



NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 26 2017

RECEIVED

Mewbourne Oil Company

Eddy County, New Mexico

Sec 6, T24S, R28E

Motley 6-7 W2DE Federal Com #1H

Wellbore #1

Design: Wellbore #1

QES Survey Report

12 June, 2017



Company Name: Mewbourne Oil Company
 Motley 6-7 W2DE Federal Com #1H
 Eddy County, New Mexico
 Rig: Patterson #243
 Created By: Shane Robbins
 Date: 6/12/2017

Motley 6-7 W2DE Federal Com #1H
 Eddy County, New Mexico
 Q170597 & WT-170490
 Design #2



PROJECT DETAILS: Eddy County, New Mexico

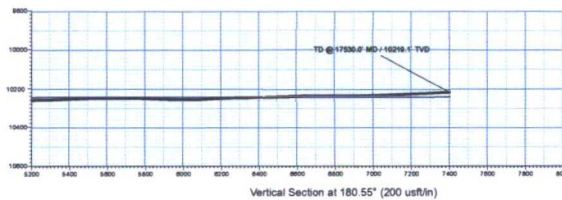
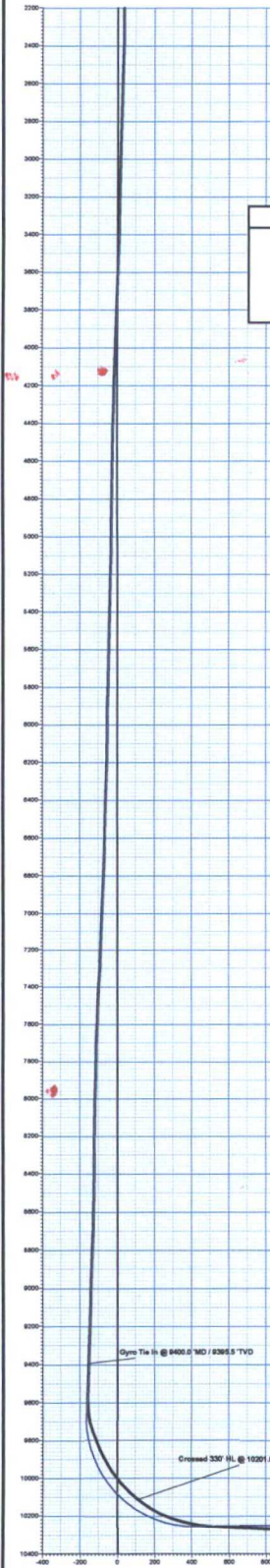
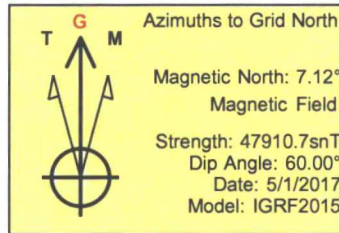
Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

WELL DETAILS: Motley 6-7 W2DE Federal Com #1H

	Ground Level:	3169.8
+N/-S	Northing	Eastng
0.0	456095.08	561724.68
	32° 15' 12.612 N	104° 8' 1.262 W

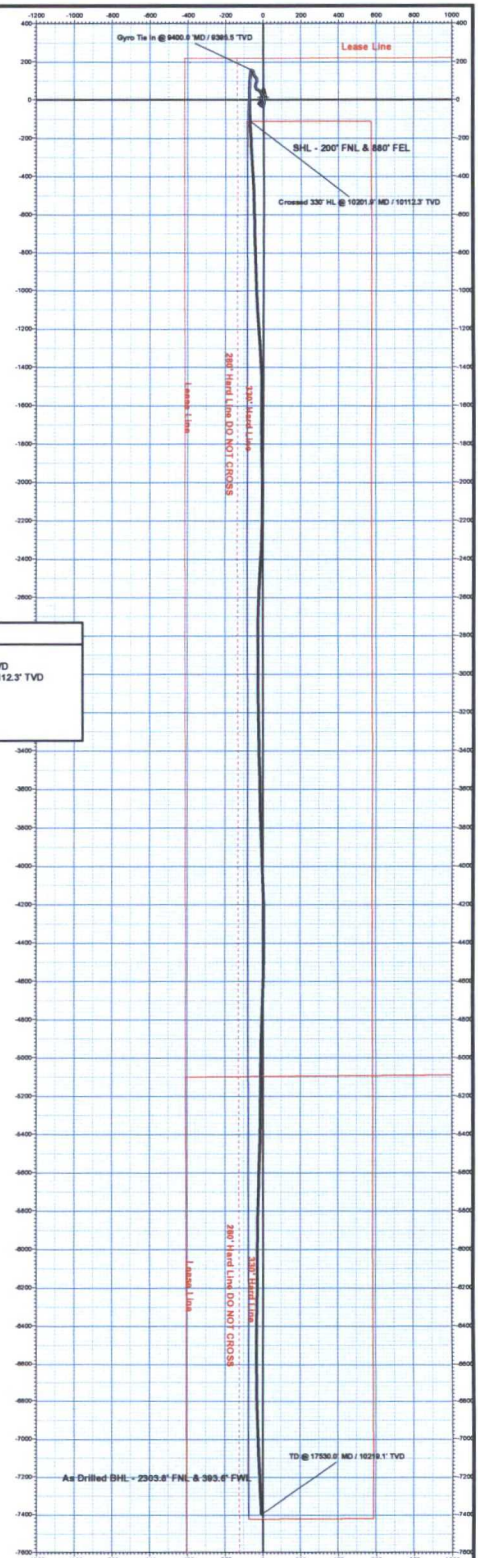
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
8400.0	2.51	327.33	9395.5	154.4	-57.2	-153.9	277.8	Gyro Tie in @ 8400.0 MD / 9395.5 TVD
10201.9	51.97	177.36	10112.3	-110.4	-72.4	111.1	557.7	Crossed 330° HL @ 10201.9 MD / 10112.3 TVD
17530.0	92.60	177.40	10219.1	-7399.7	-8.0	7399.4	7596.6	TD @ 17530.0 MD / 10219.1 TVD



Crossed 330° HL @ 10201.9 MD / 10112.3 TVD

Vertical Section at 180.55° (200 usf/in)





Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Motley 6-7 W2DE Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3136.0usft (Patterson #243)
Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM5002

