

30-015-43499



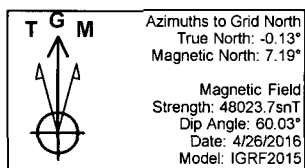
COMPANY: Mewbourne Oil Company
WELL: Foreigner 33/4 W2JO Fee Com #1H
COUNTY: Eddy County, New Mexico
DATUM: NAD 1927 (NADCON CONUS)
RIG: Patterson Patterson #231



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.19°

OFFICE: 936.582.7296

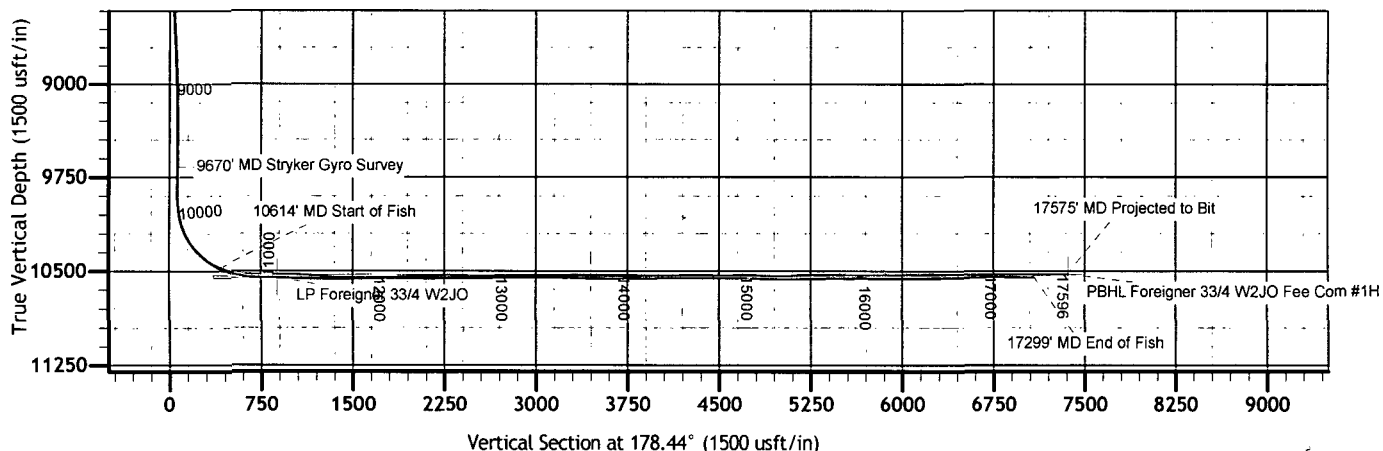
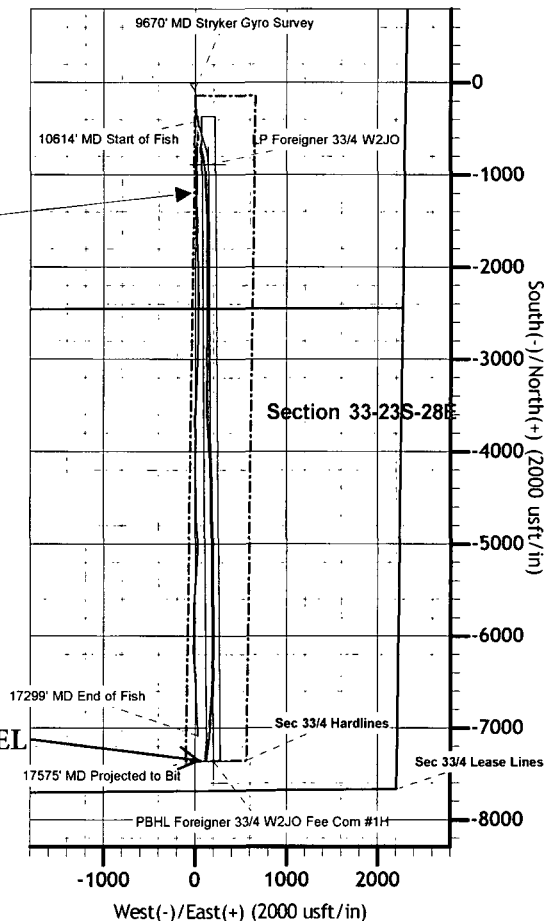
GEODETIC ZONE: New Mexico East 3001 GL 3081+27 @ 3108.0usft (Patterson #231) GROUND ELEVATION: 3081.0										
+N/-S 0.0	+E/-W 0.0	Northing 458701.10	Easting 574989.10	Latitude 32° 15' 39.072 N	Longitude 104° 5' 26.664 W					Slot
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	10564.0	59.80	173.00	10451.1	-368.1	19.0	0.00	0.00	368.5	
2	10694.7	70.00	162.62	10506.6	-483.4	44.3	10.60	-45.00	484.4	
3	10917.5	88.59	162.77	10547.8	-691.4	109.1	8.35	0.48	694.1	
4	11116.8	90.14	179.34	10550.0	-887.6	140.0	8.35	84.78	891.1	LP Foreigner 33/4 W2JO
5	11124.6	90.22	179.47	10550.0	-895.4	140.1	2.00	58.89	898.9	
6	17595.4	90.22	179.47	10525.0	-7366.0	200.0	0.00	0.00	7368.7	PBHL Foreigner 33/4 W2JO Fee Com #1H



SHL 185' FSL; 450' FWL
Section 33-23S-28E
PBHL 330' FSL; 2310' FEL
Section 4-24S-28E

Please stay East of
Hardline

338' FSL; 2,090' FEL





Mewbourne Oil Company .

Eddy County, New Mexico

Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H

Foreigner 33/4 W2JO Fee Com #1H

ST hole

Design: Original Hole

Standard Survey Report

20 June, 2016





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33/4 W2JO Fee Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Site:	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H	MD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Well:	Foreigner 33/4 W2JO Fee Com #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 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H					
Site Position:				Northing:		458,701.10 usft		Latitude:		32° 15' 39.072 N	
From:		Map		Easting:		574,989.10 usft		Longitude:		104° 5' 26.664 W	
Position Uncertainty:		0.0 usft		Slot Radius:		13-3/16 "		Grid Convergence:		0.13 °	

Well	Foreigner 33/4 W2JO Fee Com #1H					
Well Position	+N/-S	0.0 usft	Northing:	458,701.10 usft	Latitude:	32° 15' 39.072 N
	+E/-W	0.0 usft	Easting:	574,989.10 usft	Longitude:	104° 5' 26.664 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,081.0 usft

Wellbore	Original Hole				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/26/2016	7.32	60.03	48,024

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	187.78

Survey Program	Date 6/20/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,670.0	Stryker Survey #1 (Original Hole)	SRG-GYRO-MS	surface readout gyro multishot
9,837.0	10,614.0	MWD Survey (Original Hole)	MWD	MWD v3:standard declination
10,564.0	17,575.0	ST Survey (Original Hole)		

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	0.45	351.48	100.0	0.4	-0.1	-0.4	0.45	0.45	0.00
200.0	0.79	339.37	200.0	1.4	-0.4	-1.4	0.36	0.34	-12.11
300.0	1.60	303.38	300.0	2.8	-1.8	-2.6	1.07	0.81	-35.99
400.0	2.69	257.57	399.9	3.1	-5.2	-2.4	1.95	1.09	-45.81
500.0	3.20	248.61	499.8	1.6	-10.1	-0.2	0.69	0.51	-8.96
600.0	3.90	244.66	599.6	-0.9	-15.8	3.0	0.74	0.70	-3.95
700.0	4.36	244.27	699.3	-4.0	-22.3	7.0	0.46	0.46	-0.39



