

15- 41305

Mewbourne Oil Co

Eddy County, New Mexico

Sec 9-25S-28E

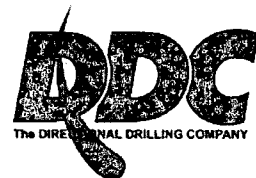
San Lorenzo 9 MD Fee #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

23 August, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #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 9-25S-28E		
Site Position:		Northing:	413,906.40 usft
From:	Map	Easting:	576,749.14 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 8' 15.729 N
		Longitude:	104° 5' 7.369 W
		Grid Convergence:	0.13 °

Well	San Lorenzo 9 MD Fee #1H		
Well Position	+N/-S	0.0 usft	Northing: 413,876.80 usft
	+E/-W	0.0 usft	Easting: 572,449.90 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 8' 15.531 N
		Longitude:	104° 5' 57.372 W
		Ground Level:	3,000.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	7/25/2013	(°) 7.56
			Dip Angle (°) 59.96
			Field Strength (nT) 48,298

Design	Wellbore #1		
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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	359.48

Survey/Program	Date 8/23/2013		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	7,306.0	Gyro (Wellbore #1)	Good_gyro
7,451.0	12,740.0	MWD (Wellbore #1)	MWD default
			Good Gyro
			MWD - Standard

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(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	0.38	105.96	100.0	-0.1	0.3	-0.1	0.38	0.38	0.00
200.0	0.79	178.10	200.0	-0.9	0.7	-0.9	0.76	0.41	72.14
300.0	1.13	126.12	300.0	-2.1	1.5	-2.2	0.90	0.34	-51.98
400.0	0.63	113.17	400.0	-2.9	2.8	-3.0	0.53	-0.50	-12.95
500.0	0.62	152.87	500.0	-3.6	3.5	-3.7	0.42	-0.01	39.70
600.0	0.97	151.09	600.0	-4.9	4.2	-4.9	0.35	0.35	-1.78
700.0	1.09	152.90	699.9	-6.4	5.0	-6.5	0.12	0.12	1.81
800.0	1.15	132.67	799.9	-8.0	6.2	-8.0	0.40	0.06	-20.23
900.0	0.97	114.66	899.9	-9.0	7.7	-9.1	0.38	-0.18	-18.01

