

30-015-41040

Mewbourne Oil Company

EDDY COUNTY, NM (NAD27)

SECTION 8

THOMPSON 8 FEDERAL #3H

Wellbore #1

Survey: Plan v. Actual

Standard Survey Report

19 March, 2013





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well THOMPSON 8 FEDERAL #3H
Project:	EDDY COUNTY, NM (NAD27)	TVD Reference:	WELL @ 3299.0usft (Original Well Elev)
Site:	SECTION 8	MD Reference:	WELL @ 3299.0usft (Original Well Elev)
Well:	THOMPSON 8 FEDERAL #3H	North Reference:	Gnd
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan v. Actual	Database:	EDM 5000.1 Single User Db

Project:	EDDY COUNTY, NM (NAD27), NM-EAST		
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:	SECTION 8 H		
Site Position:		Northing:	578,069.43 usft
From:	Map	Easting:	575,373.44 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 35' 20.329 N
		Longitude:	104° 5' 19.004 W
		Grid Convergence:	0.13 °

Well:	THOMPSON 8 FEDERAL #3H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 35' 20.329 N
		Longitude:	104° 5' 19.004 W
		Ground Level:	3,279.0 usft

Wellbore:	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	9/27/2012	7.69
			Dip Angle
			(°)
			60.40
			Field Strength
			(nT)
			48,651

Design:	Plan v. Actual		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			273.06

Survey Program	Date 3/19/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	7,310.0	Gyro Survey (Wellbore #1)	
7,486.0	12,540.0	Plan v. Actual (Wellbore #1)	
		Description	

Survey									
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Build	Turn
Depth (usft)	(°)	(°)	Depth (usft)	(usft)	(usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
7,310.0	1.98	307.22	7,308.5	3.0	-43.5	43.6	0.00	0.00	0.00
TI @ 7310 MD, 1.98°									
7,486.0	4.60	304.60	7,484.2	8.8	-51.7	52.1	1.49	1.49	-1.49
7,518.0	7.20	296.20	7,516.0	10.4	-54.6	55.0	8.54	8.13	-26.25
7,550.0	10.30	271.10	7,547.6	11.4	-59.2	59.7	15.15	9.69	-78.44
7,581.0	12.60	278.40	7,578.0	11.9	-65.3	65.9	8.76	7.42	23.55
7,613.0	16.10	275.50	7,609.0	12.9	-73.2	73.8	11.16	10.94	-9.06
7,645.0	19.10	267.70	7,639.5	13.1	-82.9	83.4	11.91	9.38	-24.38
7,677.0	21.90	260.50	7,669.5	11.9	-94.0	94.5	11.76	8.75	-22.50
7,708.0	23.90	261.60	7,698.0	10.0	-105.9	106.3	6.60	6.45	3.55



