.4	622,757.13	686,385.53	32° 42' 38.133 N	103° 43' 38.512 W
5,300.0	2.21	291.27	5,299.2	22.8	-33.5	622,758.57	686,382.38	32° 42' 38.147 N	103° 43' 38.548 W
5,400.0	2.54	288.80	5,399.1	24.2	-37.4	622,759.98	686,378.49	32° 42' 38.161 N	103° 43' 38.594 W
5,500.0	2.57	289.87	5,499.0	25.7	-41.6	622,761.46	686,374.28	32° 42' 38.176 N	103° 43' 38.643 W
5,600.0	2.96	285.34	5,598.9	27.1	-46.2	622,762.90	686,369.68	32° 42' 38.191 N	103° 43' 38.697 W
5,700.0	3.24	275.44	5,698.7	28.0	-51.5	622,763.85	686,364.38	32° 42' 38.200 N	103° 43' 38.759 W
5,800.0	3.95	273.47	5,798.5	28.5	-57.8	622,764.33	686,358.13	32° 42' 38.205 N	103° 43' 38.832 W
5,900.0	3.47	272.68	5,898.3	28.9	-64.2	622,764.68	686,351.67	32° 42' 38.209 N	103° 43' 38.907 W
6,000.0	2.76	274.74	5,998.1	29.2	-69.6	622,765.02	686,346.25	32° 42' 38.213 N	103° 43' 38.971 W
6,100.0	2.10	279.60	6,098.1	29.7	-73.9	622,765.52	686,342.04	32° 42' 38.218 N	103° 43' 39.020 W
6,200.0	1.56	280.55	6,198.0	30.3	-77.0	622,766.08	686,338.90	32° 42' 38.224 N	103° 43' 39.057 W
6,300.0	1.22	283.15	6,298.0	30.8	-79.4	622,766.57	686,336.52	32° 42' 38.229 N	103° 43' 39.085 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,400.0	1.28	293.01	6,398.0	31.4	-81.4	622,767.25	686,334.46	32° 42' 38.236 N	103° 43' 39.109 W
6,500.0	1.00	292.16	6,497.9	32.2	-83.3	622,768.01	686,332.62	32° 42' 38.243 N	103° 43' 39.130 W
6,600.0	0.98	299.73	6,597.9	33.0	-84.8	622,768.77	686,331.07	32° 42' 38.251 N	103° 43' 39.148 W
6,700.0	0.76	294.20	6,697.9	33.7	-86.2	622,769.46	686,329.72	32° 42' 38.258 N	103° 43' 39.164 W
6,800.0	0.89	300.90	6,797.9	34.3	-87.4	622,770.13	686,328.45	32° 42' 38.264 N	103° 43' 39.179 W
6,900.0	0.86	286.78	6,897.9	34.9	-88.8	622,770.75	686,327.06	32° 42' 38.271 N	103° 43' 39.195 W
7,000.0	0.55	276.05	6,997.9	35.2	-90.0	622,771.02	686,325.87	32° 42' 38.273 N	103° 43' 39.209 W
7,100.0	0.64	298.88	7,097.9	35.5	-91.0	622,771.34	686,324.90	32° 42' 38.277 N	103° 43' 39.220 W
7,200.0	0.41	270.99	7,197.9	35.8	-91.8	622,771.61	686,324.06	32° 42' 38.279 N	103° 43' 39.230 W
7,300.0	0.30	318.98	7,297.9	36.0	-92.4	622,771.82	686,323.53	32° 42' 38.281 N	103° 43' 39.236 W
7,400.0	0.49	294.40	7,397.9	36.4	-92.9	622,772.19	686,322.97	32° 42' 38.285 N	103° 43' 39.243 W
7,500.0	0.51	277.41	7,497.9	36.6	-93.8	622,772.43	686,322.13	32° 42' 38.287 N	103° 43' 39.253 W
7,600.0	0.87	306.24	7,597.9	37.1	-94.8	622,772.93	686,321.08	32° 42' 38.293 N	103° 43' 39.265 W
7,700.0	0.79	292.82	7,697.8	37.8	-96.1	622,773.65	686,319.83	32° 42' 38.300 N	103° 43' 39.279 W
