



HOBBS OGD

DEC 19 2019

RECEIVED

COMPANY: Mewbourne Oil Company
WELL: Dolly Varden 25 24 B2ED St Corn 1H
COUNTY: Lea County N. M. Nad (83)
DATUM: North American Datum 1983
RIG: Patterson 562

STRYKER
DIRECTIONAL
OFFICE: 936.582.7296

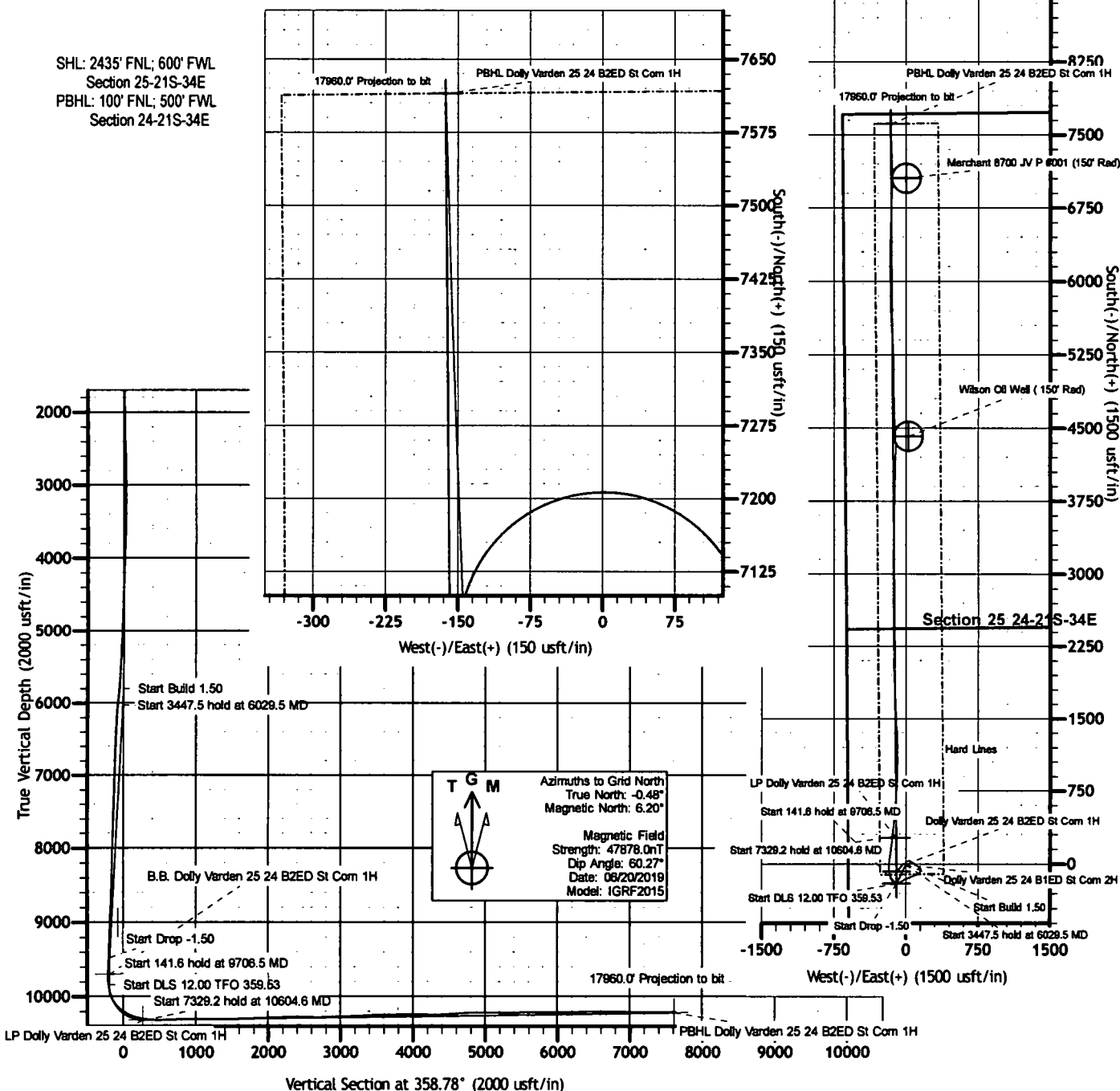
GEODETTIC ZONE: New Mexico Eastern Zone
3697 + 27 @ 3724.0usft (Patterson 562)
GROUND ELEVATION: 3697.0

+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.0	0.0	528823.40	819943.50	32° 27' 2.019 N	103° 25' 48.508 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	5800.0	0.00	0.00	5800.0	0.0	0.0	0.00	0.00	0.0	
3	6028.5	3.44	208.42	6028.3	-6.2	-3.1	1.50	208.42	-6.1	
4	9477.0	3.44	208.42	9470.7	-191.6	-85.2	0.00	0.00	-189.5	
5	9708.5	0.00	0.00	9700.0	-197.7	-88.2	1.50	180.00	-195.8	B.B. Dolly Varden 25 24 B2ED St Corn 1H
6	9848.1	0.00	0.00	9841.6	-197.7	-88.2	0.00	0.00	-195.8	
7	10804.6	90.78	359.53	10319.0	288.2	-102.2	12.00	359.53	288.4	
8	17833.8	90.78	359.53	10219.0	7814.5	-182.7	0.00	0.00	7818.2	PBHL Dolly Varden 25 24 B2ED St Corn 1H

SHL: 2435' FNL; 600' FWL
Section 25-21S-34E
PBHL: 100' FNL; 500' FWL
Section 24-21S-34E





Mewbourne Oil Company

Lea County N. M. Nad (83)

Section 25 24-21S-34E Dolly Varden 25 24

Dolly Varden 25 24 B2ED St Com 1H

Original Hole

Design: Original Hole

Standard Survey Report

30 August, 2019





Stryker Energy Directional Services

Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Dolly Varden 25 24 B2ED St Com 1H
Project:	Lea County N. M. Nad (83)	TVD Reference:	3697 + 27 @ 3724.0usft (Patterson 562)
Site:	Section 25 24-21S-34E Dolly Varden 25 24	MD Reference:	3697 + 27 @ 3724.0usft (Patterson 562)
Well:	Dolly Varden 25 24 B2ED St Com 1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.15 Single User Db

Project	Lea 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 25 24-21S-34E Dolly Varden 25 24			
Site Position:		Northing:	528,823.40 usft	Latitude:	32° 27' 2.019 N
From:	Map	Easting:	819,943.50 usft	Longitude:	103° 25' 48.508 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.48 °

