

RECEIVED

APR 17 2013

NMOCD ARTESIA

30-015-40974

Mewbourne Oil Co

Eddy County, New Mexico

Sec 13, T25S, R28E

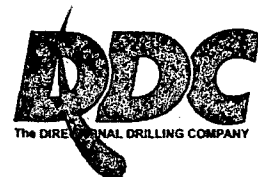
Malaga 13 CN Fed Com #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

27 February, 2013



DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 13 CN Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2913.0usft (Patterson #75)
Site:	Sec 13 T25S R28E	MD Reference:	WELL @ 2913.0usft (Patterson #75)
Well:	Malaga 13 CN Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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	Sec 13 T25S R28E		
Site Position:		Northing:	413,530.91 usft
From:	Map	Easting:	589,931.62 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 11.687 N
		Longitude:	104° 2' 34.064 W
		Grid Convergence:	0.15 °

Well	Malaga 13 CN Fed Com #1H		
Well Position	+N-S	0.0 usft	Northing: 413,530.91 usft
	+E-W	0.0 usft	Easting: 589,931.62 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 8' 11.687 N
		Longitude:	104° 2' 34.064 W
		Ground Level:	2,893.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	2/8/2013	7.59
			Dip Angle (°)
			59.98
			Field Strength (nT)
			48,350

Design	Wellbore #1		
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	178.75

Survey Program	Date 2/27/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	7,660.0	GYRO (Wellbore #1)	Good_gyro
7,781.0	12,805.0	MWD (Wellbore #1)	MWD default
			Description
			Good Gyro
			MWD - Standard

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	1.32	305.20	100.0	0.7	-0.9	-0.7	1.32	1.32	0.00	
200.0	1.93	311.57	200.0	2.4	-3.1	-2.5	0.64	0.61	6.37	
300.0	1.82	311.46	299.9	4.6	-5.6	-4.7	0.11	-0.11	-0.11	
400.0	1.74	311.35	399.8	6.7	-7.9	-6.8	0.08	-0.08	-0.11	
500.0	1.83	310.38	499.8	8.7	-10.3	-8.9	0.09	0.09	-0.97	
600.0	1.90	309.41	599.7	10.8	-12.8	-11.1	0.08	0.07	-0.97	
700.0	1.74	302.35	699.7	12.7	-15.3	-13.0	0.28	-0.16	-7.06	
800.0	1.57	295.30	799.7	14.1	-17.9	-14.4	0.26	-0.17	-7.05	
900.0	1.45	297.30	899.6	15.2	-20.2	-15.7	0.13	-0.12	2.00	

