

30-015-42028

Mewbourne Oil Company .

Eddy County, New Mexico

Section 2-19S-29E Zircon 2 B 1 EH State #2H

Zircon 2 B 1 EH State #2H

Original Hole

Design: Original Hole

Standard Survey Report

02 July, 2014

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 22 2014

RECEIVED



COMPANY: Mewbourne Oil Company
 WELL: Zircon 2 B 1 EH State #2H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson#41

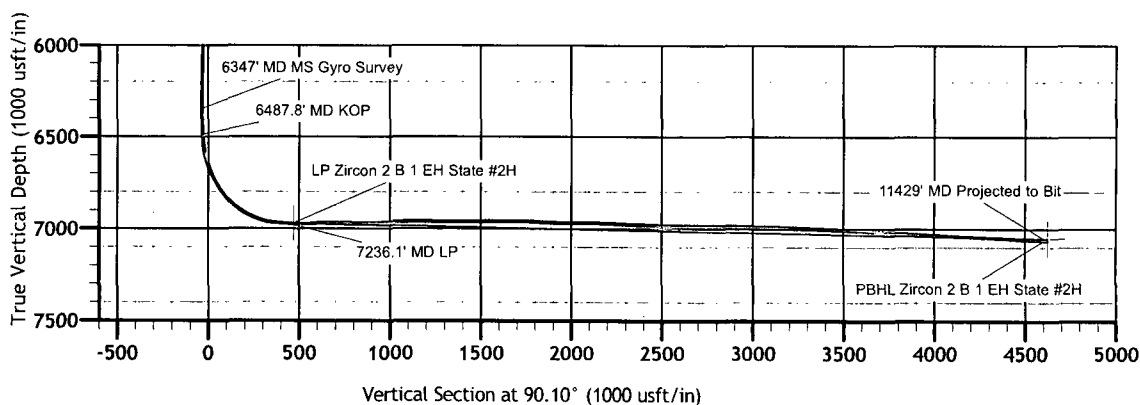
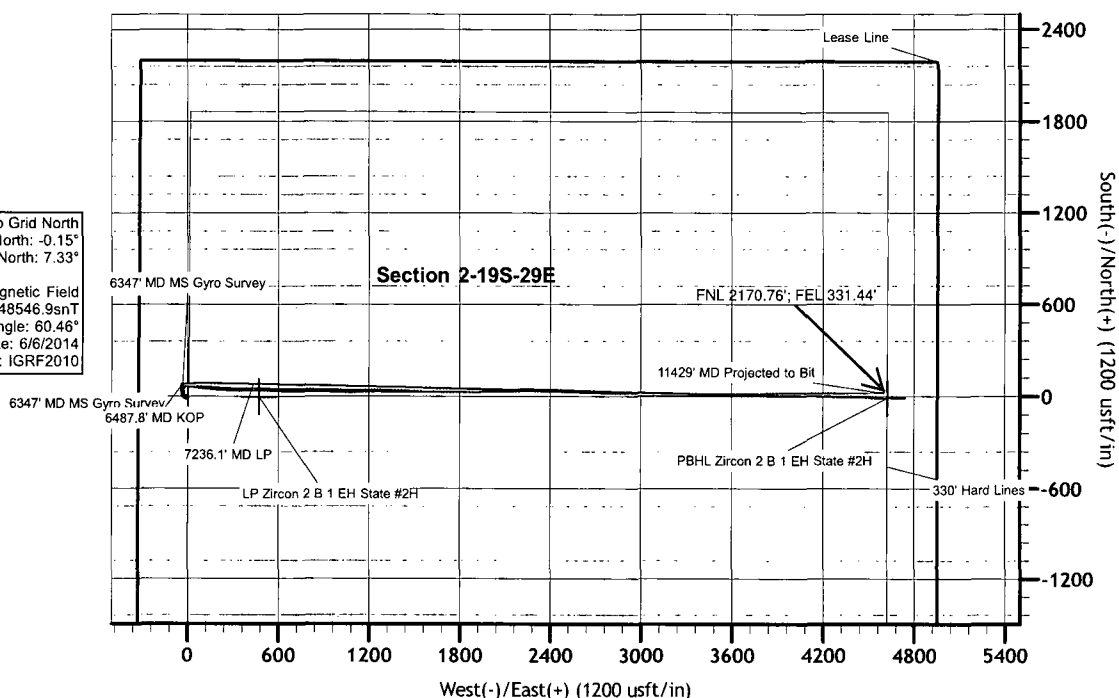
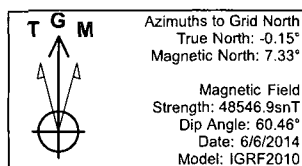


GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.33°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001						
GL 3401 + 20 @ 3421.0usft (Patterson#41)						
GROUND ELEVATION: 3401.0						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	615129.54	586400.49	32° 41' 26.792 N	104° 3' 8.971 W	

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	6347.0	1.89	333.38	6345.7	76.2	-31.7	0.00	0.00	-31.8	
2	6487.8	1.89	333.38	6486.4	80.3	-33.7	0.00	0.00	-33.9	
3	7236.1	88.91	91.26	6971.0	83.9	434.8	12.00	117.90	434.6	
4	11428.2	88.91	91.26	7051.0	-8.5	4625.1	0.00	0.00	4625.1	PBHL Zircon 2 B 1 EH State #2H



Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Zircon 2 B 1 EH State #2H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3401 + 20 @ 3421.0usft (Patterson#41)
Site:	Section 2-19S-29E Zircon 2 B 1 EH State #2H	MD Reference:	GL 3401 + 20 @ 3421.0usft (Patterson#41)
Well:	Zircon 2 B 1 EH State #2H	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 2-19S-29E Zircon 2 B 1 EH State #2H		
Site Position:		Northing:	615,129.54 usft
From:	Lat/Long	Easting:	586,400.49 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 41' 26.792 N
		Longitude:	104° 3' 8.971 W
		Grid Convergence:	0.15 °

Well	Zircon 2 B 1 EH State #2H		
Well Position	+N/-S	0.0 usft	Northing: 615,129.54 usft
	+E/-W	0.0 usft	Easting: 586,400.49 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 41' 26.792 N
		Longitude:	104° 3' 8.971 W
		Ground Level:	3,401.0 usft

Wellbore	Original Hole		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/6/2014	7.48	60.46	48,547

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	91.26

Survey Program		Date	7/2/2014	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	6,347.0	MS Gyro Survey #1 (Original Hole)	SRG-GYRO-MS	surface readout gyro multishot
6,392.0	11,429.0	MWD Survey #2 (Original Hole)	MWD	MWD v3:standard declination