Well	Dolly Varden 25 24 B2ED St Com 1H					
Well Position	+N-S	0.0 usft	Northing:	528,823.40 usft	Latitude:	32° 27' 2.019 N
	+E-W	0.0 usft	Easting:	819,943.50 usft	Longitude:	103° 25' 48.508 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	27.0 usft	Ground Level:	3,697.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	06/20/19	6.68	60.27	47,878.01194450

Design	Original Hole				
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	358.77	

Survey Program	Date	08/30/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
78.0	1,671.0	Gyro Surveys (Original Hole)	GyroFlex		
1,836.0	17,960.0	Stryker Surveys (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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
7.2	0.05	346.72	7.2	0.0	0.0	0.0	0.64	0.64	0.00	
Wilson Oil Well (150' Rad)										
30.0	0.19	346.72	30.0	0.0	0.0	0.0	0.64	0.64	0.00	
Merchant 8700 JV P #001 (150' Rad)										
78.0	0.50	346.72	78.0	0.3	-0.1	0.3	0.64	0.64	0.00	
201.0	1.00	286.72	201.0	1.2	-1.2	1.2	0.70	0.41	-48.78	
382.0	0.20	258.72	382.0	1.6	-3.1	1.6	0.46	-0.44	-15.47	
535.0	0.10	49.72	535.0	1.6	-3.2	1.7	0.19	-0.07	98.69	



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Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.15 Single User Db

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)
652.0	0.40	355.72	652.0	2.1	-3.2	2.1	0.30	0.26	-46.15
817.0	0.30	7.72	817.0	3.1	-3.1	3.1	0.07	-0.06	7.27
1,005.0	0.30	306.72	1,005.0	3.8	-3.5	3.9	0.16	0.00	-32.45
1,196.0	0.20	194.72	1,196.0	3.8	-4.0	3.9	0.22	-0.05	-58.64
1,386.0	0.30	355.72	1,386.0	4.0	-4.1	4.1	0.26	0.05	84.74
1,572.0	0.70	347.72	1,572.0	5.6	-4.4	5.7	0.22	0.22	-4.30
1,671.0	0.40	322.72	1,671.0	6.5	-4.7	6.6	0.38	-0.30	-25.25
1,836.0	0.40	302.70	1,836.0	7.2	-5.5	7.3	0.08	0.00	-12.13
2,025.0	1.00	39.00	2,024.9	8.9	-5.1	9.0	0.59	0.32	50.95
2,215.0	1.10	45.40	2,214.9	11.4	-2.7	11.5	0.08	0.05	3.37
2,405.0	1.60	46.10	2,404.9	14.6	0.5	14.5	0.26	0.26	0.37
2,594.0	1.90	53.90	2,593.8	18.2	4.9	18.1	0.20	0.16	4.13
2,785.0	2.30	52.00	2,784.6	22.5	10.5	22.2	0.21	0.21	-0.99
2,975.0	2.60	62.70	2,974.5	26.8	17.3	26.4	0.29	0.16	5.63
3,166.0	2.70	76.80	3,165.3	29.8	25.6	29.2	0.34	0.05	7.38
3,356.0	2.90	95.10	3,355.0	30.4	34.7	29.6	0.48	0.11	9.63
3,546.0	2.90	126.20	3,544.8	27.1	43.4	26.2	0.82	0.00	16.37
3,735.0	3.60	119.00	3,733.5	21.4	52.4	20.3	0.43	0.37	-3.81
3,925.0	3.60	117.60	3,923.1	15.8	62.9	14.4	0.05	0.00	-0.74
4,115.0	3.20	121.20	4,112.8	10.3	72.8	8.7	0.24	-0.21	1.89
4,305.0	3.20	118.00	4,302.5	5.0	82.0	3.3	0.09	0.00	-1.68
4,496.0	3.40	126.30	4,493.2	-0.8	91.2	-2.8	0.27	0.10	4.35
4,685.0	3.30	125.40	4,681.9	-7.3	100.2	-8.5	0.06	-0.05	-0.48
4,875.0	2.60	126.30	4,871.6	-13.0	108.1	-15.3	0.37	-0.37	0.47
5,066.0	3.00	125.60	5,062.4	-18.5	115.7	-21.0	0.21	0.21	-0.37
5,256.0	3.30	137.00	5,252.1	-25.4	123.5	-28.0	0.36	0.16	6.00
5,447.0	4.00	130.50	5,442.7	-33.7	132.3	-36.6	0.43	0.37	-3.40
5,636.0	4.40	129.30	5,631.2	-42.6	142.9	-45.7	0.22	0.21	-0.63
5,668.0	4.60	124.10	5,663.1	-44.1	144.9	-47.2	1.42	0.63	-16.25
5,733.0	4.60	128.50	5,727.9	-47.2	149.1	-50.4	0.54	0.00	6.77
5,828.0	6.90	164.20	5,822.4	-55.1	153.6	-58.3	4.36	2.42	37.58
5,924.0	6.60	185.10	5,917.8	-66.1	154.7	-69.4	2.56	-0.31	21.77
6,019.0	6.60	214.30	6,012.2	-76.1	151.2	-79.3	3.50	0.00	30.74
6,115.0	4.90	228.00	6,107.7	-83.4	145.0	-86.4	2.26	-1.77	14.27
6,209.0	4.70	230.10	6,201.4	-88.5	139.1	-91.5	0.28	-0.21	2.23
6,305.0	4.80	229.40	6,297.0	-93.6	133.0	-96.5	0.12	0.10	-0.73
6,400.0	5.10	238.10	6,391.7	-98.5	126.4	-101.2	0.85	0.32	9.16
6,590.0	5.20	243.30	6,580.9	-106.8	111.5	-109.2	0.25	0.05	2.74
6,779.0	5.20	246.70	6,769.1	-114.0	96.0	-116.1	0.16	0.00	1.80
6,969.0	5.10	248.70	6,958.4	-120.5	80.2	-122.2	0.11	-0.05	1.05
7,158.0	5.10	252.60	7,146.6	-126.1	64.4	-127.4	0.18	0.00	2.06
7,348.0	4.50	249.00	7,336.0	-131.3	49.4	-132.3	0.35	-0.32	-1.89
7,538.0	4.30	250.40	7,525.4	-136.3	35.7	-137.1	0.12	-0.11	0.74