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Site:	SECTION 8	MD Reference:	WELL @ 3299.0usft (Original Well Elev)
Well:	THOMPSON 8 FEDERAL #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan v. Actual	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)
7,740.0	25.60	265.60	7,727.1	8.5	-119.2	119.5	7.45	5.31	12.50
7,772.0	28.60	266.70	7,755.6	7.6	-133.7	134.0	9.50	9.38	3.44
7,804.0	31.80	264.70	7,783.2	6.3	-149.8	149.9	10.48	10.00	-6.25
7,835.0	35.30	263.50	7,809.1	4.6	-166.8	166.8	11.49	11.29	-3.87
7,867.0	39.20	264.00	7,834.5	2.5	-186.1	185.9	12.22	12.19	1.56
7,899.0	44.10	266.00	7,858.4	0.6	-207.3	207.0	15.86	15.31	6.25
7,931.0	49.70	267.90	7,880.3	-0.6	-230.6	230.2	18.03	17.50	5.94
7,962.0	55.50	268.90	7,899.1	-1.3	-255.2	254.8	18.88	18.71	3.23
7,994.0	61.10	270.70	7,915.9	-1.4	-282.4	281.9	18.14	17.50	5.63
8,026.0	66.90	273.90	7,930.0	-0.2	-311.1	310.7	20.23	18.13	10.00
8,058.0	72.20	275.60	7,941.1	2.3	-341.0	340.6	17.29	16.56	5.31
8,084.0	77.20	275.60	7,948.0	4.8	-365.9	365.7	19.23	19.23	0.00
8,161.0	90.50	273.70	7,956.2	10.9	-442.1	442.0	17.45	17.27	-2.47
8,193.0	90.80	273.20	7,955.9	12.9	-474.0	474.0	1.82	0.94	-1.56
8,256.0	91.50	272.30	7,954.6	15.9	-536.9	537.0	1.81	1.11	-1.43
8,319.0	89.70	269.80	7,953.9	17.0	-599.9	600.0	4.89	-2.86	-3.97
8,383.0	91.10	269.50	7,953.5	16.6	-663.9	663.8	2.24	2.19	-0.47
8,446.0	92.20	270.20	7,951.7	16.5	-726.9	726.7	2.07	1.75	1.11
8,509.0	91.30	269.50	7,949.7	16.3	-789.8	789.6	1.81	-1.43	-1.11
8,572.0	92.90	270.90	7,947.4	16.5	-852.8	852.5	3.37	2.54	2.22
8,635.0	93.10	271.80	7,944.1	18.0	-915.7	915.3	1.46	0.32	1.43
8,698.0	94.10	273.20	7,940.2	20.8	-978.5	978.2	2.73	1.59	2.22
8,761.0	93.50	275.30	7,936.0	25.4	-1,041.2	1,041.1	3.46	-0.95	3.33
8,824.0	93.10	276.30	7,932.4	31.8	-1,103.8	1,103.9	1.71	-0.63	1.59
8,887.0	89.80	280.20	7,930.8	40.8	-1,166.1	1,166.6	8.11	-5.24	6.19
8,951.0	89.80	280.70	7,931.0	52.4	-1,229.0	1,230.0	0.78	0.00	0.78
9,014.0	90.30	280.50	7,931.0	64.0	-1,290.9	1,292.5	0.85	0.79	-0.32
9,077.0	88.50	280.50	7,931.6	75.5	-1,352.9	1,355.0	2.86	-2.86	0.00
9,140.0	86.60	279.00	7,934.3	86.1	-1,414.9	1,417.5	3.84	-3.02	-2.38
9,203.0	85.60	274.70	7,938.6	93.6	-1,477.3	1,480.2	6.99	-1.59	-6.83
9,267.0	86.20	273.20	7,943.2	98.0	-1,541.0	1,544.0	2.52	0.94	-2.34
9,298.0	88.60	272.60	7,944.6	99.6	-1,571.9	1,575.0	7.98	7.74	-1.94
9,330.0	90.70	271.10	7,944.8	100.6	-1,603.9	1,607.0	8.06	6.56	-4.69
9,362.0	90.70	269.30	7,944.4	100.7	-1,635.9	1,638.9	5.62	0.00	-5.63
9,393.0	90.60	269.10	7,944.0	100.3	-1,666.9	1,669.8	0.72	-0.32	-0.65
9,425.0	91.20	268.20	7,943.5	99.6	-1,698.8	1,701.7	3.38	1.88	-2.81
9,456.0	93.10	267.90	7,942.4	98.5	-1,729.8	1,732.6	6.20	6.13	-0.97
9,488.0	92.90	267.50	7,940.7	97.2	-1,761.7	1,764.4	1.40	-0.63	-1.25
9,520.0	92.10	268.60	7,939.3	96.1	-1,793.7	1,796.3	4.25	-2.50	3.44
9,551.0	91.90	270.40	7,938.2	95.9	-1,824.7	1,827.2	5.84	-0.65	5.81
9,583.0	92.10	269.60	7,937.1	95.9	-1,856.6	1,859.1	2.58	0.63	-2.50
9,615.0	92.00	269.30	7,936.0	95.6	-1,888.6	1,891.0	0.99	-0.31	-0.94
9,646.0	91.80	270.50	7,934.9	95.5	-1,919.6	1,922.0	3.92	-0.65	3.87



