



MEWBOURNE
OIL COMPANY

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Mewbourne Oil Company

Eddy County, N.M. Nad (83)

Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA Fed

Buffalo Trace 1-36 W1PA Fed Com 2H

Original Hole

Design: Original Hole

Standard Survey Report

30 January, 2019

STRYKER
DIRECTIONAL

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA Fed	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Project	Eddy County, N.M. Nad (83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA Fed			
Site Position:		Northing:	386,802.27 usft	Latitude:	32° 3' 45.944 N
From:	Map	Easting:	665,818.48 usft	Longitude:	103° 55' 53.378 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.21 °

Well	Buffalo Trace 1-36 W1PA Fed Com 2H					
Well Position	+N/-S	0.0 usft	Northing:	386,802.27 usft	Latitude:	32° 3' 45.944 N
	+E/-W	0.0 usft	Easting:	665,818.48 usft	Longitude:	103° 55' 53.378 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,038.0 usft

Wellbore	Original Hole				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/12/18	6.95	59.84	47,654.43454808

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	1.03

Survey Program		Date	01/30/19		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
1,037.0	20,975.0	Survey #1 (Original Hole)	MWD	MWD v3:standard declination	

Survey	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	881.0	0.90	310.63	881.0	5.5	0.0	5.5	0.00	0.00	0.00
	1,037.0	2.50	270.20	1,036.9	6.3	-4.3	6.3	1.22	1.03	-25.92
	1,228.0	1.50	22.80	1,227.8	8.6	-7.5	8.5	1.77	-0.52	58.95
	1,418.0	1.60	46.20	1,417.8	12.8	-4.7	12.7	0.33	0.05	12.32
	1,608.0	1.20	34.20	1,607.7	16.3	-1.6	16.2	0.26	-0.21	-6.32
	1,798.0	0.90	11.50	1,797.7	19.4	-0.2	19.4	0.27	-0.16	-11.95
	1,988.0	0.70	15.60	1,987.7	21.9	0.4	22.0	0.11	-0.11	2.16
	2,177.0	1.10	34.60	2,176.6	24.6	1.7	24.6	0.26	0.21	10.05
	2,368.0	1.10	58.50	2,367.6	27.0	4.3	27.1	0.24	0.00	12.51
	2,558.0	1.10	69.60	2,557.6	28.6	7.6	28.7	0.11	0.00	5.84

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Well:	Buffalo Trace 1-36 W1PA Fed Com 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)
2,748.0	1.80	92.80	2,747.5	29.1	12.3	29.3	0.47	0.37	12.21
2,938.0	1.70	100.90	2,937.4	28.4	18.0	28.7	0.14	-0.05	4.26
3,128.0	2.40	96.20	3,127.3	27.5	24.8	27.9	0.38	0.37	-2.47
3,282.0	1.40	92.30	3,281.2	27.0	29.9	27.6	0.65	-0.65	-2.53
3,449.0	0.80	64.50	3,448.2	27.5	32.9	28.0	0.47	-0.36	-16.65
3,640.0	2.90	30.90	3,639.1	32.2	36.6	32.8	1.19	1.10	-17.59
3,829.0	4.40	32.20	3,827.7	42.4	42.9	43.2	0.79	0.79	0.69
4,019.0	4.70	37.20	4,017.1	54.8	51.5	55.7	0.26	0.16	2.63
4,210.0	6.30	46.50	4,207.2	68.2	63.9	69.4	0.96	0.84	4.87
4,399.0	5.40	50.30	4,395.2	81.0	78.2	82.4	0.52	-0.48	2.01
4,590.0	5.30	50.40	4,585.4	92.4	91.9	94.1	0.05	-0.05	0.05
4,779.0	5.40	49.50	4,773.6	103.7	105.4	105.6	0.07	0.05	-0.48
4,969.0	4.60	51.80	4,962.8	114.3	118.2	116.4	0.43	-0.42	1.21
5,158.0	4.00	50.70	5,151.3	123.1	129.3	125.4	0.32	-0.32	-0.58
5,348.0	3.90	51.70	5,340.9	131.3	139.5	133.8	0.06	-0.05	0.53
5,537.0	3.40	52.10	5,529.5	138.8	148.9	141.4	0.26	-0.26	0.21
5,727.0	3.70	35.20	5,719.1	147.2	156.9	150.0	0.57	0.16	-8.89
5,917.0	4.50	28.40	5,908.6	158.8	164.0	161.7	0.49	0.42	-3.58
6,108.0	5.10	47.50	6,099.0	171.1	173.8	174.2	0.89	0.31	10.00
6,298.0	4.40	48.00	6,288.3	181.7	185.5	185.0	0.37	-0.37	0.26
6,488.0	4.10	48.50	6,477.8	191.1	196.0	194.6	0.16	-0.16	0.26
6,677.0	3.70	52.20	6,666.3	199.3	205.9	203.0	0.25	-0.21	1.96
6,867.0	5.00	52.00	6,855.8	208.2	217.2	212.0	0.68	0.68	-0.11
7,057.0	4.40	50.20	7,045.2	217.9	229.3	222.0	0.33	-0.32	-0.95
7,247.0	4.10	55.30	7,234.6	226.4	240.5	230.8	0.25	-0.16	2.68
7,437.0	3.00	63.80	7,424.3	232.5	250.6	237.0	0.64	-0.58	4.47
7,628.0	1.80	31.00	7,615.1	237.3	256.6	241.9	0.93	-0.63	-17.17
7,818.0	2.00	358.70	7,805.0	243.2	258.1	247.8	0.57	0.11	-17.00
8,009.0	3.00	15.40	7,995.8	251.3	259.3	256.0	0.64	0.52	8.74
8,198.0	4.90	18.60	8,184.4	263.7	263.2	268.4	1.01	1.01	1.69
8,388.0	5.00	62.60	8,373.7	275.2	273.1	280.1	1.95	0.05	23.16
8,578.0	3.70	59.60	8,563.2	282.1	285.8	287.3	0.69	-0.68	-1.58
8,768.0	4.20	69.00	8,752.7	287.7	297.6	293.1	0.43	0.26	4.95
8,957.0	3.50	85.00	8,941.3	290.7	309.8	296.3	0.67	-0.37	8.47
9,148.0	4.60	67.30	9,131.8	294.2	322.7	300.0	0.87	0.58	-9.27
9,339.0	5.40	48.60	9,322.1	303.1	336.5	309.1	0.94	0.42	-9.79
9,528.0	4.60	35.50	9,510.4	315.1	347.5	321.4	0.73	-0.42	-6.93
9,717.0	2.90	45.80	9,699.0	324.6	355.4	331.0	0.96	-0.90	5.45
9,907.0	1.90	40.10	9,888.8	330.4	360.8	336.9	0.54	-0.53	-3.00
10,013.0	1.59	42.87	9,994.8	332.8	363.0	339.3	0.30	-0.29	2.62
B.B. Buffalo Trace 1-36 W1PA Fed Com 2H									
10,018.2	1.57	43.04	10,000.0	332.9	363.1	339.4	0.30	-0.29	3.16