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 6, T24S, R28E		
Site Position:		Northing:	456,000.10 usft
From:	Map	Easting:	561,724.60 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 12.612 N
		Longitude:	104° 8' 1.202 W
		Grid Convergence:	0.11 °

Well	Motley 6-7 W2DE Federal Com #1H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 15' 12.612 N
		Longitude:	104° 8' 1.202 W
		Ground Level:	3,109.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	5/1/2017	7.23
			Dip Angle (°)
			60.00
			Field Strength (nT)
			47,911

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 (°)
			180.55

Survey Program	Date 6/12/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	9,400.0	Gyro (Wellbore #1)	GYRO-NS
9,520.0	17,530.0	MWD Survey #2 (Wellbore #1)	MWD default
			Description
			OWSG Gyrocompass Gyro
			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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	1.40	216.57	100.0	-1.0	-0.7	1.0	1.40	1.40	0.00
200.0	1.58	224.57	200.0	-2.9	-2.4	3.0	0.27	0.18	8.00
300.0	2.15	228.80	299.9	-5.2	-4.8	5.2	0.59	0.57	4.23
400.0	1.83	240.06	399.8	-7.2	-7.6	7.3	0.50	-0.32	11.26
500.0	1.50	253.25	499.8	-8.4	-10.2	8.5	0.50	-0.33	13.19
600.0	1.08	239.66	599.8	-9.2	-12.3	9.3	0.52	-0.42	-13.59
700.0	1.22	250.45	699.8	-10.1	-14.1	10.2	0.26	0.14	10.79
800.0	0.86	248.21	799.7	-10.7	-15.8	10.8	0.36	-0.36	-2.24
900.0	0.85	228.72	899.7	-11.5	-17.1	11.6	0.29	-0.01	-19.49



Survey Report



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Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM5002

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	1.04	237.64	999.7	-12.4	-18.4	12.6	0.24	0.19	8.92
1,100.0	0.92	218.81	1,099.7	-13.5	-19.7	13.7	0.34	-0.12	-18.83
1,200.0	1.13	226.57	1,199.7	-14.8	-20.9	15.0	0.25	0.21	7.76
1,300.0	1.23	210.64	1,299.7	-16.4	-22.1	16.7	0.34	0.10	-15.93
1,400.0	1.09	215.60	1,399.6	-18.1	-23.2	18.4	0.17	-0.14	4.96
1,500.0	1.01	187.24	1,499.6	-19.8	-23.9	20.0	0.52	-0.08	-28.36
1,600.0	1.49	123.79	1,599.6	-21.4	-22.9	21.6	1.38	0.48	-63.45
1,700.0	2.64	114.01	1,699.5	-23.1	-19.8	23.2	1.20	1.15	-9.78
1,800.0	2.47	128.49	1,799.4	-25.3	-16.0	25.5	0.67	-0.17	14.48
1,900.0	1.66	144.83	1,899.4	-27.9	-13.4	28.0	0.99	-0.81	16.34
2,000.0	2.66	130.35	1,999.3	-30.5	-10.8	30.6	1.13	1.00	-14.48
2,100.0	2.38	124.64	2,099.2	-33.2	-7.4	33.3	0.38	-0.28	-5.71
2,200.0	1.33	100.24	2,199.2	-34.6	-4.5	34.7	1.29	-1.05	-24.40
2,300.0	1.46	89.77	2,299.1	-34.8	-2.1	34.8	0.29	0.13	-10.47
2,400.0	1.66	17.41	2,399.1	-33.4	-0.4	33.4	1.85	0.20	-72.36
2,500.0	1.90	11.49	2,499.0	-30.4	0.4	30.4	0.30	0.24	-5.92
2,600.0	1.66	14.29	2,599.0	-27.4	1.1	27.4	0.26	-0.24	2.80
2,700.0	1.91	9.72	2,699.0	-24.3	1.7	24.3	0.29	0.25	-4.57
2,800.0	1.81	19.11	2,798.9	-21.2	2.5	21.2	0.32	-0.10	9.39
2,900.0	1.78	19.79	2,898.9	-18.3	3.5	18.2	0.04	-0.03	0.68
3,000.0	1.36	13.36	2,998.8	-15.6	4.3	15.6	0.45	-0.42	-6.43
3,100.0	1.28	349.01	3,098.8	-13.4	4.4	13.3	0.56	-0.08	-24.35
3,200.0	1.16	332.46	3,198.8	-11.4	3.7	11.4	0.37	-0.12	-16.55
3,300.0	1.02	338.69	3,298.7	-9.7	2.9	9.6	0.18	-0.14	6.23
3,400.0	1.11	324.76	3,398.7	-8.0	2.0	8.0	0.27	0.09	-13.93
3,500.0	1.81	349.82	3,498.7	-5.7	1.2	5.7	0.93	0.70	25.06
3,600.0	2.05	346.64	3,598.6	-2.4	0.5	2.4	0.26	0.24	-3.18
3,700.0	1.77	354.66	3,698.6	0.9	0.0	-0.9	0.39	-0.28	8.02
3,800.0	1.94	357.76	3,798.5	4.1	-0.3	-4.1	0.20	0.17	3.10
3,900.0	1.75	352.93	3,898.5	7.3	-0.5	-7.3	0.25	-0.19	-4.83
4,000.0	1.73	1.03	3,998.4	10.3	-0.7	-10.3	0.25	-0.02	8.10
4,100.0	1.79	2.27	4,098.4	13.4	-0.6	-13.4	0.07	0.06	1.24
4,200.0	1.73	357.47	4,198.3	16.5	-0.6	-16.5	0.16	-0.06	-4.80
4,300.0	1.41	341.69	4,298.3	19.1	-1.0	-19.1	0.53	-0.32	-15.78
4,400.0	1.11	332.91	4,398.3	21.2	-1.9	-21.2	0.36	-0.30	-8.78
4,500.0	1.11	335.88	4,498.3	22.9	-2.7	-22.9	0.06	0.00	2.97
4,600.0	1.14	334.34	4,598.2	24.7	-3.5	-24.7	0.04	0.03	-1.54
4,700.0	1.19	334.67	4,698.2	26.5	-4.4	-26.5	0.05	0.05	0.33
4,800.0	1.17	330.41	4,798.2	28.4	-5.4	-28.3	0.09	-0.02	-4.26
4,900.0	1.19	330.36	4,898.2	30.2	-6.4	-30.1	0.02	0.02	-0.05
5,000.0	1.22	330.58	4,998.2	32.0	-7.4	-31.9	0.03	0.03	0.22
5,100.0	1.94	322.18	5,098.1	34.3	-9.0	-34.2	0.75	0.72	-8.40
5,200.0	1.97	321.83	5,198.1	36.9	-11.1	-36.8	0.03	0.03	-0.35