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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan v. Actual	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)	
9,678.0	92.20	271.90	7,933.8	96.2	-1,951.6	1,953.9	4.55	1.25	4.38	
9,710.0	92.00	271.10	7,932.6	97.0	-1,983.5	1,985.9	2.58	-0.63	-2.50	
9,741.0	91.80	270.90	7,931.6	97.6	-2,014.5	2,016.9	0.91	-0.65	-0.65	
9,773.0	92.20	272.10	7,930.5	98.4	-2,046.5	2,048.8	3.95	1.25	3.75	
9,805.0	92.80	273.20	7,929.1	99.9	-2,078.4	2,080.8	3.91	1.88	3.44	
9,836.0	93.20	272.80	7,927.5	101.5	-2,109.3	2,111.8	1.82	1.29	-1.29	
9,868.0	92.20	273.90	7,926.0	103.4	-2,141.3	2,143.7	4.64	-3.13	3.44	
9,931.0	92.10	276.20	7,923.6	108.9	-2,204.0	2,206.6	3.65	-0.16	3.65	
9,994.0	92.90	275.60	7,920.9	115.4	-2,266.6	2,269.5	1.59	1.27	-0.95	
10,057.0	92.20	276.50	7,918.0	122.0	-2,329.2	2,332.3	1.81	-1.11	1.43	
10,121.0	88.20	278.40	7,917.8	130.3	-2,392.6	2,396.1	6.92	-6.25	2.97	
10,184.0	87.40	278.10	7,920.2	139.3	-2,454.9	2,458.8	1.36	-1.27	-0.48	
10,247.0	90.70	273.90	7,921.3	145.9	-2,517.5	2,521.7	8.48	5.24	-6.67	
10,310.0	91.00	273.50	7,920.4	150.0	-2,580.4	2,584.7	0.79	0.48	-0.63	
10,373.0	91.30	273.30	7,919.1	153.7	-2,643.3	2,647.7	0.57	0.48	-0.32	
10,436.0	91.20	272.50	7,917.7	156.9	-2,706.2	2,710.7	1.28	-0.16	-1.27	
10,500.0	91.40	272.30	7,916.3	159.6	-2,770.1	2,774.7	0.44	0.31	-0.31	
10,563.0	91.40	271.90	7,914.7	161.9	-2,833.0	2,837.6	0.63	0.00	-0.63	
10,626.0	90.60	271.90	7,913.6	164.0	-2,896.0	2,900.6	1.27	-1.27	0.00	
10,690.0	90.80	271.40	7,912.8	165.8	-2,960.0	2,964.6	0.84	0.31	-0.78	
10,753.0	92.90	270.50	7,910.8	166.9	-3,022.9	3,027.5	3.63	3.33	-1.43	
10,816.0	93.60	269.80	7,907.2	167.0	-3,085.8	3,090.3	1.57	1.11	-1.11	
10,880.0	93.20	273.30	7,903.4	168.8	-3,149.7	3,154.2	5.49	-0.63	5.47	
10,943.0	91.90	274.60	7,900.6	173.1	-3,212.4	3,217.1	2.92	-2.06	2.06	
11,006.0	88.50	276.50	7,900.4	179.2	-3,275.1	3,280.0	6.18	-5.40	3.02	
11,070.0	89.00	276.30	7,901.8	186.3	-3,338.7	3,343.9	0.84	0.78	-0.31	
11,133.0	91.80	276.90	7,901.4	193.6	-3,401.3	3,406.8	4.55	4.44	0.95	
11,196.0	91.80	277.40	7,899.4	201.4	-3,463.8	3,469.6	0.79	0.00	0.79	
11,259.0	92.30	277.00	7,897.1	209.3	-3,526.2	3,532.4	1.02	0.79	-0.63	
11,322.0	92.90	276.90	7,894.3	216.9	-3,588.7	3,595.2	0.97	0.95	-0.16	
11,386.0	91.70	277.40	7,891.7	224.9	-3,652.2	3,659.0	2.03	-1.88	0.78	
11,449.0	87.80	279.00	7,892.0	233.8	-3,714.5	3,721.7	6.69	-6.19	2.54	
11,512.0	89.10	277.70	7,893.7	243.0	-3,776.8	3,784.4	2.92	2.06	-2.06	
11,576.0	89.30	277.00	7,894.6	251.2	-3,840.3	3,848.2	1.14	0.31	-1.09	
11,639.0	88.00	275.30	7,896.1	257.9	-3,902.9	3,911.1	3.40	-2.06	-2.70	
11,702.0	87.30	274.20	7,898.7	263.1	-3,965.6	3,974.0	2.07	-1.11	-1.75	
11,765.0	86.60	272.80	7,902.0	267.0	-4,028.4	4,036.9	2.48	-1.11	-2.22	
11,829.0	88.60	269.60	7,904.7	268.3	-4,092.3	4,100.8	5.89	3.13	-5.00	
11,892.0	89.50	267.70	7,905.7	266.8	-4,155.3	4,163.6	3.34	1.43	-3.02	
11,955.0	91.60	266.50	7,905.1	263.6	-4,218.2	4,226.3	3.84	3.33	-1.90	
12,019.0	93.20	266.50	7,902.4	259.7	-4,282.0	4,289.8	2.50	2.50	0.00	
12,082.0	93.60	265.60	7,898.7	255.4	-4,344.8	4,352.2	1.56	0.63	-1.43	
12,145.0	95.40	265.10	7,893.8	250.3	-4,407.4	4,414.4	2.96	2.86	-0.79	



