

OPERATOR
WELL/LEASE
COUNTY

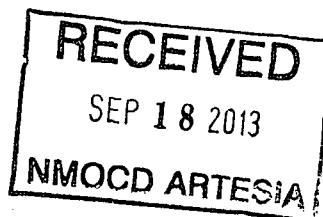
MEWBOURNE OIL COMPANY
WINCHESTER 36 AD ST. 001H
EDDY

080-0140

STATE OF NEW MEXICO
DEVIATION REPORT

15- 4/354

455	0.40
700	1.80
939	2.60
1,193	2.40
1,476	2.60
1,761	2.50
2,045	2.50
2,370	2.80
2,715	2.40
2,965	3.10
3,465	1.25
3,960	0.83
4,913	2.89
5,103	3.70
5,491	4.00
5,673	4.63
5,715	4.64
5,966	4.39
6,179	4.23
6,370	3.51



BY:

Steve Moore

STATE OF TEXAS

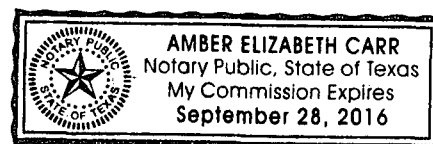
COUNTY OF MIDLAND

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

8/2/13

, by

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

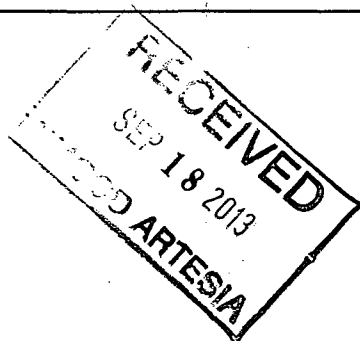




Company: Mewbourne Oil Company
Lease/Well: Winchester 36 AD State/No. 001H



Rig Name: Patterson 80
State/County: New Mexico/Eddy
Latitude: 32.62, Longitude: -104.12
GRID North is 0.11 Degrees East of True North
VS-Azi: 269.60 Degrees



DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...ster36adstate#1h-de_01_int.ut

Minimum Curvature Method

Report Date/Time: 7/29/2013 / 09:33

Vaughn Energy Services

Corpus Christi, Texas

800-606-4976

Survey Engineer: Daniel Miller

Winchester 36 AD State No. 001H / API 30-015-41354

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.36	344.28	100.00	0.31	-0.09	0.08	0.32	344.28	0.36
200.00	0.12	267.99	200.00	0.61	-0.28	0.27	0.67	335.47	0.36
300.00	0.16	200.36	300.00	0.47	-0.43	0.43	0.64	317.47	0.16
400.00	0.23	132.36	400.00	0.21	-0.34	0.33	0.39	301.40	0.22
500.00	0.57	93.13	500.00	0.04	0.31	-0.31	0.31	81.81	0.42
600.00	1.11	79.13	599.98	0.20	1.76	-1.76	1.77	83.54	0.57
700.00	2.02	80.39	699.95	0.68	4.45	-4.45	4.50	81.36	0.91
800.00	2.66	82.21	799.86	1.28	8.48	-8.49	8.58	81.39	0.64
900.00	2.25	84.44	899.77	1.79	12.74	-12.75	12.86	82.00	0.42
1000.00	2.12	98.22	999.70	1.72	16.53	-16.54	16.61	84.07	0.54
1100.00	2.08	107.29	1099.63	0.91	20.09	-20.10	20.11	87.41	0.33
1200.00	2.43	118.58	1199.55	-0.64	23.69	-23.68	23.70	91.56	0.56
1300.00	2.11	123.00	1299.48	-2.66	27.10	-27.08	27.23	95.61	0.36
1400.00	2.12	136.13	1399.41	-5.00	29.93	-29.89	30.34	99.49	0.48
1500.00	2.14	134.90	1499.34	-7.66	32.53	-32.48	33.42	103.24	0.05
1600.00	2.57	131.21	1599.25	-10.46	35.55	-35.47	37.05	106.39	0.46
1700.00	2.26	142.31	1699.16	-13.50	38.44	-38.35	40.75	109.35	0.56
1800.00	2.31	146.46	1799.09	-16.74	40.76	-40.65	44.07	112.33	0.17
1900.00	2.42	156.37	1899.00	-20.35	42.72	-42.58	47.33	115.47	0.42