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	0.27	354.68	100.0	0.2	0.0	0.0	0.27	0.27	0.00
200.0	0.51	257.78	200.0	0.4	-0.5	-0.5	0.61	0.24	-96.90
300.0	0.59	248.57	300.0	0.1	-1.4	-1.4	0.12	0.08	-9.21
400.0	0.61	249.13	400.0	-0.3	-2.4	-2.4	0.02	0.02	0.56
500.0	0.67	242.18	500.0	-0.7	-3.4	-3.4	0.10	0.06	-6.95
600.0	0.63	241.97	600.0	-1.3	-4.4	-4.4	0.04	-0.04	-0.21
700.0	0.45	229.44	700.0	-1.8	-5.2	-5.1	0.21	-0.18	-12.53
800.0	0.29	207.97	800.0	-2.3	-5.6	-5.5	0.21	-0.16	-21.47
900.0	0.47	130.20	900.0	-2.8	-5.4	-5.3	0.50	0.18	-77.77

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Zircon 2 B 1 EH State #2H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3401 + 20 @ 3421.0usft (Patterson#41)
Site:	Section 2-19S-29E Zircon 2 B 1 EH State #2H	MD Reference:	GL 3401 + 20 @ 3421.0usft (Patterson#41)
Well:	Zircon 2 B 1 EH State #2H	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)
1,000.0	0.64	121.72	1,000.0	-3.3	-4.6	-4.5	0.19	0.17	-8.48
1,100.0	0.54	112.80	1,100.0	-3.8	-3.7	-3.6	0.14	-0.10	-8.92
1,200.0	0.52	104.39	1,200.0	-4.1	-2.8	-2.7	0.08	-0.02	-8.41
1,300.0	0.30	117.85	1,300.0	-4.3	-2.1	-2.1	0.24	-0.22	13.46
1,400.0	0.30	184.55	1,399.9	-4.7	-1.9	-1.8	0.33	0.00	66.70
1,500.0	0.55	212.50	1,499.9	-5.4	-2.2	-2.1	0.32	0.25	27.95
1,600.0	0.68	226.18	1,599.9	-6.2	-2.9	-2.8	0.20	0.13	13.68
1,700.0	0.92	257.99	1,699.9	-6.8	-4.1	-4.0	0.50	0.24	31.81
1,800.0	0.97	263.51	1,799.9	-7.0	-5.7	-5.6	0.10	0.05	5.52
1,900.0	0.99	271.04	1,899.9	-7.1	-7.4	-7.3	0.13	0.02	7.53
2,000.0	0.93	281.44	1,999.9	-6.9	-9.1	-9.0	0.18	-0.06	10.40
2,100.0	1.00	288.07	2,099.9	-6.5	-10.7	-10.6	0.13	0.07	6.63
2,200.0	0.97	293.09	2,199.9	-5.9	-12.3	-12.2	0.09	-0.03	5.02
2,300.0	0.95	303.30	2,299.8	-5.1	-13.8	-13.7	0.17	-0.02	10.21
2,400.0	1.04	311.55	2,399.8	-4.1	-15.2	-15.1	0.17	0.09	8.25
2,500.0	1.13	317.87	2,499.8	-2.7	-16.5	-16.5	0.15	0.09	6.32
2,600.0	1.10	320.51	2,599.8	-1.2	-17.8	-17.8	0.06	-0.03	2.64
2,700.0	0.90	322.10	2,699.8	0.1	-18.9	-18.9	0.20	-0.20	1.59
2,800.0	0.84	313.56	2,799.8	1.2	-19.9	-19.9	0.14	-0.06	-8.54
2,900.0	0.82	315.21	2,899.8	2.2	-20.9	-21.0	0.03	-0.02	1.65
3,000.0	0.79	314.63	2,999.7	3.2	-21.9	-22.0	0.03	-0.03	-0.58
3,100.0	0.71	314.15	3,099.7	4.2	-22.9	-23.0	0.08	-0.08	-0.48
3,200.0	0.77	313.96	3,199.7	5.1	-23.8	-23.9	0.06	0.06	-0.19
3,300.0	0.81	320.44	3,299.7	6.1	-24.7	-24.9	0.10	0.04	6.48
3,400.0	0.78	320.40	3,399.7	7.1	-25.6	-25.8	0.03	-0.03	-0.04
3,500.0	0.99	326.19	3,499.7	8.4	-26.5	-26.7	0.23	0.21	5.79
3,600.0	1.29	324.47	3,599.7	10.0	-27.7	-27.9	0.30	0.30	-1.72
3,700.0	1.50	319.76	3,699.6	11.9	-29.2	-29.4	0.24	0.21	-4.71
3,800.0	1.49	327.34	3,799.6	14.0	-30.7	-31.0	0.20	-0.01	7.58
3,900.0	1.59	349.06	3,899.6	16.5	-31.7	-32.0	0.59	0.10	21.72
4,000.0	2.00	8.90	3,999.5	19.6	-31.7	-32.1	0.74	0.41	19.84
4,100.0	2.01	5.98	4,099.5	23.0	-31.2	-31.7	0.10	0.01	-2.92
4,200.0	1.70	11.74	4,199.4	26.2	-30.7	-31.3	0.36	-0.31	5.76
4,300.0	1.44	9.00	4,299.4	28.9	-30.2	-30.9	0.27	-0.26	-2.74
4,400.0	1.42	6.27	4,399.3	31.4	-29.9	-30.6	0.07	-0.02	-2.73
4,500.0	1.17	356.36	4,499.3	33.6	-29.8	-30.6	0.33	-0.25	-9.91
4,600.0	1.08	332.24	4,599.3	35.5	-30.3	-31.1	0.48	-0.09	-24.12
4,700.0	1.12	335.78	4,699.3	37.2	-31.2	-32.0	0.08	0.04	3.54
4,800.0	1.06	337.07	4,799.3	39.0	-31.9	-32.8	0.06	-0.06	1.29
4,900.0	1.07	343.27	4,899.3	40.7	-32.6	-33.5	0.12	0.01	6.20
5,000.0	1.06	336.40	4,999.2	42.5	-33.2	-34.1	0.13	-0.01	-6.87
5,100.0	0.97	0.47	5,099.2	44.1	-33.6	-34.5	0.43	-0.09	24.07
5,200.0	1.01	1.47	5,199.2	45.9	-33.5	-34.5	0.04	0.04	1.00

Stryker Directional Survey Report

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Site:	Section 2-19S-29E Zircon 2 B 1 EH State #2H	MD Reference:	GL 3401 + 20 @ 3421.0usft (Patterson#41)
Well:	Zircon 2 B 1 EH State #2H	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)
5,300.0	1.17	8.42	5,299.2	47.8	-33.4	-34.4	0.21	0.16	6.95
5,400.0	1.23	17.38	5,399.2	49.8	-32.9	-34.0	0.20	0.06	8.96
5,500.0	1.33	22.91	5,499.1	51.9	-32.1	-33.3	0.16	0.10	5.53
5,600.0	1.55	25.08	5,599.1	54.2	-31.1	-32.3	0.23	0.22	2.17
5,700.0	1.57	27.19	5,699.1	56.6	-29.9	-31.1	0.06	0.02	2.11
5,800.0	1.60	32.60	5,799.0	59.0	-28.5	-29.8	0.15	0.03	5.41
5,900.0	1.71	38.50	5,899.0	61.4	-26.8	-28.2	0.20	0.11	5.90
6,000.0	2.08	341.48	5,998.9	64.3	-26.5	-27.9	1.84	0.37	-57.02
6,100.0	2.51	334.53	6,098.9	68.0	-28.0	-29.5	0.51	0.43	-6.95
6,200.0	1.97	337.28	6,198.8	71.5	-29.6	-31.2	0.55	-0.54	2.75
6,300.0	2.02	336.52	6,298.7	74.7	-31.0	-32.6	0.06	0.05	-0.76
6,347.0	1.89	333.38	6,345.7	76.2	-31.7	-33.3	0.36	-0.28	-6.68