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33/4 W2JO Fee Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Site:	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H	MD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Well:	Foreigner 33/4 W2JO Fee Com #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)	
800.0	2.94	234.73	799.1	-7.1	-27.8	10.8	1.54	-1.42	-9.54	
900.0	0.59	97.66	899.1	-8.7	-29.4	12.6	3.40	-2.35	-137.07	
1,000.0	1.56	60.49	999.1	-8.1	-27.7	11.8	1.15	0.97	-37.17	
1,100.0	1.64	45.82	1,099.0	-6.4	-25.5	9.8	0.42	0.08	-14.67	
1,200.0	1.38	50.12	1,199.0	-4.6	-23.5	7.8	0.28	-0.26	4.30	
1,300.0	1.03	35.04	1,299.0	-3.1	-22.1	6.1	0.47	-0.35	-15.08	
1,400.0	0.87	35.74	1,399.0	-1.8	-21.1	4.6	0.16	-0.16	0.70	
1,500.0	0.57	13.81	1,498.9	-0.7	-20.6	3.5	0.40	-0.30	-21.93	
1,600.0	0.55	345.82	1,598.9	0.3	-20.6	2.5	0.27	-0.02	-27.99	
1,700.0	0.55	342.77	1,698.9	1.2	-20.8	1.6	0.03	0.00	-3.05	
1,800.0	0.44	41.55	1,798.9	1.9	-20.7	0.9	0.50	-0.11	58.78	
1,900.0	0.77	83.16	1,898.9	2.3	-19.8	0.4	0.53	0.33	41.61	
2,000.0	1.15	102.29	1,998.9	2.2	-18.1	0.3	0.49	0.38	19.13	
2,100.0	1.50	105.78	2,098.9	1.6	-15.9	0.6	0.36	0.35	3.49	
2,200.0	2.17	113.05	2,198.8	0.5	-12.9	1.3	0.71	0.67	7.27	
2,300.0	1.64	104.28	2,298.8	-0.6	-9.8	1.9	0.60	-0.53	-8.77	
2,400.0	1.38	112.99	2,398.7	-1.4	-7.3	2.4	0.35	-0.26	8.71	
2,500.0	0.15	146.87	2,498.7	-2.0	-6.1	2.8	1.26	-1.23	33.88	
2,600.0	0.57	286.38	2,598.7	-2.0	-6.5	2.8	0.69	0.42	139.51	
2,700.0	0.58	281.11	2,698.7	-1.7	-7.5	2.7	0.05	0.01	-5.27	
2,800.0	0.60	279.11	2,798.7	-1.6	-8.5	2.7	0.03	0.02	-2.00	
2,900.0	0.55	259.28	2,898.7	-1.6	-9.5	2.8	0.20	-0.05	-19.83	
3,000.0	0.50	258.93	2,998.7	-1.7	-10.4	3.1	0.05	-0.05	-0.35	
3,100.0	0.70	271.62	3,098.7	-1.8	-11.4	3.3	0.24	0.20	12.69	
3,200.0	0.53	260.43	3,198.7	-1.9	-12.5	3.5	0.21	-0.17	-11.19	
3,300.0	0.58	253.54	3,298.7	-2.1	-13.4	3.9	0.08	0.05	-6.89	
3,400.0	0.58	252.79	3,398.7	-2.4	-14.4	4.3	0.01	0.00	-0.75	
3,500.0	0.46	244.17	3,498.7	-2.7	-15.2	4.7	0.14	-0.12	-8.62	
3,600.0	0.38	248.59	3,598.7	-3.0	-15.9	5.1	0.09	-0.08	4.42	
3,700.0	0.50	242.86	3,698.7	-3.3	-16.6	5.5	0.13	0.12	-5.73	
3,800.0	0.55	244.23	3,798.7	-3.7	-17.4	6.0	0.05	0.05	1.37	
3,900.0	0.42	189.86	3,898.7	-4.3	-17.9	6.7	0.46	-0.13	-54.37	
4,000.0	0.62	268.53	3,998.7	-4.7	-18.5	7.1	0.68	0.20	78.67	
4,100.0	0.67	261.28	4,098.7	-4.8	-19.6	7.4	0.10	0.05	-7.25	
4,200.0	0.68	279.05	4,198.7	-4.8	-20.8	7.5	0.21	0.01	17.77	
4,300.0	0.16	174.39	4,298.7	-4.8	-21.4	7.7	0.74	-0.52	-104.66	
4,400.0	0.53	290.46	4,398.7	-4.8	-21.8	7.7	0.62	0.37	116.07	
4,500.0	0.35	315.50	4,498.7	-4.4	-22.5	7.4	0.26	-0.18	25.04	
4,600.0	0.19	292.21	4,598.6	-4.1	-22.8	7.2	0.19	-0.16	-23.29	
4,700.0	0.35	312.62	4,698.6	-3.9	-23.2	7.0	0.18	0.16	20.41	
4,800.0	0.12	5.47	4,798.6	-3.5	-23.4	6.7	0.29	-0.23	52.85	
4,900.0	0.15	13.28	4,898.6	-3.3	-23.4	6.4	0.04	0.03	7.81	



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33/4 W2JO Fee Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Site:	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H	MD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Well:	Foreigner 33/4 W2JO Fee Com #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)
5,000.0	0.23	45.75	4,998.6	-3.0	-23.2	6.2	0.13	0.08	32.47
5,100.0	0.65	31.90	5,098.6	-2.4	-22.8	5.5	0.43	0.42	-13.85
5,200.0	0.89	25.45	5,198.6	-1.2	-22.1	4.2	0.25	0.24	-6.45
5,300.0	0.43	343.76	5,298.6	-0.2	-21.9	3.1	0.64	-0.46	-41.69
5,400.0	0.31	342.32	5,398.6	0.4	-22.1	2.6	0.12	-0.12	-1.44
5,500.0	0.54	287.29	5,498.6	0.8	-22.6	2.2	0.44	0.23	-55.03
5,600.0	0.43	276.78	5,598.6	1.0	-23.4	2.2	0.14	-0.11	-10.51
5,700.0	0.34	265.70	5,698.6	1.0	-24.1	2.2	0.12	-0.09	-11.08
5,800.0	0.42	258.45	5,798.6	0.9	-24.8	2.4	0.09	0.08	-7.25
5,900.0	0.45	209.96	5,898.6	0.5	-25.3	2.9	0.36	0.03	-48.49
6,000.0	0.41	227.93	5,998.6	0.0	-25.8	3.5	0.14	-0.04	17.97
6,100.0	0.63	206.91	6,098.6	-0.8	-26.3	4.3	0.29	0.22	-21.02
6,200.0	0.61	202.59	6,198.6	-1.8	-26.7	5.4	0.05	-0.02	-4.32
6,300.0	0.94	210.31	6,298.6	-3.0	-27.4	6.6	0.35	0.33	7.72
6,400.0	1.12	241.51	6,398.6	-4.1	-28.6	8.0	0.58	0.18	31.20
6,500.0	1.22	253.53	6,498.6	-4.9	-30.5	9.0	0.26	0.10	12.02
6,600.0	1.16	271.48	6,598.5	-5.2	-32.5	9.5	0.38	-0.06	17.95
6,700.0	1.26	296.09	6,698.5	-4.7	-34.5	9.3	0.52	0.10	24.61
6,800.0	1.28	300.75	6,798.5	-3.6	-36.5	8.5	0.11	0.02	4.66
6,900.0	1.82	301.69	6,898.5	-2.2	-38.8	7.4	0.54	0.54	0.94
7,000.0	1.80	299.68	6,998.4	-0.6	-41.5	6.2	0.07	-0.02	-2.01
7,100.0	1.11	287.05	7,098.4	0.5	-43.8	5.5	0.76	-0.69	-12.63
7,200.0	0.98	272.59	7,198.4	0.8	-45.6	5.4	0.29	-0.13	-14.46
7,300.0	1.25	245.31	7,298.3	0.4	-47.4	6.1	0.59	0.27	-27.28
7,400.0	0.88	230.67	7,398.3	-0.6	-49.0	7.2	0.46	-0.37	-14.64
7,500.0	1.08	212.87	7,498.3	-1.8	-50.1	8.6	0.36	0.20	-17.80
7,600.0	0.83	207.90	7,598.3	-3.3	-51.0	10.2	0.26	-0.25	-4.97
7,700.0	1.12	223.81	7,698.3	-4.6	-52.0	11.6	0.39	0.29	15.91
7,800.0	2.53	226.62	7,798.2	-6.8	-54.3	14.1	1.41	1.41	2.81
7,900.0	3.89	168.48	7,898.1	-11.7	-55.2	19.1	3.34	1.36	-58.14
8,000.0	5.67	145.28	7,997.7	-19.1	-51.7	25.9	2.59	1.78	-23.20
8,100.0	5.48	145.40	8,097.3	-27.1	-46.2	33.1	0.19	-0.19	0.12
8,200.0	4.01	145.08	8,196.9	-33.9	-41.5	39.2	1.47	-1.47	-0.32
8,300.0	3.24	146.02	8,296.7	-39.1	-37.9	43.8	0.77	-0.77	0.94
8,400.0	2.12	157.06	8,396.6	-43.1	-35.6	47.5	1.23	-1.12	11.04
8,500.0	1.77	148.65	8,496.6	-46.1	-34.1	50.3	0.45	-0.35	-8.41
8,600.0	4.20	129.47	8,596.4	-49.8	-30.4	53.4	2.59	2.43	-19.18
8,700.0	4.71	128.46	8,696.1	-54.7	-24.4	57.5	0.52	0.51	-1.01
8,800.0	4.11	120.97	8,795.8	-59.1	-18.1	61.0	0.83	-0.60	-7.49
8,900.0	2.67	147.47	8,895.6	-62.9	-13.8	64.2	2.09	-1.44	26.50
9,000.0	1.69	157.40	8,995.6	-66.2	-12.0	67.2	1.05	-0.98	9.93
9,100.0	0.82	164.38	9,095.5	-68.2	-11.2	69.1	0.88	-0.87	6.98
9,200.0	0.36	162.76	9,195.5	-69.2	-10.9	70.1	0.46	-0.46	-1.62