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Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #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	0.26	28.26	999.9	-9.2	8.6	-9.2	0.99	-0.71	-86.40
1,100.0	0.29	252.70	1,099.9	-9.0	8.5	-9.1	0.51	0.03	-135.56
1,200.0	0.59	203.70	1,199.9	-9.6	8.0	-9.7	0.46	0.30	-49.00
1,300.0	0.48	158.45	1,299.9	-10.4	8.0	-10.5	0.42	-0.11	-45.25
1,400.0	0.28	207.99	1,399.9	-11.0	8.0	-11.1	0.37	-0.20	49.54
1,500.0	0.69	352.34	1,499.9	-10.7	7.8	-10.7	0.93	0.41	144.35
1,600.0	0.58	339.70	1,599.9	-9.6	7.5	-9.7	0.18	-0.11	-12.64
1,700.0	0.82	281.61	1,699.9	-9.0	6.7	-9.0	0.71	0.24	-58.09
1,800.0	0.64	356.37	1,799.9	-8.3	5.9	-8.3	0.90	-0.18	74.76
1,900.0	1.54	19.76	1,899.8	-6.5	6.3	-6.5	0.99	0.90	23.39
2,000.0	1.95	87.57	1,999.8	-5.1	8.5	-5.2	1.98	0.41	67.81
2,100.0	2.50	102.56	2,099.7	-5.5	12.3	-5.6	0.80	0.55	14.99
2,200.0	4.51	100.82	2,199.5	-6.7	18.3	-6.9	2.01	2.01	-1.74
2,300.0	5.49	101.78	2,299.2	-8.4	26.9	-8.7	0.98	0.98	0.96
2,400.0	4.74	107.90	2,398.8	-10.7	35.5	-11.0	0.93	-0.75	6.12
2,500.0	4.46	107.62	2,498.4	-13.1	43.1	-13.5	0.28	-0.28	-0.28
2,600.0	3.51	109.02	2,598.2	-15.3	49.7	-15.8	0.95	-0.95	1.40
2,700.0	3.28	111.66	2,698.0	-17.4	55.3	-17.9	0.28	-0.23	2.64
2,800.0	2.49	115.53	2,797.9	-19.4	59.9	-19.9	0.81	-0.79	3.87
2,900.0	2.83	105.36	2,897.8	-21.0	64.2	-21.5	0.58	0.34	-10.17
3,000.0	2.23	107.88	2,997.7	-22.2	68.5	-22.8	0.61	-0.60	2.52
3,100.0	2.27	110.25	3,097.6	-23.5	72.2	-24.1	0.10	0.04	2.37
3,200.0	2.34	111.83	3,197.5	-24.9	75.9	-25.6	0.09	0.07	1.58
3,300.0	1.90	121.66	3,297.5	-26.6	79.2	-27.3	0.57	-0.44	9.83
3,400.0	0.92	128.62	3,397.4	-27.9	81.3	-28.7	0.99	-0.98	6.96
3,500.0	0.97	107.80	3,497.4	-28.7	82.7	-29.4	0.35	0.05	-20.82
3,600.0	0.69	93.52	3,597.4	-29.0	84.1	-29.7	0.35	-0.28	-14.28
3,700.0	1.06	135.11	3,697.4	-29.7	85.4	-30.5	0.71	0.37	41.59
3,800.0	0.91	135.40	3,797.4	-30.9	86.6	-31.7	0.15	-0.15	0.29
3,900.0	0.90	136.97	3,897.4	-32.0	87.7	-32.8	0.03	-0.01	1.57
4,000.0	0.65	191.03	3,997.4	-33.2	88.1	-34.0	0.74	-0.25	54.06
4,100.0	0.33	214.28	4,097.4	-34.0	87.8	-34.8	0.37	-0.32	23.25
4,200.0	0.45	131.12	4,197.4	-34.5	88.0	-35.3	0.53	0.12	-83.16
4,300.0	0.68	143.32	4,297.4	-35.2	88.6	-36.0	0.26	0.23	12.20
4,400.0	1.09	177.02	4,397.3	-36.6	89.0	-37.4	0.65	0.41	33.70
4,500.0	1.22	180.34	4,497.3	-38.6	89.1	-39.4	0.15	0.13	3.32
4,600.0	1.42	212.74	4,597.3	-40.7	88.4	-41.5	0.76	0.20	32.40
4,700.0	0.85	186.30	4,697.3	-42.5	87.6	-43.3	0.76	-0.57	-26.44
4,800.0	1.59	185.56	4,797.3	-44.6	87.4	-45.4	0.74	0.74	-0.74
4,900.0	1.45	200.42	4,897.2	-47.2	86.8	-48.0	0.42	-0.14	14.86
5,000.0	1.38	193.44	4,997.2	-49.6	86.1	-50.3	0.19	-0.07	-6.98
5,100.0	1.30	202.36	5,097.2	-51.8	85.4	-52.6	0.22	-0.08	8.92
5,200.0	1.49	203.17	5,197.1	-54.0	84.5	-54.8	0.19	0.19	0.81

