



NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 12 2018

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Mewbourne Oil Company

Eddy County, New Mexico (Nad 83)

Sec 18,T20S,R29E

Derringer 18 B3LI Federal #2H

Wellbore #1

Design: Wellbore #1

QES Survey Report

09 November, 2017



Company Name: Mewbourne Oil Company
 Derringer 18 B3LI Federal #2H
 Eddy County, New Mexico (Nad 83)
 Rig: Patterson #243
 Created By: Shane Robbins
 Date: 10/6/2017

Derringer 18 B3LI Federal #2H
 Eddy County, New Mexico (Nad 83)
 Q171158 & WT-170982
 Design #2



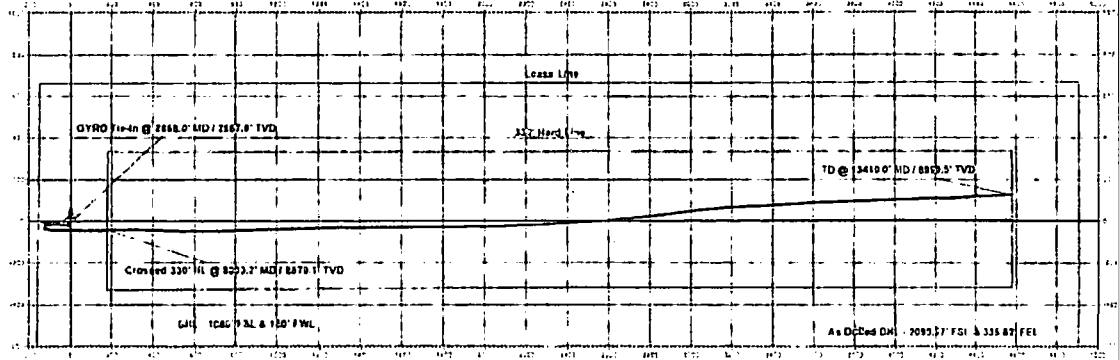
**MEWBOURNE
 OIL COMPANY**



Azimuths to Grid North

Correction: 6.99°
 Magnetic Field
 Strength: 48146.8snT
 Dip Angle: 60.26°
 Date: 9/1/2017
 Model: IGRF2010

GYRO Tie-in @ 2868.0' MD / 2867.8' TVD

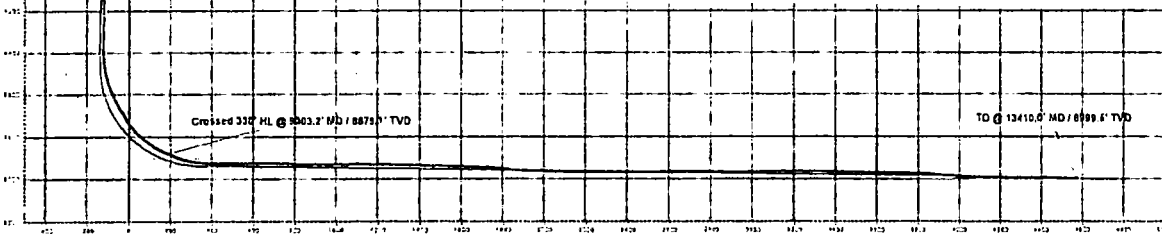


PROJECT DETAILS: Eddy County, New Mexico (Nad 83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level

WELL DETAILS: Derringer 18 B3LI Federal #2H
 3265 0
 N163° E5W Northing Easting 671777.48 608525.40
 32° 34' 18.066 N 104° 7' 18.186 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
2868.0	0.00	234.26	2867.8	-18.8	-15.6	-15.6	32.0	GYRO Tie-in @ 2868.0' MD / 2867.8' TVD
8003.2	87.07	87.82	8879.1	-43.9	178.6	178.6	801.0	Crossed 330° HL @ 8003.2' MD / 8879.1' TVD
13410.0	88.00	87.00	8989.8	126.0	4871.9	4872.0	4802.0	TD @ 13410.0' MD / 8989.8' TVD



Vertical Section at 89.89° (200 usf/m)



Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico (Nad 83)
Site: Sec 18,T20S,R29E
Well: Derringer 18 B3LI Federal #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Derringer 18 B3LI Federal #2H
TVD Reference: WELL @ 3282.0usft (Patterson #243)
MD Reference: WELL @ 3282.0usft (Patterson #243)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project	Eddy County, New Mexico (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 Sec 18,T20S,R29E

Site Position: Northing: 574,535.70 usft Latitude: 32° 34' 45.389 N
From: Map Easting: 606,553.80 usft Longitude: 104° 7' 17.790 W
Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.11 °

Well Derringer 18 B3LI Federal #2H

Well Position +N/-S 0.0 usft Northing: 571,774.48 usft Latitude: 32° 34' 18.066 N
 +E/-W 0.0 usft Easting: 606,525.40 usft Longitude: 104° 7' 18.186 W
Position Uncertainty 0.0 usft Wellhead Elevation: usft Ground Level: 3,255.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/1/2017	7.10	60.26	48,146.75447467

Design Wellbore #1

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	89.89

Survey Program Date 11/9/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	2,868.0	Gyro Survey (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro
3,016.0	13,410.0	MWD Surveys (Wellbore #1)	MWD default	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
100.0	0.55	283.25	100.0	0.1	-0.5	-0.5	0.55	0.55	0.00
200.0	0.36	281.74	200.0	0.3	-1.2	-1.2	0.19	-0.19	-1.51
300.0	0.43	298.59	300.0	0.5	-1.9	-1.9	0.13	0.07	16.85
400.0	0.61	263.34	400.0	0.6	-2.7	-2.7	0.36	0.18	-35.25
500.0	1.36	213.99	500.0	-0.4	-3.9	-3.9	1.07	0.75	-49.35
600.0	1.36	199.50	599.9	-2.5	-5.0	-5.0	0.34	0.00	-14.49
700.0	1.23	181.31	699.9	-4.7	-5.4	-5.4	0.43	-0.13	-18.19
800.0	1.23	176.65	799.9	-6.8	-5.4	-5.4	0.10	0.00	-4.66
900.0	1.16	169.31	899.9	-8.9	-5.1	-5.1	0.17	-0.07	-7.34



