

30-015-40749

Mewbourne Oil Co

Eddy County, New Mexico (Nad 83)

Sec 9, T25S, R28E

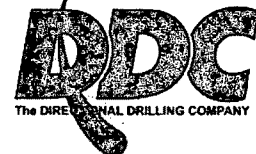
San Lorenzo 9 NC #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

29 January, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 NC #1H
Project:	Eddy County, New Mexico (Nad 83)	TVD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Site:	Sec 9, T25S, R28E	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Well:	San Lorenzo 9 NC #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 (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 9, T25S, R28E		
Site Position:		Northing:	413,937.30 usft
From:	Map	Easting:	613,914.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 15.991 N
		Longitude:	104° 5' 55.879 W
		Grid Convergence:	0.12 °

Well	San Lorenzo 9 NC #1H		
Well Position	+N/-S	0.0 usft	Northing: 413,937.30 usft
	+E/-W	0.0 usft	Easting: 613,914.10 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 8' 15.991 N
		Longitude:	104° 5' 55.879 W
		Ground Level:	3,005.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	10/4/2012	(°)
			7.66
			Dip Angle
			(°)
			59.98
			Field Strength
			(nT)
			48,378

Design	Wellbore #1		
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	14.87

Survey Program	Date 1/29/2013		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	7,465.0	Gyro (Wellbore #1)	Good_gyro
7,559.0	13,450.0	MWD (Wellbore #1)	MWD default
			Description
			Good Gyro
			MWD - Standard

Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.29	28.62	100.0	0.2	0.1	0.2	0.29	0.29	0.00
200.0	0.45	351.09	200.0	0.8	0.2	0.9	0.28	0.16	-37.53
300.0	0.58	347.18	300.0	1.7	0.0	1.7	0.13	0.13	-3.91
400.0	0.67	356.97	400.0	2.8	-0.1	2.7	0.14	0.09	9.79
500.0	0.44	18.07	500.0	3.7	0.0	3.6	0.30	-0.23	21.10
600.0	0.35	336.73	600.0	4.4	0.0	4.2	0.29	-0.09	-41.34
700.0	0.65	74.50	700.0	4.8	0.4	4.8	0.78	0.30	97.77
800.0	0.95	116.94	800.0	4.6	1.7	4.9	0.64	0.30	42.44
900.0	0.89	121.42	900.0	3.8	3.1	4.5	0.09	-0.06	4.48

