

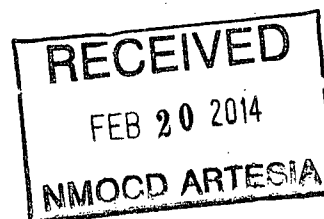
OPERATOR MEWBOURNE OIL COMPANY
WELL/LEASE BRADLEY 36 LI STATE COM 001H
COUNTY EDDY

045-0100

STATE OF NEW MEXICO
DEVIATION REPORT

30-015-41777

375	0.56
525	1.31
645	1.46
829	1.55
977	1.64
1,131	1.00
1,283	1.45
1,440	0.88
1,548	1.26
2,039	0.44
2,437	0.05
2,913	0.39
3,388	0.63
3,771	1.60
4,246	1.75
4,723	1.00
5,099	1.16
5,483	0.76
5,861	1.27
6,280	3.79
6,408	4.02
6,533	2.86
6,660	2.51
6,823	1.85
6,946	0.95
7,392	1.63



BY:

Steve Moore

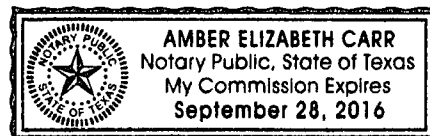
STATE OF TEXAS

COUNTY OF MIDLAND

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

12/19/13, by

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





COMPANY: Mewbourne Oil Company
 WELL: Bradley 36 LI State Com #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson#45

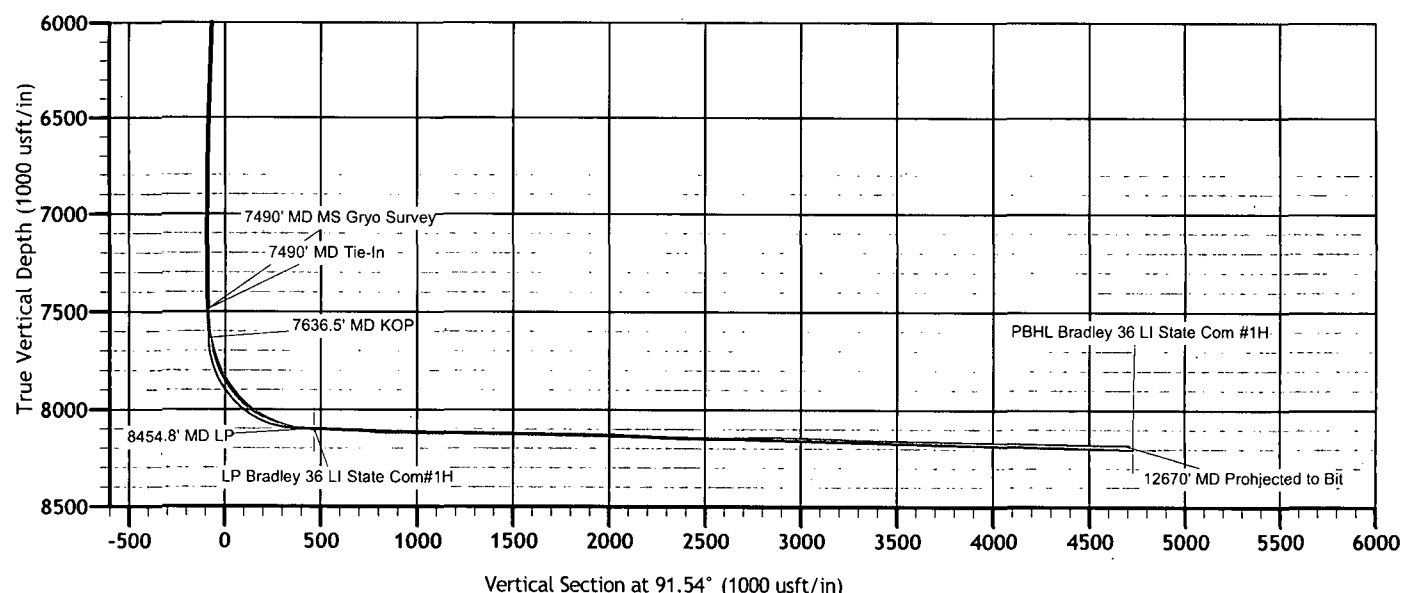
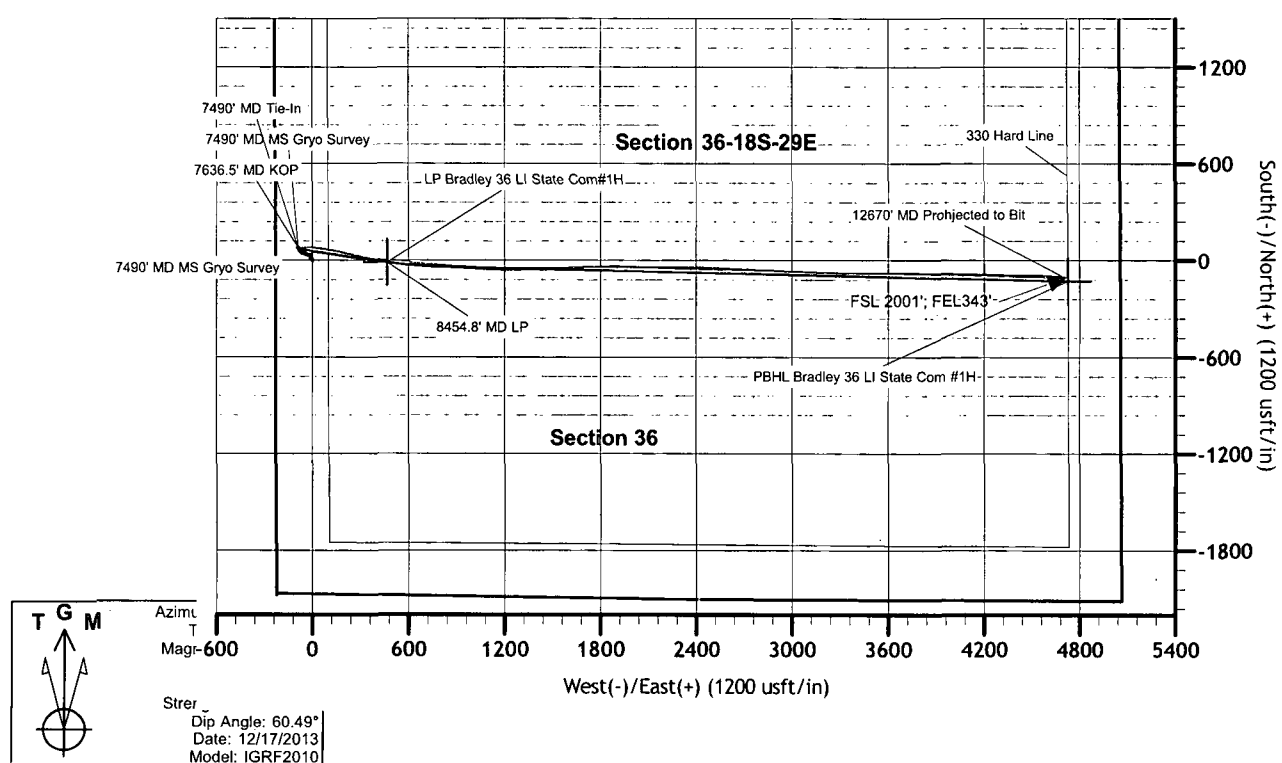


GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.37°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico East 3001					
GL 3442 + 20 @ 3462.0usft (Patterson#45)					
GROUND ELEVATION: 3442.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	619397.70	591585.20	32° 42' 8.888 N	104° 2' 8.162 W

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	7490.0	1.58	124.20	7487.9	73.3	-88.2	0.00	0.00	-90.2	
2	7636.5	1.58	124.20	7634.4	71.0	-84.9	0.00	0.00	-86.8	
3	8363.5	88.66	98.13	8099.9	-0.4	375.8	12.00	-26.09	375.7	
4	8454.8	88.66	98.13	8102.0	-13.3	466.2	0.00	0.00	466.3	LP Bradley 36 LI State Com#1H
5	8798.8	88.66	91.25	8110.1	-41.5	808.7	2.00	-90.10	809.5	
6	12718.5	88.66	91.25	8202.0	-127.1	4726.4	0.00	0.00	4728.1	PBHL Bradley 36 LI State Com #1H





Mewbourne Oil Company .