DDC Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well San Lorenzo.9 MD Fee #1H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec.9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo.9 MD Fee #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	1.59	204.84	5,297.1	-56.5	83.4	-57.2	0.11	0.10	1.67
5,400.0	1.70	209.09	5,397.1	-59.0	82.1	-59.8	0.16	0.11	4.25
5,500.0	1.47	185.71	5,497.0	-61.6	81.2	-62.3	0.68	-0.23	-23.38
5,600.0	1.58	191.11	5,597.0	-64.2	80.8	-65.0	0.18	0.11	5.40
5,700.0	1.60	211.75	5,696.9	-66.8	79.8	-67.5	0.57	0.02	20.64
5,800.0	1.60	184.31	5,796.9	-69.4	79.0	-70.1	0.76	0.00	-27.44
5,900.0	1.73	189.34	5,896.9	-72.2	78.6	-72.9	0.20	0.13	5.03
6,000.0	1.14	214.35	5,996.8	-74.5	77.8	-75.3	0.85	-0.59	25.01
6,100.0	1.27	202.01	6,096.8	-76.4	76.8	-77.1	0.29	0.13	-12.34
6,200.0	1.42	163.40	6,196.8	-78.6	76.8	-79.3	0.90	0.15	-38.61
6,300.0	1.51	128.48	6,296.8	-80.6	78.2	-81.3	0.88	0.09	-34.92
6,400.0	0.54	129.19	6,396.7	-81.7	79.6	-82.5	0.97	-0.97	0.71
6,500.0	0.71	215.89	6,496.7	-82.5	79.6	-83.3	0.87	0.17	86.70
6,600.0	0.86	260.58	6,596.7	-83.2	78.5	-83.9	0.61	0.15	44.69
6,700.0	1.36	213.91	6,696.7	-84.3	77.1	-85.0	0.99	0.50	-46.67
6,800.0	1.12	175.77	6,796.7	-86.2	76.5	-86.9	0.84	-0.24	-38.14
6,900.0	1.45	168.56	6,896.7	-88.4	76.8	-89.1	0.37	0.33	-7.21
7,000.0	1.35	209.99	6,996.6	-90.7	76.5	-91.4	0.99	-0.10	41.43
7,100.0	0.74	245.21	7,096.6	-92.0	75.3	-92.7	0.86	-0.61	35.22
7,200.0	0.63	277.32	7,196.6	-92.2	74.2	-92.9	0.39	-0.11	32.11
Tie in @ 7306' MD / 7303' TVD									
7,306.0	2.08	232.03	7,302.6	-93.3	72.1	-94.0	1.60	1.37	-42.73
7,451.0	1.90	219.30	7,447.5	-96.8	68.5	-97.4	0.33	-0.12	-8.78
7,483.0	1.90	224.90	7,479.5	-97.6	67.7	-98.2	0.58	0.00	17.50
7,515.0	1.80	297.80	7,511.5	-97.7	66.9	-98.3	6.87	-0.31	227.81
7,547.0	4.80	347.40	7,543.4	-96.2	66.2	-96.8	12.13	9.38	155.00
7,579.0	8.40	359.90	7,575.2	-92.5	65.9	-93.1	12.05	11.25	39.06
7,611.0	12.10	4.40	7,606.7	-86.8	66.2	-87.4	11.82	11.56	14.06
7,643.0	15.30	4.60	7,637.8	-79.3	66.7	-79.9	10.00	10.00	0.63
7,674.0	17.80	3.80	7,667.5	-70.5	67.4	-71.1	8.10	8.06	-2.58
7,707.0	21.20	3.80	7,698.6	-59.5	68.1	-60.1	10.30	10.30	0.00
7,739.0	24.40	3.00	7,728.1	-47.1	68.8	-47.7	10.05	10.00	-2.50
7,771.0	28.10	3.40	7,756.8	-33.0	69.6	-33.6	11.58	11.56	1.25
7,803.0	30.60	1.80	7,784.7	-17.3	70.3	-18.0	8.19	7.81	-5.00
7,834.0	33.70	2.20	7,810.9	-0.8	70.9	-1.5	10.02	10.00	1.29
7,866.0	36.70	2.50	7,837.1	17.6	71.7	16.9	9.39	9.38	0.94
7,898.0	39.40	2.20	7,862.2	37.3	72.5	36.6	8.46	8.44	-0.94
7,930.0	42.20	0.40	7,886.5	58.2	73.0	57.5	9.49	8.75	-5.63
7,961.0	44.40	358.80	7,909.0	79.5	72.8	78.8	7.93	7.10	-5.16
7,993.0	47.00	358.80	7,931.4	102.3	72.3	101.7	8.13	8.13	0.00
8,025.0	50.20	358.80	7,952.5	126.3	71.8	125.7	10.00	10.00	0.00
8,057.0	53.30	358.30	7,972.3	151.5	71.2	150.8	9.76	9.69	-1.56
8,089.0	55.90	357.20	7,990.9	177.5	70.1	176.9	8.59	8.13	-3.44