Survey Report



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Design:	Wellbore #1	Database:	EDM5002

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)
5,300.0	1.81	319.57	5,298.0	39.5	-13.2	-39.4	0.18	-0.16	-2.26
5,400.0	1.71	310.60	5,398.0	41.7	-15.3	-41.5	0.29	-0.10	-8.97
5,500.0	1.43	321.51	5,497.9	43.6	-17.2	-43.4	0.41	-0.28	10.91
5,600.0	1.41	314.44	5,597.9	45.5	-18.9	-45.3	0.18	-0.02	-7.07
5,700.0	1.92	321.16	5,697.8	47.6	-20.8	-47.4	0.55	0.51	6.72
5,800.0	1.91	320.94	5,797.8	50.2	-22.9	-50.0	0.01	-0.01	-0.22
5,900.0	2.13	289.74	5,897.7	52.1	-25.7	-51.9	1.11	0.22	-31.20
6,000.0	2.13	286.54	5,997.7	53.3	-29.2	-53.0	0.12	0.00	-3.20
6,100.0	2.05	284.62	6,097.6	54.3	-32.7	-54.0	0.11	-0.08	-1.92
6,200.0	2.12	320.52	6,197.5	56.2	-35.7	-55.8	1.29	0.07	35.90
6,300.0	2.13	331.85	6,297.5	59.2	-37.7	-58.9	0.42	0.01	11.33
6,400.0	1.57	332.47	6,397.4	62.1	-39.2	-61.7	0.56	-0.56	0.62
6,500.0	1.07	338.19	6,497.4	64.2	-40.2	-63.8	0.52	-0.50	5.72
6,600.0	2.02	344.64	6,597.4	66.7	-41.0	-66.3	0.96	0.95	6.45
6,700.0	2.07	359.59	6,697.3	70.2	-41.5	-69.8	0.53	0.05	14.95
6,800.0	2.28	9.03	6,797.2	74.0	-41.2	-73.6	0.41	0.21	9.44
6,900.0	2.50	11.83	6,897.1	78.1	-40.4	-77.7	0.25	0.22	2.80
7,000.0	2.56	10.80	6,997.0	82.4	-39.6	-82.0	0.08	0.06	-1.03
7,100.0	2.49	16.80	7,096.9	86.7	-38.5	-86.3	0.27	-0.07	6.00
7,200.0	2.02	42.07	7,196.9	90.1	-36.7	-89.7	1.09	-0.47	25.27
7,300.0	2.96	14.35	7,296.8	93.9	-34.9	-93.6	1.50	0.94	-27.72
7,400.0	3.43	1.57	7,396.6	99.4	-34.2	-99.1	0.85	0.47	-12.78
7,500.0	2.90	357.46	7,496.5	104.9	-34.2	-104.6	0.58	-0.53	-4.11
7,600.0	2.18	345.39	7,596.4	109.3	-34.8	-108.9	0.89	-0.72	-12.07
7,700.0	1.91	334.67	7,696.3	112.6	-36.0	-112.3	0.47	-0.27	-10.72
7,800.0	1.53	322.53	7,796.3	115.2	-37.5	-114.8	0.52	-0.38	-12.14
7,900.0	1.68	325.45	7,896.2	117.5	-39.2	-117.1	0.17	0.15	2.92
8,000.0	1.44	311.87	7,996.2	119.5	-40.9	-119.1	0.44	-0.24	-13.58
8,100.0	1.60	316.04	8,096.1	121.3	-42.8	-120.9	0.19	0.16	4.17
8,200.0	0.93	345.37	8,196.1	123.1	-44.0	-122.7	0.91	-0.67	29.33
8,300.0	0.47	319.46	8,296.1	124.2	-44.5	-123.8	0.55	-0.46	-25.91
8,400.0	0.42	247.13	8,396.1	124.4	-45.1	-124.0	0.53	-0.05	-72.33
8,500.0	1.64	334.23	8,496.1	125.5	-46.0	-125.1	1.67	1.22	87.10
8,600.0	1.41	333.79	8,596.1	127.9	-47.2	-127.5	0.23	-0.23	-0.44
8,700.0	2.17	335.49	8,696.0	130.8	-48.5	-130.3	0.76	0.76	1.70
8,800.0	2.66	342.34	8,795.9	134.7	-50.0	-134.2	0.57	0.49	6.85
8,900.0	2.11	349.45	8,895.8	138.7	-51.1	-138.2	0.62	-0.55	7.11
9,000.0	1.56	353.96	8,995.8	141.9	-51.5	-141.4	0.57	-0.55	4.51
9,100.0	1.37	349.58	9,095.7	144.4	-51.9	-143.9	0.22	-0.19	-4.38
9,200.0	2.19	331.32	9,195.7	147.3	-53.0	-146.7	0.99	0.82	-18.26
9,300.0	2.41	330.67	9,295.6	150.8	-55.0	-150.2	0.22	0.22	-0.65
Gyro Tie In @ 9400.0 'MD / 9395.5 'TVD									
9,400.0	2.51	327.33	9,395.5	154.4	-57.2	-153.9	0.17	0.10	-3.34