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Site:	Sec 9, T25S, R28E	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Well:	San Lorenzo 9 NC #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)
1,000.0	0.76	117.61	999.9	3.1	4.3	4.1	0.14	-0.13	-3.81
1,100.0	0.73	118.34	1,099.9	2.5	5.5	3.8	0.03	-0.03	0.73
1,200.0	0.55	129.03	1,199.9	1.9	6.4	3.5	0.22	-0.18	10.69
1,300.0	0.87	132.05	1,299.9	1.1	7.3	2.9	0.32	0.32	3.02
1,400.0	0.57	154.74	1,399.9	0.1	8.1	2.2	0.41	-0.30	22.69
1,500.0	0.63	191.28	1,499.9	-0.9	8.2	1.3	0.38	0.06	36.54
1,600.0	0.24	216.70	1,599.9	-1.6	8.0	0.5	0.43	-0.39	25.42
1,700.0	0.51	198.38	1,699.9	-2.2	7.7	-0.1	0.29	0.27	-18.32
1,800.0	1.60	79.22	1,799.9	-2.3	8.9	0.0	1.90	1.09	-119.16
1,900.0	4.13	90.22	1,899.8	-2.1	13.9	1.6	2.58	2.53	11.00
2,000.0	6.01	86.47	1,999.4	-1.8	22.7	4.1	1.91	1.88	-3.75
2,100.0	5.81	90.49	2,098.8	-1.5	33.0	7.0	0.46	-0.20	4.02
2,200.0	5.36	92.17	2,198.4	-1.7	42.8	9.3	0.48	-0.45	1.68
2,300.0	4.90	94.94	2,298.0	-2.3	51.7	11.1	0.52	-0.46	2.77
2,400.0	3.84	95.06	2,397.7	-2.9	59.3	12.4	1.06	-1.06	0.12
2,500.0	2.59	93.36	2,497.5	-3.4	64.9	13.4	1.25	-1.25	-1.70
2,600.0	2.04	92.71	2,597.4	-3.6	68.9	14.2	0.55	-0.55	-0.65
2,700.0	1.79	99.60	2,697.4	-3.9	72.2	14.8	0.34	-0.25	6.89
2,800.0	1.55	92.89	2,797.3	-4.2	75.1	15.2	0.31	-0.24	-6.71
2,900.0	1.70	96.68	2,897.3	-4.5	77.9	15.7	0.18	0.15	3.79
3,000.0	1.49	101.06	2,997.2	-4.9	80.7	16.0	0.24	-0.21	4.38
3,100.0	1.05	109.88	3,097.2	-5.5	82.8	16.0	0.48	-0.44	8.82
3,200.0	1.39	106.29	3,197.2	-6.1	84.8	15.9	0.35	0.34	-3.59
3,300.0	1.13	129.78	3,297.2	-7.1	86.8	15.4	0.57	-0.26	23.49
3,400.0	0.21	147.86	3,397.2	-7.9	87.6	14.9	0.93	-0.92	18.08
3,500.0	0.45	187.98	3,497.2	-8.4	87.7	14.4	0.32	0.24	40.12
3,600.0	0.56	159.13	3,597.2	-9.3	87.8	13.6	0.27	0.11	-28.85
3,700.0	0.36	218.25	3,697.2	-10.0	87.8	12.9	0.49	-0.20	59.12
3,800.0	0.53	153.00	3,797.2	-10.6	87.8	12.3	0.50	0.17	-65.25
3,900.0	0.62	190.39	3,897.2	-11.6	87.9	11.4	0.38	0.09	37.39
4,000.0	0.53	251.46	3,997.1	-12.2	87.4	10.6	0.59	-0.09	61.07
4,100.0	0.40	229.67	4,097.1	-12.6	86.7	10.0	0.22	-0.13	-21.79
4,200.0	0.50	239.89	4,197.1	-13.1	86.0	9.4	0.13	0.10	10.22
4,300.0	0.50	249.97	4,297.1	-13.4	85.2	8.9	0.09	0.00	10.08
4,400.0	0.44	224.03	4,397.1	-13.9	84.5	8.3	0.22	-0.06	-25.94
4,500.0	0.51	216.15	4,497.1	-14.5	84.0	7.6	0.10	0.07	-7.88
4,600.0	0.48	209.79	4,597.1	-15.2	83.5	6.7	0.06	-0.03	-6.36
4,700.0	0.94	210.65	4,697.1	-16.3	82.9	5.5	0.46	0.46	0.86
4,800.0	0.90	191.82	4,797.1	-17.8	82.3	4.0	0.30	-0.04	-18.83
4,900.0	0.96	207.99	4,897.1	-19.3	81.8	2.4	0.27	0.06	16.17
5,000.0	1.03	207.35	4,997.1	-20.8	81.0	0.7	0.07	0.07	-0.64
5,100.0	1.36	207.43	5,097.1	-22.7	80.0	-1.4	0.33	0.33	0.08
5,200.0	1.20	203.72	5,197.0	-24.7	79.1	-3.6	0.18	-0.16	-3.71