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
2000.00	2.14	167.09	1998.92	-24.11	43.99	-43.82	50.16	118.73	0.51
2100.00	1.81	181.17	2098.86	-27.51	44.38	-44.18	52.21	121.80	0.59
2200.00	1.81	173.03	2198.81	-30.66	44.53	-44.32	54.07	124.54	0.26
2300.00	1.68	184.10	2298.77	-33.69	44.62	-44.39	55.91	127.06	0.36
2400.00	1.33	195.34	2398.73	-36.28	44.21	-43.95	57.19	129.37	0.46
2500.00	1.35	201.31	2498.70	-38.50	43.47	-43.20	58.07	131.53	0.14
2600.00	1.05	196.92	2598.68	-40.47	42.78	-42.50	58.89	133.41	0.32
2700.00	1.02	183.07	2698.67	-42.23	42.47	-42.17	59.89	134.84	0.25
2800.00	0.82	195.24	2798.65	-43.81	42.23	-41.92	60.85	136.05	0.28
2900.00	0.54	229.20	2898.65	-44.81	41.69	-41.37	61.20	137.07	0.48
3000.00	0.91	215.34	2998.64	-45.77	40.87	-40.55	61.36	138.23	0.41
3100.00	0.74	206.07	3098.63	-46.99	40.13	-39.80	61.79	139.51	0.22
3200.00	0.63	232.19	3198.62	-47.91	39.41	-39.08	62.03	140.56	0.33
3300.00	0.71	215.61	3298.61	-48.74	38.62	-38.28	62.19	141.61	0.21
3400.00	0.77	259.08	3398.61	-49.37	37.60	-37.26	62.06	142.71	0.55
3500.00	0.75	214.14	3498.60	-50.05	36.58	-36.23	61.99	143.84	0.58
3600.00	0.49	216.19	3598.59	-50.93	35.96	-35.60	62.34	144.78	0.27
3700.00	0.42	202.74	3698.59	-51.61	35.56	-35.20	62.68	145.43	0.12
3800.00	0.70	159.29	3798.59	-52.53	35.64	-35.27	63.47	145.84	0.49
3900.00	0.83	113.53	3898.58	-53.39	36.52	-36.14	64.68	145.63	0.60
4000.00	0.95	75.76	3998.57	-53.47	37.98	-37.60	65.59	144.62	0.59
4100.00	1.09	63.86	4098.55	-52.85	39.63	-39.26	66.06	143.13	0.25
4200.00	1.22	57.95	4198.53	-51.87	41.39	-41.02	66.35	141.41	0.18
4300.00	1.25	29.28	4298.51	-50.35	42.82	-42.47	66.10	139.62	0.61
4400.00	1.27	352.61	4398.49	-48.30	43.21	-42.87	64.81	138.19	0.79
4500.00	1.47	332.10	4498.46	-46.07	42.47	-42.15	62.66	137.33	0.52
4600.00	1.67	321.60	4598.42	-43.80	40.97	-40.66	59.97	136.91	0.35
4700.00	2.14	321.92	4698.37	-41.19	38.91	-38.62	56.66	136.63	0.48
4800.00	2.42	320.25	4798.29	-38.10	36.41	-36.14	52.70	136.30	0.28
4900.00	2.57	319.59	4898.19	-34.77	33.61	-33.36	48.35	135.97	0.16
5000.00	3.13	318.94	4998.07	-31.00	30.36	-30.14	43.38	135.60	0.56
5100.00	3.30	318.16	5097.91	-26.79	26.64	-26.45	37.78	135.16	0.17
5200.00	3.56	319.39	5197.73	-22.29	22.70	-22.54	31.81	134.48	0.28
5300.00	3.79	321.59	5297.52	-17.34	18.62	-18.50	25.44	132.95	0.27
5400.00	4.12	325.79	5397.29	-11.77	14.54	-14.46	18.71	128.98	0.44
5500.00	4.16	333.60	5497.02	-5.55	10.91	-10.87	12.24	116.97	0.56
5600.00	4.19	345.41	5596.76	1.23	8.38	-8.39	8.47	81.64	0.86
5700.00	4.25	349.33	5696.49	8.41	6.77	-6.83	10.80	38.85	0.30
5800.00	4.31	353.16	5796.21	15.78	5.64	-5.75	16.76	19.66	0.29
5900.00	4.16	354.33	5895.94	23.12	4.83	-4.99	23.62	11.81	0.17

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
6000.00	3.97	355.40	5995.69	30.19	4.20	-4.41	30.48	7.91	0.20
6100.00	3.63	355.37	6095.47	36.80	3.66	-3.92	36.98	5.69	0.35
6200.00	3.42	355.33	6195.28	42.92	3.16	-3.46	43.04	4.22	0.21
6300.00	3.30	357.11	6295.11	48.76	2.78	-3.12	48.84	3.26	0.16
6400.00	3.15	358.89	6394.95	54.38	2.58	-2.96	54.44	2.72	0.17
6500.00	2.72	359.76	6494.82	59.51	2.52	-2.93	59.56	2.42	0.44
6600.00	2.29	0.62	6594.72	63.88	2.53	-2.97	63.93	2.27	0.43
6700.00	1.95	1.06	6694.65	67.58	2.58	-3.05	67.63	2.19	0.33
6800.00	1.62	356.50	6794.60	70.69	2.53	-3.02	70.74	2.05	0.36
6900.00	1.60	338.68	6894.56	73.41	1.93	-2.44	73.43	1.51	0.50
7000.00	1.59	321.86	6994.53	75.80	0.57	-1.10	75.80	0.43	0.47
7100.00	1.58	312.96	7094.49	77.83	-1.30	0.76	77.84	359.04	0.25

Mewbourne Oil Company .

