

30-015-38228

Mewbourne Oil Co

Eddy County, New Mexico

Sec 28-18S-30E

Bradley 28 Fed Com #1H

Wellbore #1

Survey: MWD Survey

Final DDC Survey Report

12 April, 2011



Accepted for record - NMOCD



DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico
Site: Sec 28-18S-30E
Well: Bradley 28 Fed Com #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Bradley 28 Fed Com #1H
TVD Reference: WELL @ 3431.0usft (Patterson UTI #46)
MD Reference: WELL @ 3431.0usft (Patterson UTI #46)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project: Eddy County, New Mexico

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site: Sec 28-18S-30E

Site Position: Northing: 626,279.25 usft Latitude: 32° 43' 16.513 N
From: Map Easting: 607,181.52 usft Longitude: 103° 59' 5.373 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.19 °

Well: Bradley 28 Fed Com #1H

Well Position: +N/-S 0.0 usft Northing: 626,279.25 usft Latitude: 32° 43' 16.513 N
+E/-W 0.0 usft Easting: 607,181.52 usft Longitude: 103° 59' 5.373 W
Position Uncertainty: 0.0 usft Wellhead Elevation: usft Ground Level: 3,410.0 usft

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/17/2011	7.84	60.58	48,895

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	89.92

Survey Program: Date: 4/12/2011

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,500.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
7,588.0	12,892.0	MWD Survey (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)
Tie-In to gyro:									
7,500.0	0.27	12.98	7,497.7	111.4	-48.8	-48.6	0.00	0.00	0.00
7,588.0	0.30	156.70	7,585.7	111.4	-48.6	-48.5	0.62	0.03	163.32
7,620.0	0.50	160.10	7,617.7	111.2	-48.5	-48.4	0.63	0.63	10.63
7,652.0	2.90	117.50	7,649.7	110.7	-47.8	-47.6	7.98	7.50	-133.13
7,683.0	6.20	108.70	7,680.6	109.8	-45.5	-45.3	10.85	10.65	-28.39
7,715.0	9.10	105.40	7,712.3	108.5	-41.4	-41.3	9.16	9.06	-10.31
7,746.0	11.70	103.50	7,742.8	107.2	-36.0	-35.9	8.46	8.39	-6.13
7,778.0	14.70	102.10	7,774.0	105.6	-28.9	-28.7	9.43	9.38	-4.38
7,810.0	17.20	100.10	7,804.7	103.9	-20.2	-20.1	8.00	7.81	-6.25

