

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
WYATT DRAW 13 OB 001H
EDDY

041-0111

STATE OF NEW MEXICO
DEVIATION REPORT

30-015-40302

394	1.03
749	1.13
1,198	1.42
1,634	1.69



BY:

Steve Moore

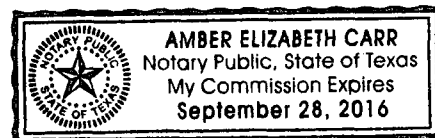
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on
Steve Moore on behalf of Patterson-UTI Drilling Company LLC.

10/20/13, by

Amber Elizabeth Carr
Notary Public for Midland County, Texas
My Commission Expires:





SURVEY CALCULATION PROGRAM

vt:00.02

OPERATOR:	MEWBOURNE OIL & GAS		Supervisors:
WELL:	WYATT DRAW 13 OB #1H		SCOTT BLACKMORE
LOCATION:	EDDY COUNTY, NM		CLAYTON THOMAS
JOB NUMBER:	WL-13444	API #:	30-015-40302
COMMENTS:			
DISPLACEMENT OF 16.82 FT AT 231.57 FT		MAG DEC. (-/+)	7.77
		GRID CORR. (-/+)	
		TOTAL CORR. (-/+)	
DATE: 6/3/13		TIME: 6:00 PM	

MINIMUM CURVATURE CALCULATIONS(SPE-3362) PROPOSED DIRECTION									0.08		TARGET TRACKING		CLOSURE		BUILD		WALK	
											TO CENTER							
SVY	MD	INC	TRUE	TVD	SECT	N-S	E-W	DLS/	ABOVE(+)	RIGHT(+)	DIR	DISTANCE	RATE/					
NUM			AZM					100	BELOW(-)	LEFT(-)	(DEG AZ)	(FEET)	%/100'					
TIE																		
1	100	0.25	335.32	100.00	0.20	0.20	-0.09	0.3	-100.0	-0.1	335.3	0.2	0.2				0.1	
2	200	0.22	97.15	200.00	0.37	0.37	0.01	0.4	-200.0	0.0	1.3	0.4	0.0				-0.4	
3	300	0.23	43.50	300.00	0.49	0.49	0.34	0.2	-300.0	0.3	34.3	0.6	0.0				-0.2	
4	400	0.07	101.09	400.00	0.63	0.63	0.54	0.2	-400.0	0.5	40.4	0.8	-0.2				0.1	
5	500	0.12	343.95	500.00	0.72	0.72	0.57	0.2	-500.0	0.6	38.3	0.9	0.1				0.2	
6	600	0.44	234.82	600.00	0.60	0.60	0.22	0.5	-600.0	0.2	20.5	0.6	0.3				0.0	
7	700	0.48	225.89	699.99	0.08	0.08	-0.39	0.1	-700.0	-0.4	282.1	0.4	0.0				0.0	
8	800	0.60	213.86	799.99	-0.64	-0.64	-0.98	0.2	-800.0	-1.0	236.8	1.2	0.1				0.0	
9	900	0.87	225.49	899.98	-1.61	-1.61	-1.82	0.3	-900.0	-1.8	228.5	2.4	0.3				0.0	
10	1000	0.70	245.74	999.97	-2.40	-2.39	-2.92	0.3	-1000.0	-2.9	230.6	3.8	-0.2				0.0	
11	1100	0.65	242.81	1099.97	-2.91	-2.90	-3.98	0.1	-1100.0	-4.0	233.9	4.9	-0.1				0.0	
12	1200	1.06	227.90	1199.95	-3.79	-3.78	-5.17	0.5	-1200.0	-5.2	233.8	6.4	0.4				0.0	
13	1300	0.93	224.08	1299.94	-4.99	-4.99	-6.42	0.1	-1299.9	-6.4	232.2	8.1	-0.1				0.0	
14	1400	0.89	231.26	1399.93	-6.07	-6.05	-7.59	0.1	-1399.9	-7.6	231.4	9.7	0.0				0.0	
15	1500	0.80	229.53	1499.92	-7.01	-6.99	-8.73	0.1	-1499.9	-8.7	231.3	11.2	-0.1				0.0	
16	1600	0.74	229.01	1599.91	-7.88	-7.87	-9.74	0.1	-1599.9	-9.7	231.1	12.5	-0.1				0.0	
17	1700	0.64	239.27	1699.90	-8.59	-8.58	-10.71	0.2	-1699.9	-10.7	231.3	13.7	-0.1				0.0	
18	1800	0.57	234.63	1799.89	-9.17	-9.15	-11.60	0.1	-1799.9	-11.6	231.7	14.8	-0.1				0.0	
19	1900	0.60	229.23	1899.89	-9.80	-9.78	-12.40	0.1	-1899.9	-12.4	231.7	15.8	0.0				0.0	
20	2000	0.58	229.00	1999.88	-10.47	-10.46	-13.18	0.0	-1999.9	-13.2	231.6	16.8	0.0				0.0	