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Well:	Buffalo Trace 1-36 W1PA Fed Com 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)
B.B. 2 Buffalo Trace 1-36 W1AP Fed Com 2H									
10,044.0	1.50	43.90	10,025.8	333.4	363.5	339.9	0.30	-0.29	3.34
10,128.0	3.10	16.40	10,109.7	336.4	364.9	342.9	2.26	1.90	-32.74
10,175.0	8.70	2.30	10,156.4	341.2	365.5	347.7	12.22	11.91	-30.00
10,223.0	13.60	358.70	10,203.5	350.5	365.5	357.0	10.31	10.21	-7.50
10,270.0	20.00	356.20	10,248.5	364.0	364.8	370.5	13.70	13.62	-5.32
10,317.0	25.80	359.40	10,291.8	382.3	364.2	388.8	12.62	12.34	6.81
10,364.0	30.50	1.20	10,333.2	404.4	364.3	411.0	10.16	10.00	3.83
10,412.0	34.30	3.90	10,373.7	430.1	365.5	436.7	8.47	7.92	5.63
10,459.0	35.60	8.10	10,412.2	456.9	368.3	463.5	5.82	2.77	8.94
10,507.0	39.30	7.70	10,450.3	485.8	372.3	492.4	7.72	7.71	-0.83
10,554.0	43.70	6.60	10,485.5	516.7	376.2	523.4	9.49	9.36	-2.34
10,602.0	50.10	5.80	10,518.3	551.5	380.0	558.3	13.39	13.33	-1.67
10,649.0	56.00	4.50	10,546.6	588.9	383.3	595.7	12.75	12.55	-2.77
10,697.0	61.50	3.00	10,571.4	629.8	386.0	636.7	11.77	11.46	-3.13
10,744.0	66.50	359.20	10,592.0	672.0	386.8	678.9	12.88	10.64	-8.09
10,792.0	72.50	357.30	10,608.9	717.0	385.4	723.8	13.04	12.50	-3.96
10,809.0	74.40	357.10	10,613.7	733.2	384.6	740.1	11.23	11.18	-1.18
10,890.0	77.50	354.60	10,633.4	811.6	378.9	818.3	4.86	3.83	-3.09
10,938.0	81.40	351.80	10,642.1	858.4	373.3	865.0	9.94	8.13	-5.83
10,995.7	87.54	350.09	10,647.7	915.2	364.2	921.6	11.03	10.63	-2.96
LP Buffalo Trace 1-36 W1AP Fed Com 2H									
11,033.0	91.50	349.00	10,648.0	951.8	357.5	958.1	11.03	10.63	-2.93
11,128.0	89.40	352.30	10,647.3	1,045.5	342.1	1,051.5	4.12	-2.21	3.47
11,223.0	89.80	356.50	10,647.9	1,140.0	332.8	1,145.9	4.44	0.42	4.42
11,318.0	86.10	357.70	10,651.3	1,234.8	328.0	1,240.6	4.09	-3.89	1.26
11,413.0	88.20	359.60	10,656.1	1,329.7	325.7	1,335.3	2.98	2.21	2.00
11,509.0	87.00	359.40	10,660.1	1,425.6	324.9	1,431.2	1.27	-1.25	-0.21
11,604.0	90.00	359.00	10,662.6	1,520.5	323.6	1,526.1	3.19	3.16	-0.42
11,699.0	91.60	358.70	10,661.2	1,615.5	321.7	1,621.0	1.71	1.68	-0.32
11,794.0	92.60	2.10	10,657.8	1,710.4	322.3	1,716.0	3.73	1.05	3.58
11,888.0	91.20	2.10	10,654.6	1,804.3	325.8	1,809.9	1.49	-1.49	0.00
11,984.0	88.80	0.20	10,654.6	1,900.3	327.7	1,905.9	3.19	-2.50	-1.98
12,079.0	88.40	0.50	10,657.0	1,995.2	328.3	2,000.8	0.53	-0.42	0.32
12,174.0	88.20	0.60	10,659.8	2,090.2	329.2	2,095.8	0.24	-0.21	0.11
12,269.0	88.20	359.90	10,662.8	2,185.2	329.6	2,190.7	0.74	0.00	-0.74
12,363.0	89.00	359.40	10,665.1	2,279.1	329.0	2,284.7	1.00	0.85	-0.53
12,457.0	90.30	359.40	10,665.6	2,373.1	328.1	2,378.6	1.38	1.38	0.00
12,552.0	90.00	359.10	10,665.4	2,468.1	326.8	2,473.6	0.45	-0.32	-0.32
12,647.0	88.00	359.00	10,667.0	2,563.1	325.2	2,568.5	2.11	-2.11	-0.11
12,742.0	90.20	358.60	10,668.5	2,658.0	323.2	2,663.4	2.35	2.32	-0.42
12,838.0	89.00	359.20	10,669.2	2,754.0	321.4	2,759.4	1.40	-1.25	0.63
12,933.0	90.00	0.00	10,670.0	2,849.0	320.7	2,854.3	1.35	1.05	0.84