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Survey

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7,728.0	4.00	241.00	7,714.9	-141.9	23.2	-142.4	0.39	-0.16	-4.95
7,918.0	3.70	245.40	7,904.5	-147.7	11.8	-147.9	0.22	-0.16	2.32
8,108.0	3.80	247.20	8,094.1	-152.7	0.5	-152.7	0.08	0.05	0.95
8,299.0	3.40	246.40	8,284.7	-157.4	-10.6	-157.1	0.21	-0.21	-0.42
8,490.0	2.90	236.60	8,475.4	-162.3	-19.8	-161.9	0.38	-0.26	-5.13
8,680.0	5.50	241.70	8,664.9	-169.3	-31.8	-168.6	1.38	1.37	2.68
8,870.0	5.00	244.10	8,854.1	-177.2	-47.3	-176.2	0.29	-0.26	1.26
9,015.0	4.92	239.01	8,998.6	-183.2	-58.3	-181.9	0.31	-0.06	-3.51
B.B.2 Dolly Varden 25 24 B1ED St Com 2H									
9,060.0	4.90	237.40	9,043.4	-185.2	-61.6	-183.9	0.31	-0.04	-3.58
9,251.0	4.70	236.90	9,233.7	-193.9	-75.0	-192.2	0.11	-0.10	-0.26
9,440.0	3.60	233.50	9,422.2	-201.6	-86.3	-199.8	0.60	-0.58	-1.80
9,631.0	3.30	236.00	9,612.9	-208.3	-95.6	-206.2	0.18	-0.16	1.31
9,717.9	2.00	250.48	9,699.7	-210.2	-99.1	-208.0	1.67	-1.50	16.65
B.B. Dolly Varden 25 24 B2ED St Com 1H									
9,725.0	1.90	252.50	9,706.8	-210.3	-99.4	-208.1	1.67	-1.36	28.62
9,843.0	5.80	294.90	9,824.5	-208.3	-106.6	-206.0	3.88	3.31	35.93
9,890.0	11.20	312.00	9,871.0	-204.3	-112.2	-201.8	12.56	11.49	36.38
9,938.0	16.40	317.90	9,917.6	-196.1	-120.2	-193.5	11.21	10.83	12.29
9,985.0	21.60	317.90	9,962.0	-184.8	-130.5	-181.9	11.06	11.06	0.00
10,032.0	26.80	326.40	10,004.9	-169.5	-142.1	-166.4	13.29	11.06	18.09
10,079.0	31.40	333.00	10,045.9	-149.8	-153.6	-146.5	11.92	9.79	14.04
10,128.0	38.10	338.20	10,086.2	-124.3	-165.0	-120.8	14.94	13.67	10.61
10,175.0	42.00	348.20	10,122.2	-95.4	-173.6	-91.7	15.99	8.30	21.28
10,223.0	44.40	356.70	10,157.2	-62.9	-177.9	-59.1	13.10	5.00	17.71
10,270.0	51.20	0.80	10,188.8	-28.1	-178.6	-24.3	15.84	14.47	8.72
10,318.0	58.00	5.30	10,216.6	10.9	-176.4	14.7	16.09	14.17	9.38
10,365.0	66.20	9.40	10,238.5	52.0	-171.0	55.7	19.07	17.45	8.72
10,413.0	69.80	9.30	10,256.5	95.9	-163.8	99.4	7.50	7.50	-0.21
10,460.0	73.10	8.70	10,271.5	139.9	-156.8	143.3	7.12	7.02	-1.28
10,507.0	75.50	8.00	10,284.2	184.7	-150.3	187.9	5.30	5.11	-1.49
10,554.0	77.60	6.90	10,295.1	230.0	-144.4	233.1	5.01	4.47	-2.34
10,597.7	80.15	6.26	10,303.5	272.6	-139.4	275.5	6.01	5.83	-1.46
LP Dolly Varden 25 24 B2ED St Com 1H									
10,602.0	80.40	6.20	10,304.3	276.8	-139.0	279.7	6.01	5.83	-1.45
10,613.0	81.20	5.80	10,306.0	287.6	-137.8	290.5	8.11	7.27	-3.64
10,723.0	86.90	5.10	10,317.4	396.5	-127.5	399.1	5.22	5.18	-0.64
10,817.0	91.20	4.60	10,319.0	490.1	-119.5	492.6	4.61	4.57	-0.53
10,913.0	92.80	4.80	10,315.6	585.7	-111.7	588.0	1.68	1.67	0.21
11,008.0	91.60	4.00	10,312.0	680.4	-104.4	682.5	1.52	-1.26	-0.84
11,103.0	91.60	3.40	10,309.3	775.1	-98.2	777.1	0.63	0.00	-0.63
11,197.0	91.10	1.50	10,307.1	869.0	-94.2	870.9	2.09	-0.53	-2.02
11,292.0	91.70	1.80	10,304.8	964.0	-91.5	965.7	0.71	0.63	0.32
11,388.0	89.90	0.00	10,303.5	1,059.9	-90.0	1,061.6	2.65	-1.88	-1.88