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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)
7,842.0	19.40	97.50	7,835.1	102.4	-10.3	-10.2	7.33	6.88	-8.13
7,874.0	21.80	95.20	7,865.1	101.1	0.9	1.0	7.91	7.50	-7.19
7,906.0	23.60	96.10	7,894.6	99.9	13.2	13.3	5.73	5.63	2.81
7,938.0	25.90	96.30	7,923.6	98.5	26.5	26.6	7.19	7.19	0.63
7,969.0	29.40	95.00	7,951.1	97.0	40.8	40.9	11.46	11.29	-4.19
8,001.0	32.20	94.30	7,978.6	95.7	57.1	57.3	8.82	8.75	-2.19
8,033.0	35.00	93.60	8,005.2	94.5	74.8	74.9	8.83	8.75	-2.19
8,065.0	38.30	92.60	8,030.9	93.5	93.9	94.0	10.48	10.31	-3.13
8,096.0	42.20	91.50	8,054.6	92.8	113.9	114.0	12.79	12.58	-3.55
8,128.0	45.60	91.00	8,077.6	92.3	136.0	136.2	10.68	10.63	-1.56
8,160.0	48.70	90.60	8,099.4	92.0	159.5	159.6	9.73	9.69	-1.25
8,191.0	52.10	91.90	8,119.1	91.4	183.4	183.5	11.43	10.97	4.19
8,223.0	55.00	92.90	8,138.1	90.4	209.1	209.2	9.40	9.06	3.13
8,255.0	58.30	92.70	8,155.7	89.0	235.8	235.9	10.33	10.31	-0.63
8,286.0	61.80	92.60	8,171.2	87.8	262.6	262.7	11.29	11.29	-0.32
Crossed Hard-Line @ 8287' MD									
8,287.0	61.92	92.60	8,171.7	87.8	263.5	263.6	11.88	11.87	0.32
8,318.0	65.60	92.70	8,185.4	86.5	291.3	291.4	11.88	11.88	0.31
8,350.0	69.50	92.90	8,197.6	85.0	320.8	320.9	12.20	12.19	0.63
8,376.0	72.70	92.90	8,206.0	83.8	345.4	345.5	12.31	12.31	0.00
8,427.0	80.00	89.90	8,218.0	82.6	394.9	395.0	15.41	14.31	-5.88
8,459.0	84.10	93.40	8,222.5	81.7	426.5	426.7	16.78	12.81	10.94
8,491.0	89.10	93.40	8,224.4	79.8	458.4	458.5	15.63	15.63	0.00
8,523.0	90.80	93.40	8,224.4	77.9	490.4	490.5	5.31	5.31	0.00
8,554.0	90.90	92.90	8,223.9	76.2	521.3	521.4	1.64	0.32	-1.61
8,586.0	91.20	92.90	8,223.3	74.6	553.3	553.4	0.94	0.94	0.00
8,618.0	90.20	92.40	8,223.0	73.1	585.2	585.3	3.49	-3.13	-1.56
8,649.0	90.00	92.40	8,222.9	71.8	616.2	616.3	0.65	-0.65	0.00
8,681.0	88.60	91.90	8,223.3	70.6	648.2	648.3	4.65	-4.38	-1.56
8,712.0	88.40	92.00	8,224.1	69.5	679.1	679.2	0.72	-0.65	0.32
8,744.0	88.30	91.70	8,225.0	68.5	711.1	711.2	0.99	-0.31	-0.94
8,775.0	89.80	91.30	8,225.5	67.7	742.1	742.2	5.01	4.84	-1.29
8,807.0	89.80	91.30	8,225.7	67.0	774.1	774.2	0.00	0.00	0.00
8,839.0	89.90	91.20	8,225.7	66.3	806.1	806.2	0.44	0.31	-0.31
8,903.0	89.80	90.80	8,225.9	65.2	870.1	870.2	0.64	-0.16	-0.63
8,967.0	89.50	91.00	8,226.3	64.1	934.1	934.1	0.56	-0.47	0.31
9,030.0	89.10	91.00	8,227.1	63.0	997.0	997.1	0.63	-0.63	0.00
9,094.0	90.10	91.20	8,227.5	61.8	1,061.0	1,061.1	1.59	1.56	0.31
9,157.0	90.50	91.00	8,227.2	60.6	1,124.0	1,124.1	0.71	0.63	-0.32
9,221.0	90.00	90.40	8,226.9	59.8	1,188.0	1,188.1	1.22	-0.78	-0.94
9,285.0	90.00	90.30	8,226.9	59.4	1,252.0	1,252.1	0.16	0.00	-0.16
9,348.0	89.20	90.60	8,227.3	58.9	1,315.0	1,315.1	1.36	-1.27	0.48
9,412.0	88.60	90.30	8,228.6	58.4	1,379.0	1,379.1	1.05	-0.94	-0.47