6347' MD MS Gyro Survey

6,392.0	2.10	335.60	6,390.7	77.6	-32.3	-34.0	0.50	0.47	4.93
6,424.0	1.10	40.10	6,422.7	78.4	-32.4	-34.1	5.95	-3.13	201.56
6,455.0	2.20	88.80	6,453.6	78.6	-31.6	-33.3	5.45	3.55	157.10
6,487.0	4.00	100.10	6,485.6	78.4	-29.9	-31.6	5.91	5.63	35.31
6,518.0	6.30	104.80	6,516.5	77.8	-27.2	-28.9	7.54	7.42	15.16
6,550.0	9.30	102.10	6,548.2	76.8	-22.9	-24.6	9.44	9.38	-8.44
6,582.0	12.10	101.10	6,579.6	75.6	-17.1	-18.8	8.77	8.75	-3.13
6,613.0	14.60	99.90	6,609.8	74.3	-10.1	-11.7	8.11	8.06	-3.87
6,645.0	17.80	99.00	6,640.5	72.9	-1.3	-2.9	10.03	10.00	-2.81
6,676.0	20.70	97.90	6,669.8	71.4	8.8	7.3	9.43	9.35	-3.55
6,708.0	23.90	97.50	6,699.4	69.7	20.9	19.3	10.01	10.00	-1.25
6,739.0	27.20	96.80	6,727.3	68.1	34.1	32.6	10.69	10.65	-2.26
6,771.0	30.20	96.20	6,755.4	66.3	49.4	47.9	9.42	9.38	-1.88
6,803.0	33.10	96.40	6,782.6	64.5	66.1	64.7	9.07	9.06	0.63
6,834.0	36.60	96.90	6,808.1	62.4	83.7	82.3	11.33	11.29	1.61
6,866.0	40.30	97.40	6,833.1	60.0	103.4	102.1	11.60	11.56	1.56
6,897.0	44.70	97.40	6,856.0	57.3	124.2	122.9	14.19	14.19	0.00
6,929.0	50.10	96.80	6,877.6	54.4	147.6	146.3	16.93	16.88	-1.88
6,960.0	55.70	96.10	6,896.3	51.6	172.1	170.9	18.15	18.06	-2.26
6,992.0	60.80	94.10	6,913.2	49.2	199.2	198.1	16.80	15.94	-6.25
7,023.0	64.40	91.40	6,927.4	47.9	226.7	225.6	13.95	11.61	-8.71
7,055.0	67.30	90.30	6,940.5	47.4	255.9	254.8	9.59	9.06	-3.44
7,086.0	72.00	89.80	6,951.3	47.4	284.9	283.8	15.24	15.16	-1.61
7,118.0	77.90	89.80	6,959.6	47.5	315.8	314.7	18.44	18.44	0.00
7,132.0	81.10	89.80	6,962.1	47.6	329.6	328.5	22.86	22.86	0.00
7,227.0	87.40	90.30	6,971.7	47.5	424.1	422.9	6.65	6.63	0.53
7,259.0	86.70	90.30	6,973.3	47.3	456.0	454.9	2.19	-2.19	0.00
7,291.0	88.80	91.60	6,974.6	46.8	488.0	486.8	7.72	6.56	4.06
7,322.0	92.90	92.70	6,974.1	45.6	519.0	517.8	13.69	13.23	3.55
7,354.0	93.10	93.00	6,972.4	44.0	550.9	549.8	1.13	0.63	0.94

Stryker Directional Survey Report

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Well:	Zircon 2 B 1 EH State #2H	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)
7,417.0	91.50	90.80	6,969.9	42.0	613.8	612.7	4.32	-2.54	-3.49
7,480.0	90.20	90.20	6,969.0	41.4	676.8	675.7	2.27	-2.06	-0.95
7,544.0	88.70	89.30	6,969.6	41.7	740.8	739.7	2.73	-2.34	-1.41
7,607.0	89.60	91.00	6,970.5	41.5	803.8	802.6	3.05	1.43	2.70
7,670.0	89.90	91.70	6,970.8	40.0	866.7	865.6	1.21	0.48	1.11
7,702.0	89.80	92.00	6,970.9	39.0	898.7	897.6	0.99	-0.31	0.94
7,734.0	92.00	92.50	6,970.4	37.7	930.7	929.6	7.05	6.88	1.56
7,765.0	94.20	91.40	6,968.7	36.7	961.6	960.6	7.93	7.10	-3.55
7,797.0	93.70	91.20	6,966.5	36.0	993.5	992.5	1.68	-1.56	-0.63
7,829.0	93.60	91.10	6,964.5	35.3	1,025.5	1,024.4	0.44	-0.31	-0.31
7,860.0	93.50	91.00	6,962.5	34.8	1,056.4	1,055.4	0.46	-0.32	-0.32
7,892.0	93.00	88.80	6,960.7	34.8	1,088.3	1,087.3	7.04	-1.56	-6.88
7,924.0	93.10	88.00	6,959.0	35.7	1,120.3	1,119.2	2.52	0.31	-2.50
7,955.0	89.90	87.70	6,958.2	36.9	1,151.3	1,150.2	10.37	-10.32	-0.97
7,987.0	88.60	87.80	6,958.6	38.1	1,183.2	1,182.1	4.07	-4.06	0.31
8,050.0	87.60	89.40	6,960.7	39.7	1,246.2	1,245.0	2.99	-1.59	2.54
8,113.0	90.20	90.80	6,961.9	39.6	1,309.2	1,308.0	4.69	4.13	2.22
8,176.0	91.00	91.40	6,961.3	38.3	1,372.1	1,371.0	1.59	1.27	0.95
8,239.0	90.70	90.80	6,960.3	37.1	1,435.1	1,434.0	1.06	-0.48	-0.95
8,303.0	90.50	90.50	6,959.7	36.4	1,499.1	1,497.9	0.56	-0.31	-0.47
8,366.0	90.50	90.10	6,959.1	36.1	1,562.1	1,560.9	0.63	0.00	-0.63
8,461.0	90.30	89.90	6,958.4	36.1	1,657.1	1,655.9	0.30	-0.21	-0.21
8,555.0	88.50	90.00	6,959.4	36.2	1,751.1	1,749.9	1.92	-1.91	0.11
8,650.0	86.90	89.50	6,963.2	36.6	1,846.0	1,844.8	1.76	-1.68	-0.53
8,745.0	89.10	89.50	6,966.6	37.4	1,940.9	1,939.7	2.32	2.32	0.00
8,840.0	89.50	89.00	6,967.7	38.7	2,035.9	2,034.6	0.67	0.42	-0.53
8,935.0	89.60	88.80	6,968.5	40.5	2,130.9	2,129.5	0.24	0.11	-0.21
9,030.0	86.60	88.90	6,971.6	42.4	2,225.8	2,224.4	3.16	-3.16	0.11
9,124.0	87.40	91.00	6,976.5	42.5	2,319.7	2,318.2	2.39	0.85	2.23
9,219.0	89.10	91.70	6,979.4	40.2	2,414.6	2,413.1	1.94	1.79	0.74
9,314.0	88.70	91.20	6,981.3	37.8	2,509.6	2,508.1	0.67	-0.42	-0.53
9,409.0	90.30	92.40	6,982.1	34.8	2,604.5	2,603.1	2.11	1.68	1.26
9,503.0	89.10	92.40	6,982.6	30.9	2,698.4	2,697.1	1.28	-1.28	0.00
9,598.0	88.60	92.00	6,984.5	27.3	2,793.3	2,792.1	0.67	-0.53	-0.42
9,693.0	89.00	91.70	6,986.5	24.2	2,888.3	2,887.0	0.53	0.42	-0.32
9,788.0	89.20	91.70	6,988.0	21.4	2,983.2	2,982.0	0.21	0.21	0.00
9,883.0	89.20	91.70	6,989.3	18.6	3,078.2	3,077.0	0.00	0.00	0.00
9,978.0	88.20	91.20	6,991.4	16.2	3,173.1	3,172.0	1.18	-1.05	-0.53
10,073.0	88.20	90.90	6,994.4	14.4	3,268.0	3,266.9	0.32	0.00	-0.32
10,167.0	86.90	90.60	6,998.5	13.2	3,361.9	3,360.8	1.42	-1.38	-0.32
10,262.0	88.30	90.50	7,002.4	12.3	3,456.9	3,455.8	1.48	1.47	-0.11
10,357.0	86.10	90.20	7,007.1	11.7	3,551.7	3,550.6	2.34	-2.32	-0.32
10,451.0	85.50	89.20	7,014.0	12.2	3,645.5	3,644.3	1.24	-0.64	-1.06
10,546.0	87.00	89.50	7,020.2	13.3	3,740.3	3,739.1	1.61	1.58	0.32

