

3001541679

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
RUGER 31 LI FEDERAL 1H
EDDY

080-0151

STATE OF NEW MEXICO
DEVIATION REPORT

331	1.95
751	3.30
870	3.39
1,052	2.60
1,354	2.03
1,639	2.89
2,030	2.40
2,496	2.40
2,962	1.10
3,450	1.43
3,925	1.45
4,400	1.36
4,878	1.43
5,378	1.54
5,834	1.80
6,311	1.80
6,756	1.30
7,256	1.60
7,743	0.50

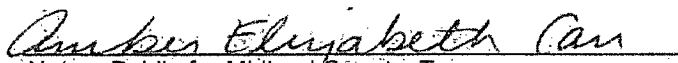
BY: 

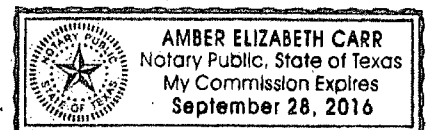
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on
Daisy Carrillo on behalf of Patterson-UTi Drilling Company LLC.

8/13/14, by


Notary Public for Midland County, Texas
My Commission Expires:





COMPANY: Mewbourne Oil Company
 WELL: Ruger 31 LI Fed Com #1H
 COUNTY: Eddy County, New Mexico
 DATUM: NAD 1927 (NADCON CONUS)
 RIG: Patterson #80



OFFICE: 936.582.7294

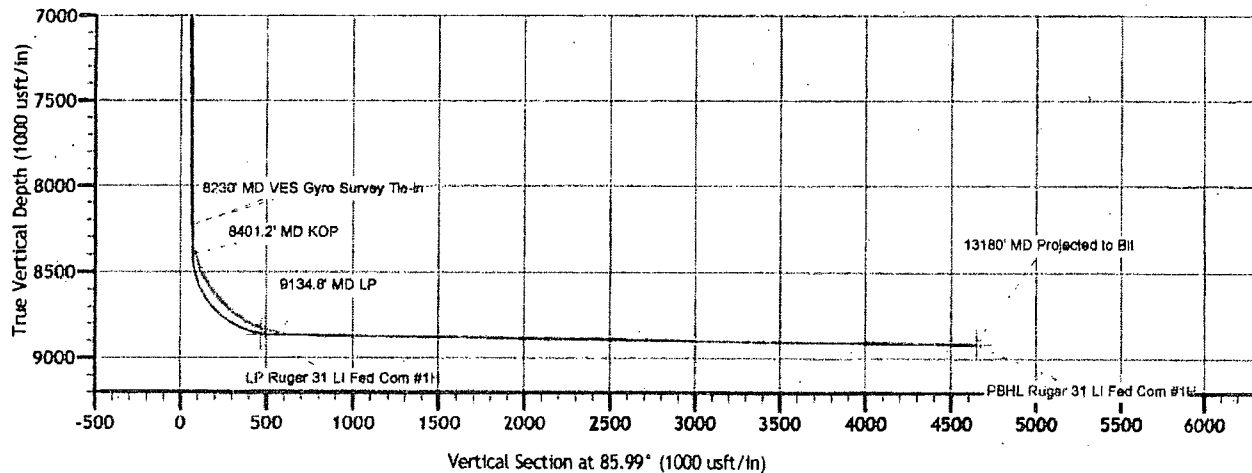
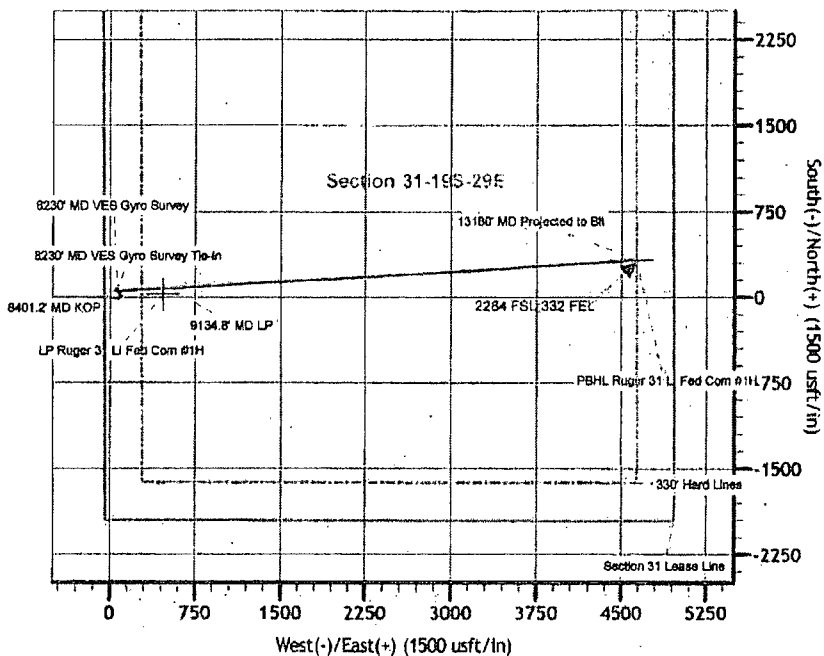
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.38°