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Well:	Buffalo Trace 1-36 W1PA Fed Com 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)	
13,029.0	90.20	358.70	10,669.9	2,945.0	319.7	2,950.3	1.37	0.21	-1.35	
13,125.0	91.70	358.70	10,668.3	3,041.0	317.5	3,046.2	1.56	1.56	0.00	
13,220.0	91.60	358.60	10,665.5	3,135.9	315.2	3,141.1	0.15	-0.11	-0.11	
13,316.0	92.60	1.60	10,662.0	3,231.8	315.4	3,237.0	3.29	1.04	3.13	
13,412.0	89.30	0.90	10,660.4	3,327.8	317.5	3,332.9	3.51	-3.44	-0.73	
13,506.0	89.30	0.60	10,661.6	3,421.7	318.7	3,426.9	0.32	0.00	-0.32	
13,601.0	88.30	0.80	10,663.6	3,516.7	319.9	3,521.9	1.07	-1.05	0.21	
13,696.0	89.60	0.40	10,665.3	3,611.7	320.9	3,616.9	1.43	1.37	-0.42	
13,792.0	89.50	0.10	10,666.1	3,707.7	321.3	3,712.9	0.33	-0.10	-0.31	
13,887.0	90.30	0.70	10,666.2	3,802.7	322.0	3,807.9	1.05	0.84	0.63	
13,982.0	89.30	0.20	10,666.6	3,897.7	322.7	3,902.9	1.18	-1.05	-0.53	
14,077.0	89.80	0.30	10,667.3	3,992.7	323.1	3,997.9	0.54	0.53	0.11	
14,172.0	88.80	359.10	10,668.5	4,087.7	322.6	4,092.8	1.64	-1.05	-1.26	
14,266.0	92.00	359.20	10,667.8	4,181.6	321.2	4,186.8	3.41	3.40	0.11	
14,360.0	91.60	359.00	10,664.9	4,275.6	319.8	4,280.7	0.48	-0.43	-0.21	
14,455.0	89.40	358.80	10,664.0	4,370.6	317.9	4,375.6	2.33	-2.32	-0.21	
14,551.0	90.90	0.20	10,663.8	4,466.5	317.1	4,471.5	2.14	1.56	1.46	
14,645.0	90.10	359.60	10,663.0	4,560.5	316.9	4,565.5	1.06	-0.85	-0.64	
14,740.0	88.70	359.40	10,664.0	4,655.5	316.1	4,660.5	1.49	-1.47	-0.21	
14,836.0	88.30	0.20	10,666.5	4,751.5	315.8	4,756.4	0.93	-0.42	0.83	
14,932.0	87.70	0.10	10,669.8	4,847.4	316.0	4,852.3	0.63	-0.63	-0.10	
15,027.0	89.90	0.60	10,671.8	4,942.4	316.6	4,947.3	2.37	2.32	0.53	
15,122.0	90.00	1.20	10,671.9	5,037.4	318.1	5,042.3	0.64	0.11	0.63	
15,218.0	89.10	2.00	10,672.6	5,133.4	320.8	5,138.3	1.25	-0.94	0.83	
15,313.0	91.30	0.80	10,672.3	5,228.3	323.1	5,233.3	2.64	2.32	-1.26	
15,409.0	91.50	1.20	10,670.0	5,324.3	324.8	5,329.3	0.47	0.21	0.42	
15,504.0	88.90	357.70	10,669.6	5,419.2	323.9	5,424.2	4.59	-2.74	-3.68	
15,600.0	88.90	357.60	10,671.5	5,515.1	319.9	5,520.0	0.10	0.00	-0.10	
15,695.0	86.40	356.00	10,675.4	5,609.9	314.6	5,614.7	3.12	-2.63	-1.68	
15,790.0	87.70	358.20	10,680.3	5,704.7	309.8	5,709.3	2.69	1.37	2.32	
15,885.0	90.40	358.60	10,681.8	5,799.6	307.2	5,804.2	2.87	2.84	0.42	
15,981.0	91.30	0.00	10,680.4	5,895.6	306.0	5,900.1	1.73	0.94	1.46	
16,076.0	92.80	1.00	10,677.0	5,990.5	306.8	5,995.1	1.90	1.58	1.05	
16,171.0	92.20	1.00	10,672.9	6,085.4	308.5	6,090.0	0.63	-0.63	0.00	
16,265.0	90.40	0.90	10,670.7	6,179.4	310.0	6,183.9	1.92	-1.91	-0.11	
16,360.0	90.10	1.00	10,670.3	6,274.3	311.6	6,278.9	0.33	-0.32	0.11	
16,455.0	90.60	0.90	10,669.7	6,369.3	313.2	6,373.9	0.54	0.53	-0.11	
16,550.0	91.70	2.50	10,667.8	6,464.3	316.0	6,468.9	2.04	1.16	1.68	
16,645.0	89.30	2.00	10,667.0	6,559.2	319.7	6,563.9	2.58	-2.53	-0.53	
16,739.0	89.30	0.10	10,668.2	6,653.2	321.5	6,657.9	2.02	0.00	-2.02	
16,834.0	89.20	359.90	10,669.4	6,748.1	321.5	6,752.8	0.24	-0.11	-0.21	
16,929.0	88.10	358.20	10,671.6	6,843.1	319.9	6,847.8	2.13	-1.16	-1.79	
17,024.0	90.60	358.60	10,672.7	6,938.0	317.2	6,942.6	2.67	2.63	0.42	