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 Design: Wellbore #1

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 MD Reference: WELL @ 3282.0usft (Patterson #243)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)	Bull Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.96	165.89	999.9	-10.7	-4.7	-4.7	0.21	-0.20	-3.42
1,100.0	0.59	168.16	1,099.9	-12.0	-4.4	-4.4	0.37	-0.37	2.27
1,200.0	0.57	181.87	1,199.8	-13.0	-4.3	-4.4	0.14	-0.02	13.71
1,300.0	0.59	190.42	1,299.8	-14.0	-4.4	-4.5	0.09	0.02	8.55
1,400.0	0.57	205.02	1,399.8	-15.0	-4.7	-4.8	0.15	-0.02	14.60
1,500.0	0.40	221.14	1,499.8	-15.7	-5.2	-5.2	0.22	-0.17	16.12
1,600.0	0.51	221.05	1,599.8	-16.3	-5.7	-5.7	0.11	0.11	-0.09
1,700.0	0.64	260.59	1,699.8	-16.7	-6.5	-6.6	0.41	0.13	39.54
1,800.0	0.57	230.73	1,799.8	-17.1	-7.5	-7.5	0.32	-0.07	-29.86
1,900.0	0.57	230.77	1,899.8	-17.8	-8.3	-8.3	0.00	0.00	0.04
2,000.0	0.70	262.79	1,999.8	-18.2	-9.2	-9.3	0.37	0.13	32.02
2,100.0	0.66	248.72	2,099.8	-18.4	-10.4	-10.4	0.17	-0.04	-14.07
2,200.0	0.70	273.88	2,199.8	-18.6	-11.5	-11.6	0.30	0.04	25.16
2,300.0	0.46	258.05	2,299.8	-18.7	-12.5	-12.6	0.29	-0.24	-15.83
2,400.0	0.30	278.01	2,399.8	-18.7	-13.2	-13.2	0.21	-0.16	19.96
2,500.0	0.26	266.53	2,499.8	-18.7	-13.7	-13.7	0.07	-0.04	-11.48
2,600.0	0.26	282.52	2,599.8	-18.6	-14.1	-14.2	0.07	0.00	15.99
2,700.0	0.34	271.33	2,699.8	-18.6	-14.6	-14.7	0.10	0.08	-11.19
2,800.0	0.26	255.94	2,799.8	-18.6	-15.2	-15.2	0.11	-0.08	-15.39
GYRO Tie-In @ 2868.0' MD / 2867.8' TVD									
2,868.0	0.50	254.26	2,867.8	-18.8	-15.6	-15.6	0.35	0.35	-2.47
3,016.0	0.40	233.60	3,015.8	-19.2	-16.6	-16.7	0.13	-0.07	-13.96
3,204.0	2.00	278.90	3,203.7	-19.1	-20.4	-20.4	0.93	0.85	24.10
3,393.0	1.90	275.80	3,392.6	-18.3	-26.8	-26.8	0.08	-0.05	-1.64
3,581.0	1.90	274.20	3,580.5	-17.7	-33.0	-33.0	0.03	0.00	-0.85
3,768.0	1.90	268.00	3,767.4	-17.6	-39.2	-39.2	0.11	0.00	-3.32
3,956.0	2.50	263.60	3,955.3	-18.2	-46.4	-46.4	0.33	0.32	-2.34
4,143.0	2.40	338.30	4,142.1	-15.0	-51.9	-51.9	1.59	-0.05	39.95
4,330.0	1.70	266.60	4,329.1	-11.5	-56.1	-56.1	1.32	-0.37	-38.34
4,518.0	1.90	267.70	4,517.0	-11.8	-62.0	-62.0	0.11	0.11	0.59
4,705.0	1.90	273.80	4,703.9	-11.7	-68.2	-68.2	0.11	0.00	3.26
4,892.0	1.90	274.00	4,890.8	-11.3	-74.4	-74.4	0.00	0.00	0.11
5,080.0	2.00	264.70	5,078.6	-11.4	-80.7	-80.8	0.18	0.05	-4.95
5,267.0	2.10	248.00	5,265.5	-13.0	-87.2	-87.2	0.32	0.05	-8.93
5,455.0	1.10	252.20	5,453.5	-14.8	-92.1	-92.1	0.54	-0.53	2.23
5,642.0	1.50	231.60	5,640.4	-16.9	-95.7	-95.7	0.33	0.21	-11.02
5,829.0	1.10	296.70	5,827.4	-17.6	-99.2	-99.3	0.77	-0.21	34.81
6,018.0	1.30	292.60	6,016.3	-16.0	-102.8	-102.8	0.12	0.11	-2.17
6,206.0	1.80	286.50	6,204.3	-14.3	-107.6	-107.6	0.28	0.27	-3.24
6,394.0	2.40	274.00	6,392.1	-13.2	-114.4	-114.4	0.40	0.32	-6.65
6,582.0	1.70	284.50	6,580.0	-12.2	-121.0	-121.0	0.42	-0.37	5.59
6,770.0	1.40	329.70	6,767.9	-9.6	-124.9	-124.9	0.65	-0.16	24.04
6,958.0	1.00	291.40	6,953.9	-7.0	-127.5	-127.5	0.47	-0.22	-20.59



