

15-39258

Mewbourne Oil Co

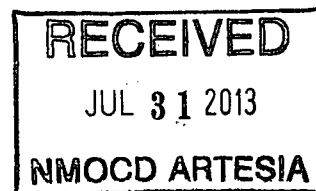
Eddy County, New Mexico

Sec 33 19S-25E

State B 33 DA #1H

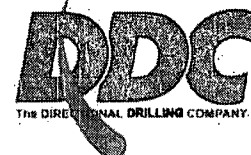
Wellbore #1

Design: Wellbore #1



DDC Survey Report

03 July, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well State B 33 DA #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3510.0usft (Patterson)
Site:	Sec 33 19S-25E	MD Reference:	WELL @ 3510.0usft (Patterson)
Well:	State B 33 DA #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 33 19S-25E		
Site Position:		Northing:	449,660.15 usft
From:	Map	Easting:	588,637.71 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 14' 9.268 N
		Longitude:	104° 2' 47.992 W
		Grid Convergence:	0.15 °

Well	State B 33 DA #1H		
Well Position	+N/-S	0.0 usft	Northing: 590,517.64 usft
	+E/-W	0.0 usft	Easting: 449,483.78 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 37' 23.986 N
		Longitude:	104° 29' 50.681 W
		Ground Level:	3,499.0 usft

Wellbore	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/15/2013	7.81	60.35	48,561

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	90.07

Survey Program		Date 7/3/2013	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	1,789.0	GYRO (Wellbore #1)	Good_gyro
1,869.0	7,010.0	MWD (Wellbore #1)	MWD default
			Description
			Good Gyro
			MWD - Standard

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	0.40	168.79	100.0	-0.3	0.1	0.1	0.40	0.40	0.00
200.0	0.53	209.19	200.0	-1.1	-0.1	-0.1	0.34	0.13	40.40
300.0	0.65	197.12	300.0	-2.0	-0.5	-0.5	0.17	0.12	-12.07
400.0	0.68	179.04	400.0	-3.2	-0.6	-0.6	0.21	0.03	-18.08
500.0	0.73	167.36	500.0	-4.4	-0.5	-0.5	0.15	0.05	-11.68
600.0	0.94	164.59	600.0	-5.8	-0.1	-0.1	0.21	0.21	-2.77
700.0	1.14	201.58	700.0	-7.5	-0.3	-0.3	0.69	0.20	36.99
800.0	0.95	209.20	799.9	-9.2	-1.1	-1.0	0.24	-0.19	7.62
900.0	0.78	228.76	899.9	-10.3	-2.0	-2.0	0.34	-0.17	19.56