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11,482.0	89.00	359.90	10,304.4	1,153.9	-90.1	1,155.6	0.96	-0.96	-0.11
11,577.0	88.90	358.00	10,306.1	1,248.9	-91.8	1,250.6	2.00	-0.11	-2.00
11,672.0	89.60	357.20	10,307.3	1,343.8	-95.8	1,345.5	1.12	0.74	-0.84
11,766.0	89.90	357.90	10,307.8	1,437.7	-99.8	1,439.5	0.81	0.32	0.74
11,861.0	91.40	357.40	10,306.7	1,532.6	-103.7	1,534.5	1.66	1.58	-0.53
11,956.0	90.90	357.70	10,304.8	1,627.5	-107.8	1,629.5	0.61	-0.53	0.32
12,050.0	92.50	357.40	10,302.0	1,721.4	-111.8	1,723.4	1.73	1.70	-0.32
12,145.0	92.70	357.60	10,297.7	1,816.2	-115.9	1,818.3	0.30	0.21	0.21
12,240.0	92.70	357.30	10,293.2	1,911.0	-120.1	1,913.1	0.32	0.00	-0.32
12,334.0	92.60	358.70	10,288.9	2,004.8	-123.4	2,007.0	1.49	-0.11	1.49
12,429.0	91.60	359.50	10,285.4	2,099.8	-124.9	2,102.0	1.35	-1.05	0.84
12,523.0	92.50	359.40	10,282.0	2,193.7	-125.8	2,195.9	0.96	0.96	-0.11
12,618.0	91.90	359.80	10,278.4	2,288.6	-126.5	2,290.8	0.76	-0.63	0.42
12,714.0	89.90	359.60	10,276.9	2,384.6	-127.0	2,386.8	2.09	-2.08	-0.21
12,809.0	89.20	359.60	10,277.6	2,479.6	-127.6	2,481.8	0.74	-0.74	0.00
12,903.0	88.70	359.40	10,279.3	2,573.6	-128.5	2,575.7	0.57	-0.53	-0.21
12,998.0	89.30	359.10	10,281.0	2,668.6	-129.7	2,670.7	0.71	0.63	-0.32
13,093.0	90.90	0.00	10,280.8	2,763.5	-130.4	2,765.7	1.93	1.68	0.95
13,189.0	91.80	359.80	10,278.6	2,859.5	-130.6	2,861.7	0.96	0.94	-0.21
13,284.0	92.90	359.90	10,274.7	2,954.4	-130.9	2,956.6	1.16	1.16	0.11
13,378.0	90.70	0.00	10,271.7	3,048.4	-130.9	3,050.5	2.34	-2.34	0.11
13,474.0	92.40	0.00	10,269.1	3,144.3	-130.9	3,146.4	1.77	1.77	0.00
13,570.0	93.70	0.40	10,264.0	3,240.2	-130.6	3,242.3	1.42	1.35	0.42
13,664.0	94.90	1.20	10,257.0	3,333.9	-129.3	3,335.9	1.53	1.28	0.85
13,759.0	91.50	1.00	10,251.7	3,428.8	-127.5	3,430.7	3.59	-3.58	-0.21
13,853.0	91.00	0.70	10,249.6	3,522.7	-126.1	3,524.6	0.62	-0.53	-0.32
13,949.0	91.50	0.80	10,247.5	3,618.7	-124.8	3,620.5	0.53	0.52	0.10
14,044.0	90.30	1.00	10,246.0	3,713.7	-123.3	3,715.5	1.28	-1.26	0.21
14,139.0	90.30	1.40	10,245.5	3,808.6	-121.3	3,810.4	0.42	0.00	0.42
14,234.0	90.40	1.50	10,244.9	3,903.6	-118.9	3,905.3	0.15	0.11	0.11
14,329.0	90.80	1.50	10,243.9	3,998.6	-116.5	4,000.2	0.42	0.42	0.00
14,423.0	90.20	0.60	10,243.1	4,092.6	-114.7	4,094.1	1.15	-0.64	-0.96
14,518.0	87.70	1.50	10,244.9	4,187.5	-113.0	4,189.0	2.80	-2.63	0.95
14,613.0	89.20	359.90	10,247.4	4,282.5	-111.8	4,283.9	2.31	1.58	-1.68
14,708.0	92.30	357.90	10,246.2	4,377.4	-113.7	4,378.9	3.88	3.26	-2.11
14,803.0	93.10	357.60	10,241.7	4,472.2	-117.4	4,473.7	0.90	0.84	-0.32
14,897.0	93.40	357.20	10,236.4	4,566.0	-121.6	4,567.6	0.53	0.32	-0.43
14,991.0	94.20	357.80	10,230.2	4,659.7	-125.7	4,661.3	1.06	0.85	0.64
15,086.0	93.50	359.10	10,223.8	4,754.4	-128.3	4,756.1	1.55	-0.74	1.37
15,181.0	90.20	359.70	10,220.7	4,849.4	-129.3	4,851.0	3.53	-3.47	0.63
15,277.0	89.10	0.00	10,221.3	4,945.4	-129.5	4,947.0	1.19	-1.15	0.31
15,372.0	89.00	359.40	10,222.9	5,040.4	-130.0	5,042.0	0.64	-0.11	-0.63
15,466.0	90.90	358.60	10,223.0	5,134.3	-131.7	5,136.0	2.19	2.02	-0.85
15,562.0	90.20	358.30	10,222.0	5,230.3	-134.3	5,232.0	0.79	-0.73	-0.31



Stryker Energy Directional Services
Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Dolly Varden 25 24 B2ED St Com 1H
Project:	Lea County N. M. Nad (83)	TVD Reference:	3697 + 27 @ 3724.0usft (Patterson 562)
Site:	Section 25 24-21S-34E Dolly Varden 25 24	MD Reference:	3697 + 27 @ 3724.0usft (Patterson 562)
Well:	Dolly Varden 25 24 B2ED St Com 1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	EDM 5000.15 Single User Db

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)
15,657.0	89.80	357.40	10,222.0	5,325.2	-137.8	5,327.0	1.04	-0.42	-0.95
15,752.0	91.70	356.20	10,220.8	5,420.1	-143.1	5,421.9	2.37	2.00	-1.26
15,847.0	89.90	356.60	10,219.5	5,514.9	-149.1	5,516.8	1.94	-1.89	0.42
15,943.0	90.70	357.20	10,219.0	5,610.7	-154.3	5,612.7	1.04	0.83	0.63
16,038.0	90.00	357.90	10,218.4	5,705.6	-158.4	5,707.7	1.04	-0.74	0.74
16,132.0	91.30	359.40	10,217.3	5,799.6	-160.6	5,801.7	2.11	1.38	1.60
16,227.0	90.50	359.40	10,215.8	5,894.6	-161.6	5,896.7	0.84	-0.84	0.00
16,322.0	89.40	358.60	10,215.9	5,989.6	-163.2	5,991.7	1.43	-1.16	-0.84
16,417.0	91.60	359.60	10,215.1	6,084.5	-164.7	6,086.7	2.54	2.32	1.05
16,512.0	89.80	359.10	10,213.9	6,179.5	-165.8	6,181.7	1.97	-1.89	-0.53
16,607.0	92.20	0.70	10,212.3	6,274.5	-166.0	6,276.6	3.04	2.53	1.68
16,702.0	91.10	0.90	10,209.5	6,369.4	-164.6	6,371.5	1.18	-1.16	0.21
16,796.0	92.70	1.60	10,206.4	6,463.4	-162.6	6,465.4	1.86	1.70	0.74
16,891.0	89.70	2.00	10,204.4	6,558.3	-159.6	6,560.2	3.19	-3.16	0.42
16,986.0	88.90	2.50	10,205.6	6,653.2	-155.9	6,655.0	0.99	-0.84	0.53
17,080.0	88.60	2.40	10,207.6	6,747.1	-151.9	6,748.8	0.34	-0.32	-0.11
17,175.0	89.10	2.20	10,209.5	6,842.0	-148.0	6,843.6	0.57	0.53	-0.21
17,270.0	88.80	1.50	10,211.3	6,936.9	-145.0	6,938.5	0.80	-0.32	-0.74
17,365.0	90.70	359.90	10,211.7	7,031.9	-143.8	7,033.4	2.61	2.00	-1.68
17,460.0	88.70	357.70	10,212.2	7,126.9	-145.8	7,128.4	3.13	-2.11	-2.32
17,555.0	88.40	357.80	10,214.6	7,221.8	-149.5	7,223.3	0.33	-0.32	0.11
17,649.0	88.60	357.80	10,217.1	7,315.7	-153.1	7,317.3	0.21	0.21	0.00
17,744.0	90.90	358.20	10,217.5	7,410.6	-156.5	7,412.3	2.46	2.42	0.42
17,839.0	92.30	358.20	10,214.8	7,505.5	-159.4	7,507.2	1.47	1.47	0.00
17,907.0	92.30	358.00	10,212.1	7,573.4	-161.7	7,575.2	0.29	0.00	-0.29
17,947.8	92.30	358.00	10,210.4	7,614.1	-163.1	7,615.9	0.00	0.00	0.00
PBHL Dolly Varden 25 24 B2ED St Com 1H									
17,960.0	92.30	358.00	10,210.0	7,626.4	-163.5	7,628.1	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
17,960.0	10,210.0	7,626.4	-163.5	17960.0' Projection to bit