Eddy County, New Mexico

Winchester 36 AD

Winchester 36 AD State #1H

OH

Design: OH

Standard Survey Report

31 July, 2013

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Winchester 36 AD State #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Site:	Winchester 36 AD	MD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Well:	Winchester 36 AD State #1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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	Winchester 36 AD
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Site Position:		Northing:	590,658.60 usft	Latitude:	32° 37' 25.126 N
From:	Map	Easting:	565,099.50 usft	Longitude:	104° 7' 18.796 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.11 °

Well	Winchester 36 AD State #1H
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Well Position	+N/-S	0.0 usft	Northing:	590,658.60 usft	Latitude:	32° 37' 25.126 N
	+E/-W	0.0 usft	Easting:	565,099.50 usft	Longitude:	104° 7' 18.796 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,301.0 usft

Wellbore	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/31/2013	7.63	60.41	48,601

Design	OH
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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	269.60

Survey Program		Date	7/31/2013	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,100.0	Gyro Survey #1 (OH)	GyroFlex	
7,160.0	12,250.0	Survey #2 (OH)	MWD	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	0.36	344.28	100.0	0.3	-0.1	0.1	0.36	0.36	0.00
	200.0	0.12	267.99	200.0	0.6	-0.3	0.3	0.35	-0.24	-76.29
	300.0	0.16	200.36	300.0	0.5	-0.4	0.4	0.16	0.04	-67.63
	400.0	0.23	132.36	400.0	0.2	-0.3	0.3	0.23	0.07	-68.00
	500.0	0.57	93.13	500.0	0.0	0.3	-0.3	0.42	0.34	-39.23
	600.0	1.11	79.13	600.0	0.2	1.8	-1.8	0.57	0.54	-14.00
	700.0	2.02	80.39	699.9	0.7	4.5	-4.5	0.91	0.91	1.26
	800.0	2.66	82.21	799.9	1.3	8.5	-8.5	0.64	0.64	1.82
	900.0	2.25	84.44	899.8	1.8	12.7	-12.8	0.42	-0.41	2.23

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Winchester 36 AD State #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Site:	Winchester 36 AD	MD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Well:	Winchester 36 AD State #1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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	2.12	98.22	999.7	1.7	16.5	-16.5	0.54	-0.13	13.78
1,100.0	2.08	107.29	1,099.6	0.9	20.1	-20.1	0.33	-0.04	9.07
1,200.0	2.43	118.58	1,199.6	-0.6	23.7	-23.7	0.56	0.35	11.29
1,300.0	2.11	123.00	1,299.5	-2.7	27.1	-27.1	0.36	-0.32	4.42
1,400.0	2.12	136.13	1,399.4	-5.0	29.9	-29.9	0.48	0.01	13.13
1,500.0	2.14	134.90	1,499.3	-7.7	32.5	-32.5	0.05	0.02	-1.23
1,600.0	2.57	131.21	1,599.3	-10.4	35.5	-35.5	0.46	0.43	-3.69
1,700.0	2.26	142.31	1,699.2	-13.5	38.4	-38.3	0.56	-0.31	11.10
1,800.0	2.31	146.46	1,799.1	-16.7	40.7	-40.6	0.17	0.05	4.15
1,900.0	2.42	156.37	1,899.0	-20.3	42.7	-42.6	0.42	0.11	9.91
2,000.0	2.14	167.09	1,998.9	-24.1	44.0	-43.8	0.51	-0.28	10.72
2,100.0	1.81	181.17	2,098.9	-27.5	44.3	-44.2	0.58	-0.33	14.08
2,200.0	1.81	173.03	2,198.8	-30.6	44.5	-44.3	0.26	0.00	-8.14
2,300.0	1.68	184.10	2,298.8	-33.7	44.6	-44.4	0.36	-0.13	11.07
2,400.0	1.33	195.34	2,398.7	-36.2	44.2	-43.9	0.46	-0.35	11.24
2,500.0	1.35	201.31	2,498.7	-38.5	43.4	-43.2	0.14	0.02	5.97
2,600.0	1.05	196.92	2,598.7	-40.4	42.8	-42.5	0.31	-0.30	-4.39
2,700.0	1.02	183.07	2,698.7	-42.2	42.4	-42.1	0.25	-0.03	-13.85
2,800.0	0.82	195.24	2,798.7	-43.8	42.2	-41.9	0.28	-0.20	12.17
2,900.0	0.54	229.20	2,898.6	-44.8	41.7	-41.3	0.48	-0.28	33.96
3,000.0	0.91	215.34	2,998.6	-45.7	40.8	-40.5	0.41	0.37	-13.86
3,100.0	0.74	206.07	3,098.6	-47.0	40.1	-39.8	0.22	-0.17	-9.27
3,200.0	0.63	232.19	3,198.6	-47.9	39.4	-39.0	0.33	-0.11	26.12
3,300.0	0.71	215.61	3,298.6	-48.7	38.6	-38.2	0.21	0.08	-16.58
3,400.0	0.77	259.08	3,398.6	-49.4	37.6	-37.2	0.55	0.06	43.47
3,500.0	0.75	214.14	3,498.6	-50.0	36.5	-36.2	0.58	-0.02	-44.94
3,600.0	0.49	216.19	3,598.6	-50.9	35.9	-35.6	0.26	-0.26	2.05
3,700.0	0.42	202.74	3,698.6	-51.6	35.5	-35.2	0.13	-0.07	-13.45
3,800.0	0.70	159.29	3,798.6	-52.5	35.6	-35.2	0.49	0.28	-43.45
3,900.0	0.83	113.53	3,898.6	-53.4	36.5	-36.1	0.61	0.13	-45.76
4,000.0	0.95	75.76	3,998.6	-53.4	37.9	-37.6	0.59	0.12	-37.77
4,100.0	1.09	63.86	4,098.6	-52.8	39.6	-39.2	0.25	0.14	-11.90
4,200.0	1.22	57.95	4,198.5	-51.8	41.4	-41.0	0.18	0.13	-5.91
4,300.0	1.25	29.28	4,298.5	-50.3	42.8	-42.4	0.61	0.03	-28.67
4,400.0	1.27	352.61	4,398.5	-48.3	43.2	-42.8	0.79	0.02	-36.67
4,500.0	1.47	332.10	4,498.5	-46.0	42.4	-42.1	0.53	0.20	-20.51
4,600.0	1.67	321.60	4,598.4	-43.8	40.9	-40.6	0.35	0.20	-10.50
4,700.0	2.14	321.92	4,698.4	-41.2	38.9	-38.6	0.47	0.47	0.32
4,800.0	2.42	320.25	4,798.3	-38.1	36.4	-36.1	0.29	0.28	-1.67
4,900.0	2.57	319.59	4,898.2	-34.7	33.6	-33.3	0.15	0.15	-0.66
5,000.0	3.13	318.94	4,998.1	-31.0	30.3	-30.1	0.56	0.56	-0.65
5,100.0	3.30	318.16	5,097.9	-26.8	26.6	-26.4	0.18	0.17	-0.78
5,200.0	3.56	319.39	5,197.7	-22.3	22.7	-22.5	0.27	0.26	1.23