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM5002

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)
9,520.0	2.20	319.30	9,515.4	158.4	-60.1	-157.8	0.38	-0.26	-6.69
9,553.0	2.20	325.60	9,548.4	159.4	-60.9	-158.8	0.73	0.00	19.09
9,585.0	1.60	320.50	9,580.4	160.3	-61.5	-159.7	1.95	-1.88	-15.94
9,616.0	2.20	207.00	9,611.4	160.1	-62.1	-159.5	10.31	1.94	-366.13
9,647.0	6.40	189.60	9,642.3	157.8	-62.6	-157.2	14.03	13.55	-56.13
9,679.0	9.70	196.10	9,674.0	153.5	-63.7	-152.9	10.68	10.31	20.31
9,711.0	14.30	192.40	9,705.3	147.0	-65.3	-146.4	14.57	14.38	-11.56
9,742.0	17.20	188.90	9,735.1	138.8	-66.8	-138.1	9.84	9.35	-11.29
9,773.0	18.80	188.00	9,764.6	129.3	-68.2	-128.6	5.24	5.16	-2.90
9,804.0	20.80	187.30	9,793.7	118.9	-69.6	-118.2	6.50	6.45	-2.26
9,836.0	22.80	186.80	9,823.4	107.1	-71.0	-106.4	6.28	6.25	-1.56
9,867.0	25.20	184.80	9,851.8	94.5	-72.3	-93.8	8.17	7.74	-6.45
9,899.0	27.00	181.70	9,880.5	80.5	-73.1	-79.8	7.06	5.63	-9.69
9,930.0	28.80	180.60	9,907.9	66.0	-73.4	-65.3	6.04	5.81	-3.55
9,961.0	31.40	180.60	9,934.7	50.4	-73.5	-49.7	8.39	8.39	0.00
9,993.0	34.50	180.30	9,961.6	33.0	-73.7	-32.3	9.70	9.69	-0.94
10,024.0	37.60	179.90	9,986.6	14.8	-73.7	-14.1	10.03	10.00	-1.29
10,055.0	40.40	180.30	10,010.7	-4.7	-73.7	5.4	9.07	9.03	1.29
10,086.0	42.90	180.40	10,033.9	-25.3	-73.9	26.0	8.07	8.06	0.32
10,118.0	45.20	179.90	10,056.9	-47.6	-73.9	48.3	7.27	7.19	-1.56
10,149.0	47.80	178.90	10,078.2	-70.0	-73.7	70.7	8.71	8.39	-3.23
10,180.0	50.20	178.00	10,098.5	-93.4	-73.1	94.1	8.05	7.74	-2.90
Crossed 330° HL @ 10201.9' MD / 10112.3' TVD									
10,201.9	51.97	177.36	10,112.3	-110.4	-72.4	111.1	8.38	8.06	-2.93
10,211.0	52.70	177.10	10,117.9	-117.6	-72.0	118.3	8.38	8.07	-2.83
10,243.0	55.10	176.90	10,136.7	-143.5	-70.7	144.1	7.52	7.50	-0.63
10,274.0	57.40	177.10	10,153.9	-169.2	-69.3	169.9	7.44	7.42	0.65
10,305.0	60.20	176.90	10,170.0	-195.7	-67.9	196.3	9.05	9.03	-0.65
10,336.0	63.50	177.60	10,184.6	-223.0	-66.6	223.6	10.83	10.65	2.26
10,368.0	67.40	177.60	10,197.9	-252.1	-65.4	252.7	12.19	12.19	0.00
10,399.0	70.10	177.40	10,209.1	-280.9	-64.1	281.5	8.73	8.71	-0.65
10,430.0	72.90	176.80	10,219.0	-310.3	-62.6	310.9	9.22	9.03	-1.94
10,480.0	77.70	177.10	10,231.7	-358.6	-60.1	359.1	9.62	9.60	0.60
10,499.0	78.40	176.80	10,235.6	-377.1	-59.1	377.7	3.99	3.68	-1.58
10,531.0	78.60	176.90	10,242.0	-408.4	-57.4	409.0	0.70	0.63	0.31
10,562.0	80.90	176.90	10,247.5	-438.9	-55.7	439.4	7.42	7.42	0.00
10,593.0	83.50	177.40	10,251.7	-469.6	-54.2	470.1	8.54	8.39	1.61
10,625.0	86.00	177.80	10,254.6	-501.4	-52.9	501.9	7.91	7.81	1.25
10,656.0	87.70	178.30	10,256.3	-532.3	-51.8	532.8	5.72	5.48	1.61
10,688.0	87.50	178.50	10,257.7	-564.3	-50.9	564.7	0.88	-0.63	0.63
10,719.0	87.60	178.50	10,259.0	-595.2	-50.1	595.7	0.32	0.32	0.00
10,751.0	87.10	178.30	10,260.5	-627.2	-49.2	627.6	1.68	-1.56	-0.63
10,844.0	87.60	178.50	10,264.8	-720.1	-46.6	720.5	0.58	0.54	0.22
10,938.0	87.30	178.00	10,269.0	-813.9	-43.7	814.3	0.62	-0.32	-0.53

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Motley 6-7 W2DE Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3136.0usft (Patterson #243)
Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM5002