DDC Survey Report



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Site:	Sec 9, T25S, R28E	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Well:	San Lorenzo 9 NC #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	1.27	216.26	5,297.0	-26.5	78.0	-5.6	0.28	0.07	12.54
5,400.0	1.18	212.92	5,397.0	-28.3	76.8	-7.6	0.11	-0.09	-3.34
5,500.0	1.42	227.30	5,497.0	-30.0	75.3	-9.7	0.40	0.24	14.38
5,600.0	1.01	243.76	5,596.9	-31.2	73.6	-11.3	0.53	-0.41	16.46
5,700.0	1.06	239.14	5,696.9	-32.1	72.0	-12.5	0.10	0.05	-4.62
5,800.0	1.24	229.18	5,796.9	-33.3	70.4	-14.1	0.27	0.18	-9.96
5,900.0	1.51	194.21	5,896.9	-35.2	69.2	-16.3	0.87	0.27	-34.97
6,000.0	1.60	208.85	5,996.8	-37.7	68.3	-19.0	0.41	0.09	14.64
6,100.0	1.44	211.39	6,096.8	-40.0	66.9	-21.5	0.17	-0.16	2.54
6,200.0	1.76	228.54	6,196.8	-42.1	65.1	-24.0	0.57	0.32	17.15
6,300.0	2.03	226.76	6,296.7	-44.4	62.7	-26.8	0.28	0.27	-1.78
6,400.0	2.11	216.70	6,396.6	-47.1	60.3	-30.0	0.37	0.08	-10.06
6,500.0	2.11	224.22	6,496.6	-49.8	57.9	-33.3	0.28	0.00	7.52
6,600.0	2.21	232.30	6,596.5	-52.3	55.1	-36.5	0.32	0.10	8.08
6,700.0	2.12	210.73	6,696.4	-55.1	52.6	-39.8	0.81	-0.09	-21.57
6,800.0	2.33	192.65	6,796.4	-58.7	51.2	-43.6	0.73	0.21	-18.08
6,900.0	2.66	206.31	6,896.3	-62.8	49.8	-47.9	0.68	0.33	13.66
7,000.0	3.08	204.60	6,996.1	-67.3	47.6	-52.8	0.43	0.42	-1.71
7,100.0	2.57	194.54	7,096.0	-71.9	45.9	-57.7	0.71	-0.51	-10.06
7,200.0	2.21	216.21	7,195.9	-75.6	44.2	-61.7	0.97	-0.36	21.67
7,300.0	3.05	207.19	7,295.8	-79.5	41.9	-66.1	0.93	0.84	-9.02
7,400.0	2.09	211.19	7,395.7	-83.5	39.7	-70.5	0.98	-0.96	4.00
Tie in @ 7465' MD / 7461' TVD									
7,465.0	1.80	215.50	7,460.7	-85.3	38.5	-72.6	0.50	-0.45	6.63
7,559.0	1.50	259.90	7,554.7	-86.7	36.4	-74.5	1.36	-0.32	47.23
7,590.0	0.60	334.40	7,585.7	-86.6	36.0	-74.5	4.71	-2.90	240.32
7,622.0	4.20	53.30	7,617.6	-85.8	36.8	-73.5	12.90	11.25	246.56
7,654.0	8.40	54.50	7,649.4	-83.7	39.7	-70.8	13.13	13.13	3.75
7,686.0	12.00	44.80	7,680.9	-80.0	43.9	-66.1	12.43	11.25	-30.31
7,718.0	15.10	50.50	7,712.0	-75.0	49.5	-59.8	10.54	9.69	17.81
7,749.0	19.00	55.00	7,741.7	-69.5	56.7	-52.7	13.27	12.58	14.52
7,782.0	22.90	58.10	7,772.5	-63.1	66.6	-43.9	12.28	11.82	9.39
7,813.0	26.80	61.50	7,800.6	-56.5	77.9	-34.7	13.39	12.58	10.97
7,845.0	29.70	60.50	7,828.8	-49.2	91.1	-24.2	9.18	9.06	-3.13
7,877.0	32.50	63.80	7,856.2	-41.5	105.7	-13.0	10.24	8.75	10.31
7,909.0	35.90	67.10	7,882.6	-34.0	122.1	-1.6	12.10	10.63	10.31
7,941.0	38.50	65.30	7,908.1	-26.2	139.8	10.5	8.81	8.13	-5.63
7,973.0	41.60	66.40	7,932.6	-17.8	158.6	23.5	9.94	9.69	3.44
8,005.0	43.10	67.00	7,956.3	-9.3	178.4	36.8	4.85	4.69	1.88
8,037.0	46.00	70.90	7,979.1	-1.2	199.3	49.9	12.46	9.06	12.19
8,069.0	49.10	74.80	8,000.7	5.7	221.9	62.4	13.21	9.69	12.19
8,101.0	53.20	76.80	8,020.7	11.8	246.0	74.5	13.70	12.81	6.25
8,132.0	57.10	79.00	8,038.5	17.1	270.9	86.1	13.86	12.58	7.10

