

30-015-40750

Mewbourne Oil Co

Eddy County, New Mexico (Nad 83)

Sec 22, T25S, R28E

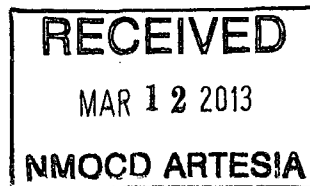
San Lorenzo 22/27 KF Fee #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

06 March, 2013



DDC
Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico (Nad 83)
Site: Sec 22,T25S,R28E
Well: San Lorenzo 22/27 KF Fee #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well San Lorenzo 22/27 KF Fee #1H
TVD Reference: WELL @ 2990.0usft (Patterson-UTI)
MD Reference: WELL @ 2990.0usft (Patterson-UTI)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project: Eddy County, New Mexico (Nad 83)
Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Site: Sec 22,T25S,R28E

Site Position: Northing: 405,636.30 usft Latitude: 32° 6' 53.693 N
From: Map Easting: 620,591.80 usft Longitude: 104° 4' 38.442 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.14 °

Well: San Lorenzo 22/27 KF Fee #1H

Well Position +N/-S 0.0 usft Northing: 405,636.30 usft Latitude: 32° 6' 53.693 N
+E/-W 0.0 usft Easting: 620,591.80 usft Longitude: 104° 4' 38.442 W
Position Uncertainty 0.0 usft Wellhead Elevation: usft Ground Level: 2,970.0 usft

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/4/2012	7.63	59.96	48,351

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	179.65

Survey Program Date 3/6/2013

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,562.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
7,726.0	12,735.0	MWD (Wellbore #1)	MWD default	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	0.28	285.46	100.0	0.1	-0.2	-0.1	0.28	0.28	0.00
200.0	0.22	317.60	200.0	0.3	-0.6	-0.3	0.15	-0.06	32.14
300.0	0.56	328.05	300.0	0.8	-1.0	-0.8	0.35	0.34	10.45
400.0	0.90	338.50	400.0	2.0	-1.5	-2.0	0.36	0.34	10.45
500.0	0.93	336.12	500.0	3.4	-2.2	-3.5	0.05	0.03	-2.38
600.0	0.95	333.73	600.0	4.9	-2.8	-4.9	0.04	0.02	-2.39
700.0	1.03	337.69	699.9	6.5	-3.6	-6.5	0.11	0.08	3.96
800.0	1.10	341.66	799.9	8.2	-4.2	-8.3	0.10	0.07	3.97
900.0	1.09	332.81	899.9	10.0	-4.9	-10.0	0.17	-0.01	-8.85