Stryker Directional Survey Report

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Zircon 2 B 1 EH State #2H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3401 + 20 @ 3421.0usft (Patterson#41)
Site:	Section 2-19S-29E Zircon 2 B 1 EH State #2H	MD Reference:	GL 3401 + 20 @ 3421.0usft (Patterson#41)
Well:	Zircon 2 B 1 EH State #2H	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)
10,640.0	87.40	88.80	7,024.8	14.6	3,834.1	3,832.9	0.86	0.43	-0.74
10,735.0	87.50	88.60	7,029.0	16.8	3,929.0	3,927.7	0.24	0.11	-0.21
10,830.0	87.40	90.50	7,033.2	17.5	4,023.9	4,022.6	2.00	-0.11	2.00
10,924.0	87.30	90.30	7,037.6	16.9	4,117.8	4,116.5	0.24	-0.11	-0.21
11,019.0	87.20	90.20	7,042.1	16.5	4,212.7	4,211.3	0.15	-0.11	-0.11
11,114.0	87.30	90.30	7,046.7	16.1	4,307.6	4,306.2	0.15	0.11	0.11
11,208.0	87.50	89.90	7,050.9	15.9	4,401.5	4,400.1	0.48	0.21	-0.43
11,303.0	87.30	89.20	7,055.2	16.6	4,496.4	4,494.9	0.77	-0.21	-0.74
11,379.0	87.30	88.70	7,058.8	18.0	4,572.3	4,570.8	0.66	0.00	-0.66
11,429.0	87.30	88.70	7,061.2	19.2	4,622.2	4,620.7	0.00	0.00	0.00
11429' MD Projected to Bit									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
6,347.0	6,345.7	76.2	-31.7	6347' MD MS Gyro Survey
11,429.0	7,061.2	19.2	4,622.2	11429' MD Projected to Bit

Operating Company Mewbourne Oil Co.
Well Name & Number Zircon 2B1EH ST 2H
Sales Ticket Number 0
Date 6/15/2014

Company Rep Ski Cherinko
Field 0
BOT Service Rep Anthony Thomas
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	830000	6.276	6.151	LTC / 8RD	0.03826	7,187.00	9,960	6,230
Top Liner	4.000	13.50	0	3.920	3.795	LTC / 8RD	0.01493	4,434.27	12,410	10,680
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-

TVD	7061.00	KOP	6347.00	Open Hole	6.125	Casing Vol. (bbl)	265.6
Carry Fluid Weight (ppg)	8.4	Propan Content (ppa)		Max Drill Out Size	0		

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ. (BBL)
Liner Top	1	10292414	JR Slv w 4.750" Alt Seal Bore ID	6940.81	4.00	5.750	3.913			

Zone Length	H4090400008	S-3 Casing Hanger Packer	6944.81	4.67	5.875	3.875				
	H299900281	Combo Collar (4-1/2 LT&C)	6949.48	0.58	5.000					
	H299710014	4-1/2" 13.5# LT&C Spacer Nipple	6950.06	7.51	4.500	3.920				
		7 Jnts 4-1/2" 13.5# LT&C csg	6957.57	299.58	4.500	3.920				
	H810090200	3.500" EXPress Sleeve (Zone 20)	7257.15	2.40	5.630		3.448	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	7259.55	128.02	4.500	3.920				
	H409360008	582 OH PACKER #19	7387.57	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	7391.46	86.39	4.500	3.920				
	H810090199	3.438" EXPress Sleeve (Zone 19)	7477.85	2.40	5.630		3.385	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	7480.25	87.37	4.500	3.920				
	H409360008	582 OH PACKER #18	7567.62	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	7571.51	126.76	4.500	3.920				
	H810090198	3.375" EXPress Sleeve (Zone 18)	7698.27	2.40	5.630		3.323	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	7700.67	129.05	4.500	3.920				
	H409360008	582 OH PACKER #17	7829.72	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	7833.61	85.08	4.500	3.920				
	H810090197	3.313" EXPress Sleeve (Zone 17)	7918.69	2.40	5.630		3.260	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	7921.09	87.29	4.500	3.920				
	H409360008	582 OH PACKER #16	8008.38	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	8012.27	84.25	4.500	3.920				
	H810090196	3.250" EXPress Sleeve (Zone 16)	8096.52	2.40	5.630		3.198	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	8098.92	130.56	4.500	3.920				
	H409360008	582 OH PACKER #15	8229.48	3.89	5.820	3.875		2154		

Operating Company Mewbourne Oil Co.
Well Name & Number Zircon 2B1EH ST 2H
Sales Ticket Number 0
Date 6/15/2014

Company Rep Ski Cherinko
Field 0
BOT Service Rep Anthony Thomas
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	830000	6.276	6.151	LTC / 8RD	0.03826	7,187.00	9,960	6,230
Top Liner	4.000	13.50	0	3.920	3.795	LTC / 8RD	0.01493	4,434.27	12,410	10,680
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-
TVD	7061.00		KOP	6347.00		Open Hole	6.125		Casing Vol. (bbl)	265.6
Carry Fluid Weight (ppg)	8.4		Propan Content (ppa)			Max Drill Out Size	0			