DDC Survey Report



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Site:	Sec 9, T25S, R28E	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Well:	San Lorenzo 9 NC #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)
8,164.0	61.30	80.40	8,054.8	22.0	297.9	97.7	13.65	13.13	4.38
8,196.0	65.30	82.60	8,069.2	26.2	326.2	109.1	13.93	12.50	6.88
8,228.0	69.70	84.10	8,081.5	29.7	355.6	119.9	14.42	13.75	4.69
8,260.0	74.00	85.90	8,091.4	32.3	385.8	130.2	14.46	13.44	5.63
8,289.0	78.00	87.20	8,098.4	34.0	413.9	139.1	14.46	13.79	4.48
8,355.0	85.20	95.80	8,108.1	32.2	479.1	154.1	16.88	10.91	13.03
8,385.0	87.10	85.10	8,110.1	32.0	509.0	161.5	36.14	6.33	-35.67
8,417.0	87.30	79.60	8,111.7	36.3	540.6	173.8	17.18	0.63	-17.19
8,449.0	86.80	75.00	8,113.3	43.3	571.8	188.6	14.44	-1.56	-14.38
8,481.0	86.70	72.10	8,115.1	52.3	602.4	205.2	9.05	-0.31	-9.06
8,513.0	88.20	70.40	8,116.6	62.6	632.7	222.9	7.08	4.69	-5.31
Crossed Lease Line @ 8544' MD / 8117' TVD									
8,544.0	90.30	69.90	8,117.0	73.1	661.9	240.5	6.96	6.77	-1.61
8,576.0	90.20	67.70	8,116.8	84.7	691.7	259.4	6.88	-0.31	-6.88
8,608.0	90.10	64.10	8,116.8	97.8	720.9	279.5	11.25	-0.31	-11.25
8,639.0	90.40	60.40	8,116.6	112.2	748.3	300.5	11.97	0.97	-11.94
8,671.0	89.50	56.80	8,116.6	128.9	775.6	323.6	11.60	-2.81	-11.25
8,703.0	88.40	52.90	8,117.2	147.3	801.8	348.1	12.66	-3.44	-12.19
8,735.0	88.60	50.30	8,118.1	167.1	826.9	373.7	8.15	0.63	-8.13
8,766.0	89.70	48.10	8,118.5	187.4	850.3	399.3	7.93	3.55	-7.10
8,798.0	91.60	45.20	8,118.2	209.4	873.6	426.5	10.83	5.94	-9.06
8,830.0	92.70	42.30	8,117.0	232.5	895.7	454.5	9.69	3.44	-9.06
8,862.0	92.20	39.10	8,115.6	256.7	916.6	483.3	10.11	-1.56	-10.00
8,893.0	92.30	36.40	8,114.4	281.2	935.5	511.8	8.71	0.32	-8.71
8,925.0	90.90	33.60	8,113.5	307.4	953.9	541.9	9.78	-4.38	-8.75
8,957.0	90.60	32.10	8,113.1	334.3	971.2	572.3	4.78	-0.94	-4.69
8,989.0	90.40	30.20	8,112.8	361.6	987.8	603.0	5.97	-0.63	-5.94
Crossed Hardline @ 8992' MD / 8113' TVD									
8,992.0	90.52	29.97	8,112.8	364.2	989.3	605.9	8.65	3.87	-7.74
9,020.0	91.60	27.80	8,112.2	388.8	1,002.8	633.1	8.65	3.87	-7.74
9,052.0	91.80	23.70	8,111.3	417.6	1,016.7	664.5	12.82	0.63	-12.81
9,084.0	88.40	20.40	8,111.2	447.2	1,028.7	696.2	14.81	-10.63	-10.31
9,115.0	85.60	16.30	8,112.9	476.6	1,038.4	727.1	16.00	-9.03	-13.23
9,147.0	83.80	11.90	8,115.8	507.5	1,046.2	759.0	14.80	-5.63	-13.75
9,179.0	84.90	7.90	8,119.0	538.8	1,051.7	790.7	12.91	3.44	-12.50
9,211.0	87.10	4.70	8,121.2	570.6	1,055.2	822.2	12.11	6.88	-10.00
9,243.0	90.20	1.80	8,122.0	602.5	1,057.0	853.6	13.26	9.69	-9.06
9,274.0	90.50	1.60	8,121.8	633.5	1,057.9	883.8	1.16	0.97	-0.65
9,306.0	90.60	2.00	8,121.5	665.5	1,058.9	914.9	1.29	0.31	1.25
9,338.0	90.50	1.50	8,121.2	697.4	1,059.9	946.1	1.59	-0.31	-1.56
9,369.0	90.60	1.40	8,120.9	728.4	1,060.7	976.2	0.46	0.32	-0.32
9,401.0	90.60	1.20	8,120.5	760.4	1,061.4	1,007.3	0.62	0.00	-0.63
9,433.0	90.80	2.60	8,120.1	792.4	1,062.5	1,038.5	4.42	0.63	4.38
9,465.0	90.90	2.50	8,119.7	824.4	1,063.9	1,069.8	0.44	0.31	-0.31

