



PHOENIX

TECHNOLOGY SERVICES USA INC.

3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

Celebrating 20 Years of Focused Solutions

April 30, 2018

Oil Conservation Division
State of New Mexico
811 S. First St.
Artesia, New Mexico 88210

Dear District 2 - Artesia

Attention: Regulatory Department

Re: Mewbourne Oil
Derringer 18 B3MP Federal 2H
Eddy County, NM
API #30-015-44816
Job No. 62713

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Andy Askew	2H	0	3,017	4/29/18	4/29/18	Gyro

A certified plat on which the bottom hole location is oriented both to the 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.

RECEIVED

Best Regards,

MAY 14 2018

Brittany Carley

DISTRICT II-ARTESIA O.C.D.

Brittany Carley
Operations Administrator

SURVEY CERTIFICATION FORM

3610 Elkins Road Midland, TX 79705 t:432-684-0057 f: 432-686-7964



PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne

Job #: 62713

Well Name: Derringer 18 B3MP Federal 2H

County/State: Eddy/ NM

Survey Instrument Type: North Seek Rate Gyro

API # 30-015-44816

TIE-IN DATA

Measure Depth (ft)	Vertical Depth (ft)	Inclination (°)	Azimuth (°)	N-S Coordinates	E-W Coordinates	Data Source
0	0	0	0	0	0	Surface

First Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2018-04-29	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2018-04-29	3017	0.92	98.1

Projected TD Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
0	0	0	0

Grid Correction
-0.11

Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Angel Guebara

To the best of my knowledge I certify this survey data to be correct and true

Date:

4/29/18

Print Name: Andy Askew

Signature:

Andy Askew



Company: Mewbourne
 Well: Derringer 18 B3MP Federal 2H
 Location: Eddy Co., NM
 Rig: Patterson 560

Job Number: 62713
 Grid Corr.: -0.11
 Lat: 32.56
 Long: -104.12

Date: 04-29-18
 Calculation Method: Minimum Curvature
 Proposed Azimuth: _____
 RKB - MSL in feet: 28.6
 Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
Enter Tie-In Survey on Line 10													
FIELD COPY, NON-DEFINITIVE													
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.21	245.52	100	100.00	-0.08	0.08 S	0.17 W	0.18	245.52	0.21	0.21	245.52
	200.00	0.35	176.52	100	200.00	-0.46	0.46 S	0.32 W	0.55	214.60	0.34	0.14	-69.00
	300.00	0.73	123.34	100	299.99	-1.11	1.11 S	0.24 E	1.14	168.03	0.59	0.38	-53.18
	400.00	1.15	86.42	100	399.98	-1.40	1.40 S	1.77 E	2.26	128.34	0.72	0.42	-36.92
	500.00	1.05	81.69	100	499.96	-1.20	1.20 S	3.68 E	3.87	108.13	0.13	-0.10	-4.73
	600.00	0.82	88.08	100	599.95	-1.05	1.05 S	5.30 E	5.40	101.18	0.25	-0.23	6.39
	700.00	1.00	84.61	100	699.94	-0.94	0.94 S	6.88 E	6.95	97.79	0.19	0.18	-3.47
	800.00	1.02	84.38	100	799.92	-0.77	0.77 S	8.64 E	8.67	95.11	0.02	0.02	-0.23
	900.00	1.06	81.13	100	899.91	-0.54	0.54 S	10.44 E	10.45	92.98	0.07	0.04	-3.25
	1000.00	1.24	81.19	100	999.88	-0.23	0.23 S	12.42 E	12.42	91.08	0.18	0.18	0.06
	1100.00	1.18	94.60	100	1099.86	-0.15	0.15 S	14.52 E	14.52	90.60	0.29	-0.06	13.41
	1200.00	0.75	68.38	100	1199.85	0.01	0.01 N	16.15 E	16.15	89.97	0.61	-0.43	-26.22
	1300.00	0.82	60.21	100	1299.84	0.60	0.60 N	17.38 E	17.39	88.01	0.13	0.07	-8.17
	1400.00	0.40	343.17	100	1399.83	1.29	1.29 N	17.90 E	17.95	85.87	0.83	-0.42	282.96
	1500.00	0.40	55.05	100	1499.83	1.83	1.83 N	18.09 E	18.18	84.23	0.47	0.00	-288.12
	1600.00	0.35	39.63	100	1599.83	2.26	2.26 N	18.57 E	18.70	83.05	0.11	-0.05	-15.42
	1700.00	0.36	43.97	100	1699.83	2.72	2.72 N	18.98 E	19.17	81.83	0.03	0.01	4.34
	1800.00	0.75	93.64	100	1799.82	2.91	2.91 N	19.85 E	20.06	81.66	0.59	0.39	49.67
	1900.00	1.03	121.04	100	1899.81	2.40	2.40 N	21.27 E	21.41	83.55	0.50	0.28	27.40
	2000.00	1.16	107.10	100	1999.79	1.64	1.64 N	23.01 E	23.07	85.92	0.30	0.13	-13.94
	2100.00	1.26	93.62	100	2099.77	1.28	1.28 N	25.08 E	25.11	87.09	0.30	0.10	-13.48
	2200.00	0.90	86.84	100	2199.75	1.25	1.25 N	26.96 E	26.99	87.35	0.38	-0.36	-6.78
	2300.00	1.26	82.09	100	2299.74	1.44	1.44 N	28.83 E	28.87	87.13	0.37	0.36	-4.75
	2400.00	1.20	81.47	100	2399.71	1.75	1.75 N	30.96 E	31.00	86.76	0.06	-0.06	-0.62
	2500.00	1.37	73.52	100	2499.69	2.25	2.25 N	33.14 E	33.21	86.12	0.25	0.17	-7.95
	2600.00	1.23	90.60	100	2599.66	2.57	2.57 N	35.36 E	35.45	85.84	0.41	-0.14	17.08
	2700.00	1.28	79.98	100	2699.64	2.76	2.76 N	37.53 E	37.63	85.80	0.24	0.05	-10.62