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 13-CN-Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2913.0usft (Patterson #75)
Site:	Sec 13, T25S, R28E	MD Reference:	WELL @ 2913.0usft (Patterson #75)
Well:	Malaga 13-CN-Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	1.34	299.31	999.6	16.4	-22.4	-16.9	0.12	-0.11	2.01
1,100.0	1.26	298.30	1,099.6	17.5	-24.4	-18.0	0.08	-0.08	-1.01
1,200.0	1.15	297.30	1,199.5	18.4	-26.2	-19.0	0.11	-0.11	-1.00
1,300.0	0.93	290.83	1,299.5	19.2	-27.9	-19.8	0.25	-0.22	-6.47
1,400.0	0.71	274.36	1,399.5	19.5	-29.2	-20.2	0.32	-0.22	-16.47
1,500.0	0.66	230.42	1,499.5	19.2	-30.3	-19.9	0.51	-0.05	-43.94
1,600.0	0.61	176.49	1,599.5	18.3	-30.7	-19.0	0.58	-0.05	-53.93
1,700.0	0.76	179.30	1,699.5	17.1	-30.7	-17.8	0.15	0.15	2.81
1,800.0	0.88	182.10	1,799.5	15.7	-30.7	-16.4	0.13	0.12	2.80
1,900.0	1.38	148.06	1,899.5	13.9	-30.1	-14.6	0.82	0.50	-34.04
2,000.0	1.88	124.01	1,999.4	12.0	-28.1	-12.6	0.84	0.50	-24.05
2,100.0	2.23	107.62	2,099.4	10.5	-24.9	-11.0	0.68	0.35	-16.39
2,200.0	2.58	101.23	2,199.3	9.4	-20.8	-9.9	0.44	0.35	-6.39
2,300.0	3.09	101.88	2,299.2	8.4	-16.0	-8.8	0.51	0.51	0.65
2,400.0	3.61	102.52	2,399.0	7.2	-10.3	-7.4	0.52	0.52	0.64
2,500.0	2.78	96.49	2,498.8	6.2	-4.8	-6.3	0.89	-0.83	-6.03
2,600.0	1.96	90.45	2,598.7	6.0	-0.7	-6.0	0.86	-0.82	-6.04
2,700.0	1.59	84.49	2,698.7	6.1	2.4	-6.0	0.41	-0.37	-5.96
2,800.0	1.23	78.54	2,798.7	6.4	4.9	-6.3	0.39	-0.36	-5.95
2,900.0	1.05	83.12	2,898.6	6.7	6.8	-6.6	0.20	-0.18	4.58
3,000.0	0.88	87.70	2,998.6	6.9	8.5	-6.7	0.19	-0.17	4.58
3,100.0	0.75	82.18	3,098.6	7.0	9.9	-6.8	0.15	-0.13	-5.52
3,200.0	0.64	76.66	3,198.6	7.2	11.1	-7.0	0.13	-0.11	-5.52
3,300.0	0.52	74.63	3,298.6	7.5	12.1	-7.2	0.12	-0.12	-2.03
3,400.0	0.41	72.59	3,398.6	7.7	12.9	-7.4	0.11	-0.11	-2.04
3,500.0	0.29	57.22	3,498.6	7.9	13.4	-7.6	0.15	-0.12	-15.37
3,600.0	0.17	41.85	3,598.6	8.2	13.7	-7.9	0.13	-0.12	-15.37
3,700.0	0.17	160.06	3,698.6	8.2	13.9	-7.9	0.29	0.00	118.21
3,800.0	0.16	278.28	3,798.6	8.0	13.8	-7.7	0.28	-0.01	118.22
3,900.0	0.14	285.20	3,898.6	8.1	13.5	-7.8	0.03	-0.02	6.92
4,000.0	0.14	292.11	3,998.6	8.2	13.3	-7.9	0.02	0.00	6.91
4,100.0	0.22	315.01	4,098.6	8.4	13.1	-8.1	0.11	0.08	22.90
4,200.0	0.27	324.91	4,198.6	8.7	12.8	-8.4	0.07	0.05	9.90
4,300.0	0.41	329.44	4,298.6	9.2	12.5	-8.9	0.14	0.14	4.53
4,400.0	0.54	333.97	4,398.6	9.9	12.1	-9.6	0.14	0.13	4.53
4,500.0	0.59	241.19	4,498.6	10.1	11.4	-9.8	0.82	0.05	-92.78
4,600.0	0.64	231.42	4,598.6	9.5	10.5	-9.3	0.12	0.05	-9.77
4,700.0	0.95	231.90	4,698.6	8.6	9.5	-8.4	0.31	0.31	0.48
4,800.0	1.24	232.39	4,798.6	7.5	7.9	-7.3	0.29	0.29	0.49
4,900.0	1.26	231.34	4,898.5	6.1	6.2	-6.0	0.03	0.02	-1.05
5,000.0	1.31	230.30	4,998.5	4.7	4.5	-4.6	0.06	0.05	-1.04
5,100.0	1.28	232.37	5,098.5	3.3	2.7	-3.2	0.06	-0.03	2.07
5,200.0	1.26	234.45	5,198.5	2.0	1.0	-1.9	0.05	-0.02	2.08

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well: Malaga 13 CN Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2913.0usft (Patterson #75)
Site:	Sec 13 T25S R28E	MD Reference:	WELL @ 2913.0usft (Patterson #75)
Well:	Malaga 13 CN Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000:1 Single User Db