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ. (BBL)
		2 Jnts 4-1/2" 13.5# LT&C csg	8233.37	85.64	4.500	3.920				
	H810090195	3.188" EXPress Sleeve (Zone 15)	8319.01	2.40	5.630		3.135	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	8321.41	87.44	4.500	3.920				
	H409360008	582 OH PACKER #14	8408.85	3.89	5.820	3.875		2154		
		3 Jnts 4-1/2" 13.5# LT&C csg	8412.74	85.67	4.500	3.920				
	H810090194	3.125" EXPress Sleeve (Zone 14)	8498.41	2.40	5.630		3.073	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	8500.81	86.19	4.500	3.920				
	H409360008	582 OH PACKER #13	8587.00	3.89	5.820	3.875		2154		
		3 Jnts 4-1/2" 13.5# LT&C csg	8590.89	129.57	4.500	3.920				
	H810090193	3.063" EXPress Sleeve (Zone 13)	8720.46	2.40	5.630		3.010	2286	226	266
		3 Jnts 4-1/2" 13.5# LT&C csg	8722.86	129.43	4.500	3.920				
	H409360008	582 OH PACKER #12	8852.29	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	8856.18	86.59	4.500	3.920				
	H810090192	3.00" EXPress Sleeve (Zone 12)	8942.77	2.40	5.630		2.948	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	8945.17	86.37	4.500	3.920				
	H409360008	582 OH PACKER #11	9031.54	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	9035.43	85.08	4.500	3.920				
	H810090191	2.938" EXPress Sleeve (Zone 11)	9120.51	2.40	5.630		2.885	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	9122.91	86.65	4.500	3.920				
	H409360008	582 OH PACKER #10	9209.56	3.89	5.820	3.875		2154		
		3 Jnts 4-1/2" 13.5# LT&C csg	9213.45	127.66	4.500	3.920				
	H810090190	2.875" EXPress Sleeve (Zone 10)	9341.11	2.40	5.630		2.823	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	9343.51	86.03	4.500	3.920				
	H409360008	582 OH PACKER #9	9429.54	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	9433.43	128.22	4.500	3.920				
	H810090189	2.813" EXPress Sleeve (Zone 9)	9561.65	2.40	5.630		2.760	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	9564.05	129.86	4.500	3.920				

Operating Company Mewbourne Oil Co.
Well Name & Number Zircon 2B1EH ST 2H
Sales Ticket Number 0
Date 6/15/2014

Company Rep Ski Cherinko
Field 0
BOT Service Rep Anthony Thomas
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	830000	6.276	6.151	LTC / 8RD	0.03826	7,187.00	9,960	6,230		
Top Liner	4.000	13.50	0	3.920	3.795	LTC / 8RD	0.01493	4,434.27	12,410	10,680		
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-		
TVD		7061.00		KOP		6347.00		Open Hole		6.125	Casing Vol. (bbl)	265.6
Carry Fluid Weight (ppg)			8.4		Propan Content (ppa)					Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ. (BBL)
	H409360008	582 OH PACKER #8	9693.91	3.89	5.820	3.875		2154		
		4 Jnts 4-1/2" 13.5# LT&C csg	9697.80	172.50	4.500	3.920				
	H810090188	2.750" EXPress Sleeve (Zone 8)	9870.30	2.40	5.630		2.698	2286		
		4 Jnts 4-1/2" 13.5# LT&C csg	9872.70	171.25	4.500	3.920				
	H409360008	582 OH PACKER #7	10043.95	3.89	5.820	3.875		2154		
		4 Jnts 4-1/2" 13.5# LT&C csg	10047.84	169.50	4.500	3.920				
	H810090187	2.688" EXPress Sleeve (Zone 7)	10217.34	2.40	5.630		2.635	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	10219.74	83.35	4.500	3.920				
	H409360008	582 OH PACKER #6	10303.09	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10306.98	85.81	4.500	3.920				
	H810090186	2.625" EXPress Sleeve (Zone 6)	10392.79	2.40	5.630		2.573	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	10395.19	86.96	4.500	3.920				
	H409360008	582 OH PACKER #5	10482.15	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10486.04	86.25	4.500	3.920				
	H810090185	2.563" EXPress Sleeve (Zone 5)	10572.29	2.40	5.630		2.510	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	10574.69	126.07	4.500	3.920				
	H409360008	582 OH PACKER #4	10700.76	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10704.65	86.80	4.500	3.920				
	H810090184	2.500" EXPress Sleeve (Zone 4)	10791.45	2.40	5.630		2.448	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	10793.85	85.47	4.500	3.920				
	H409360008	582 OH PACKER #3	10879.32	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10883.21	86.50	4.500	3.920				
	H810090183	2.438" EXPress Sleeve (Zone 3)	10969.71	2.40	5.630		2.385	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	10972.11	85.41	4.500	3.920				
	H409360008	582 OH PACKER #2	11057.52	3.89	5.820	3.875		2154		
		3 Jnts 4-1/2" 13.5# LT&C csg	11061.41	84.90	4.500	3.920				
	H810090182	2.375" EXPress Sleeve (Zone 2)	11146.31	2.40	5.630		2.323	2286		

Company Rep	Ski Cherinko
Field	0
BOT Service Rep	Anthony Thomas
District Location	Odessa, TX

[illegible]



July 2, 2014

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
Zircon 2 B1 EH State #002H
Turkey Track; Bone Spring
Eddy County, New Mexico
API# 30-015-42028

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>
Craig Estes	Original Hole	6,392 ft. to 11,379 ft.	06-05-14 to 06-15-14	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\Zircon 2 B1 EH State #2H\M141129

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



July 2, 2014

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 June 05, 2014 thru June 15, 2014, conduct or supervise the taking of a SEDS MWD Survey from a depth of 6,392 feet to 11,379 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 Zircon 2 B1 EH State #002H well, API # **30-015-42028** 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



Job Number: M141129
 Company: Mewbourne Oil Company
 Lease/Well: Zircon 2 B1 EH State # 2 H
 Location: Eddy County
 Rig Name: Patterson Rig # 41
 RKB: N/A
 G.L. or M.S.L.: N/A

State/Country: New Mexico / USA
 Declination: 7.37° Corrected To Grid
 Grid: 7.37°
 File name: C:\WINSERVE\DOCS\M141129.SVY
 Date/Time: 30-Jun-14 / 14:27
 Curve Name: SES MWD SURVEY RAN ON 6-05-14

Stryker Energy Directional Services, LLC.