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North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	1.09	323.97	999.9	11.6	-5.9	-11.7	0.17	0.00	-8.84
1,100.0	0.95	311.17	1,099.9	12.9	-7.1	-13.0	0.27	-0.14	-12.80
1,200.0	0.82	298.38	1,199.9	13.8	-8.4	-13.9	0.24	-0.13	-12.79
1,300.0	0.87	298.08	1,299.9	14.5	-9.7	-14.6	0.05	0.05	-0.30
1,400.0	0.92	297.78	1,399.8	15.3	-11.0	-15.3	0.05	0.05	-0.30
1,500.0	0.89	299.26	1,499.8	16.0	-12.4	-16.1	0.04	-0.03	1.48
1,600.0	0.87	300.75	1,599.8	16.8	-13.8	-16.9	0.03	-0.02	1.49
1,700.0	0.56	238.84	1,699.8	16.9	-14.8	-17.0	0.78	-0.31	-61.91
1,800.0	0.25	176.94	1,799.8	16.4	-15.2	-16.5	0.49	-0.31	-61.90
1,900.0	1.31	136.01	1,899.8	15.4	-14.4	-15.5	1.13	1.06	-40.93
2,000.0	2.37	95.08	1,999.8	14.4	-11.6	-14.5	1.63	1.06	-40.93
2,100.0	3.19	101.52	2,099.6	13.7	-6.8	-13.7	0.88	0.82	6.44
2,200.0	4.00	107.95	2,199.4	12.0	-0.8	-12.0	0.90	0.81	6.43
2,300.0	4.18	109.51	2,299.2	9.7	6.0	-9.7	0.21	0.18	1.56
2,400.0	4.37	111.07	2,398.9	7.1	13.0	-7.1	0.22	0.19	1.56
2,500.0	3.39	103.57	2,498.7	5.1	19.4	-5.0	1.10	-0.98	-7.50
2,600.0	2.41	96.07	2,598.5	4.2	24.4	-4.0	1.05	-0.98	-7.50
2,700.0	2.26	98.31	2,698.5	3.7	28.4	-3.5	0.18	-0.15	2.24
2,800.0	2.12	100.55	2,798.4	3.0	32.2	-2.8	0.16	-0.14	2.24
2,900.0	1.96	100.36	2,898.3	2.4	35.7	-2.2	0.16	-0.16	-0.19
3,000.0	1.80	100.17	2,998.3	1.8	38.9	-1.6	0.16	-0.16	-0.19
3,100.0	1.63	103.23	3,098.2	1.2	41.9	-0.9	0.19	-0.17	3.06
3,200.0	1.47	106.29	3,198.2	0.5	44.5	-0.2	0.18	-0.16	3.06
3,300.0	1.30	108.03	3,298.2	-0.2	46.8	0.5	0.18	-0.17	1.74
3,400.0	1.14	109.77	3,398.1	-0.9	48.8	1.2	0.16	-0.16	1.74
3,500.0	0.98	118.35	3,498.1	-1.6	50.5	1.9	0.22	-0.16	8.58
3,600.0	0.82	126.94	3,598.1	-2.5	51.8	2.8	0.21	-0.16	8.59
3,700.0	0.73	127.69	3,698.1	-3.3	52.9	3.6	0.09	-0.09	0.75
3,800.0	0.63	128.44	3,798.1	-4.0	53.8	4.3	0.10	-0.10	0.75
3,900.0	0.56	142.59	3,898.1	-4.7	54.5	5.1	0.16	-0.07	14.15
4,000.0	0.49	156.74	3,998.1	-5.5	55.0	5.9	0.15	-0.07	14.15
4,100.0	0.48	153.27	4,098.1	-6.3	55.4	6.6	0.03	-0.01	-3.47
4,200.0	0.46	149.81	4,198.1	-7.0	55.8	7.4	0.03	-0.02	-3.46
4,300.0	0.54	164.34	4,298.1	-7.8	56.1	8.2	0.15	0.08	14.53
4,400.0	0.61	178.88	4,398.1	-8.8	56.2	9.1	0.16	0.07	14.54
4,500.0	0.64	186.88	4,498.1	-9.9	56.2	10.2	0.09	0.03	8.00
4,600.0	0.67	194.88	4,598.1	-11.0	56.0	11.3	0.10	0.03	8.00
4,700.0	0.69	196.03	4,698.0	-12.1	55.6	12.5	0.02	0.02	1.15
4,800.0	0.72	197.19	4,798.0	-13.3	55.3	13.7	0.03	0.03	1.16
4,900.0	0.81	196.85	4,898.0	-14.6	54.9	14.9	0.09	0.09	-0.34
5,000.0	0.90	196.52	4,998.0	-16.0	54.5	16.4	0.09	0.09	-0.33
5,100.0	0.84	209.66	5,098.0	-17.4	53.9	17.8	0.21	-0.06	13.14
5,200.0	0.78	222.81	5,198.0	-18.6	53.1	18.9	0.19	-0.06	13.15