Mewbourne Oil Co

Eddy County, New Mexico

Sec 24-T19S-R25E

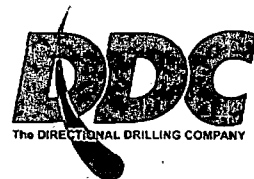
Wyatt Draw 13 OB #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

15 July, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Wyatt Draw 13 OB #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3424.0usft (Patterson)
Site:	Sec 24-T19S-R25E	MD Reference:	WELL @ 3424.0usft (Patterson)
Well:	Wyatt Draw 13 OB #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 24-T19S-R25E		
Site Position:		Northing:	597,128.75 usft
From:	Map	Easting:	466,881.19 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 38' 29.628 N
		Longitude:	104° 26' 27.333 W
		Grid Convergence:	-0.06 °

Well	Wyatt Draw 13 OB #1H		
Well Position	+N/-S	0.0 usft	Northing: 601,158.47 usft
	+E/-W	0.0 usft	Easting: 468,328.91 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 39' 9.519 N
		Longitude:	104° 26' 10.447 W
		Ground Level:	3,404.0 usft

Wellbore	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/15/2013	7.78	60.39	48,586

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	231.57

Survey Program		Date	7/15/2013	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	2,000.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
2,092.0	7,618.0	MWD (Wellbore #1)	MWD default	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	0.25	335.32	100.0	0.2	-0.1	-0.1	0.25	0.25	0.00
200.0	0.22	97.15	200.0	0.4	0.0	-0.2	0.41	-0.03	121.83
300.0	0.23	43.50	300.0	0.5	0.3	-0.6	0.20	0.01	-53.65
400.0	0.07	101.09	400.0	0.6	0.5	-0.8	0.20	-0.16	57.59
500.0	0.12	343.95	500.0	0.7	0.6	-0.9	0.16	0.05	-117.14
600.0	0.44	234.82	600.0	0.6	0.2	-0.5	0.49	0.32	-109.13
700.0	0.48	225.89	700.0	0.1	-0.4	0.3	0.08	0.04	-8.93
800.0	0.60	213.86	800.0	-0.6	-1.0	1.2	0.16	0.12	-12.03
900.0	0.87	225.49	900.0	-1.6	-1.8	2.4	0.31	0.27	11.63