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7,144.0	1.10	124.10	7,141.9	-7.4	-127.6	-127.6	1.11	0.05	-88.99	
7,332.0	2.90	109.30	7,329.8	-10.0	-121.8	-121.6	0.99	0.96	-7.87	
7,519.0	1.20	203.00	7,516.7	-13.4	-117.9	-117.9	1.72	-0.91	50.11	
7,707.0	1.40	186.80	7,704.6	-17.5	-118.9	-118.9	0.22	0.11	-8.62	
7,894.0	1.30	209.10	7,891.6	-21.6	-120.2	-120.3	0.28	-0.05	11.93	
8,081.0	2.80	196.80	8,078.5	-27.8	-122.6	-122.6	0.83	0.80	-6.58	
8,268.0	1.20	210.90	8,265.3	-33.9	-124.9	-125.0	0.89	-0.86	7.54	
8,362.0	1.00	197.40	8,359.3	-35.5	-125.6	-125.7	0.35	-0.21	-14.36	
8,396.0	1.00	175.90	8,393.3	-36.1	-125.7	-125.8	1.10	0.00	-63.24	
8,427.0	1.80	114.00	8,424.3	-36.5	-125.2	-125.3	5.15	2.58	-199.68	
8,458.0	5.70	95.10	8,455.2	-36.9	-123.3	-123.3	13.03	12.58	-60.97	
8,490.0	9.60	98.40	8,486.9	-37.4	-119.0	-119.1	12.26	12.19	10.31	
8,521.0	14.00	99.30	8,517.3	-38.4	-112.8	-112.9	14.21	14.19	2.90	
8,552.0	18.70	98.90	8,547.0	-39.8	-104.2	-104.2	15.17	15.16	-1.29	
8,584.0	23.00	97.50	8,576.9	-41.4	-92.9	-93.0	13.53	13.44	-4.38	
8,615.0	26.20	96.50	8,605.1	-42.9	-80.1	-80.2	10.41	10.32	-3.23	
8,646.0	27.40	94.50	8,632.8	-44.3	-66.2	-66.3	4.84	3.87	-6.45	
8,678.0	28.80	91.40	8,661.0	-45.0	-51.1	-51.2	6.32	4.38	-9.69	
8,709.0	29.60	89.60	8,688.1	-45.2	-36.0	-36.1	3.83	2.58	-5.81	
8,740.0	33.10	89.40	8,714.5	-45.0	-19.9	-20.0	11.30	11.29	-0.65	
8,772.0	36.90	90.50	8,740.7	-45.0	-1.5	-1.6	12.04	11.88	3.44	
8,803.0	40.30	91.00	8,765.0	-45.3	17.8	17.7	11.01	10.97	1.61	
8,835.0	44.40	90.70	8,788.6	-45.6	39.4	39.3	12.83	12.81	-0.94	
8,866.0	49.20	90.10	8,809.8	-45.7	61.9	61.9	15.55	15.48	-1.94	
8,897.0	54.30	90.50	8,829.0	-45.9	86.3	86.2	16.48	16.45	1.29	
8,928.0	59.50	89.80	8,845.9	-45.9	112.2	112.2	16.88	16.77	-2.26	
8,959.0	63.60	88.00	8,860.7	-45.4	139.5	139.4	14.18	13.23	-5.81	
8,990.0	66.20	87.70	8,873.9	-44.3	167.5	167.5	8.43	8.39	-0.97	
Crossed 330' HL @ 9003.2' MD / 8879.1' TVD										
9,003.2	67.07	87.82	8,879.1	-43.9	179.6	179.6	6.62	6.56	0.95	
9,022.0	68.30	88.00	8,886.2	-43.2	197.0	196.9	6.62	6.56	0.93	
9,053.0	70.90	89.10	8,897.0	-42.5	226.1	226.0	9.02	8.39	3.55	
<u>9,084.0</u>	73.70	89.60	8,906.5	<u>-42.2</u>	<u>255.6</u>	255.5	9.16	9.03	1.61	
9,115.0	77.40	90.70	8,914.2	-42.3	285.6	285.5	12.42	11.94	3.55	
9,147.0	80.00	91.00	8,920.5	-42.7	317.0	316.9	8.18	8.13	0.94	
9,178.0	82.80	91.50	8,925.1	-43.4	347.6	347.5	9.17	9.03	1.61	
9,209.0	86.20	92.10	8,928.1	-44.4	378.5	378.4	11.14	10.97	1.94	
9,225.0	87.70	91.90	8,928.9	-44.9	394.4	394.3	9.46	9.38	-1.25	
9,333.0	91.40	91.70	8,929.8	-48.3	502.4	502.3	3.43	3.43	-0.19	
9,427.0	89.50	89.80	8,929.0	-49.5	596.3	596.2	2.86	-2.02	-2.02	
9,521.0	89.70	89.10	8,929.7	-48.6	690.3	690.2	0.77	0.21	-0.74	
9,615.0	86.80	88.20	8,932.6	-46.4	784.2	784.2	3.23	-3.09	-0.96	
9,709.0	90.20	88.60	8,935.0	-43.8	878.2	878.1	3.64	3.62	0.43	
9,803.0	90.50	88.40	8,934.4	-41.3	972.1	972.0	0.38	0.32	-0.21	