DDC Survey Report



Company: Mewbourne Oil Co
Project: Eddy County, New Mexico
Site: Sec 33 19S-25E
Well: State B 33 DA #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well State B 33 DA #1H
TVD Reference: WELL @ 3510.0usft (Patterson)
MD Reference: WELL @ 3510.0usft (Patterson)
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	0.27	231.27	999.9	-10.9	-2.7	-2.6	0.51	-0.51	2.51
1,100.0	0.21	280.25	1,099.9	-11.0	-3.0	-3.0	0.21	-0.06	48.98
1,200.0	0.37	260.75	1,199.9	-11.1	-3.5	-3.5	0.19	0.16	-19.50
1,300.0	0.37	260.42	1,299.9	-11.2	-4.2	-4.1	0.00	0.00	-0.33
1,400.0	0.33	233.33	1,399.9	-11.4	-4.7	-4.7	0.17	-0.04	-27.09
1,500.0	0.20	236.01	1,499.9	-11.7	-5.1	-5.1	0.13	-0.13	2.68
1,600.0	0.14	293.89	1,599.9	-11.7	-5.3	-5.3	0.17	-0.06	57.88
1,700.0	0.08	339.24	1,699.9	-11.6	-5.5	-5.5	0.10	-0.06	45.35
TIE ON @ 1789' MD / 1789' TVD									
1,789.0	0.15	28.66	1,788.9	-11.4	-5.4	-5.4	0.13	0.08	55.53
1,869.0	1.00	76.40	1,868.9	-11.2	-4.7	-4.7	1.13	1.06	59.68
1,901.0	5.50	84.80	1,900.8	-11.0	-2.9	-2.9	14.10	14.06	26.25
1,933.0	9.90	85.10	1,932.5	-10.6	1.4	1.4	13.75	13.75	0.94
1,965.0	13.40	83.90	1,963.9	-10.0	7.8	7.8	10.96	10.94	-3.75
1,996.0	17.10	84.50	1,993.8	-9.2	15.9	15.9	11.95	11.94	1.94
2,028.0	20.90	86.40	2,024.0	-8.3	26.3	26.3	12.03	11.88	5.94
2,060.0	24.60	89.00	2,053.5	-7.9	38.6	38.6	11.98	11.56	8.13
2,091.0	27.70	91.80	2,081.4	-8.0	52.3	52.3	10.76	10.00	9.03
2,123.0	30.80	91.90	2,109.3	-8.5	67.9	67.9	9.69	9.69	0.31
2,154.0	33.50	91.20	2,135.5	-8.9	84.4	84.4	8.79	8.71	-2.26
2,186.0	36.30	90.20	2,161.8	-9.2	102.7	102.7	8.93	8.75	-3.13
2,217.0	39.00	89.50	2,186.3	-9.1	121.6	121.7	8.82	8.71	-2.26
2,249.0	41.60	88.80	2,210.7	-8.8	142.3	142.3	8.25	8.13	-2.19
2,280.0	44.60	88.60	2,233.4	-8.3	163.5	163.5	9.69	9.68	-0.65
CROSSED HARDLINE @ 2303.1' MD / 2249.5' TVD									
2,303.1	46.55	88.82	2,249.5	-7.9	180.0	180.0	8.46	8.44	0.95
2,312.0	47.30	88.90	2,255.6	-7.8	186.5	186.5	8.46	8.44	0.91
2,343.0	49.70	89.60	2,276.1	-7.5	209.7	209.7	7.92	7.74	2.26
2,375.0	52.20	90.20	2,296.3	-7.5	234.6	234.6	7.95	7.81	1.88
2,406.0	54.70	90.40	2,314.8	-7.6	259.5	259.5	8.08	8.06	0.65
2,438.0	57.50	89.70	2,332.6	-7.6	286.0	286.0	8.94	8.75	-2.19
2,469.0	60.60	89.00	2,348.5	-7.3	312.6	312.6	10.19	10.00	-2.26
2,501.0	63.60	88.00	2,363.5	-6.6	340.9	340.9	9.77	9.38	-3.13
2,533.0	66.10	88.20	2,377.1	-5.6	369.8	369.8	7.83	7.81	0.63
2,564.0	67.90	88.50	2,389.2	-4.8	398.3	398.3	5.87	5.81	0.97
2,596.0	70.70	88.60	2,400.5	-4.0	428.3	428.3	8.75	8.75	0.31
2,627.0	73.10	89.10	2,410.2	-3.4	457.7	457.7	7.89	7.74	1.61
2,659.0	75.40	89.70	2,418.9	-3.1	488.5	488.5	7.41	7.19	1.88
2,691.0	78.00	89.60	2,426.2	-2.9	519.7	519.7	8.13	8.13	-0.31
2,722.0	79.00	89.70	2,432.4	-2.7	550.0	550.0	3.24	3.23	0.32
2,754.0	81.80	89.90	2,437.7	-2.6	581.6	581.6	8.77	8.75	0.63
2,785.0	86.10	89.80	2,441.0	-2.5	612.4	612.4	13.87	13.87	-0.32
2,792.0	86.80	89.90	2,441.4	-2.5	619.4	619.4	10.10	10.00	1.43