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA Fed	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 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)
17,118.0	92.30	0.70	10,670.3	7,032.0	316.7	7,036.6	2.87	1.81	2.23
17,213.0	91.60	0.60	10,667.1	7,126.9	317.7	7,131.5	0.74	-0.74	-0.11
17,308.0	91.70	358.00	10,664.4	7,221.9	316.6	7,226.4	2.74	0.11	-2.74
17,402.0	90.40	357.10	10,662.6	7,315.8	312.6	7,320.2	1.68	-1.38	-0.96
17,497.0	87.70	356.50	10,664.2	7,410.6	307.3	7,415.0	2.91	-2.84	-0.63
17,592.0	87.60	355.90	10,668.1	7,505.3	301.0	7,509.5	0.64	-0.11	-0.63
17,686.0	86.20	354.40	10,673.2	7,598.8	293.0	7,602.9	2.18	-1.49	-1.60
17,781.0	86.80	355.80	10,679.0	7,693.3	284.9	7,697.2	1.60	0.63	1.47
17,887.0	90.20	357.80	10,681.8	7,799.1	279.0	7,802.9	3.72	3.21	1.89
17,981.0	88.90	357.20	10,682.5	7,893.0	274.9	7,896.7	1.52	-1.38	-0.64
18,076.0	88.70	357.40	10,684.5	7,987.9	270.4	7,991.5	0.30	-0.21	0.21
18,171.0	93.00	358.50	10,683.1	8,082.8	267.1	8,086.3	4.67	4.53	1.16
18,266.0	92.40	0.90	10,678.6	8,177.7	266.6	8,181.1	2.60	-0.63	2.53
18,364.0	90.90	0.90	10,675.8	8,275.6	268.1	8,279.1	1.53	-1.53	0.00
18,459.0	89.60	359.70	10,675.4	8,370.6	268.6	8,374.1	1.86	-1.37	-1.26
18,554.0	87.50	0.30	10,677.8	8,465.6	268.6	8,469.0	2.30	-2.21	0.63
18,649.0	89.90	2.60	10,679.9	8,560.5	271.0	8,564.0	3.50	2.53	2.42
18,744.0	92.00	3.10	10,678.4	8,655.4	275.7	8,658.9	2.27	2.21	0.53
18,839.0	91.60	3.50	10,675.4	8,750.2	281.2	8,753.8	0.60	-0.42	0.42
18,934.0	90.70	1.40	10,673.5	8,845.0	285.2	8,848.8	2.40	-0.95	-2.21
19,029.0	89.60	1.30	10,673.2	8,940.0	287.5	8,943.8	1.16	-1.16	-0.11
19,124.0	89.00	1.20	10,674.4	9,035.0	289.6	9,038.7	0.64	-0.63	-0.11
19,219.0	89.90	2.30	10,675.3	9,129.9	292.5	9,133.7	1.50	0.95	1.16
19,314.0	89.20	359.50	10,676.0	9,224.9	293.9	9,228.7	3.04	-0.74	-2.95
19,410.0	89.70	0.10	10,677.0	9,320.9	293.6	9,324.7	0.81	0.52	0.63
19,504.0	90.20	0.30	10,677.1	9,414.9	293.9	9,418.7	0.57	0.53	0.21
19,600.0	88.70	359.60	10,678.0	9,510.9	293.9	9,514.7	1.72	-1.56	-0.73
19,695.0	88.50	359.10	10,680.3	9,605.9	292.8	9,609.6	0.57	-0.21	-0.53
19,789.0	88.00	358.60	10,683.2	9,699.8	290.9	9,703.5	0.75	-0.53	-0.53
19,884.0	88.70	359.40	10,685.9	9,794.7	289.2	9,798.4	1.12	0.74	0.84
19,978.0	91.80	0.20	10,685.5	9,888.7	288.9	9,892.3	3.41	3.30	0.85
20,073.0	89.70	357.30	10,684.2	9,983.7	286.8	9,987.2	3.77	-2.21	-3.05
20,169.0	91.00	358.30	10,683.7	10,079.6	283.1	10,083.1	1.71	1.35	1.04
20,264.0	90.80	358.70	10,682.2	10,174.6	280.7	10,178.0	0.47	-0.21	0.42
20,359.0	89.80	358.80	10,681.7	10,269.5	278.6	10,272.9	1.06	-1.05	0.11
20,454.0	90.30	359.10	10,681.6	10,364.5	276.8	10,367.8	0.61	0.53	0.32
20,549.0	90.20	359.40	10,681.2	10,459.5	275.6	10,462.8	0.33	-0.11	0.32
20,644.0	89.90	0.10	10,681.1	10,554.5	275.2	10,557.8	0.80	-0.32	0.74
20,739.0	91.70	0.90	10,679.8	10,649.5	276.0	10,652.7	2.07	1.89	0.84
20,834.0	90.90	0.90	10,677.6	10,744.5	277.5	10,747.7	0.84	-0.84	0.00
20,930.0	91.90	1.60	10,675.3	10,840.4	279.6	10,843.7	1.27	1.04	0.73
20,975.0	91.90	1.60	10,673.8	10,885.4	280.9	10,888.7	0.00	0.00	0.00

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA Fed	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
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20975' MD Projected to Bit - PBHL Buffalo Trace 1-36 W1AP Fed Com 2H

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		
		+N/-S (usft)	+E/-W (usft)	Comment
20,975.0	10,673.8	10,885.4	280.9	20975' MD Projected to Bit

STRYKER

DIRECTIONAL

March 21, 2019

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

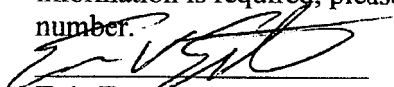
Attn: Jackie Lathan

Re: Mewbourne Oil Company
Buffalo Trace 1 36 W1PA Fed Com #2H
Purple Sage; Wolfcamp
Eddy County, New Mexico
API# 30-015-45536

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>
Cody Hash	Original Hole	1,037ft. to 20,930ft.	01-18-19 to 02-06-19	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.