Checked By: _____ Approved By: _____ Date: _____

STRYKER

DIRECTIONAL

November 20, 2019

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

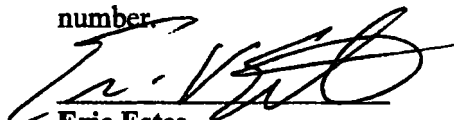
Attn: Jackie Lathan

Re: Mewbourne Oil Company
Dolly Varden 25 24 B2ED State Com #1H
Grama Ridge; Bone Spring
Lea County, New Mexico
API# 30-025-45400

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	1,836ft. to 17,907ft.	08-10-19 to 08-30-19	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\Dolly Varden 25 24 B2ED State Com #1H\M191147

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



November 20, 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 August 10, 2019, through August 30, 2019 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 1,836feet to a depth of 17,907feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Dolly Varden 25 24 B2ED State Com #1H well, API # **30-025-45400** 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

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**



Stryker Energy Directional Services

Survey Report Landscape



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 25 24-21S-34E Dolly Varden 25 24
Well: Dolly Varden 25 24 B2ED St Com 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Dolly Varden 25 24 B2ED St Com 1H
TVD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
MD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey Program		Date	08/30/19		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
78.0	1,871.0	Gyro Surveys (Original Hole)	GyroFlex		
1,838.0	17,960.0	Stryker Surveys (Original Hole)	MWD	MWD v3:standard declination	

Survey											
MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (")	DLeg ("/100usft)	Northing (usft)	Easting (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	528,823.40	819,943.50	
78.0	0.50	346.72	78.0	0.3	-0.1	0.3	346.72	0.64	528,823.73	819,943.42	
201.0	1.00	286.72	201.0	1.2	-1.2	1.7	313.39	0.70	528,824.56	819,942.27	
382.0	0.20	258.72	382.0	1.6	-3.1	3.4	297.00	0.46	528,824.95	819,940.45	
535.0	0.10	49.72	535.0	1.6	-3.2	3.6	296.32	0.19	528,824.99	819,940.29	
652.0	0.40	355.72	652.0	2.1	-3.2	3.8	303.09	0.30	528,825.46	819,940.34	
817.0	0.30	7.72	817.0	3.1	-3.1	4.4	314.22	0.07	528,826.46	819,940.35	
1,005.0	0.30	306.72	1,005.0	3.8	-3.5	5.2	317.86	0.16	528,827.25	819,940.02	
1,196.0	0.20	194.72	1,196.0	3.8	-4.0	5.5	313.97	0.22	528,827.22	819,939.64	
1,386.0	0.30	355.72	1,386.0	4.0	-4.1	5.7	314.39	0.26	528,827.40	819,939.42	
1,572.0	0.70	347.72	1,572.0	6.6	-4.4	7.1	322.05	0.22	528,828.99	819,939.14	
1,671.0	0.40	322.72	1,671.0	6.5	-4.7	8.0	323.96	0.38	528,829.86	819,938.80	
1,836.0	0.40	302.70	1,836.0	7.2	-5.6	9.1	322.57	0.08	528,830.63	819,937.97	
2,025.0	1.00	39.00	2,024.9	8.9	-5.1	10.2	330.33	0.59	528,832.27	819,938.45	
2,215.0	1.10	45.40	2,214.9	11.4	-2.7	11.8	346.67	0.08	528,834.84	819,940.79	
2,405.0	1.80	46.10	2,404.9	14.6	0.5	14.6	1.97	0.26	528,837.96	819,944.00	
2,594.0	1.90	53.90	2,593.8	18.2	4.9	18.9	15.14	0.20	528,841.63	819,948.43	
2,785.0	2.30	52.00	2,784.6	22.5	10.5	24.8	25.08	0.21	528,845.86	819,954.01	
2,975.0	2.60	62.70	2,974.5	26.8	17.3	31.9	32.93	0.29	528,850.18	819,960.85	
3,166.0	2.70	76.80	3,165.3	29.8	25.6	39.3	40.64	0.34	528,853.20	819,969.08	
3,356.0	2.90	95.10	3,355.0	30.4	34.7	46.1	48.60	0.48	528,853.79	819,978.22	