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)
5,300.0	1.09	226.41	5,298.4	0.7	-0.6	-0.7	0.24	-0.17	-8.04
5,400.0	0.91	218.37	5,398.4	-0.6	-1.8	0.6	0.23	-0.18	-8.04
5,500.0	1.08	207.69	5,498.4	-2.1	-2.7	2.0	0.25	0.17	-10.68
5,600.0	1.24	197.01	5,598.4	-3.9	-3.5	3.9	0.27	0.16	-10.68
5,700.0	1.34	201.30	5,698.4	-6.1	-4.2	6.0	0.14	0.10	4.29
5,800.0	1.43	205.58	5,798.3	-8.3	-5.2	8.2	0.14	0.09	4.28
5,900.0	1.31	198.52	5,898.3	-10.5	-6.1	10.3	0.21	-0.12	-7.06
6,000.0	1.19	191.46	5,998.3	-12.6	-6.7	12.4	0.20	-0.12	-7.06
6,100.0	1.19	200.82	6,098.3	-14.6	-7.3	14.4	0.19	0.00	9.36
6,200.0	1.18	212.17	6,198.2	-16.4	-8.2	16.2	0.23	-0.01	11.35
6,300.0	1.20	233.97	6,298.2	-17.9	-9.6	17.7	0.45	0.02	21.80
6,400.0	1.21	253.77	6,398.2	-18.8	-11.4	18.6	0.41	0.01	19.80
6,500.0	1.75	266.74	6,498.2	-19.2	-14.0	18.9	0.63	0.54	12.97
6,600.0	2.30	279.70	6,598.1	-18.9	-17.5	18.6	0.71	0.55	12.96
6,700.0	3.32	279.67	6,698.0	-18.1	-22.3	17.6	1.02	1.02	-0.03
6,800.0	4.35	285.63	6,797.7	-16.6	-28.8	16.0	1.10	1.03	5.96
6,900.0	2.37	295.76	6,897.6	-14.7	-34.3	13.9	2.06	-1.98	10.13
7,000.0	0.39	290.89	6,997.5	-13.7	-36.5	12.9	1.98	-1.98	-4.87
7,100.0	0.78	258.26	7,097.5	-13.7	-37.5	12.9	0.50	0.39	-32.63
7,200.0	1.06	203.11	7,197.5	-14.7	-38.5	13.8	0.89	0.28	-55.15
7,300.0	1.58	165.76	7,297.5	-16.9	-38.5	16.0	0.98	0.52	-37.35
7,400.0	1.45	131.70	7,397.5	-19.0	-37.3	18.2	0.90	-0.13	-34.06
7,500.0	1.14	132.55	7,497.4	-20.6	-35.6	19.8	0.31	-0.31	0.85
7,600.0	0.60	128.64	7,597.4	-21.6	-34.4	20.8	0.54	-0.54	-3.91
TIE IN @ 7660 MD / 7657.4 TVD									
7,660.0	0.20	277.40	7,657.4	-21.7	-34.3	21.0	1.30	-0.67	247.93
7,781.0	1.80	172.10	7,778.4	-23.6	-34.2	22.8	1.54	1.32	-87.02
7,813.0	5.00	222.10	7,810.4	-25.1	-35.1	24.4	12.76	10.00	156.25
7,845.0	6.20	227.70	7,842.2	-27.3	-37.3	26.5	4.12	3.75	17.50
7,876.0	6.60	225.80	7,873.0	-29.7	-39.8	28.8	1.46	1.29	-6.13
7,908.0	8.30	223.10	7,904.7	-32.7	-42.7	31.7	5.42	5.31	-8.44
7,940.0	11.80	219.10	7,936.2	-36.9	-46.4	35.9	11.15	10.94	-12.50
7,972.0	14.90	209.90	7,967.4	-43.0	-50.5	41.9	11.72	9.69	-28.75
8,003.0	17.00	197.60	7,997.2	-50.8	-53.8	49.6	12.80	6.77	-39.68
8,035.0	18.60	184.30	8,027.7	-60.3	-55.6	59.1	13.62	5.00	-41.56
8,067.0	21.10	176.50	8,057.8	-71.2	-55.7	69.9	11.37	7.81	-24.38
CROSSED HARD LINE @ 8089 MD / 8078.1 TVD									
8,089.0	23.71	174.12	8,078.1	-79.5	-55.0	78.3	12.54	11.84	-10.80
8,099.0	24.90	173.20	8,087.2	-83.6	-54.5	82.4	12.54	11.95	-9.24
8,132.0	27.70	170.60	8,116.8	-98.1	-52.5	96.9	9.17	8.48	-7.88
8,163.0	31.90	166.30	8,143.7	-113.2	-49.3	112.1	15.19	13.55	-13.87
8,195.0	37.20	168.80	8,170.0	-130.9	-45.4	129.9	17.14	16.56	7.81
8,227.0	43.00	170.00	8,194.5	-151.1	-41.7	150.2	18.28	18.13	3.75
8,259.0	49.00	170.70	8,216.7	-173.8	-37.8	172.9	18.82	18.75	2.19