Eric 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\Buffalo Trace 1 36 W1PA Fed Com #2H\M191006

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



March 21, 2019

Survey Certification Report

STATE OF TEXAS
COUNTY OF Montgomery

I, Eric Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of January 3, 2019, through January 29, 2019 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 1,037feet to a depth of 20,930feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Buffalo Trace 1 36 W1PA Federal Com #2H, well API # 30-015-45536 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.

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

Eric 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

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Project:	Eddy County, N.M. Nad (83)	System Datum:	Mean Sea Level
Map System:	US State Plane 1983		
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA Fed
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Site Position:		Northing:	386,802.27 usft	Latitude:	32° 3' 45.944 N
From:	Map	Easting:	665,818.47 usft	Longitude:	103° 55' 53.378 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.21 °

Well:		Buffalo Trace 1-36 W1PA Fed Com 2H				
Well Position	+N/-S	0.0 usft	Northing:	386,802.27 usft	Latitude:	32° 3' 45.944 N
	+E/-W	0.0 usft	Easting:	665,818.47 usft	Longitude:	103° 55' 53.378 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,038.0 usft

Wellbore:	Original Hole
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/12/18	6.95	59.84	47,654.43454808

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	1.03

Survey Program		Date 01/30/19		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
1,037.0	20,975.0	Survey #1 (Original Hole)	MWD	MWD v3:standard declination

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
881.0	0.90	310.63	881.0	2,184.0	5.5	0.0	5.5	359.90	Tie-In
1,037.0	2.50	270.20	1,036.9	2,028.1	6.3	-4.3	7.7	325.55	
1,228.0	1.50	22.80	1,227.8	1,837.2	8.6	-7.5	11.5	318.92	
1,418.0	1.60	46.20	1,417.8	1,647.2	12.8	-4.7	13.6	339.96	
1,608.0	1.20	34.20	1,607.7	1,457.3	16.3	-1.6	16.3	354.28	
1,798.0	0.90	11.50	1,797.7	1,267.3	19.4	-0.2	19.4	359.37	
1,988.0	0.70	15.60	1,987.7	1,077.3	21.9	0.4	22.0	1.03	
2,177.0	1.10	34.60	2,176.6	888.4	24.6	1.7	24.6	4.05	
2,368.0	1.10	58.50	2,367.6	697.4	27.0	4.3	27.4	9.13	
2,558.0	1.10	69.60	2,557.6	507.4	28.6	7.6	29.6	14.89	
2,748.0	1.80	92.80	2,747.5	317.5	29.1	12.3	31.6	22.91	
2,938.0	1.70	100.90	2,937.4	127.6	28.4	18.0	33.7	32.41	
3,128.0	2.40	96.20	3,127.3	-62.3	27.5	24.8	37.0	42.05	
3,282.0	1.40	92.30	3,281.2	-216.2	27.0	29.9	40.3	47.84	
3,449.0	0.80	64.50	3,448.2	-383.2	27.5	32.9	42.9	50.19	
3,640.0	2.90	30.90	3,639.1	-574.1	32.2	36.6	48.8	48.70	
3,829.0	4.40	32.20	3,827.7	-762.7	42.4	42.9	60.4	45.36	
4,019.0	4.70	37.20	4,017.1	-952.1	54.8	51.5	75.2	43.25	
4,210.0	6.30	46.50	4,207.2	-1,142.2	68.2	63.9	93.5	43.11	
4,399.0	5.40	50.30	4,395.2	-1,330.2	81.0	78.2	112.6	43.99	
4,590.0	5.30	50.40	4,585.4	-1,520.4	92.4	91.9	130.4	44.86	
4,779.0	5.40	49.50	4,773.6	-1,708.6	103.7	105.4	147.9	45.46	
4,969.0	4.60	51.80	4,962.8	-1,897.8	114.3	118.2	164.4	45.97	
5,158.0	4.00	50.70	5,151.3	-2,086.3	123.1	129.3	178.5	46.40	
5,348.0	3.90	51.70	5,340.9	-2,275.9	131.3	139.5	191.6	46.72	
5,537.0	3.40	52.10	5,529.5	-2,464.5	138.8	148.9	203.6	47.03	
5,727.0	3.70	35.20	5,719.1	-2,654.1	147.2	156.9	215.2	46.83	