Stryker Energy Directional Services

Survey Report Landscape



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 25 24-21S-34E Dolly Varden 25 24
Well: Dolly Varden 25 24 B2ED St Com 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Dolly Varden 25 24 B2ED St Com 1H
TVD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
MD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
3,548.0	2.90	126.20	3,544.8	27.1	43.4	51.2	57.99	0.82	528,850.52	819,988.89	
3,735.0	3.80	119.00	3,733.5	21.4	52.4	58.6	67.78	0.43	528,844.82	819,995.93	
3,925.0	3.80	117.80	3,923.1	15.8	62.9	64.9	75.93	0.05	528,839.17	820,006.44	
4,115.0	3.20	121.20	4,112.8	10.3	72.8	73.5	81.98	0.24	528,833.66	820,016.26	
4,305.0	3.20	118.00	4,302.5	5.0	82.0	82.1	86.50	0.09	528,828.42	820,025.48	
4,496.0	3.40	126.30	4,493.2	-0.8	91.2	91.3	90.52	0.27	528,822.58	820,034.75	
4,685.0	3.30	125.40	4,681.9	-7.3	100.2	100.5	94.17	0.06	528,816.10	820,043.70	
4,875.0	2.80	126.30	4,871.6	-13.0	108.1	108.9	98.87	0.37	528,810.38	820,051.83	
5,066.0	3.00	125.80	5,062.4	-18.5	115.7	117.2	99.08	0.21	528,804.90	820,059.19	
5,256.0	3.30	137.00	5,252.1	-25.4	123.5	128.0	101.62	0.38	528,798.01	820,066.96	
5,447.0	4.00	130.50	5,442.7	-33.7	132.3	138.5	104.31	0.43	528,789.88	820,075.77	
5,638.0	4.40	129.30	5,631.2	-42.6	142.9	149.1	106.80	0.22	528,780.79	820,086.40	
5,668.0	4.80	124.10	5,663.1	-44.1	144.9	151.5	108.93	1.42	528,779.29	820,088.41	
5,733.0	4.80	128.50	5,727.9	-47.2	149.1	156.4	107.56	0.54	528,776.21	820,092.81	
5,828.0	6.90	164.20	5,822.4	-55.1	153.6	163.2	109.72	4.36	528,768.34	820,097.14	
5,924.0	6.80	185.10	5,917.8	-66.1	154.7	168.3	113.13	2.56	528,757.30	820,098.22	
6,019.0	6.80	214.30	6,012.2	-76.1	151.2	169.2	116.71	3.50	528,747.35	820,094.66	
6,115.0	4.90	228.00	6,107.7	-83.4	145.0	167.3	119.89	2.26	528,740.04	820,088.50	
6,209.0	4.70	230.10	6,201.4	-88.5	139.1	164.8	122.48	0.28	528,734.89	820,082.57	
6,305.0	4.80	229.40	6,297.0	-93.6	133.0	162.7	125.15	0.12	528,729.75	820,076.50	
6,400.0	5.10	238.10	6,391.7	-98.5	126.4	160.2	127.92	0.85	528,724.83	820,069.90	
6,590.0	5.20	243.30	6,580.9	-106.8	111.5	154.4	133.76	0.25	528,716.60	820,055.04	
6,779.0	5.20	246.70	6,769.1	-114.0	96.0	149.1	139.90	0.16	528,709.36	820,039.52	
6,969.0	5.10	248.70	6,958.4	-120.5	80.2	144.8	146.34	0.11	528,702.89	820,023.74	
7,158.0	5.10	252.80	7,146.6	-126.1	64.4	141.6	152.94	0.18	528,697.33	820,007.80	
7,348.0	4.50	249.00	7,336.0	-131.3	49.4	140.2	159.38	0.35	528,692.13	819,992.88	
7,538.0	4.30	250.40	7,525.4	-136.3	35.7	140.9	165.32	0.12	528,687.07	819,979.21	



Stryker Energy Directional Services
Survey Report Landscape



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 25 24-21S-34E Dolly Varden 25 24
Well: Dolly Varden 25 24 B2ED St Com 1H
Wellbore: Original Hole
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Local Co-ordinate Reference: Well Dolly Varden 25 24 B2ED St Com 1H
TVD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
MD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
7,728.0	4.00	241.00	7,714.9	-141.9	23.2	143.8	170.71	0.39	528,681.47	819,866.71
7,918.0	3.70	245.40	7,904.5	-147.7	11.8	148.2	175.42	0.22	528,675.70	819,955.34
8,108.0	3.80	247.20	8,094.1	-152.7	0.5	152.7	179.83	0.08	528,670.71	819,943.96
8,299.0	3.40	246.40	8,284.7	-157.4	-10.6	157.8	183.84	0.21	528,665.99	819,932.93
8,490.0	2.90	236.60	8,475.4	-162.3	-19.8	163.5	186.95	0.38	528,661.06	819,923.71
8,680.0	5.50	241.70	8,664.9	-169.3	-31.8	172.3	190.65	1.38	528,654.10	819,911.68
8,870.0	5.00	244.10	8,854.1	-177.2	-47.3	183.4	194.94	0.29	528,646.17	819,896.21
9,060.0	4.90	237.40	9,043.4	-185.2	-61.6	195.2	198.39	0.31	528,638.18	819,881.93
9,251.0	4.70	236.90	9,233.7	-193.9	-75.0	207.9	201.15	0.11	528,629.51	819,868.50
9,440.0	3.60	233.50	9,422.2	-201.6	-88.3	219.3	203.16	0.60	528,621.75	819,857.24
9,631.0	3.30	236.00	9,612.9	-208.3	-95.6	229.2	204.66	0.18	528,615.11	819,847.87
9,725.0	1.90	252.60	9,706.8	-210.3	-99.4	232.6	205.29	1.67	528,613.13	819,844.14
9,843.0	5.80	294.90	9,824.5	-208.3	-106.6	234.1	207.11	3.88	528,616.06	819,836.86
9,890.0	11.20	312.00	9,871.0	-204.3	-112.2	233.1	208.77	12.56	528,619.11	819,831.31
9,938.0	16.40	317.90	9,917.8	-196.1	-120.2	230.0	211.50	11.21	528,627.26	819,823.29
9,985.0	21.60	317.90	9,962.0	-184.8	-130.5	226.2	215.22	11.06	528,638.61	819,813.04
10,032.0	26.80	326.40	10,004.9	-169.5	-142.1	221.2	219.98	13.29	528,653.87	819,801.36
10,079.0	31.40	333.00	10,045.9	-149.8	-153.6	214.5	225.72	11.92	528,673.62	819,789.93
10,128.0	36.10	336.20	10,086.2	-124.3	-165.0	206.6	233.00	14.94	528,699.07	819,778.51
10,175.0	42.00	346.20	10,122.2	-95.4	-173.6	199.1	241.20	15.99	528,727.96	819,769.90
10,223.0	44.40	356.70	10,157.2	-62.9	-177.9	188.7	250.52	13.10	528,760.48	819,765.64
10,270.0	51.20	0.80	10,188.8	-28.1	-178.6	180.8	261.04	15.84	528,795.26	819,764.95
10,318.0	58.00	5.30	10,216.6	10.9	-176.4	176.7	273.53	16.09	528,834.28	819,767.09
10,365.0	66.20	9.40	10,238.6	62.0	-171.0	178.6	286.92	19.07	528,875.42	819,772.46
10,413.0	69.80	9.30	10,256.5	95.9	-163.8	189.8	300.35	7.50	528,919.33	819,779.69
10,460.0	73.10	8.70	10,271.5	139.9	-156.8	210.2	311.74	7.12	528,963.33	819,786.65
10,507.0	75.50	8.00	10,284.2	184.7	-150.3	238.1	320.87	5.30	529,006.10	819,793.22



