

STRYKER

DIRECTIONAL

June 19, 2019

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

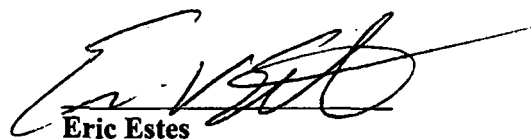
Attn: Jackie Lathan

Re: Mewbourne Oil Company
Salado Draw 9 16 W1AP Federal Com #2H
Red Hills; Wolfcamp (Gas)
Lea County, New Mexico
API# 30-025-44913

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>
Jose Cortina	Original Hole	14,762ft. to 22,823ft.	11-29-18 to 12-19-18	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\Salado Draw 9 16 W1AP Fed Com #2HM181168

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

P.O. Box 1250

Montgomery, TX 77356

Office (936) 582-7296 * Fax (936)-588-4163



June 19, 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 November 29, 2018, through December 19, 2018 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 14,762 feet to a depth of 22,823 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 Salado Draw 9 16 W1AP Federal Com #002H, well API # 30-025-44913 in Lea 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

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Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 9 16-26S-33E Salado Draw 9/16 W1AP F
Well: Salado Draw 9/16 W1AP Fed Com #2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Salado Draw 9/16 W1AP Fed Com #2H
TVD Reference: 3332 + 27 @ 3359.0usft (Patterson 231)
MD Reference: 3332 + 27 @ 3359.0usft (Patterson 231)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey Program Date 01/03/19

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	14,656.0	Intrepid Survey (Original Hole)	MWD	MWD v3:standard declination
14,762.0	22,825.0	Survey #2 (Original Hole)		

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	
14,656.0	91.60	181.00	12,561.8	-9,202.8	-1,967.6	-130.4	1,971.9	183.79	Tie-In
B.B. Salado Draw 9 16 W1AP Fed Com #2H									
14,762.0	89.50	178.90	12,560.8	-9,201.8	-2,073.6	-130.3	2,077.7	183.60	
14,857.0	87.60	179.00	12,563.2	-9,204.2	-2,168.6	-128.6	2,172.4	183.39	
14,952.0	87.10	179.50	12,567.6	-9,208.6	-2,263.4	-127.3	2,267.0	183.22	
15,047.0	86.70	181.80	12,572.7	-9,213.7	-2,358.3	-128.4	2,361.8	183.12	
15,142.0	87.60	181.30	12,577.5	-9,218.5	-2,453.1	-131.0	2,456.6	183.06	
15,236.0	87.30	179.20	12,581.7	-9,222.7	-2,547.0	-131.4	2,550.4	182.95	
15,331.0	87.70	178.90	12,585.8	-9,226.8	-2,641.9	-129.8	2,645.1	182.81	
15,426.0	90.60	179.40	12,587.2	-9,228.2	-2,736.9	-128.4	2,739.9	182.69	
15,521.0	91.70	180.20	12,585.3	-9,226.3	-2,831.9	-128.1	2,834.8	182.59	
15,615.0	91.50	181.40	12,582.7	-9,223.7	-2,925.8	-129.4	2,928.7	182.53	
15,710.0	89.70	180.70	12,581.7	-9,222.7	-3,020.8	-131.1	3,023.7	182.49	
15,805.0	90.80	179.60	12,581.2	-9,222.2	-3,115.8	-131.4	3,118.6	182.41	
15,900.0	89.00	179.10	12,581.3	-9,222.3	-3,210.8	-130.3	3,213.4	182.32	
15,993.0	88.10	178.60	12,583.6	-9,224.6	-3,303.7	-128.4	3,306.2	182.23	
16,087.0	88.30	179.50	12,586.6	-9,227.6	-3,397.7	-126.9	3,400.0	182.14	
16,182.0	87.60	179.80	12,590.0	-9,231.0	-3,492.6	-126.3	3,494.9	182.07	
16,277.0	89.10	177.70	12,592.7	-9,233.7	-3,587.5	-124.2	3,589.7	181.98	
16,372.0	89.10	177.10	12,594.2	-9,235.2	-3,682.4	-119.9	3,684.4	181.87	
16,467.0	89.00	177.00	12,595.8	-9,236.8	-3,777.3	-115.0	3,779.0	181.74	