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
5,917.0	4.50	28.40	5,908.6	-2,843.6	158.8	164.0	228.3	45.92	
6,108.0	5.10	47.50	6,099.0	-3,034.0	171.1	173.8	243.9	45.45	
6,298.0	4.40	48.00	6,288.3	-3,223.3	181.7	185.5	259.6	45.59	
6,488.0	4.10	48.50	6,477.8	-3,412.8	191.1	196.0	273.7	45.72	
6,677.0	3.70	52.20	6,666.3	-3,601.3	199.3	205.9	286.5	45.93	
6,867.0	5.00	52.00	6,855.8	-3,790.8	208.2	217.2	300.9	46.22	
7,057.0	4.40	50.20	7,045.2	-3,980.2	217.9	229.3	316.4	46.46	
7,247.0	4.10	55.30	7,234.6	-4,169.6	226.4	240.5	330.4	46.73	
7,437.0	3.00	63.80	7,424.3	-4,359.3	232.5	250.6	341.8	47.14	
7,628.0	1.80	31.00	7,615.1	-4,550.1	237.3	256.6	349.5	47.24	
7,818.0	2.00	358.70	7,805.0	-4,740.0	243.2	258.1	354.6	46.70	
8,009.0	3.00	15.40	7,995.8	-4,930.8	251.3	259.3	361.1	45.90	
8,198.0	4.90	18.60	8,184.4	-5,119.4	263.7	263.2	372.6	44.94	
8,388.0	5.00	62.60	8,373.7	-5,308.7	275.2	273.1	387.8	44.78	
8,578.0	3.70	59.60	8,563.2	-5,498.2	282.1	285.8	401.6	45.37	
8,768.0	4.20	69.00	8,752.7	-5,687.7	287.7	297.6	413.9	45.96	
8,957.0	3.50	85.00	8,941.3	-5,876.3	290.7	309.8	424.8	46.82	
9,148.0	4.60	67.30	9,131.8	-6,066.8	294.2	322.7	436.6	47.64	
9,339.0	5.40	48.60	9,322.1	-6,257.1	303.1	336.5	452.8	47.99	
9,528.0	4.60	35.50	9,510.4	-6,445.4	315.1	347.5	469.1	47.80	
9,717.0	2.90	45.80	9,699.0	-6,634.0	324.6	355.4	481.3	47.59	
9,907.0	1.90	40.10	9,888.8	-6,823.8	330.4	360.8	489.3	47.52	
10,013.0	1.59	42.87	9,994.8	-6,929.8	332.8	363.0	492.5	47.48	
B.B. Buffalo Trace 1-36 W1AP Fed Com 2H									
10,018.2	1.57	43.04	10,000.0	-6,935.0	332.9	363.1	492.6	47.48	
B.B. 2 Buffalo Trace 1-36 W1AP Fed Com 2H									
10,044.0	1.50	43.90	10,025.8	-6,960.8	333.4	363.5	493.3	47.47	

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
10,128.0	3.10	16.40	10,109.7	-7,044.7	336.4	364.9	496.3	47.33	
10,175.0	8.70	2.30	10,156.4	-7,091.4	341.2	365.5	500.0	46.97	
10,223.0	13.60	358.70	10,203.5	-7,138.5	350.5	365.5	506.3	46.20	
10,270.0	20.00	356.20	10,248.5	-7,183.5	364.0	364.8	515.4	45.06	
10,317.0	25.80	359.40	10,291.8	-7,226.8	382.3	364.2	528.0	43.61	
10,364.0	30.50	1.20	10,333.2	-7,268.2	404.4	364.3	544.3	42.01	
10,412.0	34.30	3.90	10,373.7	-7,308.7	430.1	365.5	564.4	40.36	
10,459.0	35.60	8.10	10,412.2	-7,347.2	456.9	368.3	586.9	38.87	
10,507.0	39.30	7.70	10,450.3	-7,385.3	485.8	372.3	612.1	37.47	
10,554.0	43.70	6.60	10,485.5	-7,420.5	516.7	376.2	639.1	36.06	
10,602.0	50.10	5.80	10,518.3	-7,453.3	551.5	380.0	669.7	34.56	
10,649.0	56.00	4.50	10,546.6	-7,481.6	588.9	383.3	702.7	33.06	
10,697.0	61.50	3.00	10,571.4	-7,506.4	629.8	386.0	738.7	31.50	
10,744.0	66.50	359.20	10,592.0	-7,527.0	672.0	386.8	775.4	29.92	
10,792.0	72.50	357.30	10,608.9	-7,543.9	717.0	385.4	814.0	28.26	
10,809.0	74.40	357.10	10,613.7	-7,548.7	733.2	384.6	828.0	27.68	
10,890.0	77.50	354.60	10,633.4	-7,568.4	811.6	378.9	895.7	25.02	
10,938.0	81.40	351.80	10,642.1	-7,577.1	858.4	373.3	936.1	23.50	
10,995.7	87.54	350.09	10,647.7	-7,582.7	915.2	364.2	985.0	21.70	
LP Buffalo Trace 1-36 W1AP Fed Com 2H									
11,033.0	91.50	349.00	10,648.0	-7,583.0	951.8	357.5	1,016.7	20.59	
11,128.0	89.40	352.30	10,647.3	-7,582.3	1,045.5	342.1	1,100.0	18.12	
11,223.0	89.80	356.50	10,647.9	-7,582.9	1,140.0	332.8	1,187.6	16.27	
11,318.0	86.10	357.70	10,651.3	-7,586.3	1,234.8	328.0	1,277.6	14.87	
11,413.0	88.20	359.60	10,656.1	-7,591.1	1,329.7	325.7	1,369.0	13.77	
11,509.0	87.00	359.40	10,660.1	-7,595.1	1,425.6	324.9	1,462.1	12.84	
11,604.0	90.00	359.00	10,662.6	-7,597.6	1,520.5	323.6	1,554.6	12.01	