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well State B 33 DA #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3510.0usft (Patterson)
Site:	Sec 33 19S-25E	MD Reference:	WELL @ 3510.0usft (Patterson)
Well:	State B 33 DA #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)	
2,875.0	89.30	90.60	2,444.3	-2.9	702.3	702.3	3.13	3.01	0.84	
2,938.0	89.80	89.30	2,444.8	-2.8	765.3	765.3	2.21	0.79	-2.06	
3,001.0	88.70	88.90	2,445.6	-1.8	828.3	828.3	1.86	-1.75	-0.63	
3,064.0	88.20	88.60	2,447.3	-0.5	891.3	891.3	0.93	-0.79	-0.48	
3,128.0	89.10	88.50	2,448.8	1.1	955.2	955.2	1.41	1.41	-0.16	
3,191.0	89.80	88.10	2,449.4	3.0	1,018.2	1,018.2	1.28	1.11	-0.63	
3,254.0	89.10	88.00	2,450.0	5.2	1,081.2	1,081.2	1.12	-1.11	-0.16	
3,317.0	88.50	88.40	2,451.3	7.1	1,144.1	1,144.1	1.14	-0.95	0.63	
3,380.0	88.40	88.90	2,453.0	8.6	1,207.1	1,207.1	0.81	-0.16	0.79	
3,444.0	88.80	89.80	2,454.6	9.3	1,271.1	1,271.0	1.54	0.63	1.41	
3,507.0	89.60	90.10	2,455.5	9.4	1,334.0	1,334.0	1.36	1.27	0.48	
3,570.0	88.80	90.00	2,456.3	9.3	1,397.0	1,397.0	1.28	-1.27	-0.16	
3,634.0	88.80	91.80	2,457.7	8.3	1,461.0	1,461.0	2.81	0.00	2.81	
3,729.0	89.20	92.60	2,459.3	4.7	1,555.9	1,555.9	0.94	0.42	0.84	
3,823.0	90.10	92.60	2,459.9	0.4	1,649.8	1,649.8	0.96	0.96	0.00	
3,918.0	89.50	90.40	2,460.2	-2.1	1,744.8	1,744.8	2.40	-0.63	-2.32	
4,013.0	87.90	90.30	2,462.4	-2.6	1,839.8	1,839.8	1.69	-1.68	-0.11	
4,076.0	88.60	88.80	2,464.3	-2.1	1,902.7	1,902.7	2.63	1.11	-2.38	
4,171.0	88.50	90.00	2,466.7	-1.1	1,997.7	1,997.7	1.27	-0.11	1.26	
4,266.0	87.40	91.20	2,470.1	-2.1	2,092.6	2,092.6	1.71	-1.16	1.26	
4,361.0	87.90	90.90	2,474.0	-3.9	2,187.5	2,187.5	0.61	0.53	-0.32	
4,456.0	88.20	89.60	2,477.3	-4.3	2,282.5	2,282.5	1.40	0.32	-1.37	
4,551.0	88.30	89.70	2,480.2	-3.7	2,377.4	2,377.4	0.15	0.11	0.11	
4,646.0	89.50	89.00	2,482.0	-2.6	2,472.4	2,472.4	1.46	1.26	-0.74	
4,740.0	89.80	90.40	2,482.6	-2.1	2,566.4	2,566.4	1.52	0.32	1.49	
4,835.0	90.50	90.30	2,482.3	-2.7	2,661.4	2,661.4	0.74	0.74	-0.11	
4,930.0	90.00	91.60	2,481.9	-4.3	2,756.4	2,756.4	1.47	-0.53	1.37	
5,025.0	88.30	91.80	2,483.3	-7.1	2,851.3	2,851.3	1.80	-1.79	0.21	
5,120.0	88.70	92.50	2,485.8	-10.7	2,946.2	2,946.2	0.85	0.42	0.74	
5,214.0	89.10	89.90	2,487.6	-12.7	3,040.2	3,040.2	2.80	0.43	-2.77	
5,309.0	88.30	89.00	2,489.7	-11.7	3,135.1	3,135.2	1.27	-0.84	-0.95	
5,401.0	88.30	90.70	2,492.5	-11.5	3,227.1	3,227.1	1.85	0.00	1.85	
5,493.0	89.20	88.40	2,494.5	-10.8	3,319.1	3,319.1	2.68	0.98	-2.50	
5,584.0	89.80	90.40	2,495.3	-9.8	3,410.1	3,410.1	2.29	0.66	2.20	
5,676.0	89.40	91.60	2,495.9	-11.4	3,502.0	3,502.0	1.37	-0.43	1.30	
5,765.0	89.70	91.70	2,496.6	-14.0	3,591.0	3,591.0	0.36	0.34	0.11	
5,855.0	90.00	90.50	2,496.9	-15.7	3,681.0	3,681.0	1.37	0.33	-1.33	
5,950.0	89.20	90.30	2,497.5	-16.4	3,776.0	3,776.0	0.87	-0.84	-0.21	
6,042.0	89.70	91.00	2,498.4	-17.4	3,868.0	3,868.0	0.94	0.54	0.76	
6,101.0	89.20	90.80	2,499.0	-18.4	3,926.9	3,927.0	0.91	-0.85	-0.34	
6,194.0	89.20	90.00	2,500.3	-19.0	4,019.9	4,020.0	0.86	0.00	-0.86	
6,288.0	88.40	89.20	2,502.2	-18.3	4,113.9	4,113.9	1.20	-0.85	-0.85	
6,351.0	89.90	87.50	2,503.2	-16.5	4,176.9	4,176.9	3.60	2.38	-2.70	
6,414.0	89.50	86.80	2,503.5	-13.4	4,239.8	4,239.8	1.28	-0.63	-1.11	