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 90.10
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
Tie-In Data Provided by MS Gyro Survey									
6347.00	1.89	333.38	6345.70	76.17	-31.65	-31.78	82.48	337.44	.00
6392.00	2.10	335.60	6390.67	77.58	-32.32	-32.46	84.05	337.38	.50
6424.00	1.10	40.10	6422.66	78.35	-32.37	-32.50	84.78	337.55	5.95
6455.00	2.20	88.80	6453.65	78.59	-31.58	-31.72	84.70	338.11	5.45
6487.00	4.00	100.10	6485.60	78.41	-29.87	-30.00	83.91	339.15	5.91
6518.00	6.30	104.80	6516.47	77.79	-27.16	-27.29	82.39	340.75	7.54
6550.00	9.30	102.10	6548.18	76.80	-22.93	-23.07	80.15	343.37	9.44
6582.00	12.10	101.10	6579.62	75.61	-17.11	-17.24	77.52	347.25	8.77
6613.00	14.60	99.90	6609.78	74.31	-10.07	-10.20	74.99	352.28	8.11
6645.00	17.80	99.00	6640.50	72.85	-1.27	-1.39	72.86	359.00	10.03
6676.00	20.70	97.90	6669.77	71.36	8.84	8.72	71.90	7.06	9.43
6708.00	23.90	97.50	6699.37	69.73	20.87	20.75	72.79	16.66	10.01
6739.00	27.20	96.80	6727.33	68.07	34.14	34.02	76.15	26.63	10.69
6771.00	30.20	96.20	6755.40	66.34	49.41	49.29	82.71	36.68	9.42
6803.00	33.10	96.40	6782.64	64.49	66.09	65.98	92.35	45.70	9.07
6834.00	36.60	96.90	6808.07	62.44	83.69	83.58	104.41	53.27	11.33
6866.00	40.30	97.40	6833.13	59.96	103.43	103.32	119.55	59.90	11.60
6897.00	44.70	97.40	6855.98	57.26	124.19	124.09	136.76	65.25	14.19
6929.00	50.10	96.80	6877.63	54.36	147.56	147.46	157.25	69.78	16.93
6960.00	55.70	96.10	6896.32	51.59	172.11	172.02	179.68	73.32	18.15
6992.00	60.80	94.10	6913.16	49.18	199.21	199.12	205.19	76.13	16.80
7023.00	64.40	91.40	6927.42	47.87	226.69	226.61	231.69	78.08	13.95
7055.00	67.30	90.30	6940.51	47.44	255.88	255.80	260.24	79.50	9.59
7086.00	72.00	89.80	6951.29	47.42	284.94	284.86	288.86	80.55	15.24

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
				FT	FT	FT	Distance FT	Direction Deg	
7118.00	77.90	89.80	6959.60	47.53	315.83	315.75	319.39	81.44	18.44
7132.00	81.10	89.80	6962.15	47.58	329.59	329.51	333.01	81.79	22.86
7227.00	87.40	90.30	6971.66	47.49	424.07	423.98	426.72	83.61	6.65
7259.00	86.70	90.30	6973.31	47.32	456.02	455.94	458.47	84.08	2.19
7291.00	88.80	91.60	6974.56	46.79	487.99	487.91	490.23	84.52	7.72
7322.00	92.90	92.70	6974.10	45.63	518.96	518.88	520.96	84.98	13.69
7354.00	93.10	93.00	6972.43	44.04	550.88	550.80	552.63	85.43	1.13
7417.00	91.50	90.80	6969.90	41.96	613.79	613.71	615.22	86.09	4.32
7480.00	90.20	90.20	6968.97	41.41	676.77	676.70	678.04	86.50	2.27
7544.00	88.70	89.30	6969.58	41.69	740.77	740.69	741.94	86.78	2.73
7607.00	89.60	91.00	6970.52	41.52	803.76	803.68	804.83	87.04	3.05
7670.00	89.90	91.70	6970.79	40.04	866.74	866.67	867.66	87.36	1.21
7702.00	89.80	92.00	6970.87	39.00	898.72	898.65	899.57	87.52	.99
7734.00	92.00	92.50	6970.37	37.75	930.69	930.62	931.46	87.68	7.05
7765.00	94.20	91.40	6968.70	36.69	961.63	961.56	962.33	87.81	7.93
7797.00	93.70	91.20	6966.49	35.97	993.54	993.48	994.19	87.93	1.68
7829.00	93.60	91.10	6964.45	35.33	1025.47	1025.41	1026.08	88.03	.44
7860.00	93.50	91.00	6962.53	34.76	1056.41	1056.34	1056.98	88.12	.46
7892.00	93.00	88.80	6960.72	34.82	1088.35	1088.29	1088.91	88.17	7.04
7924.00	93.10	88.00	6959.02	35.71	1120.29	1120.23	1120.86	88.17	2.52
7955.00	89.90	87.70	6958.21	36.87	1151.26	1151.19	1151.85	88.17	10.37
7987.00	88.60	87.80	6958.62	38.13	1183.23	1183.16	1183.84	88.15	4.07
8050.00	87.60	89.40	6960.71	39.67	1246.17	1246.10	1246.80	88.18	2.99
8113.00	90.20	90.80	6961.92	39.56	1309.15	1309.08	1309.75	88.27	4.69
8176.00	91.00	91.40	6961.26	38.35	1372.14	1372.07	1372.67	88.40	1.59
8239.00	90.70	90.80	6960.33	37.14	1435.12	1435.05	1435.60	88.52	1.06
8303.00	90.50	90.50	6959.66	36.41	1499.11	1499.05	1499.55	88.61	.56
8366.00	90.50	90.10	6959.11	36.08	1562.11	1562.04	1562.53	88.68	.63
8461.00	90.30	89.90	6958.45	36.08	1657.11	1657.04	1657.50	88.75	.30
8555.00	88.50	90.00	6959.43	36.16	1751.10	1751.03	1751.47	88.82	1.92
8650.00	86.90	89.50	6963.24	36.58	1846.02	1845.95	1846.38	88.86	1.76
8745.00	89.10	89.50	6966.56	37.41	1940.95	1940.88	1941.31	88.90	2.32
8840.00	89.50	89.00	6967.72	38.65	2035.93	2035.86	2036.30	88.91	.67
8935.00	89.60	88.80	6968.46	40.47	2130.91	2130.84	2131.30	88.91	.24
9030.00	86.60	88.90	6971.61	42.38	2225.83	2225.75	2226.23	88.91	3.16
9124.00	87.40	91.00	6976.53	42.46	2319.70	2319.62	2320.08	88.95	2.39
9219.00	89.10	91.70	6979.44	40.22	2414.62	2414.55	2414.96	89.05	1.94
9314.00	88.70	91.20	6981.26	37.82	2509.57	2509.50	2509.86	89.14	.67
9409.00	90.30	92.40	6982.09	34.84	2604.52	2604.45	2604.75	89.23	2.11
9503.00	89.10	92.40	6982.58	30.90	2698.43	2698.37	2698.61	89.34	1.28
9598.00	88.60	92.00	6984.49	27.25	2793.34	2793.29	2793.48	89.44	.67
9693.00	89.00	91.70	6986.48	24.19	2888.27	2888.23	2888.37	89.52	.53
9788.00	89.20	91.70	6987.97	21.37	2983.22	2983.18	2983.29	89.59	.21
9883.00	89.20	91.70	6989.29	18.55	3078.17	3078.13	3078.22	89.65	.00
9978.00	88.20	91.20	6991.45	16.15	3173.11	3173.08	3173.15	89.71	1.18

