



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

January 9, 2018

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

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 16 2018
RECEIVED

Dear District 2 - Artesia

Attention: Regulatory Department

Re: Mewbourne Oil
Pavo Macho 31 B2LI Fed Com 1H
Eddy County, NM
API #30-015-44066
Job No. 61010

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	1H	0	4,360	3/20/17	3/20/17	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.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

JAN 16 2018

SURVEY CERTIFICATION FORM

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



Company: Mewbourne Oil

Job #: 61010

Well Name: Pavo Macho 31 B2LI Fed Com 1H

County/State: Eddy / NM

Survey Instrument Type: North Seek Rate Gyro

API #: 30-015-44066

TIE-IN DATA

0	0	0	0	0	0	Surface

First Survey

2017-03-20	0	0	0

Last Survey

2017-03-20	4360	0.77	235.64

Projected TD Survey

0	0	0	0

-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

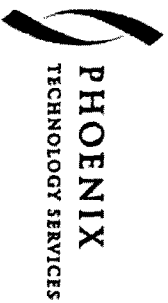
Date:

3-20-17

Print Name: Andy Askew

Signature:

A handwritten signature in black ink, appearing to read 'Andy Askew'.



PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne Oil
Well: Pavo Macho 31 B2U Fed Com 1H
Location: Eddy Co., NM
Rig: Patterson 250

Job Number: 61010
Grid Corr.: -0.11
Lat: 32.70
Long: -104.12

Date: 03-20-17
Calculation Method: Minimum Curvature
Proposed Azimuth: 26.6
RKB - MSL in feet: Surface
Tie Into:

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													
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.26	155.57	100	100.00	-0.21	0.21 S	0.09 E	0.23	155.57	0.26	0.26	155.57
	200.00	0.26	243.69	100	200.00	-0.51	0.51 S	0.02 W	0.51	181.75	0.36	0.00	88.12
	300.00	0.77	165.56	100	300.00	-1.27	1.27 S	0.05 W	1.27	182.33	0.76	0.51	-78.13
	400.00	1.10	161.04	100	399.98	-2.82	2.82 S	0.43 E	2.86	171.38	0.34	0.33	-4.52
	500.00	1.17	153.59	100	499.96	-4.65	4.65 S	1.19 E	4.80	165.59	0.16	0.07	-7.45
	600.00	1.39	123.59	100	599.94	-6.23	6.23 S	2.66 E	6.77	156.90	0.70	0.22	-30.00
	700.00	1.60	113.70	100	699.90	-7.46	7.46 S	4.95 E	8.95	146.46	0.33	0.21	-9.89
	800.00	1.61	118.34	100	799.87	-8.69	8.69 S	7.46 E	11.46	139.35	0.13	0.01	4.64
	900.00	1.53	119.94	100	899.83	-10.02	10.02 S	9.86 E	14.06	135.49	0.09	-0.08	1.60
	1000.00	1.43	116.74	100	999.79	-11.25	11.25 S	12.13 E	16.54	132.86	0.13	-0.10	-3.20
	1100.00	1.39	123.74	100	1099.76	-12.49	12.49 S	14.25 E	18.95	131.23	0.18	-0.04	7.00
	1200.00	1.43	134.82	100	1199.73	-14.04	14.04 S	16.14 E	21.39	131.02	0.28	0.04	11.08
	1300.00	1.61	122.48	100	1299.70	-15.67	15.67 S	18.21 E	24.03	130.72	0.37	0.18	-12.34
	1400.00	1.25	127.09	100	1399.67	-17.09	17.09 S	20.27 E	26.51	130.13	0.38	-0.36	4.61
	1500.00	1.04	134.05	100	1499.65	-18.38	18.38 S	21.79 E	28.50	130.14	0.25	-0.21	6.96
	1600.00	0.80	138.49	100	1599.63	-19.53	19.53 S	22.91 E	30.10	130.45	0.25	-0.24	4.44
	1700.00	0.78	140.00	100	1699.63	-20.57	20.57 S	23.81 E	31.46	130.83	0.03	-0.02	1.51
	1800.00	0.85	147.27	100	1799.62	-21.72	21.72 S	24.64 E	32.85	131.39	0.12	0.07	7.27
	1900.00	0.89	158.71	100	1899.60	-23.07	23.07 S	25.33 E	34.26	132.33	0.18	0.04	11.44
	2000.00	0.93	162.15	100	1999.59	-24.56	24.56 S	25.86 E	35.66	133.53	0.07	0.04	3.44
	2100.00	1.16	170.83	100	2099.57	-26.33	26.33 S	26.27 E	37.20	135.07	0.28	0.23	8.68
	2200.00	1.15	175.19	100	2199.55	-28.33	28.33 S	26.51 E	38.80	136.90	0.09	-0.01	4.36
	2300.00	1.24	181.77	100	2299.53	-30.41	30.41 S	26.56 E	40.38	138.87	0.16	0.09	6.58
	2400.00	1.26	181.91	100	2399.51	-32.60	32.60 S	26.49 E	42.00	140.89	0.02	0.02	0.14
	2500.00	1.58	172.99	100	2499.48	-35.06	35.06 S	26.63 E	44.03	142.79	0.39	0.32	-8.92
	2600.00	1.39	183.31	100	2599.44	-37.64	37.64 S	26.72 E	46.16	144.63	0.33	-0.19	10.32
	2700.00	1.19	194.03	100	2699.42	-39.86	39.86 S	26.40 E	47.81	146.48	0.31	-0.20	10.72