**Eddy County, New Mexico
Section 36-18S-29E Bradley 36 LI
Bradley 36 LI State Com #1H**

Original hole

Design: Original hole



Standard Survey Report

31 January, 2014





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

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

Site	Section 36-18S-29E Bradley 36 LI		
Site Position:		Northing:	619,397.70 usft
From:	Map	Easting:	591,585.20 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 42' 8.888 N
		Longitude:	104° 2' 8.162 W
		Grid Convergence:	0.16 °

Well	Bradley 36 LI State Com #1H		
Well Position	+N/-S	0.0 usft	Northing: 619,397.70 usft
	+E/-W	0.0 usft	Easting: 591,585.20 usft
Position Uncertainty	0.0 usft		Wellhead Elevation: usft
			Latitude: 32° 42' 8.888 N
			Longitude: 104° 2' 8.162 W
			Ground Level: 3,442.0 usft

Wellbore	Original hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/17/2013	7.53	60.49	48,602

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	91.54

Survey Program	Date 1/31/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200.0	7,490.0	MS Gryo Survey #1 (Original hole)	GyroFlex	
7,528.0	12,670.0	MWD Survey #2 (Original hole)	MWD	MWD - Standard

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.62	4.15	200.0	1.1	0.1	0.0	0.31	0.31	0.00
400.0	1.16	304.82	400.0	3.3	-1.5	-1.6	0.50	0.27	-29.67
600.0	1.24	304.99	599.9	5.7	-4.9	-5.1	0.04	0.04	0.09
800.0	1.06	320.01	799.9	8.4	-7.9	-8.1	0.17	-0.09	7.51
1,000.0	1.02	5.71	999.9	11.6	-8.9	-9.2	0.40	-0.02	22.85
1,200.0	1.12	16.51	1,199.8	15.2	-8.2	-8.6	0.11	0.05	5.40
1,400.0	1.12	5.31	1,399.8	19.0	-7.4	-8.0	0.11	0.00	-5.60
1,600.0	0.92	344.83	1,599.8	22.5	-7.7	-8.3	0.21	-0.10	-10.24
1,800.0	0.67	337.51	1,799.7	25.2	-8.6	-9.2	0.13	-0.13	-3.66



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,000.0	0.63	329.60	1,999.7	27.2	-9.6	-10.3	0.05	-0.02	-3.96
2,200.0	0.36	323.35	2,199.7	28.6	-10.5	-11.3	0.14	-0.14	-3.13
2,400.0	0.25	326.68	2,399.7	29.5	-11.1	-11.9	0.06	-0.06	1.67
2,600.0	0.17	319.37	2,599.7	30.1	-11.5	-12.3	0.04	-0.04	-3.66
2,800.0	0.19	342.22	2,799.7	30.6	-11.8	-12.6	0.04	0.01	11.43
3,000.0	0.29	315.43	2,999.7	31.3	-12.3	-13.1	0.07	0.05	-13.40
3,200.0	0.53	300.36	3,199.7	32.1	-13.4	-14.3	0.13	0.12	-7.54
3,400.0	0.72	300.56	3,399.7	33.2	-15.3	-16.2	0.10	0.10	0.10
3,600.0	0.95	286.38	3,599.7	34.3	-18.0	-18.9	0.15	0.12	-7.09
3,800.0	2.26	271.23	3,799.6	34.9	-23.5	-24.5	0.68	0.66	-7.58
4,000.0	2.55	282.54	3,999.4	36.0	-31.8	-32.8	0.28	0.15	5.66
4,200.0	1.83	287.47	4,199.3	37.9	-39.2	-40.2	0.37	-0.36	2.47
4,400.0	1.31	300.91	4,399.2	40.0	-44.2	-45.3	0.32	-0.26	6.72
4,600.0	1.48	302.00	4,599.1	42.6	-48.4	-49.5	0.09	0.09	0.55
4,800.0	1.09	298.62	4,799.1	44.8	-52.2	-53.4	0.20	-0.20	-1.69
5,000.0	0.69	303.13	4,999.1	46.4	-54.9	-56.1	0.20	-0.20	2.26
5,200.0	0.81	304.06	5,199.0	47.9	-57.1	-58.3	0.06	0.06	0.47
5,400.0	0.86	292.97	5,399.0	49.2	-59.6	-60.9	0.08	0.03	-5.55
5,600.0	0.78	306.41	5,599.0	50.6	-62.1	-63.4	0.10	-0.04	6.72
5,800.0	1.02	206.73	5,799.0	49.8	-64.0	-65.3	0.69	0.12	-49.84
6,000.0	1.01	248.09	5,999.0	47.6	-66.4	-67.7	0.36	-0.01	20.68
6,200.0	3.22	320.39	6,198.8	51.3	-71.7	-73.0	1.53	1.11	36.15
6,400.0	3.75	324.62	6,398.5	60.9	-79.0	-80.6	0.29	0.27	2.12
6,600.0	2.63	326.61	6,598.1	70.1	-85.3	-87.2	0.56	-0.56	1.00
6,800.0	1.48	333.11	6,798.0	76.2	-89.0	-91.0	0.59	-0.58	3.25
7,000.0	0.47	253.14	6,998.0	78.3	-91.0	-93.1	0.74	-0.51	-39.99
7,200.0	0.40	214.35	7,198.0	77.5	-92.2	-94.2	0.15	-0.04	-19.40
7,400.0	1.75	131.51	7,398.0	74.9	-90.3	-92.3	0.87	0.68	-41.42
7,490.0	1.58	124.20	7,487.9	73.3	-88.2	-90.2	0.30	-0.19	-8.12
7490' MD MS Gryo Survey									
7,528.0	4.20	108.50	7,525.9	72.5	-86.5	-88.4	7.14	6.89	-41.32
7,560.0	4.50	105.60	7,557.8	71.8	-84.1	-86.0	1.16	0.94	-9.06
7,591.0	5.50	99.80	7,588.7	71.2	-81.5	-83.4	3.61	3.23	-18.71
7,623.0	8.50	88.80	7,620.4	71.0	-77.6	-79.5	10.23	9.38	-34.38
7,655.0	12.50	84.70	7,651.9	71.4	-71.8	-73.7	12.71	12.50	-12.81
7,686.0	15.10	86.30	7,682.0	72.0	-64.4	-66.4	8.48	8.39	5.16
7,718.0	17.90	88.90	7,712.7	72.3	-55.4	-57.3	9.05	8.75	8.13
7,750.0	21.50	90.30	7,742.8	72.4	-44.6	-46.5	11.35	11.25	4.38
7,781.0	23.20	91.60	7,771.4	72.2	-32.8	-34.7	5.71	5.48	4.19
7,813.0	25.40	91.90	7,800.6	71.8	-19.6	-21.6	6.89	6.88	0.94
7,845.0	28.00	93.70	7,829.2	71.1	-5.3	-7.2	8.51	8.13	5.63
7,877.0	30.90	95.80	7,857.1	69.8	10.4	8.5	9.62	9.06	6.56
7,908.0	34.40	97.60	7,883.2	67.8	27.0	25.2	11.72	11.29	5.81