Stryker Energy Directional Services
Survey Report Landscape



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 25 24-21S-34E Dolly Varden 25 24
Well: Dolly Varden 25 24 B2ED St Com 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Dolly Varden 25 24 B2ED St Com 1H
3697 + 27 @ 3724.0usft (Patterson 562)
3697 + 27 @ 3724.0usft (Patterson 562)
Grid
Minimum Curvature
EDM 5000.15 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLog (°/100usft)	Northing (usft)	Easting (usft)	
10,554.0	77.60	6.80	10,295.1	230.0	-144.4	271.6	327.89	5.01	529,053.42	819,799.15	
10,602.0	80.40	6.20	10,304.3	276.8	-139.0	309.8	333.34	6.01	529,100.23	819,804.62	
10,613.0	81.20	5.80	10,306.0	287.6	-137.8	319.0	334.39	8.11	529,111.03	819,805.65	
10,723.0	86.90	5.10	10,317.4	396.5	-127.5	416.5	342.18	5.22	529,219.89	819,816.04	
10,817.0	91.20	4.60	10,319.0	490.1	-119.5	504.5	348.30	4.61	529,313.52	819,823.98	
10,913.0	92.80	4.80	10,315.6	585.7	-111.7	596.3	349.21	1.68	529,409.14	819,831.84	
11,008.0	91.60	4.00	10,312.0	680.4	-104.4	688.3	351.28	1.52	529,503.76	819,839.13	
11,103.0	91.60	3.40	10,309.3	775.1	-98.2	781.4	352.78	0.83	529,598.55	819,845.25	
11,197.0	91.10	1.50	10,307.1	869.0	-94.2	874.1	353.81	2.09	529,692.43	819,849.27	
11,292.0	91.70	1.80	10,304.8	964.0	-91.5	968.3	354.58	0.71	529,787.36	819,852.00	
11,388.0	89.90	0.00	10,303.6	1,059.9	-90.0	1,063.7	355.15	2.65	529,883.34	819,853.61	
11,482.0	89.00	359.90	10,304.4	1,153.9	-90.1	1,157.4	355.54	0.98	529,977.33	819,853.43	
11,577.0	88.90	358.00	10,306.1	1,248.9	-91.8	1,252.3	355.80	2.00	530,072.29	819,851.69	
11,672.0	89.60	357.20	10,307.3	1,343.8	-95.8	1,347.2	356.92	1.12	530,167.20	819,847.71	
11,766.0	89.90	357.90	10,307.8	1,437.7	-99.8	1,441.2	358.03	0.81	530,261.11	819,843.69	
11,861.0	91.40	357.40	10,308.7	1,532.6	-103.7	1,536.1	358.13	1.86	530,356.02	819,839.80	
11,956.0	90.90	357.70	10,304.8	1,627.5	-107.8	1,631.1	358.21	0.81	530,450.92	819,835.74	
12,050.0	92.50	357.40	10,302.0	1,721.4	-111.8	1,725.0	358.28	1.73	530,544.79	819,831.72	
12,145.0	92.70	357.60	10,297.7	1,816.2	-115.9	1,819.9	358.35	0.30	530,639.60	819,827.58	
12,240.0	92.70	357.30	10,293.2	1,911.0	-120.1	1,914.8	358.40	0.32	530,734.40	819,823.36	
12,334.0	92.60	358.70	10,288.9	2,004.8	-123.4	2,008.6	358.48	1.49	530,828.24	819,820.08	
12,429.0	91.60	359.50	10,285.4	2,099.8	-124.9	2,103.5	358.60	1.35	530,923.16	819,818.59	
12,523.0	92.50	359.40	10,282.0	2,193.7	-125.8	2,197.3	358.72	0.96	531,017.10	819,817.69	
12,618.0	91.90	359.80	10,278.4	2,288.6	-128.5	2,292.1	358.84	0.76	531,112.02	819,817.03	
12,714.0	89.90	359.60	10,276.9	2,384.6	-127.0	2,388.0	358.95	2.09	531,208.01	819,816.53	
12,809.0	89.20	359.60	10,277.6	2,479.6	-127.6	2,482.9	357.05	0.74	531,303.00	819,815.86	
12,903.0	88.70	359.40	10,279.3	2,573.6	-128.5	2,576.8	357.14	0.57	531,396.98	819,815.04	



Stryker Energy Directional Services
Survey Report Landscape



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 25 24-21S-34E Dolly Varden 25 24
Well: Dolly Varden 25 24 B2ED St Com 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Dolly Varden 25 24 B2ED St Com 1H
TVD Reference: 3897 + 27 @ 3724.0usft (Patterson 562)
MD Reference: 3897 + 27 @ 3724.0usft (Patterson 562)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
12,998.0	89.30	359.10	10,281.0	2,688.6	-129.7	2,671.7	357.22	0.71	531,481.96	819,813.80
13,093.0	90.90	0.00	10,280.8	2,783.5	-130.4	2,768.8	357.30	1.93	531,588.95	819,813.05
13,189.0	91.80	359.80	10,278.6	2,859.5	-130.6	2,862.5	357.38	0.96	531,682.92	819,812.89
13,284.0	92.80	359.90	10,274.7	2,954.4	-130.9	2,957.3	357.46	1.16	531,777.84	819,812.64
13,378.0	90.70	0.00	10,271.7	3,048.4	-130.9	3,051.2	357.54	2.34	531,871.79	819,812.56
13,474.0	92.40	0.00	10,269.1	3,144.3	-130.9	3,147.1	357.62	1.77	531,967.75	819,812.56
13,570.0	93.70	0.40	10,264.0	3,240.2	-130.6	3,242.8	357.69	1.42	532,063.61	819,812.89
13,664.0	94.90	1.20	10,257.0	3,333.9	-129.3	3,336.4	357.78	1.53	532,157.33	819,814.20
13,759.0	91.50	1.00	10,251.7	3,428.8	-127.5	3,431.1	357.87	3.59	532,252.15	819,816.02
13,853.0	91.00	0.70	10,249.6	3,522.7	-126.1	3,525.0	357.95	0.62	532,346.12	819,817.41
13,949.0	91.50	0.80	10,247.5	3,618.7	-124.8	3,620.8	358.02	0.53	532,442.09	819,818.67
14,044.0	90.30	1.00	10,246.0	3,713.7	-123.3	3,715.7	358.10	1.28	532,537.07	819,820.16
14,139.0	90.30	1.40	10,245.5	3,808.6	-121.3	3,810.6	358.18	0.42	532,632.04	819,822.15
14,234.0	90.40	1.50	10,244.9	3,903.8	-118.9	3,905.4	358.25	0.15	532,727.01	819,824.55
14,329.0	90.80	1.50	10,243.9	3,998.8	-116.5	4,000.3	358.33	0.42	532,821.97	819,827.04
14,423.0	90.20	0.60	10,243.1	4,092.8	-114.7	4,094.2	358.39	1.15	532,916.95	819,828.76
14,518.0	87.70	1.50	10,244.9	4,187.5	-113.0	4,189.0	358.45	2.80	533,010.91	819,830.50
14,613.0	89.20	359.90	10,247.4	4,282.5	-111.8	4,283.9	358.50	2.31	533,105.86	819,831.68
14,708.0	92.30	357.90	10,246.2	4,377.4	-113.7	4,378.9	358.51	3.88	533,200.82	819,829.84
14,803.0	93.10	357.60	10,241.7	4,472.2	-117.4	4,473.8	358.50	0.90	533,295.64	819,826.11
14,897.0	93.40	357.20	10,238.4	4,568.0	-121.6	4,567.6	358.47	0.53	533,389.39	819,821.86
14,991.0	94.20	357.80	10,230.2	4,659.7	-125.7	4,661.4	358.45	1.08	533,483.10	819,817.77
15,086.0	93.50	359.10	10,223.8	4,754.4	-128.3	4,756.2	358.45	1.55	533,577.85	819,815.20
15,181.0	90.20	359.70	10,220.7	4,849.4	-129.3	4,851.1	358.47	3.53	533,672.78	819,814.21
15,277.0	89.10	0.00	10,221.3	4,945.4	-129.5	4,947.1	358.50	1.19	533,768.77	819,813.98
15,372.0	89.00	359.40	10,222.9	5,040.4	-130.0	5,042.0	358.52	0.84	533,863.76	819,813.48
15,466.0	90.90	358.60	10,223.0	5,134.3	-131.7	5,136.0	358.53	2.19	533,957.74	819,811.82