GEODETTIC ZONE: New Mexico East 3001						
3290 + 20 @ 3310.0usft (Patterson #80)						
GROUND ELEVATION: 3290.0						
+N-S	+E-W	North	East	Latitude	Longitude	Spot
0.0	0.0	587854.69	565313.65	32° 38' 56.396 N	104° 7' 18.383 W	

PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSecl	Target
1	8230.0	1.49	122.57	8226.5	58.7	84.4	0.00	0.00	88.4	
2	8401.2	1.48	122.57	8397.7	59.3	88.2	0.00	0.00	72.0	
3	9134.8	69.23	86.54	8865.0	77.7	539.7	12.00	-38.05	542.6	
4	13239.8	69.23	86.54	8920.0	325.4	4835.9	0.00	0.00	4647.3	PBHL Ruger 31 LI Fed Com #1H

Section 31-19S-29E Ruger 31 DA Federal #1H

Azimuths to Grid North
 True North: -0.11°
 Magnetic North: 7.38°
 Magnetic Field
 Strength: 48485.4nT
 Dip Angle: 60.36°
 Date: 7/11/2014
 Model: IGRF2010





August 14, 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
Ruger 31 LI Federal Com #001H
Winchester; Bone Spring
Eddy County, New Mexico
API# 30-015-41679

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>
Ryan Steglich	Original Hole	8,306 ft. to 13,126 ft.	07-11-14 to 07-22-14	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\Ruger 31 LI Federal Com #1HM141145

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



August 14, 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 July 11, 2014 thru July 22, 2014, conduct or supervise the taking of a SEDS MWD Survey from a depth of 8,306 feet to 13,126 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 Ruger 31 LI Federal Com #001H well, API # **30-015-41679** 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: M141145

Company: Mawbourn Oil Company

Lease/Well: Ruger 31 LI Federal # 1 H

Location: Eddy County

Rig Name: Patterson Rig # 80

RKB: N/A

G.L. or M.S.L.: N/A

State/Country: New Mexico / USA

Declination: 7.38° Corrected To Grid

Grid: 7.38°

File name: C:\WINSERVE\DOCS\M141145.SVY

Date/Time: 14-Aug-14 / 09:18

Curve Name: SES MWD SURVEY RAN ON 7-11-14

Styker Energy Directional Services, LLC.