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,940.0	39.60	98.30	7,908.7	65.1	46.1	44.3	16.30	16.25	2.19
7,972.0	44.30	98.10	7,932.5	62.1	67.2	65.5	14.69	14.69	-0.63
8,003.0	46.10	98.40	7,954.3	58.9	89.0	87.4	5.85	5.81	0.97
8,035.0	48.60	99.50	7,976.0	55.3	112.2	110.7	8.21	7.81	3.44
8,067.0	52.30	100.70	7,996.4	50.9	136.5	135.1	11.92	11.56	3.75
8,099.0	56.30	101.40	8,015.1	45.9	162.0	160.7	12.63	12.50	2.19
8,130.0	59.70	101.80	8,031.5	40.7	187.8	186.6	11.02	10.97	1.29
8,162.0	63.10	102.50	8,046.8	34.7	215.2	214.2	10.80	10.63	2.19
8,194.0	67.90	102.80	8,060.1	28.4	243.6	242.8	15.02	15.00	0.94
8,225.0	71.30	102.00	8,070.9	22.1	272.0	271.3	11.23	10.97	-2.58
8,257.0	73.70	100.90	8,080.5	16.1	301.9	301.4	8.19	7.50	-3.44
8,289.0	76.00	99.70	8,088.9	10.6	332.3	331.9	8.05	7.19	-3.75
8,321.0	80.60	98.80	8,095.3	5.5	363.2	363.0	14.64	14.38	-2.81
8,351.0	86.40	97.90	8,098.7	1.2	392.7	392.5	19.56	19.33	-3.00
8,425.7	88.97	96.16	8,101.8	-7.9	466.8	466.9	4.16	3.44	-2.33
LP Bradley 36 LI State Com#1H									
8,441.0	89.50	95.80	8,102.0	-9.5	482.0	482.1	4.16	3.45	-2.33
8,473.0	89.10	95.40	8,102.3	-12.7	513.8	514.0	1.77	-1.25	-1.25
8,537.0	87.90	95.30	8,104.0	-18.6	577.5	577.8	1.88	-1.88	-0.16
8,602.0	86.70	94.70	8,107.1	-24.3	642.2	642.6	2.06	-1.85	-0.92
8,666.0	87.20	93.90	8,110.5	-29.1	705.9	706.5	1.47	0.78	-1.25
8,697.0	87.00	93.70	8,112.1	-31.1	736.8	737.4	0.91	-0.65	-0.65
8,760.0	87.10	93.70	8,115.3	-35.2	799.6	800.3	0.16	0.16	0.00
8,823.0	89.30	94.00	8,117.3	-39.4	862.5	863.2	3.52	3.49	0.48
8,886.0	89.40	93.90	8,118.0	-43.7	925.3	926.1	0.22	0.16	-0.16
8,949.0	89.30	93.30	8,118.7	-47.7	988.2	989.1	0.97	-0.16	-0.95
8,981.0	88.50	93.20	8,119.3	-49.5	1,020.1	1,021.1	2.52	-2.50	-0.31
9,013.0	88.60	92.80	8,120.1	-51.2	1,052.1	1,053.1	1.29	0.31	-1.25
9,076.0	89.50	91.90	8,121.2	-53.8	1,115.0	1,116.0	2.02	1.43	-1.43
9,139.0	89.10	91.60	8,121.9	-55.7	1,178.0	1,179.0	0.79	-0.63	-0.48
9,202.0	88.40	90.20	8,123.3	-56.7	1,240.9	1,242.0	2.48	-1.11	-2.22
9,265.0	89.40	90.00	8,124.5	-56.8	1,303.9	1,305.0	1.62	1.59	-0.32
9,329.0	89.50	89.60	8,125.1	-56.6	1,367.9	1,368.9	0.64	0.16	-0.63
9,392.0	89.70	88.90	8,125.6	-55.8	1,430.9	1,431.9	1.16	0.32	-1.11
9,455.0	90.00	87.70	8,125.7	-53.9	1,493.9	1,494.8	1.96	0.48	-1.90
9,518.0	89.30	89.30	8,126.1	-52.2	1,556.9	1,557.7	2.77	-1.11	2.54
9,582.0	89.30	88.60	8,126.9	-51.1	1,620.8	1,621.6	1.09	0.00	-1.09
9,645.0	89.30	88.40	8,127.7	-49.4	1,683.8	1,684.5	0.32	0.00	-0.32
9,708.0	90.00	88.60	8,128.1	-47.8	1,746.8	1,747.4	1.16	1.11	0.32
9,772.0	90.10	88.60	8,128.0	-46.2	1,810.8	1,811.4	0.16	0.16	0.00
9,835.0	89.00	89.60	8,128.5	-45.2	1,873.8	1,874.3	2.36	-1.75	1.59
9,898.0	89.20	91.10	8,129.5	-45.6	1,936.7	1,937.3	2.40	0.32	2.38
9,961.0	87.90	91.10	8,131.1	-46.8	1,999.7	2,000.3	2.06	-2.06	0.00
10,025.0	87.60	90.90	8,133.6	-47.9	2,063.7	2,064.2	0.56	-0.47	-0.31



Stryker Directional Survey Report



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Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,088.0	87.80	90.90	8,136.1	-48.9	2,126.6	2,127.1	0.32	0.32	0.00
10,151.0	87.60	90.50	8,138.7	-49.7	2,189.5	2,190.1	0.71	-0.32	-0.63
10,215.0	87.40	89.60	8,141.5	-49.7	2,253.5	2,254.0	1.44	-0.31	-1.41
10,278.0	87.80	90.00	8,144.1	-49.5	2,316.4	2,316.9	0.90	0.63	0.63
10,341.0	87.80	91.10	8,146.5	-50.1	2,379.4	2,379.9	1.74	0.00	1.75
10,404.0	88.50	91.80	8,148.5	-51.7	2,442.3	2,442.8	1.57	1.11	1.11
10,467.0	89.90	92.30	8,149.4	-54.0	2,505.3	2,505.8	2.36	2.22	0.79
10,530.0	90.50	92.30	8,149.2	-56.5	2,568.2	2,568.8	0.95	0.95	0.00
10,593.0	90.30	92.80	8,148.8	-59.3	2,631.2	2,631.8	0.85	-0.32	0.79
10,657.0	90.20	92.50	8,148.5	-62.3	2,695.1	2,695.8	0.49	-0.16	-0.47
10,720.0	90.40	92.10	8,148.2	-64.8	2,758.0	2,758.8	0.71	0.32	-0.63
10,783.0	89.50	92.50	8,148.2	-67.3	2,821.0	2,821.8	1.56	-1.43	0.63
10,845.0	89.70	92.30	8,148.6	-69.9	2,882.9	2,883.8	0.46	0.32	-0.32
10,908.0	88.40	91.90	8,149.7	-72.2	2,945.9	2,946.8	2.16	-2.06	-0.63
10,971.0	88.40	92.10	8,151.4	-74.4	3,008.8	3,009.7	0.32	0.00	0.32
11,034.0	87.80	91.90	8,153.5	-76.6	3,071.7	3,072.7	1.00	-0.95	-0.32
11,097.0	88.10	92.30	8,155.8	-78.9	3,134.7	3,135.6	0.79	0.48	0.63
11,161.0	88.50	91.90	8,157.7	-81.3	3,198.6	3,199.6	0.88	0.63	-0.63
11,224.0	88.30	90.90	8,159.4	-82.8	3,261.5	3,262.6	1.62	-0.32	-1.59
11,287.0	88.20	90.90	8,161.4	-83.8	3,324.5	3,325.6	0.16	-0.16	0.00
11,351.0	88.50	90.70	8,163.2	-84.7	3,388.5	3,389.5	0.56	0.47	-0.31
11,414.0	89.30	90.50	8,164.4	-85.3	3,451.5	3,452.5	1.31	1.27	-0.32
11,477.0	89.30	89.60	8,165.2	-85.4	3,514.5	3,515.5	1.43	0.00	-1.43
11,541.0	88.50	90.00	8,166.4	-85.2	3,578.4	3,579.4	1.40	-1.25	0.63
11,604.0	88.80	89.60	8,167.9	-85.0	3,641.4	3,642.4	0.79	0.48	-0.63
11,668.0	89.40	90.90	8,168.9	-85.2	3,705.4	3,706.4	2.24	0.94	2.03
11,731.0	89.80	90.90	8,169.4	-86.2	3,768.4	3,769.4	0.63	0.63	0.00
11,794.0	89.00	90.90	8,170.0	-87.2	3,831.4	3,832.3	1.27	-1.27	0.00
11,858.0	88.60	90.30	8,171.4	-87.9	3,895.4	3,896.3	1.13	-0.63	-0.94
11,920.0	88.40	91.10	8,173.0	-88.6	3,957.3	3,958.3	1.33	-0.32	1.29
11,984.0	88.80	91.10	8,174.5	-89.9	4,021.3	4,022.3	0.63	0.63	0.00
12,047.0	88.40	91.10	8,176.1	-91.1	4,084.3	4,085.3	0.63	-0.63	0.00
12,110.0	87.80	91.10	8,178.2	-92.3	4,147.2	4,148.2	0.95	-0.95	0.00
12,173.0	88.30	90.90	8,180.3	-93.4	4,210.2	4,211.2	0.85	0.79	-0.32
12,236.0	88.60	90.90	8,182.0	-94.4	4,273.2	4,274.2	0.48	0.48	0.00
12,300.0	90.00	91.10	8,182.8	-95.5	4,337.1	4,338.1	2.21	2.19	0.31
12,363.0	90.40	90.90	8,182.6	-96.6	4,400.1	4,401.1	0.71	0.63	-0.32
12,426.0	88.80	91.10	8,183.0	-97.7	4,463.1	4,464.1	2.56	-2.54	0.32
12,458.0	88.70	91.20	8,183.7	-98.3	4,495.1	4,496.1	0.44	-0.31	0.31
12,489.0	89.30	91.20	8,184.3	-99.0	4,526.1	4,527.1	1.94	1.94	0.00
12,553.0	89.60	92.10	8,184.9	-100.8	4,590.1	4,591.1	1.48	0.47	1.41
12,670.0	89.60	92.10	8,185.7	-105.1	4,707.0	4,708.1	0.00	0.00	0.00
12670' MD Projected to Bit - PBHL Bradley 36 LI State Com #1H									



Stryker Directional

Survey Report



Company:	Mewbourne Oil Company .	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,490.0	7,487.9	73.3	-88.2	7490' MD MS Gryo Survey
12,670.0	8,185.7	-105.1	4,707.0	12670' MD Projected to Bit



Mewbourne Oil Company .