Company: Mewbourne Oil Company
Project: Eddy County, N.M. Nad (83)
Site: Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA
Well: Buffalo Trace 1-36 W1PA Fed Com 2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Buffalo Trace 1-36 W1PA Fed Com 2H
TVD Reference: 3038 + 27 @ 3065.0usft (Patterson 562)
MD Reference: 3038 + 27 @ 3065.0usft (Patterson 562)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
11,699.0	91.60	358.70	10,661.2	-7,596.2	1,615.5	321.7	1,647.2	11.26
11,794.0	92.60	2.10	10,657.8	-7,592.8	1,710.4	322.3	1,740.5	10.67
11,888.0	91.20	2.10	10,654.6	-7,589.6	1,804.3	325.8	1,833.5	10.23
11,984.0	88.80	0.20	10,654.6	-7,589.6	1,900.3	327.7	1,928.3	9.78
12,079.0	88.40	0.50	10,657.0	-7,592.0	1,995.2	328.3	2,022.1	9.34
12,174.0	88.20	0.60	10,659.8	-7,594.8	2,090.2	329.2	2,116.0	8.95
12,269.0	88.20	359.90	10,662.8	-7,597.8	2,185.2	329.6	2,209.9	8.58
12,363.0	89.00	359.40	10,665.1	-7,600.1	2,279.1	329.0	2,302.7	8.22
12,457.0	90.30	359.40	10,665.6	-7,600.6	2,373.1	328.1	2,395.7	7.87
12,552.0	90.00	359.10	10,665.4	-7,600.4	2,468.1	326.8	2,489.6	7.54
12,647.0	88.00	359.00	10,667.0	-7,602.0	2,563.1	325.2	2,583.6	7.23
12,742.0	90.20	358.60	10,668.5	-7,603.5	2,658.0	323.2	2,677.6	6.93
12,838.0	89.00	359.20	10,669.2	-7,604.2	2,754.0	321.4	2,772.7	6.66
12,933.0	90.00	0.00	10,670.0	-7,605.0	2,849.0	320.7	2,867.0	6.42
13,029.0	90.20	358.70	10,669.9	-7,604.9	2,945.0	319.7	2,962.3	6.19
13,125.0	91.70	358.70	10,668.3	-7,603.3	3,041.0	317.5	3,057.5	5.96
13,220.0	91.60	358.60	10,665.5	-7,600.5	3,135.9	315.2	3,151.7	5.74
13,316.0	92.60	1.60	10,662.0	-7,597.0	3,231.8	315.4	3,247.2	5.57
13,412.0	89.30	0.90	10,660.4	-7,595.4	3,327.8	317.5	3,342.9	5.45
13,506.0	89.30	0.60	10,661.6	-7,596.6	3,421.7	318.7	3,436.6	5.32
13,601.0	88.30	0.80	10,663.6	-7,598.6	3,516.7	319.9	3,531.2	5.20
13,696.0	89.60	0.40	10,665.3	-7,600.3	3,611.7	320.9	3,625.9	5.08
13,792.0	89.50	0.10	10,666.1	-7,601.1	3,707.7	321.3	3,721.6	4.95
13,887.0	90.30	0.70	10,666.2	-7,601.2	3,802.7	322.0	3,816.3	4.84
13,982.0	89.30	0.20	10,666.6	-7,601.6	3,897.7	322.7	3,911.0	4.73
14,077.0	89.80	0.30	10,667.3	-7,602.3	3,992.7	323.1	4,005.7	4.63
14,172.0	88.80	359.10	10,668.5	-7,603.5	4,087.7	322.6	4,100.4	4.51

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
14,266.0	92.00	359.20	10,667.8	-7,602.8	4,181.6	321.2	4,194.0	4.39	
14,360.0	91.60	359.00	10,664.9	-7,599.9	4,275.6	319.8	4,287.5	4.28	
14,455.0	89.40	358.80	10,664.0	-7,599.0	4,370.6	317.9	4,382.1	4.16	
14,551.0	90.90	0.20	10,663.8	-7,598.8	4,466.5	317.1	4,477.8	4.06	
14,645.0	90.10	359.60	10,663.0	-7,598.0	4,560.5	316.9	4,571.5	3.98	
14,740.0	88.70	359.40	10,664.0	-7,599.0	4,655.5	316.1	4,666.2	3.88	
14,836.0	88.30	0.20	10,666.5	-7,601.5	4,751.5	315.8	4,762.0	3.80	
14,932.0	87.70	0.10	10,669.8	-7,604.8	4,847.4	316.0	4,857.7	3.73	
15,027.0	89.90	0.60	10,671.8	-7,606.8	4,942.4	316.6	4,952.5	3.67	
15,122.0	90.00	1.20	10,671.9	-7,606.9	5,037.4	318.1	5,047.4	3.61	
15,218.0	89.10	2.00	10,672.6	-7,607.6	5,133.4	320.8	5,143.4	3.58	
15,313.0	91.30	0.80	10,672.3	-7,607.3	5,228.3	323.1	5,238.3	3.54	
15,409.0	91.50	1.20	10,670.0	-7,605.0	5,324.3	324.8	5,334.2	3.49	
15,504.0	88.90	357.70	10,669.6	-7,604.6	5,419.2	323.9	5,428.9	3.42	
15,600.0	88.90	357.60	10,671.5	-7,606.5	5,515.1	319.9	5,524.4	3.32	
15,695.0	86.40	356.00	10,675.4	-7,610.4	5,609.9	314.6	5,618.7	3.21	
15,790.0	87.70	358.20	10,680.3	-7,615.3	5,704.7	309.8	5,713.1	3.11	
15,885.0	90.40	358.60	10,681.8	-7,616.8	5,799.6	307.2	5,807.7	3.03	
15,981.0	91.30	0.00	10,680.4	-7,615.4	5,895.6	306.0	5,903.5	2.97	
16,076.0	92.80	1.00	10,677.0	-7,612.0	5,990.5	306.8	5,998.4	2.93	
16,171.0	92.20	1.00	10,672.9	-7,607.9	6,085.4	308.5	6,093.2	2.90	
16,265.0	90.40	0.90	10,670.7	-7,605.7	6,179.4	310.0	6,187.1	2.87	
16,360.0	90.10	1.00	10,670.3	-7,605.3	6,274.3	311.6	6,282.1	2.84	
16,455.0	90.60	0.90	10,669.7	-7,604.7	6,369.3	313.2	6,377.0	2.82	
16,550.0	91.70	2.50	10,667.8	-7,602.8	6,464.3	316.0	6,472.0	2.80	
16,645.0	89.30	2.00	10,667.0	-7,602.0	6,559.2	319.7	6,567.0	2.79	
16,739.0	89.30	0.10	10,668.2	-7,603.2	6,653.2	321.5	6,660.9	2.77	