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Proposed Azimuth: 26.6
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Tie Into: _____

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')
	2800.00	1.23	199.94	100	2799.40	-41.88	41.88 S	25.78 E	49.18	148.38	0.13	0.04	5.91
	2900.00	1.59	194.22	100	2899.37	-44.23	44.23 S	25.08 E	50.84	150.45	0.39	0.36	-5.72
	3000.00	1.69	198.40	100	2999.33	-46.97	46.97 S	24.27 E	52.87	152.67	0.16	0.10	4.18
	3100.00	2.24	196.08	100	3099.27	-50.25	50.25 S	23.26 E	55.38	155.16	0.56	0.55	-2.32
	3200.00	2.66	197.24	100	3199.17	-54.35	54.35 S	22.04 E	58.64	157.93	0.42	0.42	1.16
	3300.00	2.89	202.60	100	3299.06	-58.89	58.89 S	20.38 E	62.32	160.91	0.35	0.23	5.36
	3400.00	3.22	205.06	100	3398.92	-63.76	63.76 S	18.22 E	66.31	164.05	0.36	0.33	2.46
	3500.00	2.94	206.05	100	3498.77	-68.61	68.61 S	15.90 E	70.43	166.95	0.28	-0.28	0.99
	3600.00	2.32	212.82	100	3598.67	-72.61	72.61 S	13.68 E	73.89	169.33	0.69	-0.62	6.77
	3700.00	1.81	215.36	100	3698.60	-75.60	75.60 S	11.67 E	76.50	171.22	0.52	-0.51	2.54
	3800.00	1.33	226.65	100	3798.56	-77.69	77.69 S	9.91 E	78.32	172.73	0.57	-0.48	11.29
	3900.00	0.89	232.48	100	3898.54	-78.96	78.96 S	8.45 E	79.41	173.89	0.45	-0.44	5.83
	4000.00	0.99	254.43	100	3998.53	-79.66	79.66 S	7.00 E	79.97	174.97	0.37	0.10	21.95
	4100.00	0.59	250.65	100	4098.52	-80.06	80.06 S	5.69 E	80.27	175.94	0.40	-0.40	-3.78
	4200.00	0.69	259.05	100	4198.51	-80.35	80.35 S	4.61 E	80.48	176.72	0.14	0.10	8.40
	4300.00	0.71	257.49	100	4298.51	-80.60	80.60 S	3.41 E	80.67	177.57	0.03	0.02	-1.56
	4360.00	0.77	235.64	60	4358.50	-80.91	80.91 S	2.72 E	80.95	178.08	0.48	0.10	-36.42

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
1220 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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-44066		2 Pool Code 49553		3 Pool Name PALMILLO EAST BONE SPRING OIL	
4 Property Code 317454		5 Property Name PAVO MACHO 31 B2LI FED COM			6 Well Number 1H
7 GRID NO. 14744		8 Operator Name MEWBOURNE OIL COMPANY			9 Elevation 3397'
10 Surface Location					
UL or lot no. 3	Section 31	Township 18S	Range 29E	Lot Idn 1980	Feet from the 185
North/South line SOUTH		Feet from the 185		East/West line WEST	
County EDDY					
11 Bottom Hole Location If Different From Surface					
UL or lot no. I	Section 31	Township 18S	Range 29E	Lot Idn 1800	Feet from the 330
North/South line SOUTH		Feet from the 330		East/West line EAST	
County EDDY					
12 Dedicated Acres 160		13 Joint or Infill 152.8		14 Consolidation Code	
15 Order No.					

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.

16 GEODETIC DATA NAD 27 GRID - NM EAST LOT 1 SURFACE LOCATION N 619431.7 - E 565383.3 LAT: 32.70273540° N LONG: 104.12077887° W BOTTOM HOLE N 619183.5 - E 569913.9		17 CORNER DATA NAD 27 GRID - NM EAST A: FOUND BRASS CAP "1916" N 617454.7 - E 565198.6 B: FOUND BRASS CAP "1916" N 622447.7 - E 565205.0 C: FOUND BRASS CAP "1916" N 622456.4 - E 567594.8 D: FOUND BRASS CAP "1916" N 622466.3 - E 570235.1 E: FOUND BRASS CAP "1916" N 619825.8 - E 570241.6 F: FOUND 1/2" REBAR N 617378.0 - E 570250.1 G: FOUND 1/2" REBAR N 617422.6 - E 567609.1 H: FOUND BRASS CAP "1914" N 620105.300 - E 565198.23		18 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 unleased 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 Signature: <u>Bradley B. Bish</u> Date: <u>7-6-16</u> Printed Name: <u>BRADLEY BISH</u> E-mail Address: _____	
LOT 2 Project Area LOT 3 SEE DETAIL "A" WELL PATH DETAIL "A" Producing Area		19 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. Date of Survey: <u>7-17-2015</u> Signature and Seal of Professional Surveyor: <u>Robert M. Howett</u> Certificate Number: <u>19680</u>			