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9,896.0	90.90	88.40	8,933.3	-38.7	1,065.1	1,065.0	0.43	0.43	0.00
9,991.0	89.30	87.80	8,933.1	-35.6	1,160.0	1,160.0	1.80	-1.68	-0.63
10,085.0	88.20	89.60	8,935.2	-33.5	1,254.0	1,253.9	2.24	-1.17	1.91
10,178.0	88.60	88.90	8,937.8	-32.2	1,346.9	1,346.9	0.87	0.43	-0.75
10,272.0	89.00	89.60	8,939.8	-31.0	1,440.9	1,440.8	0.86	0.43	0.74
10,366.0	87.30	90.00	8,942.8	-30.7	1,534.8	1,534.8	1.86	-1.81	0.43
10,460.0	88.70	90.10	8,946.1	-30.8	1,628.8	1,628.7	1.49	1.49	0.11
10,554.0	86.40	89.40	8,950.1	-30.4	1,722.7	1,722.6	2.56	-2.45	-0.74
10,647.0	85.80	89.60	8,956.4	-29.5	1,815.5	1,815.4	0.68	-0.65	0.22
10,741.0	87.70	89.10	8,961.7	-28.5	1,909.3	1,909.3	2.09	2.02	-0.53
10,835.0	87.20	88.60	8,965.9	-26.6	2,003.2	2,003.1	0.75	-0.53	-0.53
10,928.0	89.50	87.50	8,968.6	-23.4	2,096.1	2,096.1	2.74	2.47	-1.18
11,022.0	89.90	87.20	8,969.1	-19.1	2,190.0	2,190.0	0.53	0.43	-0.32
11,116.0	90.50	87.50	8,968.8	-14.7	2,283.9	2,283.9	0.71	0.64	0.32
11,209.0	89.10	87.20	8,969.1	-10.4	2,376.8	2,376.8	1.54	-1.51	-0.32
11,303.0	90.10	86.30	8,969.7	-5.1	2,470.6	2,470.6	1.43	1.06	-0.96
11,396.0	91.00	85.60	8,968.9	1.5	2,563.4	2,563.4	1.23	0.97	-0.75
11,490.0	89.60	84.90	8,968.4	9.2	2,657.1	2,657.1	1.67	-1.49	-0.74
11,583.0	90.10	83.60	8,968.6	18.6	2,749.6	2,749.6	1.50	0.54	-1.40
11,677.0	88.50	83.40	8,969.8	29.2	2,843.0	2,843.0	1.72	-1.70	-0.21
11,770.0	89.30	82.80	8,971.5	40.4	2,935.3	2,935.4	1.08	0.86	-0.65
11,864.0	92.00	83.10	8,970.5	51.9	3,028.6	3,028.7	2.89	2.87	0.32
11,957.0	91.10	85.00	8,968.0	61.5	3,121.0	3,121.1	2.26	-0.97	2.04
12,051.0	89.00	87.30	8,967.9	67.8	3,214.8	3,214.9	3.31	-2.23	2.45
12,145.0	90.00	87.30	8,968.7	72.3	3,308.7	3,308.8	1.06	1.06	0.00
12,238.0	88.50	87.00	8,969.9	76.9	3,401.6	3,401.7	1.64	-1.61	-0.32
12,332.0	87.90	87.00	8,972.9	81.8	3,495.4	3,495.5	0.64	-0.64	0.00
12,425.0	89.00	87.20	8,975.4	86.5	3,588.2	3,588.4	1.20	1.18	0.22
12,518.0	90.40	87.50	8,975.9	90.8	3,681.1	3,681.3	1.54	1.51	0.32
12,612.0	87.80	88.20	8,977.3	94.3	3,775.1	3,775.2	2.86	-2.77	0.74
12,705.0	87.70	88.20	8,981.0	97.3	3,867.9	3,868.1	0.11	-0.11	0.00
12,799.0	85.20	87.70	8,986.8	100.6	3,961.7	3,961.9	2.71	-2.66	-0.53
12,892.0	87.50	88.20	8,992.7	103.9	4,054.4	4,054.6	2.53	2.47	0.54
12,986.0	88.60	88.00	8,995.9	107.1	4,148.3	4,148.5	1.19	1.17	-0.21
13,080.0	89.30	86.60	8,997.7	111.5	4,242.2	4,242.4	1.66	0.74	-1.49
13,173.0	90.80	87.50	8,997.6	116.3	4,335.1	4,335.3	1.88	1.61	0.97
13,267.0	90.00	87.20	8,996.9	120.6	4,429.0	4,429.2	0.91	-0.85	-0.32
13,343.0	88.60	87.00	8,997.8	124.5	4,504.9	4,505.1	1.86	-1.84	-0.26
TD @ 13410.0' MD / 8999.5' TVD									
13,410.0	88.60	87.00	8,999.5	128.0	4,571.8	4,572.0	0.00	0.00	0.00