**Eddy County, New Mexico
Section 36-18S-29E Bradley 36 LI
Bradley 36 LI State Com #1H**

Original hole

Design: Original hole

Survey Report - Geographic

31 January, 2014





Stryker Directional

Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

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

Site	Section 36-18S-29E Bradley 36 LI		
Site Position:		Northing:	619,397.70 usft
From:	Map	Easting:	591,585.20 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 42' 8.888 N
		Longitude:	104° 2' 8.162 W
		Grid Convergence:	0.16 °

Well	Bradley 36 LI State Com #1H		
Well Position	+N/-S	0.0 usft	Northing: 619,397.70 usft
	+E/-W	0.0 usft	Easting: 591,585.20 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 42' 8.888 N
		Longitude:	104° 2' 8.162 W
		Ground Level:	3,442.0 usft

Wellbore	Original hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/17/2013	7.53	60.49	48,602

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	91.54

Survey Program	Date 1/31/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200.0	7,490.0	MS Gryo Survey #1 (Original hole)	GyroFlex	
7,528.0	12,670.0	MWD Survey #2 (Original hole)	MWD	MWD - Standard

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	619,397.70	591,585.20	32° 42' 8.888 N	104° 2' 8.162 W
200.0	0.62	4.15	200.0	1.1	0.1	619,398.78	591,585.28	32° 42' 8.898 N	104° 2' 8.161 W
400.0	1.16	304.82	400.0	3.3	-1.5	619,401.02	591,583.70	32° 42' 8.920 N	104° 2' 8.179 W
600.0	1.24	304.99	599.9	5.7	-4.9	619,403.42	591,580.26	32° 42' 8.944 N	104° 2' 8.219 W
800.0	1.06	320.01	799.9	8.4	-7.9	619,406.07	591,577.30	32° 42' 8.971 N	104° 2' 8.254 W
1,000.0	1.02	5.71	999.9	11.6	-8.9	619,409.26	591,576.29	32° 42' 9.002 N	104° 2' 8.266 W
1,200.0	1.12	16.51	1,199.8	15.2	-8.2	619,412.91	591,577.02	32° 42' 9.038 N	104° 2' 8.257 W
1,400.0	1.12	5.31	1,399.8	19.0	-7.4	619,416.73	591,577.76	32° 42' 9.076 N	104° 2' 8.248 W
1,600.0	0.92	344.83	1,599.8	22.5	-7.7	619,420.22	591,577.52	32° 42' 9.111 N	104° 2' 8.251 W
1,800.0	0.67	337.51	1,799.7	25.2	-8.6	619,422.85	591,576.65	32° 42' 9.137 N	104° 2' 8.261 W
2,000.0	0.63	329.60	1,999.7	27.2	-9.6	619,424.88	591,575.65	32° 42' 9.157 N	104° 2' 8.273 W



Stryker Directional Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
2,200.0	0.36	323.35	2,199.7	28.6	-10.5	619,426.34	591,574.72	32° 42' 9.171 N	104° 2' 8.284 W
2,400.0	0.25	326.68	2,399.7	29.5	-11.1	619,427.20	591,574.10	32° 42' 9.180 N	104° 2' 8.291 W
2,600.0	0.17	319.37	2,599.7	30.1	-11.5	619,427.79	591,573.67	32° 42' 9.186 N	104° 2' 8.296 W
2,800.0	0.19	342.22	2,799.7	30.6	-11.8	619,428.33	591,573.37	32° 42' 9.191 N	104° 2' 8.299 W
3,000.0	0.29	315.43	2,999.7	31.3	-12.3	619,429.01	591,572.92	32° 42' 9.198 N	104° 2' 8.305 W
3,200.0	0.53	300.36	3,199.7	32.1	-13.4	619,429.84	591,571.76	32° 42' 9.206 N	104° 2' 8.318 W
3,400.0	0.72	300.56	3,399.7	33.2	-15.3	619,430.95	591,569.88	32° 42' 9.217 N	104° 2' 8.340 W
3,600.0	0.95	286.38	3,599.7	34.3	-18.0	619,432.05	591,567.21	32° 42' 9.228 N	104° 2' 8.371 W
3,800.0	2.26	271.23	3,799.6	34.9	-23.5	619,432.60	591,561.68	32° 42' 9.234 N	104° 2' 8.436 W
4,000.0	2.55	282.54	3,999.4	36.0	-31.8	619,433.65	591,553.39	32° 42' 9.244 N	104° 2' 8.533 W
4,200.0	1.83	287.47	4,199.3	37.9	-39.2	619,435.58	591,546.00	32° 42' 9.263 N	104° 2' 8.619 W
4,400.0	1.31	300.91	4,399.2	40.0	-44.2	619,437.71	591,541.00	32° 42' 9.285 N	104° 2' 8.678 W
4,600.0	1.48	302.00	4,599.1	42.6	-48.4	619,440.26	591,536.84	32° 42' 9.310 N	104° 2' 8.726 W
4,800.0	1.09	298.62	4,799.1	44.8	-52.2	619,442.54	591,532.98	32° 42' 9.333 N	104° 2' 8.771 W
5,000.0	0.69	303.13	4,999.1	46.4	-54.9	619,444.11	591,530.31	32° 42' 9.348 N	104° 2' 8.803 W
5,200.0	0.81	304.06	5,199.0	47.9	-57.1	619,445.55	591,528.13	32° 42' 9.363 N	104° 2' 8.828 W
5,400.0	0.86	292.97	5,399.0	49.2	-59.6	619,446.93	591,525.57	32° 42' 9.376 N	104° 2' 8.858 W
5,600.0	0.78	306.41	5,599.0	50.6	-62.1	619,448.33	591,523.10	32° 42' 9.390 N	104° 2' 8.887 W
5,800.0	1.02	206.73	5,799.0	49.8	-64.0	619,447.54	591,521.20	32° 42' 9.383 N	104° 2' 8.909 W
6,000.0	1.01	248.09	5,999.0	47.6	-66.4	619,445.30	591,518.76	32° 42' 9.360 N	104° 2' 8.938 W
6,200.0	3.22	320.39	6,198.8	51.3	-71.7	619,448.97	591,513.54	32° 42' 9.397 N	104° 2' 8.999 W
6,400.0	3.75	324.62	6,398.5	60.9	-79.0	619,458.63	591,506.18	32° 42' 9.493 N	104° 2' 9.085 W
6,600.0	2.63	326.61	6,598.1	70.1	-85.3	619,467.79	591,499.86	32° 42' 9.583 N	104° 2' 9.158 W
6,800.0	1.48	333.11	6,798.0	76.2	-89.0	619,473.93	591,496.17	32° 42' 9.644 N	104° 2' 9.201 W
7,000.0	0.47	253.14	6,998.0	78.3	-91.0	619,475.99	591,494.22	32° 42' 9.665 N	104° 2' 9.224 W
7,200.0	0.40	214.35	7,198.0	77.5	-92.2	619,475.18	591,493.04	32° 42' 9.657 N	104° 2' 9.238 W
7,400.0	1.75	131.51	7,398.0	74.9	-90.3	619,472.58	591,494.93	32° 42' 9.631 N	104° 2' 9.216 W
7,490.0	1.58	124.20	7,487.9	73.3	-88.2	619,470.97	591,496.99	32° 42' 9.615 N	104° 2' 9.192 W
7490' MD MS Gryo Survey									
7,528.0	4.20	108.50	7,525.9	72.5	-86.5	619,470.23	591,498.74	32° 42' 9.608 N	104° 2' 9.171 W
7,560.0	4.50	105.60	7,557.8	71.8	-84.1	619,469.52	591,501.06	32° 42' 9.601 N	104° 2' 9.144 W
7,591.0	5.50	99.80	7,588.7	71.2	-81.5	619,468.94	591,503.70	32° 42' 9.595 N	104° 2' 9.113 W
7,623.0	8.50	88.80	7,620.4	71.0	-77.6	619,468.73	591,507.57	32° 42' 9.593 N	104° 2' 9.068 W
7,655.0	12.50	84.70	7,651.9	71.4	-71.8	619,469.10	591,513.39	32° 42' 9.596 N	104° 2' 9.000 W
7,686.0	15.10	86.30	7,682.0	72.0	-64.4	619,469.67	591,520.76	32° 42' 9.601 N	104° 2' 8.914 W
7,718.0	17.90	88.90	7,712.7	72.3	-55.4	619,470.04	591,529.84	32° 42' 9.605 N	104° 2' 8.807 W
7,750.0	21.50	90.30	7,742.8	72.4	-44.6	619,470.10	591,540.62	32° 42' 9.605 N	104° 2' 8.681 W
7,781.0	23.20	91.60	7,771.4	72.2	-32.8	619,469.90	591,552.41	32° 42' 9.603 N	104° 2' 8.543 W
7,813.0	25.40	91.90	7,800.6	71.8	-19.6	619,469.50	591,565.57	32° 42' 9.598 N	104° 2' 8.389 W
7,845.0	28.00	93.70	7,829.2	71.1	-5.3	619,468.78	591,579.93	32° 42' 9.591 N	104° 2' 8.221 W
7,877.0	30.90	95.80	7,857.1	69.8	10.4	619,467.47	591,595.60	32° 42' 9.578 N	104° 2' 8.038 W
7,908.0	34.40	97.60	7,883.2	67.8	27.0	619,465.50	591,612.20	32° 42' 9.558 N	104° 2' 7.844 W
7,940.0	39.60	98.30	7,908.7	65.1	46.1	619,462.83	591,631.27	32° 42' 9.531 N	104° 2' 7.621 W
7,972.0	44.30	98.10	7,932.5	62.1	67.2	619,459.79	591,652.44	32° 42' 9.500 N	104° 2' 7.373 W
8,003.0	46.10	98.40	7,954.3	58.9	89.0	619,456.63	591,674.21	32° 42' 9.468 N	104° 2' 7.118 W
8,035.0	48.60	99.50	7,976.0	55.3	112.2	619,452.96	591,697.45	32° 42' 9.431 N	104° 2' 6.846 W
8,067.0	52.30	100.70	7,996.4	50.9	136.5	619,448.63	591,721.74	32° 42' 9.388 N	104° 2' 6.562 W
8,099.0	56.30	101.40	8,015.1	45.9	162.0	619,443.65	591,747.24	32° 42' 9.338 N	104° 2' 6.264 W
8,130.0	59.70	101.80	8,031.5	40.7	187.8	619,438.36	591,772.98	32° 42' 9.285 N	104° 2' 5.963 W
8,162.0	63.10	102.50	8,046.8	34.7	215.2	619,432.44	591,800.45	32° 42' 9.225 N	104° 2' 5.642 W
8,194.0	67.90	102.80	8,060.1	28.4	243.6	619,426.07	591,828.85	32° 42' 9.161 N	104° 2' 5.309 W
8,225.0	71.30	102.00	8,070.9	22.1	272.0	619,419.83	591,857.22	32° 42' 9.099 N	104° 2' 4.978 W
8,257.0	73.70	100.90	8,080.5	16.1	301.9	619,413.78	591,887.13	32° 42' 9.038 N	104° 2' 4.628 W
8,289.0	76.00	99.70	8,088.9	10.6	332.3	619,408.26	591,917.52	32° 42' 8.983 N	104° 2' 4.272 W
8,321.0	80.60	98.80	8,095.3	5.5	363.2	619,403.22	591,948.44	32° 42' 8.932 N	104° 2' 3.911 W