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9:25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #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)
CROSSED HARDLINE @ 8092' MD / 7992.6' TVD									
8,092.0	56.16	357.26	7,992.6	180.0	70.0	179.4	8.89	8.75	1.93
8,121.0	58.70	357.80	8,008.2	204.4	69.0	203.8	8.89	8.75	1.87
8,152.0	61.80	358.00	8,023.5	231.3	68.0	230.7	10.02	10.00	0.65
8,184.0	64.90	358.10	8,037.9	259.9	67.0	259.3	9.69	9.69	0.31
8,215.0	67.60	358.10	8,050.4	288.3	66.1	287.6	8.71	8.71	0.00
8,247.0	70.90	358.30	8,061.7	318.2	65.1	317.6	10.33	10.31	0.63
8,279.0	73.60	358.50	8,071.5	348.6	64.3	348.0	8.46	8.44	0.63
8,311.0	76.60	358.30	8,079.7	379.5	63.4	378.9	9.39	9.38	-0.63
8,342.0	79.70	358.60	8,086.1	409.9	62.6	409.3	10.04	10.00	0.97
8,374.0	82.90	359.70	8,090.9	441.5	62.1	440.9	10.56	10.00	3.44
8,457.0	87.80	0.20	8,097.6	524.2	62.1	523.6	5.93	5.90	0.60
8,489.0	87.70	359.70	8,098.9	556.2	62.0	555.6	1.59	-0.31	-1.56
8,553.0	89.20	0.40	8,100.6	620.1	62.1	619.5	2.59	2.34	1.09
8,616.0	89.60	0.20	8,101.3	683.1	62.4	682.5	0.71	0.63	-0.32
8,679.0	90.00	0.40	8,101.5	746.1	62.8	745.5	0.71	0.63	0.32
8,742.0	90.20	359.50	8,101.4	809.1	62.7	808.5	1.46	0.32	-1.43
8,806.0	90.70	359.40	8,100.9	873.1	62.1	872.5	0.80	0.78	-0.16
8,869.0	91.00	359.70	8,100.0	936.1	61.6	935.5	0.67	0.48	0.48
8,932.0	91.40	358.80	8,098.6	999.1	60.8	998.5	1.56	0.63	-1.43
8,996.0	90.00	359.20	8,097.9	1,063.1	59.6	1,062.5	2.28	-2.19	0.63
9,059.0	90.00	359.00	8,097.9	1,126.1	58.7	1,125.5	0.32	0.00	-0.32
9,123.0	90.40	358.80	8,097.6	1,190.1	57.4	1,189.5	0.70	0.63	-0.31
9,185.0	89.60	358.30	8,097.6	1,252.0	55.9	1,251.5	1.52	-1.29	-0.81
9,249.0	89.60	357.60	8,098.1	1,316.0	53.6	1,315.4	1.09	0.00	-1.09
9,312.0	89.70	357.10	8,098.5	1,378.9	50.7	1,378.4	0.81	0.16	-0.79
9,375.0	90.20	356.50	8,098.5	1,441.8	47.1	1,441.3	1.24	0.79	-0.95
9,439.0	90.30	356.70	8,098.2	1,505.7	43.3	1,505.3	0.35	0.16	0.31
9,502.0	90.80	356.40	8,097.6	1,568.6	39.6	1,568.2	0.93	0.79	-0.48
9,565.0	90.00	356.70	8,097.2	1,631.5	35.8	1,631.1	1.36	-1.27	0.48
9,628.0	90.00	357.20	8,097.2	1,694.4	32.4	1,694.0	0.79	0.00	0.79
9,692.0	90.20	357.20	8,097.1	1,758.3	29.3	1,758.0	0.31	0.31	0.00
9,755.0	89.20	358.60	8,097.4	1,821.3	27.0	1,820.9	2.73	-1.59	2.22
9,818.0	88.80	358.50	8,098.5	1,884.2	25.4	1,883.9	0.65	-0.63	-0.16
9,881.0	89.00	358.50	8,099.7	1,947.2	23.7	1,946.9	0.32	0.32	0.00
9,945.0	89.40	358.50	8,100.6	2,011.2	22.1	2,010.9	0.63	0.63	0.00
10,008.0	89.80	358.80	8,101.1	2,074.2	20.6	2,073.9	0.79	0.63	0.48
10,071.0	89.80	358.60	8,101.3	2,137.1	19.1	2,136.9	0.32	0.00	-0.32
10,135.0	90.10	359.00	8,101.3	2,201.1	17.8	2,200.9	0.78	0.47	0.63
10,198.0	90.30	358.60	8,101.1	2,264.1	16.5	2,263.9	0.71	0.32	-0.63
10,261.0	90.70	359.40	8,100.6	2,327.1	15.4	2,326.9	1.42	0.63	1.27
10,324.0	90.80	359.00	8,099.7	2,390.1	14.5	2,389.9	0.65	0.16	-0.63
10,388.0	91.10	359.40	8,098.7	2,454.1	13.6	2,453.8	0.78	0.47	0.63
10,451.0	89.50	358.60	8,098.3	2,517.1	12.5	2,516.8	2.84	-2.54	-1.27

