

Mewbourne Oil Co

Eddy, New Mexico

Sec 4-20S-25E

Long Draw 4 JL Federal #1H

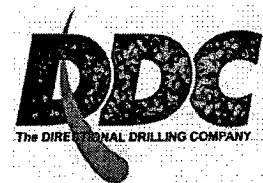
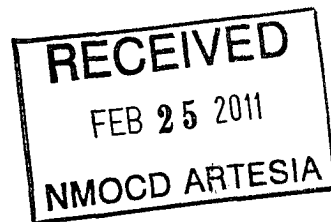
30-015-37585

Wellbore #1

Survey: Long Draw 4 JL Fed #1H

DDC Survey Report

06 December, 2010



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Long Draw 4 JL Federal #1H
Project:	Eddy, New Mexico	TVD Reference:	WELL @ 3500.0usft (Patterson UTI #101)
Site:	Sec 4-20S-25E	MD Reference:	WELL @ 3500.0usft (Patterson UTI #101)
Well:	Long Draw 4 JL Federal #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Eddy, 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 4-20S-25E		
Site Position:		Northing:	581,878.03 usft
From:	Map	Easting:	452,952.66 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 35' 58.542 N
		Longitude:	104° 29' 9.974 W
		Grid Convergence:	-0.08 °

Well	Long Draw 4 JL Federal #1H		
Well Position	+N/-S	0.0 usft	Northing: 581,878.03 usft
	+E/-W	0.0 usft	Easting: 452,952.66 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 35' 58.542 N
		Longitude:	104° 29' 9.974 W
		Ground Level:	3,481.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF200510	10/27/2010	8.10
			Dip Angle (°)
			60.41
			Field Strength (nT)
			48,836

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)
	0.0	0.0	0.0
			Direction (°)
			270.83

Survey Program	Date 12/6/2010		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	1,786.0	Gyro (Wellbore #1)	MWD default
1,903.0	5,605.0	Long Draw 4 JL Fed #1H (Wellbore #1)	MWD default
			Description
			MWD - Standard
			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)
Tie-in to Gyro										
	1,786.0	0.27	350.09	1,786.0	1.8	11.2	-11.2	0.00	0.00	0.00
	1,903.0	1.60	291.60	1,902.9	2.7	9.7	-9.6	1.26	1.14	-49.99
	1,934.0	0.60	70.10	1,933.9	2.9	9.4	-9.4	6.73	-3.23	446.77
	1,966.0	1.50	272.70	1,965.9	3.0	9.1	-9.1	6.46	2.81	-491.88
	1,998.0	6.30	266.70	1,997.8	2.9	7.0	-6.9	15.03	15.00	-18.75
	2,030.0	9.10	270.50	2,029.6	2.8	2.7	-2.6	8.89	8.75	11.88
Crossed Hard Line @ 2048' MD										
	2,048.0	10.55	272.35	2,047.3	2.9	-0.4	0.4	8.24	8.05	10.27