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33/4 W2JO Fee Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Site:	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H	MD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Well:	Foreigner 33/4 W2JO Fee Com #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)	
9,300.0	0.46	154.74	9,295.5	-69.9	-10.7	70.7	0.12	0.10	-8.02	
9,400.0	0.20	106.77	9,395.5	-70.3	-10.3	71.1	0.36	-0.26	-47.97	
9,500.0	0.21	100.33	9,495.5	-70.4	-10.0	71.1	0.03	0.01	-6.44	
9,600.0	0.08	119.89	9,595.5	-70.5	-9.7	71.1	0.14	-0.13	19.56	
9,670.0	0.20	166.22	9,665.5	-70.6	-9.7	71.3	0.22	0.17	66.19	
9670' MD Stryker Gyro Survey										
9,837.0	0.50	133.30	9,832.5	-71.4	-9.1	72.0	0.21	0.18	-19.71	
9,931.0	1.30	129.20	9,926.5	-72.3	-7.9	72.8	0.85	0.85	-4.36	
9,963.0	4.00	164.40	9,958.5	-73.7	-7.3	74.0	9.47	8.44	110.00	
9,995.0	4.50	181.70	9,990.4	-76.0	-7.1	76.2	4.28	1.56	54.06	
10,026.0	7.60	186.30	10,021.2	-79.2	-7.3	79.5	10.11	10.00	14.84	
10,058.0	10.90	173.20	10,052.8	-84.3	-7.2	84.5	12.17	10.31	-40.94	
10,089.0	14.20	167.30	10,083.1	-91.0	-6.0	90.9	11.41	10.65	-19.03	
10,121.0	16.30	161.40	10,113.9	-99.1	-3.7	98.6	8.15	6.56	-18.44	
10,153.0	19.70	167.20	10,144.4	-108.6	-1.1	107.7	12.00	10.63	18.13	
10,185.0	22.50	173.30	10,174.2	-119.9	0.8	118.7	11.11	8.75	19.06	
10,216.0	25.80	176.80	10,202.5	-132.5	1.9	131.1	11.60	10.65	11.29	
10,248.0	29.80	176.30	10,230.8	-147.4	2.8	145.7	12.52	12.50	-1.56	
10,279.0	32.90	179.90	10,257.3	-163.6	3.3	161.6	11.68	10.00	11.61	
10,311.0	36.10	177.70	10,283.6	-181.7	3.7	179.5	10.73	10.00	-6.88	
10,343.0	38.70	175.90	10,309.1	-201.1	4.8	198.6	8.81	8.13	-5.63	
10,374.0	41.50	176.50	10,332.8	-221.0	6.1	218.1	9.12	9.03	1.94	
10,406.0	45.10	177.50	10,356.1	-242.9	7.2	239.7	11.45	11.25	3.13	
10,437.0	49.50	176.90	10,377.1	-265.7	8.3	262.1	14.26	14.19	-1.94	
10,469.0	53.00	174.90	10,397.1	-290.5	10.1	286.5	11.97	10.94	-6.25	
10,500.0	53.50	174.20	10,415.7	-315.3	12.5	310.7	2.42	1.61	-2.26	
10,532.0	56.10	172.50	10,434.1	-341.2	15.5	336.0	9.21	8.13	-5.31	
10,564.0	59.80	173.00	10,451.1	-368.1	19.0	362.2	11.64	11.56	1.56	
10,705.0	78.60	178.00	10,501.0	-498.9	28.9	490.4	13.73	13.33	3.55	
10,768.0	80.50	177.50	10,512.4	-560.8	31.3	551.4	3.12	3.02	-0.79	
10,799.0	80.60	173.20	10,517.5	-591.3	33.8	581.3	13.69	0.32	-13.87	
10,831.0	82.40	170.10	10,522.2	-622.6	38.4	611.7	11.11	5.63	-9.69	
10,863.0	85.50	168.60	10,525.6	-653.9	44.3	641.9	10.75	9.69	-4.69	
10,894.0	87.80	165.50	10,527.4	-684.0	51.2	670.8	12.44	7.42	-10.00	
10,957.0	90.50	168.60	10,528.3	-745.4	65.3	729.7	6.52	4.29	4.92	
11,052.0	91.40	170.00	10,526.7	-838.7	83.0	819.8	1.75	0.95	1.47	
11,115.0	90.30	171.50	10,525.8	-900.9	93.1	880.0	2.95	-1.75	2.38	
11,146.0	88.60	172.60	10,526.1	-931.6	97.4	909.8	6.53	-5.48	3.55	
11,178.0	89.00	173.00	10,526.8	-963.4	101.4	940.7	1.77	1.25	1.25	
11,209.0	89.50	173.00	10,527.2	-994.1	105.2	970.7	1.61	1.61	0.00	
11,241.0	88.60	173.90	10,527.7	-1,025.9	108.8	1,001.7	3.98	-2.81	2.81	
11,273.0	85.20	175.20	10,529.4	-1,057.7	111.8	1,032.8	11.37	-10.63	4.06	
11,305.0	85.30	176.10	10,532.1	-1,089.5	114.3	1,064.0	2.82	0.31	2.81	



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33/4 W2JO Fee Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Site:	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H	MD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Well:	Foreigner 33/4 W2JO Fee Com #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)
11,336.0	85.40	176.20	10,534.6	-1,120.3	116.3	1,094.3	0.46	0.32	0.32
11,368.0	85.40	176.60	10,537.2	-1,152.2	118.3	1,125.5	1.25	0.00	1.25
11,400.0	85.60	176.50	10,539.7	-1,184.0	120.3	1,156.8	0.70	0.63	-0.31
11,432.0	86.90	177.00	10,541.8	-1,215.9	122.1	1,188.2	4.35	4.06	1.56
11,528.0	86.30	177.10	10,547.5	-1,311.6	127.0	1,282.3	0.63	-0.63	0.10
11,623.0	88.10	177.50	10,552.1	-1,406.4	131.5	1,375.6	1.94	1.89	0.42
11,718.0	88.40	179.40	10,555.0	-1,501.3	134.0	1,469.3	2.02	0.32	2.00
11,813.0	92.30	180.60	10,554.4	-1,596.3	134.0	1,563.4	4.30	4.11	1.26
11,908.0	92.10	180.40	10,550.8	-1,691.2	133.2	1,657.6	0.30	-0.21	-0.21
12,004.0	90.40	180.00	10,548.7	-1,787.2	132.9	1,752.7	1.82	-1.77	-0.42
12,100.0	89.10	178.70	10,549.1	-1,883.2	134.0	1,847.7	1.92	-1.35	-1.35
12,195.0	92.30	178.50	10,548.0	-1,978.1	136.3	1,941.4	3.37	3.37	-0.21
12,290.0	93.00	179.30	10,543.6	-2,073.0	138.1	2,035.2	1.12	0.74	0.84
12,322.0	92.40	179.40	10,542.1	-2,104.9	138.5	2,066.8	1.90	-1.88	0.31
12,418.0	90.90	180.40	10,539.3	-2,200.9	138.6	2,161.8	1.88	-1.56	1.04
12,514.0	88.70	179.50	10,539.6	-2,296.9	138.7	2,256.9	2.48	-2.29	-0.94
12,609.0	87.20	178.90	10,543.0	-2,391.8	140.0	2,350.8	1.70	-1.58	-0.63
12,705.0	90.20	179.70	10,545.2	-2,487.8	141.2	2,445.7	3.23	3.13	0.83
12,800.0	90.50	181.60	10,544.6	-2,582.8	140.1	2,540.0	2.02	0.32	2.00
12,896.0	90.00	180.60	10,544.2	-2,678.7	138.3	2,635.3	1.16	-0.52	-1.04
12,992.0	90.80	181.80	10,543.5	-2,774.7	136.3	2,730.7	1.50	0.83	1.25
13,088.0	91.30	181.00	10,541.8	-2,870.7	133.9	2,826.1	0.98	0.52	-0.83
13,183.0	89.60	179.00	10,541.0	-2,965.7	133.9	2,920.2	2.76	-1.79	-2.11
13,279.0	89.00	178.80	10,542.2	-3,061.6	135.8	3,015.0	0.66	-0.63	-0.21
13,374.0	90.50	180.90	10,542.6	-3,156.6	136.0	3,109.1	2.72	1.58	2.21
13,469.0	90.90	182.30	10,541.5	-3,251.6	133.4	3,203.6	1.53	0.42	1.47
13,565.0	91.20	180.00	10,539.7	-3,347.5	131.5	3,298.9	2.42	0.31	-2.40
13,661.0	90.20	179.50	10,538.5	-3,443.5	131.9	3,393.9	1.16	-1.04	-0.52
13,757.0	89.70	177.30	10,538.6	-3,539.5	134.6	3,488.6	2.35	-0.52	-2.29
13,852.0	89.60	178.40	10,539.2	-3,634.4	138.1	3,582.2	1.16	-0.11	1.16
13,948.0	89.00	175.40	10,540.4	-3,730.3	143.3	3,676.5	3.19	-0.63	-3.13
14,044.0	89.60	176.00	10,541.5	-3,826.0	150.5	3,770.3	0.88	0.63	0.63
14,140.0	90.20	176.30	10,541.7	-3,921.8	157.0	3,864.4	0.70	0.63	0.31
14,235.0	89.30	175.20	10,542.1	-4,016.5	164.0	3,957.3	1.50	-0.95	-1.16
14,331.0	90.50	177.90	10,542.3	-4,112.3	169.8	4,051.4	3.08	1.25	2.81
14,427.0	92.10	179.10	10,540.1	-4,208.3	172.3	4,146.1	2.08	1.67	1.25
14,522.0	90.20	178.00	10,538.2	-4,303.2	174.7	4,239.9	2.31	-2.00	-1.16
14,618.0	89.30	178.70	10,538.6	-4,399.2	177.5	4,334.6	1.19	-0.94	0.73
14,714.0	89.40	179.20	10,539.7	-4,495.1	179.2	4,429.4	0.53	0.10	0.52
14,809.0	91.60	179.50	10,538.9	-4,590.1	180.3	4,523.4	2.34	2.32	0.32
14,905.0	92.10	179.50	10,535.8	-4,686.1	181.1	4,618.3	0.52	0.52	0.00
15,000.0	87.30	177.30	10,536.3	-4,781.0	183.8	4,712.0	5.56	-5.05	-2.32