DDC Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9, 25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #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)
10,514.0	89.40	358.80	8,098.9	2,580.0	11.1	2,579.8	0.35	-0.16	0.32
10,578.0	89.90	359.40	8,099.3	2,644.0	10.1	2,643.8	1.22	0.78	0.94
10,641.0	90.00	359.50	8,099.4	2,707.0	9.5	2,706.8	0.22	0.16	0.16
10,704.0	90.30	359.20	8,099.2	2,770.0	8.8	2,769.8	0.67	0.48	-0.48
10,768.0	90.60	359.20	8,098.7	2,834.0	7.9	2,833.8	0.47	0.47	0.00
10,831.0	90.80	359.40	8,098.0	2,897.0	7.1	2,896.8	0.45	0.32	0.32
10,895.0	90.10	359.70	8,097.5	2,961.0	6.6	2,960.8	1.19	-1.09	0.47
10,958.0	90.20	0.20	8,097.3	3,024.0	6.5	3,023.8	0.81	0.16	0.79
11,021.0	89.60	359.40	8,097.4	3,087.0	6.3	3,086.8	1.59	-0.95	-1.27
11,085.0	89.60	359.70	8,097.8	3,151.0	5.8	3,150.8	0.47	0.00	0.47
11,148.0	89.30	359.40	8,098.5	3,214.0	5.3	3,213.8	0.67	-0.48	-0.48
11,211.0	89.60	359.40	8,099.1	3,277.0	4.7	3,276.8	0.48	0.48	0.00
11,275.0	89.90	358.80	8,099.3	3,341.0	3.7	3,340.8	1.05	0.47	-0.94
11,338.0	90.20	359.00	8,099.3	3,404.0	2.4	3,403.8	0.57	0.48	0.32
11,401.0	90.50	358.80	8,098.9	3,466.9	1.2	3,466.8	0.57	0.48	-0.32
11,465.0	90.80	358.50	8,098.2	3,530.9	-0.3	3,530.8	0.66	0.47	-0.47
11,528.0	91.10	358.10	8,097.1	3,593.9	-2.1	3,593.8	0.79	0.48	-0.63
11,591.0	90.60	358.60	8,096.2	3,656.9	-4.0	3,656.7	1.12	-0.79	0.79
11,654.0	90.60	358.00	8,095.5	3,719.8	-5.8	3,719.7	0.95	0.00	-0.95
11,718.0	89.60	359.40	8,095.4	3,783.8	-7.3	3,783.7	2.69	-1.56	2.19
11,781.0	89.70	358.60	8,095.8	3,846.8	-8.4	3,846.7	1.28	0.16	-1.27
11,844.0	89.90	358.80	8,096.0	3,909.8	-9.8	3,909.7	0.45	0.32	0.32
11,908.0	89.90	359.40	8,096.1	3,973.8	-10.8	3,973.7	0.94	0.00	0.94
11,971.0	88.60	0.60	8,097.0	4,036.8	-10.8	4,036.7	2.81	-2.06	1.90
12,034.0	88.80	0.60	8,098.4	4,099.7	-10.1	4,099.7	0.32	0.32	0.00
12,097.0	89.40	0.90	8,099.4	4,162.7	-9.3	4,162.6	1.06	0.95	0.48
12,161.0	89.30	0.90	8,100.1	4,226.7	-8.3	4,226.6	0.16	-0.16	0.00
12,224.0	89.40	0.90	8,100.8	4,289.7	-7.3	4,289.6	0.16	0.16	0.00
12,287.0	89.90	0.80	8,101.2	4,352.7	-6.4	4,352.6	0.81	0.79	-0.16
12,350.0	90.10	1.50	8,101.2	4,415.7	-5.1	4,415.5	1.16	0.32	1.11
12,414.0	90.20	1.60	8,101.0	4,479.7	-3.4	4,479.5	0.22	0.16	0.16
12,477.0	90.40	1.10	8,100.7	4,542.6	-1.9	4,542.5	0.85	0.32	-0.79
12,541.0	90.50	0.90	8,100.2	4,606.6	-0.8	4,606.4	0.35	0.16	-0.31
12,604.0	90.00	0.80	8,099.9	4,669.6	0.1	4,669.4	0.81	-0.79	-0.16
12,692.0	90.20	0.90	8,099.8	4,757.6	1.4	4,757.4	0.25	0.23	0.11
TD @ 12,740 MD / 8099.6 TVD									
12,740.0	90.20	0.90	8,099.6	4,805.6	2.2	4,805.4	0.00	0.00	0.00

