

30-015-42596

Mewbourne Oil Company .

Eddy County, New Mexico

Section 27-18S-30E Ursa 27 B2EH Federal Com #1H

Ursa 27 B2EH Federal Com #1H

Original Hole

Design: Original Hole

Standard Survey Report

27 October, 2014

SP

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Ursa 27 B2EH Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3471 + 20 @ 3491.0usft (Patterson #41)
Site:	Section 27-18S-30E Ursa 27 B2EH Federal Com #1H	MD Reference:	GL 3471 + 20 @ 3491.0usft (Patterson #41)
Well:	Ursa 27 B2EH Federal Com #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 27-18S-30E Ursa 27 B2EH Federal Com #1H		
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Site Position:		Northing:	625,987.50 usft	Latitude:	32° 43' 13.441 N
From:	Map	Easting:	612,724.26 usft	Longitude:	103° 58' 0.505 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.20 °

Well	Ursa 27 B2EH Federal Com #1H				
Well Position	+N/-S	0.0 usft	Northing:	625,987.50 usft	Latitude: 32° 43' 13.441 N
	+E/-W	0.0 usft	Easting:	612,724.26 usft	Longitude: 103° 58' 0.505 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	0.0 usft	Ground Level: 3,471.0 usft

Wellbore	Original Hole				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/21/2014	7.40	60.50	48,544

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	91.10

Survey Program		Date	10/27/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	7,780.0	VES Survey #1 (Original Hole)	GyroFlex		
7,800.0	12,685.0	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
	100.0	0.60	288.76	100.0	0.2	-0.5	-0.5	0.60	0.60	0.00
	200.0	0.70	298.23	200.0	0.6	-1.5	-1.5	0.15	0.10	9.47
	300.0	0.54	311.81	300.0	1.2	-2.4	-2.4	0.22	-0.16	13.58
	400.0	0.50	338.11	400.0	1.9	-2.9	-3.0	0.24	-0.04	26.30
	500.0	0.34	333.20	500.0	2.6	-3.2	-3.3	0.16	-0.16	-4.91
	600.0	0.19	285.02	600.0	2.9	-3.5	-3.6	0.26	-0.15	-48.18
	700.0	0.16	274.41	700.0	3.0	-3.8	-3.9	0.04	-0.03	-10.61
	800.0	0.07	216.58	800.0	2.9	-4.0	-4.1	0.14	-0.09	-57.83