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Foreigner 33/4 W2JO Fee Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Site:	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H	MD Reference:	GL 3081+27 @ 3108.0usft (Patterson #231)
Well:	Foreigner 33/4 W2JO Fee Com #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)	
15,096.0	86.10	177.80	10,541.8	-4,876.7	187.9	4,806.4	1.35	-1.25	0.52	
15,159.0	90.00	180.20	10,543.9	-4,939.7	189.0	4,868.6	7.27	6.19	3.81	
15,191.0	91.50	180.90	10,543.5	-4,971.7	188.7	4,900.3	5.17	4.69	2.19	
15,287.0	91.60	179.50	10,540.9	-5,067.6	188.3	4,995.4	1.46	0.10	-1.46	
15,382.0	93.50	180.30	10,536.7	-5,162.5	188.5	5,089.4	2.17	2.00	0.84	
15,478.0	90.10	180.00	10,533.7	-5,258.5	188.2	5,184.5	3.56	-3.54	-0.31	
15,573.0	91.60	180.30	10,532.3	-5,353.5	188.0	5,278.7	1.61	1.58	0.32	
15,669.0	92.90	180.90	10,528.5	-5,449.4	187.0	5,373.8	1.49	1.35	0.63	
15,765.0	91.50	178.30	10,524.8	-5,545.3	187.7	5,468.8	3.07	-1.46	-2.71	
15,860.0	89.90	177.60	10,523.7	-5,640.2	191.1	5,562.4	1.84	-1.68	-0.74	
15,956.0	88.70	178.50	10,524.8	-5,736.2	194.3	5,657.0	1.56	-1.25	0.94	
16,051.0	88.80	179.80	10,526.9	-5,831.1	195.7	5,750.9	1.37	0.11	1.37	
16,147.0	92.60	182.00	10,525.7	-5,927.1	194.2	5,846.2	4.57	3.96	2.29	
16,243.0	88.90	180.00	10,524.5	-6,023.0	192.6	5,941.5	4.38	-3.85	-2.08	
16,388.0	91.60	180.00	10,523.8	-6,168.0	192.6	6,085.1	1.86	1.86	0.00	
16,434.0	89.40	178.80	10,523.4	-6,214.0	193.0	6,130.6	5.45	-4.78	-2.61	
16,529.0	88.00	178.60	10,525.6	-6,309.0	195.2	6,224.4	1.49	-1.47	-0.21	
16,625.0	89.50	180.10	10,527.7	-6,404.9	196.3	6,319.3	2.21	1.56	1.56	
16,721.0	89.50	180.90	10,528.5	-6,500.9	195.4	6,414.5	0.83	0.00	0.83	
16,816.0	91.00	185.80	10,528.1	-6,595.7	189.9	6,509.2	5.39	1.58	5.16	
16,912.0	88.90	183.20	10,528.2	-6,691.4	182.4	6,605.1	3.48	-2.19	-2.71	
17,008.0	90.80	183.90	10,528.4	-6,787.2	176.4	6,700.8	2.11	1.98	0.73	
17,103.0	91.80	184.40	10,526.3	-6,881.9	169.5	6,795.6	1.18	1.05	0.53	
17,198.0	90.00	185.70	10,524.8	-6,976.6	161.2	6,890.4	2.34	-1.89	1.37	
17,294.0	90.90	188.70	10,524.0	-7,071.8	149.2	6,986.4	3.26	0.94	3.13	
17,390.0	89.90	186.80	10,523.4	-7,166.9	136.2	7,082.4	2.24	-1.04	-1.98	
17,486.0	89.90	186.60	10,523.5	-7,262.3	125.0	7,178.4	0.21	0.00	-0.21	
17,528.0	90.30	186.50	10,523.5	-7,304.0	120.2	7,220.4	0.98	0.95	-0.24	
17,575.0	90.30	186.50	10,523.2	-7,350.7	114.9	7,267.4	0.00	0.00	0.00	
17575' MD Projected to Bit										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,670.0	9,665.5	-70.6	-9.7	9670' MD Stryker Gyro Survey	
17,575.0	10,523.2	-7,350.7	114.9	17575' MD Projected to Bit	



July 13, 2016

New Mexico Energy, Minerals and Natural Resources Department
Attn: Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attn: Jackie Lathan

Re: Mewbourne Oil Company
Foreigner 33-4 W2JO Fee Com #001H
Culebra Bluff; Wolfcamp, South (Gas)
Eddy County, New Mexico
API# 30-015-43499

Enclosed please find the original and one (1) copy of the survey performed on the reference well by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C. Other information required by your office is as follows:

<u>Name & Title</u>	<u>Drainhole No.</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Chris Alley	Original Hole	Surface to 9,670ft.	05/08/2016	Gyro Survey
Keith Broussard	Original Hole	9,837ft. to 17,158ft.	05-08-16 to 05-28-16	MWD Survey
Keith Broussard	"Sidetrack" Hole	10,705ft. to 17,528ft.	06-04-16 to 06-19-16	MWD Survey

A certified plat on which the bottom-hole location is oriented to both surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Todd Estes

Enclosures

CC:

Mewbourne Oil Company
Attn: Frosty Lathan
P.O. Box 5720
Hobbs, NM 88241

Mewbourne Oil Company
Attn: Robin Terrell
P.O. Box 5720
Hobbs, NM 88241

NMEMaNRD\Mewbourne Oil Company\Foreigner 33-4 W2JO Fee Com #1H\M161032

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.
P.O. Box 1250
Montgomery, TX 77356
Office (936) 582-7296 * Fax (936)-588-4163



July 13, 2016

Survey Certification Report

STATE OF **TEXAS**
COUNTY OF **Montgomery**

I, Todd Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of May 08, 2016, conduct or supervise the taking of a SEDS Original Hole Gyro Survey from Surface to a depth of 9,670 feet; and that I did on the day(s) of May 08, 2016, through May 28, 2016 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 9,837 feet to a depth of 17,158 feet; and that I did on the day(s) of June 04, 2016, through June 19, 2016 conduct or supervise the taking of a SEDS "Sidetrack" Hole MWD Survey from a depth of 10,705 feet to a depth of 17,528 feet that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Foreigner 33-4 W2JO Fee Com #001H well, API # **30-015-43499** in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.



Todd Estes

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.
P.O. Box 1250
Montgomery, TX 77356
Office (936) 582-7296 * Fax (936)-588-4163

Stryker Directional

Foreigner 33-4 W2JO Fee Com #1H

Company: Newbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference:
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project: Eddy County, New Mexico
Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001
System Datum: Mean Sea Level

Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H

Site Position: Northing: 458,701.10 usft Latitude: 32° 15' 39.072 N
From: Easting: 574,989.10 usft Longitude: 104° 5' 26.664 W
Position Uncertainty: Map Slot Radius: 13-3/16 " Grid Convergence: 0.13°
 0.0 usft

Well: Foreigner 33/4 W2JO Fee Com #1H

Well Position: Northing: 458,701.10 usft Latitude: 32° 15' 39.072 N
Position Uncertainty: Easting: 574,989.10 usft Longitude: 104° 5' 26.664 W
 0.0 usft Wellhead Elevation: 0.0 usft Ground Level: 3,081.0 usft

Wellbore: Original Hole

Magnetics: Model Name: IGRF2015 Sample Date: 4/26/2016 Declination (°): 7.19 Dip Angle (°): 60.03 Field Strength (nT): 48,024

Design: Original Hole

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 0.0 180.77

Stryker Directional

Foreigner 33-4 W2JO Fee Com #1H

Company: Newbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Foreigner 33/4 W2JO Fee Com #1H
 GL 3081+27 @ 3108.0usft (Patterson #231)
 GL 3081+27 @ 3108.0usft (Patterson #231)
 Grid
 Minimum Curvature
 Stryker_EDM

Survey Program: Date 5/11/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,670.0	Stryker Gyro Survey (Original Hole)	SRG-GYRO-MS	surface readout gyro multishot

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	D Leg (°/100usft)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.00
	100.0	0.45	351.48	100.0	0.4	-0.1	-0.4	0.4	351.48	0.45
	200.0	0.79	339.37	200.0	1.4	-0.4	-1.4	1.5	345.82	0.36
	300.0	1.60	303.38	300.0	2.8	-1.8	-2.6	3.3	328.05	1.07
	400.0	2.69	257.57	399.9	3.1	-5.2	-2.4	6.1	300.66	1.95
	500.0	3.20	248.61	499.8	1.6	-10.1	-0.2	10.2	278.85	0.69
	600.0	3.90	244.66	599.6	-0.9	-15.8	3.0	15.8	266.74	0.74
	700.0	4.36	244.27	699.3	-4.0	-22.3	7.0	22.6	259.81	0.46
	800.0	2.94	234.73	799.1	-7.1	-27.8	10.8	28.7	255.61	1.54
	900.0	0.59	97.66	899.1	-8.7	-29.4	12.6	30.6	253.54	3.40
	1,000.0	1.56	60.49	999.1	-8.1	-27.7	11.8	28.8	253.73	1.15
	1,100.0	1.64	45.82	1,099.0	-6.4	-25.5	9.8	26.3	255.87	0.42
	1,200.0	1.38	50.12	1,199.0	-4.6	-23.5	7.8	24.0	258.83	0.28
	1,300.0	1.03	35.04	1,299.0	-3.1	-22.1	6.1	22.3	261.92	0.47
	1,400.0	0.87	35.74	1,399.0	-1.8	-21.1	4.6	21.2	265.17	0.16
	1,500.0	0.57	13.81	1,498.9	-0.7	-20.6	3.5	20.6	268.09	0.40
	1,600.0	0.55	345.82	1,598.9	0.3	-20.6	2.5	20.6	270.73	0.27
	1,700.0	0.55	342.77	1,698.9	1.2	-20.8	1.6	20.9	273.26	0.03
	1,800.0	0.44	41.55	1,798.9	1.9	-20.7	0.9	20.8	275.33	0.50
	1,900.0	0.77	83.16	1,898.9	2.3	-19.8	0.4	19.9	276.62	0.53
	2,000.0	1.15	102.29	1,998.9	2.2	-18.1	0.3	18.3	276.80	0.49

Stryker Directional

Foreigner 33-4 W2JO Fee Com #1H

Company:

Newbourne Oil Company

Project:

Eddy County, New Mexico

Site:

Section 33-23S-28E Foreigner 33/4 W2JO Fee C

Well:

Foreigner 33/4 W2JO Fee Com #1H

Wellbore:

Original Hole

Design:

Original Hole

Local Co-ordinate Reference:

Well Foreigner 33/4 W2JO Fee Com #1H

TVD Reference:

GL 3081+27 @ 3108.0usft (Patterson #231)

MD Reference:

GL 3081+27 @ 3108.0usft (Patterson #231)

North Reference:

Grid

Survey Calculation Method:

Minimum Curvature

Database:

Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	D Leg (°/100usft)
2,100.0	1.50	105.78	2,098.9	1.6	-15.9	0.6	16.0	275.73	0.36
2,200.0	2.17	113.05	2,198.8	0.5	-12.9	1.3	12.9	272.21	0.71
2,300.0	1.64	104.28	2,298.8	-0.6	-9.8	1.9	9.8	266.51	0.60
2,400.0	1.38	112.99	2,398.7	-1.4	-7.3	2.4	7.4	258.97	0.35
2,500.0	0.15	146.87	2,498.7	-2.0	-6.1	2.8	6.4	251.86	1.26
2,600.0	0.57	286.38	2,598.7	-2.0	-6.5	2.8	6.8	253.17	0.69
2,700.0	0.58	281.11	2,698.7	-1.7	-7.5	2.7	7.7	256.97	0.05
2,800.0	0.60	279.11	2,798.7	-1.6	-8.5	2.7	8.6	259.66	0.03
2,900.0	0.55	259.28	2,898.7	-1.6	-9.5	2.8	9.6	260.68	0.20
3,000.0	0.50	258.93	2,998.7	-1.7	-10.4	3.1	10.5	260.54	0.05
3,100.0	0.70	271.62	3,098.7	-1.8	-11.4	3.3	11.6	261.06	0.24
3,200.0	0.53	260.43	3,198.7	-1.9	-12.5	3.5	12.6	261.55	0.21
3,300.0	0.58	253.54	3,298.7	-2.1	-13.4	3.9	13.6	261.21	0.08
3,400.0	0.58	252.79	3,398.7	-2.4	-14.4	4.3	14.6	260.66	0.01
3,500.0	0.46	244.17	3,498.7	-2.7	-15.2	4.7	15.5	259.98	0.14
3,600.0	0.38	248.59	3,598.7	-3.0	-15.9	5.1	16.2	259.36	0.09
3,700.0	0.50	242.86	3,698.7	-3.3	-16.6	5.5	16.9	258.73	0.13
3,800.0	0.55	244.23	3,798.7	-3.7	-17.4	6.0	17.8	257.96	0.05
3,900.0	0.42	189.86	3,898.7	-4.3	-17.9	6.7	18.4	256.55	0.46
4,000.0	0.62	268.53	3,998.7	-4.7	-18.5	7.1	19.1	255.88	0.68
4,100.0	0.67	261.28	4,098.7	-4.8	-19.6	7.4	20.2	256.37	0.10
4,200.0	0.68	279.05	4,198.7	-4.8	-20.8	7.5	21.4	257.12	0.21
4,300.0	0.16	174.39	4,298.7	-4.8	-21.4	7.7	21.9	257.33	0.74
4,400.0	0.53	290.46	4,398.7	-4.8	-21.8	7.7	22.3	257.63	0.62
4,500.0	0.35	315.50	4,498.7	-4.4	-22.5	7.4	22.9	258.90	0.26
4,600.0	0.19	292.21	4,598.7	-4.1	-22.8	7.2	23.2	259.76	0.19
4,700.0	0.35	312.62	4,698.6	-3.9	-23.2	7.0	23.5	260.57	0.18

Stryker Directional

Foreigner 33-4 W2JO Fee Com #1H

Company: Newbourne Oil Company
 Project: Eddy County, New Mexico
 Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
 Well: Foreigner 33/4 W2JO Fee Com #1H
 Wellbore: Original Hole
 Design: Original Hole

Local Coordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Database:

Well Foreigner 33/4 W2JO Fee Com #1H
 GL 3081+27 @ 3108.0usft (Patterson #231)
 GL 3081+27 @ 3108.0usft (Patterson #231)
 Grid
 Minimum Curvature
 Stryker_EDM

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	D Leg (°/100usft)
	4,800.0	0.12	5.47	4,798.6	-3.5	-23.4	6.7	23.7	261.40	0.29
	4,900.0	0.15	13.28	4,898.6	-3.3	-23.4	6.4	23.6	261.94	0.04
	5,000.0	0.23	45.75	4,998.6	-3.0	-23.2	6.2	23.4	262.53	0.13
	5,100.0	0.65	31.90	5,098.6	-2.4	-22.8	5.5	22.9	263.92	0.43
	5,200.0	0.89	25.45	5,198.6	-1.2	-22.1	4.2	22.2	266.79	0.25
	5,300.0	0.43	343.76	5,298.6	-0.2	-21.9	3.1	21.9	269.54	0.64
	5,400.0	0.31	342.32	5,398.6	0.4	-22.1	2.6	22.1	271.14	0.12
	5,500.0	0.54	287.29	5,498.6	0.8	-22.6	2.2	22.6	272.12	0.44
	5,600.0	0.43	276.78	5,598.6	1.0	-23.4	2.2	23.5	272.50	0.14
	5,700.0	0.34	265.70	5,698.6	1.0	-24.1	2.2	24.1	272.48	0.12
	5,800.0	0.42	258.45	5,798.6	0.9	-24.8	2.4	24.8	272.20	0.09
	5,900.0	0.45	209.96	5,898.6	0.5	-25.3	2.9	25.3	271.21	0.36
	6,000.0	0.41	227.93	5,998.6	0.0	-25.8	3.5	25.8	269.90	0.14
	6,100.0	0.63	206.91	6,098.6	-0.8	-26.3	4.3	26.3	268.31	0.29
	6,200.0	0.61	202.59	6,198.6	-1.8	-26.7	5.4	26.8	266.24	0.05
	6,300.0	0.94	210.31	6,298.6	-3.0	-27.4	6.6	27.5	263.83	0.35
	6,400.0	1.12	241.51	6,398.6	-4.1	-28.6	8.0	28.9	261.79	0.58
	6,500.0	1.22	253.53	6,498.6	-4.9	-30.5	9.0	30.9	260.88	0.26
	6,600.0	1.16	271.48	6,598.5	-5.2	-32.5	9.5	33.0	260.97	0.38
	6,700.0	1.26	296.09	6,698.5	-4.7	-34.5	9.3	34.9	262.31	0.52
	6,800.0	1.28	300.75	6,798.5	-3.6	-36.5	8.5	36.7	264.35	0.11
	6,900.0	1.82	301.69	6,898.5	-2.2	-38.8	7.4	38.9	266.75	0.54
	7,000.0	1.80	299.58	6,998.4	-0.6	-41.5	6.2	41.5	269.18	0.07
	7,100.0	1.11	287.05	7,098.4	0.5	-43.8	5.5	43.8	270.61	0.76
	7,200.0	0.98	272.59	7,198.4	0.8	-45.6	5.4	45.6	271.00	0.29
	7,300.0	1.25	245.31	7,298.3	0.4	-47.4	6.1	47.4	270.45	0.59
	7,400.0	0.88	230.67	7,398.3	-0.6	-49.0	7.2	49.0	269.34	0.46

Stryker Directional

Foreigner 33-4 W2JO Fee Com #1H

Company: Newbourne Oil Company
 Project: Eddy County, New Mexico
 Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
 Well: Foreigner 33/4 W2JO Fee Com #1H
 Wellbore: Original Hole
 Design: Original Hole

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Database:

Well Foreigner 33/4 W2JO Fee Com #1H
 GL 3081+27 @ 3108.0usft (Patterson #231)
 GL 3081+27 @ 3108.0usft (Patterson #231)
 Grid
 Minimum Curvature
 Stryker_EDM

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)
	7,500.0	1.08	212.87	7,498.3	-1.8	-50.1	8.6	50.2	267.89	0.36
	7,600.0	0.83	207.90	7,598.3	-3.3	-51.0	10.2	51.1	266.32	0.26
	7,700.0	1.12	223.81	7,698.3	-4.6	-52.0	11.6	52.2	264.92	0.39
	7,800.0	2.53	226.62	7,798.2	-6.8	-54.3	14.1	54.7	262.81	1.41
	7,900.0	3.89	168.48	7,898.1	-11.7	-55.2	19.1	56.4	258.05	3.34
	8,000.0	5.67	145.28	7,997.7	-19.1	-51.7	25.9	55.1	249.76	2.59
	8,100.0	5.48	145.40	8,097.3	-27.1	-46.2	33.1	53.5	239.63	0.19
	8,200.0	4.01	145.08	8,196.9	-33.9	-41.5	39.2	53.5	230.77	1.47
	8,300.0	3.24	146.02	8,296.7	-39.1	-37.9	43.8	54.4	224.12	0.77
	8,400.0	2.12	157.06	8,396.6	-43.1	-35.6	47.5	55.9	219.54	1.23
	8,500.0	1.77	148.65	8,496.6	-46.1	-34.1	50.3	57.4	216.44	0.45
	8,600.0	4.20	129.47	8,596.4	-49.8	-30.4	53.4	58.4	211.44	2.59
	8,700.0	4.71	128.46	8,696.1	-54.7	-24.4	57.5	59.9	204.05	0.52
	8,800.0	4.11	120.97	8,795.8	-59.1	-18.1	61.0	61.8	197.04	0.83
	8,900.0	2.67	147.47	8,895.6	-62.9	-13.8	64.2	64.4	192.36	2.09
	9,000.0	1.69	157.40	8,995.6	-66.2	-12.0	67.2	67.3	190.24	1.05
	9,100.0	0.82	164.38	9,095.5	-68.2	-11.2	69.1	69.2	189.32	0.88
	9,200.0	0.36	162.76	9,195.5	-69.2	-10.9	70.1	70.1	188.96	0.46
	9,300.0	0.46	154.74	9,295.5	-69.9	-10.7	70.7	70.7	188.66	0.12
	9,400.0	0.20	106.77	9,395.5	-70.3	-10.3	71.1	71.1	188.34	0.36
	9,500.0	0.21	100.33	9,495.5	-70.4	-10.0	71.1	71.1	188.06	0.03
	9,600.0	0.08	119.89	9,595.5	-70.5	-9.7	71.1	71.1	187.86	0.14
	9,670.0	0.20	166.22	9,665.5	-70.6	-9.7	71.3	71.3	187.78	0.22