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MD Reference: WELL @ 3431.0usft (Patterson UTi #46)
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)
9,475.0	88.50	90.30	8,230.2	58.1	1,442.0	1,442.1	0.16	-0.16	0.00
9,539.0	88.20	90.10	8,232.0	57.9	1,505.9	1,506.0	0.56	-0.47	-0.31
9,603.0	89.30	90.30	8,233.4	57.7	1,569.9	1,570.0	1.75	1.72	0.31
9,666.0	89.00	90.30	8,234.3	57.3	1,632.9	1,633.0	0.48	-0.48	0.00
9,730.0	90.10	90.80	8,234.8	56.7	1,696.9	1,697.0	1.89	1.72	0.78
9,794.0	89.90	90.60	8,234.8	55.9	1,760.9	1,761.0	0.44	-0.31	-0.31
9,857.0	89.50	90.30	8,235.2	55.4	1,823.9	1,824.0	0.79	-0.63	-0.48
9,920.0	89.30	90.30	8,235.8	55.1	1,886.9	1,887.0	0.32	-0.32	0.00
9,983.0	90.20	90.10	8,236.1	54.9	1,949.9	1,950.0	1.46	1.43	-0.32
10,047.0	89.90	89.40	8,236.0	55.2	2,013.9	2,014.0	1.19	-0.47	-1.09
10,111.0	89.40	88.90	8,236.4	56.1	2,077.9	2,078.0	1.10	-0.78	-0.78
10,174.0	88.70	88.20	8,237.5	57.7	2,140.9	2,140.9	1.57	-1.11	-1.11
10,238.0	89.50	88.70	8,238.5	59.4	2,204.8	2,204.9	1.47	1.25	0.78
10,301.0	89.90	90.10	8,238.8	60.1	2,267.8	2,267.9	2.31	0.63	2.22
10,364.0	89.90	91.30	8,238.9	59.3	2,330.8	2,330.9	1.90	0.00	1.90
10,428.0	89.90	91.50	8,239.0	57.8	2,394.8	2,394.9	0.31	0.00	0.31
10,492.0	89.90	91.20	8,239.2	56.3	2,458.8	2,458.9	0.47	0.00	-0.47
10,555.0	89.60	90.30	8,239.4	55.4	2,521.8	2,521.8	1.51	-0.48	-1.43
10,619.0	89.90	91.70	8,239.7	54.3	2,585.8	2,585.8	2.24	0.47	2.19
10,683.0	89.10	92.40	8,240.3	52.0	2,649.7	2,649.8	1.66	-1.25	1.09
10,747.0	88.80	92.00	8,241.4	49.6	2,713.7	2,713.7	0.78	-0.47	-0.63
10,810.0	90.00	92.40	8,242.1	47.2	2,776.6	2,776.7	2.01	1.90	0.63
10,874.0	90.00	92.20	8,242.1	44.6	2,840.6	2,840.6	0.31	0.00	-0.31
10,938.0	90.10	92.00	8,242.0	42.2	2,904.5	2,904.6	0.35	0.16	-0.31
11,002.0	90.10	92.00	8,241.9	40.0	2,968.5	2,968.5	0.00	0.00	0.00
11,066.0	89.30	92.60	8,242.3	37.4	3,032.4	3,032.5	1.56	-1.25	0.94
11,129.0	88.90	92.00	8,243.3	34.9	3,095.4	3,095.4	1.14	-0.63	-0.95
11,193.0	88.40	91.50	8,244.8	33.0	3,159.3	3,159.4	1.10	-0.78	-0.78
11,256.0	89.00	91.30	8,246.2	31.4	3,222.3	3,222.3	1.00	0.95	-0.32
11,320.0	90.20	91.70	8,246.6	29.7	3,286.3	3,286.3	1.98	1.88	0.63
11,384.0	90.00	91.30	8,246.5	28.1	3,350.2	3,350.3	0.70	-0.31	-0.63
11,447.0	90.00	91.20	8,246.5	26.7	3,413.2	3,413.3	0.16	0.00	-0.16
11,511.0	89.20	91.20	8,247.0	25.4	3,477.2	3,477.2	1.25	-1.25	0.00
11,574.0	88.70	90.80	8,248.1	24.3	3,540.2	3,540.2	1.02	-0.79	-0.63
11,638.0	89.20	90.60	8,249.3	23.5	3,604.2	3,604.2	0.84	0.78	-0.31
11,701.0	89.20	90.40	8,250.2	22.9	3,667.2	3,667.2	0.32	0.00	-0.32
11,765.0	88.90	90.10	8,251.2	22.6	3,731.1	3,731.2	0.66	-0.47	-0.47
11,828.0	88.10	88.70	8,252.9	23.3	3,794.1	3,794.1	2.56	-1.27	-2.22
11,891.0	88.90	89.40	8,254.5	24.4	3,857.1	3,857.1	1.69	1.27	1.11
11,955.0	89.90	90.40	8,255.2	24.5	3,921.1	3,921.1	2.21	1.56	1.56
12,017.0	89.90	89.90	8,255.3	24.3	3,983.1	3,983.1	0.81	0.00	-0.81
12,080.0	89.70	89.60	8,255.5	24.6	4,046.1	4,046.1	0.57	-0.32	-0.48
12,144.0	89.50	89.40	8,256.0	25.1	4,110.1	4,110.1	0.44	-0.31	-0.31
12,207.0	89.90	89.20	8,256.3	25.9	4,173.1	4,173.1	0.71	0.63	-0.32