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Well:	Wyatt Draw 13 OB #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	0.70	245.74	1,000.0	-2.4	-2.9	3.8	0.32	-0.17	20.25
1,100.0	0.65	242.81	1,100.0	-2.9	-4.0	4.9	0.06	-0.05	-2.93
1,200.0	1.06	227.90	1,200.0	-3.8	-5.2	6.4	0.46	0.41	-14.91
1,300.0	0.93	224.08	1,299.9	-5.0	-6.4	8.1	0.15	-0.13	-3.82
1,400.0	0.89	231.26	1,399.9	-6.1	-7.6	9.7	0.12	-0.04	7.18
1,500.0	0.80	229.53	1,499.9	-7.0	-8.7	11.2	0.09	-0.09	-1.73
1,600.0	0.74	229.01	1,599.9	-7.9	-9.7	12.5	0.06	-0.06	-0.52
1,700.0	0.64	239.27	1,699.9	-8.6	-10.7	13.7	0.16	-0.10	10.26
1,800.0	0.57	234.63	1,799.9	-9.2	-11.6	14.8	0.09	-0.07	-4.64
1,900.0	0.60	229.23	1,899.9	-9.8	-12.4	15.8	0.06	0.03	-5.40
TIE IN @ 2000' MD / 1999.9' TVD									
2,000.0	0.58	229.00	1,999.9	-10.5	-13.2	16.8	0.02	-0.02	-0.23
2,092.0	0.90	261.80	2,091.9	-10.9	-14.2	17.9	0.56	0.35	35.65
2,123.0	2.20	343.30	2,122.9	-10.3	-14.7	17.9	7.26	4.19	262.90
2,155.0	5.40	357.10	2,154.8	-8.2	-14.9	16.8	10.33	10.00	43.13
2,187.0	8.50	359.70	2,186.6	-4.4	-15.0	14.5	9.73	9.69	8.13
2,218.0	12.00	0.90	2,217.1	1.1	-15.0	11.0	11.31	11.29	3.87
2,250.0	15.60	1.30	2,248.1	8.8	-14.8	6.1	11.25	11.25	1.25
2,281.0	18.10	1.30	2,277.8	17.8	-14.6	0.4	8.06	8.06	0.00
2,313.0	20.90	0.30	2,308.0	28.4	-14.5	-6.3	8.81	8.75	-3.13
2,344.0	24.00	358.90	2,336.6	40.3	-14.6	-13.6	10.15	10.00	-4.52
2,376.0	26.90	358.30	2,365.5	54.0	-14.9	-21.9	9.10	9.06	-1.88
2,407.0	29.20	358.50	2,392.8	68.6	-15.3	-30.6	7.43	7.42	0.65
2,439.0	31.50	359.00	2,420.5	84.8	-15.7	-40.4	7.23	7.19	1.56
2,470.0	34.00	359.50	2,446.5	101.5	-15.9	-50.7	8.11	8.06	1.61
2,502.0	36.40	359.70	2,472.7	120.0	-16.0	-62.0	7.51	7.50	0.63
2,533.0	39.00	359.60	2,497.2	138.9	-16.1	-73.7	8.39	8.39	-0.32
2,565.0	41.80	359.50	2,521.6	159.7	-16.3	-86.5	8.75	8.75	-0.31
2,596.0	44.30	359.70	2,544.2	180.8	-16.4	-99.5	8.08	8.06	0.65
2,628.0	46.70	0.30	2,566.7	203.6	-16.4	-113.7	7.62	7.50	1.88
2,659.0	48.90	1.20	2,587.5	226.6	-16.1	-128.2	7.42	7.10	2.90
CROSSED LEASE LINE @ 2685.5' MD / 2604.6' TVD									
2,685.5	50.64	359.95	2,604.6	246.8	-15.9	-141.0	7.48	6.56	-4.71
2,691.0	51.00	359.70	2,608.1	251.1	-15.9	-143.6	7.48	6.59	-4.57
2,722.0	53.00	359.90	2,627.1	275.5	-16.0	-158.7	6.47	6.45	0.65
2,754.0	55.00	0.50	2,646.0	301.4	-15.9	-174.9	6.43	6.25	1.88
2,786.0	57.10	0.30	2,663.8	328.0	-15.7	-191.5	6.58	6.56	-0.63
2,817.0	59.60	0.10	2,680.1	354.3	-15.6	-208.0	8.08	8.06	-0.65
2,848.0	62.20	359.90	2,695.2	381.4	-15.6	-224.8	8.41	8.39	-0.65
2,879.0	65.00	0.20	2,708.9	409.2	-15.6	-242.1	9.07	9.03	0.97
2,911.0	68.20	359.60	2,721.7	438.6	-15.7	-260.3	10.15	10.00	-1.88
2,942.0	72.00	358.80	2,732.2	467.7	-16.1	-278.1	12.50	12.26	-2.58
2,974.0	74.60	358.30	2,741.4	498.3	-16.9	-296.5	8.26	8.13	-1.56