Company: Mewbourne
 Well: Derringer 18 B3MP Federal 2H
 Location: Eddy Co., NM
 Rig: Patterson 560

Job Number: 62713
 Grid Corr.: -0.11
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 Long: -104.12

Calculation Method: Minimum Curvature
 Proposed Azimuth:
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 Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	2800.00	1.42	77.92	100	2799.61	3.21	3.21 N	39.84 E	39.97	85.39	0.15	0.14	-2.06
	2900.00	0.95	78.20	100	2899.59	3.64	3.64 N	41.86 E	42.02	85.03	0.47	-0.47	0.28
	3017.00	0.92	98.10	117	3016.57	3.70	3.70 N	43.74 E	43.90	85.16	0.28	-0.03	17.01

**NM OIL CONSERVATION
ARTESIA DISTRICT**

MAR 20 2018

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1320 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-44816		² Pool Code 52805	³ Pool Name Russell; Benz Spring
⁴ Property Code 31620 321020	⁵ Property Name DERRINGER 18 B3MP FEDERAL		⁶ Well Number 2H
⁷ GRID NO. 14744	⁸ Operator Name MEWBOURNE OIL COMPANY		⁹ Elevation 3263'

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
4	18	20S	29E		290	SOUTH	475	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	20S	29E		450	SOUTH	330	EAST	EDDY

¹² Dedicated Acres 160	¹³ Joint or Infill (53.69)	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

LOT 1 LOT 2 LOT 3 LOT 4 475' 290' S. L.	16 S 89°54'02" W 3375.87' 17 S 89°54'26" W 2641.24' 18 S 89°54'30" W 2642.21'	19 S 89°54'33" E 2642.02' 20 S 89°54'33" E 2642.02'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Jackie Lathan</i> 3/20/18 Signature Date Printed Name E-mail Address
	GEODETIC DATA NAD 83 GRID - NM EAST SURFACE LOCATION N 570086.2 - E 606832.8 LAT: 32.5670428° N LONG: 104.1207313° W BOTTOM HOLE N 570254.2 - E 611108.8 LAT: 32.5674803° N LONG: 104.1068568° W CORNER DATA NAD 83 GRID - NM EAST A: FOUND 1" IRON PIPE N 569795.3 - E 606355.1 B: FOUND BRASS CAP "1942" N 572439.7 - E 606381.9 C: FOUND BRASS CAP "1916" N 575081.0 - E 606409.4 D: FOUND BRASS CAP "1916" N 575085.1 - E 608784.7 E: FOUND BRASS CAP "1916" N 575088.8 - E 611425.3 F: FOUND BRASS CAP "1916" N 569804.9 - E 611432.8 G: FOUND BRASS CAP "1916" N 569800.7 - E 608798.2	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 1-18-2018 Date of Survey <i>Robert M. Howett</i> Signature and Seal of Professional Surveyor 19680 Certificate Number	
	16 S 89°54'02" W 3375.87' 17 S 89°54'26" W 2641.24' 18 S 89°54'30" W 2642.21'	19 S 89°54'33" E 2642.02' 20 S 89°54'33" E 2642.02'	
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RRC - Job No.: LS1801009

for 3-20-18