



Mewbourne Oil Co

Eddy County, New Mexico

Sec 23, T25S, R27E

Hayhurst 23 PA State Com #1H

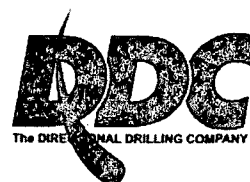
30-015-41356

Wellbore #1

Design: Wellbore #1

DDC Survey Report

19 August, 2013



DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Hayhurst 23 PA State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3081.0usft (Patterson UTI)
Site:	Sec 23, T25S, R27E	MD Reference:	WELL @ 3081.0usft (Patterson UTI)
Well:	Hayhurst 23 PA State 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 23, T25S, R27E					
Site Position:		Northing:	403,383.52 usft	Latitude:	32° 6' 32.023 N
From:	Map	Easting:	554,479.12 usft	Longitude:	104° 9' 26.579 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.09 °

Well	Hayhurst 23 PA State Com #1H					
Well Position	+N/-S	0.0 usft	Northing:	403,333.47 usft	Latitude:	32° 6' 31.508 N
	+E/-W	0.0 usft	Easting:	555,679.09 usft	Longitude:	104° 9' 12.628 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,061.0 usft	

Wellbore:	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/11/2013	7.59	59.93	48,278

Design:	Wellbore #1
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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	359.86

Survey Program	Date	From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
	8/19/2013	100.0	7,050.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
		7,177.0	12,290.0	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)	Buidl 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	0.66	110.85	100.0	-0.2	0.5	-0.2	0.66	0.66	0.00
	200.0	0.45	83.15	200.0	-0.4	1.5	-0.4	0.33	-0.21	-27.70
	300.0	0.62	202.30	300.0	-0.8	1.7	-0.8	0.93	0.17	119.15
	400.0	1.30	221.37	400.0	-2.2	0.7	-2.2	0.74	0.68	19.07
	500.0	1.71	229.86	499.9	-4.0	-1.2	-4.0	0.47	0.41	8.49
	600.0	0.72	251.63	599.9	-5.1	-2.9	-5.1	1.08	-0.99	21.77
	700.0	0.51	253.89	699.9	-5.5	-4.0	-5.5	0.21	-0.21	2.26
	800.0	1.19	203.56	799.9	-6.5	-4.8	-6.5	0.95	0.68	-50.33
	900.0	1.68	215.95	899.9	-8.7	-6.1	-8.7	0.58	0.49	12.39

