

30-015-43494



I Andy Askew certify that I am employed by VES Survey International. That I did on the day(s) of 01/24/16 through 01/24/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 9,600.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil for the Foreigner 33/4 W2LM FEE Well # 1H API # 30-015-43494 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

A handwritten signature in black ink, appearing to read "Andy Askew", is written over a horizontal line.

Andy Askew
Service Technician
Vaughn Energy Services



Company: Mewbourne Oil

Lease/Well: Foreigner 33 4 W2LM FEE No/001H

Rig Name: Patterson 250

State/County: New Mexico/Eddy

VS-Azi: 0.00 Degrees

Latitude: 32.26084, Longitude: -104.09901

Grid North = True North -0.13 degs (NAD 27)

Grid Correction Applied = -0.13 degs



Depth Reference : RKB = 26 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut

Minimum Curvature Method

Report Date/Time: 1/29/2016 / 12:59

NM OIL CONSERVATION

ARTESIA DISTRICT

AUG 29 2016

RECEIVED

(432)-563-5444

Surveyor: Andy Askew

Foreigner 33 4 W2LM Fee No 001H / API 30-015-43494

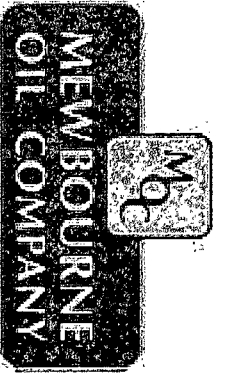
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/S FT	+E/W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	1.21	263.81	99.99	-0.11	-1.05	-0.11	1.05	263.81	1.21
200.00	1.55	253.92	199.96	-0.60	-3.40	-0.60	3.45	259.94	0.42
300.00	1.46	240.80	299.93	-1.60	-5.81	-1.60	6.03	254.61	0.36
400.00	1.14	219.59	399.90	-2.99	-7.55	-2.99	8.12	248.44	0.58
500.00	1.55	191.23	499.88	-5.08	-8.45	-5.08	9.86	238.99	0.77
600.00	1.43	200.68	599.84	-7.58	-9.15	-7.58	11.88	230.39	0.28
700.00	1.51	182.92	699.81	-10.06	-9.66	-10.06	13.95	223.84	0.46
800.00	1.58	198.03	799.78	-12.69	-10.16	-12.69	16.25	218.67	0.41
900.00	1.06	190.83	899.75	-14.90	-10.75	-14.90	18.38	215.82	0.54
1000.00	0.64	198.01	999.74	-16.34	-11.10	-16.34	19.75	214.19	0.43
1100.00	0.89	201.22	1099.73	-17.60	-11.56	-17.60	21.06	213.29	0.26
1200.00	0.52	247.07	1199.72	-18.51	-12.26	-18.51	22.20	213.52	0.65
1300.00	0.65	255.63	1299.72	-18.83	-13.23	-18.83	23.01	215.11	0.16
1400.00	0.68	259.90	1399.71	-19.07	-14.37	-19.07	23.88	217.00	0.06
1500.00	0.66	274.61	1499.70	-19.13	-15.53	-19.13	24.64	219.08	0.17
1600.00	0.42	313.17	1599.70	-18.83	-16.37	-18.83	24.96	221.00	0.42

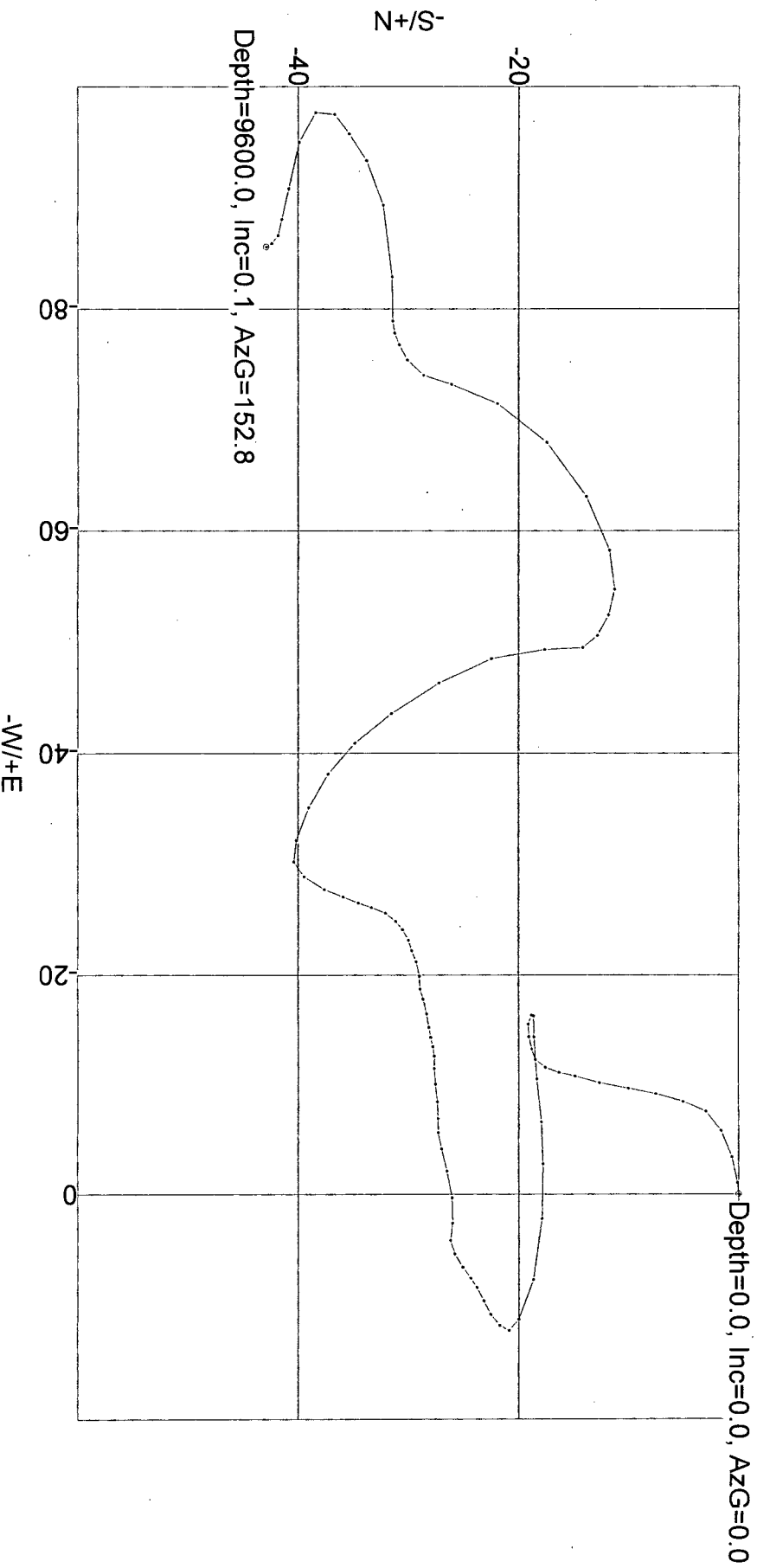
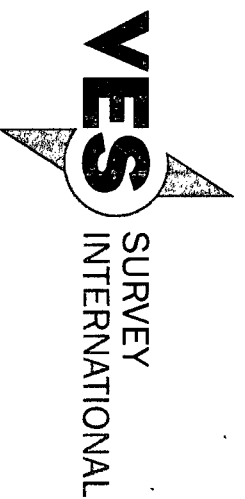
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/S FT	+E/W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1700.00	0.37	100.95	1699.70	-18.65	-16.32	-18.65	24.78	221.20	0.76
1800.00	1.92	87.34	1799.67	-18.63	-14.34	-18.63	23.51	217.58	1.56
1900.00	2.50	85.09	1899.60	-18.37	-10.49	-18.37	21.15	209.74	0.59
2000.00	1.99	82.59	1999.52	-17.95	-6.60	-17.95	19.13	200.17	0.51
2100.00	2.40	91.59	2099.45	-17.79	-2.78	-17.79	18.00	188.87	0.53
2200.00	3.30	90.70	2199.32	-17.88	2.20	-17.88	18.01	173.00	0.90
2300.00	3.07	106.83	2299.17	-18.69	7.64	-18.69	20.19	157.78	0.92
2400.00	1.22	120.28	2399.10	-20.00	11.12	-20.00	22.89	150.93	1.90
2500.00	0.39	160.29	2499.09	-20.87	12.16	-20.87	24.15	149.77	0.96
2600.00	0.91	227.73	2599.08	-21.72	11.69	-21.72	24.67	151.71	0.84
2700.00	0.58	233.75	2699.07	-22.56	10.69	-22.56	24.96	154.63	0.33
2800.00	0.97	247.28	2799.06	-23.18	9.50	-23.18	25.06	157.71	0.43
2900.00	0.56	234.72	2899.06	-23.80	8.32	-23.80	25.21	160.73	0.44
3000.00	0.60	234.29	2999.05	-24.39	7.49	-24.39	25.51	162.92	0.04
3100.00	0.76	234.14	3099.04	-25.08	6.53	-25.08	25.92	165.41	0.16
3200.00	0.84	242.09	3199.03	-25.81	5.34	-25.81	26.36	168.31	0.13
3300.00	0.63	266.52	3299.02	-26.19	4.15	-26.19	26.52	171.01	0.37
3400.00	1.16	281.57	3399.01	-26.02	2.60	-26.02	26.15	174.29	0.58
3500.00	1.50	258.96	3498.99	-26.07	0.32	-26.07	26.07	179.30	0.62
3600.00	1.35	259.49	3598.96	-26.53	-2.12	-26.53	26.62	184.57	0.15
3700.00	1.04	252.72	3698.93	-27.02	-4.15	-27.02	27.33	188.72	0.34
3800.00	0.68	266.62	3798.92	-27.32	-5.61	-27.32	27.89	191.61	0.41
3900.00	0.77	271.13	3898.91	-27.34	-6.88	-27.34	28.20	194.12	0.10
4000.00	0.98	264.93	3998.90	-27.41	-8.41	-27.41	28.67	197.05	0.23
4100.00	0.89	262.42	4098.89	-27.59	-10.04	-27.59	29.36	199.99	0.10
4200.00	0.74	270.57	4198.88	-27.68	-11.46	-27.68	29.96	202.48	0.19
4300.00	0.55	268.43	4298.87	-27.69	-12.58	-27.69	30.41	204.43	0.19
4400.00	0.48	256.80	4398.87	-27.80	-13.46	-27.80	30.89	205.84	0.12
4500.00	0.52	256.40	4498.86	-28.00	-14.32	-28.00	31.45	207.08	0.04
4600.00	0.52	261.36	4598.86	-28.18	-15.21	-28.18	32.02	208.37	0.05
4700.00	0.97	261.38	4698.85	-28.37	-16.50	-28.37	32.82	210.18	0.45
4800.00	0.59	249.51	4798.84	-28.68	-17.82	-28.68	33.77	211.86	0.41
4900.00	0.51	255.99	4898.84	-28.97	-18.73	-28.97	34.50	212.89	0.10
5000.00	0.82	274.17	4998.83	-29.02	-19.88	-29.02	35.18	214.41	0.37
5100.00	0.78	241.96	5098.82	-29.29	-21.19	-29.29	36.16	215.89	0.45
5200.00	0.47	254.38	5198.82	-29.72	-22.19	-29.72	37.09	216.74	0.34
5300.00	0.70	253.35	5298.81	-30.01	-23.17	-30.01	37.91	217.67	0.23
5400.00	0.57	222.54	5398.80	-30.55	-24.09	-30.55	38.91	218.26	0.36
5500.00	0.56	237.68	5498.80	-31.18	-24.84	-31.18	39.87	218.55	0.15