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 13 CN Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2913.0usft (Patterson #75)
Site:	Sec 13 T25S R28E	MD Reference:	WELL @ 2913.0usft (Patterson #75)
Well:	Malaga 13 CN Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
8,291.0	54.20	172.10	8,236.6	-198.6	-34.1	197.8	16.61	16.25	4.38
8,323.0	60.40	173.00	8,253.9	-225.3	-30.6	224.6	19.52	19.38	2.81
8,354.0	65.80	172.50	8,267.9	-252.7	-27.1	252.1	17.48	17.42	-1.61
8,386.0	71.10	173.00	8,279.7	-282.2	-23.4	281.6	16.63	16.56	1.56
8,393.0	72.30	172.30	8,281.9	-288.8	-22.5	288.2	19.60	17.14	-10.00
8,478.0	78.90	171.40	8,303.0	-370.3	-10.8	369.9	7.83	7.76	-1.06
8,510.0	80.30	171.30	8,308.8	-401.4	-6.1	401.1	4.39	4.38	-0.31
8,542.0	82.30	171.60	8,313.6	-432.7	-1.4	432.5	6.32	6.25	0.94
8,573.0	83.00	171.40	8,317.6	-463.1	3.1	463.0	2.35	2.26	-0.65
8,605.0	84.10	172.00	8,321.2	-494.5	7.7	494.6	3.91	3.44	1.88
8,637.0	84.70	173.20	8,324.3	-526.1	11.8	526.2	4.18	1.88	3.75
8,668.0	85.70	173.70	8,326.9	-556.8	15.4	557.0	3.60	3.23	1.61
8,700.0	88.50	174.80	8,328.5	-588.6	18.6	588.9	9.40	8.75	3.44
8,731.0	91.10	174.80	8,328.6	-619.5	21.4	619.8	8.39	8.39	0.00
8,762.0	92.80	174.80	8,327.5	-650.3	24.2	650.7	5.48	5.48	0.00
8,794.0	92.20	174.40	8,326.2	-682.1	27.2	682.6	2.25	-1.88	-1.25
8,826.0	92.30	174.60	8,324.9	-714.0	30.3	714.5	0.70	0.31	0.63
8,889.0	92.10	175.50	8,322.5	-776.7	35.7	777.3	1.46	-0.32	1.43
8,953.0	92.10	176.40	8,320.1	-840.5	40.2	841.2	1.41	0.00	1.41
9,017.0	92.10	176.70	8,317.8	-904.3	44.0	905.1	0.47	0.00	0.47
9,080.0	90.70	176.50	8,316.2	-967.2	47.8	968.0	2.24	-2.22	-0.32
9,144.0	89.60	176.40	8,316.1	-1,031.1	51.7	1,032.0	1.73	-1.72	-0.16
9,207.0	89.50	176.50	8,316.6	-1,093.9	55.6	1,094.9	0.22	-0.16	0.16
9,270.0	89.30	175.80	8,317.2	-1,156.8	59.9	1,157.8	1.16	-0.32	-1.11
9,334.0	88.80	175.30	8,318.3	-1,220.6	64.8	1,221.7	1.10	-0.78	-0.78
9,398.0	89.60	176.20	8,319.2	-1,284.4	69.6	1,285.6	1.88	1.25	1.41
9,461.0	89.50	178.10	8,319.7	-1,347.3	72.7	1,348.6	3.02	-0.16	3.02
9,524.0	89.10	178.10	8,320.5	-1,410.3	74.8	1,411.6	0.63	-0.63	0.00
9,587.0	88.90	177.40	8,321.6	-1,473.2	77.3	1,474.6	1.16	-0.32	-1.11
9,651.0	90.20	178.70	8,322.1	-1,537.2	79.5	1,538.6	2.87	2.03	2.03
9,715.0	90.90	178.30	8,321.4	-1,601.2	81.1	1,602.6	1.26	1.09	-0.63
9,778.0	90.70	177.90	8,320.6	-1,664.1	83.2	1,665.5	0.71	-0.32	-0.63
9,841.0	90.50	177.40	8,319.9	-1,727.1	85.8	1,728.5	0.85	-0.32	-0.79
9,905.0	89.30	176.40	8,320.0	-1,791.0	89.3	1,792.5	2.44	-1.88	-1.56
9,968.0	89.40	177.40	8,320.7	-1,853.9	92.7	1,855.5	1.60	0.16	1.59
10,032.0	90.00	177.90	8,321.1	-1,917.8	95.3	1,919.4	1.22	0.94	0.78
10,096.0	90.30	177.90	8,320.9	-1,981.8	97.6	1,983.4	0.47	0.47	0.00
10,159.0	90.30	178.80	8,320.6	-2,044.8	99.5	2,046.4	1.43	0.00	1.43
10,223.0	90.70	180.10	8,320.0	-2,108.7	100.1	2,110.4	2.13	0.63	2.03
10,286.0	90.00	179.90	8,319.6	-2,171.7	100.1	2,173.4	1.16	-1.11	-0.32
10,350.0	90.10	179.50	8,319.6	-2,235.7	100.4	2,237.4	0.64	0.16	-0.63
10,414.0	89.60	180.10	8,319.7	-2,299.7	100.6	2,301.4	1.22	-0.78	0.94
10,477.0	89.60	179.70	8,320.2	-2,362.7	100.7	2,364.4	0.63	0.00	-0.63