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Well:	Hayhurst 23 PA State 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)
1,000.0	2.09	260.88	999.8	-10.2	-8.7	-10.1	1.49	0.41	44.93
1,100.0	1.37	225.65	1,099.8	-11.3	-11.4	-11.2	1.25	-0.72	-35.23
1,200.0	1.38	226.26	1,199.7	-12.9	-13.1	-12.9	0.02	0.01	0.61
1,300.0	1.80	276.67	1,299.7	-13.6	-15.5	-13.6	1.41	0.42	50.41
1,400.0	0.75	274.18	1,399.7	-13.4	-17.8	-13.3	1.05	-1.05	-2.49
1,500.0	1.28	225.68	1,499.7	-14.1	-19.2	-14.1	0.96	0.53	-48.50
1,600.0	1.57	193.70	1,599.6	-16.2	-20.3	-16.2	0.83	0.29	-31.98
1,700.0	0.60	180.85	1,699.6	-18.1	-20.7	-18.0	0.99	-0.97	-12.85
1,800.0	1.21	127.85	1,799.6	-19.2	-19.8	-19.2	0.97	0.61	-53.00
1,900.0	2.53	125.40	1,899.6	-21.2	-17.2	-21.1	1.32	-1.32	-2.45
2,000.0	3.31	128.69	1,999.4	-24.2	-13.2	-24.2	0.80	0.78	3.29
2,100.0	3.18	130.66	2,099.3	-27.9	-8.8	-27.8	0.17	-0.13	1.97
2,200.0	2.47	127.98	2,199.1	-31.0	-5.0	-31.0	0.72	-0.71	-2.68
2,300.0	2.33	128.22	2,299.1	-33.6	-1.7	-33.6	0.14	-0.14	0.24
2,400.0	2.01	125.28	2,399.0	-35.8	1.3	-35.8	0.34	-0.32	-2.94
2,500.0	1.90	125.97	2,498.9	-37.8	4.1	-37.8	0.11	-0.11	0.69
2,600.0	1.67	127.61	2,598.9	-39.7	6.6	-39.7	0.24	-0.23	1.64
2,700.0	1.24	121.14	2,698.8	-41.1	8.7	-41.2	0.46	-0.43	-6.47
2,800.0	1.24	124.47	2,798.8	-42.3	10.5	-42.3	0.07	0.00	3.33
2,900.0	1.12	129.48	2,898.8	-43.5	12.1	-43.6	0.16	-0.12	5.01
3,000.0	0.73	220.95	2,998.8	-44.7	12.5	-44.7	1.35	-0.39	91.47
3,100.0	1.04	139.55	3,098.8	-45.8	12.7	-45.9	1.18	0.31	-81.40
3,200.0	1.42	168.49	3,198.8	-47.7	13.5	-47.8	0.72	0.38	28.94
3,300.0	0.11	144.55	3,298.8	-49.0	13.8	-49.1	1.32	-1.31	-23.94
3,400.0	0.97	144.92	3,398.7	-49.8	14.3	-49.8	0.86	0.86	0.37
3,500.0	1.13	154.90	3,498.7	-51.4	15.2	-51.4	0.24	0.16	9.98
3,600.0	1.17	163.58	3,598.7	-53.2	15.9	-53.3	0.18	0.04	8.68
3,700.0	0.66	143.89	3,698.7	-54.7	16.6	-54.7	0.59	-0.51	-19.69
3,800.0	1.22	179.47	3,798.7	-56.2	16.9	-56.3	0.78	0.56	35.58
3,900.0	1.45	235.69	3,898.7	-58.0	15.9	-58.0	1.27	0.23	56.22
4,000.0	1.06	180.73	3,998.6	-59.6	14.8	-59.7	1.21	-0.39	-54.96
4,100.0	1.48	199.00	4,098.6	-61.8	14.4	-61.8	0.58	0.42	18.27
4,200.0	1.40	201.48	4,198.6	-64.1	13.5	-64.2	0.10	-0.08	2.48
4,300.0	1.34	256.45	4,298.6	-65.6	11.9	-65.6	1.27	-0.06	54.97
4,400.0	1.43	200.14	4,398.5	-67.0	10.4	-67.0	1.31	0.09	-56.31
4,500.0	1.62	200.03	4,498.5	-69.5	9.5	-69.5	0.19	0.19	-0.11
4,600.0	0.51	221.83	4,598.5	-71.2	8.7	-71.2	1.16	-1.11	21.80
4,700.0	0.52	235.54	4,698.5	-71.7	8.0	-71.8	0.12	0.01	13.71
4,800.0	0.73	174.37	4,798.5	-72.6	7.7	-72.7	0.66	0.21	-61.17
4,900.0	1.30	182.06	4,898.5	-74.4	7.7	-74.4	0.58	0.57	7.69
5,000.0	1.28	225.22	4,998.4	-76.3	6.9	-76.3	0.95	-0.02	43.16
5,100.0	1.23	216.30	5,098.4	-78.0	5.5	-78.0	0.20	-0.05	-8.92
5,200.0	1.05	176.51	5,198.4	-79.8	4.9	-79.8	0.79	-0.18	-39.79