DDC Survey Report



Company:	Newbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9-NC #1H
Project:	Eddy County, New Mexico (Nad 83)	TVD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Site:	Sec 9, T25S, R28E	MD Reference:	WELL @ 3025.0usft (Patterson-UTI)
Well:	San Lorenzo 9-NC #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)
9,497.0	91.10	2.50	8,119.1	856.3	1,065.3	1,101.0	0.63	0.63	0.00
9,528.0	91.50	3.10	8,118.4	887.3	1,066.8	1,131.3	2.33	1.29	1.94
9,560.0	91.40	3.50	8,117.6	919.2	1,068.6	1,162.7	1.29	-0.31	1.25
9,592.0	90.10	4.40	8,117.2	951.1	1,070.8	1,194.1	4.94	-4.06	2.81
9,624.0	89.80	4.40	8,117.2	983.0	1,073.3	1,225.6	0.94	-0.94	0.00
9,656.0	89.80	4.60	8,117.3	1,015.0	1,075.8	1,257.0	0.62	0.00	0.63
9,719.0	89.80	4.60	8,117.5	1,077.7	1,080.9	1,319.0	0.00	0.00	0.00
9,783.0	89.80	4.50	8,117.7	1,141.5	1,085.9	1,382.0	0.16	0.00	-0.16
9,847.0	89.70	2.40	8,118.0	1,205.4	1,089.8	1,444.7	3.28	-0.16	-3.28
9,910.0	89.70	1.10	8,118.4	1,268.4	1,091.7	1,506.1	2.06	0.00	-2.06
9,973.0	90.70	2.20	8,118.1	1,331.4	1,093.5	1,567.4	2.36	1.59	1.75
10,036.0	91.10	2.70	8,117.1	1,394.3	1,096.2	1,628.9	1.02	0.63	0.79
10,100.0	91.30	2.00	8,115.8	1,458.2	1,098.8	1,691.4	1.14	0.31	-1.09
10,163.0	91.20	3.60	8,114.4	1,521.1	1,101.9	1,753.0	2.54	-0.16	2.54
10,227.0	89.60	3.90	8,114.0	1,585.0	1,106.1	1,815.8	2.54	-2.50	0.47
10,291.0	89.60	3.70	8,114.4	1,648.9	1,110.3	1,878.6	0.31	0.00	-0.31
10,354.0	89.80	4.20	8,114.8	1,711.7	1,114.7	1,940.4	0.85	0.32	0.79
10,418.0	90.00	4.00	8,114.9	1,775.5	1,119.3	2,003.3	0.44	0.31	-0.31
10,482.0	89.10	4.10	8,115.4	1,839.4	1,123.8	2,066.2	1.41	-1.41	0.16