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 9 16-28S-33E Salado Draw 9/16 W1AP F
Well: Salado Draw 9/16 W1AP Fed Com #2H
Wellbore: Original Hole
Design: Original Hole

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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 (°)
16,563.0	91.70	177.10	12,595.2	-9,236.2	-3,873.2	-110.1	3,874.7	181.63
16,657.0	91.10	177.00	12,592.9	-9,233.9	-3,967.0	-105.3	3,968.4	181.52
16,752.0	90.00	176.40	12,592.0	-9,233.0	-4,061.8	-99.8	4,063.1	181.41
16,848.0	90.50	176.80	12,591.6	-9,232.6	-4,157.7	-94.1	4,158.7	181.30
16,943.0	90.70	178.80	12,590.6	-9,231.6	-4,252.6	-90.4	4,253.6	181.22
17,038.0	90.10	180.00	12,589.9	-9,230.9	-4,347.6	-89.5	4,348.5	181.18
17,132.0	90.50	179.20	12,589.4	-9,230.4	-4,441.6	-88.8	4,442.5	181.15
17,227.0	89.30	177.40	12,589.6	-9,230.6	-4,536.5	-86.0	4,537.3	181.09
17,322.0	90.80	177.50	12,589.5	-9,230.5	-4,631.4	-81.8	4,632.2	181.01
17,416.0	88.70	178.60	12,589.9	-9,230.9	-4,725.4	-78.6	4,726.0	180.95
17,510.0	94.50	182.00	12,587.3	-9,228.3	-4,819.3	-79.0	4,819.9	180.94
17,575.0	94.50	182.40	12,582.2	-9,223.2	-4,884.0	-81.5	4,884.7	180.96
17,607.0	91.70	184.00	12,580.4	-9,221.4	-4,915.9	-83.3	4,916.6	180.97
17,702.0	86.00	183.20	12,582.4	-9,223.4	-5,010.7	-89.3	5,011.5	181.02
17,734.0	88.40	184.00	12,583.9	-9,224.9	-5,042.6	-91.3	5,043.4	181.04
17,759.0	88.50	183.90	12,584.6	-9,225.6	-5,067.5	-93.0	5,068.4	181.05
17,796.0	90.70	183.80	12,584.9	-9,225.9	-5,104.4	-95.5	5,105.3	181.07
17,828.0	89.80	183.00	12,584.7	-9,225.7	-5,136.4	-97.4	5,137.3	181.09
17,860.0	89.10	182.60	12,585.0	-9,226.0	-5,168.3	-98.9	5,169.3	181.10
17,891.0	88.30	182.80	12,585.7	-9,226.7	-5,199.3	-100.4	5,200.3	181.11
17,923.0	88.00	183.10	12,586.8	-9,227.8	-5,231.2	-102.1	5,232.2	181.12
17,954.0	87.80	183.90	12,587.9	-9,228.9	-5,262.1	-103.9	5,263.2	181.13
17,986.0	87.10	183.90	12,589.3	-9,230.3	-5,294.0	-106.1	5,295.1	181.15
18,081.0	88.40	183.10	12,593.0	-9,234.0	-5,388.8	-111.9	5,390.0	181.19
18,175.0	88.50	181.60	12,595.6	-9,236.6	-5,482.7	-115.8	5,483.9	181.21
18,270.0	89.80	180.50	12,597.0	-9,238.0	-5,577.6	-117.5	5,578.9	181.21
18,365.0	88.90	182.60	12,598.1	-9,239.1	-5,672.6	-120.1	5,673.9	181.21