DDC
Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well San Lorenzo 9 MD Fee #1H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3020.0usft (Patterson)
Site:	Sec 9-25S-28E	MD Reference:	WELL @ 3020.0usft (Patterson)
Well:	San Lorenzo 9 MD Fee #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000:1 Single User Db

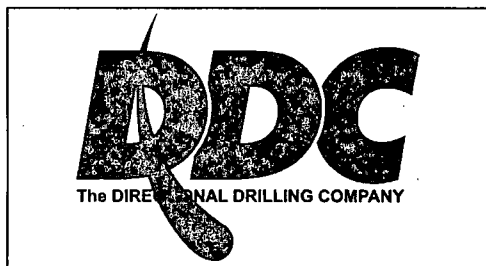
Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,306.0	7,302.6	-93.3	72.1	Tie In @ 7306' MD / 7303' TVD
8,092.0	7,992.6	180.0	70.0	CROSSED HARDLINE @ 8092' MD / 7992.6' TVD
12,740.0	8,099.6	4,805.6	2.2	TD @ 12740' MD / 8099.6' TVD

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
 San Lorenzo 9 MD Fee #1H
 Eddy County, New Mexico
 Rig: Patterson #75
 Created By: TIFFANI MIZELL
 Date: 8/23/2013

San Lorenzo 9 MD Fee #1H
 Eddy County, New Mexico
 Q130362 & WT-13595
 Design #2

Mewbourne Oil Company



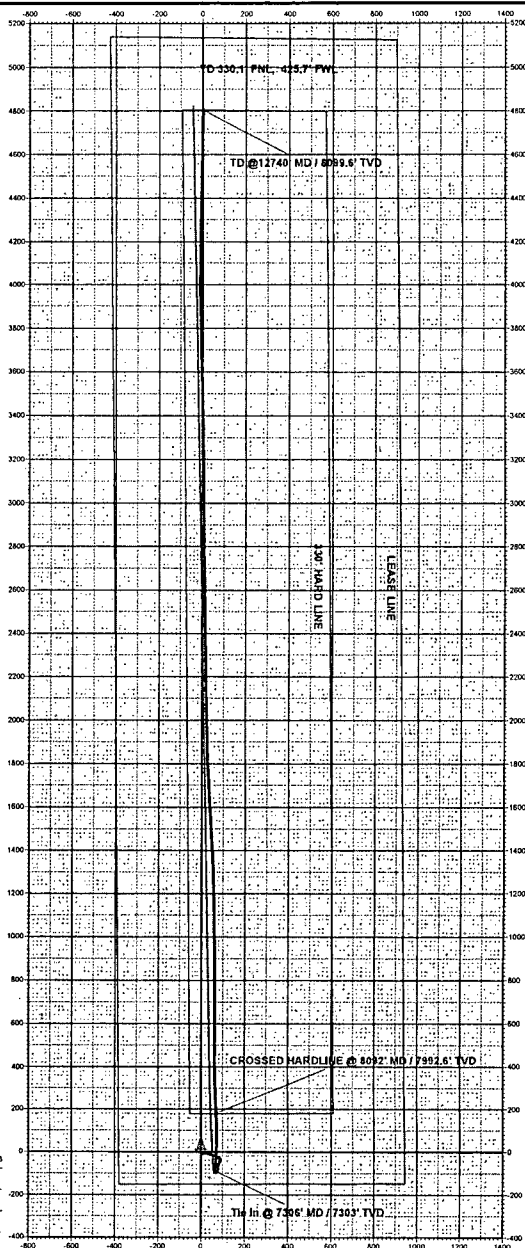
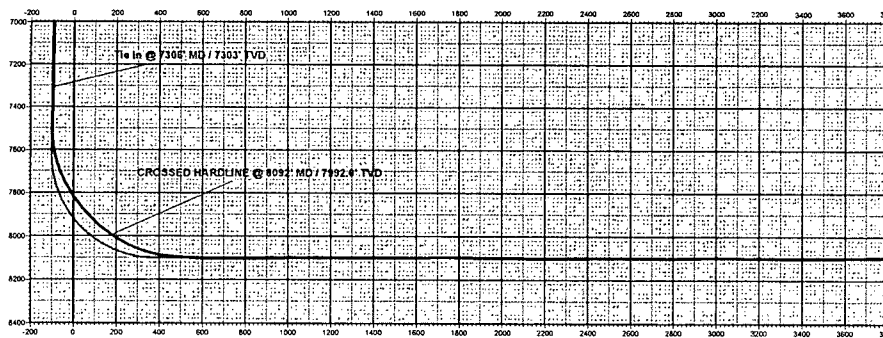
T G M
 Azimuths to Grid North