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Wyatt Draw 13 OB #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3424.0usft (Patterson)
Site:	Sec 24-T19S-R25E	MD Reference:	WELL @ 3424.0usft (Patterson)
Well:	Wyatt Draw 13 OB #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)
3,006.0	76.70	358.60	2,749.3	529.3	-17.7	-315.1	6.63	6.56	0.94
3,037.0	79.60	358.90	2,755.7	559.6	-18.4	-333.5	9.40	9.35	0.97
CROSSED HARDLINE @ 3053.7' MD / 2758.4' TVD									
3,053.7	81.83	358.73	2,758.4	576.1	-18.7	-343.5	13.37	13.33	-1.00
3,067.0	83.60	358.60	2,760.1	589.3	-19.0	-351.4	13.37	13.33	-0.99
3,188.0	89.30	358.40	2,767.6	710.0	-22.2	-423.9	4.71	4.71	-0.17
3,220.0	89.40	358.40	2,767.9	742.0	-23.1	-443.1	0.31	0.31	0.00
3,251.0	88.90	0.40	2,768.4	773.0	-23.4	-462.1	6.65	-1.61	6.45
3,287.0	89.30	0.80	2,769.0	809.0	-23.0	-484.8	1.57	1.11	1.11
3,319.0	89.30	1.40	2,769.3	841.0	-22.4	-505.2	1.87	0.00	1.88
3,350.0	90.50	0.90	2,769.4	871.9	-21.8	-524.9	4.19	3.87	-1.61
3,382.0	92.30	359.60	2,768.6	903.9	-21.6	-544.9	6.94	5.63	-4.06
3,445.0	92.90	358.80	2,765.8	966.9	-22.5	-583.3	1.59	0.95	-1.27
3,508.0	93.00	1.40	2,762.5	1,029.8	-22.4	-622.5	4.12	0.16	4.13
3,571.0	91.80	3.10	2,759.9	1,092.7	-19.9	-663.6	3.30	-1.90	2.70
3,634.0	91.00	3.10	2,758.3	1,155.6	-16.5	-705.3	1.27	-1.27	0.00
3,697.0	90.40	3.60	2,757.6	1,218.4	-12.8	-747.3	1.24	-0.95	0.79
3,761.0	90.80	2.80	2,756.9	1,282.3	-9.3	-789.8	1.40	0.63	-1.25
3,824.0	90.30	3.40	2,756.3	1,345.2	-5.9	-831.6	1.24	-0.79	0.95
3,887.0	90.90	2.40	2,755.6	1,408.2	-2.7	-873.2	1.85	0.95	-1.59
3,950.0	90.50	1.10	2,754.9	1,471.1	-0.8	-913.8	2.16	-0.63	-2.06
4,013.0	90.20	359.30	2,754.5	1,534.1	-0.5	-953.1	2.90	-0.48	-2.86
4,077.0	90.40	358.60	2,754.1	1,598.1	-1.7	-992.0	1.14	0.31	-1.09
4,140.0	91.40	358.00	2,753.2	1,661.1	-3.6	-1,029.7	1.85	1.59	-0.95
4,203.0	91.40	358.90	2,751.6	1,724.0	-5.3	-1,067.5	1.43	0.00	1.43
4,266.0	92.10	0.50	2,749.7	1,787.0	-5.6	-1,106.4	2.77	1.11	2.54
4,297.0	92.10	0.70	2,748.6	1,818.0	-5.3	-1,125.9	0.64	0.00	0.65
4,360.0	91.10	2.30	2,746.8	1,880.9	-3.6	-1,166.3	2.99	-1.59	2.54
4,424.0	89.80	1.40	2,746.3	1,944.9	-1.6	-1,207.7	2.47	-2.03	-1.41
4,487.0	89.20	359.70	2,746.8	2,007.9	-1.0	-1,247.3	2.86	-0.95	-2.70
4,550.0	90.00	359.10	2,747.3	2,070.9	-1.6	-1,285.9	1.59	1.27	-0.95
4,613.0	91.50	359.40	2,746.5	2,133.9	-2.4	-1,324.4	2.43	2.38	0.48
4,677.0	91.30	359.80	2,744.9	2,197.8	-2.9	-1,363.9	0.70	-0.31	0.63
4,740.0	90.60	0.10	2,743.9	2,260.8	-2.9	-1,403.0	1.21	-1.11	0.48
4,803.0	92.20	0.20	2,742.3	2,323.8	-2.8	-1,442.2	2.54	2.54	0.16
4,866.0	92.60	1.30	2,739.7	2,386.7	-2.0	-1,482.0	1.86	0.63	1.75
4,930.0	91.60	2.10	2,737.3	2,450.7	-0.1	-1,523.2	2.00	-1.56	1.25
4,993.0	90.60	1.20	2,736.1	2,513.6	1.7	-1,563.8	2.14	-1.59	-1.43
5,056.0	90.00	1.70	2,735.8	2,576.6	3.3	-1,604.2	1.24	-0.95	0.79
5,120.0	91.40	1.90	2,735.0	2,640.6	5.4	-1,645.5	2.21	2.19	0.31
5,183.0	90.10	1.80	2,734.2	2,703.5	7.4	-1,686.2	2.07	-2.06	-0.16
5,246.0	89.40	0.90	2,734.5	2,766.5	8.9	-1,726.5	1.81	-1.11	-1.43
5,309.0	89.40	0.30	2,735.1	2,829.5	9.5	-1,766.2	0.95	0.00	-0.95
5,371.0	89.80	0.40	2,735.6	2,891.5	9.9	-1,805.0	0.67	0.65	0.16