DDC
Survey Report



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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	1.13	232.83	5,298.4	-81.3	4.2	-81.3	1.03	0.08	56.32
5,400.0	0.61	152.83	5,398.4	-82.3	3.6	-82.3	1.19	-0.52	-80.00
5,500.0	1.25	204.10	5,498.4	-83.8	3.4	-83.8	0.99	0.64	51.27
5,600.0	1.47	258.11	5,598.3	-85.1	1.7	-85.1	1.25	0.22	54.01
5,700.0	1.27	220.37	5,698.3	-86.2	-0.3	-86.2	0.91	-0.20	-37.74
5,800.0	0.59	228.24	5,798.3	-87.4	-1.4	-87.4	0.69	-0.68	7.87
5,900.0	1.54	261.63	5,898.3	-87.9	-3.1	-87.9	1.10	0.95	33.39
6,000.0	2.77	314.37	5,998.2	-86.4	-6.1	-86.4	2.21	1.23	52.74
6,100.0	1.10	312.47	6,098.1	-84.1	-8.6	-84.0	1.67	-1.67	-1.90
6,200.0	2.07	275.00	6,198.1	-83.3	-11.1	-83.2	1.37	0.97	-37.47
6,300.0	2.00	289.05	6,298.0	-82.5	-14.5	-82.5	0.50	-0.07	14.05
6,400.0	1.83	288.26	6,398.0	-81.5	-17.7	-81.4	0.17	-0.17	-0.79
6,500.0	1.88	303.74	6,497.9	-80.1	-20.6	-80.0	0.50	0.05	15.48
6,600.0	2.31	242.16	6,597.9	-80.1	-23.7	-80.0	2.18	0.43	-61.58
6,700.0	1.33	248.62	6,697.8	-81.4	-26.6	-81.4	1.00	-0.98	6.46
6,800.0	3.65	221.78	6,797.7	-84.2	-29.8	-84.2	2.54	2.32	-26.84
6,900.0	4.40	238.39	6,897.5	-88.6	-35.2	-88.5	1.38	0.75	16.61
7,000.0	3.85	245.99	6,997.2	-92.0	-41.5	-91.9	0.77	-0.55	7.60
Tie In @ 7050 MD / 7047 TVD									
7,050.0	3.11	262.48	7,047.1	-92.9	-44.4	-92.8	2.47	-1.48	32.98
7,177.0	0.40	118.80	7,174.1	-93.5	-47.4	-93.4	2.71	-2.13	-113.13
7,209.0	3.30	45.30	7,206.1	-92.9	-46.7	-92.8	10.03	9.06	-229.69
7,241.0	6.10	23.70	7,238.0	-90.7	-45.3	-90.6	10.20	8.75	-67.50
7,272.0	9.10	19.80	7,268.7	-86.9	-43.8	-86.8	9.81	9.68	-12.58
7,304.0	12.40	15.60	7,300.1	-81.2	-42.0	-81.1	10.59	10.31	-13.13
7,336.0	14.20	17.20	7,331.3	-74.2	-40.0	-74.1	5.74	5.63	5.00
7,367.0	15.80	14.90	7,361.2	-66.5	-37.8	-66.4	5.51	5.16	-7.42
7,399.0	19.20	11.40	7,391.7	-57.1	-35.6	-57.0	11.12	10.63	-10.94
7,431.0	23.10	9.10	7,421.6	-45.7	-33.6	-45.6	12.46	12.19	-7.19
7,463.0	27.20	8.40	7,450.5	-32.3	-31.5	-32.2	12.85	12.81	-2.19
7,496.0	30.40	6.80	7,479.4	-16.5	-29.4	-16.5	9.97	9.70	-4.85
7,527.0	33.60	5.20	7,505.7	-0.2	-27.7	-0.1	10.68	10.32	-5.16
7,559.0	36.80	2.90	7,531.9	18.2	-26.4	18.3	10.82	10.00	-7.19
7,591.0	40.30	2.00	7,556.9	38.1	-25.6	38.2	11.08	10.94	-2.81
Crossed Hardline @ 7601.4 MD / 7564.7 TVD									
7,601.4	41.47	1.26	7,564.7	44.9	-25.4	45.0	12.17	11.25	-7.08
7,622.0	43.80	359.90	7,579.9	58.9	-25.2	58.9	12.17	11.31	-6.62
7,654.0	47.60	0.30	7,602.2	81.8	-25.2	81.8	11.91	11.88	1.25
7,686.0	52.00	359.90	7,622.9	106.2	-25.2	106.3	13.78	13.75	-1.25
7,717.0	55.60	358.00	7,641.2	131.2	-25.6	131.3	12.62	11.61	-6.13
7,749.0	60.20	357.50	7,658.2	158.3	-26.7	158.4	14.44	14.38	-1.56
7,781.0	62.90	357.80	7,673.4	186.4	-27.8	186.5	8.48	8.44	0.94
7,813.0	65.50	357.10	7,687.4	215.2	-29.1	215.3	8.36	8.13	-2.19
7,844.0	68.40	358.90	7,699.5	243.7	-30.1	243.8	10.77	9.35	5.81