Stryker Directional

Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,351.0	86.40	97.90	8,098.7	1.2	392.7	619,398.90	591,977.92	32° 42' 8.888 N	104° 2' 3.566 W
8,425.7	88.97	96.16	8,101.8	-7.9	466.8	619,389.76	592,052.02	32° 42' 8.796 N	104° 2' 2.699 W
LP Bradley 36 LI State Com#1H									
8,441.0	89.50	95.80	8,102.0	-9.5	482.0	619,388.17	592,067.20	32° 42' 8.780 N	104° 2' 2.521 W
8,473.0	89.10	95.40	8,102.3	-12.7	513.8	619,385.05	592,099.05	32° 42' 8.748 N	104° 2' 2.149 W
8,537.0	87.90	95.30	8,104.0	-18.6	577.5	619,379.09	592,162.75	32° 42' 8.687 N	104° 2' 1.403 W
8,602.0	86.70	94.70	8,107.1	-24.3	642.2	619,373.43	592,227.42	32° 42' 8.629 N	104° 2' 0.647 W
8,666.0	87.20	93.90	8,110.5	-29.1	705.9	619,368.63	592,291.15	32° 42' 8.580 N	104° 1' 59.901 W
8,697.0	87.00	93.70	8,112.1	-31.1	736.8	619,366.58	592,322.05	32° 42' 8.559 N	104° 1' 59.540 W
8,760.0	87.10	93.70	8,115.3	-35.2	799.6	619,362.52	592,384.83	32° 42' 8.517 N	104° 1' 58.805 W
8,823.0	89.30	94.00	8,117.3	-39.4	862.5	619,358.29	592,447.65	32° 42' 8.473 N	104° 1' 58.070 W
8,886.0	89.40	93.90	8,118.0	-43.7	925.3	619,353.96	592,510.50	32° 42' 8.429 N	104° 1' 57.334 W
8,949.0	89.30	93.30	8,118.7	-47.7	988.2	619,350.00	592,573.37	32° 42' 8.388 N	104° 1' 56.599 W
8,981.0	88.50	93.20	8,119.3	-49.5	1,020.1	619,348.19	592,605.31	32° 42' 8.369 N	104° 1' 56.225 W
9,013.0	88.60	92.80	8,120.1	-51.2	1,052.1	619,346.51	592,637.26	32° 42' 8.352 N	104° 1' 55.851 W
9,076.0	89.50	91.90	8,121.2	-53.8	1,115.0	619,343.93	592,700.20	32° 42' 8.324 N	104° 1' 55.115 W
9,139.0	89.10	91.60	8,121.9	-55.7	1,178.0	619,342.00	592,763.16	32° 42' 8.303 N	104° 1' 54.378 W
9,202.0	88.40	90.20	8,123.3	-56.7	1,240.9	619,341.02	592,826.14	32° 42' 8.292 N	104° 1' 53.641 W
9,265.0	89.40	90.00	8,124.5	-56.8	1,303.9	619,340.91	592,889.12	32° 42' 8.289 N	104° 1' 52.904 W
9,329.0	89.50	89.60	8,125.1	-56.6	1,367.9	619,341.13	592,953.12	32° 42' 8.289 N	104° 1' 52.155 W
9,392.0	89.70	88.90	8,125.6	-55.8	1,430.9	619,341.95	593,016.11	32° 42' 8.296 N	104° 1' 51.418 W
9,455.0	90.00	87.70	8,125.7	-53.9	1,493.9	619,343.82	593,079.08	32° 42' 8.313 N	104° 1' 50.681 W
9,518.0	89.30	89.30	8,126.1	-52.2	1,556.9	619,345.47	593,142.06	32° 42' 8.327 N	104° 1' 49.944 W
9,582.0	89.30	88.60	8,126.9	-51.1	1,620.8	619,346.64	593,206.04	32° 42' 8.337 N	104° 1' 49.195 W
9,645.0	89.30	88.40	8,127.7	-49.4	1,683.8	619,348.29	593,269.02	32° 42' 8.351 N	104° 1' 48.458 W
9,708.0	90.00	88.60	8,128.1	-47.8	1,746.8	619,349.94	593,331.99	32° 42' 8.366 N	104° 1' 47.721 W
9,772.0	90.10	88.60	8,128.0	-46.2	1,810.8	619,351.51	593,395.98	32° 42' 8.380 N	104° 1' 46.972 W
9,835.0	89.00	89.60	8,128.5	-45.2	1,873.8	619,352.50	593,458.96	32° 42' 8.388 N	104° 1' 46.235 W
9,898.0	89.20	91.10	8,129.5	-45.6	1,936.7	619,352.11	593,521.95	32° 42' 8.382 N	104° 1' 45.497 W
9,961.0	87.90	91.10	8,131.1	-46.8	1,999.7	619,350.90	593,584.92	32° 42' 8.368 N	104° 1' 44.761 W
10,025.0	87.60	90.90	8,133.6	-47.9	2,063.7	619,349.79	593,648.86	32° 42' 8.355 N	104° 1' 44.012 W
10,088.0	87.80	90.90	8,136.1	-48.9	2,126.6	619,348.80	593,711.80	32° 42' 8.344 N	104° 1' 43.276 W
10,151.0	87.60	90.50	8,138.7	-49.7	2,189.5	619,348.03	593,774.75	32° 42' 8.334 N	104° 1' 42.539 W
10,215.0	87.40	89.60	8,141.5	-49.7	2,253.5	619,347.97	593,838.68	32° 42' 8.332 N	104° 1' 41.791 W
10,278.0	87.80	90.00	8,144.1	-49.5	2,316.4	619,348.19	593,901.63	32° 42' 8.332 N	104° 1' 41.054 W
10,341.0	87.80	91.10	8,146.5	-50.1	2,379.4	619,347.59	593,964.58	32° 42' 8.325 N	104° 1' 40.318 W
10,404.0	88.50	91.80	8,148.5	-51.7	2,442.3	619,345.99	594,027.52	32° 42' 8.307 N	104° 1' 39.581 W
10,467.0	89.90	92.30	8,149.4	-54.0	2,505.3	619,343.74	594,090.48	32° 42' 8.283 N	104° 1' 38.844 W
10,530.0	90.50	92.30	8,149.2	-56.5	2,568.2	619,341.21	594,153.43	32° 42' 8.256 N	104° 1' 38.108 W
10,593.0	90.30	92.80	8,148.8	-59.3	2,631.2	619,338.41	594,216.36	32° 42' 8.227 N	104° 1' 37.371 W
10,657.0	90.20	92.50	8,148.5	-62.3	2,695.1	619,335.45	594,280.29	32° 42' 8.196 N	104° 1' 36.623 W
10,720.0	90.40	92.10	8,148.2	-64.8	2,758.0	619,332.92	594,343.24	32° 42' 8.169 N	104° 1' 35.887 W
10,783.0	89.50	92.50	8,148.2	-67.3	2,821.0	619,330.39	594,406.19	32° 42' 8.142 N	104° 1' 35.150 W
10,845.0	89.70	92.30	8,148.6	-69.9	2,882.9	619,327.80	594,468.13	32° 42' 8.114 N	104° 1' 34.425 W
10,908.0	88.40	91.90	8,149.7	-72.2	2,945.9	619,325.49	594,531.08	32° 42' 8.090 N	104° 1' 33.689 W
10,971.0	88.40	92.10	8,151.4	-74.4	3,008.8	619,323.29	594,594.02	32° 42' 8.066 N	104° 1' 32.952 W
11,034.0	87.80	91.90	8,153.5	-76.6	3,071.7	619,321.09	594,656.94	32° 42' 8.043 N	104° 1' 32.216 W
11,097.0	88.10	92.30	8,155.8	-78.9	3,134.7	619,318.79	594,719.86	32° 42' 8.018 N	104° 1' 31.479 W
11,161.0	88.50	91.90	8,157.7	-81.3	3,198.6	619,316.44	594,783.79	32° 42' 7.993 N	104° 1' 30.731 W
11,224.0	88.30	90.90	8,159.4	-82.8	3,261.5	619,314.90	594,846.75	32° 42' 7.976 N	104° 1' 29.995 W
11,287.0	88.20	90.90	8,161.4	-83.8	3,324.5	619,313.92	594,909.71	32° 42' 7.964 N	104° 1' 29.258 W
11,351.0	88.50	90.70	8,163.2	-84.7	3,388.5	619,313.02	594,973.68	32° 42' 7.954 N	104° 1' 28.509 W
11,414.0	89.30	90.50	8,164.4	-85.3	3,451.5	619,312.36	595,036.66	32° 42' 7.945 N	104° 1' 27.772 W
11,477.0	89.30	89.60	8,165.2	-85.4	3,514.5	619,312.31	595,099.65	32° 42' 7.943 N	104° 1' 27.035 W
11,541.0	88.50	90.00	8,166.4	-85.2	3,578.4	619,312.53	595,163.64	32° 42' 7.943 N	104° 1' 26.286 W