DDC
Survey Report



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Sits: Sec 22,T25S,R28E
Well: San Lorenzo 22/27 KF Fee #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well San Lorenzo 22/27 KF Fee #1H
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MD Reference: WELL @ 2990.0usft (Patterson-UTI)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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	0.69	210.91	5,298.0	-19.6	52.3	19.9	0.18	-0.09	-11.90
5,400.0	0.60	199.01	5,398.0	-20.6	51.8	20.9	0.16	-0.09	-11.90
5,500.0	0.60	196.08	5,498.0	-21.6	51.5	21.9	0.03	0.00	-2.93
5,600.0	0.60	193.16	5,598.0	-22.6	51.2	22.9	0.03	0.00	-2.92
5,700.0	0.59	193.16	5,698.0	-23.6	51.0	23.9	0.01	-0.01	0.00
5,800.0	0.58	193.16	5,798.0	-24.6	50.8	24.9	0.01	-0.01	0.00
5,900.0	0.66	193.88	5,898.0	-25.7	50.5	26.0	0.08	0.08	0.72
6,000.0	0.74	194.60	5,997.9	-26.8	50.2	27.1	0.08	0.08	0.72
6,100.0	0.72	208.52	6,097.9	-26.0	49.7	28.3	0.18	-0.02	13.92
6,200.0	0.71	222.44	6,197.9	-29.0	49.0	29.3	0.17	-0.01	13.92
6,300.0	1.73	244.15	6,297.9	-30.1	47.2	30.4	1.10	1.02	21.71
6,400.0	2.75	265.86	6,397.8	-31.0	43.5	31.2	1.31	1.02	21.71
6,500.0	3.03	269.50	6,497.7	-31.2	38.5	31.4	0.33	0.28	3.64
6,600.0	3.31	273.14	6,597.6	-31.0	32.9	31.2	0.34	0.28	3.64
6,700.0	3.44	282.18	6,697.4	-30.2	27.1	30.4	0.55	0.13	9.04
6,800.0	3.57	291.22	6,797.2	-28.5	21.3	28.6	0.57	0.13	9.04
6,900.0	4.25	289.47	6,897.0	-26.1	14.9	26.2	0.69	0.68	-1.75
7,000.0	4.92	287.71	6,996.6	-23.6	7.3	23.6	0.68	0.67	-1.76
7,100.0	3.89	279.89	7,096.3	-21.7	-0.1	21.7	1.19	-1.03	-7.82
7,200.0	2.86	272.07	7,196.2	-21.0	-6.0	21.0	1.13	-1.03	-7.82
7,300.0	2.45	272.87	7,296.1	-20.8	-10.6	20.8	0.41	-0.41	0.80
7,400.0	2.04	273.68	7,396.0	-20.6	-14.5	20.5	0.41	-0.41	0.81
7,500.0	1.79	269.43	7,495.9	-20.5	-17.8	20.4	0.29	-0.25	-4.25
TIE IN @ 7562' MD / 7558' TVD									
7,562.0	1.65	287.45	7,557.9	-20.2	-19.7	20.1	0.90	-0.23	29.06
7,726.0	4.00	168.70	7,721.8	-25.2	-20.8	25.0	3.05	1.43	-72.41
7,757.0	8.50	165.20	7,752.6	-28.4	-20.0	28.3	14.56	14.52	-11.29
7,789.0	10.90	184.00	7,784.1	-33.7	-19.6	33.6	12.33	7.50	58.75
7,821.0	11.60	177.80	7,815.5	-40.0	-19.7	39.8	4.36	2.19	-19.38
7,853.0	14.20	168.70	7,846.7	-47.0	-18.8	46.9	10.29	8.13	-28.44
7,885.0	17.90	165.30	7,877.5	-55.6	-16.8	55.5	11.93	11.56	-10.63
7,917.0	22.70	164.80	7,907.5	-66.4	-13.9	66.3	15.01	15.00	-1.56
7,949.0	27.60	163.60	7,936.4	-79.4	-10.2	79.4	15.39	15.31	-3.75
7,981.0	32.30	164.10	7,964.1	-94.8	-5.7	94.7	14.71	14.69	1.56
8,013.0	35.70	169.00	7,990.7	-112.2	-1.6	112.2	13.64	10.63	15.31
8,045.0	40.20	171.50	8,015.9	-131.6	1.7	131.6	14.86	14.06	7.81
CROSSED HARD LINE @ 8063' MD / 8030' TVD									
8,063.1	42.51	172.73	8,029.5	-143.4	3.3	143.4	13.55	12.79	6.79
8,077.0	44.30	173.60	8,039.6	-152.9	4.5	152.9	13.55	12.85	6.27
8,108.0	48.50	174.30	8,061.0	-175.2	6.8	175.3	13.65	13.55	2.26
8,140.0	51.80	178.70	8,081.5	-199.7	8.3	199.8	14.75	10.31	13.75
8,172.0	55.40	182.70	8,100.5	-225.5	8.0	225.5	15.09	11.25	12.50
8,204.0	59.20	183.60	8,117.7	-252.4	6.5	252.4	12.11	11.88	2.81
8,236.0	61.70	183.60	8,133.5	-280.1	4.7	280.2	7.81	7.81	0.00