DDC Survey Report



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Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3081.0usft (Patterson UTI)
Site:	Sec 23 T25S R27E	MD Reference:	WELL @ 3081.0usft (Patterson UTI)
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Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey									
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7,876.0	72.30	357.80	7,710.3	273.8	-31.0	273.9	12.61	12.19	-3.44
7,907.0	76.80	358.40	7,718.5	303.7	-32.0	303.7	14.64	14.52	1.94
7,939.0	79.50	359.00	7,725.1	335.0	-32.7	335.0	8.63	8.44	1.88
7,971.0	81.00	357.60	7,730.5	366.5	-33.6	366.6	6.37	4.69	-4.38
8,003.0	84.20	357.80	7,734.6	398.2	-34.9	398.3	10.02	10.00	0.63
8,035.0	87.50	357.60	7,736.9	430.1	-36.2	430.2	10.33	10.31	-0.63
8,043.0	88.50	358.70	7,737.2	438.1	-36.4	438.2	18.58	12.50	13.75
8,129.0	91.20	358.70	7,737.5	524.0	-38.4	524.1	3.14	3.14	0.00
8,192.0	87.80	0.10	7,738.0	587.0	-39.0	587.1	5.84	-5.40	2.22
8,286.0	88.00	0.50	7,741.4	681.0	-38.6	681.1	0.48	0.21	0.43
8,381.0	88.90	358.90	7,744.0	775.9	-39.0	776.0	1.93	0.95	-1.68
8,444.0	87.80	0.60	7,745.8	838.9	-39.3	839.0	3.21	-1.75	2.70
8,507.0	88.30	359.90	7,748.0	901.9	-39.0	901.9	1.36	0.79	-1.11
8,570.0	87.10	0.50	7,750.5	964.8	-38.8	964.9	2.13	-1.90	0.95
8,633.0	87.40	2.20	7,753.5	1,027.7	-37.3	1,027.8	2.74	0.48	2.70
8,696.0	87.80	1.30	7,756.2	1,090.6	-35.4	1,090.7	1.56	0.63	-1.43
8,759.0	88.20	1.90	7,758.4	1,153.6	-33.7	1,153.6	1.14	0.63	0.95
8,822.0	88.20	2.00	7,760.3	1,216.5	-31.5	1,216.6	0.16	0.00	0.16
8,885.0	88.60	2.20	7,762.1	1,279.4	-29.2	1,279.5	0.71	0.63	0.32
8,948.0	88.00	1.50	7,764.0	1,342.4	-27.2	1,342.4	1.46	-0.95	-1.11
9,011.0	88.40	1.50	7,765.9	1,405.3	-25.5	1,405.4	0.63	0.63	0.00
9,074.0	87.90	1.00	7,768.0	1,468.3	-24.2	1,468.3	1.12	-0.79	-0.79
9,168.0	87.90	0.50	7,771.4	1,562.2	-22.9	1,562.2	0.53	0.00	-0.53
9,263.0	87.90	358.90	7,774.9	1,657.1	-23.4	1,657.2	1.68	0.00	-1.68
9,357.0	88.70	358.50	7,777.7	1,751.1	-25.6	1,751.1	0.95	0.85	-0.43
9,452.0	87.80	358.40	7,780.6	1,846.0	-28.1	1,846.0	0.95	-0.95	-0.11
9,547.0	87.80	358.50	7,784.2	1,940.9	-30.7	1,940.9	0.11	0.00	0.11
9,642.0	89.50	357.50	7,786.5	2,035.8	-34.0	2,035.9	2.08	1.79	-1.05
9,736.0	91.50	359.90	7,785.7	2,129.7	-36.1	2,129.8	3.32	2.13	2.55
9,768.0	92.20	359.90	7,784.6	2,161.7	-36.2	2,161.8	2.19	2.19	0.00
9,800.0	90.50	359.90	7,783.9	2,193.7	-36.3	2,193.8	5.31	-5.31	0.00
9,831.0	88.60	0.10	7,784.1	2,224.7	-36.3	2,224.8	6.16	-6.13	0.65
9,894.0	86.30	1.30	7,786.9	2,287.6	-35.5	2,287.7	4.12	-3.65	1.90
9,957.0	86.70	1.20	7,790.8	2,350.5	-34.1	2,350.6	0.65	0.63	-0.16
10,021.0	86.70	359.60	7,794.5	2,414.4	-33.7	2,414.5	2.50	0.00	-2.50
10,084.0	88.10	0.10	7,797.3	2,477.3	-33.8	2,477.4	2.36	2.22	0.79
10,147.0	89.20	0.60	7,798.8	2,540.3	-33.4	2,540.4	1.92	1.75	0.79
10,210.0	89.80	0.60	7,799.3	2,603.3	-32.8	2,603.4	0.95	0.95	0.00
10,273.0	88.90	0.60	7,800.1	2,666.3	-32.1	2,666.4	1.43	-1.43	0.00
10,336.0	87.00	359.20	7,802.3	2,729.3	-32.2	2,729.3	3.75	-3.02	-2.22
10,431.0	89.90	359.80	7,804.9	2,824.2	-33.1	2,824.3	3.12	3.05	0.63
10,526.0	90.30	359.00	7,804.7	2,919.2	-34.1	2,919.3	0.94	0.42	-0.84
10,620.0	91.20	0.10	7,803.5	3,013.2	-34.8	3,013.3	1.51	0.96	1.17