7,800.0	3.02	229.89	7,797.8	36.4	-98.7	622,772.22	686,317.18	32° 42' 38.286 N	103° 43' 39.310 W
7,900.0	3.29	224.91	7,897.6	32.7	-102.8	622,768.49	686,313.14	32° 42' 38.249 N	103° 43' 39.358 W
8,000.0	2.22	227.03	7,997.5	29.3	-106.2	622,765.14	686,309.70	32° 42' 38.216 N	103° 43' 39.399 W
8,100.0	2.09	231.83	8,097.4	26.9	-109.0	622,762.69	686,306.85	32° 42' 38.192 N	103° 43' 39.432 W
8,200.0	2.37	254.74	8,197.4	25.2	-112.5	622,761.02	686,303.42	32° 42' 38.176 N	103° 43' 39.472 W
8,300.0	3.04	259.00	8,297.3	24.2	-117.1	622,759.97	686,298.82	32° 42' 38.166 N	103° 43' 39.526 W
8,400.0	3.26	264.95	8,397.1	23.4	-122.5	622,759.21	686,293.39	32° 42' 38.158 N	103° 43' 39.590 W
8,500.0	2.99	259.43	8,497.0	22.7	-127.9	622,758.48	686,287.99	32° 42' 38.151 N	103° 43' 39.653 W
8,600.0	2.49	255.69	8,596.8	21.7	-132.6	622,757.47	686,283.32	32° 42' 38.142 N	103° 43' 39.708 W
8,631.0	2.31	253.25	8,627.8	21.3	-133.8	622,757.12	686,282.07	32° 42' 38.138 N	103° 43' 39.722 W
8631' MD VES Gyro									
8,776.0	1.20	251.20	8,772.8	20.0	-138.1	622,755.79	686,277.84	32° 42' 38.125 N	103° 43' 39.772 W
8,871.0	1.10	241.40	8,867.7	19.2	-139.8	622,755.03	686,276.09	32° 42' 38.118 N	103° 43' 39.793 W
8,965.0	1.60	133.20	8,961.7	17.9	-139.6	622,753.70	686,276.26	32° 42' 38.105 N	103° 43' 39.791 W
8,997.0	4.90	119.20	8,993.7	16.9	-138.1	622,752.73	686,277.78	32° 42' 38.095 N	103° 43' 39.773 W
9,029.0	6.50	106.60	9,025.5	15.7	-135.2	622,751.54	686,280.71	32° 42' 38.083 N	103° 43' 39.739 W
9,060.0	8.80	97.30	9,056.2	14.9	-131.2	622,750.74	686,284.74	32° 42' 38.075 N	103° 43' 39.692 W
9,092.0	12.10	87.60	9,087.7	14.8	-125.4	622,750.57	686,290.52	32° 42' 38.073 N	103° 43' 39.624 W
9,123.0	16.00	91.50	9,117.8	14.8	-117.9	622,750.60	686,298.04	32° 42' 38.073 N	103° 43' 39.536 W
9,155.0	18.70	91.80	9,148.3	14.5	-108.3	622,750.32	686,307.58	32° 42' 38.070 N	103° 43' 39.424 W
9,187.0	21.10	97.80	9,178.4	13.6	-97.5	622,749.38	686,318.42	32° 42' 38.060 N	103° 43' 39.298 W
9,218.0	22.70	97.70	9,207.2	12.0	-86.0	622,747.82	686,329.87	32° 42' 38.044 N	103° 43' 39.164 W
9,250.0	23.90	101.50	9,236.5	9.9	-73.6	622,745.70	686,342.34	32° 42' 38.022 N	103° 43' 39.018 W
9,281.0	27.00	102.50	9,264.5	7.1	-60.5	622,742.92	686,355.37	32° 42' 37.994 N	103° 43' 38.865 W
9,313.0	30.30	103.60	9,292.6	3.6	-45.6	622,739.45	686,370.31	32° 42' 37.958 N	103° 43' 38.691 W
9,344.0	33.40	104.20	9,318.9	-0.3	-29.7	622,735.52	686,386.19	32° 42' 37.919 N	103° 43' 38.505 W
9,376.0	36.80	106.10	9,345.1	-5.1	-12.0	622,730.70	686,403.94	32° 42' 37.870 N	103° 43' 38.298 W