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Winchester 36 AD State #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Site:	Winchester 36 AD	MD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Well:	Winchester 36 AD State #1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)	
5,300.0	3.79	321.59	5,297.5	-17.3	18.6	-18.5	0.27	0.23	2.20	
5,400.0	4.12	325.79	5,397.3	-11.8	14.5	-14.4	0.44	0.33	4.20	
5,500.0	4.16	333.60	5,497.0	-5.5	10.9	-10.9	0.56	0.04	7.81	
5,600.0	4.19	345.41	5,596.8	1.2	8.4	-8.4	0.86	0.03	11.81	
5,700.0	4.25	349.33	5,696.5	8.4	6.8	-6.8	0.29	0.06	3.92	
5,800.0	4.31	353.16	5,796.2	15.8	5.6	-5.7	0.29	0.06	3.83	
5,900.0	4.16	354.33	5,895.9	23.1	4.8	-5.0	0.17	-0.15	1.17	
6,000.0	3.97	355.40	5,995.7	30.2	4.2	-4.4	0.20	-0.19	1.07	
6,100.0	3.63	355.37	6,095.5	36.8	3.6	-3.9	0.34	-0.34	-0.03	
6,200.0	3.42	355.33	6,195.3	42.9	3.2	-3.5	0.21	-0.21	-0.04	
6,300.0	3.30	357.11	6,295.1	48.8	2.8	-3.1	0.16	-0.12	1.78	
6,400.0	3.15	358.89	6,395.0	54.4	2.6	-2.9	0.18	-0.15	1.78	
6,500.0	2.72	359.76	6,494.8	59.5	2.5	-2.9	0.43	-0.43	0.87	
6,600.0	2.29	0.62	6,594.7	63.9	2.5	-3.0	0.43	-0.43	0.86	
6,700.0	1.95	1.06	6,694.7	67.6	2.6	-3.0	0.34	-0.34	0.44	
6,800.0	1.62	356.50	6,794.6	70.7	2.5	-3.0	0.36	-0.33	-4.56	
6,900.0	1.60	338.68	6,894.6	73.4	1.9	-2.4	0.50	-0.02	-17.82	
7,000.0	1.59	321.86	6,994.5	75.8	0.6	-1.1	0.47	-0.01	-16.82	
7,100.0	1.58	312.96	7,094.5	77.8	-1.3	0.8	0.25	-0.01	-8.90	
7,160.0	4.00	201.00	7,154.4	76.4	-2.7	2.1	8.03	4.03	-186.60	
7,191.0	9.10	196.60	7,185.2	73.1	-3.8	3.2	16.52	16.45	-14.19	
7,223.0	13.70	200.50	7,216.6	67.1	-5.8	5.3	14.57	14.38	12.19	
7,255.0	17.90	201.30	7,247.4	59.0	-8.9	8.5	13.14	13.13	2.50	
7,287.0	21.10	202.60	7,277.5	49.1	-12.9	12.6	10.09	10.00	4.06	
7,319.0	25.70	205.40	7,306.9	37.5	-18.1	17.9	14.79	14.38	8.75	
7,350.0	29.40	206.80	7,334.4	24.6	-24.4	24.3	12.12	11.94	4.52	
7,382.0	31.00	214.70	7,362.0	10.8	-32.7	32.6	13.38	5.00	24.69	
7,414.0	32.00	222.60	7,389.3	-2.2	-43.1	43.1	13.26	3.13	24.69	
7,445.0	32.70	230.70	7,415.5	-13.6	-55.1	55.2	14.15	2.26	26.13	
7,477.0	35.90	235.40	7,442.0	-24.4	-69.6	69.7	12.97	10.00	14.69	
7,509.0	40.10	238.30	7,467.2	-35.1	-86.1	86.3	14.26	13.13	9.06	
7,540.0	43.40	242.50	7,490.3	-45.3	-104.0	104.3	13.95	10.65	13.55	
7,572.0	47.20	247.20	7,512.8	-54.9	-124.6	125.0	15.81	11.88	14.69	
7,604.0	50.90	250.70	7,533.8	-63.6	-147.2	147.6	14.21	11.56	10.94	
7,635.0	54.70	254.80	7,552.5	-70.9	-170.7	171.2	16.16	12.26	13.23	
7,667.0	57.80	259.70	7,570.3	-76.7	-196.7	197.2	15.99	9.69	15.31	
7,699.0	59.90	265.30	7,586.9	-80.3	-223.8	224.4	16.35	6.56	17.50	
7,731.0	63.20	270.20	7,602.1	-81.4	-251.9	252.5	16.96	10.31	15.31	
7,762.0	64.80	276.60	7,615.7	-79.7	-279.7	280.2	19.26	5.16	20.65	
7,794.0	66.20	280.30	7,629.0	-75.4	-308.5	309.0	11.39	4.38	11.56	
7,826.0	65.90	282.60	7,642.0	-69.6	-337.2	337.6	6.64	-0.94	7.19	
7,857.0	67.00	282.60	7,654.4	-63.4	-364.9	365.3	3.55	3.55	0.00	
7,889.0	70.50	281.30	7,666.0	-57.2	-394.1	394.4	11.57	10.94	-4.06	