9670' MD Stryker Gyro Survey

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Foreigner 33/4 W2JO Fee Com #1H
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project:	Eddy County, New Mexico	System Datum:	Mean Sea Level
Map System:	US State Plane 1927 (Exact solution)		
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H		
Site Position:		Northing:	458,701.10 usft
From:	Map	Easting:	574,989.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 39.072 N
		Longitude:	104° 5' 26.664 W
		Grid Convergence:	0.13 °

Well	Foreigner 33/4 W2JO Fee Com #1H		
Well Position	+N/-S	Northing:	458,701.10 usft
	+E/-W	Easting:	574,989.10 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 15' 39.072 N
		Longitude:	104° 5' 26.664 W
		Ground Level:	3,081.0 usft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Field Strength (nT)
	IGRF2015	4/26/2016	48,024
		Declination (°)	Dip Angle (°)
		7.32	60.03

Design	Original Hole		
Audit Notes:			
Version:	1.0	Phase:	Tie On Depth:
		ACTUAL	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	Direction (°)
	0.0	0.0	187.78
		+E/-W (usft)	
		0.0	

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Foreigner 33/4 W2JO Fee Com #1H
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey Program		Date	7/13/2016	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	9,670.0	Stryker Survey #1 (Original Hole)	SRG-GYRO-MS	surface readout gyro multishot
9,837.0	17,158.0	MWD Survey (Original Hole)	MWD	MWD v3:standard declination

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)
9,670.0	0.20	166.22	9,665.5	-70.6	-9.7	71.3	71.3	187.78	0.00
9,837.0	0.50	133.30	9,832.5	-71.4	-9.1	72.0	72.0	187.23	0.21
9,931.0	1.30	129.20	9,926.5	-72.3	-7.9	72.8	72.8	186.25	0.85
9,963.0	4.00	164.40	9,958.5	-73.7	-7.3	74.0	74.0	185.70	9.47
9,995.0	4.50	181.70	9,990.4	-76.0	-7.1	76.2	76.3	185.33	4.28
10,026.0	7.60	186.30	10,021.2	-79.2	-7.3	79.5	79.6	185.30	10.11
10,058.0	10.90	173.20	10,052.8	-84.3	-7.2	84.5	84.7	184.89	12.17
10,089.0	14.20	167.30	10,083.1	-91.0	-6.0	90.9	91.2	183.80	11.41
10,121.0	16.30	161.40	10,113.9	-99.1	-3.7	98.6	99.1	182.16	8.15
10,153.0	19.70	167.20	10,144.4	-108.6	-1.1	107.7	108.6	180.59	12.00
10,185.0	22.50	173.30	10,174.2	-119.9	0.8	118.7	119.9	179.62	11.11
10,216.0	25.80	176.80	10,202.5	-132.5	1.9	131.1	132.6	179.19	11.60
10,248.0	29.80	176.30	10,230.8	-147.4	2.8	145.7	147.5	178.92	12.52
10,279.0	32.90	179.90	10,257.3	-163.6	3.3	161.6	163.6	178.85	11.68
10,311.0	36.10	177.70	10,283.6	-181.7	3.7	179.5	181.7	178.84	10.73
10,343.0	38.70	175.90	10,309.1	-201.1	4.8	198.6	201.1	178.84	8.81
10,374.0	41.50	176.50	10,332.8	-221.0	6.1	218.1	221.1	178.42	9.12
10,406.0	45.10	177.50	10,356.1	-242.9	7.2	239.7	243.0	178.29	11.45
10,437.0	49.50	176.90	10,377.1	-265.7	8.3	262.1	265.8	178.20	14.26
10,469.0	53.00	174.90	10,397.1	-290.5	10.1	286.5	290.7	178.00	11.97

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Newbourn Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference:
TVD Reference: Well Foreigner 33/4 W2JO Fee Com #1H
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
Survey Calculation Method: Grid
Database: Minimum Curvature
 Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	D Leg (°/100usft)
10,500.0	53.50	174.20	10,415.7	-315.3	12.5	310.7	315.5	177.73	2.42
10,532.0	56.10	172.50	10,434.1	-341.2	15.5	336.0	341.6	177.39	9.21
10,564.0	59.80	173.00	10,451.1	-368.1	19.0	362.2	368.6	177.05	11.64
10,595.0	64.70	175.10	10,465.5	-395.4	21.8	388.8	396.0	176.85	16.90
10,630.0	69.80	178.30	10,479.0	-427.6	23.6	420.5	428.3	176.84	16.83
10,709.0	74.90	182.00	10,503.0	-502.9	23.4	495.1	503.4	177.34	7.85
10,740.0	75.50	183.00	10,510.9	-532.8	22.1	524.9	533.3	177.63	3.67
10,772.0	76.70	182.40	10,518.6	-563.8	20.6	555.8	564.2	177.90	4.17
10,803.0	79.10	182.50	10,525.1	-594.1	19.3	586.0	594.4	178.14	7.75
10,835.0	82.50	181.70	10,530.2	-625.7	18.2	617.4	625.9	178.34	10.91
10,866.0	84.20	181.20	10,533.8	-656.5	17.4	648.0	656.7	178.48	5.71
10,898.0	85.00	180.70	10,536.8	-688.3	16.9	679.7	688.5	178.60	2.94
10,961.0	87.10	181.10	10,541.2	-751.1	15.9	742.1	751.3	178.79	3.39
11,056.0	86.90	180.50	10,546.1	-846.0	14.6	836.2	846.1	179.01	0.66
11,151.0	88.20	180.30	10,550.2	-940.9	13.9	930.4	941.0	179.15	1.38
11,246.0	86.80	181.00	10,554.3	-1,035.8	12.8	1,024.5	1,035.9	179.29	1.65
11,341.0	89.60	180.30	10,557.3	-1,130.8	11.7	1,118.7	1,130.8	179.41	3.04
11,435.0	88.40	179.00	10,559.0	-1,224.7	12.3	1,211.8	1,224.8	179.42	1.88
11,531.0	91.00	179.60	10,559.5	-1,320.7	13.5	1,306.7	1,320.8	179.41	2.78
11,625.0	88.80	177.20	10,559.6	-1,414.7	16.1	1,399.4	1,414.8	179.35	3.46
11,720.0	89.70	178.10	10,560.9	-1,509.6	20.0	1,493.0	1,509.7	179.24	1.34
11,815.0	93.70	180.60	10,558.1	-1,604.5	21.1	1,586.9	1,604.6	179.25	4.96
11,910.0	90.40	179.60	10,554.7	-1,699.4	20.9	1,680.9	1,699.6	179.29	3.63
12,005.0	88.70	178.00	10,555.4	-1,794.4	22.9	1,774.8	1,794.5	179.27	2.46
12,099.0	90.50	177.90	10,556.1	-1,888.3	26.3	1,867.4	1,888.5	179.20	1.92
12,194.0	90.10	177.60	10,555.6	-1,983.3	30.0	1,960.9	1,983.5	179.13	0.53
12,289.0	89.70	180.20	10,555.7	-2,078.2	31.8	2,054.8	2,078.5	179.12	2.77

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico

Site:

Section 33-23S-28E Foreigner 33/4 W2JO Fee C

Well:

Foreigner 33/4 W2JO Fee Com #1H

Wellbore:

Original Hole

Design:

Original Hole

Local Co-ordinate Reference:

Well Foreigner 33/4 W2JO Fee Com #1H

TVD Reference:

GL 3081+27 @ 3108.0usft (Patterson #231)

MD Reference:

GL 3081+27 @ 3108.0usft (Patterson #231)

North Reference:

Grid

Survey Calculation Method:

Minimum Curvature

Database:

Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLog (°/100usft)
12,384.0	89.90	179.70	10,556.1	-2,173.2	31.9	2,148.9	2,173.5	179.16	0.57
12,479.0	89.80	179.70	10,556.3	-2,288.2	32.4	2,242.9	2,288.5	179.18	0.11
12,574.0	91.20	179.90	10,555.5	-2,363.2	32.7	2,337.0	2,363.4	179.21	1.49
12,669.0	89.40	178.10	10,555.0	-2,458.2	34.4	2,430.9	2,458.4	179.20	2.68
12,764.0	90.90	181.00	10,554.7	-2,553.2	35.1	2,524.9	2,553.4	179.21	3.44
12,858.0	91.30	180.40	10,552.9	-2,647.2	34.0	2,618.2	2,647.4	179.26	0.77
12,953.0	92.30	182.40	10,549.9	-2,742.1	31.7	2,712.5	2,742.3	179.34	2.35
13,048.0	88.70	181.60	10,549.1	-2,837.0	28.4	2,807.0	2,837.1	179.43	3.88
13,142.0	90.40	182.10	10,549.8	-2,930.9	25.3	2,900.5	2,931.1	179.50	1.89
13,238.0	89.50	181.20	10,549.9	-3,026.9	22.6	2,986.0	3,027.0	179.57	1.33
13,334.0	91.50	182.30	10,549.1	-3,122.8	19.6	3,091.4	3,122.9	179.64	2.38
13,429.0	87.90	181.50	10,549.6	-3,217.8	16.5	3,185.9	3,217.8	179.71	3.88
13,523.0	87.50	181.50	10,553.4	-3,311.7	14.0	3,279.3	3,311.7	179.76	0.43
13,618.0	88.60	182.50	10,556.6	-3,406.6	10.7	3,373.7	3,406.6	179.82	1.56
13,714.0	89.50	183.90	10,558.2	-3,502.4	5.3	3,469.4	3,502.4	179.91	1.73
13,808.0	90.10	182.40	10,558.5	-3,596.2	0.2	3,563.1	3,596.2	180.00	1.72
13,904.0	90.80	179.10	10,557.8	-3,692.2	-1.1	3,658.3	3,692.2	180.02	3.51
13,999.0	89.00	176.60	10,557.9	-3,787.1	2.5	3,751.9	3,787.1	179.96	3.24
14,094.0	91.40	181.70	10,557.6	-3,882.1	3.9	3,845.8	3,882.1	179.94	5.93
14,189.0	90.30	179.70	10,556.2	-3,977.1	2.7	3,940.0	3,977.1	179.96	2.40
14,283.0	91.10	182.40	10,555.0	-4,071.0	1.0	4,033.4	4,071.0	179.99	3.00
14,378.0	89.50	179.00	10,554.5	-4,166.0	-0.1	4,127.6	4,166.0	180.00	3.96
14,473.0	90.10	177.00	10,554.9	-4,260.9	3.2	4,221.2	4,260.9	179.96	2.20
14,568.0	91.20	180.30	10,553.8	-4,355.9	5.4	4,315.0	4,355.9	179.93	3.66
14,662.0	88.50	175.60	10,554.0	-4,449.8	8.8	4,407.6	4,449.8	179.89	5.77
14,757.0	90.20	180.70	10,555.1	-4,544.7	11.8	4,501.2	4,544.7	179.85	5.66
14,852.0	89.80	179.50	10,555.1	-4,639.7	11.7	4,595.4	4,639.7	179.86	1.33

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Foreigner 33/4 W2JO Fee Com #1H
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)
14,947.0	88.30	176.40	10,556.7	-4,734.6	15.1	4,688.9	4,734.6	179.82	3.62
15,042.0	88.80	176.30	10,559.1	-4,829.4	21.1	4,782.0	4,829.4	179.75	0.54
15,137.0	89.70	178.10	10,560.3	-4,924.3	25.8	4,875.4	4,924.3	179.70	2.12
15,234.0	90.50	181.30	10,560.2	-5,021.3	26.3	4,971.4	5,021.3	179.70	3.40
15,358.0	89.50	182.80	10,560.2	-5,145.2	21.8	5,094.8	5,145.2	179.76	1.45
15,453.0	91.30	184.20	10,559.5	-5,240.0	16.0	5,189.5	5,240.0	179.82	2.40
15,547.0	89.70	184.40	10,558.7	-5,333.7	9.0	5,283.3	5,333.7	179.90	1.72
15,642.0	93.20	185.10	10,556.3	-5,428.3	1.1	5,378.2	5,428.3	179.99	3.76
15,737.0	89.10	182.20	10,554.4	-5,523.1	-4.9	5,472.9	5,523.1	180.05	5.29
15,832.0	88.30	181.90	10,556.5	-5,618.0	-8.3	5,567.4	5,618.0	180.08	0.90
15,927.0	91.30	181.60	10,556.9	-5,713.0	-11.2	5,661.8	5,713.0	180.11	3.17
16,022.0	89.80	180.70	10,556.0	-5,807.9	-13.1	5,756.2	5,807.9	180.13	1.84
16,117.0	89.80	180.50	10,556.3	-5,902.9	-14.1	5,850.4	5,902.9	180.14	0.21
16,211.0	88.30	180.10	10,557.8	-5,996.9	-14.6	5,943.6	5,996.9	180.14	1.65
16,306.0	91.30	181.60	10,558.2	-6,091.9	-16.0	6,037.9	6,091.9	180.15	3.53
16,401.0	90.10	176.90	10,557.0	-6,186.8	-14.8	6,131.8	6,186.9	180.14	5.11
16,495.0	91.00	175.90	10,556.1	-6,280.6	-8.9	6,224.0	6,280.7	180.08	1.43
16,590.0	90.70	175.10	10,554.7	-6,375.3	-1.4	6,316.8	6,375.3	180.01	0.90
16,654.0	91.70	176.60	10,553.4	-6,439.2	3.2	6,379.4	6,439.2	179.97	2.82
16,779.0	91.80	179.40	10,549.5	-6,564.0	7.6	6,502.5	6,564.0	179.93	2.24
16,874.0	91.00	177.20	10,547.2	-6,658.9	10.4	6,586.2	6,658.9	179.91	2.46
16,969.0	90.50	177.60	10,546.0	-6,753.8	14.7	6,689.6	6,753.8	179.88	0.67
17,063.0	89.20	177.90	10,546.2	-6,847.8	18.4	6,782.2	6,847.8	179.85	1.42
17,158.0	89.30	176.10	10,547.5	-6,942.6	23.3	6,875.5	6,942.6	179.81	1.90
17158' MD Survey Depth									

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Sidetrack
Design: Sidetrack

Local Co-ordinate Reference: Well Foreigner 33/4 W2JO Fee Com #1H
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project	Eddy County, New Mexico	System Datum:	Mean Sea Level
Map System:	US State Plane 1927 (Exact solution)		
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Section 33-23S-28E Foreigner 33/4 W2JO Fee Com #1H		
Site Position:		Northing:	458,701.10 usft
From:	Map	Easting:	574,989.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 39.072 N
		Longitude:	104° 5' 26.664 W
		Grid Convergence:	0.13 °

Well	Foreigner 33/4 W2JO Fee Com #1H		
Well Position	+N/-S	Northing:	458,701.10 usft
	+E/-W	Easting:	574,989.10 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 15' 39.072 N
		Longitude:	104° 5' 26.664 W
		Ground Level:	3,081.0 usft

Wellbore	Sidetrack		
Magnetics	Model Name	Sample Date	Field Strength (nT)
	IGRF2015	4/26/2016	48,024
		Declination (°)	Dip Angle (°)
		7.32	60.03

Design	Sidetrack		
Audit Notes:	1.0	Phase:	Tie On Depth:
Version:		ACTUAL	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	Direction (°)
	0.0	0.0	187.78
		+E/-W (usft)	
		0.0	

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Sidetrack
Design: Sidetrack

Local Co-ordinate Reference: Well Foreigner 33/4 W2JO Fee Com #1H
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey Program		Date	6/20/2016	
From (usft)	To (usft)	Survey (Wellbore)		
100.0	9,670.0	Stryker Survey #1 (Original Hole)		
9,837.0	17,158.0	MWD Survey (Original Hole)		
10,564.0	17,575.0	ST Survey		
		Tool Name	Description	
		SRG-GYRO-MS	surface readout gyro multishot	
		MWD	MWD v3:standard declination	
		MWD	MWD v3:standard declination	

Tool Name
 SRG-GYRO-MS
 MWD
 MWD

Description
 surface readout gyro multishot
 MWD v3:standard declination
 MWD v3:standard declination

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)
10,564.0	59.80	173.00	10,451.1	-368.1	19.0	362.1	368.6	177.05	0.00
10,705.0	78.60	178.00	10,501.0	-498.9	28.9	490.4	499.7	176.68	13.73
10,768.0	80.50	177.50	10,512.4	-560.8	31.4	551.4	561.7	176.80	3.12
10,799.0	80.60	173.20	10,517.5	-591.3	33.8	581.2	592.2	176.72	13.69
10,831.0	82.40	170.10	10,522.2	-622.6	38.4	611.6	623.8	176.47	11.11
10,863.0	85.50	168.60	10,525.6	-653.8	44.3	641.8	655.3	176.12	10.75
10,894.0	87.80	165.50	10,527.4	-684.0	51.3	670.8	685.9	175.71	12.44
10,957.0	90.50	168.60	10,528.3	-745.4	65.4	729.7	748.2	174.99	6.52
11,052.0	91.40	170.00	10,526.8	-838.7	83.0	819.7	842.8	174.35	1.75
11,115.0	90.30	171.50	10,525.8	-900.9	93.1	880.0	905.7	174.10	2.95
11,146.0	88.60	172.60	10,526.1	-931.6	97.4	909.8	936.7	174.03	6.53
11,178.0	89.00	173.00	10,526.8	-963.3	101.4	940.7	968.6	173.99	1.77
11,209.0	89.50	173.00	10,527.2	-994.1	105.2	970.7	999.6	173.96	1.61
11,241.0	88.60	173.90	10,527.7	-1,025.9	108.9	1,001.7	1,031.6	173.94	3.98
11,273.0	85.20	175.20	10,529.5	-1,057.7	111.9	1,032.8	1,063.6	173.96	11.37
11,305.0	85.30	176.10	10,532.1	-1,089.5	114.3	1,063.9	1,095.5	174.01	2.82
11,336.0	85.40	176.20	10,534.6	-1,120.3	116.4	1,094.2	1,126.3	174.07	0.46
11,368.0	85.40	176.60	10,537.2	-1,152.1	118.4	1,125.5	1,158.2	174.13	1.25
11,400.0	85.60	176.50	10,539.7	-1,184.0	120.3	1,156.8	1,190.1	174.20	0.70
11,432.0	86.90	177.00	10,541.8	-1,215.9	122.1	1,188.1	1,222.0	174.26	4.35