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
5600.00	0.85	206.79	5598.79	-32.10	-25.59	-32.10	41.05	218.56	0.47
5700.00	0.71	197.04	5698.78	-33.35	-26.10	-33.35	42.35	218.05	0.19
5800.00	0.76	200.64	5798.77	-34.56	-26.52	-34.56	43.56	217.50	0.07
5900.00	0.92	202.65	5898.76	-35.92	-27.06	-35.92	44.97	216.99	0.16
6000.00	1.19	200.83	5998.75	-37.64	-27.74	-37.64	46.75	216.39	0.28
6100.00	1.35	222.73	6098.72	-39.47	-28.91	-39.47	48.93	216.22	0.51
6200.00	0.60	264.00	6198.71	-40.40	-30.23	-40.40	50.46	216.81	0.98
6300.00	1.65	280.96	6298.69	-40.18	-32.17	-40.18	51.47	218.68	1.09
6400.00	2.01	299.95	6398.64	-39.03	-35.11	-39.03	52.49	221.97	0.70
6500.00	2.00	300.23	6498.58	-37.27	-38.13	-37.27	53.32	225.65	0.01
6600.00	2.30	320.30	6598.51	-34.85	-40.92	-34.85	53.75	229.58	0.80
6700.00	2.52	322.33	6698.42	-31.56	-43.55	-31.56	53.79	234.07	0.24
6800.00	3.37	331.41	6798.29	-27.24	-46.30	-27.24	53.72	239.53	0.97
6900.00	2.68	340.37	6898.15	-22.45	-48.50	-22.45	53.44	245.16	0.84
7000.00	3.00	359.44	6998.03	-17.63	-49.31	-17.63	52.37	250.32	0.99
7100.00	0.96	349.31	7097.96	-14.19	-49.49	-14.19	51.48	254.00	2.06
7200.00	1.24	298.41	7197.94	-12.85	-50.60	-12.85	52.20	255.75	0.98
7300.00	1.14	300.09	7297.92	-11.84	-52.41	-11.84	53.73	257.27	0.10
7400.00	1.67	272.21	7397.89	-11.28	-54.73	-11.28	55.88	258.36	0.85
7500.00	2.44	255.36	7497.83	-11.76	-58.24	-11.76	59.42	258.58	0.97
7600.00	3.66	240.76	7597.69	-13.86	-63.09	-13.86	64.59	257.61	1.44
7700.00	3.34	225.69	7697.50	-17.45	-67.96	-17.45	70.16	255.60	0.97
7800.00	3.27	210.19	7797.34	-21.95	-71.48	-21.95	74.77	252.93	0.89
7900.00	1.95	190.49	7897.23	-26.09	-73.22	-26.09	77.73	250.39	1.58
8000.00	1.18	210.67	7997.20	-28.65	-74.05	-28.65	79.40	248.85	0.93
8100.00	1.18	235.61	8097.18	-30.12	-75.43	-30.12	81.22	248.24	0.51
8200.00	0.58	253.62	8197.16	-30.84	-76.77	-30.84	82.73	248.11	0.66
8300.00	0.76	245.16	8297.16	-31.26	-77.86	-31.26	83.90	248.12	0.20
8400.00	0.56	282.40	8397.15	-31.43	-78.93	-31.43	84.96	248.28	0.46
8500.00	4.02	267.25	8497.06	-31.50	-82.91	-31.50	88.69	249.20	3.49
8600.00	3.44	257.89	8596.85	-32.30	-89.35	-32.30	95.00	250.13	0.84
8700.00	1.59	230.88	8696.75	-33.80	-93.36	-33.80	99.29	250.10	2.14
8800.00	1.69	242.12	8796.71	-35.37	-95.74	-35.37	102.06	249.72	0.34
8900.00	0.90	215.08	8896.68	-36.70	-97.50	-36.70	104.18	249.37	0.98
9000.00	1.28	165.22	8996.67	-38.42	-97.66	-38.42	104.95	248.52	0.98
9100.00	2.78	100.20	9096.61	-39.93	-94.99	-39.93	103.04	247.20	2.52
9200.00	2.10	105.47	9196.52	-40.84	-90.84	-40.84	99.60	245.79	0.72
9300.00	1.18	98.41	9296.48	-41.48	-88.06	-41.48	97.34	244.78	0.94
9400.00	0.54	112.57	9396.47	-41.82	-86.61	-41.82	96.17	244.23	0.66

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
9500.00	0.56	145.88	9496.46	-42.40	-85.90	-42.40	95.79	243.73	0.32
9600.00	0.11	152.83	9596.46	-42.89	-85.58	-42.89	95.73	243.38	0.45

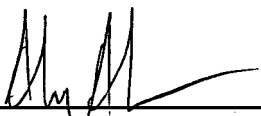


VES Survey International
Midland, TX
(432)-563-5444
Surveyor: Andy Askew
Foreigner 33 4 WZLM Fee No 001H / API 30-015-43494





I Andy Askew certify that I am employed by VES Survey International. That I did on the day(s) of 01/24/16 through 01/24/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 9,600.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil for the Foreigner 33/4 W2LM FEE Well # 1H API # 30-015-43494 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services



Andy Askew
Service Technician
Vaughn Energy Services



COMPANY: Mewbourne Oil Company
WELL: Yardbirds 34 W2OB Fee #1H
COUNTY: Eddy County, New Mexico
DATUM: NAD 1927 (NADCON CONUS)
RIG: Patterson 250

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.20°

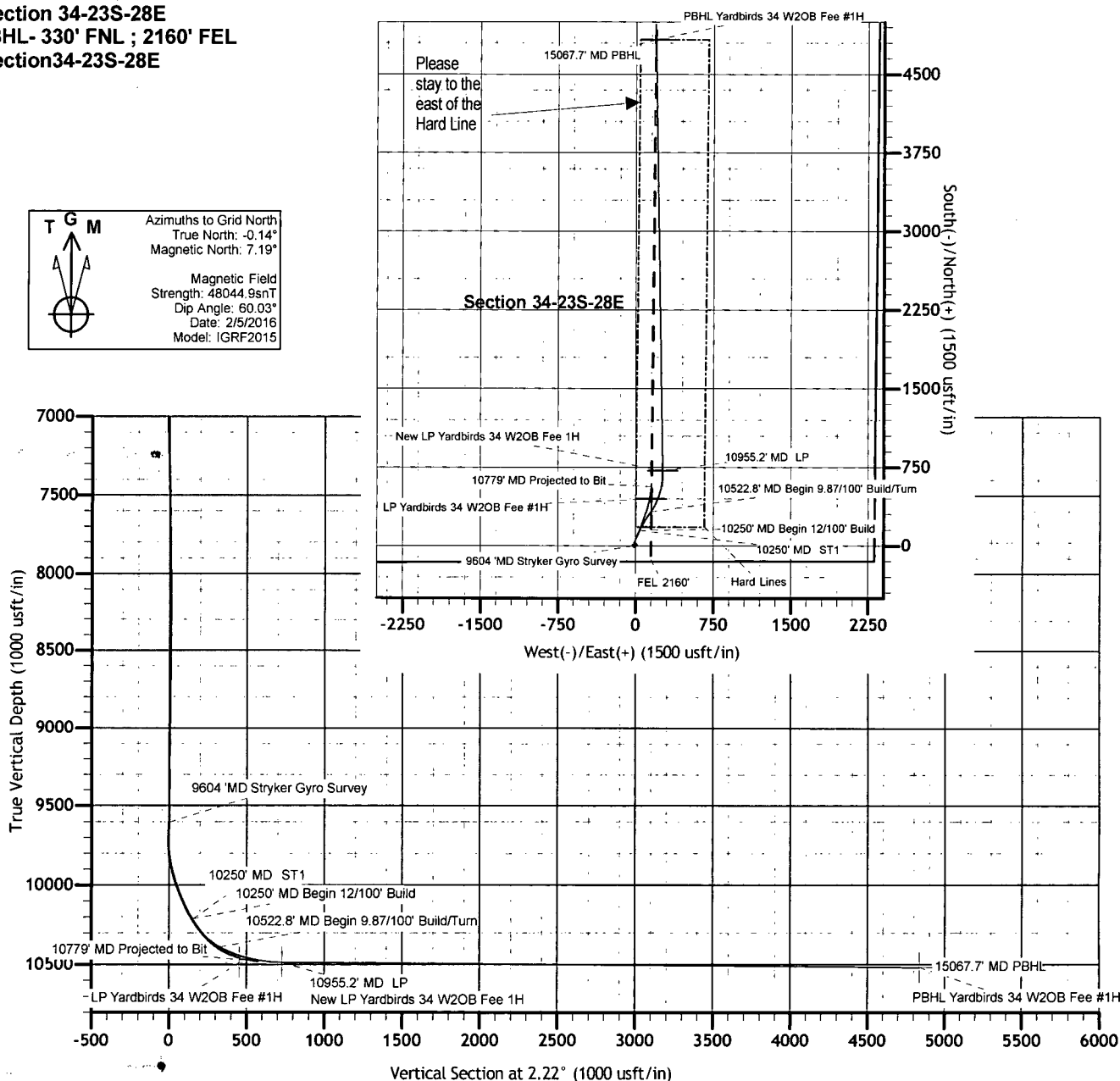
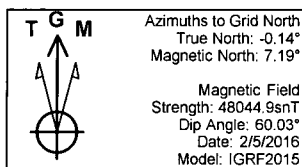


OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001 3025 + 27 @ 3052 Ousfl (Patterson 250) GROUND ELEVATION: 3025.0									
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot			
0.0	0.0	456418.40	580296.30	32° 15' 16.359 N	104° 4' 24.920 W				

PLAN SECTIONS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
1	10250.0	33.85	24.37	10215.0	149.9	37.9	0.00	0.00	151.3		
2	10522.8	65.56	35.47	10389.5	325.1	144.2	12.00	18.91	330.4		
3	10955.2	89.57	358.98	10485.0	720.0	260.0	9.87	-61.29	729.5	New LP Yardbirds 34 W2OB Fee 1H	
4	15067.7	89.57	358.98	10516.0	4831.7	187.0	0.00	0.00	4835.3	PBHL Yardbirds 34 W2OB Fee #1H	

SHL- 150' FSL ; 2310' FEL
Section 34-23S-28E
PBHL- 330' FNL ; 2160' FEL
Section 34-23S-28E





NM OIL CONSERVATION

ARTESIA DISTRICT

AUG 29 2016

RECEIVED

Mewbourne Oil Company .

Eddy County, New Mexico

Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H

Foreigner 33-4 W2LM Fee #1H

Original Hole

Design: Original Hole

Standard Survey Report

24 February, 2016





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33-4 W2LM Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Site:	Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H	MD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Well:	Foreigner 33-4 W2LM Fee #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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						Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H					
Site Position:		Northing:		458,693.20 usft		Latitude:		32° 15' 39.050 N			
From:		Map		Easting:		572,429.90 usft		Longitude:		104° 5' 56.468 W	
Position Uncertainty:		0.0 usft		Slot Radius:		13-3/16 "		Grid Convergence:		0.13 °	

Well	Foreigner 33-4 W2LM Fee #1H					
Well Position	+N/-S	0.0 usft	Northing:	458,693.20 usft	Latitude:	32° 15' 39.050 N
	+E/-W	0.0 usft	Easting:	572,429.90 usft	Longitude:	104° 5' 56.468 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,101.0 usft

Wellbore	Original Hole
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/5/2016	7.36	60.03	48,054

Design	Original Hole
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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	178.03

Survey Program	Date 2/24/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,600.0	VES Gyro Survey (Original Hole)	SRG-GYRO-MS	surface readout gyro multishot
9,715.0	17,660.0	MWD Survey #2 (Original Hole)	MWD	MWD v3:standard declination

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	1.21	263.81	100.0	-0.1	-1.0	0.1	1.21	1.21	0.00
200.0	1.55	253.92	200.0	-0.6	-3.4	0.5	0.41	0.34	-9.89
300.0	1.46	240.80	299.9	-1.6	-5.8	1.4	0.36	-0.09	-13.12
400.0	1.14	219.59	399.9	-3.0	-7.6	2.7	0.57	-0.32	-21.21
500.0	1.55	191.23	499.9	-5.1	-8.5	4.8	0.77	0.41	-28.36
600.0	1.43	200.68	599.8	-7.6	-9.2	7.3	0.27	-0.12	9.45
700.0	1.51	182.92	699.8	-10.1	-9.7	9.7	0.46	0.08	-17.76
800.0	1.58	198.03	799.8	-12.7	-10.2	12.3	0.41	0.07	15.11



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33-4 W2LM Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Site:	Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H	MD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Well:	Foreigner 33-4 W2LM Fee #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
900.0	1.06	190.83	899.7	-14.9	-10.8	14.5	0.54	-0.52	-7.20
1,000.0	0.64	198.01	999.7	-16.3	-11.1	16.0	0.43	-0.42	7.18
1,100.0	0.89	201.22	1,099.7	-17.6	-11.6	17.2	0.25	0.25	3.21
1,200.0	0.52	247.07	1,199.7	-18.5	-12.3	18.1	0.65	-0.37	45.85
1,300.0	0.65	255.63	1,299.7	-18.8	-13.2	18.4	0.16	0.13	8.56
1,400.0	0.68	259.90	1,399.7	-19.1	-14.4	18.6	0.06	0.03	4.27
1,500.0	0.66	274.61	1,499.7	-19.1	-15.5	18.6	0.17	-0.02	14.71
1,600.0	0.42	313.17	1,599.7	-18.8	-16.4	18.2	0.42	-0.24	38.56
1,700.0	0.37	100.95	1,699.7	-18.6	-16.3	18.1	0.76	-0.05	147.78
1,800.0	1.92	87.34	1,799.7	-18.6	-14.3	18.1	1.56	1.55	-13.61
1,900.0	2.50	85.09	1,899.6	-18.4	-10.5	18.0	0.59	0.58	-2.25
2,000.0	1.99	82.59	1,999.5	-17.9	-6.6	17.7	0.52	-0.51	-2.50
2,100.0	2.40	91.59	2,099.4	-17.8	-2.8	17.7	0.53	0.41	9.00
2,200.0	3.30	90.70	2,199.3	-17.9	2.2	17.9	0.90	0.90	-0.89
2,300.0	3.07	106.83	2,299.2	-18.7	7.6	18.9	0.92	-0.23	16.13
2,400.0	1.22	120.28	2,399.1	-20.0	11.1	20.4	1.90	-1.85	13.45
2,500.0	0.39	160.29	2,499.1	-20.8	12.2	21.3	0.95	-0.83	40.01
2,600.0	0.91	227.73	2,599.1	-21.7	11.7	22.1	0.84	0.52	67.44
2,700.0	0.58	233.75	2,699.1	-22.5	10.7	22.9	0.34	-0.33	6.02
2,800.0	0.97	247.28	2,799.1	-23.2	9.5	23.5	0.43	0.39	13.53
2,900.0	0.56	234.72	2,899.1	-23.8	8.3	24.0	0.44	-0.41	-12.56
3,000.0	0.60	234.29	2,999.1	-24.4	7.5	24.6	0.04	0.04	-0.43
3,100.0	0.76	234.14	3,099.0	-25.1	6.5	25.3	0.16	0.16	-0.15
3,200.0	0.84	242.09	3,199.0	-25.8	5.4	26.0	0.14	0.08	7.95
3,300.0	0.63	266.52	3,299.0	-26.2	4.2	26.3	0.37	-0.21	24.43
3,400.0	1.16	281.57	3,399.0	-26.0	2.6	26.1	0.58	0.53	15.05
3,500.0	1.50	258.96	3,499.0	-26.0	0.3	26.0	0.62	0.34	-22.61
3,600.0	1.35	259.49	3,599.0	-26.5	-2.1	26.4	0.15	-0.15	0.53
3,700.0	1.04	252.72	3,698.9	-27.0	-4.1	26.8	0.34	-0.31	-6.77
3,800.0	0.68	266.62	3,798.9	-27.3	-5.6	27.1	0.41	-0.36	13.90
3,900.0	0.77	271.13	3,898.9	-27.3	-6.8	27.1	0.11	0.09	4.51
4,000.0	0.98	264.93	3,998.9	-27.4	-8.4	27.1	0.23	0.21	-6.20
4,100.0	0.89	262.42	4,098.9	-27.6	-10.0	27.2	0.10	-0.09	-2.51
4,200.0	0.74	270.57	4,198.9	-27.7	-11.4	27.2	0.19	-0.15	8.15
4,300.0	0.55	268.43	4,298.9	-27.7	-12.5	27.2	0.19	-0.19	-2.14
4,400.0	0.48	256.80	4,398.9	-27.8	-13.4	27.3	0.13	-0.07	-11.63
4,500.0	0.52	256.40	4,498.9	-28.0	-14.3	27.5	0.04	0.04	-0.40
4,600.0	0.52	261.36	4,598.9	-28.1	-15.2	27.6	0.05	0.00	4.96
4,700.0	0.97	261.38	4,698.9	-28.3	-16.4	27.8	0.45	0.45	0.02
4,800.0	0.59	249.51	4,798.8	-28.6	-17.8	28.0	0.41	-0.38	-11.87
4,900.0	0.51	255.99	4,898.8	-28.9	-18.7	28.3	0.10	-0.08	6.48
5,000.0	0.82	274.17	4,998.8	-29.0	-19.8	28.3	0.37	0.31	18.18