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Hayhurst 23 PA State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3081.0usft (Patterson UTI)
Site:	Sec 23, T25S, R27E	MD Reference:	WELL @ 3081.0usft (Patterson UTI)
Well:	Hayhurst 23 PA State 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)
10,683.0	91.60	359.60	7,801.9	3,076.2	-35.0	3,076.2	1.02	0.63	-0.79
10,746.0	90.50	358.00	7,800.8	3,139.1	-36.3	3,139.2	3.08	-1.75	-2.54
10,809.0	90.80	358.50	7,800.1	3,202.1	-38.2	3,202.2	0.93	0.48	0.79
10,872.0	89.20	357.10	7,800.1	3,265.1	-40.6	3,265.1	3.37	-2.54	-2.22
10,935.0	89.10	358.20	7,801.0	3,328.0	-43.2	3,328.1	1.75	-0.16	1.75
10,998.0	89.60	358.00	7,801.7	3,391.0	-45.3	3,391.1	0.85	0.79	-0.32
11,060.0	90.20	356.90	7,801.8	3,452.9	-48.1	3,453.0	2.02	0.97	-1.77
11,123.0	90.00	359.20	7,801.7	3,515.8	-50.2	3,516.0	3.66	-0.32	3.65
11,186.0	90.30	358.90	7,801.6	3,578.8	-51.2	3,579.0	0.67	0.48	-0.48
11,248.0	89.80	1.90	7,801.5	3,640.8	-50.8	3,640.9	4.91	-0.81	4.84
11,311.0	89.90	1.00	7,801.7	3,703.8	-49.2	3,703.9	1.44	0.16	-1.43
11,374.0	90.70	1.20	7,801.3	3,766.8	-48.0	3,766.9	1.31	1.27	0.32
11,470.0	89.80	2.60	7,800.9	3,862.7	-44.8	3,862.8	1.73	-0.94	1.46
11,564.0	90.40	4.20	7,800.8	3,956.6	-39.3	3,956.7	1.82	0.64	1.70
11,659.0	91.20	4.70	7,799.4	4,051.3	-31.9	4,051.3	0.99	0.84	0.53
11,723.0	91.10	3.10	7,798.1	4,115.1	-27.5	4,115.2	2.50	-0.16	-2.50
11,786.0	89.60	2.40	7,797.8	4,178.0	-24.5	4,178.1	2.63	-2.38	-1.11
11,850.0	89.40	2.00	7,798.3	4,242.0	-22.0	4,242.0	0.70	-0.31	-0.63
11,913.0	90.00	1.50	7,798.7	4,305.0	-20.1	4,305.0	1.24	0.95	-0.79
11,976.0	91.10	359.60	7,798.0	4,367.9	-19.5	4,368.0	3.48	1.75	-3.02
12,040.0	91.60	358.90	7,796.5	4,431.9	-20.4	4,432.0	1.34	0.78	-1.09
12,103.0	90.40	357.80	7,795.4	4,494.9	-22.2	4,494.9	2.58	-1.90	-1.75
12,166.0	87.70	358.70	7,796.5	4,557.8	-24.1	4,557.9	4.52	-4.29	1.43
12,240.0	87.90	358.40	7,799.3	4,631.8	-26.0	4,631.8	0.49	0.27	-0.41
TD @ 12290' MD / 7801.2' TVD									
12,290.0	87.90	358.40	7,801.2	4,681.7	-27.4	4,681.8	0.00	0.00	0.00