Stryker Energy Directional Services
Survey Report Landscape



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 25 24-21S-34E Dolly Varden 25 24
Well: Dolly Varden 25 24 B2ED St Com 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Dolly Varden 25 24 B2ED St Com 1H
TVD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
MD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
15,562.0	90.20	358.30	10,222.0	5,230.3	-134.3	5,232.0	358.53	0.79	534,053.70	819,809.22
15,657.0	89.80	357.40	10,222.0	5,325.2	-137.8	5,327.0	358.52	1.04	534,148.63	819,805.66
15,752.0	91.70	356.20	10,220.8	5,420.1	-143.1	5,422.0	358.48	2.37	534,243.47	819,800.36
15,847.0	89.90	356.60	10,219.5	5,514.9	-148.1	5,516.9	358.45	1.94	534,338.27	819,794.39
15,943.0	90.70	357.20	10,219.0	5,610.7	-154.3	5,612.8	358.42	1.04	534,434.12	819,789.20
16,038.0	90.00	357.90	10,218.4	5,705.6	-158.4	5,707.8	358.41	1.04	534,529.03	819,785.14
16,132.0	91.30	359.40	10,217.3	5,799.6	-160.6	5,801.8	358.41	2.11	534,623.00	819,782.93
16,227.0	90.50	359.40	10,215.8	5,894.6	-161.6	5,896.8	358.43	0.84	534,717.98	819,781.93
16,322.0	89.40	358.80	10,215.9	5,989.6	-163.2	5,991.8	358.44	1.43	534,812.96	819,780.27
16,417.0	91.80	359.60	10,215.1	6,084.5	-164.7	6,086.8	358.45	2.54	534,907.94	819,778.78
16,512.0	89.80	359.10	10,213.9	6,179.5	-165.8	6,181.7	358.46	1.97	535,002.92	819,777.70
16,607.0	92.20	0.70	10,212.3	6,274.5	-166.0	6,276.7	358.48	3.04	535,097.90	819,777.54
16,702.0	91.10	0.90	10,209.5	6,369.4	-164.6	6,371.6	358.52	1.18	535,192.85	819,778.86
16,796.0	92.70	1.60	10,206.4	6,463.4	-162.6	6,465.4	358.56	1.86	535,286.77	819,780.91
16,891.0	89.70	2.00	10,204.4	6,558.3	-159.6	6,560.2	358.61	3.19	535,381.69	819,783.90
16,986.0	88.90	2.50	10,205.6	6,653.2	-155.9	6,655.0	358.66	0.99	535,476.61	819,787.63
17,080.0	88.60	2.40	10,207.6	6,747.1	-151.9	6,748.8	358.71	0.34	535,570.50	819,791.64
17,175.0	89.10	2.20	10,209.5	6,842.0	-148.0	6,843.6	358.76	0.57	535,665.41	819,795.45
17,270.0	88.80	1.50	10,211.3	6,936.9	-145.0	6,938.5	358.80	0.80	535,760.34	819,798.52
17,365.0	90.70	359.90	10,211.7	7,031.9	-143.8	7,033.4	358.83	2.61	535,855.33	819,799.68
17,460.0	88.70	357.70	10,212.2	7,126.9	-145.8	7,128.4	358.83	3.13	535,950.29	819,797.69
17,555.0	88.40	357.80	10,214.6	7,221.8	-149.5	7,223.3	358.81	0.33	536,045.19	819,793.96
17,649.0	88.60	357.80	10,217.1	7,315.7	-153.1	7,317.3	358.80	0.21	536,139.09	819,790.36
17,744.0	90.90	358.20	10,217.5	7,410.6	-156.5	7,412.3	358.79	2.46	536,234.02	819,787.04
17,839.0	92.30	358.20	10,214.8	7,505.5	-159.4	7,507.2	358.78	1.47	536,328.94	819,784.06
17,907.0	92.30	358.00	10,212.1	7,573.4	-161.7	7,575.2	358.78	0.29	536,396.84	819,781.81
17,960.0	92.30	358.00	10,210.0	7,626.4	-163.5	7,628.1	358.77	0.00	536,449.77	819,779.98



Stryker Energy Directional Services
Survey Report Landscape



Company: Mewbourne Oil Company
Project: Lea County N. M. Nad (83)
Site: Section 25 24-21S-34E Dolly Varden 25 24
Well: Dolly Varden 25 24 B2ED St Com 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Dolly Varden 25 24 B2ED St Com 1H
TVD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
MD Reference: 3697 + 27 @ 3724.0usft (Patterson 562)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.15 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
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Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
17,960.0	10,210.0	7,828.4	-183.5	17960.0' Projection to bit

Checked By: _____ Approved By: _____ Date: _____