9,407.0	40.00	108.50	9,369.4	-10.8	6.4	622,724.96	686,422.32	32° 42' 37.812 N	103° 43' 38.083 W
9,439.0	42.80	108.70	9,393.4	-17.6	26.5	622,718.21	686,442.37	32° 42' 37.744 N	103° 43' 37.849 W
9,470.0	45.80	107.60	9,415.6	-24.3	47.0	622,711.47	686,462.94	32° 42' 37.676 N	103° 43' 37.609 W
9,502.0	49.10	106.70	9,437.2	-31.3	69.6	622,704.52	686,485.47	32° 42' 37.606 N	103° 43' 37.345 W
9,533.0	51.70	106.30	9,457.0	-38.1	92.5	622,697.74	686,508.37	32° 42' 37.538 N	103° 43' 37.078 W
9,565.0	53.20	106.10	9,476.5	-45.1	116.8	622,690.67	686,532.73	32° 42' 37.467 N	103° 43' 36.793 W
9,597.0	55.60	106.00	9,495.1	-52.3	141.8	622,683.47	686,557.73	32° 42' 37.394 N	103° 43' 36.501 W
9,628.0	59.90	105.40	9,511.7	-59.4	167.1	622,676.38	686,582.97	32° 42' 37.322 N	103° 43' 36.206 W
9,660.0	63.30	104.90	9,526.9	-66.8	194.2	622,669.03	686,610.14	32° 42' 37.248 N	103° 43' 35.889 W
9,692.0	65.80	105.40	9,540.6	-74.3	222.1	622,661.48	686,638.02	32° 42' 37.172 N	103° 43' 35.563 W
9,723.0	68.30	105.70	9,552.7	-82.0	249.6	622,653.82	686,665.52	32° 42' 37.094 N	103° 43' 35.242 W
9,755.0	70.80	105.80	9,563.9	-90.1	278.5	622,645.69	686,694.38	32° 42' 37.012 N	103° 43' 34.904 W
9,786.0	72.70	105.60	9,573.6	-98.1	306.8	622,637.72	686,722.72	32° 42' 36.932 N	103° 43' 34.573 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,818.0	74.60	104.90	9,582.6	-106.2	336.4	622,629.65	686,752.34	32° 42' 36.850 N	103° 43' 34.227 W
9,850.0	77.10	104.50	9,590.4	-114.0	366.5	622,621.77	686,782.35	32° 42' 36.771 N	103° 43' 33.876 W
9,881.0	79.30	104.20	9,596.8	-121.6	395.9	622,614.25	686,811.75	32° 42' 36.695 N	103° 43' 33.533 W
9,913.0	81.00	104.10	9,602.2	-129.3	426.4	622,606.55	686,842.32	32° 42' 36.617 N	103° 43' 33.176 W
9,927.0	82.00	104.40	9,604.3	-132.7	439.8	622,603.14	686,855.74	32° 42' 36.582 N	103° 43' 33.019 W
10,003.0	87.10	102.40	9,611.5	-150.2	513.4	622,585.62	686,929.31	32° 42' 36.405 N	103° 43' 32.159 W
10,035.0	88.90	99.40	9,612.6	-156.2	544.8	622,579.57	686,960.71	32° 42' 36.343 N	103° 43' 31.792 W
10,052.6	89.10	98.90	9,613.0	-159.0	562.2	622,576.77	686,978.10	32° 42' 36.314 N	103° 43' 31.589 W
LP Lone Wolf 36B2DM st Com1H									
10,098.0	89.60	97.60	9,613.5	-165.5	607.1	622,570.26	687,023.01	32° 42' 36.247 N	103° 43' 31.063 W
10,193.0	90.90	97.40	9,613.1	-177.9	701.3	622,557.86	687,117.19	32° 42' 36.119 N	103° 43' 29.962 W
10,288.0	90.20	95.50	9,612.1	-188.6	795.7	622,547.19	687,211.58	32° 42' 36.008 N	103° 43' 28.858 W
10,383.0	90.70	98.70	9,611.4	-200.4	889.9	622,535.45	687,305.84	32° 42' 35.887 N	103° 43' 27.756 W