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 13 CN Fed Com #1H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 2913.0usft (Patterson #75)
Site:	Sec 13 T25S R28E	MD Reference:	WELL @ 2913.0usft (Patterson #75)
Well:	Malaga 13 CN Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
10,540.0	90.00	179.50	8,320.4	-2,425.7	101.2	2,427.4	0.71	0.63	-0.32
10,603.0	90.10	179.00	8,320.3	-2,488.7	102.0	2,490.4	0.81	0.16	-0.79
10,667.0	90.40	178.70	8,320.1	-2,552.7	103.3	2,554.4	0.66	0.47	-0.47
10,730.0	90.70	178.50	8,319.5	-2,615.7	104.8	2,617.4	0.57	0.48	-0.32
10,794.0	89.60	178.10	8,319.3	-2,679.7	106.7	2,681.4	1.83	-1.72	-0.63
10,858.0	89.30	177.90	8,319.9	-2,743.6	109.0	2,745.3	0.56	-0.47	-0.31
10,921.0	89.70	177.40	8,320.5	-2,806.6	111.5	2,808.3	1.02	0.63	-0.79
10,985.0	90.00	177.20	8,320.6	-2,870.5	114.6	2,872.3	0.56	0.47	-0.31
11,048.0	89.90	176.70	8,320.7	-2,933.4	117.9	2,935.3	0.81	-0.16	-0.79
11,112.0	90.00	176.50	8,320.7	-2,997.3	121.7	2,999.2	0.35	0.16	-0.31
11,175.0	90.50	177.90	8,320.5	-3,060.2	124.8	3,062.2	2.36	0.79	2.22
11,238.0	90.70	178.10	8,319.8	-3,123.2	127.0	3,125.2	0.45	0.32	0.32
11,301.0	90.70	178.30	8,319.0	-3,186.1	129.0	3,188.2	0.32	0.00	0.32
11,365.0	91.60	179.50	8,317.7	-3,250.1	130.2	3,252.2	2.34	1.41	1.88
11,429.0	90.70	179.70	8,316.5	-3,314.1	130.6	3,316.2	1.44	-1.41	0.31
11,492.0	89.70	180.20	8,316.2	-3,377.1	130.7	3,379.1	1.77	-1.59	0.79
11,555.0	88.10	181.10	8,317.4	-3,440.1	130.0	3,442.1	2.91	-2.54	1.43
11,619.0	88.40	180.90	8,319.4	-3,504.0	128.9	3,506.0	0.56	0.47	-0.31
11,682.0	88.50	180.40	8,321.1	-3,567.0	128.1	3,569.0	0.81	0.16	-0.79
11,745.0	89.50	181.50	8,322.2	-3,630.0	127.1	3,631.9	2.36	1.59	1.75
11,809.0	90.50	181.30	8,322.2	-3,694.0	125.5	3,695.8	1.59	1.56	-0.31