Survey Report



Company: Mewbourne Oil Company
 Project: Eddy County, New Mexico (Nad 83)
 Site: Sec 18,T20S,R29E
 Well: Derringer 18 B3LI Federal #2H
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well Derringer 18 B3LI Federal #2H
 TVD Reference: WELL @ 3282.0usft (Patterson #243)
 MD Reference: WELL @ 3282.0usft (Patterson #243)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,868.0	2,867.8	-18.8	-15.6	GYRO Tie-In @ 2868.0' MD / 2867.8' TVD
9,003.2	8,879.1	-43.9	179.6	Crossed 330' HL @ 9003.2' MD / 8879.1' TVD
13,410.0	8,999.5	128.0	4,571.8	TD @ 13410.0' MD / 8999.5' TVD

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------



3335 Pollok Drive
Conroe, Texas 77303

936.442.2500 (office)
936.442.2599 (fax)
www.msenergyservices.com

Surveyor Certification Form

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 12 2018

RECEIVED

Survey Company: MS ENERGY SERVICES
Surveyors Name: COREY MILBY
Survey Job Type: RATE GYRO
Customer: MEWBOURNE
Well: DERRINGER 18B3LI FED 2H
API: 30-015-44431
Surveyed from: SURFACE TO A DEPTH OF 2868'MD
Survey Run Date: 09-24-17 TO 09-25-17
Surface Location: EDDY COUNTY, NM

I certify that the data is true, correct, and complete and within the limitations of the tool set forth by MS Energy Services; that I am authorized and qualified to make this report; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by MS Energy Services.

**Corey
Milby**

Digitally signed by Corey Milby
DN: cn=Corey Milby, o=MS
Energy Services, ou=MS Survey,
email=cmiby@msenergyservice
s.com, c=US
Date: 2017.09.15 16:08:10
-05'00'



Job Number: SVMO-170660
 Company: Mewbourne
 Lease/Well: Derringer 18B3LI Fed 2H
 Location: Eddy County, NM
 Rig Name: Patterson 243
 RKB: 26.6'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: Declination See Details Below
 Grid: East To Grid North
 File name: C:\WINSER-1\2017\MEWBOU-1\MO\DERRIN-1\18B3LIFED2H.SVY
 Date/Time: 26-Sep-17 / 08:30
 Curve Name: Surface - 2868' M.D. (Rate Gyro)
 Lat: 32.571556 Long: -104.121167

MS Energy

Declination To True North: 7.263°
 Grid Convergence Factor: 0° 6' 51.19497"
 Total Correction Mag to Grid: 6.99°

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 89.89
 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		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.55	283.25	100.00	.11	-.47	-.47	.48	283.25	.55
200.00	.36	281.74	200.00	.28	-1.24	-1.24	1.27	282.88	.19
300.00	.43	298.59	299.99	.53	-1.88	-1.88	1.95	285.68	.13
400.00	.61	263.34	399.99	.65	-2.74	-2.74	2.81	283.26	.36
500.00	1.36	213.99	499.97	-.40	-3.93	-3.93	3.95	264.18	1.07
600.00	1.36	199.50	599.95	-2.50	-4.99	-4.99	5.58	243.36	.34
700.00	1.23	181.31	699.92	-4.69	-5.41	-5.42	7.16	229.05	.43
800.00	1.23	176.65	799.90	-6.84	-5.37	-5.38	8.70	218.15	.10
900.00	1.16	169.31	899.88	-8.91	-5.12	-5.14	10.27	209.90	.17
1000.00	.96	165.89	999.86	-10.71	-4.73	-4.75	11.71	203.82	.21
1100.00	.59	168.16	1099.85	-12.03	-4.42	-4.44	12.81	200.17	.37
1200.00	.57	181.87	1199.85	-13.03	-4.33	-4.35	13.73	198.38	.14