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)
11,032.0	89.70	178.70	10,271.4	-907.8	-41.0	908.2	2.66	2.55	0.74
11,126.0	88.60	176.60	10,272.8	-1,001.7	-37.2	1,002.1	2.52	-1.17	-2.23
11,219.0	91.30	177.10	10,272.9	-1,094.6	-32.1	1,094.9	2.95	2.90	0.54
11,313.0	89.40	175.70	10,272.3	-1,188.4	-26.2	1,188.6	2.51	-2.02	-1.49
11,407.0	92.10	176.10	10,271.1	-1,282.1	-19.5	1,282.3	2.90	2.87	0.43
11,501.0	90.70	176.10	10,268.8	-1,375.9	-13.1	1,376.0	1.49	-1.49	0.00
11,594.0	92.80	178.90	10,266.0	-1,468.8	-9.0	1,468.8	3.76	2.26	3.01
11,687.0	93.40	179.90	10,260.9	-1,561.6	-8.0	1,561.6	1.25	0.65	1.08
11,781.0	92.80	180.10	10,255.8	-1,655.5	-8.0	1,655.5	0.67	-0.64	0.21
11,875.0	90.80	179.70	10,252.9	-1,749.4	-7.9	1,749.4	2.17	-2.13	-0.43
11,969.0	88.80	179.20	10,253.2	-1,843.4	-7.0	1,843.4	2.19	-2.13	-0.53
12,063.0	86.80	178.00	10,256.8	-1,937.3	-4.7	1,937.3	2.48	-2.13	-1.28
12,157.0	88.30	179.70	10,260.8	-2,031.2	-2.8	2,031.1	2.41	1.60	1.81
12,251.0	91.40	181.00	10,261.1	-2,125.2	-3.4	2,125.1	3.58	3.30	1.38
12,345.0	93.90	179.90	10,256.7	-2,219.1	-4.1	2,219.0	2.91	2.66	-1.17
12,439.0	92.00	182.70	10,251.9	-2,312.9	-6.2	2,312.9	3.60	-2.02	2.98
12,532.0	88.20	183.30	10,251.7	-2,405.8	-11.1	2,405.8	4.14	-4.09	0.65
12,626.0	90.20	183.60	10,253.1	-2,499.6	-16.8	2,499.6	2.15	2.13	0.32
12,719.0	85.80	182.40	10,256.3	-2,592.4	-21.6	2,592.5	4.90	-4.73	-1.29
12,813.0	85.70	182.00	10,263.3	-2,686.0	-25.2	2,686.2	0.44	-0.11	-0.43
12,907.0	87.40	180.30	10,268.9	-2,779.8	-27.1	2,780.0	2.56	1.81	-1.81
13,001.0	89.60	179.20	10,271.4	-2,873.8	-26.7	2,873.9	2.62	2.34	-1.17
13,095.0	89.30	179.70	10,272.3	-2,967.8	-25.8	2,967.9	0.62	-0.32	0.53
13,189.0	88.70	180.10	10,273.9	-3,061.8	-25.6	3,061.9	0.77	-0.64	0.43
13,282.0	91.60	178.90	10,273.7	-3,154.8	-24.8	3,154.9	3.37	3.12	-1.29
13,376.0	92.80	180.10	10,270.1	-3,248.7	-24.0	3,248.8	1.80	1.28	1.28
13,469.0	89.40	178.30	10,268.3	-3,341.6	-22.7	3,341.7	4.14	-3.66	-1.94
13,563.0	88.50	178.30	10,270.0	-3,435.6	-19.9	3,435.6	0.96	-0.96	0.00
13,657.0	90.50	178.90	10,270.8	-3,529.5	-17.6	3,529.6	2.22	2.13	0.64
13,751.0	90.80	178.70	10,269.8	-3,623.5	-15.6	3,623.5	0.38	0.32	-0.21
13,846.0	90.40	178.30	10,268.8	-3,718.5	-13.2	3,718.4	0.60	-0.42	-0.42
13,939.0	90.00	178.20	10,268.5	-3,811.4	-10.3	3,811.4	0.44	-0.43	-0.11
14,033.0	91.90	178.20	10,266.9	-3,905.4	-7.4	3,905.3	2.02	2.02	0.00
14,124.0	91.70	177.40	10,264.0	-3,996.3	-3.9	3,996.1	0.91	-0.22	-0.88
14,218.0	91.50	178.00	10,261.4	-4,090.2	-0.1	4,090.0	0.67	-0.21	0.64
14,312.0	92.10	178.90	10,258.5	-4,184.1	2.4	4,183.9	1.15	0.64	0.96
14,405.0	92.20	178.90	10,255.0	-4,277.0	4.2	4,276.7	0.11	0.11	0.00
14,499.0	90.90	180.10	10,252.4	-4,370.9	5.0	4,370.7	1.88	-1.38	1.28
14,593.0	89.50	181.00	10,252.1	-4,464.9	4.1	4,464.7	1.77	-1.49	0.96
14,687.0	89.30	181.70	10,253.1	-4,558.9	1.9	4,558.7	0.77	-0.21	0.74
14,780.0	88.20	181.90	10,255.1	-4,651.8	-1.0	4,651.6	1.20	-1.18	0.22
14,875.0	88.00	182.00	10,258.3	-4,746.7	-4.2	4,746.6	0.24	-0.21	0.11
14,969.0	87.90	182.60	10,261.6	-4,840.6	-8.0	4,840.4	0.65	-0.11	0.64



Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Motley 6-7 W2DE Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3136.0usft (Patterson #243)
Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM5002

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)
15,062.0	90.10	180.60	10,263.2	-4,933.5	-10.6	4,933.4	3.20	2.37	-2.15
15,156.0	90.10	180.40	10,263.1	-5,027.5	-11.4	5,027.4	0.21	0.00	-0.21
15,250.0	91.10	180.60	10,262.1	-5,121.5	-12.2	5,121.4	1.08	1.06	0.21
15,344.0	91.00	180.40	10,260.4	-5,215.5	-13.0	5,215.4	0.24	-0.11	-0.21
15,438.0	91.40	180.40	10,258.4	-5,309.5	-13.7	5,309.4	0.43	0.43	0.00
15,533.0	92.80	182.00	10,254.9	-5,404.4	-15.7	5,404.3	2.24	1.47	1.68
15,626.0	91.10	181.90	10,251.8	-5,497.3	-18.9	5,497.2	1.83	-1.83	-0.11
15,720.0	90.40	181.50	10,250.5	-5,591.2	-21.6	5,591.2	0.86	-0.74	-0.43
15,814.0	89.70	181.90	10,250.4	-5,685.2	-24.4	5,685.2	0.86	-0.74	0.43
15,908.0	88.30	182.00	10,252.1	-5,779.1	-27.6	5,779.1	1.49	-1.49	0.11
16,001.0	87.80	180.10	10,255.3	-5,872.0	-29.3	5,872.0	2.11	-0.54	-2.04
16,095.0	88.60	180.30	10,258.2	-5,966.0	-29.7	5,966.0	0.88	0.85	0.21
16,189.0	92.30	180.30	10,257.5	-6,060.0	-30.2	6,060.0	3.94	3.94	0.00
16,283.0	92.90	180.80	10,253.2	-6,153.9	-31.1	6,153.9	0.83	0.64	0.53
16,376.0	91.40	180.60	10,249.7	-6,246.8	-32.2	6,246.8	1.63	-1.61	-0.22
16,470.0	91.90	180.60	10,247.0	-6,340.7	-33.2	6,340.8	0.53	0.53	0.00
16,564.0	92.20	181.30	10,243.6	-6,434.7	-34.7	6,434.7	0.81	0.32	0.74
16,658.0	91.00	179.90	10,241.0	-6,528.6	-35.7	6,528.7	1.96	-1.28	-1.49
16,752.0	91.80	179.40	10,238.7	-6,622.6	-35.1	6,622.6	1.00	0.85	-0.53
16,847.0	90.20	178.90	10,237.1	-6,717.6	-33.7	6,717.6	1.76	-1.68	-0.53
16,941.0	89.50	178.90	10,237.3	-6,811.5	-31.9	6,811.5	0.74	-0.74	0.00
17,035.0	90.70	178.50	10,237.1	-6,905.5	-29.8	6,905.5	1.35	1.28	-0.43
17,129.0	91.10	177.80	10,235.7	-6,999.5	-26.8	6,999.4	0.86	0.43	-0.74
17,223.0	92.50	176.90	10,232.7	-7,093.3	-22.4	7,093.2	1.77	1.49	-0.96
17,316.0	92.40	176.80	10,228.7	-7,186.1	-17.3	7,185.9	0.15	-0.11	-0.11
17,410.0	92.70	178.00	10,224.6	-7,279.9	-13.0	7,279.7	1.31	0.32	1.28
17,480.0	92.60	177.40	10,221.3	-7,349.8	-10.2	7,349.5	0.87	-0.14	-0.86
TD @ 17530.0' MD / 10219.1' TVD									
17,530.0	92.60	177.40	10,219.1	-7,399.7	-8.0	7,399.4	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,400.0	9,395.5	154.4	-57.2	Gyro Tie In @ 9400.0' MD / 9395.5' TVD
10,201.9	10,112.3	-110.4	-72.4	Crossed 330' HL @ 10201.9' MD / 10112.3' TVD
17,530.0	10,219.1	-7,399.7	-8.0	TD @ 17530.0' MD / 10219.1' TVD