Microsoft
MWD Surveys



Company: Mewbourne Oil Company
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Wellbore: Original Hole
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Local Co-ordinate Reference: Well Salado Draw 9/16 W1AP Fed Com #2H
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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 (°)
18,460.0	92.00	180.90	12,597.3	-9,238.3	-5,767.5	-123.0	5,768.8	181.22
18,555.0	86.60	177.30	12,598.5	-9,239.5	-5,862.5	-121.5	5,863.7	181.19
18,650.0	88.80	177.60	12,602.3	-9,243.3	-5,957.3	-117.3	5,958.4	181.13
18,744.0	88.30	177.20	12,604.7	-9,245.7	-6,051.2	-113.0	6,052.2	181.07
18,839.0	87.80	176.30	12,607.9	-9,248.9	-6,146.0	-107.6	6,146.9	181.00
18,934.0	88.50	178.10	12,611.0	-9,252.0	-6,240.8	-103.0	6,241.6	180.95
19,030.0	89.80	177.00	12,612.4	-9,253.4	-6,336.7	-98.9	6,337.5	180.89
19,124.0	88.00	176.30	12,614.2	-9,255.2	-6,430.5	-93.4	6,431.2	180.83
19,219.0	89.90	177.50	12,615.9	-9,256.9	-6,525.3	-88.3	6,525.9	180.77
19,331.0	90.50	179.40	12,615.6	-9,256.6	-6,637.3	-85.2	6,637.8	180.74
19,426.0	90.30	179.70	12,614.9	-9,255.9	-6,732.3	-84.5	6,732.8	180.72
19,521.0	89.70	179.80	12,614.9	-9,255.9	-6,827.3	-84.1	6,827.8	180.71
19,616.0	89.40	180.90	12,615.6	-9,256.6	-6,922.3	-84.6	6,922.8	180.70
19,711.0	90.10	181.60	12,616.1	-9,257.1	-7,017.3	-86.7	7,017.8	180.71
19,806.0	91.00	182.00	12,615.1	-9,256.1	-7,112.2	-89.7	7,112.8	180.72
19,900.0	90.40	183.40	12,614.0	-9,255.0	-7,206.1	-94.1	7,206.7	180.75
19,995.0	87.90	183.90	12,615.4	-9,256.4	-7,300.9	-100.2	7,301.6	180.79
20,090.0	87.80	182.40	12,619.0	-9,260.0	-7,395.7	-105.4	7,396.4	180.82
20,185.0	87.70	181.00	12,622.7	-9,263.7	-7,490.5	-108.2	7,491.3	180.83
20,280.0	88.40	180.20	12,625.9	-9,266.9	-7,585.6	-109.2	7,586.3	180.82
20,374.0	89.40	179.00	12,627.7	-9,268.7	-7,679.5	-108.5	7,680.2	180.81
20,469.0	90.60	179.10	12,627.7	-9,268.7	-7,774.4	-107.0	7,775.2	180.79
20,564.0	90.90	179.20	12,626.5	-9,267.5	-7,869.4	-105.6	7,870.1	180.77
20,658.0	91.70	179.10	12,624.4	-9,265.4	-7,963.4	-104.2	7,964.1	180.75
20,753.0	92.50	178.80	12,620.9	-9,261.9	-8,058.3	-102.4	8,059.0	180.73
20,848.0	90.70	178.30	12,618.2	-9,259.2	-8,153.2	-100.0	8,153.9	180.70
20,944.0	90.50	179.30	12,617.2	-9,258.2	-8,249.2	-98.0	8,249.8	180.68