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
10073.00	88.20	90.90	6994.43	14.41	3268.05	3268.02	3268.08	89.75	.32
10167.00	86.90	90.60	6998.45	13.18	3361.95	3361.92	3361.98	89.78	1.42
10262.00	88.30	90.50	7002.43	12.27	3456.86	3456.84	3456.88	89.80	1.48
10357.00	86.10	90.20	7007.07	11.69	3551.74	3551.71	3551.76	89.81	2.34
10451.00	85.50	89.20	7013.96	12.18	3645.49	3645.46	3645.51	89.81	1.24
10546.00	87.00	89.50	7020.17	13.25	3740.27	3740.24	3740.30	89.80	1.61
10640.00	87.40	88.80	7024.76	14.65	3834.15	3834.12	3834.18	89.78	.86
10735.00	87.50	88.60	7028.99	16.80	3929.03	3929.00	3929.07	89.76	.24
10830.00	87.40	90.50	7033.21	17.54	4023.93	4023.89	4023.97	89.75	2.00
10924.00	87.30	90.30	7037.56	16.89	4117.83	4117.79	4117.86	89.77	.24
11019.00	87.20	90.20	7042.12	16.48	4212.72	4212.68	4212.75	89.78	.15
11114.00	87.30	90.30	7046.68	16.06	4307.61	4307.57	4307.64	89.79	.15
11208.00	87.50	89.90	7050.94	15.90	4401.51	4401.47	4401.54	89.79	.48
11303.00	87.30	89.20	7055.25	16.64	4496.41	4496.37	4496.44	89.79	.77
11379.00	87.30	88.70	7058.83	18.03	4572.31	4572.27	4572.35	89.77	.66

Projection to Bit

11429.00	87.30	88.70	7061.19	19.17	4622.24	4622.20	4622.28	89.76	.00
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COMPANY: Mewbourne Oil Company
 WELL: Zircon 2 B 1 EH State #2H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson#41

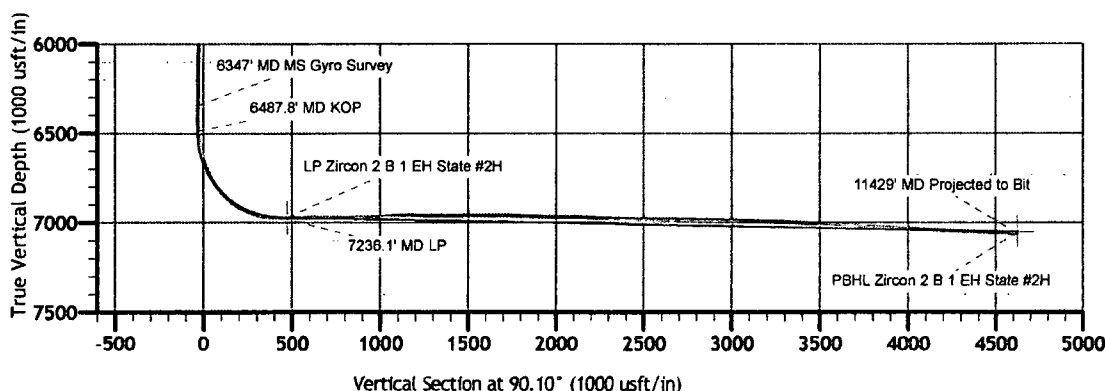
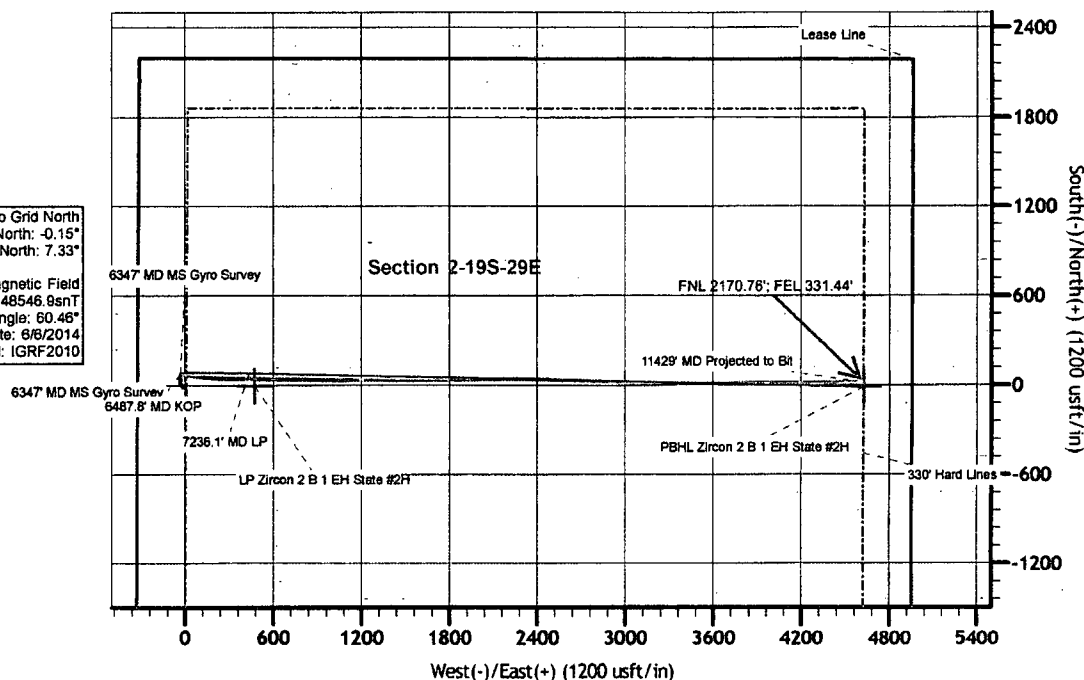
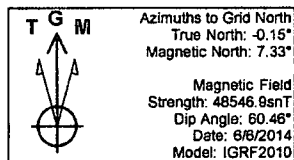


GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.33°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001					
GL 3401 + 20 @ 3421.0usft (Patterson#41)					
GROUND ELEVATION: 3401.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	615129.54	586400.49	32° 41' 26.792 N	104° 3' 8.971 W
					Slot

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	8347.0	1.89	333.38	6345.7	76.2	-31.7	0.00	0.00	-31.8	
2	6487.8	1.89	333.38	6488.4	80.3	-33.7	0.00	0.00	-33.9	
3	7236.1	88.91	91.26	6971.0	83.9	434.8	12.00	117.90	434.6	
4	11428.2	88.91	91.26	7051.0	-8.5	4625.1	0.00	0.00	4625.1	PBHL Zircon 2 B 1 EH State #2H





Job Number: SVMO-140747
 Company: Mewbourne Oil & Gas
 Lease/Well: Zircon 2 B1EH ST COM 2H
 Location: Eddy County, NM
 Rig Name: Patterson #41
 RKB: 13.5'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.36°
 Grid: East To Grid North
 File name: Y:\WINSER~1\2014SU~1\MEWBOU~1\MO\ZIRCON~3\2H.SVY
 Date/Time: 06-Jun-14 / 12:59
 Curve Name: Surface - 6347' M.D. (Rate Gyro)