DDC Survey Report



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Well:	Wyatt Draw 13 OB #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)
5,435.0	90.90	359.60	2,735.2	2,955.5	9.9	-1,844.8	2.13	1.72	-1.25
5,498.0	91.10	359.40	2,734.1	3,018.5	9.4	-1,883.5	0.45	0.32	-0.32
5,561.0	91.10	359.30	2,732.9	3,081.5	8.6	-1,922.1	0.16	0.00	-0.16
5,624.0	90.90	358.90	2,731.8	3,144.5	7.7	-1,960.5	0.71	-0.32	-0.63
5,688.0	90.50	358.60	2,731.0	3,208.4	6.3	-1,999.2	0.78	-0.63	-0.47
5,750.0	90.70	0.00	2,730.3	3,270.4	5.5	-2,037.1	2.28	0.32	2.26
5,811.0	90.50	0.30	2,729.7	3,331.4	5.7	-2,075.2	0.59	-0.33	0.49
5,872.0	90.40	359.80	2,729.2	3,392.4	5.7	-2,113.1	0.84	-0.16	-0.82
5,931.0	90.30	359.80	2,728.8	3,451.4	5.5	-2,149.6	0.17	-0.17	0.00
5,993.0	90.00	359.80	2,728.7	3,513.4	5.3	-2,188.0	0.48	-0.48	0.00
6,054.0	90.10	0.20	2,728.6	3,574.4	5.3	-2,225.9	0.68	0.16	0.66
6,113.0	90.70	0.00	2,728.2	3,633.4	5.4	-2,262.7	1.07	1.02	-0.34
6,174.0	90.40	0.00	2,727.6	3,694.4	5.4	-2,300.6	0.49	-0.49	0.00
6,235.0	90.70	359.90	2,727.0	3,755.4	5.3	-2,338.5	0.52	0.49	-0.16
6,297.0	90.70	0.20	2,726.3	3,817.4	5.4	-2,377.0	0.48	0.00	0.48
6,359.0	90.70	0.50	2,725.5	3,879.4	5.8	-2,415.9	0.48	0.00	0.48
6,419.0	90.80	0.70	2,724.7	3,939.4	6.4	-2,453.6	0.37	0.17	0.33
6,479.0	90.60	0.60	2,724.0	3,999.4	7.1	-2,491.5	0.37	-0.33	-0.17
6,540.0	90.30	0.50	2,723.5	4,060.4	7.7	-2,529.8	0.52	-0.49	-0.16
6,632.0	89.30	359.80	2,723.9	4,152.4	7.9	-2,587.2	1.33	-1.09	-0.76
6,693.0	89.90	359.00	2,724.3	4,213.4	7.3	-2,624.6	1.64	0.98	-1.31
6,754.0	90.60	358.50	2,724.0	4,274.4	5.9	-2,661.5	1.41	1.15	-0.82
6,846.0	90.40	358.30	2,723.2	4,366.3	3.4	-2,716.6	0.31	-0.22	-0.22
6,940.0	90.30	358.30	2,722.6	4,460.3	0.6	-2,772.8	0.11	-0.11	0.00
7,034.0	90.50	358.80	2,722.0	4,554.2	-1.8	-2,829.4	0.57	0.21	0.53
7,129.0	90.60	359.10	2,721.1	4,649.2	-3.5	-2,887.1	0.33	0.11	0.32
7,224.0	90.70	359.20	2,720.0	4,744.2	-4.9	-2,945.0	0.15	0.11	0.11
7,319.0	91.30	359.70	2,718.3	4,839.2	-5.9	-3,003.3	0.82	0.63	0.53
7,414.0	91.00	0.00	2,716.4	4,934.2	-6.1	-3,062.2	0.45	-0.32	0.32
7,508.0	89.40	359.20	2,716.1	5,028.2	-6.8	-3,120.1	1.90	-1.70	-0.85
7,571.0	88.80	359.10	2,717.1	5,091.1	-7.7	-3,158.5	0.97	-0.95	-0.16
TD @ 7618' MD / 2718.1' TVD									
7,618.0	88.80	359.10	2,718.1	5,138.1	-8.4	-3,187.1	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	1,999.9	-10.5	-13.2	TIE IN @ 2000' MD / 1999.9' TVD
2,685.5	2,604.6	246.8	-15.9	CROSSED LEASE LINE @ 2685.5' MD / 2604.6' TVD
3,053.7	2,758.4	576.1	-18.7	CROSSED HARDLINE @ 3053.7' MD / 2758.4' TVD
7,618.0	2,718.1	5,138.1	-8.4	TD @ 7618' MD / 2718.1' TVD

DDC
Survey Report



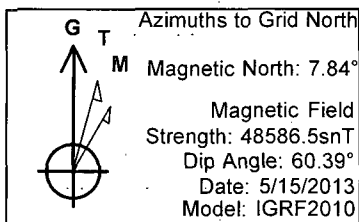
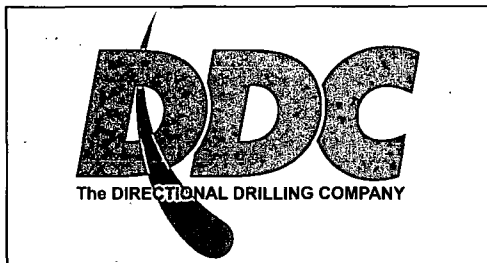
Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Wyatt Draw 13 OB #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3424.0usft (Patterson)
Site:	Sec 24-T19S-R25E	MD Reference:	WELL @ 3424.0usft (Patterson)
Well:	Wyatt Draw 13 OB #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co.
Wyatt Draw 13 OB #1H
Eddy County, New Mexico
Rig: Patterson #41
Created By: TIFFANI MIZELL
Date: 7/15/2013