DDC Survey Report



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Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3431.0usft (Patterson UTI #46)
Site:	Sec 28-18S-30E	MD Reference:	WELL @ 3431.0usft (Patterson UTI #46)
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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

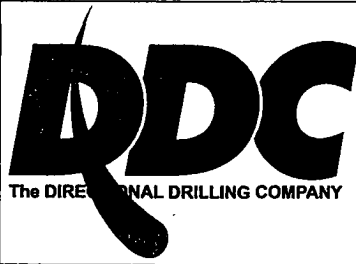
Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,270.0	89.90	89.90	8,256.4	26.4	4,236.1	4,236.1	1.11	0.00	1.11
12,334.0	89.80	90.80	8,256.6	26.0	4,300.1	4,300.1	1.41	-0.16	1.41
12,397.0	89.80	92.90	8,256.8	24.0	4,363.0	4,363.1	3.33	0.00	3.33
12,461.0	90.20	93.60	8,256.8	20.3	4,426.9	4,427.0	1.26	0.63	1.09
12,525.0	89.20	94.00	8,257.1	16.1	4,490.8	4,490.8	1.68	-1.56	0.63
12,588.0	88.90	94.10	8,258.2	11.7	4,553.6	4,553.6	0.50	-0.48	0.16
12,651.0	88.60	93.30	8,259.6	7.6	4,616.5	4,616.5	1.36	-0.48	-1.27
12,715.0	88.50	93.10	8,261.2	4.0	4,680.4	4,680.4	0.35	-0.16	-0.31
12,778.0	88.50	92.90	8,262.8	0.7	4,743.2	4,743.2	0.32	0.00	-0.32
12,842.0	88.10	92.70	8,264.7	-2.4	4,807.1	4,807.1	0.70	-0.63	-0.31
TD									
12,892.0	88.10	92.70	8,266.4	-4.8	4,857.1	4,857.0	0.00	0.00	0.00

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,500.0	7,497.7	111.4	-48.8	Tie-In to gyro
8,287.0	8,171.7	87.8	263.5	Crossed Hard-Line @ 8287' MD
12,892.0	8,266.4	-4.8	4,857.1	TD

Checked By: _____ Approved By: _____ Date: _____

Bradley 28 Fed Com #1H
Eddy County, New Mexico
Q100888 & WT-11141

Company Name: Mewbourne Oil Co
Bradley 28 Fed Com #1H
Eddy County, New Mexico
Rig: Patterson UTI #46
Created By: Kristen Koch
Date: 4/12/2011



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

Azimuths to Grid North
Magnetic North: 7.66°
Magnetic Field
Strength: 48894.9snT
Dip Angle: 60.58°
Date: 3/17/2011
Model: IGRF2010