11,872.0	91.00	180.90	8,321.4	-3,757.0	124.3	3,758.8	1.02	0.79	-0.63
11,936.0	90.90	180.20	8,320.3	-3,820.9	123.7	3,822.7	1.10	-0.16	-1.09
11,999.0	91.70	180.60	8,318.9	-3,883.9	123.3	3,885.7	1.42	1.27	0.63
12,063.0	91.50	180.10	8,317.1	-3,947.9	122.9	3,949.6	0.84	-0.31	-0.78
12,126.0	90.70	179.50	8,315.9	-4,010.9	123.1	4,012.6	1.59	-1.27	-0.95
12,189.0	91.50	179.40	8,314.7	-4,073.9	123.7	4,075.6	1.28	1.27	-0.16
12,253.0	91.90	178.80	8,312.8	-4,137.8	124.7	4,139.6	1.13	0.63	-0.94
12,317.0	92.20	178.30	8,310.5	-4,201.8	126.3	4,203.5	0.91	0.47	-0.78
12,380.0	88.60	177.60	8,310.1	-4,264.7	128.6	4,266.5	5.82	-5.71	-1.11
12,444.0	88.10	177.60	8,311.9	-4,328.6	131.3	4,330.5	0.78	-0.78	0.00
12,507.0	88.40	177.20	8,313.8	-4,391.5	134.1	4,393.4	0.79	0.48	-0.63
12,571.0	88.90	176.50	8,315.3	-4,455.4	137.6	4,457.4	1.34	0.78	-1.09
12,635.0	89.20	176.40	8,316.4	-4,519.3	141.6	4,521.3	0.49	0.47	-0.16
12,698.0	91.90	176.00	8,315.8	-4,582.1	145.8	4,584.2	4.33	4.29	-0.63
12,751.0	92.00	175.70	8,314.0	-4,635.0	149.6	4,637.1	0.60	0.19	-0.57
TD @ 12805 MD / 8312.1 TVD									
12,805.0	92.00	175.70	8,312.1	-4,688.8	153.6	4,691.0	0.00	0.00	0.00

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 13 CN Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2913.0usft (Patterson #75)
Site:	Sec 13, T25S, R28E	MD Reference:	WELL @ 2913.0usft (Patterson #75)
Well:	Malaga 13 CN Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1; Single User Db

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,660.0	7,657.4	-21.7	-34.3	TIE IN @ 7660' MD / 7657.4' TVD
8,089.0	8,078.1	-79.5	-55.0	CROSSED HARDLINE @ 8089' MD / 8078.1' TVD
12,805.0	8,312.1	-4,688.8	153.6	TD @ 12805' MD / 8312.1' TVD

Checked By: _____ Approved By: _____ Date: _____