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Winchester 36 AD State #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Site:	Winchester 36 AD	MD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Well:	Winchester 36 AD State #1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)
7,921.0	75.50	280.30	7,675.3	-51.5	-424.1	424.5	15.91	15.63	-3.13
7,952.0	81.30	278.30	7,681.6	-46.6	-454.1	454.4	19.75	18.71	-6.45
7,975.0	84.50	276.90	7,684.4	-43.6	-476.7	477.0	15.17	13.91	-6.09
8,065.0	90.30	276.60	7,688.5	-33.0	-565.9	566.1	6.45	6.44	-0.33
8,128.0	89.20	276.60	7,688.8	-25.8	-628.5	628.7	1.75	-1.75	0.00
8,223.0	88.00	275.00	7,691.1	-16.2	-723.0	723.1	2.10	-1.26	-1.68
8,317.0	89.30	272.90	7,693.3	-9.7	-816.7	816.8	2.63	1.38	-2.23
8,412.0	90.50	273.60	7,693.5	-4.3	-911.6	911.6	1.46	1.26	0.74
8,507.0	89.30	272.50	7,693.6	0.7	-1,006.4	1,006.4	1.71	-1.26	-1.16
8,601.0	90.40	271.30	7,693.9	3.8	-1,100.4	1,100.3	1.73	1.17	-1.28
8,696.0	89.80	269.70	7,693.7	4.7	-1,195.4	1,195.3	1.80	-0.63	-1.68
8,791.0	91.50	268.70	7,692.6	3.3	-1,290.4	1,290.3	2.08	1.79	-1.05
8,886.0	90.80	267.80	7,690.7	0.4	-1,385.3	1,385.3	1.20	-0.74	-0.95
8,981.0	89.50	266.90	7,690.5	-4.0	-1,480.2	1,480.2	1.66	-1.37	-0.95
9,076.0	91.00	267.60	7,690.1	-8.5	-1,575.1	1,575.1	1.74	1.58	0.74
9,171.0	91.30	267.60	7,688.2	-12.5	-1,670.0	1,670.0	0.32	0.32	0.00
9,266.0	91.80	267.40	7,685.6	-16.6	-1,764.8	1,764.9	0.57	0.53	-0.21
9,361.0	91.60	266.40	7,682.8	-21.8	-1,859.7	1,859.8	1.07	-0.21	-1.05
9,456.0	90.20	266.20	7,681.3	-27.9	-1,954.5	1,954.6	1.49	-1.47	-0.21
9,551.0	88.50	263.90	7,682.4	-36.1	-2,049.1	2,049.3	3.01	-1.79	-2.42
9,646.0	90.70	264.30	7,683.0	-45.9	-2,143.6	2,143.8	2.35	2.32	0.42
9,741.0	90.70	266.90	7,681.9	-53.1	-2,238.3	2,238.6	2.74	0.00	2.74
9,836.0	91.50	270.40	7,680.0	-55.4	-2,333.2	2,333.5	3.78	0.84	3.68
9,931.0	90.90	273.10	7,678.1	-52.5	-2,428.1	2,428.4	2.91	-0.63	2.84
10,025.0	90.70	272.40	7,676.7	-48.0	-2,522.0	2,522.3	0.77	-0.21	-0.74
10,121.0	90.30	271.70	7,675.9	-44.5	-2,618.0	2,618.2	0.84	-0.42	-0.73
10,216.0	89.40	271.10	7,676.2	-42.2	-2,712.9	2,713.2	1.14	-0.95	-0.63
10,311.0	90.30	272.20	7,676.4	-39.5	-2,807.9	2,808.1	1.50	0.95	1.16
10,406.0	91.70	272.20	7,674.7	-35.8	-2,902.8	2,903.0	1.47	1.47	0.00
10,501.0	91.00	271.30	7,672.5	-32.9	-2,997.7	2,997.9	1.20	-0.74	-0.95
10,596.0	90.10	270.20	7,671.6	-31.7	-3,092.7	3,092.9	1.50	-0.95	-1.16
10,691.0	88.60	269.20	7,672.7	-32.2	-3,187.7	3,187.8	1.90	-1.58	-1.05
10,786.0	89.90	270.60	7,673.9	-32.4	-3,282.7	3,282.8	2.01	1.37	1.47
10,880.0	90.00	269.70	7,674.0	-32.1	-3,376.7	3,376.8	0.96	0.11	-0.96
10,974.0	92.40	270.60	7,672.0	-31.9	-3,470.7	3,470.8	2.73	2.55	0.96
11,070.0	92.90	269.90	7,667.6	-31.4	-3,566.6	3,566.7	0.90	0.52	-0.73
11,164.0	92.30	269.50	7,663.3	-31.9	-3,660.5	3,660.6	0.77	-0.64	-0.43
11,257.0	92.40	269.40	7,659.5	-32.8	-3,753.4	3,753.5	0.15	0.11	-0.11
11,352.0	92.20	269.00	7,655.7	-34.2	-3,848.3	3,848.4	0.47	-0.21	-0.42
11,446.0	91.10	267.60	7,653.0	-36.9	-3,942.2	3,942.4	1.89	-1.17	-1.49
11,541.0	91.00	267.60	7,651.2	-40.9	-4,037.1	4,037.3	0.11	-0.11	0.00
11,635.0	88.60	267.30	7,651.6	-45.1	-4,131.0	4,131.2	2.57	-2.55	-0.32
11,730.0	87.10	265.90	7,655.1	-50.7	-4,225.8	4,226.0	2.16	-1.58	-1.47
11,824.0	86.70	264.30	7,660.2	-58.8	-4,319.3	4,319.6	1.75	-0.43	-1.70