Stryker Directional

Survey Report - Geographic



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Bradley 36 LI State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Site:	Section 36-18S-29E Bradley 36 LI	MD Reference:	GL 3442 + 20 @ 3462.0usft (Patterson#45)
Well:	Bradley 36 LI State Com #1H	North Reference:	Grid
Wellbore:	Original hole	Survey Calculation Method:	Minimum Curvature
Design:	Original hole	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,604.0	88.80	89.60	8,167.9	-85.0	3,641.4	619,312.75	595,226.62	32° 42' 7.944 N	104° 1' 25.549 W
11,668.0	89.40	90.90	8,168.9	-85.2	3,705.4	619,312.47	595,290.61	32° 42' 7.939 N	104° 1' 24.800 W
11,731.0	89.80	90.90	8,169.4	-86.2	3,768.4	619,311.48	595,353.60	32° 42' 7.927 N	104° 1' 24.063 W
11,794.0	89.00	90.90	8,170.0	-87.2	3,831.4	619,310.49	595,416.59	32° 42' 7.916 N	104° 1' 23.326 W
11,858.0	88.60	90.30	8,171.4	-87.9	3,895.4	619,309.82	595,480.57	32° 42' 7.907 N	104° 1' 22.577 W
11,920.0	88.40	91.10	8,173.0	-88.6	3,957.3	619,309.07	595,542.55	32° 42' 7.898 N	104° 1' 21.852 W
11,984.0	88.80	91.10	8,174.5	-89.9	4,021.3	619,307.84	595,606.52	32° 42' 7.884 N	104° 1' 21.103 W
12,047.0	88.40	91.10	8,176.1	-91.1	4,084.3	619,306.63	595,669.49	32° 42' 7.870 N	104° 1' 20.366 W
12,110.0	87.80	91.10	8,178.2	-92.3	4,147.2	619,305.42	595,732.44	32° 42' 7.857 N	104° 1' 19.630 W
12,173.0	88.30	90.90	8,180.3	-93.4	4,210.2	619,304.32	595,795.39	32° 42' 7.844 N	104° 1' 18.893 W
12,236.0	88.60	90.90	8,182.0	-94.4	4,273.2	619,303.33	595,858.36	32° 42' 7.832 N	104° 1' 18.156 W
12,300.0	90.00	91.10	8,182.8	-95.5	4,337.1	619,302.21	595,922.35	32° 42' 7.819 N	104° 1' 17.407 W
12,363.0	90.40	90.90	8,182.6	-96.6	4,400.1	619,301.11	595,985.34	32° 42' 7.807 N	104° 1' 16.670 W
12,426.0	88.80	91.10	8,183.0	-97.7	4,463.1	619,300.02	596,048.32	32° 42' 7.794 N	104° 1' 15.933 W
12,458.0	88.70	91.20	8,183.7	-98.3	4,495.1	619,299.37	596,080.31	32° 42' 7.787 N	104° 1' 15.559 W
12,489.0	89.30	91.20	8,184.3	-99.0	4,526.1	619,298.72	596,111.30	32° 42' 7.779 N	104° 1' 15.196 W
12,553.0	89.60	92.10	8,184.9	-100.8	4,590.1	619,296.88	596,175.27	32° 42' 7.759 N	104° 1' 14.448 W
12,670.0	89.60	92.10	8,185.7	-105.1	4,707.0	619,292.59	596,292.19	32° 42' 7.713 N	104° 1' 13.079 W

12670' MD Projcted to Bit - PBHL Bradley 36 LI State Com #1H

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,490.0	7,487.9	73.3	-88.2	7490' MD MS Gryo Survey
12,670.0	8,185.7	-105.1	4,707.0	12670' MD Projcted to Bit



Stryker Energy Directional Services, LLC

SURVEY CALCULATION REPORT

Minimum Curvature Calculations

Operator: Mewbourne Oil Company
Lease Name: Bradley 36 LI State Com #1H
API /Job Number: 30-015-41777 C131182
Comments: Tie in to MS Energy Gyro
Survey Company: Stryker MWD

Target KBTVD: 8,089 Feet
Target Angle: 88.66 Degrees
Section Plane: 91.54 Degrees
Declination Corrected to Grid: 7.38 Degrees
Bit to Survey Offset: 54 Feet