Wyatt Draw 13 OB #1H
Eddy County, New Mexico
Q130410 & WT-13437
Design #2 (Tie-On)

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

WELL DETAILS: Wyatt Draw 13 OB #1H

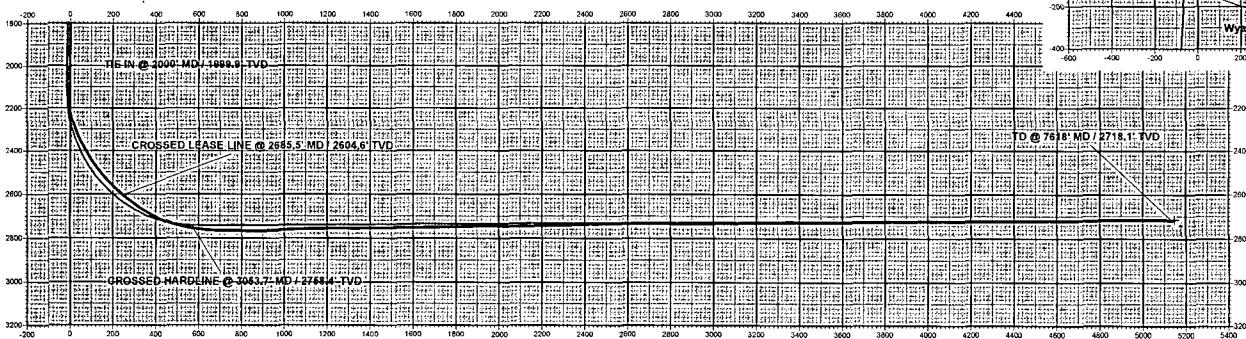
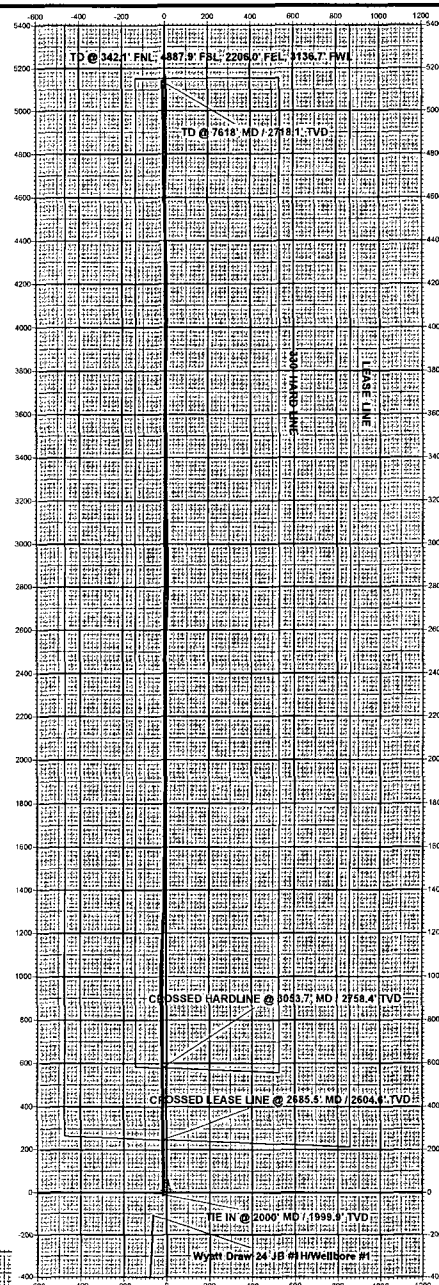
Ground Level: 3404.0
Northing: 601158.47 Easting: 468328.91
Latitude: 32° 39' 9.519 N Longitude: 104° 26' 10.447 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP Wyatt Draw 13 OB #1H Design #1	0.0	594.5	-0.9	601754.97	469328.01	32° 39' 15.421 N	104° 26' 10.465 W
- plan misses target center by 594.5snT at 1.2snT MD (1.2 TVD, 0.0 N, 0.0 E)							
PBHL Wyatt Draw 13 OB #1H Design #1	2715.0	5150.2	7.6	606308.67	469336.51	32° 40' 0.483 N	104° 26' 10.417 W
- plan hits target center							