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
16,834.0	89.20	359.90	10,669.4	-7,604.4	6,748.1	321.5	6,755.8	2.73
16,929.0	88.10	358.20	10,671.6	-7,606.6	6,843.1	319.9	6,850.6	2.68
17,024.0	90.60	358.60	10,672.7	-7,607.7	6,938.0	317.2	6,945.3	2.62
17,118.0	92.30	0.70	10,670.3	-7,605.3	7,032.0	316.7	7,039.1	2.58
17,213.0	91.60	0.60	10,667.1	-7,602.1	7,126.9	317.7	7,134.0	2.55
17,308.0	91.70	358.00	10,664.4	-7,599.4	7,221.9	316.6	7,228.8	2.51
17,402.0	90.40	357.10	10,662.6	-7,597.6	7,315.8	312.6	7,322.5	2.45
17,497.0	87.70	356.50	10,664.2	-7,599.2	7,410.6	307.3	7,417.0	2.37
17,592.0	87.60	355.90	10,668.1	-7,603.1	7,505.3	301.0	7,511.4	2.30
17,686.0	86.20	354.40	10,673.2	-7,608.2	7,598.8	293.0	7,604.5	2.21
17,781.0	86.80	355.80	10,679.0	-7,614.0	7,693.3	284.9	7,698.6	2.12
17,887.0	90.20	357.80	10,681.8	-7,616.8	7,799.1	279.0	7,804.1	2.05
17,981.0	88.90	357.20	10,682.5	-7,617.5	7,893.0	274.9	7,897.8	1.99
18,076.0	88.70	357.40	10,684.5	-7,619.5	7,987.9	270.4	7,992.5	1.94
18,171.0	93.00	358.50	10,683.1	-7,618.1	8,082.8	267.1	8,087.2	1.89
18,266.0	92.40	0.90	10,678.6	-7,613.6	8,177.7	266.6	8,182.0	1.87
18,364.0	90.90	0.90	10,675.8	-7,610.8	8,275.6	268.1	8,280.0	1.86
18,459.0	89.60	359.70	10,675.4	-7,610.4	8,370.6	268.6	8,374.9	1.84
18,554.0	87.50	0.30	10,677.8	-7,612.8	8,465.6	268.6	8,469.8	1.82
18,649.0	89.90	2.60	10,679.9	-7,614.9	8,560.5	271.0	8,564.8	1.81
18,744.0	92.00	3.10	10,678.4	-7,613.4	8,655.4	275.7	8,659.8	1.82
18,839.0	91.60	3.50	10,675.4	-7,610.4	8,750.2	281.2	8,754.7	1.84
18,934.0	90.70	1.40	10,673.5	-7,608.5	8,845.1	285.2	8,849.6	1.85
19,029.0	89.60	1.30	10,673.2	-7,608.2	8,940.0	287.5	8,944.6	1.84
19,124.0	89.00	1.20	10,674.4	-7,609.4	9,035.0	289.6	9,039.6	1.84
19,219.0	89.90	2.30	10,675.3	-7,610.3	9,129.9	292.5	9,134.6	1.83
19,314.0	89.20	359.50	10,676.0	-7,611.0	9,224.9	293.9	9,229.6	1.83

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Buffalo Trace 1-36 W1PA Fed Com 2H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Site:	Section 1-36 -26S-29E Buffalo Trace 1 36 W1PA	MD Reference:	3038 + 27 @ 3065.0usft (Patterson 562)
Well:	Buffalo Trace 1-36 W1PA Fed Com 2H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
19,410.0	89.70	0.10	10,677.0	-7,612.0	9,320.9	293.6	9,325.5	1.80	
19,504.0	90.20	0.30	10,677.1	-7,612.1	9,414.9	293.9	9,419.5	1.79	
19,600.0	88.70	359.60	10,678.0	-7,613.0	9,510.9	293.9	9,515.4	1.77	
19,695.0	88.50	359.10	10,680.3	-7,615.3	9,605.9	292.8	9,610.3	1.75	
19,789.0	88.00	358.60	10,683.2	-7,618.2	9,699.8	290.9	9,704.2	1.72	
19,884.0	88.70	359.40	10,685.9	-7,620.9	9,794.7	289.2	9,799.0	1.69	
19,978.0	91.80	0.20	10,685.5	-7,620.5	9,888.7	288.9	9,893.0	1.67	
20,073.0	89.70	357.30	10,684.2	-7,619.2	9,983.7	286.8	9,987.8	1.65	
20,169.0	91.00	358.30	10,683.7	-7,618.7	10,079.6	283.1	10,083.6	1.61	
20,264.0	90.80	358.70	10,682.2	-7,617.2	10,174.6	280.7	10,178.4	1.58	
20,359.0	89.80	358.80	10,681.7	-7,616.7	10,269.5	278.6	10,273.3	1.55	
20,454.0	90.30	359.10	10,681.6	-7,616.6	10,364.5	276.8	10,368.2	1.53	
20,549.0	90.20	359.40	10,681.2	-7,616.2	10,459.5	275.6	10,463.1	1.51	
20,644.0	89.90	0.10	10,681.1	-7,616.1	10,554.5	275.2	10,558.1	1.49	
20,739.0	91.70	0.90	10,679.8	-7,614.8	10,649.5	276.0	10,653.1	1.48	
20,834.0	90.90	0.90	10,677.6	-7,612.6	10,744.5	277.5	10,748.0	1.48	
20,930.0	91.90	1.60	10,675.3	-7,610.3	10,840.4	279.6	10,844.0	1.48	
20,975.0	91.90	1.60	10,673.8	-7,608.8	10,885.4	280.9	10,889.0	1.48	
20975' MD Projected to Bit - PBHL Buffalo Trace 1-36 W1AP Fed Com 2H									

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
20,975.0	10,673.8	10,885.4	280.9	20975' MD Projected to Bit