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	
1300.00	.59	190.42	1299.84	-14.03	-4.44	-4.47	14.72	197.55	.09
1400.00	.57	205.02	1399.84	-14.99	-4.74	-4.77	15.72	197.56	.15
1500.00	.40	221.14	1499.83	-15.70	-5.18	-5.21	16.54	198.26	.22
1600.00	.51	221.05	1599.83	-16.30	-5.70	-5.74	17.27	199.29	.11
1700.00	.64	260.59	1699.82	-16.73	-6.55	-6.58	17.97	201.37	.41
1800.00	.57	230.73	1799.82	-17.14	-7.48	-7.52	18.70	203.59	.32
1900.00	.57	230.77	1899.81	-17.77	-8.25	-8.29	19.59	204.92	.00
2000.00	.70	262.79	1999.81	-18.16	-9.25	-9.28	20.37	206.99	.37
2100.00	.66	248.72	2099.80	-18.44	-10.39	-10.42	21.17	209.39	.17
2200.00	.70	273.88	2199.79	-18.61	-11.53	-11.57	21.89	211.79	.30
2300.00	.46	258.05	2299.79	-18.65	-12.54	-12.57	22.47	213.91	.29
2400.00	.30	278.01	2399.79	-18.70	-13.19	-13.22	22.88	215.20	.21
2500.00	.26	266.53	2499.79	-18.68	-13.67	-13.71	23.15	216.21	.07
2600.00	.26	282.52	2599.78	-18.64	-14.12	-14.16	23.39	217.15	.07
2700.00	.34	271.33	2699.78	-18.58	-14.64	-14.68	23.66	218.23	.10
2800.00	.26	255.94	2799.78	-18.63	-15.16	-15.19	24.02	219.13	.11
Last Survey Depth Recorded									
2868.00	.50	254.26	2867.78	-18.75	-15.59	-15.63	24.39	219.75	.35



Company: Mewbourne Oil Company Lease / Well: Derringer 18B3L1# Fed:2H County/Parish: Eddy County State: New Mexico Date: 9/25/2017 API#: 30-015-44431 Dir. Company: QBS Latitude: N 32° 34' 17.6" Longitude: W 104° 07' 16.2"	Operator: Corey Milby Job Number: SVMO-170660 Gyro Serial #: 164 Proposed Direction: 89.89 Total Correction: 6.99 East To Grid Rig/RKB: Patterson 243 Tie-in Company: N/A X: . Y: .
--	--

26'6" ft.