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8,268.0	65.10	182.70	8,147.8	-308.7	3.2	308.7	10.92	10.63	-2.81
8,300.0	69.60	181.00	8,160.2	-338.2	2.2	338.2	14.89	14.06	-5.31
8,332.0	73.80	180.50	8,170.2	-368.6	1.8	368.6	13.21	13.13	-1.56
8,363.0	76.40	180.80	8,178.2	-398.5	1.5	398.5	8.44	8.39	0.97
8,396.0	80.10	180.80	8,184.9	-430.3	1.0	430.8	11.21	11.21	0.00
8,420.0	84.00	179.40	8,188.2	-454.6	1.0	454.6	17.25	16.25	-5.83
8,480.0	88.30	175.40	8,192.2	-514.4	3.7	514.4	9.78	7.17	-6.67
8,512.0	89.20	177.50	8,192.9	-546.3	5.7	546.3	7.14	2.81	6.56
8,543.0	89.50	177.10	8,193.3	-577.3	7.1	577.3	1.61	0.97	-1.29
8,575.0	89.80	176.90	8,193.5	-609.2	8.8	609.3	1.13	0.94	-0.63
8,616.0	90.00	176.90	8,193.6	-650.2	11.0	650.2	0.49	0.49	0.00
8,638.0	90.00	178.40	8,193.6	-672.1	11.9	672.2	6.82	0.00	6.82
8,702.0	89.10	179.20	8,194.1	-736.1	13.3	736.2	1.88	-1.41	1.25
8,764.0	89.10	179.10	8,195.0	-798.1	14.2	798.2	0.16	0.00	-0.16
8,827.0	89.50	178.70	8,195.8	-861.1	15.4	861.2	0.90	0.63	-0.63
8,891.0	90.00	177.60	8,196.1	-925.1	17.5	925.1	1.89	0.78	-1.72
8,953.0	89.30	177.80	8,196.5	-987.0	20.0	987.1	1.17	-1.13	0.32
9,016.0	89.00	178.50	8,197.4	-1,050.0	22.0	1,050.1	1.21	-0.48	1.11
9,080.0	89.30	178.40	8,198.4	-1,113.9	23.7	1,114.1	0.49	0.47	-0.16
9,144.0	89.60	178.70	8,199.0	-1,177.9	25.4	1,178.0	0.66	0.47	0.47
9,208.0	89.60	179.90	8,199.4	-1,241.9	26.1	1,242.0	1.87	0.00	1.88
9,271.0	90.60	178.90	8,199.3	-1,304.9	26.3	1,305.0	2.24	1.59	-1.59
9,335.0	89.60	179.90	8,199.2	-1,368.9	27.5	1,369.0	2.21	-1.56	1.56
9,398.0	90.10	179.40	8,199.4	-1,431.9	27.8	1,432.0	1.12	0.79	-0.79
9,462.0	90.60	180.10	8,199.0	-1,495.9	28.1	1,496.0	1.34	0.78	1.09
9,525.0	91.10	180.50	8,198.0	-1,558.9	27.8	1,559.0	1.02	0.79	0.63
9,589.0	88.40	182.00	8,198.3	-1,622.9	26.4	1,623.0	4.83	-4.22	2.34
9,652.0	90.10	181.70	8,199.1	-1,685.8	24.4	1,685.9	2.74	2.70	-0.48
9,716.0	88.40	182.70	8,200.0	-1,749.8	21.9	1,749.9	3.08	-2.66	1.56
9,779.0	87.80	183.10	8,202.1	-1,812.6	18.7	1,812.7	1.14	-0.95	0.63
9,843.0	88.20	183.40	8,204.3	-1,876.6	15.1	1,876.6	0.78	0.63	0.47
9,905.0	88.10	183.40	8,206.3	-1,938.4	11.4	1,938.4	0.16	-0.16	0.00
9,969.0	89.50	183.10	8,207.6	-2,002.2	7.8	2,002.3	2.24	2.19	-0.47
10,032.0	90.10	182.60	8,207.9	-2,065.2	4.7	2,065.2	1.24	0.95	-0.79
10,096.0	90.70	182.40	8,207.4	-2,129.1	1.9	2,129.1	0.99	0.94	-0.31
10,160.0	90.60	182.70	8,206.7	-2,193.0	-1.0	2,193.0	0.49	-0.16	0.47
10,222.0	90.70	182.40	8,206.0	-2,255.0	-3.7	2,254.9	0.51	0.16	-0.48
10,286.0	91.40	181.70	8,204.8	-2,318.9	-6.0	2,318.8	1.55	1.09	-1.09
10,349.0	90.80	182.90	8,203.6	-2,381.9	-8.6	2,381.8	2.13	-0.95	1.90
10,413.0	89.50	182.60	8,203.4	-2,445.8	-11.6	2,445.7	2.08	-2.03	-0.47
10,476.0	88.90	180.60	8,204.3	-2,508.7	-13.4	2,508.6	3.31	-0.95	-3.17
10,540.0	88.70	180.50	8,205.6	-2,572.7	-14.0	2,572.6	0.35	-0.31	-0.16
10,603.0	89.90	179.80	8,206.4	-2,635.7	-14.2	2,635.6	2.21	1.90	-1.11