WINSERVE SURVEY CALCULATIONS Minimum Curvature Method Vertical Section Plane 85.99° 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 VES Gyro Survey									
8230.00	1.49	122.57	8226.51	58.67	64.44	68.39	87.15	47.68	.00
8306.00	3.40	123.40	8302.44	56.90	67.15	70.97	88.02	49.73	2.51
8337.00	7.70	103.00	8333.29	55.92	69.95	73.69	89.55	51.36	15.05
8369.00	12.00	93.20	8364.81	55.26	75.36	79.04	93.45	53.75	14.38
8401.00	15.70	86.50	8395.88	55.33	83.01	86.67	99.76	56.31	12.58
8433.00	17.80	83.50	8426.52	56.15	92.19	95.89	107.94	58.65	7.09
8465.00	20.50	82.60	8456.74	57.43	102.61	106.37	117.58	60.76	8.49
8496.00	24.10	83.30	8485.42	58.87	114.28	118.12	128.55	62.75	11.64
8528.00	25.70	84.40	8514.45	60.31	127.67	131.58	141.20	64.72	5.21
8560.00	28.60	86.00	8542.92	61.52	142.22	146.18	154.96	66.61	9.34
8592.00	32.80	84.00	8570.43	62.96	158.49	162.51	170.54	68.34	13.51
8623.00	37.40	85.30	8595.78	64.61	176.23	180.32	187.70	69.87	15.03
8655.00	39.10	84.90	8620.91	66.30	195.97	200.13	206.88	71.31	5.37
8687.00	40.00	83.30	8645.59	68.40	216.24	220.49	226.80	72.45	4.25
8718.00	42.70	86.00	8668.86	70.29	236.63	240.96	246.85	73.45	10.44
8750.00	47.30	86.80	8691.48	71.71	259.20	263.58	268.94	74.54	14.48
8781.00	49.90	87.90	8711.98	72.78	282.43	286.83	291.65	75.55	8.80
8813.00	52.00	89.00	8732.14	73.45	307.27	311.65	315.92	76.56	7.08
8845.00	54.20	89.00	8751.35	73.89	332.85	337.20	340.96	77.48	6.87
8877.00	57.00	88.60	8769.43	74.45	359.25	363.57	366.88	78.29	8.81
8909.00	59.60	88.80	8786.24	75.07	386.46	390.77	393.69	79.01	8.14
8941.00	63.10	89.10	8801.58	75.58	414.54	418.81	421.37	79.67	10.97
8972.00	66.10	89.30	8814.88	75.97	442.53	446.76	449.01	80.26	9.69
9004.00	69.40	88.80	8826.99	76.46	472.14	476.33	478.29	80.80	10.41