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Site:	Sec 4-20S-25E	MD Reference:	WELL @ 3500.0usft (Patterson UTI #101)
Well:	Long Draw 4 JL Federal #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)
2,061.0	11.60	273.40	2,060.0	3.0	-2.9	2.9	8.24	8.09	8.08
2,093.0	14.70	272.90	2,091.2	3.4	-10.1	10.2	9.69	9.69	-1.56
2,125.0	18.40	271.60	2,121.9	3.8	-19.3	19.3	11.62	11.56	-4.06
2,156.0	22.10	267.80	2,151.0	3.7	-30.0	30.0	12.66	11.94	-12.26
2,188.0	25.50	266.90	2,180.2	3.1	-42.9	42.9	10.69	10.63	-2.81
2,220.0	28.70	267.50	2,208.7	2.4	-57.4	57.5	10.04	10.00	1.88
2,252.0	32.10	271.00	2,236.3	2.2	-73.6	73.6	11.98	10.63	10.94
2,284.0	34.40	271.40	2,263.1	2.6	-91.2	91.2	7.22	7.19	1.25
2,315.0	34.70	268.60	2,288.6	2.6	-108.7	108.8	5.21	0.97	-9.03
2,347.0	36.90	266.30	2,314.6	1.7	-127.4	127.4	8.06	6.88	-7.19
2,379.0	39.70	266.20	2,339.7	0.4	-147.2	147.2	8.75	8.75	-0.31
Crossed Hard Line @ 2385' MD									
2,384.5	40.11	266.31	2,343.9	0.2	-150.7	150.7	7.53	7.42	2.01
2,410.0	42.00	266.80	2,363.1	-0.8	-167.5	167.4	7.53	7.42	1.92
2,441.0	45.10	266.80	2,385.6	-2.0	-188.8	188.7	10.00	10.00	0.00
2,473.0	48.30	268.90	2,407.5	-2.9	-212.0	212.0	11.08	10.00	6.56
2,505.0	51.20	270.40	2,428.2	-3.0	-236.5	236.4	9.74	9.06	4.69
2,537.0	53.90	271.30	2,447.7	-2.6	-261.9	261.8	8.73	8.44	2.81
2,569.0	57.50	271.90	2,465.7	-1.9	-288.3	288.2	11.36	11.25	1.88
2,600.0	61.20	271.90	2,481.5	-1.0	-314.9	314.9	11.94	11.94	0.00
2,632.0	65.00	272.00	2,496.0	0.0	-343.4	343.4	11.88	11.88	0.31
Crossed Hard Line @ 2641' MD									
2,641.0	65.87	272.06	2,499.7	0.3	-351.6	351.6	9.70	9.68	0.66
2,663.0	68.00	272.20	2,508.3	1.0	-371.9	371.8	9.70	9.68	0.64
2,695.0	71.30	272.30	2,519.4	2.2	-401.8	401.8	10.32	10.31	0.31
2,726.0	75.00	272.10	2,528.4	3.3	-431.5	431.5	11.95	11.94	-0.65
2,758.0	79.30	271.70	2,535.5	4.4	-462.6	462.7	13.49	13.44	-1.25
2,789.0	83.30	271.60	2,540.2	5.2	-493.3	493.3	12.91	12.90	-0.32
2,821.0	87.30	271.80	2,542.9	6.2	-525.1	525.2	12.52	12.50	0.63
2,849.0	90.00	269.50	2,543.5	6.5	-553.1	553.2	12.67	9.64	-8.21
2,881.0	90.70	270.10	2,543.3	6.4	-585.1	585.2	2.88	2.19	1.88
2,912.0	90.50	270.00	2,543.0	6.4	-616.1	616.2	0.72	-0.65	-0.32
2,944.0	91.20	271.80	2,542.5	6.9	-648.1	648.1	6.03	2.19	5.63
2,976.0	92.10	272.80	2,541.6	8.2	-680.1	680.1	4.20	2.81	3.13
3,008.0	91.90	273.00	2,540.5	9.8	-712.0	712.1	0.88	-0.63	0.63
3,040.0	91.50	272.60	2,539.5	11.4	-744.0	744.0	1.77	-1.25	-1.25
3,071.0	91.40	272.60	2,538.7	12.8	-774.9	775.0	0.32	-0.32	0.00
3,103.0	91.30	272.40	2,538.0	14.2	-806.9	807.0	0.70	-0.31	-0.63
3,135.0	91.20	272.40	2,537.3	15.5	-838.8	839.0	0.31	-0.31	0.00
3,167.0	92.20	273.50	2,536.3	17.2	-870.8	870.9	4.64	3.13	3.44
3,199.0	92.20	273.90	2,535.1	19.2	-902.7	902.9	1.25	0.00	1.25
3,230.0	91.70	274.00	2,534.1	21.4	-933.6	933.8	1.64	-1.61	0.32
3,262.0	91.80	273.60	2,533.1	23.5	-965.5	965.8	1.29	0.31	-1.25
3,294.0	91.70	272.60	2,532.1	25.2	-997.5	997.7	3.14	-0.31	-3.13