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Winchester 36 AD State #1H
Project:	Eddy County, New Mexico	TVD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Site:	Winchester 36 AD	MD Reference:	RKB = 20' @ 3321.0usft (Patterson # 80)
Well:	Winchester 36 AD State #1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)
11,919.0	90.20	267.80	7,662.8	-65.3	-4,414.0	4,414.3	5.21	3.68	3.68
12,014.0	91.30	269.00	7,661.6	-67.9	-4,508.9	4,509.3	1.71	1.16	1.26
12,108.0	91.00	268.10	7,659.7	-70.3	-4,602.9	4,603.3	1.01	-0.32	-0.96
12,189.0	90.00	267.80	7,659.0	-73.2	-4,683.8	4,684.2	1.29	-1.23	-0.37
12,250.0	91.00	267.80	7,658.4	-75.6	-4,744.8	4,745.2	1.64	1.64	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,100.0	7,094.5	77.8	-1.3	7100' MD VES Gyro Survey
12,250.0	7,658.4	-75.6	-4,744.8	12250' MD Projected to bit

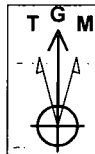


COMPANY: Mewbourne Oil Company
 WELL: Winchester 36 AD State #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson # 80



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.52°

OFFICE: 936.582.7296



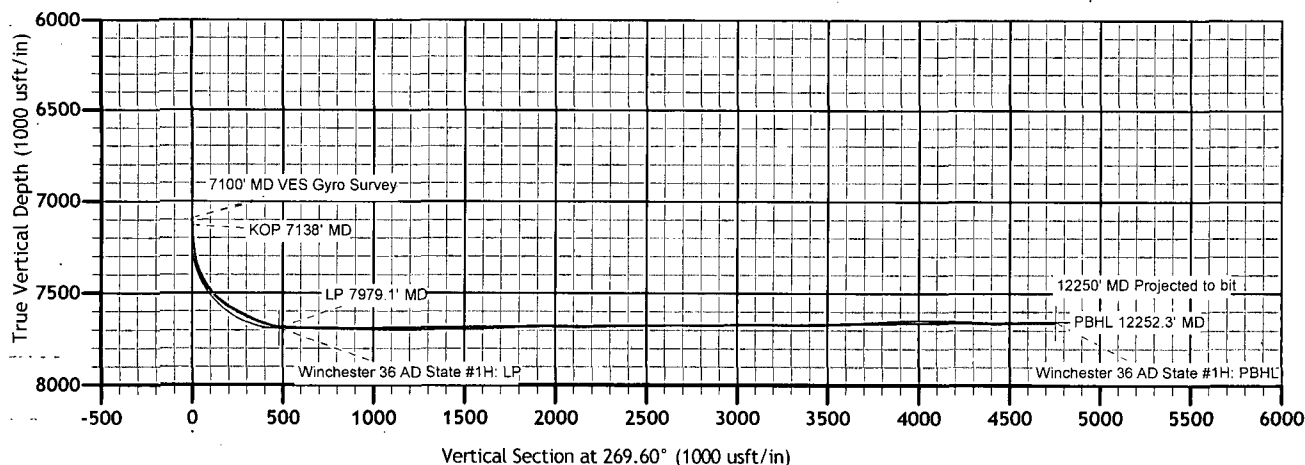
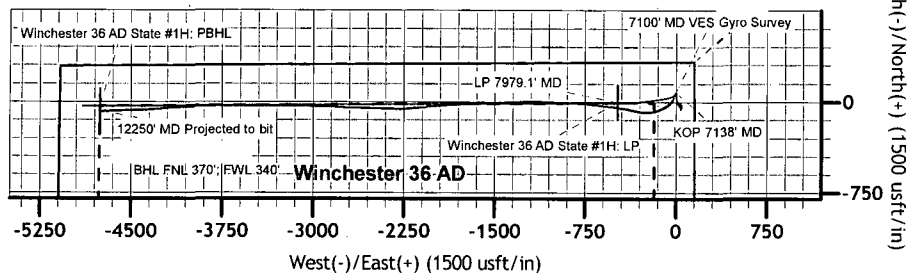
Azimuths to Grid North
 True North: -0.11°
 Magnetic North: 7.52°
 Magnetic Field
 Strength: 48601.1 nT
 Dip Angle: 60.41°
 Date: 5/31/2013
 Model: IGRF2010