10,545.0	88.70	3.90	8,116.6	1,902.2	1,128.2	2,128.0	0.71	-0.63	-0.32
10,608.0	89.10	4.10	8,117.8	1,965.0	1,132.6	2,189.9	0.71	0.63	0.32
10,672.0	89.60	4.20	8,118.5	2,028.9	1,137.2	2,252.8	0.80	0.78	0.16
10,735.0	90.00	4.30	8,118.7	2,091.7	1,141.9	2,314.7	0.65	0.63	0.16
10,799.0	90.80	4.90	8,118.3	2,155.5	1,147.0	2,377.7	1.56	1.25	0.94
10,894.0	89.50	3.60	8,118.0	2,250.2	1,154.0	2,471.0	1.94	-1.37	-1.37
10,958.0	89.50	2.70	8,118.6	2,314.1	1,157.6	2,533.7	1.41	0.00	-1.41
11,021.0	89.90	3.00	8,118.9	2,377.0	1,160.7	2,595.3	0.79	0.63	0.48
11,085.0	91.40	2.80	8,118.2	2,441.0	1,163.9	2,657.9	2.36	2.34	-0.31
11,148.0	90.10	2.40	8,117.4	2,503.9	1,166.8	2,719.5	2.16	-2.06	-0.63
11,212.0	90.40	2.50	8,117.1	2,567.8	1,169.5	2,782.0	0.49	0.47	0.16
11,275.0	88.20	1.70	8,117.9	2,630.8	1,171.8	2,843.4	3.72	-3.49	-1.27
11,339.0	87.70	1.70	8,120.2	2,694.7	1,173.7	2,905.7	0.78	-0.78	0.00
11,403.0	88.80	1.60	8,122.1	2,758.7	1,175.6	2,967.9	1.73	1.72	-0.16
11,466.0	89.00	1.50	8,123.3	2,821.6	1,177.3	3,029.2	0.35	0.32	-0.16
11,530.0	89.60	1.80	8,124.1	2,885.6	1,179.1	3,091.5	1.05	0.94	0.47
11,594.0	89.70	2.00	8,124.5	2,949.5	1,181.2	3,153.9	0.35	0.16	0.31
11,657.0	89.60	1.90	8,124.9	3,012.5	1,183.4	3,215.3	0.22	-0.16	-0.16
11,721.0	90.70	2.50	8,124.7	3,076.5	1,185.8	3,277.8	1.96	1.72	0.94
11,784.0	91.20	2.40	8,123.7	3,139.4	1,188.5	3,339.3	0.81	0.79	-0.16
11,848.0	91.30	2.40	8,122.3	3,203.3	1,191.2	3,401.7	0.16	0.16	0.00
11,911.0	91.60	3.60	8,120.7	3,266.2	1,194.5	3,463.4	1.96	0.48	1.90
11,975.0	89.90	4.60	8,119.8	3,330.0	1,199.1	3,526.2	3.08	-2.66	1.56
12,039.0	89.50	5.10	8,120.2	3,393.8	1,204.5	3,589.3	1.00	-0.63	0.78