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33-4 W2LM Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Site:	Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H	MD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Well:	Foreigner 33-4 W2LM Fee #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
5,100.0	0.78	241.96	5,098.8	-29.3	-21.1	28.5	0.45	-0.04	-32.21
5,200.0	0.47	254.38	5,198.8	-29.7	-22.1	28.9	0.34	-0.31	12.42
5,300.0	0.70	253.35	5,298.8	-30.0	-23.1	29.2	0.23	0.23	-1.03
5,400.0	0.57	222.54	5,398.8	-30.5	-24.0	29.7	0.36	-0.13	-30.81
5,500.0	0.56	237.68	5,498.8	-31.1	-24.8	30.3	0.15	-0.01	15.14
5,600.0	0.85	206.79	5,598.8	-32.1	-25.5	31.2	0.47	0.29	-30.89
5,700.0	0.71	197.04	5,698.8	-33.3	-26.0	32.4	0.19	-0.14	-9.75
5,800.0	0.76	200.64	5,798.8	-34.5	-26.5	33.6	0.07	0.05	3.60
5,900.0	0.92	202.65	5,898.8	-35.9	-27.0	34.9	0.16	0.16	2.01
6,000.0	1.19	200.83	5,998.7	-37.6	-27.7	36.6	0.27	0.27	-1.82
6,100.0	1.35	222.73	6,098.7	-39.4	-28.9	38.4	0.51	0.16	21.90
6,200.0	0.60	264.00	6,198.7	-40.4	-30.2	39.3	0.98	-0.75	41.27
6,300.0	1.65	280.96	6,298.7	-40.1	-32.1	39.0	1.09	1.05	16.96
6,400.0	2.01	299.95	6,398.6	-39.0	-35.0	37.8	0.70	0.36	18.99
6,500.0	2.00	300.23	6,498.6	-37.2	-38.1	35.9	0.01	-0.01	0.28
6,600.0	2.30	320.30	6,598.5	-34.8	-40.9	33.4	0.81	0.30	20.07
6,700.0	2.52	322.33	6,698.4	-31.5	-43.5	30.0	0.24	0.22	2.03
6,800.0	3.37	331.41	6,798.3	-27.2	-46.2	25.6	0.97	0.85	9.08
6,900.0	2.68	340.37	6,898.1	-22.4	-48.4	20.8	0.83	-0.69	8.96
7,000.0	3.00	359.44	6,998.0	-17.6	-49.2	15.9	0.99	0.32	19.07
7,100.0	0.96	349.31	7,098.0	-14.2	-49.4	12.5	2.06	-2.04	-10.13
7,200.0	1.24	298.41	7,197.9	-12.8	-50.5	11.1	0.98	0.28	-50.90
7,300.0	1.14	300.09	7,297.9	-11.8	-52.3	10.0	0.11	-0.10	1.68
7,400.0	1.67	272.21	7,397.9	-11.3	-54.7	9.4	0.85	0.53	-27.88
7,500.0	2.44	255.36	7,497.8	-11.7	-58.2	9.7	0.97	0.77	-16.85
7,600.0	3.66	240.76	7,597.7	-13.8	-63.0	11.7	1.44	1.22	-14.60
7,700.0	3.34	225.69	7,697.5	-17.4	-67.9	15.1	0.97	-0.32	-15.07
7,800.0	3.27	210.19	7,797.3	-21.9	-71.4	19.5	0.89	-0.07	-15.50
7,900.0	1.95	190.49	7,897.2	-26.1	-73.1	23.5	1.58	-1.32	-19.70
8,000.0	1.18	210.67	7,997.2	-28.6	-74.0	26.1	0.94	-0.77	20.18
8,100.0	1.18	235.61	8,097.2	-30.1	-75.4	27.5	0.51	0.00	24.94
8,200.0	0.58	253.62	8,197.2	-30.8	-76.7	28.2	0.65	-0.60	18.01
8,300.0	0.76	245.16	8,297.2	-31.2	-77.8	28.6	0.20	0.18	-8.46
8,400.0	0.56	282.40	8,397.2	-31.4	-78.9	28.7	0.46	-0.20	37.24
8,500.0	4.02	267.25	8,497.1	-31.5	-82.8	28.6	3.48	3.46	-15.15
8,600.0	3.44	257.89	8,596.8	-32.3	-89.3	29.2	0.84	-0.58	-9.36
8,700.0	1.59	230.88	8,696.7	-33.8	-93.3	30.6	2.15	-1.85	-27.01
8,800.0	1.69	242.12	8,796.7	-35.4	-95.7	32.0	0.34	0.10	11.24
8,900.0	0.90	215.08	8,896.7	-36.7	-97.4	33.3	0.98	-0.79	-27.04
9,000.0	1.28	165.22	8,996.7	-38.4	-97.6	35.0	0.98	0.38	-49.86
9,100.0	2.78	100.20	9,096.6	-39.9	-94.9	36.6	2.52	1.50	-65.02
9,200.0	2.10	105.47	9,196.5	-40.8	-90.8	37.7	0.72	-0.68	5.27
9,300.0	1.18	98.41	9,296.5	-41.5	-88.0	38.4	0.94	-0.92	-7.06



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33-4 W2LM Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Site:	Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H	MD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Well:	Foreigner 33-4 W2LM Fee #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)	
9,400.0	0.54	112.57	9,396.5	-41.8	-86.5	38.8	0.67	-0.64	14.16	
9,500.0	0.56	145.88	9,496.5	-42.4	-85.8	39.4	0.32	0.02	33.31	
9,600.0	0.11	152.83	9,596.5	-42.9	-85.5	39.9	0.45	-0.45	6.95	
9600' VES Gyro Survey										
9,715.0	0.90	173.10	9,711.5	-43.9	-85.3	40.9	0.69	0.69	17.63	
9,746.0	2.40	134.40	9,742.4	-44.6	-84.8	41.6	5.77	4.84	-124.84	
9,777.0	4.10	121.80	9,773.4	-45.6	-83.4	42.7	5.92	5.48	-40.65	
9,809.0	5.80	113.40	9,805.3	-46.9	-81.0	44.0	5.76	5.31	-26.25	
9,840.0	7.60	106.50	9,836.1	-48.1	-77.6	45.4	6.35	5.81	-22.26	
9,871.0	8.90	100.90	9,866.7	-49.1	-73.3	46.5	4.93	4.19	-18.06	
9,903.0	10.50	96.70	9,898.3	-49.9	-67.9	47.5	5.46	5.00	-13.13	
9,935.0	12.00	93.40	9,929.7	-50.4	-61.7	48.3	5.10	4.69	-10.31	
9,966.0	13.20	93.50	9,959.9	-50.8	-55.0	48.9	3.87	3.87	0.32	
9,998.0	14.10	97.70	9,991.0	-51.6	-47.5	49.9	4.18	2.81	13.13	
10,029.0	16.30	102.80	10,020.9	-53.1	-39.5	51.7	8.30	7.10	16.45	
10,061.0	19.90	109.50	10,051.3	-55.9	-30.0	54.8	12.98	11.25	20.94	
10,092.0	23.80	112.30	10,080.1	-60.0	-19.2	59.3	13.02	12.58	9.03	
10,124.0	27.70	113.70	10,108.9	-65.5	-6.4	65.2	12.33	12.19	4.38	
10,155.0	31.80	114.00	10,135.8	-71.7	7.7	71.9	13.23	13.23	0.97	
10,186.0	35.60	112.70	10,161.6	-78.5	23.5	79.2	12.48	12.26	-4.19	
10,218.0	37.80	119.50	10,187.3	-86.9	40.6	88.3	14.43	6.88	21.25	
10,250.0	41.20	126.50	10,212.0	-98.0	57.6	99.9	17.49	10.63	21.88	
10,281.0	44.10	132.20	10,234.8	-111.3	73.8	113.8	15.57	9.35	18.39	
10,313.0	49.10	134.50	10,256.8	-127.3	90.7	130.4	16.47	15.63	7.19	
10,345.0	54.70	134.80	10,276.5	-145.0	108.6	148.7	17.52	17.50	0.94	
10,376.0	59.50	134.10	10,293.4	-163.2	127.2	167.5	15.60	15.48	-2.26	
10,408.0	60.40	139.50	10,309.4	-183.4	146.1	188.3	14.87	2.81	16.88	
10,425.0	60.10	143.50	10,317.8	-195.0	155.3	200.2	20.50	-1.76	23.53	
10,451.0	61.30	150.20	10,330.6	-213.9	167.7	219.6	22.94	4.62	25.77	
10,483.0	64.40	150.80	10,345.2	-238.7	181.7	244.8	9.83	9.69	1.88	
10,514.0	66.00	152.20	10,358.2	-263.4	195.2	270.0	6.59	5.16	4.52	
10,546.0	67.40	154.00	10,370.8	-289.6	208.4	296.6	6.77	4.38	5.63	
10,577.0	68.60	155.90	10,382.4	-315.7	220.6	323.1	6.88	3.87	6.13	
10,609.0	69.70	158.30	10,393.8	-343.2	232.2	351.0	7.81	3.44	7.50	
10,640.0	71.10	160.40	10,404.2	-370.6	242.5	378.7	7.82	4.52	6.77	
10,672.0	73.30	161.80	10,414.0	-399.4	252.4	407.8	8.04	6.88	4.38	
10,704.0	75.30	163.20	10,422.7	-428.8	261.7	437.5	7.54	6.25	4.38	
10,735.0	77.50	164.60	10,430.0	-457.7	270.0	466.7	8.34	7.10	4.52	
10,766.0	79.20	167.00	10,436.2	-487.1	277.5	496.4	9.36	5.48	7.74	
10,798.0	80.70	169.10	10,441.8	-518.0	284.0	527.4	7.98	4.69	6.56	
10,829.0	81.60	170.90	10,446.6	-548.1	289.3	557.7	6.43	2.90	5.81	
10,861.0	81.50	170.50	10,451.3	-579.4	294.4	589.1	1.28	-0.31	-1.25	