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Company: Mewbourne Oil Company
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Site: Section 9 16-28S-33E Salado Draw 9/16 W1AP F
Well: Salado Draw 9/16 W1AP Fed Com #2H
Wellbore: Original Hole
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Local Co-ordinate Reference: Well Salado Draw 9/16 W1AP Fed Com #2H
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Survey Calculation Method: Minimum Curvature
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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
21,039.0	90.80	180.20	12,616.1	-9,257.1	-8,344.2	-97.6	8,344.8	180.67
21,134.0	87.60	177.50	12,617.5	-9,258.5	-8,439.2	-95.7	8,439.7	180.65
21,229.0	87.40	178.80	12,621.6	-9,262.6	-8,534.0	-92.6	8,534.5	180.62
21,324.0	86.40	178.20	12,626.8	-9,267.8	-8,628.8	-90.1	8,629.3	180.60
21,418.0	87.30	179.50	12,631.9	-9,272.9	-8,722.7	-88.3	8,723.1	180.58
21,513.0	89.00	181.50	12,635.0	-9,276.0	-8,817.6	-89.1	8,818.1	180.58
21,608.0	89.00	182.90	12,636.6	-9,277.6	-8,912.5	-92.7	8,913.0	180.60
21,703.0	89.50	182.20	12,637.9	-9,278.9	-9,007.4	-97.0	9,007.9	180.62
21,798.0	92.40	188.10	12,636.3	-9,277.3	-9,102.0	-105.5	9,102.6	180.66
21,893.0	91.90	185.90	12,632.7	-9,273.7	-9,196.2	-117.1	9,196.9	180.73
21,988.0	90.10	184.90	12,631.1	-9,272.1	-9,290.8	-126.0	9,291.6	180.78
22,083.0	88.50	182.20	12,632.2	-9,273.2	-9,385.6	-131.9	9,386.5	180.80
22,178.0	90.50	181.00	12,633.1	-9,274.1	-9,480.5	-134.5	9,481.5	180.81
22,273.0	91.20	181.00	12,631.7	-9,272.7	-9,575.5	-136.2	9,576.4	180.81
22,367.0	90.40	180.40	12,630.4	-9,271.4	-9,669.5	-137.3	9,670.4	180.81
22,462.0	89.60	181.40	12,630.4	-9,271.4	-9,764.4	-138.8	9,765.4	180.81
22,557.0	90.70	182.50	12,630.1	-9,271.1	-9,859.4	-142.1	9,860.4	180.83
22,652.0	90.80	183.50	12,628.9	-9,269.9	-9,954.3	-147.0	9,955.3	180.85
22,746.0	90.90	183.50	12,627.5	-9,268.5	-10,048.1	-152.8	10,049.2	180.87
22,769.0	91.20	183.70	12,627.0	-9,268.0	-10,071.0	-154.2	10,072.2	180.88
22,823.6	91.20	183.70	12,625.9	-9,266.9	-10,125.5	-157.7	10,126.8	180.89
PBHL Salado Draw 9 16 W1AP Fed Com #2H								
22,825.0	91.20	183.70	12,625.9	-9,266.9	-10,126.9	-157.8	10,128.1	180.89
22825.0' MD Projected to Bit								



Microsoft
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Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
22,825.0	12,625.9	-10,126.9	-157.8	22825.0' MD Projected to Bit



COMPANY: Mewbourne Oil Company
WELL: Salado Draw 9/16 W1AP Fed Com #2H
COUNTY: Lea County N. M. Nad (83)
DATUM: North American Datum 1983
RIG: Patterson 231

STRYKER
DIRECTIONAL

OFFICE: 734.582.7294

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.38°

GEODETIC ZONE: New Mexico East Zone
3332 + 27 @ 3359.0usft (Patterson 231)
GROUND ELEVATION: 3332.0

+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.0	0.0	387886.60	777886.70	32° 3' 51.669 N	103° 34' 9.823 W

PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3400.0	0.00	0.00	3400.0	0.0	0.0	0.00	0.00	0.0	
3	3450.0	1.00	0.00	3450.0	0.4	0.0	2.00	0.00	-0.4	
4	4950.0	1.00	0.00	4949.8	26.6	0.0	0.00	0.00	-26.6	
5	5155.0	5.00	336.67	5154.5	36.6	-3.5	2.00	331.14	-36.6	
6	8433.3	5.00	336.67	8420.3	299.0	-116.7	0.00	0.00	-288.4	
7	8683.3	0.00	0.00	8670.0	309.0	-121.0	2.00	180.00	-308.4	
8	12004.4	0.00	0.00	11991.1	309.0	-121.0	0.00	0.00	-308.4	
9	12900.6	89.62	179.60	12564.0	-260.2	-117.0	10.00	179.60	260.7	
10	22773.6	89.62	179.60	12629.0	-10132.7	-47.8	0.00	10132.8		PBHL Salado Draw 9 16 W1AP Fed Com #2H



Azimuths to Grid North
True North: -0.41°
Magnetic North: 6.38°

Magnetic Field
Strength: 47695.4nT
Dip Angle: 59.90°
Date: 11/28/2018
Model: IGRF2015

SHL: 310' FNL; 2310' FEL
Section 9-26S-33E
PBHL: 100' FSL; 330' FEL
Section 16-26S-33E