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Well:	Ursa 27 B2EH Federal 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	0.17	139.74	900.0	2.8	-3.9	-4.0	0.17	0.10	-76.84
1,000.0	0.39	112.31	1,000.0	2.5	-3.5	-3.6	0.25	0.22	-27.43
1,100.0	0.67	94.42	1,100.0	2.4	-2.6	-2.7	0.32	0.28	-17.89
1,200.0	1.43	65.52	1,200.0	2.8	-0.9	-1.0	0.90	0.76	-28.90
1,300.0	1.82	63.99	1,299.9	4.0	1.7	1.6	0.39	0.39	-1.53
1,400.0	3.26	64.27	1,399.8	6.0	5.6	5.5	1.44	1.44	0.28
1,500.0	2.66	71.64	1,499.7	7.9	10.4	10.2	0.71	-0.60	7.37
1,600.0	2.52	62.97	1,599.6	9.7	14.6	14.4	0.42	-0.14	-8.67
1,700.0	1.75	55.18	1,699.5	11.5	17.8	17.6	0.82	-0.77	-7.79
1,800.0	1.61	58.90	1,799.5	13.1	20.2	20.0	0.18	-0.14	3.72
1,900.0	1.58	59.31	1,899.4	14.6	22.6	22.3	0.03	-0.03	0.41
2,000.0	1.35	54.69	1,999.4	16.0	24.8	24.5	0.26	-0.23	-4.62
2,100.0	0.94	64.30	2,099.4	17.0	26.5	26.1	0.45	-0.41	9.61
2,200.0	0.60	47.29	2,199.4	17.7	27.6	27.2	0.41	-0.34	-17.01
2,300.0	0.57	61.84	2,299.4	18.3	28.4	28.1	0.15	-0.03	14.55
2,400.0	0.49	21.77	2,399.4	18.9	29.0	28.6	0.37	-0.08	-40.07
2,500.0	0.34	19.83	2,499.4	19.6	29.3	28.9	0.15	-0.15	-1.94
2,600.0	0.42	11.43	2,599.4	20.2	29.4	29.1	0.10	0.08	-8.40
2,700.0	0.51	350.20	2,699.3	21.0	29.4	29.0	0.19	0.09	-21.23
2,800.0	0.51	329.04	2,799.3	21.9	29.1	28.7	0.19	0.00	-21.16
2,900.0	0.32	310.87	2,899.3	22.4	28.7	28.3	0.23	-0.19	-18.17
3,000.0	0.46	313.88	2,999.3	22.9	28.2	27.8	0.14	0.14	3.01
3,100.0	0.25	316.01	3,099.3	23.3	27.8	27.3	0.21	-0.21	2.13
3,200.0	0.55	320.54	3,199.3	23.8	27.3	26.8	0.30	0.30	4.53
3,300.0	0.53	334.51	3,299.3	24.6	26.8	26.3	0.13	-0.02	13.97
3,400.0	0.54	324.44	3,399.3	25.4	26.3	25.8	0.09	0.01	-10.07
3,500.0	0.44	317.18	3,499.3	26.1	25.8	25.3	0.12	-0.10	-7.26
3,600.0	0.65	317.27	3,599.3	26.8	25.1	24.6	0.21	0.21	0.09
3,700.0	0.50	312.26	3,699.3	27.5	24.4	23.9	0.16	-0.15	-5.01
3,800.0	0.29	318.98	3,799.3	28.0	23.9	23.4	0.21	-0.21	6.72
3,900.0	0.56	335.73	3,899.3	28.6	23.6	23.0	0.29	0.27	16.75
4,000.0	0.77	347.26	3,999.3	29.7	23.2	22.7	0.25	0.21	11.53
4,100.0	0.43	357.68	4,099.3	30.8	23.1	22.5	0.36	-0.34	10.42
4,200.0	0.68	341.70	4,199.3	31.7	22.9	22.3	0.29	0.25	-15.98
4,300.0	0.62	331.09	4,299.3	32.7	22.4	21.8	0.13	-0.06	-10.61
4,400.0	0.46	335.75	4,399.3	33.6	22.0	21.3	0.17	-0.16	4.66
4,500.0	0.37	338.62	4,499.3	34.2	21.7	21.0	0.09	-0.09	2.87
4,600.0	0.42	338.74	4,599.3	34.9	21.5	20.8	0.05	0.05	0.12
4,700.0	1.30	6.29	4,699.3	36.4	21.4	20.7	0.95	0.88	27.55
4,800.0	2.21	13.07	4,799.2	39.4	22.0	21.2	0.93	0.91	6.78
4,900.0	2.52	32.44	4,899.1	43.1	23.6	22.8	0.85	0.31	19.37
5,000.0	2.56	43.13	4,999.0	46.6	26.3	25.4	0.47	0.04	10.69