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33-4 W2LM Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Site:	Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H	MD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Well:	Foreigner 33-4 W2LM Fee #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
10,892.0	81.60	170.60	10,455.8	-609.6	299.5	619.5	0.45	0.32	0.32
10,923.0	81.30	171.60	10,460.4	-639.9	304.2	650.0	3.33	-0.97	3.23
10,955.0	81.70	173.90	10,465.2	-671.3	308.2	681.5	7.22	1.25	7.19
10,986.0	83.20	175.80	10,469.2	-701.9	311.0	712.2	7.77	4.84	6.13
11,018.0	85.20	177.60	10,472.5	-733.7	312.8	744.0	8.39	6.25	5.63
11,049.0	84.40	177.50	10,475.3	-764.5	314.1	774.9	2.60	-2.58	-0.32
11,080.0	86.00	178.00	10,477.9	-795.4	315.3	805.8	5.41	5.16	1.61
11,112.0	86.40	177.60	10,480.0	-827.3	316.5	837.7	1.77	1.25	-1.25
11,143.0	86.40	178.10	10,481.9	-858.2	317.7	868.6	1.61	0.00	1.61
11,175.0	87.00	179.10	10,483.8	-890.1	318.5	900.6	3.64	1.88	3.13
11,206.0	87.20	180.60	10,485.4	-921.1	318.6	931.5	4.88	0.65	4.84
11,269.0	87.70	180.80	10,488.2	-984.0	317.8	994.4	0.85	0.79	0.32
11,338.0	93.50	179.80	10,487.4	-1,053.0	317.4	1,063.3	8.53	8.41	-1.45
11,364.0	94.10	178.10	10,485.7	-1,078.9	317.9	1,089.2	6.92	2.31	-6.54
11,395.0	92.60	178.30	10,483.9	-1,109.9	318.9	1,120.2	4.88	-4.84	0.65
11,427.0	90.60	180.70	10,483.0	-1,141.8	319.2	1,152.1	9.76	-6.25	7.50
11,458.0	88.70	180.00	10,483.2	-1,172.8	319.0	1,183.1	6.53	-6.13	-2.26
11,489.0	87.70	179.30	10,484.2	-1,203.8	319.2	1,214.1	3.94	-3.23	-2.26
11,521.0	88.70	180.50	10,485.2	-1,235.8	319.2	1,246.1	4.88	3.13	3.75
11,552.0	89.20	182.00	10,485.7	-1,266.8	318.5	1,277.0	5.10	1.61	4.84
11,583.0	88.50	183.60	10,486.4	-1,297.8	317.0	1,307.9	5.63	-2.26	5.16
11,615.0	87.40	184.20	10,487.5	-1,329.7	314.8	1,339.7	3.92	-3.44	1.88
11,646.0	86.50	182.90	10,489.2	-1,360.6	312.9	1,370.5	5.10	-2.90	-4.19
11,709.0	90.60	182.20	10,490.8	-1,423.5	310.1	1,433.3	6.60	6.51	-1.11
11,741.0	91.30	182.30	10,490.2	-1,455.4	308.9	1,465.2	2.21	2.19	0.31
11,773.0	90.40	182.00	10,489.7	-1,487.4	307.7	1,497.1	2.96	-2.81	-0.94
11,804.0	90.10	183.60	10,489.6	-1,518.4	306.2	1,528.0	5.25	-0.97	5.16
11,836.0	90.30	184.20	10,489.5	-1,550.3	304.0	1,559.8	1.98	0.63	1.88
11,867.0	87.10	183.30	10,490.2	-1,581.2	302.0	1,590.7	10.72	-10.32	-2.90
11,930.0	87.60	181.90	10,493.1	-1,644.1	299.1	1,653.4	2.36	0.79	-2.22
11,962.0	89.00	181.40	10,494.1	-1,676.0	298.2	1,685.3	4.65	4.38	-1.56
11,993.0	91.40	181.90	10,494.0	-1,707.0	297.3	1,716.2	7.91	7.74	1.61
12,025.0	92.00	182.10	10,493.0	-1,739.0	296.2	1,748.2	1.98	1.88	0.63
12,056.0	91.20	182.10	10,492.1	-1,770.0	295.0	1,779.1	2.58	-2.58	0.00
12,088.0	91.50	182.00	10,491.4	-1,801.9	293.9	1,811.0	0.99	0.94	-0.31
12,119.0	90.30	182.40	10,490.9	-1,832.9	292.7	1,841.9	4.08	-3.87	1.29
12,151.0	89.20	181.20	10,491.0	-1,864.9	291.7	1,873.8	5.09	-3.44	-3.75
12,182.0	87.90	181.00	10,491.8	-1,895.9	291.1	1,904.8	4.24	-4.19	-0.65
12,215.0	87.60	180.00	10,493.1	-1,928.8	290.8	1,937.7	3.16	-0.91	-3.03
12,247.0	88.90	180.80	10,494.1	-1,960.8	290.6	1,969.7	4.77	4.06	2.50
12,278.0	88.20	179.60	10,494.9	-1,991.8	290.5	2,000.6	4.48	-2.26	-3.87
12,310.0	87.20	179.70	10,496.2	-2,023.8	290.7	2,032.6	3.14	-3.13	0.31
12,372.0	87.50	180.60	10,499.0	-2,085.7	290.5	2,094.5	1.53	0.48	1.45



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33-4 W2LM Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Site:	Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H	MD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Well:	Foreigner 33-4 W2LM Fee #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
12,404.0	87.10	180.80	10,500.5	-2,117.7	290.1	2,126.4	1.40	-1.25	0.63
12,498.0	85.60	180.30	10,506.5	-2,211.5	289.2	2,220.1	1.68	-1.60	-0.53
12,561.0	86.90	179.10	10,510.6	-2,274.4	289.6	2,283.0	2.81	2.06	-1.90
12,593.0	86.80	179.40	10,512.4	-2,306.3	290.0	2,314.9	0.99	-0.31	0.94
12,687.0	91.50	182.30	10,513.8	-2,400.2	288.6	2,408.7	5.87	5.00	3.09
12,781.0	90.30	180.50	10,512.3	-2,494.2	286.3	2,502.6	2.30	-1.28	-1.91
12,876.0	91.00	180.20	10,511.2	-2,589.2	285.7	2,597.5	0.80	0.74	-0.32
12,970.0	89.30	179.10	10,511.0	-2,683.2	286.3	2,691.4	2.15	-1.81	-1.17
13,064.0	91.20	180.30	10,510.6	-2,777.2	286.8	2,785.4	2.39	2.02	1.28
13,158.0	91.90	182.10	10,508.0	-2,871.1	284.8	2,879.2	2.05	0.74	1.91
13,253.0	90.50	181.30	10,506.1	-2,966.1	282.0	2,974.0	1.70	-1.47	-0.84
13,348.0	87.30	179.50	10,507.9	-3,061.0	281.3	3,068.9	3.86	-3.37	-1.89
13,441.0	91.60	179.50	10,508.8	-3,154.0	282.1	3,161.8	4.62	4.62	0.00
13,536.0	88.60	176.60	10,508.6	-3,248.9	285.4	3,256.8	4.39	-3.16	-3.05
13,631.0	91.80	178.40	10,508.3	-3,343.8	289.5	3,351.8	3.86	3.37	1.89
13,725.0	89.60	179.00	10,507.1	-3,437.8	291.6	3,445.8	2.43	-2.34	0.64
13,819.0	88.50	177.40	10,508.7	-3,531.7	294.6	3,539.7	2.07	-1.17	-1.70
13,913.0	91.40	179.60	10,508.8	-3,625.7	297.1	3,633.7	3.87	3.09	2.34
14,007.0	89.70	177.10	10,507.9	-3,719.6	299.8	3,727.7	3.22	-1.81	-2.66
14,152.0	90.30	176.90	10,507.9	-3,864.4	307.3	3,872.7	0.44	0.41	-0.14
14,247.0	93.30	178.20	10,504.9	-3,959.3	311.4	3,967.6	3.44	3.16	1.37
14,341.0	88.80	178.50	10,503.2	-4,053.2	314.1	4,061.6	4.80	-4.79	0.32
14,436.0	93.60	179.00	10,501.2	-4,148.1	316.2	4,156.5	5.08	5.05	0.53
14,530.0	93.40	184.80	10,495.4	-4,241.8	313.1	4,250.1	6.16	-0.21	6.17
14,625.0	89.40	185.90	10,493.1	-4,336.4	304.2	4,344.3	4.37	-4.21	1.16
14,718.0	87.50	184.60	10,495.6	-4,428.9	295.7	4,436.5	2.48	-2.04	-1.40
14,813.0	90.50	185.00	10,497.3	-4,523.6	287.8	4,530.8	3.19	3.16	0.42
14,908.0	87.20	183.90	10,499.2	-4,618.3	280.4	4,625.2	3.66	-3.47	-1.16
15,002.0	88.70	184.80	10,502.5	-4,711.9	273.3	4,718.5	1.86	1.60	0.96
15,096.0	91.40	184.90	10,502.5	-4,805.6	265.3	4,811.9	2.87	2.87	0.11
15,190.0	89.70	184.00	10,501.6	-4,899.3	258.0	4,905.3	2.05	-1.81	-0.96
15,284.0	89.30	178.90	10,502.4	-4,993.2	255.7	4,999.1	5.44	-0.43	-5.43
15,378.0	91.80	180.70	10,501.5	-5,087.2	256.0	5,093.0	3.28	2.66	1.91
15,473.0	91.20	182.20	10,499.0	-5,182.1	253.6	5,187.8	1.70	-0.63	1.58
15,568.0	87.70	177.50	10,499.9	-5,277.1	253.8	5,282.7	6.17	-3.68	-4.95
15,661.0	84.70	175.20	10,506.1	-5,369.7	259.7	5,375.4	4.06	-3.23	-2.47
15,757.0	86.60	176.90	10,513.4	-5,465.2	266.3	5,471.1	2.65	1.98	1.77
15,852.0	90.50	179.30	10,515.8	-5,560.1	269.5	5,566.0	4.82	4.11	2.53
15,947.0	90.90	180.70	10,514.6	-5,655.1	269.5	5,661.0	1.53	0.42	1.47
16,040.0	90.50	180.00	10,513.5	-5,748.0	268.9	5,753.9	0.87	-0.43	-0.75
16,135.0	91.30	181.50	10,512.0	-5,843.0	267.7	5,848.8	1.79	0.84	1.58
16,229.0	89.30	179.80	10,511.5	-5,937.0	266.6	5,942.7	2.79	-2.13	-1.81