GEODETTIC ZONE: New Mexico East 3001
 RKB = 20' @ 3321.0usft (Patterson # 80)
 GROUND ELEVATION: 3301.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	590658.60	565099.50	32° 37' 25.126 N	104° 7' 18.796 W	

PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	7100.0	1.58	312.96	7094.5	77.8	-1.3	0.00	0.00	0.8	
2	7138.0	1.58	312.96	7132.5	78.5	-2.1	0.00	0.00	1.5	
3	7215.7	8.00	168.58	7210.0	74.0	-1.8	12.00	210.00	1.3	
4	7964.3	89.12	268.59	7690.8	-3.0	-466.5	12.09	100.03	466.5	
5	7979.1	89.12	268.59	7691.0	-3.4	-481.4	0.00	0.00	481.4	Winchester 36 AD State #1H: LP
6	8151.0	90.50	269.62	7691.6	-6.1	-653.2	1.00	36.74	653.2	
7	12252.3	90.50	269.62	7656.0	-33.5	-4754.3	0.00	0.00	4754.4	Winchester 36 AD State #1H: PBHL



Company Rep	Brian Reed
Field	
BOT Service Rep	John Davis
District Location	Odessa, Texas, USA



	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
Liner Top 1	10292414	JR Setting Sleeve_RH Profile	7830.29							

Zone Length		JR Sleeve_S3 Hyd Set Packer	7830.29	9.54	5.813	3.875				
		4-1/2-13.5 LTC Nipple	7839.83	5.98	5.000	3.920				
		7 Joints of 4-1/2-13.5 LTC Casing	7845.81	269.59	5.000	3.920				
		3.625 EX Frac Sleeve	8115.40	2.40	5.750		3.525	2286	303	304
		3 Joint of 4-1/2-13.5 LTC Casing	8117.80	114.99	5.000	3.920				
20		Baker Open Hole Packer	8232.79	3.89	5.820	3.875		2154		
406.4		2 Joints of 4-1/2-13.5 LTC Casing	8236.68	77.12	5.000	3.920				
		3.500 EX Frac Sleeve	8313.80	2.40	5.750		3.400	2286	282	307
19		3 Joint of 4-1/2-13.5 LTC Casing	8316.20	115.56	5.000	3.920				
202.9		Baker Open Hole Packer	8431.76	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	8435.65	112.54	5.000	3.920				
		3.375 EX Frac Sleeve	8548.19	2.40	5.750		3.275	2286	262	310
18		3 Joint of 4-1/2-13.5 LTC Casing	8550.59	115.03	5.000	3.920				
237.8		Baker Open Hole Packer	8665.62	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	8669.51	115.63	5.000	3.920				
		3.250 EX Frac Sleeve	8785.14	2.40	5.750		3.150	2286	242	314
17		3 Joint of 4-1/2-13.5 LTC Casing	8787.54	115.52	5.000	3.920				
241.3		Baker Open Hole Packer	8903.06	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8906.95	76.73	5.000	3.920				
		3.125 EX Frac Sleeve	8983.68	2.40	5.750		3.025	2286	223	317
16		3 Joints of 4-1/2-13.5 LTC Casing	8986.08	113.42	5.000	3.920				
200.3		Baker Open Hole Packer	9099.50	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number Winchester 36 AD State #1H
 Sales Ticket Number 5691939-1
 Date 7/31/2013