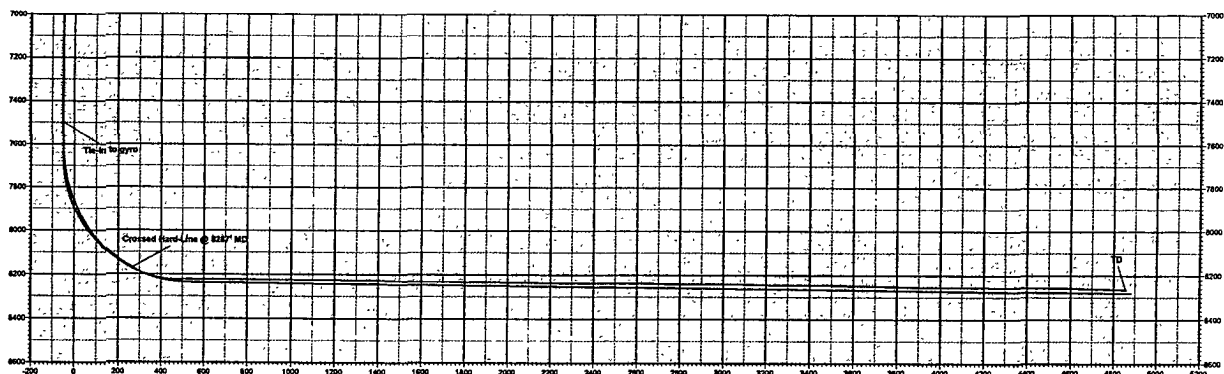
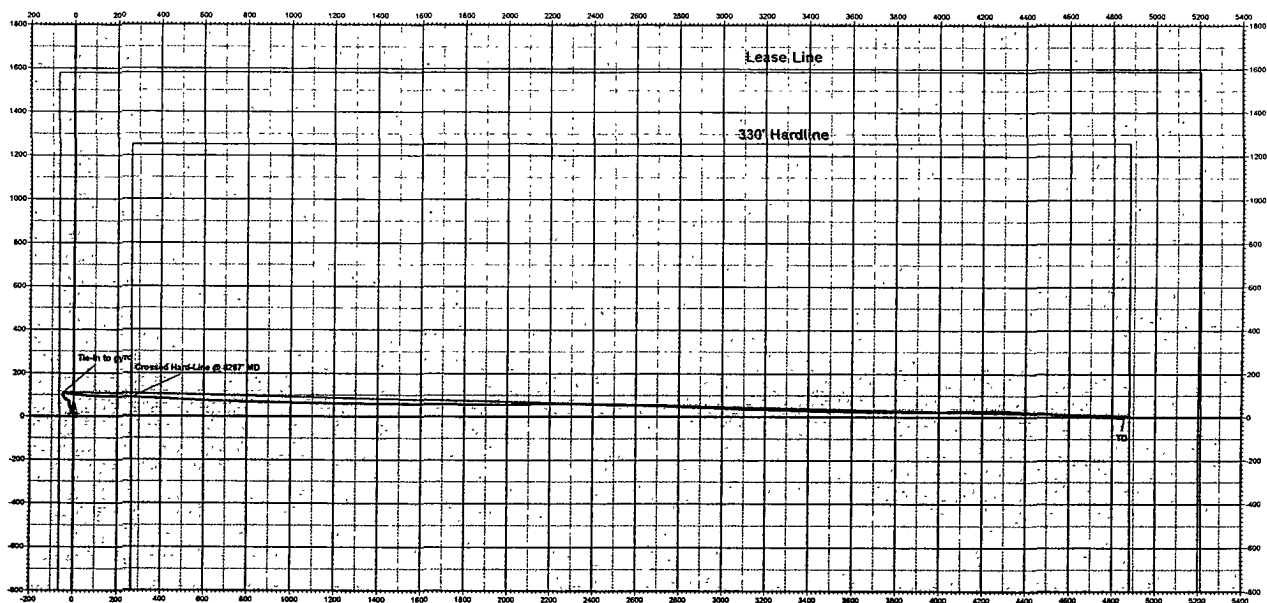
Mewbourne Oil Company

WELL DETAILS Bradley 28 Fed Com #1H

+N/-S	+E/-W	North	Ground Level	East	Latitude	Longitude
0.0	0.0	626279.24	3410.0	607181.61	32° 43' 16.613 N	105° 59' 5.373 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
7600.0	0.27	12.98	7497.7	111.4	-48.8	-48.6	158.7	Tie-in to gyro
8171.7	82.87.0	61.92	92.60	87.8	263.6	263.6	473.1	Crossed Hard-Line @ 8287' MD
12892.0	88.10	92.70	8266.4	-4.8	4857.1	4857.0	5066.7	TD



Vertical Section at 89.92° (200 usf/m)