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33-4 W2LM Fee #1H
Project:	Eddy County, New Mexico	TVD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Site:	Section 33-4 23S-28E Foreigner 33-4 W2LM Fee 1H	MD Reference:	3101 + 27 @ 3128.0usft (Patterson 250)
Well:	Foreigner 33-4 W2LM Fee #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
16,323.0	91.70	183.30	10,510.7	-6,031.0	264.0	6,036.5	4.51	2.55	3.72
16,418.0	92.50	184.70	10,507.2	-6,125.7	257.4	6,130.9	1.70	0.84	1.47
16,513.0	90.20	180.60	10,504.9	-6,220.5	253.0	6,225.5	4.95	-2.42	-4.32
16,607.0	89.20	180.90	10,505.4	-6,314.5	251.8	6,319.4	1.11	-1.06	0.32
16,701.0	89.10	182.40	10,506.8	-6,408.4	249.1	6,413.2	1.60	-0.11	1.60
16,796.0	88.60	179.80	10,508.7	-6,503.4	247.3	6,508.0	2.79	-0.53	-2.74
16,891.0	88.20	178.20	10,511.4	-6,598.3	248.9	6,603.0	1.74	-0.42	-1.68
16,985.0	89.40	178.00	10,513.3	-6,692.3	252.1	6,697.0	1.29	1.28	-0.21
17,078.0	89.50	178.60	10,514.2	-6,785.2	254.8	6,790.0	0.65	0.11	0.65
17,173.0	88.30	178.30	10,516.1	-6,880.2	257.4	6,884.9	1.30	-1.26	-0.32
17,267.0	89.40	177.60	10,518.0	-6,974.1	260.7	6,978.9	1.39	1.17	-0.74
17,362.0	89.90	177.90	10,518.5	-7,069.0	264.5	7,073.9	0.61	0.53	0.32
17,457.0	89.80	177.00	10,518.8	-7,163.9	268.7	7,168.9	0.95	-0.11	-0.95
17,551.0	89.60	177.40	10,519.3	-7,257.8	273.3	7,262.9	0.48	-0.21	0.43
17,613.0	89.90	177.60	10,519.5	-7,319.7	276.0	7,324.9	0.58	0.48	0.32
17,660.0	89.90	177.60	10,519.6	-7,366.7	278.0	7,371.9	0.00	0.00	0.00
17660' MD Projected to Bit									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,600.0	9,596.5	-42.9	-85.5	9600' VES Gyro Survey
17,660.0	10,519.6	-7,366.7	278.0	17660' MD Projected to Bit



NM OIL CONSERVATION

ARTESIA DISTRICT

AUG 29 2016

RECEIVED

Mewbourne Oil Company .

Eddy County, New Mexico

Section 34-23S Yardbirds 34 W2OB Fee #1H

Yardbirds 34 W2OB Fee #1H

Original Hole

Plan: Plan#3

Standard Planning Report

15 March, 2016





Stryker Directional Planning Report



Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Yardbirds 34 W2OB Fee #1H
Company:	Mewbourne Oil Company .	TVD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Project:	Eddy County, New Mexico	MD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Site:	Section 34-23S Yardbirds 34 W2OB Fee #1H	North Reference:	Grid
Well:	Yardbirds 34 W2OB Fee #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#3		

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	Section 34-23S Yardbirds 34 W2OB Fee #1H		
Site Position:		Northing:	456,418.40 usft
From:	Map	Easting:	580,296.30 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 16.359 N
		Longitude:	104° 4' 24.920 W
		Grid Convergence:	0.14 °

Well	Yardbirds 34 W2OB Fee #1H		
Well Position	+N/-S	0.0 usft	Northing: 456,418.40 usft
	+E/-W	0.0 usft	Easting: 580,296.30 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	27.0 usft
		Latitude:	32° 15' 16.359 N
		Longitude:	104° 4' 24.920 W
		Ground Level:	3,025.0 usft

Wellbore	Original Hole
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/5/2016	7.33	60.03	48,045

Plan Sections										
Measured			Vertical			Dogleg	Build	Turn		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Rate	Rate	Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
10,250.0	33.85	24.37	10,215.0	149.9	37.9	0.00	0.00	0.00	0.00	
10,522.8	65.56	35.47	10,389.5	325.1	144.2	12.00	11.63	4.07	18.91	
10,955.2	89.57	358.98	10,485.0	720.0	260.0	9.87	5.55	-8.44	-61.29	New LP Yardbirds 34
15,067.7	89.57	358.98	10,516.0	4,831.7	187.0	0.00	0.00	0.00	0.00	PBHL Yardbirds 34



Stryker Directional Planning Report



Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Yardbirds 34 W2OB Fee #1H
Company:	Mewbourne Oil Company	TVD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Project:	Eddy County, New Mexico	MD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Site:	Section 34-23S Yardbirds 34 W2OB Fee #1H	North Reference:	Grid
Well:	Yardbirds 34 W2OB Fee #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#3		