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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	2.64	42.54	5,098.9	49.9	29.4	28.4	0.08	0.08	-0.59	
5,200.0	2.61	45.25	5,198.8	53.2	32.6	31.6	0.13	-0.03	2.71	
5,300.0	2.44	43.28	5,298.7	56.4	35.7	34.6	0.19	-0.17	-1.97	
5,400.0	2.05	39.18	5,398.7	59.3	38.3	37.1	0.42	-0.39	-4.10	
5,500.0	1.71	32.45	5,498.6	61.9	40.2	39.0	0.40	-0.34	-6.73	
5,600.0	1.15	18.93	5,598.6	64.1	41.3	40.1	0.65	-0.56	-13.52	
5,700.0	0.81	12.37	5,698.6	65.8	41.8	40.5	0.36	-0.34	-6.56	
5,800.0	0.79	3.50	5,798.5	67.2	42.0	40.7	0.13	-0.02	-8.87	
5,900.0	1.08	343.70	5,898.5	68.8	41.8	40.4	0.43	0.29	-19.80	
6,000.0	1.15	333.45	5,998.5	70.6	41.0	39.7	0.21	0.07	-10.25	
6,100.0	1.58	349.79	6,098.5	72.8	40.4	38.9	0.58	0.43	16.34	
6,200.0	1.72	16.42	6,198.4	75.6	40.5	39.1	0.77	0.14	26.63	
6,300.0	2.09	22.51	6,298.4	78.7	41.7	40.1	0.42	0.37	6.09	
6,400.0	2.34	23.18	6,398.3	82.3	43.2	41.6	0.25	0.25	0.67	
6,500.0	2.49	26.89	6,498.2	86.1	44.9	43.3	0.22	0.15	3.71	
6,600.0	2.55	25.57	6,598.1	90.1	46.9	45.1	0.08	0.06	-1.32	
6,700.0	2.59	23.62	6,698.0	94.1	48.7	46.9	0.10	0.04	-1.95	
6,800.0	2.57	14.67	6,797.9	98.4	50.2	48.3	0.40	-0.02	-8.95	
6,900.0	2.60	14.07	6,897.8	102.7	51.3	49.4	0.04	0.03	-0.60	
7,000.0	2.63	9.57	6,997.7	107.2	52.3	50.2	0.21	0.03	-4.50	
7,100.0	2.39	7.77	7,097.6	111.5	52.9	50.8	0.25	-0.24	-1.80	
7,200.0	2.28	11.32	7,197.5	115.5	53.6	51.4	0.18	-0.11	3.55	
7,300.0	2.68	15.57	7,297.4	119.7	54.6	52.3	0.44	0.40	4.25	
7,400.0	2.12	24.75	7,397.4	123.7	56.0	53.6	0.68	-0.56	9.18	
7,500.0	2.47	24.46	7,497.3	127.3	57.7	55.2	0.35	0.35	-0.29	
7,600.0	2.13	17.01	7,597.2	131.1	59.1	56.6	0.45	-0.34	-7.45	
7,700.0	1.94	11.20	7,697.1	134.5	60.0	57.4	0.28	-0.19	-5.81	
7,780.0	1.75	6.48	7,777.1	137.0	60.4	57.8	0.30	-0.24	-5.90	
7780' MD VES Gyro										
7,800.0	1.70	62.50	7,797.1	137.5	60.7	58.1	8.10	-0.25	280.10	
7,832.0	4.50	108.30	7,829.0	137.3	62.3	59.7	11.04	8.75	143.13	
7,863.0	8.70	118.20	7,859.8	135.8	65.5	62.9	13.99	13.55	31.94	
7,895.0	12.80	121.30	7,891.3	132.8	70.7	68.1	12.93	12.81	9.69	
7,926.0	16.20	123.60	7,921.3	128.6	77.2	74.8	11.12	10.97	7.42	
7,958.0	19.00	122.90	7,951.8	123.3	85.3	83.0	8.77	8.75	-2.19	
7,989.0	22.20	121.30	7,980.8	117.6	94.6	92.3	10.48	10.32	-5.16	
8,021.0	25.80	121.30	8,010.0	110.8	105.7	103.6	11.25	11.25	0.00	
8,053.0	28.30	121.30	8,038.5	103.2	118.1	116.1	7.81	7.81	0.00	
8,084.0	30.80	120.10	8,065.5	95.4	131.3	129.4	8.29	8.06	-3.87	
8,116.0	34.00	118.50	8,092.5	87.1	146.2	144.5	10.35	10.00	-5.00	
8,148.0	37.80	116.80	8,118.4	78.4	162.9	161.3	12.28	11.88	-5.31	
8,180.0	41.00	113.60	8,143.1	69.7	181.2	179.9	11.84	10.00	-10.00	
8,211.0	43.90	110.40	8,166.0	61.9	200.6	199.4	11.66	9.35	-10.32	