Company Rep Brian Reed
 Field
 BOT Service Rep John Davis
 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	8,039.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,401.71	12,410	10,680
Bott Liner										
TVD		7,658.43	KOP		7,138.00	Open Hole		6.125	Casing Vol. (bbl)	299.6
Carry Fluid Weight (ppg)		8.8	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)
15 240.3		3 Joints of 4-1/2-13.5 LTC Casing	9103.39	114.71	5.000	3.920				
		3.000 EX Frac sleeve	9218.10	2.40	5.750		2.900	2286	205	320
		3 Joint of 4-1/2-13.5 LTC Casing	9220.50	115.43	5.000	3.920				
		Baker Open Hole Packer	9335.93	3.89	5.820	3.875		2154		
14 202.3		2 Joints of 4-1/2-13.5 LTC Casing	9339.82	77.01	5.000	3.920				
		2.875 EX Frac Sleeve	9416.83	2.40	5.750		2.775	2286	188	323
		3 Joints of 4-1/2-13.5 LTC Casing	9419.23	115.14	5.000	3.920				
		Baker Open Hole Packer	9534.37	3.89	5.820	3.875		2154		
13 202		2 Joints of 4-1/2-13.5 LTC Casing	9538.26	76.29	5.000	3.920				
		2.750 EX Frac Sleeve	9614.55	2.40	5.750		2.650	2286	171	326
		3 Joint of 4-1/2-13.5 LTC Casing	9616.95	115.48	5.000	3.920				
		Baker Open Hole Packer	9732.43	3.89	5.820	3.875		2154		
12 240.8		3 Joints of 4-1/2-13.5 LTC Casing	9736.32	115.40	5.000	3.920				
		2.625 EX Frac Sleeve	9851.72	2.40	5.750		2.525	2286	155	330
		3 Joints of 4-1/2-13.5 LTC Casing	9854.12	115.26	5.000	3.920				
		Baker Open Hole Packer	9969.38	3.89	5.820	3.875		2154		
11 202.9		3 Joints of 4-1/2-13.5 LTC Casing	9973.27	77.16	5.000	3.920				
		2.500 EX Frac Sleeve	10050.43	2.40	5.750		2.400	2286	140	333
		3 Joint of 4-1/2-13.5 LTC Casing	10052.83	115.58	5.000	3.920				
		Baker Open Hole Packer	10168.41	3.89	5.820	3.875		2154		
10 238.7		3 Joints of 4-1/2-13.5 LTC Casing	10172.30	114.96	5.000	3.920				
		2.375 EX Frac Sleeve	10287.26	2.40	5.750		2.275	2286	126	336
		3 Joints of 4-1/2-13.5 LTC Casing	10289.66	113.57	5.000	3.920				
		Baker Open Hole Packer	10403.23	3.89	5.820	3.875		2154		
9		2 Joint of 4-1/2-13.5 LTC Casing	10407.12	74.79	5.000	3.920				
		2.250 EX Frac Sleeve	10481.91	2.40	5.750		2.150	2286	113	339

Operating Company Mewbourne
 Well Name & Number Winchester 36 AD State #1H
 Sales Ticket Number 5691939-1
 Date 7/31/2013

Company Rep Brian Reed
 Field
 BOT Service Rep John Davis
 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	8,039.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,401.71	12,410	10,680
Bott Liner										
TVD		7,658.43	KOP		7,138.00	Open Hole		6.125	Casing Vol. (bbl)	299.6
Carry Fluid Weight (ppg)		8.8	Propan Content (ppa)					Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ. (BBL)
200.5		3 Joints of 4-1/2-13.5 LTC Casing	10484.31	115.57	5.000	3.920				
		Baker Open Hole Packer	10599.88	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	10603.77	115.26	5.000	3.920				
8		2.125 EX Frac Sleeve	10719.03	2.40	5.750		2.025	2286	100	343
240.1		3 Joints of 4-1/2-13.5 LTC Casing	10721.43	114.70	5.000	3.920				
		Baker Open Hole Packer	10836.13	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	10840.02	77.12	5.000	3.920				
7		2.000 EX Frac Sleeve	10917.14	2.40	5.750		1.900	2286	88	346
202.8		3 Joints of 4-1/2-13.5 LTC Casing	10919.54	115.50	5.000	3.920				
		Baker Open Hole Packer	11035.04	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	11038.93	76.61	5.000	3.920				
6		1.875 EX Frac Sleeve	11115.54	2.40	5.750		1.775	2286	77	349
201.8		3 Joints of 4-1/2-13.5 LTC Casing	11117.94	114.44	5.000	3.920				
		Baker Open Hole Packer	11232.38	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11236.27	115.45	5.000	3.920				
5		1.750 EX Frac Sleeve	11351.72	2.40	5.750		1.650	2286	66	352
241		3 Joint of 4-1/2-13.5 LTC Casing	11354.12	115.40	5.000	3.920				
		Baker Open Hole Packer	11469.52	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11473.41	77.02	5.000	3.920				
4		1.625 EX Frac Sleeve	11550.43	2.40	5.750		1.525	2286	57	355
202.8		3 Joints of 4-1/2-13.5 LTC Casing	11552.83	115.57	5.000	3.920				
		Baker Open Hole Packer	11668.40	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11672.29	115.79	5.000	3.920				
3		1.500 DBL Ball Frac Sleeve	11788.08	2.40	5.750		1.400	2286	48	359
241.5		3 Joint of 4-1/2-13.5 LTC Casing	11790.48	115.55	5.000	3.920				
		Baker Open Hole Packer	11906.03	3.89	5.820	3.875		2154		

Company Rep	Brian Reed
Field	
BOT Service Rep	John Davis
District Location	Odessa, Texas, USA

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