DDC Survey Report



Company: Mewbourne Oil Co.
Project: Eddy County, New Mexico
Site: Sec 33 19S-25E
Well: State B 33 DA #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well State B 33 DA #1H
TVD Reference: WELL @ 3510.0usft (Patterson)
MD Reference: WELL @ 3510.0usft (Patterson)
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)
6,477.0	88.10	86.00	2,504.8	-9.4	4,302.7	4,302.7	2.56	-2.22	-1.27
6,541.0	85.40	88.20	2,508.4	-6.2	4,366.5	4,366.5	5.44	-4.22	3.44
6,604.0	87.20	88.90	2,512.5	-4.6	4,429.3	4,429.3	3.06	2.86	1.11
6,699.0	88.70	90.40	2,515.9	-4.0	4,524.2	4,524.2	2.23	1.58	1.58
6,794.0	87.80	91.50	2,518.8	-5.6	4,619.2	4,619.2	1.50	-0.95	1.16
6,889.0	87.90	91.20	2,522.4	-7.9	4,714.1	4,714.1	0.33	0.11	-0.32
6,965.0	88.20	89.50	2,525.0	-8.3	4,790.0	4,790.0	2.27	0.39	-2.24
TD @ 7010' MD / 2526.4' TVD									
7,010.0	88.20	89.50	2,526.4	-7.9	4,835.0	4,835.0	0.00	0.00	0.00

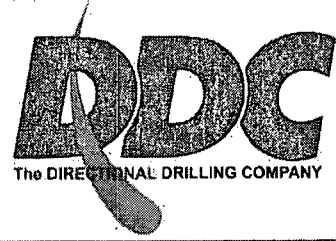
Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,789.0	1,788.9	-11.4	-5.4	TIE ON @ 1789' MD / 1789' TVD
2,303.1	2,249.5	-7.9	180.0	CROSSED HARDLINE @ 2303.1' MD / 2249.5' TVD
7,010.0	2,526.4	-7.9	4,835.0	TD @ 7010' MD / 2526.4' TVD

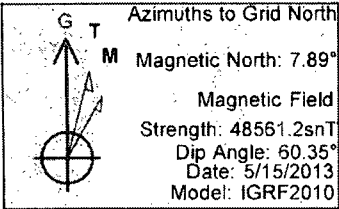
Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
 State B 33 DA #1H
 Eddy County, New Mexico
 Rig: Patterson #41
 Created By: TIFFANI MIZELL
 Date: 07/03/2013