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
2000.0	0.58	229.00	1999.9	-10.5	-13.2	16.8	19.5	TIE IN @ 2000' MD / 1999.9' TVD
2695.6	50.64	359.95	2604.6	246.8	-15.9	-141.0	279.3	CROSSED LEASE LINE @ 2695.6' MD / 2604.6' TVD
3053.7	81.83	358.73	2758.4	576.1	-18.7	-343.5	609.1	CROSSED HARDLINE @ 3053.7' MD / 2758.4' TVD
7618.0	88.80	359.10	2718.1	5138.1	-8.4	-3187.1	5171.2	TD @ 7618' MD / 2718.1' TVD



Vertical Section at 0.08" (200 usf/in)

Operating Company Mewbourne
Well Name & Number Wyatt Draw 13 OB #1H
Sales Ticket Number 5321272

Company Rep 0
Field
BOT Service Rep Hector R Magallanes



Date 6/13/2013

District Location Odessa, Texas, USA

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	2,724.00	9,960	6,230
Top Liner	4.500	11.60	55000	4.000	3.875	LT&C	0.01554	4,345.78	5,350	4,960
Bott Liner										

TVD	2,718.00	KOP	2,061.00	Open Hole	6.125	Casing Vol. (bbl)	110.7
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Carry Fluid Weight (ppg)	8.5	Propant Content (ppa)		Max Drill Out Size	0
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	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
Liner Top	1	10378942	JR Setting Sleeve_RH Profile	2892.80						

Zone Length										
		JR Sleeve_S3 Hyd Set Packer	2892.80	8.70	5.813	3.875				
		4-1/2-13.5 LTC Nipple	2901.50	6.09	5.000	4.000				
		6 Joints of 4-1/2-13.5 LTC Casing	2907.59	255.90	5.000	3.920				
20		3.625 EX Frac Sleeve	3163.49	3.90	5.750		3.525	1524	252	115
406.3		3 Joint of 4-1/2-13.5 LTC Casing	3167.39	127.86	5.000	4.000				
		Baker Open Hole Packer	3295.25	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	3299.14	85.32	5.000	4.000				
19		3.500 EX Frac Sleeve	3384.46	3.90	5.750		3.400	1524	234	118
224.9		3 Joint of 4-1/2-13.5 LTC Casing	3388.36	127.91	5.000	4.000				
		Baker Open Hole Packer	3516.27	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	3520.16	85.30	5.000	4.000				
18		3.375 EX Frac Sleeve	3605.46	3.90	5.750		3.275	1524	217	122
224.9		3 Joint of 4-1/2-13.5 LTC Casing	3609.36	127.95	5.000	4.000				
		Baker Open Hole Packer	3737.31	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	3741.20	127.92	5.000	4.000				
17		3.250 EX Frac Sleeve	3869.12	3.90	5.750		3.150	1524	201	126
267.3		3 Joint of 4-1/2-13.5 LTC Casing	3873.02	127.65	5.000	4.000				
		Baker Open Hole Packer	4000.67	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	4004.56	85.26	5.000	4.000				
16		3.125 EX Frac Sleeve	4089.82	3.90	5.750		3.025	1524	185	129
224.7		3 Joints of 4-1/2-13.5 LTC Casing	4093.72	127.74	5.000	4.000				
		Baker Open Hole Packer	4221.46	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number Wyatt Draw 13 OB #1H
 Sales Ticket Number 5321272
 Date 6/13/2013

Company Rep 0
 Field
 BOT Service Rep Hector R Magallanes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	2,724.00	9,960	6,230
Top Liner	4.500	11.60	55000	4.000	3.875	LT&C	0.01554	4,345.78	5,350	4,960
Bott Liner										