10,478.0	90.10	97.90	9,610.7	-214.1	983.9	622,521.74	687,399.84	32° 42' 35.746 N	103° 43' 26.656 W
10,573.0	89.70	96.30	9,610.9	-225.8	1,078.2	622,509.99	687,494.11	32° 42' 35.624 N	103° 43' 25.554 W
10,668.0	89.10	95.30	9,611.9	-235.4	1,172.7	622,500.39	687,588.61	32° 42' 35.524 N	103° 43' 24.448 W
10,763.0	91.40	96.60	9,611.5	-245.3	1,267.2	622,490.55	687,683.09	32° 42' 35.421 N	103° 43' 23.343 W
10,858.0	92.70	100.00	9,608.1	-259.0	1,361.1	622,476.85	687,777.02	32° 42' 35.280 N	103° 43' 22.245 W
10,952.0	92.60	98.70	9,603.7	-274.2	1,453.8	622,461.59	687,869.67	32° 42' 35.124 N	103° 43' 21.162 W
11,047.0	89.50	99.20	9,602.0	-289.0	1,547.6	622,446.82	687,963.49	32° 42' 34.972 N	103° 43' 20.065 W
11,142.0	88.90	97.30	9,603.3	-302.6	1,641.6	622,433.19	688,057.49	32° 42' 34.832 N	103° 43' 18.965 W
11,236.0	88.80	98.40	9,605.2	-315.5	1,734.7	622,420.35	688,150.59	32° 42' 34.700 N	103° 43' 17.877 W
11,331.0	90.10	98.40	9,606.1	-329.3	1,828.7	622,406.47	688,244.56	32° 42' 34.557 N	103° 43' 16.778 W
11,426.0	93.20	97.60	9,603.4	-342.5	1,922.7	622,393.26	688,338.59	32° 42' 34.421 N	103° 43' 15.678 W
11,520.0	93.10	98.00	9,598.2	-355.3	2,015.7	622,380.52	688,431.58	32° 42' 34.290 N	103° 43' 14.591 W
11,615.0	93.70	98.30	9,592.6	-368.7	2,109.6	622,367.08	688,525.45	32° 42' 34.151 N	103° 43' 13.493 W
11,710.0	91.30	102.80	9,588.4	-386.1	2,202.8	622,349.70	688,618.73	32° 42' 33.974 N	103° 43' 12.403 W
11,804.0	87.80	103.20	9,589.2	-407.2	2,294.4	622,328.56	688,710.30	32° 42' 33.760 N	103° 43' 11.332 W
11,899.0	88.00	103.90	9,592.7	-429.5	2,386.7	622,306.32	688,802.59	32° 42' 33.534 N	103° 43' 10.254 W
11,994.0	86.70	100.40	9,597.1	-449.5	2,479.5	622,286.35	688,895.35	32° 42' 33.331 N	103° 43' 9.170 W
12,089.0	86.90	101.00	9,602.4	-467.1	2,572.7	622,268.74	688,988.55	32° 42' 33.152 N	103° 43' 8.080 W
12,152.0	87.50	99.80	9,605.4	-478.4	2,634.5	622,257.38	689,050.44	32° 42' 33.036 N	103° 43' 7.356 W
12,184.0	88.40	99.10	9,606.6	-483.7	2,666.1	622,252.13	689,081.99	32° 42' 32.982 N	103° 43' 6.988 W
12,216.0	89.20	98.20	9,607.3	-488.5	2,697.7	622,247.31	689,113.61	32° 42' 32.932 N	103° 43' 6.618 W
12,247.0	90.50	98.10	9,607.3	-492.9	2,728.4	622,242.92	689,144.30	32° 42' 32.887 N	103° 43' 6.259 W
12,279.0	90.50	97.40	9,607.1	-497.2	2,760.1	622,238.60	689,176.01	32° 42' 32.843 N	103° 43' 5.888 W
12,374.0	92.00	95.00	9,605.0	-507.5	2,854.5	622,228.35	689,270.42	32° 42' 32.736 N	103° 43' 4.784 W
12,469.0	91.50	94.00	9,602.1	-514.9	2,949.2	622,220.90	689,365.08	32° 42' 32.657 N	103° 43' 3.677 W