State B 33 DA #1H
 Eddy County, New Mexico
 Q130411 & WT-13484
 Design #2



Mewbourne Oil Company



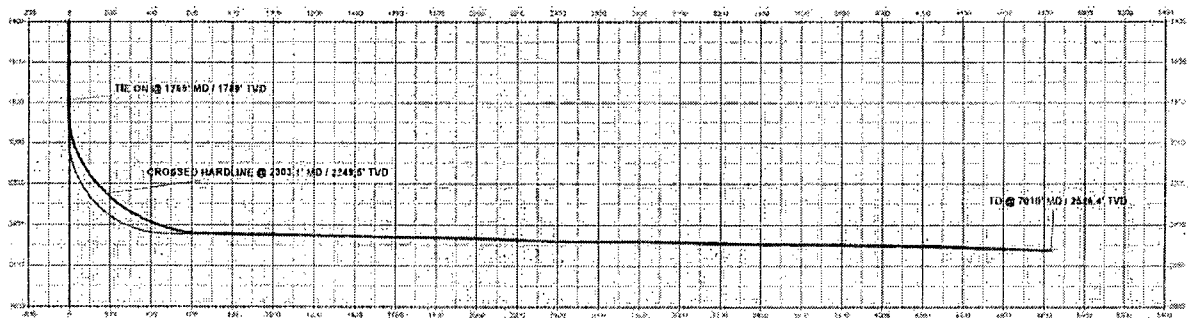
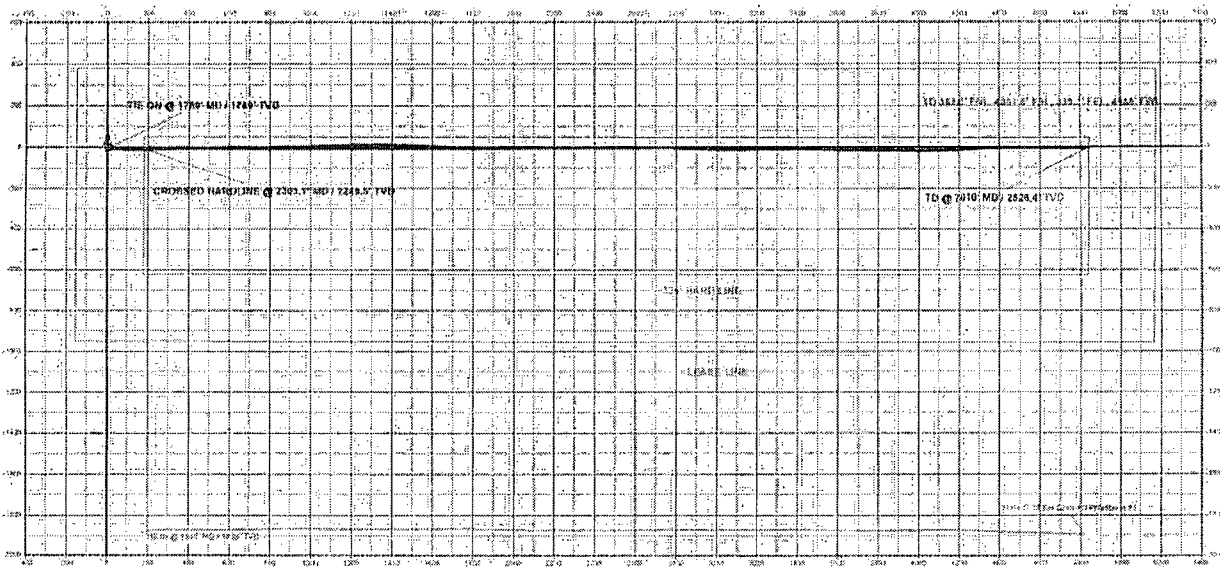
PROJECT DETAILS: Eddy County, New Mexico

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

DESIGN TARGET DATA					
Name	TVD	DB-S	DELW	Nothing	Nothing
PBIL State B 33 DA #1H Design #1	2622.0	4.0	4844.6	890511.64	84331.34
- plan hit target center					
				32° 37' 22.897 N	104° 28' 54.093 W

WELL DETAILS:					
State B 33 DA #1H					
Ground Level: 3488.0					
*N-S	*E-W	Nothing	Existing	Latitude	Longitude
0.0	0.0	890617.84	484492.36	32° 37' 23.886 N	104° 28' 53.481 W

ANNOTATIONS									
MD	Inc	ALJ	TVD	*N-S	*E-W	V3act	Depth	Approx	
1789.0	0.18	28.46	1789.8	-11.4	-6.4	15.4	1789.0	1789.0	TIE-ON @ 1789' MD / 1789' TVD
2303.1	46.65	89.82	2249.8	-7.8	188.0	201.2	2303.1	2249.8	CROSSED HARDLINE @ 2303.1' MD / 2249.8' TVD
7010.0	88.20	89.60	2624.4	-7.3	4935.0	4937.3	7010.0	2624.4	TD @ 7010' MD / 2624.4' TVD



Vertical Section at 90.07° (200 usf/m)