Planned 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	1.60	32.64	100.0	1.2	0.8	1.2	1.60	1.60	0.00
200.0	1.71	21.37	199.9	3.7	2.0	3.8	0.34	0.11	-11.27
300.0	2.53	349.94	299.9	7.3	2.2	7.4	1.39	0.82	-31.43
400.0	3.68	336.46	399.7	12.4	0.5	12.4	1.35	1.15	-13.48
500.0	1.26	349.68	499.6	16.4	-0.9	16.4	2.47	-2.42	13.22
600.0	0.23	94.30	599.6	17.5	-0.9	17.5	1.34	-1.03	104.62
700.0	0.82	134.37	699.6	17.0	-0.2	17.0	0.66	0.59	40.07
800.0	0.90	181.86	799.6	15.7	0.3	15.7	0.70	0.08	47.49
900.0	0.72	162.46	899.6	14.3	0.4	14.3	0.33	-0.18	-19.40
1,000.0	0.86	19.92	999.6	14.4	0.9	14.5	1.50	0.14	-142.54
1,100.0	1.04	23.57	1,099.6	16.0	1.5	16.0	0.19	0.18	3.65
1,200.0	0.36	72.95	1,199.6	16.9	2.2	17.0	0.85	-0.68	49.38
1,300.0	0.23	59.86	1,299.6	17.1	2.6	17.2	0.15	-0.13	-13.09
1,400.0	0.09	16.86	1,399.6	17.3	2.8	17.4	0.18	-0.14	-43.00
1,500.0	0.21	55.08	1,499.6	17.4	3.0	17.5	0.15	0.12	38.22
1,600.0	0.44	78.20	1,599.6	17.6	3.5	17.7	0.26	0.23	23.12
1,700.0	0.31	105.96	1,699.6	17.6	4.2	17.8	0.22	-0.13	27.76
1,800.0	0.42	85.69	1,799.6	17.6	4.8	17.8	0.17	0.11	-20.27
1,900.0	1.27	113.75	1,899.6	17.2	6.2	17.4	0.92	0.85	28.06
2,000.0	1.37	121.70	1,999.5	16.1	8.2	16.4	0.21	0.10	7.95
2,100.0	0.93	131.33	2,099.5	14.9	9.8	15.3	0.48	-0.44	9.63
2,200.0	0.51	140.74	2,199.5	14.0	10.7	14.4	0.43	-0.42	9.41
2,300.0	0.91	150.14	2,299.5	13.0	11.4	13.4	0.42	0.40	9.40
2,400.0	0.57	156.76	2,399.5	11.9	12.0	12.3	0.35	-0.34	6.62
2,500.0	0.48	223.78	2,499.5	11.1	11.9	11.6	0.58	-0.09	67.02
2,600.0	0.20	289.51	2,599.5	10.9	11.4	11.3	0.44	-0.28	65.73
2,700.0	0.20	234.61	2,699.5	10.8	11.1	11.2	0.18	0.00	-54.90
2,800.0	0.30	304.70	2,799.5	10.9	10.8	11.3	0.30	0.10	70.09
2,900.0	0.14	254.56	2,899.5	11.0	10.4	11.4	0.24	-0.16	-50.14
3,000.0	0.12	278.87	2,999.5	11.0	10.2	11.4	0.06	-0.02	24.31
3,100.0	0.23	287.62	3,099.5	11.0	9.9	11.4	0.11	0.11	8.75
3,200.0	0.31	259.38	3,199.5	11.1	9.5	11.4	0.15	0.08	-28.24
3,300.0	0.50	253.85	3,299.5	10.9	8.8	11.2	0.19	0.19	-5.53
3,400.0	0.31	289.86	3,399.5	10.9	8.1	11.2	0.31	-0.19	36.01
3,500.0	0.40	233.24	3,499.5	10.7	7.6	11.0	0.35	0.09	-56.62
3,600.0	0.41	232.19	3,599.5	10.3	7.0	10.6	0.01	0.01	-1.05
3,700.0	0.39	228.54	3,699.5	9.9	6.5	10.1	0.03	-0.02	-3.65
3,800.0	0.75	220.66	3,799.5	9.1	5.8	9.4	0.37	0.36	-7.88
3,900.0	0.72	249.85	3,899.5	8.4	4.8	8.6	0.37	-0.03	29.19
4,000.0	0.46	252.80	3,999.4	8.1	3.8	8.2	0.26	-0.26	2.95
4,100.0	0.45	236.83	4,099.4	7.8	3.1	7.9	0.13	-0.01	-15.97
4,200.0	0.65	205.78	4,199.4	7.0	2.5	7.1	0.35	0.20	-31.05
4,300.0	0.57	215.10	4,299.4	6.1	2.0	6.2	0.13	-0.08	9.32
4,400.0	0.47	219.17	4,399.4	5.4	1.4	5.4	0.11	-0.10	4.07
4,500.0	0.47	232.40	4,499.4	4.8	0.9	4.9	0.11	0.00	13.23
4,600.0	0.67	201.10	4,599.4	4.0	0.3	4.0	0.36	0.20	-31.30
4,700.0	0.65	234.96	4,699.4	3.2	-0.4	3.1	0.38	-0.02	33.86
4,800.0	0.78	205.20	4,799.4	2.2	-1.1	2.2	0.39	0.13	-29.76
4,900.0	0.86	213.43	4,899.4	1.0	-1.8	0.9	0.14	0.08	8.23
5,000.0	0.89	220.37	4,999.4	-0.2	-2.7	-0.3	0.11	0.03	6.94
5,100.0	0.85	209.08	5,099.4	-1.5	-3.6	-1.6	0.18	-0.04	-11.29
5,200.0	0.78	206.56	5,199.4	-2.7	-4.3	-2.9	0.08	-0.07	-2.52
5,300.0	0.55	224.46	5,299.4	-3.7	-4.9	-3.9	0.31	-0.23	17.90



Stryker Directional Planning Report



Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Yardbirds 34 W2OB Fee #1H
Company:	Mewbourne Oil Company .	TVD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Project:	Eddy County, New Mexico	MD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Site:	Section 34-23S Yardbirds 34 W2OB Fee #1H	North Reference:	Grid
Well:	Yardbirds 34 W2OB Fee #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#3		

Planned 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)
5,400.0	0.59	188.41	5,399.4	-4.5	-5.3	-4.7	0.35	0.04	-36.05
5,500.0	0.38	234.27	5,499.3	-5.2	-5.7	-5.5	0.42	-0.21	45.86
5,600.0	0.41	195.58	5,599.3	-5.8	-6.0	-6.0	0.26	0.03	-38.69
5,700.0	0.34	165.20	5,699.3	-6.4	-6.0	-6.6	0.21	-0.07	-30.38
5,800.0	0.63	219.34	5,799.3	-7.1	-6.3	-7.4	0.51	0.29	54.14
5,900.0	0.78	189.33	5,899.3	-8.2	-6.8	-8.5	0.39	0.15	-30.01
6,000.0	0.49	210.21	5,999.3	-9.3	-7.1	-9.5	0.37	-0.29	20.88
6,100.0	0.61	174.76	6,099.3	-10.2	-7.3	-10.4	0.35	0.12	-35.45
6,200.0	0.77	192.22	6,199.3	-11.4	-7.4	-11.6	0.26	0.16	17.46
6,300.0	0.66	107.52	6,299.3	-12.2	-7.0	-12.4	0.97	-0.11	-84.70
6,400.0	0.97	80.56	6,399.3	-12.2	-5.6	-12.4	0.49	0.31	-26.96
6,500.0	0.06	48.03	6,499.3	-12.0	-4.7	-12.2	0.92	-0.91	-32.53
6,600.0	0.82	277.30	6,599.3	-11.9	-5.4	-12.1	0.86	0.76	-130.73
6,700.0	1.15	303.70	6,699.3	-11.3	-6.9	-11.5	0.55	0.33	26.40
6,800.0	0.73	256.64	6,799.3	-10.9	-8.4	-11.2	0.84	-0.42	-47.06
6,900.0	1.09	359.94	6,899.3	-10.1	-9.0	-10.4	1.44	0.36	103.30
7,000.0	1.87	5.45	6,999.2	-7.5	-8.8	-7.8	0.79	0.78	5.51
7,100.0	2.03	3.95	7,099.2	-4.1	-8.6	-4.4	0.17	0.16	-1.50
7,200.0	1.89	6.36	7,199.1	-0.7	-8.3	-1.0	0.16	-0.14	2.41
7,300.0	1.22	330.90	7,299.1	1.9	-8.6	1.6	1.14	-0.67	-35.46
7,400.0	1.37	321.61	7,399.0	3.8	-9.8	3.4	0.26	0.15	-9.29
7,500.0	1.83	325.44	7,499.0	6.0	-11.5	5.6	0.47	0.46	3.83
7,600.0	1.28	317.43	7,599.0	8.1	-13.2	7.6	0.59	-0.55	-8.01
7,700.0	0.78	294.99	7,699.0	9.3	-14.5	8.7	0.63	-0.50	-22.44
7,800.0	0.75	299.19	7,798.9	9.9	-15.7	9.2	0.06	-0.03	4.20
7,900.0	0.69	277.03	7,898.9	10.3	-16.9	9.6	0.28	-0.06	-22.16
8,000.0	0.79	279.00	7,998.9	10.4	-18.2	9.7	0.10	0.10	1.97
8,100.0	0.68	248.24	8,098.9	10.3	-19.4	9.6	0.40	-0.11	-30.76
8,200.0	0.82	238.46	8,198.9	9.7	-20.6	8.9	0.19	0.14	-9.78
8,300.0	0.92	249.39	8,298.9	9.1	-21.9	8.2	0.19	0.10	10.93
8,400.0	1.36	258.91	8,398.9	8.6	-23.8	7.6	0.48	0.44	9.52
8,500.0	0.89	275.87	8,498.9	8.4	-25.8	7.4	0.57	-0.47	16.96
8,600.0	0.62	17.70	8,598.9	9.0	-26.4	8.0	1.18	-0.27	101.83
8,700.0	1.48	132.80	8,698.8	8.6	-25.3	7.7	1.83	0.86	115.10
8,800.0	1.14	116.85	8,798.8	7.3	-23.4	6.4	0.50	-0.34	-15.95
8,900.0	0.92	98.40	8,898.8	6.7	-21.8	5.9	0.40	-0.22	-18.45
9,000.0	0.28	88.89	8,998.8	6.6	-20.7	5.8	0.65	-0.64	-9.51
9,100.0	0.48	226.34	9,098.8	6.4	-20.8	5.5	0.71	0.20	137.45
9,200.0	1.17	231.63	9,198.8	5.4	-21.9	4.6	0.69	0.69	5.29
9,300.0	1.09	248.83	9,298.8	4.5	-23.6	3.5	0.35	-0.08	17.20
9,400.0	0.93	236.41	9,398.8	3.7	-25.1	2.7	0.27	-0.16	-12.42
9,500.0	0.82	245.40	9,498.7	2.9	-26.5	1.9	0.18	-0.11	8.99
9,600.0	0.82	214.31	9,598.7	2.0	-27.5	1.0	0.44	0.00	-31.09
9,604.0	0.77	216.67	9,602.7	2.0	-27.5	0.9	1.49	-1.25	59.00
9,696.0	1.50	194.10	9,694.7	0.3	-28.2	-0.8	0.92	0.79	-24.53
9,759.0	1.50	56.50	9,757.7	0.0	-27.7	-1.1	4.44	0.00	-218.41
9,790.0	4.30	32.10	9,788.7	1.2	-26.8	0.1	9.67	9.03	-78.71
9,821.0	8.20	27.10	9,819.5	4.1	-25.1	3.2	12.69	12.58	-16.13
9,853.0	11.90	26.40	9,851.0	9.1	-22.6	8.2	11.57	11.56	-2.19
9,884.0	14.10	25.60	9,881.2	15.4	-19.6	14.6	7.12	7.10	-2.58
9,916.0	16.20	23.10	9,912.1	23.0	-16.1	22.4	6.87	6.56	-7.81
9,947.0	18.20	21.00	9,941.7	31.5	-12.7	31.0	6.75	6.45	-6.77
9,979.0	19.70	20.60	9,971.9	41.2	-9.0	40.8	4.71	4.69	-1.25
10,010.0	20.90	21.10	10,001.0	51.3	-5.2	51.0	3.91	3.87	1.61