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Well:	Ursa 27 B2EH Federal 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)
8,243.0	46.10	106.60	8,188.6	54.8	222.1	221.0	10.85	6.88	-11.88
8,274.0	48.20	103.40	8,209.7	48.9	244.0	243.1	10.16	6.77	-10.32
8,306.0	51.50	101.10	8,230.4	43.7	267.9	267.0	11.68	10.31	-7.19
8,338.0	55.70	98.80	8,249.3	39.3	293.3	292.5	14.34	13.13	-7.19
8,369.0	60.60	96.70	8,265.7	35.7	319.4	318.6	16.82	15.81	-6.77
8,401.0	64.80	95.30	8,280.4	32.8	347.7	347.0	13.69	13.13	-4.38
8,432.0	68.20	95.30	8,292.7	30.2	376.0	375.3	10.97	10.97	0.00
8,464.0	70.20	95.00	8,304.1	27.5	405.7	405.1	6.31	6.25	-0.94
8,495.0	72.50	95.50	8,314.0	24.8	435.0	434.4	7.58	7.42	1.61
8,527.0	74.80	95.90	8,323.0	21.7	465.5	465.0	7.29	7.19	1.25
8,559.0	77.10	95.90	8,330.8	18.5	496.4	496.0	7.19	7.19	0.00
8,590.0	79.20	96.00	8,337.1	15.4	526.6	526.2	6.78	6.77	0.32
8,622.0	80.60	96.20	8,342.8	12.0	557.9	557.6	4.42	4.38	0.63
8,653.0	82.70	95.90	8,347.3	8.8	588.4	588.1	6.84	6.77	-0.97
8,685.0	85.20	95.90	8,350.6	5.5	620.1	619.9	7.81	7.81	0.00
8,771.0	89.50	96.20	8,354.6	-3.5	705.5	705.4	5.01	5.00	0.35
8,803.0	89.70	96.60	8,354.8	-7.1	737.3	737.3	1.40	0.63	1.25
8,834.0	89.50	95.70	8,355.0	-10.4	768.1	768.2	2.97	-0.65	-2.90
8,866.0	89.20	92.90	8,355.4	-12.8	800.0	800.1	8.80	-0.94	-8.75
8,898.0	89.00	91.60	8,355.9	-14.1	832.0	832.1	4.11	-0.63	-4.06
8,929.0	89.20	91.10	8,356.4	-14.8	863.0	863.1	1.74	0.65	-1.61
8,961.0	89.20	91.60	8,356.8	-15.5	895.0	895.1	1.56	0.00	1.56
8,992.0	89.50	91.10	8,357.2	-16.3	925.9	926.1	1.88	0.97	-1.61
9,024.0	89.70	89.90	8,357.4	-16.5	957.9	958.1	3.80	0.63	-3.75
9,054.0	89.50	89.50	8,357.6	-16.4	987.9	988.1	1.49	-0.67	-1.33
9,149.0	89.30	89.20	8,358.6	-15.3	1,082.9	1,083.0	0.38	-0.21	-0.32
9,243.0	88.50	90.60	8,360.4	-15.1	1,176.9	1,177.0	1.72	-0.85	1.49
9,338.0	89.40	92.20	8,362.2	-17.5	1,271.9	1,272.0	1.93	0.95	1.68
9,432.0	90.80	91.50	8,362.0	-20.5	1,365.8	1,365.9	1.67	1.49	-0.74
9,528.0	90.40	90.80	8,361.0	-22.4	1,461.8	1,461.9	0.84	-0.42	-0.73
9,622.0	88.70	91.10	8,361.7	-24.0	1,555.8	1,555.9	1.84	-1.81	0.32
9,717.0	88.40	92.30	8,364.1	-26.8	1,650.7	1,650.9	1.30	-0.32	1.26
9,812.0	89.10	92.20	8,366.2	-30.5	1,745.6	1,745.9	0.74	0.74	-0.11
9,907.0	89.00	92.50	8,367.8	-34.4	1,840.5	1,840.8	0.33	-0.11	0.32
10,002.0	87.00	94.40	8,371.1	-40.1	1,935.3	1,935.7	2.90	-2.11	2.00
10,097.0	87.40	93.40	8,375.7	-46.6	2,029.9	2,030.4	1.13	0.42	-1.05
10,192.0	88.20	92.30	8,379.4	-51.3	2,124.7	2,125.3	1.43	0.84	-1.16
10,287.0	88.00	92.20	8,382.5	-55.0	2,219.6	2,220.3	0.24	-0.21	-0.11
10,319.0	88.10	91.30	8,383.6	-56.0	2,251.6	2,252.2	2.83	0.31	-2.81
10,350.0	88.90	90.90	8,384.4	-56.6	2,282.6	2,283.2	2.89	2.58	-1.29
10,382.0	90.70	91.50	8,384.6	-57.3	2,314.6	2,315.2	5.93	5.63	1.88
10,413.0	91.90	91.60	8,383.9	-58.1	2,345.5	2,346.2	3.88	3.87	0.32