DDC
Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico (Nad 83)
Site: Sec 22, T25S, R28E
Well: San Lorenzo 22/27 KF Fee #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well San Lorenzo 22/27 KF Fee #1H
TVD Reference: WELL @ 2990.0usft (Patterson-UTI)
MD Reference: WELL @ 2990.0usft (Patterson-UTI)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
10,667.0	90.00	179.60	8,206.5	-2,399.7	-13.8	2,699.6	0.35	0.16	-0.31
10,731.0	90.80	179.60	8,206.0	-2,763.7	-13.4	2,763.6	1.25	1.25	0.00
10,795.0	89.60	179.60	8,205.8	-2,827.7	-12.9	2,827.6	1.83	-1.88	0.00
10,857.0	89.20	180.50	8,206.5	-2,889.7	-13.0	2,889.6	1.59	-0.65	1.45
10,920.0	89.30	179.80	8,207.3	-2,952.7	-13.1	2,952.6	1.12	0.16	-1.11
10,984.0	89.70	179.60	8,207.8	-3,016.7	-12.8	3,016.6	0.70	0.63	-0.31
11,047.0	89.70	180.10	8,208.2	-3,079.7	-12.6	3,079.6	0.79	0.00	0.79
11,110.0	90.00	180.10	8,208.3	-3,142.7	-12.8	3,142.6	0.48	0.48	0.00
11,173.0	90.50	179.80	8,208.1	-3,205.7	-12.7	3,205.6	0.93	0.79	-0.48
11,237.0	90.70	180.10	8,207.4	-3,269.7	-12.6	3,269.6	0.56	0.31	0.47
11,300.0	90.00	179.40	8,207.0	-3,332.7	-12.4	3,332.5	1.57	-1.11	-1.11
11,364.0	89.60	179.20	8,207.2	-3,396.7	-11.6	3,396.5	0.70	-0.63	-0.31
11,427.0	89.60	179.40	8,207.7	-3,459.7	-10.8	3,459.5	0.32	0.00	0.32
11,491.0	90.50	179.10	8,207.6	-3,523.7	-10.0	3,523.5	1.48	1.41	-0.47
11,555.0	90.30	178.90	8,207.2	-3,587.7	-8.9	3,587.5	0.44	-0.31	-0.31
11,618.0	90.50	180.30	8,206.7	-3,650.7	-8.4	3,650.5	2.24	0.32	2.22
11,682.0	90.30	180.60	8,206.3	-3,714.7	-8.9	3,714.5	0.56	-0.31	0.47
11,745.0	90.00	181.20	8,206.1	-3,777.6	-9.9	3,777.5	1.06	-0.48	0.95
11,809.0	88.80	180.50	8,206.8	-3,841.6	-10.9	3,841.5	2.17	-1.88	-1.09
11,873.0	89.20	179.80	8,207.9	-3,905.6	-11.0	3,905.5	1.26	0.63	-1.09
11,936.0	89.80	178.50	8,208.4	-3,968.6	-10.1	3,968.5	2.27	0.95	-2.06
12,000.0	89.30	178.20	8,209.0	-4,032.6	-8.3	4,032.5	0.91	-0.78	-0.47
12,063.0	89.10	177.30	8,209.8	-4,095.5	-5.8	4,095.4	1.46	-0.32	-1.43
12,127.0	89.30	177.60	8,210.7	-4,159.5	-2.9	4,159.4	0.56	0.31	0.47
12,190.0	90.30	177.30	8,210.9	-4,222.4	-0.1	4,222.3	1.66	1.59	-0.48
12,254.0	90.60	178.50	8,210.4	-4,286.3	2.2	4,286.3	1.93	0.47	1.88
12,317.0	90.40	178.70	8,209.9	-4,349.3	3.7	4,349.3	0.45	-0.32	0.32
12,381.0	90.00	179.40	8,209.7	-4,413.3	4.8	4,413.3	1.26	-0.63	1.09
12,445.0	89.10	179.20	8,210.2	-4,477.3	5.6	4,477.3	1.44	-1.41	-0.31
12,509.0	88.60	178.90	8,211.5	-4,541.3	6.7	4,541.2	0.91	-0.78	-0.47
12,572.0	88.80	178.50	8,212.9	-4,604.3	8.1	4,604.2	0.71	0.32	-0.63
12,632.0	89.10	178.00	8,214.0	-4,664.2	9.9	4,664.2	0.97	0.50	-0.83
12,685.0	89.30	177.50	8,214.7	-4,717.2	12.0	4,717.2	1.02	0.38	-0.94
TD @ 12735' MD / 8215' TVD									
12,735.0	89.30	177.50	8,215.3	-4,767.1	14.2	4,767.1	0.00	0.00	0.00