Stryker Directional Planning Report



Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Yardbirds 34 W2OB Fee #1H
Company:	Mewbourne Oil Company	TVD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Project:	Eddy County, New Mexico	MD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Site:	Section 34-23S Yardbirds 34 W2OB Fee #1H	North Reference:	Grid
Well:	Yardbirds 34 W2OB Fee #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#3		

Planned 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)
10,042.0	22.30	21.90	10,030.8	62.2	-0.9	62.2	4.47	4.38	2.50
10,073.0	23.90	22.30	10,059.3	73.5	3.7	73.6	5.19	5.16	1.29
10,104.0	25.60	22.80	10,087.4	85.5	8.7	85.8	5.53	5.48	1.61
10,135.0	26.40	24.10	10,115.3	98.0	14.1	98.4	3.17	2.58	4.19
10,167.0	27.80	25.70	10,143.8	111.2	20.2	111.9	4.93	4.38	5.00
10,198.0	30.30	23.30	10,170.9	124.9	26.5	125.8	8.90	8.06	-7.74
10,230.0	32.30	25.10	10,198.2	140.0	33.3	141.2	6.90	6.25	5.63
10,250.0	33.85	24.37	10,215.0	149.9	37.9	151.3	7.99	7.74	-3.63
10250' MD ST1 - 10250' MD Begin 12/100' Build									
10,275.0	36.70	26.00	10,235.4	163.0	44.0	164.6	12.00	11.40	6.51
10,300.0	39.57	27.42	10,255.1	176.8	50.9	178.6	12.00	11.47	5.69
10,325.0	42.45	28.68	10,273.9	191.3	58.7	193.4	12.00	11.54	5.04
10,350.0	45.35	29.81	10,291.9	206.4	67.1	208.8	12.00	11.59	4.51
10,375.0	48.25	30.83	10,309.0	222.1	76.3	224.9	12.00	11.63	4.08
10,400.0	51.17	31.76	10,325.2	238.4	86.2	241.6	12.00	11.66	3.73
10,425.0	54.09	32.62	10,340.4	255.2	96.8	258.8	12.00	11.69	3.43
10,450.0	57.02	33.42	10,354.5	272.5	108.1	276.5	12.00	11.71	3.19
10,475.0	59.95	34.16	10,367.6	290.2	119.9	294.6	12.00	11.73	2.98
10,500.0	62.88	34.87	10,379.5	308.3	132.4	313.2	12.00	11.74	2.81
10,522.8	65.56	35.47	10,389.5	325.1	144.2	330.4	12.00	11.76	2.67
10522.8' MD Begin 9.87/100' Build/Turn									
10,550.0	66.88	32.91	10,400.4	345.6	158.2	351.5	9.87	4.82	-9.41
10,600.0	69.39	28.34	10,419.1	385.6	181.8	392.3	9.87	5.03	-9.16
10,650.0	72.02	23.91	10,435.6	427.9	202.5	435.4	9.87	5.26	-8.85
10,700.0	74.75	19.62	10,449.9	472.4	220.3	480.6	9.87	5.45	-8.59
10,750.0	77.55	15.43	10,461.9	518.7	234.9	527.4	9.87	5.61	-8.36
10,800.0	80.42	11.34	10,471.4	566.4	246.2	575.5	9.87	5.74	-8.18
10,850.0	83.34	7.32	10,478.5	615.3	254.3	624.6	9.87	5.83	-8.05
10,900.0	86.29	3.34	10,483.0	664.8	258.9	674.3	9.87	5.90	-7.95
10,950.0	89.26	359.40	10,484.9	714.8	260.1	724.3	9.87	5.93	-7.90
10,955.2	89.57	358.99	10,485.0	720.0	260.0	729.5	9.87	5.94	-7.88
10955.2' MD LP									
11,000.0	89.57	358.98	10,485.3	764.7	259.2	774.2	0.01	0.01	-0.01
11,100.0	89.57	358.98	10,486.1	864.7	257.4	874.0	0.00	0.00	0.00
11,200.0	89.57	358.98	10,486.8	964.7	255.7	973.9	0.00	0.00	0.00
11,300.0	89.57	358.98	10,487.6	1,064.7	253.9	1,073.7	0.00	0.00	0.00
11,400.0	89.57	358.98	10,488.4	1,164.7	252.1	1,173.5	0.00	0.00	0.00
11,500.0	89.57	358.98	10,489.1	1,264.7	250.3	1,273.4	0.00	0.00	0.00
11,600.0	89.57	358.98	10,489.9	1,364.6	248.5	1,373.2	0.00	0.00	0.00
11,700.0	89.57	358.98	10,490.6	1,464.6	246.8	1,473.1	0.00	0.00	0.00
11,800.0	89.57	358.98	10,491.4	1,564.6	245.0	1,572.9	0.00	0.00	0.00
11,900.0	89.57	358.98	10,492.1	1,664.6	243.2	1,672.7	0.00	0.00	0.00
12,000.0	89.57	358.98	10,492.9	1,764.6	241.4	1,772.6	0.00	0.00	0.00
12,100.0	89.57	358.98	10,493.6	1,864.5	239.7	1,872.4	0.00	0.00	0.00
12,200.0	89.57	358.98	10,494.4	1,964.5	237.9	1,972.3	0.00	0.00	0.00
12,300.0	89.57	358.98	10,495.1	2,064.5	236.1	2,072.1	0.00	0.00	0.00
12,400.0	89.57	358.98	10,495.9	2,164.5	234.3	2,171.9	0.00	0.00	0.00
12,500.0	89.57	358.98	10,496.6	2,264.5	232.6	2,271.8	0.00	0.00	0.00
12,600.0	89.57	358.98	10,497.4	2,364.4	230.8	2,371.6	0.00	0.00	0.00
12,700.0	89.57	358.98	10,498.2	2,464.4	229.0	2,471.4	0.00	0.00	0.00
12,800.0	89.57	358.98	10,498.9	2,564.4	227.2	2,571.3	0.00	0.00	0.00
12,900.0	89.57	358.98	10,499.7	2,664.4	225.5	2,671.1	0.00	0.00	0.00
13,000.0	89.57	358.98	10,500.4	2,764.4	223.7	2,771.0	0.00	0.00	0.00



Stryker Directional Planning Report



Database:	Stryker_EDM	Local Co-ordinate Reference:	Well Yardbirds 34 W2OB Fee #1H
Company:	Mewbourne Oil Company	TVD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Project:	Eddy County, New Mexico	MD Reference:	3025 + 27 @ 3052.0usft (Patterson 250)
Site:	Section 34-23S Yardbirds 34 W2OB Fee #1H	North Reference:	Grid
Well:	Yardbirds 34 W2OB Fee #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan#3		

Planned 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)
13,100.0	89.57	358.98	10,501.2	2,864.4	221.9	2,870.8	0.00	0.00	0.00
13,200.0	89.57	358.98	10,501.9	2,964.3	220.1	2,970.6	0.00	0.00	0.00
13,300.0	89.57	358.98	10,502.7	3,064.3	218.4	3,070.5	0.00	0.00	0.00
13,400.0	89.57	358.98	10,503.4	3,164.3	216.6	3,170.3	0.00	0.00	0.00
13,500.0	89.57	358.98	10,504.2	3,264.3	214.8	3,270.1	0.00	0.00	0.00
13,600.0	89.57	358.98	10,504.9	3,364.3	213.0	3,370.0	0.00	0.00	0.00
13,700.0	89.57	358.98	10,505.7	3,464.2	211.3	3,469.8	0.00	0.00	0.00
13,800.0	89.57	358.98	10,506.4	3,564.2	209.5	3,569.7	0.00	0.00	0.00
13,900.0	89.57	358.98	10,507.2	3,664.2	207.7	3,669.5	0.00	0.00	0.00
14,000.0	89.57	358.98	10,508.0	3,764.2	205.9	3,769.3	0.00	0.00	0.00
14,100.0	89.57	358.98	10,508.7	3,864.2	204.2	3,869.2	0.00	0.00	0.00
14,200.0	89.57	358.98	10,509.5	3,964.1	202.4	3,969.0	0.00	0.00	0.00
14,300.0	89.57	358.98	10,510.2	4,064.1	200.6	4,068.8	0.00	0.00	0.00
14,400.0	89.57	358.98	10,511.0	4,164.1	198.8	4,168.7	0.00	0.00	0.00
14,500.0	89.57	358.98	10,511.7	4,264.1	197.0	4,268.5	0.00	0.00	0.00
14,600.0	89.57	358.98	10,512.5	4,364.1	195.3	4,368.4	0.00	0.00	0.00
14,700.0	89.57	358.98	10,513.2	4,464.1	193.5	4,468.2	0.00	0.00	0.00
14,800.0	89.57	358.98	10,514.0	4,564.0	191.7	4,568.0	0.00	0.00	0.00
14,900.0	89.57	358.98	10,514.7	4,664.0	189.9	4,667.9	0.00	0.00	0.00
15,000.0	89.57	358.98	10,515.5	4,764.0	188.2	4,767.7	0.00	0.00	0.00
15,067.7	89.57	358.98	10,516.0	4,831.7	187.0	4,835.3	0.00	0.00	0.00

15067.7' MD PBHL

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,250.0	10,215.0	149.9	37.9	10250' MD ST1
10,250.0	10,215.0	149.9	37.9	10250' MD Begin 12/100' Build
10,522.8	10,389.5	325.1	144.2	10522.8' MD Begin 9.87/100' Build/Turn
10,955.2	10,485.0	720.0	260.0	10955.2' MD LP
15,067.7	10,516.0	4,831.7	187.0	15067.7' MD PBHL