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Ursa 27 B2EH Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3471 + 20 @ 3491.0usft (Patterson #41)
Site:	Section 27-18S-30E Ursa 27 B2EH Federal Com #1H	MD Reference:	GL 3471 + 20 @ 3491.0usft (Patterson #41)
Well:	Ursa 27 B2EH Federal Com #1H	North Reference:	Grid
Wellbore:	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)
10,445.0	91.50	90.80	8,382.9	-58.8	2,377.5	2,378.2	2.79	-1.25	-2.50
10,477.0	89.40	90.40	8,382.7	-59.1	2,409.5	2,410.2	6.68	-6.56	-1.25
10,508.0	88.20	90.40	8,383.3	-59.3	2,440.5	2,441.2	3.87	-3.87	0.00
10,540.0	89.20	90.60	8,384.0	-59.6	2,472.5	2,473.2	3.19	3.13	0.63
10,572.0	90.70	91.10	8,384.1	-60.1	2,504.5	2,505.2	4.94	4.69	1.56
10,603.0	91.50	90.20	8,383.5	-60.5	2,535.5	2,536.2	3.88	2.58	-2.90
10,635.0	91.00	89.90	8,382.8	-60.5	2,567.5	2,568.2	1.82	-1.56	-0.94
10,666.0	89.50	90.10	8,382.6	-60.5	2,598.5	2,599.1	4.88	-4.84	0.65
10,760.0	88.50	89.70	8,384.3	-60.3	2,692.4	2,693.1	1.15	-1.06	-0.43
10,855.0	90.00	91.10	8,385.5	-61.0	2,787.4	2,788.1	2.16	1.58	1.47
10,949.0	88.90	90.40	8,386.4	-62.2	2,881.4	2,882.1	1.39	-1.17	-0.74
11,045.0	90.00	88.80	8,387.3	-61.5	2,977.4	2,978.0	2.02	1.15	-1.67
11,139.0	90.00	91.30	8,387.3	-61.6	3,071.4	3,072.0	2.66	0.00	2.66
11,235.0	90.00	90.40	8,387.3	-63.0	3,167.4	3,168.0	0.94	0.00	-0.94
11,330.0	88.80	90.10	8,388.3	-63.5	3,262.4	3,263.0	1.30	-1.26	-0.32
11,424.0	87.80	91.50	8,391.1	-64.8	3,356.3	3,357.0	1.83	-1.06	1.49
11,519.0	87.00	91.50	8,395.4	-67.3	3,451.2	3,451.9	0.84	-0.84	0.00
11,614.0	88.90	91.80	8,398.8	-70.0	3,546.1	3,546.8	2.02	2.00	0.32
11,710.0	91.10	90.20	8,398.8	-71.7	3,642.1	3,642.8	2.83	2.29	-1.67
11,805.0	90.50	88.60	8,397.5	-70.7	3,737.0	3,737.7	1.80	-0.63	-1.68
11,900.0	90.00	89.00	8,397.1	-68.7	3,832.0	3,832.6	0.67	-0.53	0.42
11,995.0	88.50	91.80	8,398.3	-69.3	3,927.0	3,927.6	3.34	-1.58	2.95
12,089.0	89.10	90.10	8,400.3	-70.9	4,021.0	4,021.6	1.92	0.64	-1.81
12,184.0	89.30	91.30	8,401.6	-72.1	4,115.9	4,116.6	1.28	0.21	1.26
12,279.0	89.70	91.30	8,402.5	-74.2	4,210.9	4,211.6	0.42	0.42	0.00
12,373.0	89.70	90.20	8,402.9	-75.4	4,304.9	4,305.6	1.17	0.00	-1.17
12,468.0	88.50	90.60	8,404.4	-76.1	4,399.9	4,400.5	1.33	-1.26	0.42
12,562.0	89.20	92.00	8,406.3	-78.2	4,493.8	4,494.5	1.66	0.74	1.49
12,626.0	89.30	90.40	8,407.2	-79.6	4,557.8	4,558.5	2.50	0.16	-2.50
12,685.0	89.30	90.40	8,407.9	-80.0	4,616.8	4,617.5	0.00	0.00	0.00

12685' MD Projected to Bit

Design Annotations:				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,780.0	7,777.1	137.0	60.4	7780' MD VES Gyro
12,685.0	8,407.9	-80.0	4,616.8	12685' MD Projected to Bit



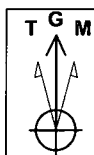
COMPANY: Mewbourne Oil Company
 WELL: Ursa 27 B2EH Federal Com #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson #41



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.21°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001					
GL 3471 + 20 @ 3491.0usft (Patterson #41)					
GROUND ELEVATION: 3471.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	625987.50	612724.26	32° 43' 13.441 N	103° 58' 0.505 W
					Slot



Azimuths to Grid North
 True North: -0.20°
 Magnetic North: 7.21°

Magnetic Field
 Strength: 48544.2snT
 Dip Angle: 60.50°
 Date: 9/21/2014
 Model: IGRF2010

PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	7780.0	1.75	6.48	7777.1	137.0	60.4	0.00	0.00	57.8	
2	7810.0	1.75	6.48	7807.1	137.9	60.5	0.00	0.00	57.8	
3	7980.2	19.20	155.96	7974.3	114.7	72.3	12.18	151.84	70.1	
4	8647.5	89.23	91.05	8361.0	-13.9	530.0	12.18	-66.37	530.2	LP2 Ursa 27 B3EH Fed Com #1H
5	12740.0	89.23	91.05	8416.0	-89.0	4621.4	0.00	0.00	4622.3	PBHL Ursa 27 B2EH Fed Com #1H