DDC
Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico (Nad 83)
Site: Sec 22, T25S, R28E
Well: San Lorenzo 22/27 KF Fee #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well San Lorenzo 22/27 KF Fee #1H
TVD Reference: WELL @ 2990.0usft (Patterson-UTI)
MD Reference: WELL @ 2990.0usft (Patterson-UTI)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,562.0	7,557.9	-20.2	-19.7	TIE IN @ 7562' MD / 7558' TVD
8,063.1	8,029.5	-143.4	3.3	CROSSED HARD LINE @ 8063' MD / 8030' TVD
12,735.0	8,215.3	-4,767.1	14.2	TD @ 12735' MD / 8215' TVD

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mowbourne Oil Co
 San Lorenzo 22/27 KF Fee #1H
 Eddy County, New Mexico (Nad 83)
 Rig: Patterson-UT1
 Created By: Tiffani Mizell
 Date: 3/06/2013

San Lorenzo 22/27 KF Fee #1H
 Eddy County, New Mexico (Nad 83)
 Q120736 & WT-12921
 Design #2

Mewbourne Oil Company

PROJECT DETAILS: Eddy County, New Mexico (Nad 83)

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level

WELL DETAILS: San Lorenzo 22/27 KF Fee #1H

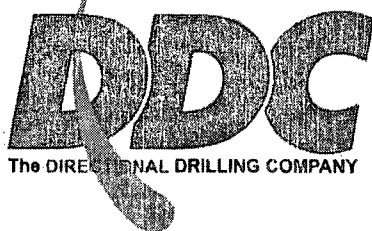
Ground Level: 2776.0	
+N/S 0.0	+E/W 0.0
Northings 466935.36	Eastings 620811.89
Latitude 32° 0' 53.663 N	
Longitude 104° 4' 39.412 W	