MS Survey

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 90.10
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from:
 Surface MD to 6347' MD is, to the best of
 our knowledge a true and accurate account of
 the well bore.
 Harley Patterson 6/6/14
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.27	354.68	100.00	.23	-.02	-.02	.24	354.68	.27
200.00	.51	257.78	200.00	.38	-.48	-.48	.61	308.08	.61
300.00	.59	248.57	299.99	.09	-1.39	-1.39	1.40	273.81	.12
400.00	.61	249.13	399.99	-.29	-2.37	-2.37	2.39	263.14	.02
500.00	.67	242.18	499.98	-.75	-3.38	-3.38	3.47	257.54	.10
600.00	.63	241.97	599.98	-1.28	-4.39	-4.38	4.57	253.75	.04
700.00	.45	229.44	699.97	-1.79	-5.17	-5.17	5.47	250.88	.21
800.00	.29	207.97	799.97	-2.27	-5.59	-5.58	6.03	247.88	.21
900.00	.47	130.20	899.97	-2.76	-5.39	-5.39	6.06	242.90	.50

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1000.00	.64	121.72	999.96	-3.32	-4.60	-4.60	5.68	234.22	.19
1100.00	.54	112.80	1099.96	-3.79	-3.69	-3.69	5.30	224.24	.14
1200.00	.52	104.39	1199.95	-4.09	-2.82	-2.81	4.97	214.60	.08
1300.00	.30	117.85	1299.95	-4.32	-2.15	-2.14	4.83	206.43	.24
1400.00	.30	184.55	1399.95	-4.71	-1.94	-1.93	5.09	202.38	.33
1500.00	.55	212.50	1499.95	-5.37	-2.22	-2.21	5.81	202.43	.32
1600.00	.68	226.18	1599.94	-6.19	-2.90	-2.89	6.84	205.13	.20
1700.00	.92	257.99	1699.93	-6.77	-4.12	-4.11	7.92	211.32	.50
1800.00	.97	263.51	1799.92	-7.03	-5.74	-5.73	9.08	219.25	.10
1900.00	.99	271.04	1899.90	-7.11	-7.45	-7.44	10.30	226.33	.13
2000.00	.93	281.44	1999.89	-6.93	-9.11	-9.10	11.45	232.72	.18
2100.00	1.00	288.07	2099.88	-6.50	-10.73	-10.72	12.55	238.79	.13
2200.00	.97	293.09	2199.86	-5.90	-12.34	-12.33	13.68	244.45	.09
2300.00	.95	303.30	2299.85	-5.11	-13.81	-13.80	14.73	249.69	.17
2400.00	1.04	311.55	2399.83	-4.05	-15.18	-15.18	15.72	255.05	.17
2500.00	1.13	317.87	2499.81	-2.72	-16.52	-16.52	16.75	260.65	.15
2600.00	1.10	320.51	2599.79	-1.25	-17.80	-17.79	17.84	265.98	.06
2700.00	.90	322.10	2699.78	.11	-18.89	-18.89	18.89	270.34	.20
2800.00	.84	313.56	2799.77	1.24	-19.90	-19.91	19.94	273.55	.14
2900.00	.82	315.21	2899.76	2.25	-20.94	-20.94	21.06	276.13	.03
3000.00	.79	314.63	2999.75	3.24	-21.93	-21.94	22.17	278.41	.03
3100.00	.71	314.15	3099.74	4.16	-22.87	-22.88	23.24	280.30	.08
3200.00	.77	313.96	3199.73	5.05	-23.80	-23.81	24.33	281.99	.06
3300.00	.81	320.44	3299.72	6.07	-24.73	-24.74	25.46	283.78	.10
3400.00	.78	320.40	3399.71	7.14	-25.61	-25.63	26.59	285.57	.03
3500.00	.99	326.19	3499.70	8.38	-26.53	-26.54	27.82	287.53	.23
3600.00	1.29	324.47	3599.68	10.01	-27.66	-27.68	29.42	289.90	.30
3700.00	1.50	319.76	3699.65	11.93	-29.16	-29.18	31.51	292.24	.24
3800.00	1.49	327.34	3799.62	14.02	-30.71	-30.73	33.76	294.54	.20

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
3900.00	1.59	349.06	3899.58	16.48	-31.68	-31.70	35.70	297.48	.59
4000.00	2.00	8.90	3999.53	19.56	-31.67	-31.70	37.22	301.71	.74
4100.00	2.01	5.98	4099.47	23.03	-31.22	-31.26	38.79	306.42	.10
4200.00	1.70	11.74	4199.42	26.23	-30.73	-30.78	40.40	310.48	.36
4300.00	1.44	9.00	4299.38	28.92	-30.23	-30.28	41.84	313.73	.27
4400.00	1.42	6.27	4399.35	31.39	-29.90	-29.96	43.36	316.39	.07
4500.00	1.17	356.36	4499.32	33.64	-29.83	-29.89	44.96	318.44	.33
4600.00	1.08	332.24	4599.31	35.50	-30.33	-30.40	46.69	319.48	.48
4700.00	1.12	335.78	4699.29	37.22	-31.17	-31.24	48.55	320.05	.08
4800.00	1.06	337.07	4799.27	38.97	-31.94	-32.00	50.38	320.66	.06
4900.00	1.07	343.27	4899.25	40.71	-32.56	-32.64	52.13	321.34	.12
5000.00	1.06	336.40	4999.23	42.45	-33.20	-33.28	53.90	321.97	.13
5100.00	.97	.47	5099.22	44.15	-33.57	-33.64	55.46	322.75	.43
5200.00	1.01	1.47	5199.20	45.87	-33.54	-33.62	56.83	323.83	.04
5300.00	1.17	8.42	5299.19	47.77	-33.37	-33.45	58.27	325.06	.21
5400.00	1.23	17.38	5399.16	49.80	-32.90	-32.98	59.68	326.55	.20
5500.00	1.33	22.91	5499.14	51.89	-32.12	-32.21	61.03	328.24	.16
5600.00	1.55	25.08	5599.11	54.19	-31.10	-31.19	62.48	330.15	.23
5700.00	1.57	27.19	5699.07	56.63	-29.90	-30.00	64.04	332.17	.06
5800.00	1.60	32.60	5799.03	59.03	-28.52	-28.62	65.55	334.21	.15
5900.00	1.71	38.50	5898.99	61.37	-26.84	-26.95	66.98	336.38	.20
6000.00	2.08	341.48	5998.94	64.26	-26.49	-26.60	69.50	337.60	1.84
6100.00	2.51	334.53	6098.86	67.96	-28.01	-28.12	73.50	337.60	.51
6200.00	1.97	337.28	6198.79	71.52	-29.61	-29.74	77.41	337.51	.55
6300.00	2.02	336.52	6298.73	74.72	-30.98	-31.11	80.89	337.48	.06

Last Survey Depth Recorded

6347.00	1.89	333.38	6345.70	76.17	-31.65	-31.79	82.49	337.43	.36
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