Checked By: _____ Approved By: _____ Date: _____



Mewbourne Oil Company

Eddy County, New Mexico

Sec 6, T24S, R28E

Motley 6-7 W2DE Federal Com #1H

Wellbore #1

Survey: MWD Survey #2

QES Survey Report

10 August, 2017



Quintana Energy Services

11390 FM 830

Willis, TX 77318

Phone: (936) 856-4332

Fax: (936) 856-8678

**Survey Certification Sheet**

Company	Job Number	Date
Mewbourne Oil Company	WT-170490	8/10/2017

Lease	Well Name	County & State
Sec 6 T24S R28E	Motley 6-7 W2DE Fed Com 1H	Eddy, New Mexico

API No.	Survey Depth Range	Survey Type
30-015-44140	9400 feet to 17530 feet MD	MWD

Sidetrack Information	Directional Supervisor/Surveyor
N/A	Brad Reed

Certification Statement

The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by Quintana Energy Services (QES). This report represents a true and correct directional survey of this well based on the original data obtained at the well site. Wellbore coordinates are calculated using minimum curvature.

Christopher Hughes

Digitally signed by Christopher Hughes
DN: cn=Christopher Hughes, o=QES,
ou=compliance, email=chrish@qeslp.com, c=US
Date: 2017.08.15 15:44:30 -05'00'

Christopher Hughes
MWD Compliance Manager
Quintana Energy Services



Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Motley 6-7 W2DE Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3136.0usft (Patterson #243)
Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #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 6, T24S, R28E		
Site Position:		Northing:	456,000.10 usft
From:	Map	Easting:	561,724.60 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 12.612 N
		Longitude:	104° 8' 1.202 W
		Grid Convergence:	0.11 °

Well	Motley 6-7 W2DE Federal Com #1H		
Well Position	+N/-S	0.0 usft	Northing: 456,000.09 usft
	+E/-W	0.0 usft	Easting: 561,724.60 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 15' 12.612 N
		Longitude:	104° 8' 1.202 W
		Ground Level:	3,109.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/1/2017	7.23	60.00	47,910.68286386

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	180.55

Survey Program	Date 6/12/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,400.0	Gyro (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro
9,520.0	17,530.0	MWD Survey #2 (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)
Gyro Tie In @ 9400.0 'MD / 9395.5 'TVD									
9,400.0	2.51	327.33	9,395.5	154.4	-57.2	-153.9	0.00	0.00	0.00
9,520.0	2.20	319.30	9,515.4	158.4	-60.1	-157.8	0.38	-0.26	-6.69
9,553.0	2.20	325.60	9,548.4	159.4	-60.9	-158.8	0.73	0.00	19.09
9,585.0	1.60	320.50	9,580.4	160.3	-61.5	-159.7	1.95	-1.88	-15.94
9,616.0	2.20	207.00	9,611.4	160.1	-62.1	-159.5	10.31	1.94	-366.13
9,647.0	6.40	189.60	9,642.3	157.8	-62.6	-157.2	14.03	13.55	-56.13
9,679.0	9.70	196.10	9,674.0	153.5	-63.7	-152.9	10.68	10.31	20.31
9,711.0	14.30	192.40	9,705.3	147.0	-65.3	-146.4	14.57	14.38	-11.56
9,742.0	17.20	188.90	9,735.1	138.8	-66.8	-138.1	9.84	9.35	-11.29



Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Motley 6-7 W2DE Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3136.0usft (Patterson #243)
Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #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)
9,773.0	18.80	188.00	9,764.6	129.3	-68.2	-128.6	5.24	5.16	-2.90
9,804.0	20.80	187.30	9,793.7	118.9	-69.6	-118.2	6.50	6.45	-2.26
9,836.0	22.80	186.80	9,823.4	107.1	-71.0	-106.4	6.28	6.25	-1.56
9,867.0	25.20	184.80	9,851.8	94.5	-72.3	-93.8	8.17	7.74	-6.45
9,899.0	27.00	181.70	9,880.5	80.5	-73.1	-79.8	7.06	5.63	-9.69
9,930.0	28.80	180.60	9,907.9	66.0	-73.4	-65.3	6.04	5.81	-3.55
9,961.0	31.40	180.60	9,934.7	50.4	-73.5	-49.7	8.39	8.39	0.00
9,993.0	34.50	180.30	9,961.6	33.0	-73.7	-32.3	9.70	9.69	-0.94
10,024.0	37.60	179.90	9,986.6	14.8	-73.7	-14.1	10.03	10.00	-1.29
10,055.0	40.40	180.30	10,010.7	-4.7	-73.7	5.4	9.07	9.03	1.29
10,086.0	42.90	180.40	10,033.9	-25.3	-73.9	26.0	8.07	8.06	0.32
10,118.0	45.20	179.90	10,056.9	-47.6	-73.9	48.3	7.27	7.19	-1.56
10,149.0	47.80	178.90	10,078.2	-70.0	-73.7	70.7	8.71	8.39	-3.23
10,180.0	50.20	178.00	10,098.5	-93.4	-73.1	94.1	8.05	7.74	-2.90
10,211.0	52.70	177.10	10,117.9	-117.6	-72.0	118.3	8.38	8.06	-2.90
10,243.0	55.10	176.90	10,136.7	-143.5	-70.7	144.1	7.52	7.50	-0.63
10,274.0	57.40	177.10	10,153.9	-169.2	-69.3	169.9	7.44	7.42	0.65
10,305.0	60.20	176.90	10,170.0	-195.7	-67.9	196.3	9.05	9.03	-0.65
10,336.0	63.50	177.60	10,184.6	-223.0	-66.6	223.6	10.83	10.65	2.26
10,368.0	67.40	177.60	10,197.9	-252.1	-65.4	252.7	12.19	12.19	0.00
10,399.0	70.10	177.40	10,209.1	-280.9	-64.1	281.5	8.73	8.71	-0.65
10,430.0	72.90	176.80	10,219.0	-310.3	-62.6	310.9	9.22	9.03	-1.94
10,480.0	77.70	177.10	10,231.7	-358.6	-60.1	359.1	9.62	9.60	0.60
10,499.0	78.40	176.80	10,235.6	-377.1	-59.1	377.7	3.99	3.68	-1.58
10,531.0	78.60	176.90	10,242.0	-408.4	-57.4	409.0	0.70	0.63	0.31
10,562.0	80.90	176.90	10,247.5	-438.9	-55.7	439.4	7.42	7.42	0.00
10,593.0	83.50	177.40	10,251.7	-469.6	-54.2	470.1	8.54	8.39	1.61
10,625.0	86.00	177.80	10,254.6	-501.4	-52.9	501.9	7.91	7.81	1.25
10,656.0	87.70	178.30	10,256.3	-532.3	-51.8	532.8	5.72	5.48	1.61
10,688.0	87.50	178.50	10,257.7	-564.3	-50.9	564.7	0.88	-0.63	0.63
10,719.0	87.60	178.50	10,259.0	-595.2	-50.1	595.7	0.32	0.32	0.00
10,751.0	87.10	178.30	10,260.5	-627.2	-49.2	627.6	1.68	-1.56	-0.63
10,844.0	87.60	178.50	10,264.8	-720.1	-46.6	720.5	0.58	0.54	0.22
10,938.0	87.30	178.00	10,269.0	-813.9	-43.7	814.3	0.62	-0.32	-0.53
11,032.0	89.70	178.70	10,271.4	-907.8	-41.0	908.2	2.66	2.55	0.74
11,126.0	88.60	176.60	10,272.8	-1,001.7	-37.2	1,002.1	2.52	-1.17	-2.23
11,219.0	91.30	177.10	10,272.9	-1,094.6	-32.1	1,094.9	2.95	2.90	0.54
11,313.0	89.40	175.70	10,272.3	-1,188.4	-26.2	1,188.6	2.51	-2.02	-1.49
11,407.0	92.10	176.10	10,271.1	-1,282.1	-19.5	1,282.3	2.90	2.87	0.43
11,501.0	90.70	176.10	10,268.8	-1,375.9	-13.1	1,376.0	1.49	-1.49	0.00
11,594.0	92.80	178.90	10,266.0	-1,468.8	-9.0	1,468.8	3.76	2.26	3.01
11,687.0	93.40	179.90	10,260.9	-1,561.6	-8.0	1,561.6	1.25	0.65	1.08
11,781.0	92.80	180.10	10,255.8	-1,655.5	-8.0	1,655.5	0.67	-0.64	0.21



Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Motley 6-7 W2DE Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3136.0usft (Patterson #243)
Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #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)
11,875.0	90.80	179.70	10,252.9	-1,749.4	-7.9	1,749.4	2.17	-2.13	-0.43
11,969.0	88.80	179.20	10,253.2	-1,843.4	-7.0	1,843.4	2.19	-2.13	-0.53
12,063.0	86.80	178.00	10,256.8	-1,937.3	-4.7	1,937.3	2.48	-2.13	-1.28
12,157.0	88.30	179.70	10,260.8	-2,031.2	-2.8	2,031.1	2.41	1.60	1.81
12,251.0	91.40	181.00	10,261.1	-2,125.2	-3.4	2,125.1	3.58	3.30	1.38
12,345.0	93.90	179.90	10,256.7	-2,219.1	-4.1	2,219.0	2.91	2.66	-1.17
12,439.0	92.00	182.70	10,251.9	-2,312.9	-6.2	2,312.9	3.60	-2.02	2.98
12,532.0	88.20	183.30	10,251.7	-2,405.8	-11.1	2,405.8	4.14	-4.09	0.65
12,626.0	90.20	183.60	10,253.1	-2,499.6	-16.8	2,499.6	2.15	2.13	0.32
12,719.0	85.80	182.40	10,256.3	-2,592.4	-21.6	2,592.5	4.90	-4.73	-1.29
12,813.0	85.70	182.00	10,263.3	-2,686.0	-25.2	2,686.2	0.44	-0.11	-0.43
12,907.0	87.40	180.30	10,268.9	-2,779.8	-27.1	2,780.0	2.56	1.81	-1.81
13,001.0	89.60	179.20	10,271.4	-2,873.8	-26.7	2,873.9	2.62	2.34	-1.17
13,095.0	89.30	179.70	10,272.3	-2,967.8	-25.8	2,967.9	0.62	-0.32	0.53
13,189.0	88.70	180.10	10,273.9	-3,061.8	-25.6	3,061.9	0.77	-0.64	0.43
13,282.0	91.60	178.90	10,273.7	-3,154.8	-24.8	3,154.9	3.37	3.12	-1.29
13,376.0	92.80	180.10	10,270.1	-3,248.7	-24.0	3,248.8	1.80	1.28	1.28
13,469.0	89.40	178.30	10,268.3	-3,341.6	-22.7	3,341.7	4.14	-3.66	-1.94
13,563.0	88.50	178.30	10,270.0	-3,435.6	-19.9	3,435.6	0.96	-0.96	0.00
13,657.0	90.50	178.90	10,270.8	-3,529.5	-17.6	3,529.6	2.22	2.13	0.64
13,751.0	90.80	178.70	10,269.8	-3,623.5	-15.6	3,623.5	0.38	0.32	-0.21
13,846.0	90.40	178.30	10,268.8	-3,718.5	-13.2	3,718.4	0.60	-0.42	-0.42
13,939.0	90.00	178.20	10,268.5	-3,811.4	-10.3	3,811.4	0.44	-0.43	-0.11
14,033.0	91.90	178.20	10,266.9	-3,905.4	-7.4	3,905.3	2.02	2.02	0.00
14,124.0	91.70	177.40	10,264.0	-3,996.3	-3.9	3,996.1	0.91	-0.22	-0.88
14,218.0	91.50	178.00	10,261.4	-4,090.2	-0.1	4,090.0	0.67	-0.21	0.64
14,312.0	92.10	178.90	10,258.5	-4,184.1	2.4	4,183.9	1.15	0.64	0.96
14,405.0	92.20	178.90	10,255.0	-4,277.0	4.2	4,276.7	0.11	0.11	0.00
14,499.0	90.90	180.10	10,252.4	-4,370.9	5.0	4,370.7	1.88	-1.38	1.28
14,593.0	89.50	181.00	10,252.1	-4,464.9	4.1	4,464.7	1.77	-1.49	0.96
14,687.0	89.30	181.70	10,253.1	-4,558.9	1.9	4,558.7	0.77	-0.21	0.74
14,780.0	88.20	181.90	10,255.1	-4,651.8	-1.0	4,651.6	1.20	-1.18	0.22
14,875.0	88.00	182.00	10,258.3	-4,746.7	-4.2	4,746.6	0.24	-0.21	0.11
14,969.0	87.90	182.60	10,261.6	-4,840.6	-8.0	4,840.4	0.65	-0.11	0.64
15,062.0	90.10	180.60	10,263.2	-4,933.5	-10.6	4,933.4	3.20	2.37	-2.15
15,156.0	90.10	180.40	10,263.1	-5,027.5	-11.4	5,027.4	0.21	0.00	-0.21
15,250.0	91.10	180.60	10,262.1	-5,121.5	-12.2	5,121.4	1.08	1.06	0.21
15,344.0	91.00	180.40	10,260.4	-5,215.5	-13.0	5,215.4	0.24	-0.11	-0.21
15,438.0	91.40	180.40	10,258.4	-5,309.5	-13.7	5,309.4	0.43	0.43	0.00
15,533.0	92.80	182.00	10,254.9	-5,404.4	-15.7	5,404.3	2.24	1.47	1.68
15,626.0	91.10	181.90	10,251.8	-5,497.3	-18.9	5,497.2	1.83	-1.83	-0.11
15,720.0	90.40	181.50	10,250.5	-5,591.2	-21.6	5,591.2	0.86	-0.74	-0.43
15,814.0	89.70	181.90	10,250.4	-5,685.2	-24.4	5,685.2	0.86	-0.74	0.43



Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Motley 6-7 W2DE Federal Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB @ 3136.0usft (Patterson #243)
Site:	Sec 6, T24S, R28E	MD Reference:	RKB @ 3136.0usft (Patterson #243)
Well:	Motley 6-7 W2DE Federal Com #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)
15,908.0	88.30	182.00	10,252.1	-5,779.1	-27.6	5,779.1	1.49	-1.49	0.11
16,001.0	87.80	180.10	10,255.3	-5,872.0	-29.3	5,872.0	2.11	-0.54	-2.04
16,095.0	88.60	180.30	10,258.2	-5,966.0	-29.7	5,966.0	0.88	0.85	0.21
16,189.0	92.30	180.30	10,257.5	-6,060.0	-30.2	6,060.0	3.94	3.94	0.00
16,283.0	92.90	180.80	10,253.2	-6,153.9	-31.1	6,153.9	0.83	0.64	0.53
16,376.0	91.40	180.60	10,249.7	-6,246.8	-32.2	6,246.8	1.63	-1.61	-0.22
16,470.0	91.90	180.60	10,247.0	-6,340.7	-33.2	6,340.8	0.53	0.53	0.00
16,564.0	92.20	181.30	10,243.6	-6,434.7	-34.7	6,434.7	0.81	0.32	0.74
16,658.0	91.00	179.90	10,241.0	-6,528.6	-35.7	6,528.7	1.96	-1.28	-1.49
16,752.0	91.80	179.40	10,238.7	-6,622.6	-35.1	6,622.6	1.00	0.85	-0.53
16,847.0	90.20	178.90	10,237.1	-6,717.6	-33.7	6,717.6	1.76	-1.68	-0.53
16,941.0	89.50	178.90	10,237.3	-6,811.5	-31.9	6,811.5	0.74	-0.74	0.00
17,035.0	90.70	178.50	10,237.1	-6,905.5	-29.8	6,905.5	1.35	1.28	-0.43
17,129.0	91.10	177.80	10,235.7	-6,999.5	-26.8	6,999.4	0.86	0.43	-0.74
17,223.0	92.50	176.90	10,232.7	-7,093.3	-22.4	7,093.2	1.77	1.49	-0.96
17,316.0	92.40	176.80	10,228.7	-7,186.1	-17.3	7,185.9	0.15	-0.11	-0.11
17,410.0	92.70	178.00	10,224.6	-7,279.9	-13.0	7,279.7	1.31	0.32	1.28
17,480.0	92.60	177.40	10,221.3	-7,349.8	-10.2	7,349.5	0.87	-0.14	-0.86
TD @ 17530.0' MD / 10219.1' TVD									
17,530.0	92.60	177.40	10,219.1	-7,399.7	-8.0	7,399.4	0.00	0.00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,400.0	9,395.5	154.4	-57.2	Gyro Tie In @ 9400.0 'MD / 9395.5 'TVD
17,530.0	10,219.1	-7,399.7	-8.0	TD @ 17530.0' MD / 10219.1' TVD

Checked By: _____ Approved By: _____ Date: _____