Design Annotations

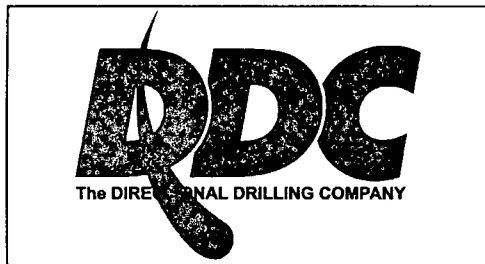
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,050.0	7,047.1	-92.9	-44.4	Tie In @ 7050' MD / 7047' TVD
7,601.4	7,564.7	44.9	-25.4	Crossed Hardline @ 7601.4' MD / 7564.7' TVD
12,290.0	7,801.2	4,681.7	-27.4	TD @ 12290' MD / 7801.2' TVD

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
Hayhurst 23 PA State Com #1H
Eddy County, New Mexico
Rig: Patterson UTI
Created By: TIFFANI MIZELL
Date: 8/19/2013

Hayhurst 23 PA State Com #1H
Eddy County, New Mexico
Q130470 & WT-13555
Design #2

Mewbourne Oil Company



T G M Azimuths to Grid North
Correciton: 7.49°
Magnetic Field
Strength: 48278.3snT
Dip Angle: 59.93°
Date: 7/11/2013
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: Hayhurst 23 PA State Com #1H

Ground Level: 3061.0
Northing Easting Latitude Longitude
0.0 0.0 403333.47 56979.09 32° 6' 31.508 N 104° 9' 12.628 W

DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
PBHL - Hayhurst 23 PA State Com #1H - plan hita target center	7741.0	4696.3	-11.1	408019.73	556668.03	32° 7' 17.896 N	104° 9' 12.656 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Departure	Annotation
7050.0	3.11	252.48	7047.1	-52.9	-44.4	-52.8	180.8	Tie In @ 7050' MD / 7047' TVD
7601.4	41.47	1.26	7564.7	44.9	-25.4	45.0	325.2	Crossed Hardline @ 7601.4' MD / 7564.7' TVD
12230.0	87.90	359.40	7801.2	4681.7	-27.4	4681.8	4964.8	TD @ 12230' MD / 7801.2' TVD