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Sidetrack
Design: Sidetrack

Local Co-ordinate Reference: Well Foreigner 33/4 W2JO Fee Com #1H
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	Closure Distance (usft)	Azimuth (°)	DLeg (°/100usft)
11,528.0	86.30	177.10	10,547.5	-1,311.6	127.0	1,282.3	1,317.7	174.47	0.63
11,623.0	88.10	177.50	10,552.1	-1,406.3	131.5	1,375.6	1,412.5	174.66	1.94
11,718.0	88.40	179.40	10,555.0	-1,501.3	134.1	1,469.3	1,507.2	174.90	2.02
11,813.0	92.30	180.60	10,554.5	-1,596.2	134.1	1,563.4	1,601.9	175.20	4.30
11,908.0	92.10	180.40	10,550.8	-1,691.2	133.3	1,657.5	1,696.4	175.49	0.30
12,004.0	90.40	180.00	10,548.7	-1,787.1	132.9	1,752.7	1,792.1	175.75	1.82
12,100.0	89.10	178.70	10,549.1	-1,883.1	134.0	1,847.6	1,887.9	175.93	1.92
12,195.0	92.30	178.50	10,548.0	-1,978.1	136.3	1,941.4	1,982.8	176.06	3.37
12,290.0	93.00	179.30	10,543.6	-2,073.0	138.2	2,035.1	2,077.5	176.19	1.12
12,322.0	92.40	179.40	10,542.1	-2,104.9	138.5	2,066.8	2,109.5	176.24	1.90
12,415.0	90.90	180.40	10,539.3	-2,200.9	138.7	2,161.8	2,205.2	176.39	1.88
12,514.0	88.70	179.50	10,539.6	-2,296.9	138.8	2,256.9	2,301.1	176.54	2.48
12,609.0	87.20	178.90	10,543.0	-2,391.8	140.1	2,350.8	2,395.9	176.65	1.70
12,705.0	90.20	179.70	10,545.2	-2,487.7	141.3	2,445.7	2,491.8	176.75	3.23
12,800.0	90.50	181.60	10,544.6	-2,582.7	140.2	2,539.9	2,586.5	176.89	2.02
12,895.0	90.00	180.60	10,544.2	-2,678.7	138.3	2,635.3	2,682.3	177.04	1.16
12,992.0	90.80	181.80	10,543.5	-2,774.7	136.3	2,730.7	2,778.0	177.19	1.50
13,088.0	91.30	181.00	10,541.8	-2,870.6	134.0	2,826.0	2,873.8	177.33	0.98
13,183.0	89.60	179.00	10,541.0	-2,965.6	134.0	2,920.2	2,968.7	177.41	2.76
13,279.0	89.00	178.80	10,542.2	-3,061.6	135.8	3,015.0	3,064.6	177.46	0.66
13,374.0	90.50	180.90	10,542.6	-3,156.6	136.1	3,109.1	3,159.5	177.53	2.72
13,469.0	90.90	182.30	10,541.5	-3,251.5	133.4	3,203.5	3,254.3	177.65	1.53
13,565.0	91.20	180.00	10,539.7	-3,347.5	131.5	3,298.8	3,350.1	177.75	2.42
13,661.0	90.20	179.50	10,538.5	-3,443.5	131.9	3,393.9	3,446.0	177.81	1.16
13,757.0	89.70	177.30	10,538.6	-3,539.5	134.6	3,488.6	3,542.0	177.82	2.35
13,852.0	89.60	178.40	10,539.2	-3,634.4	138.2	3,582.2	3,637.0	177.82	1.16
13,948.0	89.00	175.40	10,540.4	-3,730.2	143.4	3,676.4	3,733.0	177.80	3.19

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company:

Mewbourne Oil Company

Project:

Eddy County, New Mexico

Site:

Section 33-23S-28E Foreigner 33/4 W2JO Fee C

Well:

Foreigner 33/4 W2JO Fee Com #1H

Wellbore:

Sidetrack

Design:

Sidetrack

Local Co-ordinate Reference:

Well Foreigner 33/4 W2JO Fee Com #1H

TVD Reference:

GL 3081+27 @ 3108.0usft (Patterson #231)

MD Reference:

GL 3081+27 @ 3108.0usft (Patterson #231)

North Reference:

Grid

Survey Calculation Method:

Minimum Curvature

Database:

Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)
14,044.0	89.60	176.00	10,541.5	-3,825.9	150.6	3,770.3	3,828.9	177.75	0.88
14,140.0	90.20	176.30	10,541.7	-3,921.7	157.0	3,864.3	3,924.9	177.71	0.70
14,235.0	89.30	175.20	10,542.1	-4,016.5	164.0	3,957.2	4,019.8	177.66	1.50
14,331.0	90.50	177.90	10,542.3	-4,112.3	169.8	4,051.4	4,115.8	177.64	3.08
14,427.0	92.10	179.10	10,540.1	-4,208.2	172.3	4,146.1	4,211.7	177.66	2.08
14,522.0	90.20	178.00	10,538.2	-4,303.2	174.7	4,239.8	4,306.7	177.67	2.31
14,618.0	89.30	178.70	10,538.6	-4,399.1	177.5	4,334.5	4,402.7	177.69	1.19
14,714.0	89.40	179.20	10,539.7	-4,495.1	179.3	4,429.4	4,498.7	177.72	0.53
14,809.0	91.60	179.50	10,538.9	-4,590.1	180.3	4,523.4	4,593.6	177.75	2.34
14,905.0	92.10	179.50	10,535.8	-4,686.0	181.2	4,618.3	4,689.5	177.79	0.52
15,000.0	87.30	177.30	10,536.3	-4,781.0	183.8	4,712.0	4,784.5	177.80	5.56
15,096.0	86.10	177.80	10,541.8	-4,876.7	187.9	4,806.3	4,880.3	177.79	1.35
15,159.0	90.00	180.20	10,544.0	-4,939.6	189.0	4,868.5	4,943.3	177.81	7.27
15,191.0	91.50	180.90	10,543.5	-4,971.6	188.7	4,900.3	4,975.2	177.83	5.17
15,287.0	91.60	179.50	10,540.9	-5,067.6	188.4	4,995.4	5,071.1	177.87	1.46
15,382.0	93.50	180.30	10,536.7	-5,162.5	188.5	5,089.4	5,165.9	177.91	2.17
15,478.0	90.10	180.00	10,533.7	-5,258.4	188.3	5,184.5	5,261.8	177.95	3.56
15,573.0	91.60	180.30	10,532.3	-5,353.4	188.0	5,278.6	5,356.7	177.99	1.61
15,669.0	92.90	180.90	10,528.5	-5,449.3	187.0	5,373.8	5,452.6	178.03	1.49
15,765.0	91.50	178.30	10,524.8	-5,545.3	187.7	5,468.7	5,548.4	178.06	3.07
15,860.0	89.90	177.60	10,523.7	-5,640.2	191.1	5,562.3	5,643.4	178.06	1.84
15,956.0	88.70	178.50	10,524.9	-5,736.1	194.4	5,656.9	5,739.4	178.06	1.56
16,051.0	88.80	179.80	10,526.9	-5,831.1	195.8	5,750.8	5,834.4	178.08	1.37
16,147.0	92.60	182.00	10,525.8	-5,927.0	194.3	5,846.1	5,930.2	178.12	4.57
16,243.0	88.90	180.00	10,524.5	-6,023.0	192.6	5,941.4	6,026.1	178.17	4.38
16,388.0	91.60	180.00	10,523.9	-6,168.0	192.6	6,085.1	6,171.0	178.21	1.86
16,434.0	89.40	178.80	10,523.5	-6,214.0	193.1	6,130.6	6,217.0	178.22	5.45

Stryker Directional

Foreigner 33 4 W2JO Fee Com #1H

Company: Newbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 33-23S-28E Foreigner 33/4 W2JO Fee C
Well: Foreigner 33/4 W2JO Fee Com #1H
Wellbore: Sidetrack
Design: Sidetrack

Local Co-ordinate Reference: Well Foreigner 33/4 W2JO Fee Com #1H
TVD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
MD Reference: GL 3081+27 @ 3108.0usft (Patterson #231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (°)	D Leg (°/100usft)
16,529.0	88.00	178.60	10,525.6	-6,308.9	195.2	6,224.3	6,311.9	178.23	1.49
16,625.0	89.50	180.10	10,527.7	-6,404.9	196.3	6,319.3	6,407.9	178.24	2.21
16,721.0	89.50	180.90	10,528.5	-6,500.9	195.5	6,414.5	6,503.8	178.28	0.83
16,816.0	91.00	185.80	10,528.1	-6,595.7	189.9	6,509.2	6,598.4	178.35	5.39
16,912.0	88.90	183.20	10,528.2	-6,691.4	182.4	6,605.0	6,693.9	178.44	3.48
17,008.0	90.80	183.90	10,528.5	-6,787.2	176.5	6,700.7	6,789.5	178.51	2.11
17,103.0	91.80	184.40	10,526.3	-6,881.9	169.6	6,795.5	6,884.0	178.59	1.18
17,198.0	90.00	185.70	10,524.8	-6,976.5	161.2	6,890.4	6,978.4	178.68	2.34
17,294.0	90.90	188.70	10,524.1	-7,071.8	149.2	6,986.4	7,073.3	178.79	3.26
17,390.0	89.90	186.80	10,523.4	-7,166.9	136.3	7,082.4	7,168.2	178.91	2.24
17,486.0	89.90	186.60	10,523.6	-7,262.2	125.1	7,178.4	7,263.3	179.01	0.21
17,528.0	90.30	186.50	10,523.5	-7,303.9	120.3	7,220.3	7,304.9	179.05	0.98
17,575.0	90.30	186.50	10,523.2	-7,350.6	114.9	7,267.3	7,351.5	179.10	0.00

17575' MD Projected to Bit

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/S (usft)	+E/W (usft)	Comment
17,575.0	10,523.2	-7,350.6	114.9	17575' MD Projected to Bit