FIELD USE ONLY, DEFINITIVE SURVEY WILL COME FROM MS SURVEY OFFICES

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

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
100.00	0.55	283.25	100.00	-0.47	0.11	-0.47	0.55	0.48	283.25
200.00	0.36	281.74	200.00	-1.24	0.28	-1.24	0.19	1.27	282.88
300.00	0.43	298.59	299.99	-1.88	0.53	-1.88	0.13	1.95	285.68
400.00	0.61	263.34	399.99	-2.74	0.65	-2.74	0.36	2.81	283.26
500.00	1.36	213.99	499.97	-3.93	-0.40	-3.93	1.07	3.95	264.18
600.00	1.36	199.50	599.95	-4.99	-2.50	-4.99	0.34	5.58	243.36
700.00	1.23	181.31	699.92	-5.42	-4.69	-5.41	0.43	7.16	229.05
800.00	1.23	176.65	799.90	-5.38	-6.84	-5.37	0.10	8.70	218.15
900.00	1.16	169.31	899.88	-5.14	-8.91	-5.12	0.17	10.27	209.90
1000.00	0.96	165.89	999.86	-4.75	-10.71	-4.73	0.21	11.71	203.82
1100.00	0.59	168.16	1099.85	-4.44	-12.03	-4.42	0.37	12.81	200.17
1200.00	0.57	181.87	1199.85	-4.35	-13.03	-4.33	0.14	13.73	198.38
1300.00	0.59	190.42	1299.84	-4.47	-14.03	-4.44	0.09	14.72	197.55
1400.00	0.57	205.02	1399.84	-4.77	-14.99	-4.74	0.15	15.72	197.56
1500.00	0.40	221.14	1499.83	-5.21	-15.70	-5.18	0.22	16.54	198.26
1600.00	0.51	221.05	1599.83	-5.74	-16.30	-5.70	0.11	17.27	199.29
1700.00	0.64	260.59	1699.82	-6.58	-16.73	-6.55	0.41	17.97	201.37
1800.00	0.57	230.73	1799.82	-7.52	-17.14	-7.48	0.32	18.70	203.59
1900.00	0.57	230.77	1899.81	-8.29	-17.77	-8.25	0.00	19.59	204.92
2000.00	0.70	262.79	1999.81	-9.28	-18.16	-9.25	0.37	20.37	206.99
2100.00	0.66	248.72	2099.80	-10.42	-18.44	-10.39	0.17	21.17	209.39
2200.00	0.70	273.88	2199.79	-11.57	-18.61	-11.53	0.30	21.89	211.79
2300.00	0.46	258.05	2299.79	-12.57	-18.65	-12.54	0.29	22.47	213.91
2400.00	0.30	278.01	2399.79	-13.22	-18.70	-13.19	0.21	22.88	215.20
2500.00	0.26	266.53	2499.78	-13.71	-18.68	-13.67	0.07	23.15	216.21
2600.00	0.26	282.52	2599.78	-14.16	-18.64	-14.12	0.07	23.39	217.15
2700.00	0.34	271.33	2699.78	-14.68	-18.58	-14.64	0.10	23.66	218.23
2800.00	0.26	255.94	2799.78	-15.19	-18.63	-15.16	0.11	24.02	219.13
2868.00	0.50	254.26	2867.78	-15.63	-18.75	-15.59	0.35	24.39	219.75

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

NM OIL CONSERVATION
ARTESIA DISTRICT
Submit one copy to appropriate District Office
MAR 12 2018
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Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TRANSPORT

¹ Operator name and Address Mewbourne Oil Company PO Box 5270 Hobbs, NM 88241		² OGRID Number 14744
		³ Reason for Filing Code/ Effective Date NW / 01/06/18
⁴ API Number 30 - 015 - 44431	⁵ Pool Name Russell Bone Spring	⁶ Pool Code 52805
⁷ Property Code 319563	⁸ Property Name Derringer 18 B3L1 Federal	⁹ Well Number 2H

II. ¹⁰ Surface Location

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
3	18	20S	29E		1980	South	150	West	Eddy

¹¹ Bottom Hole Location

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	18	20S	29E		2099	South	336'	West	Eddy

¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
F	Gas Lift	01/06/2018			

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
35246	Shell Trading Company PO Box 4604 Houston, TX 77210-4604	O
151618	Enterprise Field Services PO Box 4503 Houston, TX 77210	G

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBDT	²⁵ Perforations	²⁶ DHC, MC
09/17/2017	01/06/18	13410'	13370'	9080' - 13370'	
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set	³⁰ Sacks Cement
26"		20"		408'	750
17 1/2"		13 3/4"		1105'	800
12 1/4"		9 1/4"		2985'	825
8 3/4"		7"		9265'	850
6 1/2"		4 1/2"		8413'-13363'	300
		2 3/4"		8389'	

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
01/06/18	01/06/18	1/8/2018	24 hrs	620	10
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas	⁴¹ Test Method	
NA	872	2900	1664	Producing	

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.
Signature: *Ruby Caballero*
Printed name: Ruby Caballero
Title: Regulatory
E-mail Address: rcaballero@mewbourne.com
Date: 01/23/18

OIL CONSERVATION DIVISION
Approved by:
Title:
Approval Date:
Phone: 575-393-5905