Survey Number	Measured Depth	Drift	Azimuth	Course	TVD	Vertical	+N/-S	+E/-W	BUR	DLS	KBTVD	+Above -Below Target
		(Degrees)	(Degrees)	Length	(Feet)	Section	(Feet)	(Feet)				
T/I	7,490	1.6	124.2	N/A	7,487.9	-90.1	73.3	-88.2	N/A	N/A	7490.0	599.0
1	7,528	4.2	108.5	38	7,525.9	-88.4	72.5	-86.5	6.9	7.1	7527.9	561.1
2	7,560	4.5	105.6	32	7,557.8	-86.0	71.8	-84.1	0.9	1.2	7559.8	529.2
3	7,591	5.5	99.8	31	7,588.6	-83.4	71.2	-81.5	3.2	3.6	7590.6	498.4
4	7,623	8.5	88.8	32	7,620.4	-79.5	71.0	-77.6	9.4	10.2	7622.3	466.7
5	7,655	12.5	84.7	32	7,651.9	-73.7	71.4	-71.8	12.5	12.7	7653.6	435.4
6	7,686	15.1	86.3	31	7,682.0	-66.4	72.0	-64.4	8.4	8.5	7683.5	405.5
7	7,718	17.9	88.9	32	7,712.6	-57.3	72.3	-55.4	8.8	9.0	7714.0	375.0
8	7,750	21.5	90.3	32	7,742.8	-46.5	72.4	-44.6	11.3	11.3	7743.9	345.1
9	7,781	23.2	91.6	31	7,771.4	-34.7	72.2	-32.8	5.5	5.7	7772.3	316.7
10	7,813	25.4	91.9	32	7,800.6	-21.6	71.8	-19.6	6.9	6.9	7801.1	287.9
11	7,845	28.0	93.7	32	7,829.2	-7.2	71.1	-5.3	8.1	8.5	7829.4	259.6
12	7,877	30.9	95.8	32	7,857.1	8.5	69.8	10.4	9.1	9.6	7856.9	232.1
13	7,908	34.4	97.6	31	7,883.2	25.2	67.8	27.0	11.3	11.7	7882.6	206.4
14	7,940	39.6	98.3	32	7,908.7	44.3	65.1	46.1	16.3	16.3	7907.7	181.3
15	7,972	44.3	98.1	32	7,932.5	65.5	62.1	67.2	14.7	14.7	7931.0	158.0
16	8,003	46.1	98.4	31	7,954.3	87.4	58.9	89.0	5.8	5.8	7952.3	136.7
17	8,035	48.6	99.5	32	7,976.0	110.7	55.3	112.2	7.8	8.2	7973.4	115.6
18	8,067	52.3	100.7	32	7,996.4	135.1	50.9	136.5	11.6	11.9	7993.2	95.8
19	8,099	56.3	101.4	32	8,015.1	160.7	45.9	162.0	12.5	12.6	8011.3	77.7
20	8,130	59.7	101.8	31	8,031.5	186.6	40.7	187.8	11.0	11.0	8027.1	61.9
21	8,162	63.1	102.5	32	8,046.8	214.2	34.7	215.2	10.6	10.8	8041.8	47.2
22	8,194	67.9	102.8	32	8,060.1	242.8	28.4	243.6	15.0	15.0	8054.4	34.6
23	8,225	71.3	102.0	31	8,070.9	271.3	22.1	272.0	11.0	11.2	8064.5	24.5
24	8,257	73.7	100.9	32	8,080.5	301.4	16.1	301.9	7.5	8.2	8073.4	15.6
25	8,289	76.0	99.7	32	8,088.9	331.9	10.5	332.3	7.2	8.0	8081.1	7.9
26	8,321	80.6	98.8	32	8,095.3	363.0	5.5	363.2	14.4	14.6	8086.9	2.1
27	8,351	86.4	97.9	30	8,098.7	392.5	1.2	392.7	19.3	19.6	8089.6	-0.6
28	8,441	89.5	95.8	90	8,102.0	482.1	-9.5	482.0	3.4	4.2	8090.7	-1.7
29	8,473	89.1	95.4	32	8,102.3	514.0	-12.7	513.8	-1.3	1.8	8090.3	-1.3
30	8,537	87.9	95.3	64	8,104.0	577.8	-18.6	577.5	-1.9	1.9	8090.5	-1.5
31	8,602	86.7	94.7	65	8,107.1	642.6	-24.3	642.2	-1.8	2.1	8092.0	-3.0
32	8,666	87.2	93.9	64	8,110.5	706.5	-29.1	705.9	0.8	1.5	8094.0	-5.0
33	8,697	87.0	93.7	31	8,112.1	737.4	-31.1	736.8	-0.6	0.9	8094.8	-5.8
34	8,760	87.1	93.7	63	8,115.3	800.3	-35.2	799.6	0.2	0.2	8096.6	-7.6
35	8,823	89.3	94.0	63	8,117.3	863.2	-39.4	862.4	3.5	3.5	8097.1	-8.1
36	8,886	89.4	93.9	63	8,118.0	926.1	-43.8	925.3	0.2	0.2	8096.3	-7.3
37	8,949	89.3	93.3	63	8,118.7	989.1	-47.7	988.2	-0.2	1.0	8095.6	-6.6
38	8,981	88.5	93.2	32	8,119.3	1,021.1	-49.5	1,020.1	-2.5	2.5	8095.4	-6.4
39	9,013	88.6	92.8	32	8,120.1	1,053.0	-51.2	1,052.0	0.3	1.3	8095.5	-6.5
40	9,076	89.5	91.9	63	8,121.2	1,116.0	-53.8	1,115.0	1.4	2.0	8095.1	-6.1
41	9,139	89.1	91.6	63	8,121.9	1,179.0	-55.7	1,177.9	-0.6	0.8	8094.4	-5.4
42	9,202	88.4	90.2	63	8,123.3	1,242.0	-56.7	1,240.9	-1.1	2.5	8094.3	-5.3
43	9,265	89.4	90.0	63	8,124.5	1,305.0	-56.8	1,303.9	1.6	1.6	8094.0	-5.0



Stryker Energy Directional Services, LLC

SURVEY CALCULATION REPORT

Minimum Curvature Calculations

Operator: Mewbourne Oil Company
 Lease Name: Bradley 36 LI State Com #1H
 API /Job Number: 30-015-41777 C131182
 Comments: Tie in to MS Energy Gyro
 Survey Company: Stryker MWD

Target KBTVD: 8,089 Feet
 Target Angle: 88.66 Degrees
 Section Plane: 91.54 Degrees
 Declination Corrected to Grid: 7.38 Degrees
 Bit to Survey Offset: 54 Feet

Survey Number	Measured Depth	Drift (Degrees)	Azimuth (Degrees)	Course Length	TVD (Feet)	Vertical Section	+N/-S (Feet)	+E/-W (Feet)	BUR	DLS	KBTVD	+Above -Below Target
44	9,329	89.5	89.6	64	8,125.1	1,368.9	-56.6	1,367.9	0.2	0.6	8093.1	-4.1
45	9,392	89.7	88.9	63	8,125.6	1,431.9	-55.8	1,430.9	0.3	1.2	8092.1	-3.1
46	9,455	90.0	87.7	63	8,125.7	1,494.8	-53.9	1,493.9	0.5	2.0	8090.8	-1.8
47	9,518	89.3	89.3	63	8,126.1	1,557.7	-52.2	1,556.8	-1.1	2.8	8089.7	-0.7
48	9,582	89.3	88.6	64	8,126.9	1,621.6	-51.1	1,620.8	0.0	1.1	8089.0	0.0
49	9,645	89.3	88.4	63	8,127.7	1,684.5	-49.4	1,683.8	0.0	0.3	8088.3	0.7
50	9,708	90.0	88.6	63	8,128.1	1,747.4	-47.8	1,746.8	1.1	1.2	8087.2	1.8
51	9,772	90.1	88.6	64	8,128.0	1,811.3	-46.2	1,810.8	0.2	0.2	8085.6	3.4
52	9,835	89.0	89.6	63	8,128.5	1,874.3	-45.2	1,873.7	-1.7	2.4	8084.7	4.3
53	9,898	89.2	91.1	63	8,129.5	1,937.3	-45.6	1,936.7	0.3	2.4	8084.2	4.8
54	9,961	87.9	91.1	63	8,131.1	2,000.2	-46.8	1,999.7	-2.1	2.1	8084.3	4.7
55	10,025	87.6	90.9	64	8,133.6	2,064.2	-47.9	2,063.6	-0.5	0.6	8085.3	3.7
56	10,088	87.8	90.9	63	8,136.1	2,127.1	-48.9	2,126.6	0.3	0.3	8086.4	2.6
57	10,151	87.6	90.5	63	8,138.7	2,190.1	-49.7	2,189.5	-0.3	0.7	8087.4	1.6
58	10,215	87.4	89.6	64	8,141.5	2,254.0	-49.7	2,253.5	-0.3	1.4	8088.7	0.3
59	10,278	87.8	90.0	63	8,144.1	2,316.9	-49.5	2,316.4	0.6	0.9	8089.9	-0.9
60	10,341	87.8	91.1	63	8,146.5	2,379.8	-50.1	2,379.3	0.0	1.7	8090.8	-1.8
61	10,404	88.5	91.8	63	8,148.5	2,442.8	-51.7	2,442.3	1.1	1.6	8091.4	-2.4
62	10,467	89.9	92.3	63	8,149.4	2,505.8	-54.0	2,505.2	2.2	2.4	8090.8	-1.8
63	10,530	90.5	92.3	63	8,149.2	2,568.8	-56.5	2,568.2	1.0	1.0	8089.1	-0.1
64	10,593	90.3	92.8	63	8,148.8	2,631.8	-59.3	2,631.1	-0.3	0.9	8087.2	1.8
65	10,657	90.2	92.5	64	8,148.5	2,695.8	-62.3	2,695.1	-0.2	0.5	8085.4	3.6
66	10,720	90.4	92.1	63	8,148.2	2,758.8	-64.8	2,758.0	0.3	0.7	8083.6	5.4
67	10,783	89.5	92.5	63	8,148.2	2,821.7	-67.3	2,821.0	-1.4	1.6	8082.2	6.8
68	10,845	89.7	92.3	62	8,148.6	2,883.7	-69.9	2,882.9	0.3	0.5	8081.2	7.8
69	10,908	88.4	91.9	63	8,149.7	2,946.7	-72.2	2,945.8	-2.1	2.2	8080.8	8.2
70	10,971	88.4	92.1	63	8,151.4	3,009.7	-74.4	3,008.8	0.0	0.3	8081.0	8.0
71	11,034	87.8	91.9	63	8,153.5	3,072.7	-76.6	3,071.7	-1.0	1.0	8081.7	7.3
72	11,097	88.1	92.3	63	8,155.8	3,135.6	-78.9	3,134.6	0.5	0.8	8082.4	6.6
73	11,161	88.5	91.9	64	8,157.7	3,199.6	-81.3	3,198.5	0.6	0.9	8082.8	6.2
74	11,224	88.3	90.9	63	8,159.4	3,262.6	-82.8	3,261.5	-0.3	1.6	8083.1	5.9
75	11,287	88.2	90.9	63	8,161.4	3,325.5	-83.8	3,324.5	-0.2	0.2	8083.6	5.4
76	11,351	88.5	90.7	64	8,163.2	3,389.5	-84.7	3,388.4	0.5	0.6	8083.9	5.1
77	11,414	89.3	90.5	63	8,164.4	3,452.5	-85.3	3,451.4	1.3	1.3	8083.7	5.3
78	11,477	89.3	89.6	63	8,165.2	3,515.4	-85.4	3,514.4	0.0	1.4	8083.0	6.0
79	11,541	88.5	90.0	64	8,166.4	3,579.4	-85.2	3,578.4	-1.3	1.4	8082.7	6.3
80	11,604	88.8	89.6	63	8,167.9	3,642.3	-85.0	3,641.4	0.5	0.8	8082.7	6.3
81	11,668	89.4	90.9	64	8,168.9	3,706.3	-85.2	3,705.4	0.9	2.2	8082.2	6.8
82	11,731	89.8	90.9	63	8,169.3	3,769.3	-86.2	3,768.4	0.6	0.6	8081.2	7.8
83	11,794	89.0	90.9	63	8,170.0	3,832.3	-87.2	3,831.3	-1.3	1.3	8080.4	8.6
84	11,858	88.6	90.3	64	8,171.3	3,896.3	-87.9	3,895.3	-0.6	1.1	8080.2	8.8
85	11,920	88.4	91.1	62	8,173.0	3,958.3	-88.6	3,957.3	-0.3	1.3	8080.4	8.6
86	11,984	88.8	91.1	64	8,174.5	4,022.2	-89.9	4,021.3	0.6	0.6	8080.4	8.6
87	12,047	88.4	91.1	63	8,176.1	4,085.2	-91.1	4,084.2	-0.6	0.6	8080.5	8.5