TVD	2,718.00	KOP	2,061.00	Open Hole	6.125	Casing Vol. (bbl)	110.7
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Carry Fluid Weight (ppg)	8.5	Propant Content (ppa)		Max Drill Out Size	0
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	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
15 224.8		2 Joints of 4-1/2-13.5 LTC Casing	4225.35	85.28	5.000	4.000				
		3.000 EX Frac sleeve	4310.63	3.90	5.750		2.900	1524	170	133
		3 Joint of 4-1/2-13.5 LTC Casing	4314.53	127.86	5.000	4.000				
		Baker Open Hole Packer	4442.39	3.89	5.820	3.875		2154		
14 267.5		3 Joints of 4-1/2-13.5 LTC Casing	4446.28	127.87	5.000	4.000				
		2.875 EX Frac Sleeve	4574.15	3.90	5.750		2.775	1524	156	137
		3 Joints of 4-1/2-13.5 LTC Casing	4578.05	127.91	5.000	4.000				
		Baker Open Hole Packer	4705.96	3.89	5.820	3.875		2154		
13 224.9		2 Joints of 4-1/2-13.5 LTC Casing	4709.85	85.29	5.000	4.000				
		2.750 EX Frac Sleeve	4795.14	3.90	5.750		2.650	1524	142	140
		3 Joint of 4-1/2-13.5 LTC Casing	4799.04	127.93	5.000	4.000				
		Baker Open Hole Packer	4926.97	3.89	5.820	3.875		2154		
12 225		2 Joints of 4-1/2-13.5 LTC Casing	4930.86	85.28	5.000	4.000				
		2.625 EX Frac Sleeve	5016.14	3.90	5.750		2.525	1524	129	144
		3 Joints of 4-1/2-13.5 LTC Casing	5020.04	127.99	5.000	4.000				
		Baker Open Hole Packer	5148.03	3.89	5.820	3.875		2154		
11 267.5		3 Joints of 4-1/2-13.5 LTC Casing	5151.92	127.92	5.000	4.000				
		2.500 EX Frac Sleeve	5279.84	3.90	5.750		2.400	1524	117	148
		3 Joint of 4-1/2-13.5 LTC Casing	5283.74	127.91	5.000	4.000				
		Baker Open Hole Packer	5411.65	3.89	5.820	3.875		2154		
10 224.9		2 Joints of 4-1/2-13.5 LTC Casing	5415.54	85.27	5.000	4.000				
		2.375 EX Frac Sleeve	5500.81	3.90	5.750		2.275	1524	105	151
		3 Joints of 4-1/2-13.5 LTC Casing	5504.71	127.96	5.000	4.000				
		Baker Open Hole Packer	5632.67	3.89	5.820	3.875		2154		
9		2 Joint of 4-1/2-13.5 LTC Casing	5636.56	85.30	5.000	4.000				
		2.250 EX Frac Sleeve	5721.86	3.90	5.750		2.150	1524	94	155

Operating Company Mewbourne
 Well Name & Number Wyatt Draw 13 OB #1H
 Sales Ticket Number 5321272
 Date 6/13/2013

Company Rep 0
 Field
 BOT Service Rep Hector R Magallanes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	2,724.00	9,960	6,230	
Top Liner	4.500	11.60	55000	4.000	3.875	LT&C	0.01554	4,345.78	5,350	4,960	
Bott Liner											
TVD		2,718.00		KOP		2,061.00		Open Hole	6.125	Casing Vol. (bbl)	110.7
Carry Fluid Weight (ppg)			8.5		Propant Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
224.9		3 Joints of 4-1/2-13.5 LTC Casing	5725.76	127.94	5.000	4.000				
		Baker Open Hole Packer	5853.70	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	5857.59	127.94	5.000	4.000				
8		2.125 EX Frac Sleeve	5985.53	3.90	5.750		2.025	1524	83	159
267.6		3 Joints of 4-1/2-13.5 LTC Casing	5989.43	127.98	5.000	4.000				
		Baker Open Hole Packer	6117.41	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	6121.30	85.25	5.000	4.000				
7		2.000 EX Frac Sleeve	6206.55	3.90	5.750		1.900	1524	73	162
224.9		3 Joints of 4-1/2-13.5 LTC Casing	6210.45	127.97	5.000	4.000				
		Baker Open Hole Packer	6338.42	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	6342.31	85.28	5.000	4.000				
6		1.875 EX Frac Sleeve	6427.59	3.90	5.750		1.775	1524	64	166
224.9		3 Joints of 4-1/2-13.5 LTC Casing	6431.49	127.90	5.000	4.000				
		Baker Open Hole Packer	6559.39	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	6563.28	85.16	5.000	4.000				
5		1.750 EX Frac Sleeve	6648.44	3.90	5.750		1.650	1524	55	169
224.8		3 Joint of 4-1/2-13.5 LTC Casing	6652.34	127.92	5.000	4.000				
		Baker Open Hole Packer	6780.26	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	6784.15	127.95	5.000	4.000				
4		1.625 EX Frac Sleeve	6912.10	3.90	5.750		1.525	1524	47	173
267.6		3 Joints of 4-1/2-13.5 LTC Casing	6916.00	127.92	5.000	4.000				
		Baker Open Hole Packer	7043.92	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	7047.81	85.28	5.000	4.000				
3		1.50 DB EX Frac Sleeve	7133.09	3.90	5.750		1.400	1524	40	177
224.8		2 Joints of 4-1/2-13.5 LTC Casing	7136.99	127.88	5.000	4.000				
		Baker Open Hole Packer	7264.87	3.89	5.820			2154		

Company Rep	0
Field	
BOT Service Rep	Hector R Magallanes
District Location	Odessa, Texas, USA

[illegible]

TVD	2,718.00	KOP	2,061.00	Open Hole	6.125	Casing Vol. (bbl)	110.7
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Carry Fluid Weight (ppg)	8.5	Propant Content (ppa)		Max Drill Out Size	0
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[illegible]