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well: San Lorenzo 9, NC #1H
Project:	Eddy County, New Mexico (Nad 83)	TVD Reference:	WELL @ 3025.0usft (Patterson-UT)
Site:	Sec.9 T25S R28E	MD Reference:	WELL @ 3025.0usft (Patterson-UT)
Well:	San Lorenzo 9, NC #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)
12,102.0	89.40	4.60	8,120.8	3,456.6	1,209.8	3,651.3	0.81	-0.16	-0.79
12,166.0	89.50	4.60	8,121.4	3,520.4	1,214.9	3,714.3	0.16	0.16	0.00
12,229.0	89.30	4.20	8,122.1	3,583.2	1,219.8	3,776.2	0.71	-0.32	-0.63
12,293.0	89.10	3.80	8,123.0	3,647.0	1,224.2	3,839.1	0.70	-0.31	-0.63
12,349.0	89.10	3.30	8,123.8	3,702.9	1,227.7	3,894.0	0.89	0.00	-0.89
12,412.0	89.50	2.80	8,124.6	3,765.8	1,231.1	3,955.6	1.02	0.63	-0.79
12,476.0	89.80	2.80	8,125.0	3,829.7	1,234.2	4,018.2	0.47	0.47	0.00
12,539.0	90.30	2.40	8,124.9	3,892.7	1,237.0	4,079.8	1.02	0.79	-0.63
12,603.0	90.80	2.70	8,124.3	3,956.6	1,239.9	4,142.3	0.91	0.78	0.47
12,666.0	91.00	2.30	8,123.3	4,019.5	1,242.6	4,203.8	0.71	0.32	-0.63
12,729.0	91.10	2.30	8,122.2	4,082.5	1,245.2	4,265.3	0.16	0.16	0.00
12,793.0	90.00	3.60	8,121.6	4,146.4	1,248.5	4,327.9	2.66	-1.72	2.03
12,857.0	89.50	3.30	8,121.8	4,210.3	1,252.3	4,390.6	0.91	-0.78	-0.47
12,920.0	89.70	3.20	8,122.3	4,273.2	1,255.9	4,452.4	0.35	0.32	-0.16
12,983.0	90.10	2.80	8,122.4	4,336.1	1,259.2	4,514.0	0.90	0.63	-0.63
13,046.0	89.30	3.50	8,122.7	4,399.0	1,262.6	4,575.7	1.69	-1.27	1.11
13,110.0	88.80	3.80	8,123.8	4,462.8	1,266.7	4,638.5	0.91	-0.78	0.47
13,173.0	89.10	3.80	8,124.9	4,525.7	1,270.9	4,700.3	0.48	0.48	0.00
13,237.0	89.20	3.40	8,125.9	4,589.6	1,274.9	4,763.0	0.64	0.16	-0.63
13,300.0	89.50	2.50	8,126.6	4,652.5	1,278.2	4,824.7	1.51	0.48	-1.43
13,398.0	90.10	1.80	8,126.9	4,750.4	1,281.8	4,920.3	0.94	0.61	-0.71
TD @ 13450' MD / 8127' TVD									
13,450.0	90.10	1.80	8,126.9	4,802.4	1,283.5	4,970.9	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,465.0	7,460.7	-85.3	38.5	Tie in @ 7465' MD / 7461' TVD
8,544.0	8,117.0	73.1	661.9	Crossed Lease Line @ 8544' MD / 8117' TVD
8,992.0	8,112.8	364.2	989.3	Crossed Hardline @ 8992' MD / 8113' TVD
13,450.0	8,126.9	4,802.4	1,283.5	TD @ 13450' MD / 8127' TVD

Checked By: _____	Approved By: _____	Date: _____
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