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Site:	SECTION 8	MD Reference:	WELL @ 3299.0usft (Original Well Elev)
Well:	THOMPSON 8 FEDERAL #3H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan v. Actual	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)	
12,208.0	97.20	264.60	7,886.9	244.7	-4,469.7	4,476.4	2.96	2.86	-0.79	
12,272.0	98.20	265.30	7,878.3	239.1	-4,532.9	4,539.2	1.90	1.56	1.09	
12,335.0	98.60	267.00	7,869.1	234.9	-4,595.1	4,601.1	2.74	0.63	2.70	
12,398.0	94.30	268.40	7,862.0	232.4	-4,657.6	4,663.4	7.17	-6.83	2.22	
12,461.0	94.10	268.10	7,857.4	230.5	-4,720.4	4,726.0	0.57	-0.32	-0.48	
12,477.0	94.20	267.70	7,856.2	229.9	-4,736.4	4,741.9	2.57	0.63	-2.50	
12,540.0	94.20	267.70	7,851.6	227.4	-4,799.2	4,804.5	0.00	0.00	0.00	
BHL @ 12540 MD, 94.20°										

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
7,310.0	7,308.5	3.0	-43.5	TI @ 7310 MD, 1.98°	
12,540.0	7,851.6	227.4	-4,799.2	BHL @ 12540 MD, 94.20°	

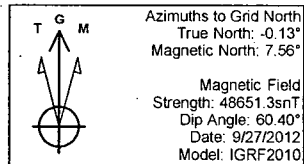
Checked By: _____	Approved By: _____	Date: _____
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COMPANY: Mewbourne Oil Company
 WELL: THOMPSON 8 FEDERAL #3H
 COUNTY: EDDY COUNTY, NM (NAD27)
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: PATTERSON 47
 GRID CORRECTION: 7.56° E



OFFICE: 936.582.7296 PLANNING: 214.784.3778



GEODETIC ZONE: New Mexico East 3001					
WELL @ 3299.0usft (Original Well Elev)					
GROUND ELEVATION: 3279.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	578069.42	575373.44	32° 35' 20.329 N	104° 5' 19.004 W

CRITICAL POINTS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
7308.5	7310.0	1.98	307.22	3.0	-43.5	43.6	0.0	TI @ 7310 MD, 1.98°	
7851.6	12540.0	94.20	267.70	227.4	-4799.2	4804.5	4776.1	BHL @ 12540 MD, 94.20°	

CREATED BY: BRANDON ESTES
 DATE: 10:21, March 19 2013
 PLAN: Plan v. Actual