DESIGN TARGET DETAILS

Name	TVD	+N/S	+E/W	Northings	Eastings	Latitude	Longitude
PBHL San Lorenzo 22/27 KF Fee #1H -plan file target center	8215.9	-4750.3	26.7	400868.02	620825.49	32° 0' 9.982 N	104° 4' 37.246 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N/S	+E/W	VSecl	Depth	Annotation
7582.0	1.86	287.45	7567.9	-20.2	-19.7	20.1	190 k	TD @ 7582' MD / 7568' TVD
8083.5	42.61	172.73	8028.5	-143.4	3.2	145.4	329 k	CROSSED HARD LINE @ 8083' MD / 8038' TVD
12735.9	69.30	177.66	1215.3	-4767.1	14.2	4767.1	495 k	TD @ 12735' MD / 8215' TVD



M Azimuths to Grid North

Magnetic North: 7.49°

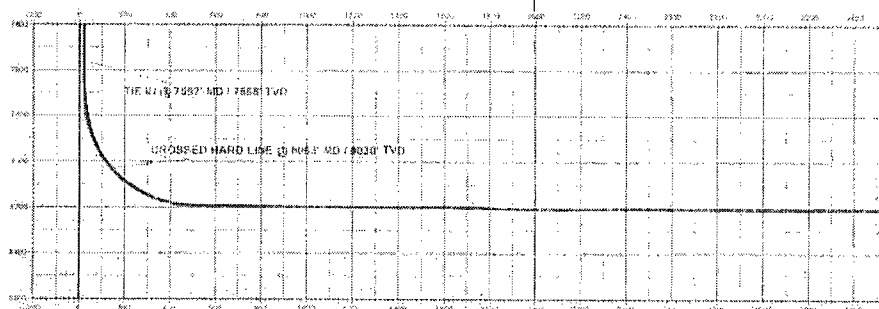
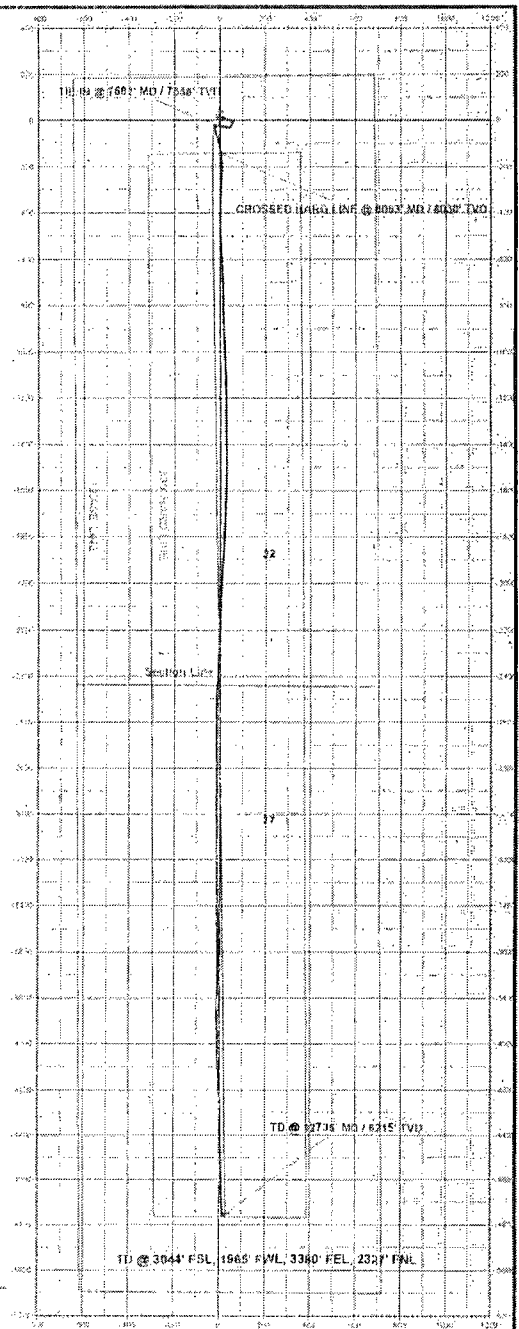
Magnetic Field

Strength: 48350.7snT

Dip Angle: 59.96°

Date: 12/4/2012

Model: IGRF2010



Vertical Section at 179.65° (200 ual/in)