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
9036.00	72.60	87.90	8837.41	77.33	502.38	506.56	508.30	81.25	10.35
9068.00	75.40	86.10	8846.23	78.95	533.10	537.31	538.91	81.58	10.29
9100.00	79.00	84.40	8853.32	81.53	564.19	568.51	570.05	81.78	12.39
9132.00	82.50	82.80	8858.46	85.06	595.57	600.06	601.61	81.87	12.00
9164.00	85.20	82.40	8861.89	89.15	627.12	631.82	633.42	81.91	8.53
9196.00	85.80	83.00	8864.40	93.21	658.76	663.66	665.32	81.95	2.65
9228.00	86.30	84.60	8866.60	96.66	690.49	695.56	697.23	82.03	5.23
9259.00	87.20	85.40	8868.36	99.35	721.33	726.51	728.14	82.16	3.88
9291.00	87.80	85.60	8869.76	101.86	753.20	758.48	760.05	82.30	1.98
9323.00	88.00	85.40	8870.93	104.37	785.08	790.45	791.98	82.43	.88
9419.00	91.50	87.70	8871.35	110.15	880.88	886.43	887.74	82.87	4.36
9515.00	89.10	88.20	8870.85	113.58	976.81	982.36	983.39	83.37	2.55
9610.00	89.30	87.70	8872.17	116.98	1071.74	1077.30	1078.11	83.77	.57
9705.00	88.50	87.70	8874.00	120.79	1166.65	1172.24	1172.88	84.09	.84
9801.00	89.10	87.90	8876.01	124.47	1262.55	1268.17	1268.67	84.37	.66
9896.00	89.90	87.00	8876.84	128.70	1357.45	1363.13	1363.54	84.58	1.27
9991.00	90.70	86.80	8876.34	133.84	1452.31	1458.12	1458.47	84.73	.87
10087.00	91.20	86.00	8874.75	139.86	1548.11	1554.10	1554.41	84.84	.98
10183.00	88.30	87.20	8875.17	145.56	1643.93	1650.08	1650.36	84.94	3.27
10278.00	88.50	87.00	8877.82	150.36	1738.77	1745.03	1745.26	85.06	.30
10374.00	87.90	86.30	8880.83	155.97	1834.56	1840.97	1841.17	85.14	.96
10469.00	89.10	87.70	8883.32	160.94	1929.39	1935.92	1936.09	85.23	1.94
10564.00	89.10	87.40	8884.81	165.00	2024.29	2030.87	2031.00	85.34	.32
10660.00	89.90	87.70	8885.65	169.10	2120.20	2126.83	2126.93	85.44	.89
10755.00	89.70	87.40	8885.98	173.16	2215.11	2221.80	2221.87	85.53	.38
10850.00	90.00	86.70	8886.23	178.05	2309.98	2316.78	2316.84	85.59	.80
10944.00	90.70	86.50	8885.66	183.63	2403.82	2410.77	2410.82	85.63	.77
11038.00	89.20	86.30	8885.74	189.53	2497.63	2504.77	2504.81	85.66	1.61
11134.00	90.00	85.80	8886.41	196.14	2593.40	2600.76	2600.80	85.67	.98
11228.00	87.90	87.40	8888.13	201.72	2687.21	2694.73	2694.77	85.71	2.81
11323.00	88.50	87.50	8891.12	205.94	2782.07	2789.66	2789.68	85.77	.64
11419.00	87.70	87.00	8894.30	210.54	2877.90	2885.58	2885.59	85.82	.98
11514.00	87.20	86.80	8898.53	215.68	2972.67	2980.47	2980.48	85.85	.57
11609.00	88.70	86.10	8901.92	221.55	3067.42	3075.41	3075.41	85.87	1.74
11704.00	89.30	86.10	8903.58	228.01	3162.19	3170.39	3170.40	85.88	.63
11799.00	89.50	86.50	8904.58	234.14	3256.98	3265.38	3265.39	85.89	.47
11894.00	90.10	86.10	8904.91	240.28	3351.78	3360.38	3360.39	85.90	.76
11989.00	89.40	85.60	8905.32	247.15	3446.53	3455.38	3455.38	85.90	.91
12085.00	90.70	84.90	8905.24	255.10	3542.20	3551.37	3551.37	85.88	1.54
12180.00	92.00	84.00	8903.00	264.28	3636.73	3646.30	3646.32	85.84	1.66
12275.00	90.10	85.10	8901.26	273.30	3731.28	3741.25	3741.27	85.81	2.31
12371.00	90.70	84.90	8900.59	281.67	3826.91	3837.24	3837.26	85.79	.66
12466.00	90.00	86.70	8900.01	288.63	3921.65	3932.23	3932.25	85.79	2.03
12562.00	89.90	86.70	8900.09	294.15	4017.49	4028.22	4028.24	85.81	.10
12657.00	89.70	87.20	8900.42	299.21	4112.35	4123.21	4123.22	85.84	.57

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
12752.00	87.70	87.40	8902.58	303.68	4207.22	4218.15	4218.16	85.87	2.12
12847.00	88.10	86.80	8906.06	308.49	4302.03	4313.07	4313.08	85.90	.76
12942.00	89.60	86.00	8907.97	314.45	4396.82	4408.05	4408.05	85.91	1.79
13038.00	88.90	85.80	8909.22	321.31	4492.57	4504.04	4504.04	85.91	.76
13126.00	90.40	86.70	8909.76	327.07	4580.37	4592.03	4592.03	85.92	1.99

Projection to Total Depth

13180.00	90.40	86.70	8909.38	330.18	4634.28	4646.03	4646.03	85.92	.00
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