Stryker Energy Directional Services, LLC

SURVEY CALCULATION REPORT

Minimum Curvature Calculations

Operator: Mewbourne Oil Company
Lease Name: Bradley 36 LI State Com #1H
API /Job Number: 30-015-41777 C131182
Comments: Tie in to MS Energy Gyro
Survey Company: Stryker MWD

Target KBTVD: 8,089 Feet
Target Angle: 88.66 Degrees
Section Plane: 91.54 Degrees
Declination Corrected to Grid: 7.38 Degrees
Bit to Survey Offset: 54 Feet

Survey Number	Measured Depth	Drift (Degrees)	Azimuth (Degrees)	Course Length	TVD (Feet)	Vertical Section	+N/-S (Feet)	+E/-W (Feet)	BUR	DLS	KBTVD	+Above -Below Target
88	12,110	87.8	91.1	63	8,178.2	4,148.2	-92.3	4,147.2	-1.0	1.0	8081.1	7.9
89	12,173	88.3	90.9	63	8,180.3	4,211.1	-93.4	4,210.1	0.8	0.9	8081.8	7.2
90	12,236	88.6	90.9	63	8,182.0	4,274.1	-94.4	4,273.1	0.5	0.5	8082.0	7.0
91	12,300	90.0	91.1	64	8,182.8	4,338.1	-95.5	4,337.1	2.2	2.2	8081.3	7.7
92	12,363	90.4	90.9	63	8,182.6	4,401.1	-96.6	4,400.1	0.6	0.7	8079.6	9.4
93	12,426	88.8	91.1	63	8,183.0	4,464.1	-97.7	4,463.1	-2.5	2.6	8078.6	10.4
94	12,458	88.7	91.2	32	8,183.7	4,496.1	-98.3	4,495.1	-0.3	0.4	8078.5	10.5
95	12,489	89.3	91.2	31	8,184.3	4,527.1	-99.0	4,526.0	1.9	1.9	8078.4	10.6
96	12,553	89.6	92.1	64	8,184.9	4,591.1	-100.8	4,590.0	0.5	1.5	8077.5	11.5
BIT	12,670	89.6	92.8	117	8,185.7	4,708.0	-105.8	4,706.9	0.0	0.6	8075.6	13.4
Target	12,675	89.0	92.1	5	8,185.7	4,713.0	-106.0	4,711.9	-12.0	18.4	8075.5	13.5

Closure Distance @ T.D. : 4713.1 Feet

Closure Direction @ T.D. : 91.3 Degrees

Distance from Section Line @ T.D. : 20.6 Feet Left of Section Line



Company: Mewbourne Oil Company	Operator: Daniel West
Lease / Well: BRADLEY 36LI STATE COM #1H	Job Number: SVM0-131115
County/Parish: Eddy County	Gyro Serial #: 168
State: New Mexico	Proposed Direction: 91.47
Date: 12/16/2013	Mag. Declination: 7.38 East to Grid
API#: 30-015 41777	Rig/RKB: PATTERSON 21 ft.
Dir. Company: N/A	Tie-in Company: N/A
Latitude:	X: N/A
Longitude:	Y: N/A

TIE-IN Survey					
Measured Depth (ft.)	Inclination	Azimuth Bearing	Vertical Depth	Coordinates (+N/-S)	Coordinates (+E/-W)
0.00	0.00	0.00	0.00	0.00	0.00

Digital Multi-Shot Survey Report									
Measured Depth (ft.)	Inclination	Azimuth Bearing	Vertical Depth	Vertical Section	Coordinates (+N/-S)	Coordinates (+E/-W)	Dog-Leg / 100 ft.	Closure Distance	Closure Direction
200.00	0.62	4.15	200.00	0.05	1.08	0.08	0.31	1.08	4.15
400.00	1.16	304.82	399.97	-1.59	3.31	-1.51	0.50	3.64	335.57
600.00	1.24	304.99	599.93	-5.09	5.71	-4.94	0.04	7.55	319.14
800.00	1.06	320.01	799.89	-8.11	8.37	-7.90	0.17	11.51	316.65
1000.00	1.02	5.71	999.86	-9.21	11.56	-8.91	0.40	14.60	322.36
1200.00	1.12	16.51	1199.83	-8.57	15.20	-8.18	0.11	17.27	331.72
1400.00	1.12	5.31	1399.79	-7.93	19.02	-7.44	0.11	20.43	338.63
1600.00	0.92	344.83	1599.76	-8.26	22.52	-7.68	0.21	23.79	341.16
1800.00	0.67	337.51	1799.74	-9.19	25.15	-8.55	0.13	26.56	341.22
2000.00	0.63	329.60	1999.72	-10.25	27.18	-9.56	0.05	28.81	340.63
2200.00	0.36	323.35	2199.72	-11.22	28.63	-10.49	0.14	30.49	339.88
2400.00	0.25	326.68	2399.71	-11.85	29.50	-11.10	0.06	31.52	339.38
2600.00	0.17	319.37	2599.71	-12.30	30.09	-11.53	0.04	32.22	339.03
2800.00	0.19	342.22	2799.71	-12.61	30.63	-11.83	0.04	32.84	338.88
3000.00	0.29	315.43	2999.71	-13.08	31.31	-12.29	0.07	33.63	338.57
3200.00	0.53	300.36	3199.70	-14.26	32.14	-13.44	0.13	34.83	337.31
3400.00	0.72	300.56	3399.69	-16.17	33.24	-15.32	0.10	36.60	335.26
3600.00	0.95	286.38	3599.67	-18.87	34.35	-17.99	0.15	38.77	332.35
3800.00	2.26	271.23	3799.59	-24.41	34.90	-23.53	0.68	42.09	326.02
4000.00	2.55	282.54	3999.41	-32.72	35.95	-31.81	0.28	48.00	318.50
4200.00	1.83	287.47	4199.27	-40.16	37.88	-39.20	0.37	54.51	314.02
4400.00	1.31	300.91	4399.19	-45.22	40.01	-44.21	0.32	59.62	312.15
4600.00	1.48	302.00	4599.13	-49.44	42.55	-48.36	0.09	64.42	311.34
4800.00	1.09	298.62	4799.08	-53.35	44.83	-52.22	0.20	68.82	310.65
5000.00	0.69	303.13	4999.06	-56.07	46.40	-54.90	0.20	71.88	310.21
5200.00	0.81	304.06	5199.04	-58.29	47.85	-57.08	0.06	74.48	309.97
5400.00	0.86	292.97	5399.02	-60.87	49.23	-59.63	0.08	77.33	309.54
5600.00	0.78	306.41	5599.00	-63.39	50.62	-62.11	0.10	80.13	309.18
5800.00	1.02	206.73	5798.98	-65.26	49.84	-64.00	0.69	81.12	307.91
6000.00	1.01	248.09	5998.95	-67.64	47.59	-66.44	0.36	81.73	305.61
6200.00	3.22	320.39	6198.83	-72.95	51.26	-71.66	1.53	88.11	305.58
6400.00	3.75	324.62	6398.46	-80.56	60.92	-79.03	0.29	99.78	307.63
6600.00	2.63	326.61	6598.15	-87.11	70.09	-85.34	0.56	110.43	309.40
6800.00	1.48	333.11	6798.01	-90.96	76.22	-89.03	0.59	117.20	310.57
7000.00	0.47	253.14	6997.99	-92.96	78.29	-90.99	0.74	120.03	310.71
7200.00	0.40	214.35	7197.98	-94.12	77.47	-92.16	0.15	120.40	310.05
7400.00	1.75	131.51	7397.95	-92.16	74.87	-90.27	0.87	117.28	309.67
7490.00	1.58	124.20	7487.91	-90.07	73.26	-88.22	0.30	114.67	309.71