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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)
3,325.0	91.70	272.60	2,531.2	26.6	-1,028.4	1,028.7	0.00	0.00	0.00
3,357.0	90.70	271.80	2,530.5	27.9	-1,060.4	1,060.7	4.00	-3.13	-2.50
3,389.0	90.90	271.50	2,530.1	28.8	-1,092.4	1,092.7	1.13	0.63	-0.94
3,421.0	90.70	271.30	2,529.6	29.6	-1,124.4	1,124.7	0.88	-0.63	-0.63
3,453.0	90.90	271.00	2,529.2	30.2	-1,156.3	1,156.7	1.13	0.63	-0.94
3,516.0	91.00	270.40	2,528.1	31.0	-1,219.3	1,219.6	0.97	0.16	-0.95
3,580.0	90.70	270.60	2,527.2	31.5	-1,283.3	1,283.6	0.56	-0.47	0.31
3,643.0	90.70	270.20	2,526.4	32.0	-1,346.3	1,346.6	0.63	0.00	-0.63
3,707.0	90.60	269.90	2,525.7	32.0	-1,410.3	1,410.6	0.49	-0.16	-0.47
3,770.0	91.30	270.50	2,524.6	32.2	-1,473.3	1,473.6	1.46	1.11	0.95
3,828.0	91.20	270.40	2,523.4	32.7	-1,531.3	1,531.6	0.24	-0.17	-0.17
3,888.0	90.80	269.80	2,522.3	32.8	-1,591.3	1,591.6	1.20	-0.67	-1.00
3,946.0	90.60	270.30	2,521.6	32.9	-1,649.3	1,649.6	0.93	-0.34	0.86
4,005.0	90.70	271.40	2,521.0	33.7	-1,708.3	1,708.6	1.87	0.17	1.86
4,063.0	90.20	271.10	2,520.5	35.0	-1,766.2	1,766.6	1.01	-0.86	-0.52
4,121.0	89.70	270.60	2,520.6	35.9	-1,824.2	1,824.6	1.22	-0.86	-0.86
4,181.0	90.10	270.80	2,520.7	36.6	-1,884.2	1,884.6	0.75	0.67	0.33
4,240.0	90.70	271.40	2,520.2	37.7	-1,943.2	1,943.6	1.44	1.02	1.02
4,299.0	90.40	270.60	2,519.7	38.8	-2,002.2	2,002.6	1.45	-0.51	-1.36
4,358.0	91.40	269.90	2,518.7	39.0	-2,061.2	2,061.5	2.07	1.69	-1.19
4,415.0	92.70	270.40	2,516.7	39.2	-2,118.2	2,118.5	2.44	2.28	0.88
4,478.0	93.10	271.00	2,513.5	39.9	-2,181.1	2,181.4	1.14	0.63	0.95
4,542.0	92.40	271.60	2,510.5	41.4	-2,245.0	2,245.3	1.44	-1.09	0.94
4,605.0	91.10	272.20	2,508.5	43.5	-2,307.9	2,308.3	2.27	-2.06	0.95
4,668.0	90.70	271.70	2,507.5	45.6	-2,370.9	2,371.3	1.02	-0.63	-0.79
4,732.0	90.60	271.50	2,506.8	47.4	-2,434.8	2,435.3	0.35	-0.16	-0.31
4,796.0	90.70	271.10	2,506.1	48.8	-2,498.8	2,499.3	0.64	0.16	-0.63
4,859.0	90.70	271.20	2,505.3	50.1	-2,561.8	2,562.3	0.16	0.00	0.16
4,923.0	90.70	270.90	2,504.5	51.3	-2,625.8	2,626.3	0.47	0.00	-0.47
4,986.0	90.50	270.40	2,503.9	52.0	-2,688.8	2,689.3	0.85	-0.32	-0.79
5,050.0	89.60	270.00	2,503.8	52.2	-2,752.8	2,753.2	1.54	-1.41	-0.63
5,113.0	91.40	270.10	2,503.3	52.3	-2,815.8	2,816.2	2.86	2.86	0.16
5,177.0	91.50	270.10	2,501.7	52.4	-2,879.8	2,880.2	0.16	0.16	0.00
5,240.0	91.10	269.70	2,500.2	52.3	-2,942.7	2,943.2	0.90	-0.63	-0.63
5,304.0	91.90	269.40	2,498.5	51.8	-3,006.7	3,007.1	1.33	1.25	-0.47
5,368.0	91.90	270.90	2,496.4	51.9	-3,070.7	3,071.1	2.34	0.00	2.34
5,431.0	92.00	271.70	2,494.3	53.4	-3,133.6	3,134.1	1.28	0.16	1.27
5,495.0	90.50	271.50	2,492.9	55.2	-3,197.6	3,198.0	2.36	-2.34	-0.31
5,558.0	90.10	270.80	2,492.6	56.4	-3,260.6	3,261.0	1.28	-0.63	-1.11
Projection to Bit									
5,605.0	90.10	270.80	2,492.5	57.1	-3,307.6	3,308.0	0.00	0.00	0.00

DDC
Survey Report



Company: Mewbourne Oil Co
Project: Eddy, New Mexico
Site: Sec 4-20S-25E
Well: Long Draw 4 JL Federal #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Long Draw 4 JL Federal #1H
TVD Reference: WELL @ 3500.0usft (Patterson UTI #101)
MD Reference: WELL @ 3500.0usft (Patterson UTI #101)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,786.0	1,786.0	1.8	11.2	Tie-in to Gyro
2,048.0	2,047.3	2.9	-0.4	Crossed Hard Line @ 2048' MD
2,384.5	2,343.9	0.2	-150.7	Crossed Hard Line @ 2385' MD
2,641.0	2,499.7	0.3	-351.6	Crossed Hard Line @ 2641' MD
5,605.0	2,492.5	57.1	-3,307.6	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____