 Correction: 7.44°
 Magnetic Field
 Strength: 48298.4snT
 Dip Angle: 59.96°
 Date: 7/25/2013
 Model: IGRF2010

PROJECT DETAILS: Eddy County, New Mexico
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

WELL DETAILS: San Lorenzo 9 MD Fee #1H					
+N-S	+E-W	Ground Level:	3000.0		
0.0	0.0	North	East	Latitude	Longitude
		413876.80	872449.90	32° 5' 15.531 N	104° 5' 57.372 W

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	North	East	Latitude
FBHL San Lorenzo 9 MD Fee #1H Design #1 8100.0	4805.5	-43.6	418682.70	572406.31	32° 5' 3.993 N	104° 5' 57.757 W
- plan hits target center						

ANNOTATIONS									
MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Departure	Annotation	
7306.0	2.09	233.03	7303.6	-43.3	72.1	-84.0	181.3	Tie In @ 7306' MD / 7303' TVD	
8092.0	56.16	357.26	7992.6	180.0	70.0	179.4	467.3	CROSSED HARDLINE @ 8092' MD / 7992.6' TVD	
12740.0	90.20	.90	8099.6	4805.6	2.2	4805.1	6094.0	TD @ 12740' MD / 8099.6' TVD	



Vertical Section at 359.48° (200 usft/n)