12,563.0	91.60	93.30	9,599.5	-520.9	3,043.0	622,214.92	689,458.85	32° 42' 32.592 N	103° 43' 2.580 W
12,658.0	90.30	94.00	9,598.0	-526.9	3,137.8	622,208.87	689,553.65	32° 42' 32.527 N	103° 43' 1.471 W
12,753.0	94.30	94.20	9,594.1	-533.7	3,232.4	622,202.08	689,648.31	32° 42' 32.454 N	103° 43' 0.363 W
12,848.0	93.70	94.40	9,587.5	-540.8	3,326.9	622,194.98	689,742.81	32° 42' 32.378 N	103° 42' 59.258 W
12,943.0	91.50	95.50	9,583.2	-549.0	3,421.5	622,186.79	689,837.35	32° 42' 32.292 N	103° 42' 58.152 W
13,038.0	90.50	96.20	9,581.6	-558.7	3,515.9	622,177.11	689,931.84	32° 42' 32.191 N	103° 42' 57.047 W
13,133.0	88.60	94.10	9,582.3	-567.2	3,610.5	622,168.58	690,026.44	32° 42' 32.101 N	103° 42' 55.940 W
13,228.0	88.00	93.70	9,585.1	-573.7	3,705.3	622,162.12	690,121.18	32° 42' 32.032 N	103° 42' 54.832 W
13,323.0	90.50	92.70	9,586.4	-579.0	3,800.1	622,156.82	690,216.02	32° 42' 31.974 N	103° 42' 53.722 W
13,418.0	91.50	93.40	9,584.7	-584.0	3,895.0	622,151.77	690,310.86	32° 42' 31.918 N	103° 42' 52.612 W
13,513.0	92.40	98.10	9,581.5	-593.5	3,989.4	622,142.26	690,405.30	32° 42' 31.819 N	103° 42' 51.508 W
13,607.0	88.90	100.00	9,580.4	-608.3	4,082.2	622,127.48	690,498.11	32° 42' 31.667 N	103° 42' 50.423 W
13,703.0	88.80	100.30	9,582.3	-625.2	4,176.7	622,110.56	690,592.59	32° 42' 31.494 N	103° 42' 49.318 W
13,798.0	91.10	100.50	9,582.4	-642.4	4,270.1	622,093.41	690,686.02	32° 42' 31.319 N	103° 42' 48.226 W
13,893.0	90.10	101.10	9,581.4	-660.2	4,363.4	622,075.61	690,779.33	32° 42' 31.138 N	103° 42' 47.135 W
13,988.0	90.50	101.70	9,580.9	-679.0	4,456.6	622,056.84	690,872.46	32° 42' 30.946 N	103° 42' 46.046 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company .	Local Co-ordinate Reference:	Well Lone Wolf 36 B2DM St Com #1H
Project:	Lea County N.M.	TVD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Site:	Section 36-18S-32E Lone Wolf 36 B2DM St Com 1H	MD Reference:	3734 + 27 @ 3761.0usft (Patterson 243)
Well:	Lone Wolf 36 B2DM St Com #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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,049.0	90.40	101.80	9,580.4	-691.4	4,516.3	622,044.41	690,932.18	32° 42' 30.820 N	103° 42' 45.348 W
14,107.0	90.40	101.80	9,580.0	-703.2	4,573.1	622,032.55	690,988.95	32° 42' 30.699 N	103° 42' 44.685 W
14107' MD Projected to Bit - PBHL Lone Wolf 36 B2DM St Com 1H									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,631.0	8,627.8	21.3	-133.8	8631' MD VES Gyro
14,107.0	9,580.0	-703.2	4,573.1	14107' MD Projected to Bit