



**MEWBOURNE
OIL COMPANY**

**NM OIL CONSERVATION
ARTESIA DISTRICT**

FEB 14 2019

RECEIVED

Mewbourne Oil Company

Eddy County, N.M. Nad (83)

Section 10-9-22S-23E Bogle Flats Fed Unit 9 Y1AD

Bogle Flats Fed Unit 9 Y1AD 1H

Original Hole

30.015-45067

Design: Original Hole

Standard Survey Report

24 September, 2018





Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, N.M. Nad (83)
Site: Section 10-9-22S-23E Bogle Flats Fed Unit 9 Y1AD
Well: Bogle Flats Fed Unit 9 Y1AD 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Bogle Flats Fed Unit 9 Y1AD 1H
TVD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
MD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Project	Eddy 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 10-9-22S-23E Bogle Flats Fed Unit 9 Y1AD		
Site Position:		Northing:	513,905.50 usft
From:	Map	Easting:	460,704.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 24' 45.081 N
		Longitude:	104° 35' 40.655 W
		Grid Convergence:	-0.14 °

Well	Bogle Flats Fed Unit 9 Y1AD 1H		
Well Position	+N/-S	0.0 usft	Northing: 513,905.50 usft
	+E/-W	0.0 usft	Easting: 460,704.40 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	27.0 usft
		Latitude:	32° 24' 45.081 N
		Longitude:	104° 35' 40.655 W
		Ground Level:	4,103.0 usft

Wellbore	Original Hole		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	8/24/2018	7.31
		Dip Angle (°)	60.06
		Field Strength (nT)	47,812.03141178

Design	Original Hole		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
		Direction (°)	257.42

Survey Program	Date 9/24/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	454.0	MS gyro Survey (Original Hole)	NSG-CT_WL
581.0	7,855.0	MWD Survey (Original Hole)	MWD
			Description
			Continuous north-seeking gyro on wireline
			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
100.0	0.09	345.01	100.0	0.1	0.0	0.0	0.09	0.09	0.00
200.0	0.20	248.82	200.0	0.1	-0.2	0.2	0.23	0.11	-96.19
300.0	0.40	132.38	300.0	-0.2	-0.1	0.2	0.52	0.20	-116.44
400.0	0.25	181.64	400.0	-0.7	0.1	0.0	0.30	-0.15	49.26
454.0	0.04	165.42	454.0	-0.8	0.1	0.0	0.39	-0.39	-30.04
454.0' MD MS Gyro Survey									
581.0	0.10	214.40	581.0	-0.9	0.1	0.1	0.06	0.05	38.57
707.0	0.10	235.00	707.0	-1.1	-0.1	0.3	0.03	0.00	16.35



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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulid Rate (°/100usft)	Turn Rate (°/100usft)
833.0	0.40	241.90	833.0	-1.4	-0.5	0.8	0.24	0.24	5.48
960.0	0.40	354.10	960.0	-1.1	-1.0	1.2	0.52	0.00	88.35
1,085.0	0.50	304.50	1,085.0	-0.4	-1.5	1.5	0.31	0.08	-39.68
1,211.0	0.20	354.20	1,211.0	0.1	-1.9	1.9	0.32	-0.24	39.44
1,339.0	0.50	247.00	1,339.0	0.2	-2.5	2.4	0.46	0.23	-83.75
1,465.0	0.80	228.80	1,465.0	-0.5	-3.5	3.5	0.16	0.08	-14.44
1,576.0	0.50	261.50	1,576.0	-1.0	-4.4	4.5	0.29	-0.09	29.46
1,607.0	0.50	261.90	1,607.0	-1.0	-4.7	4.8	0.01	0.00	1.29
1,639.0	1.80	250.60	1,639.0	-1.2	-5.3	5.4	4.10	4.06	-35.31
1,671.0	4.70	241.50	1,670.9	-2.0	-6.9	7.2	9.18	9.06	-28.44
1,702.0	8.30	239.60	1,701.7	-3.7	-10.0	10.5	11.63	11.61	-6.13
1,734.0	12.40	240.20	1,733.2	-6.6	-14.9	16.0	12.82	12.81	1.88
1,765.0	16.50	242.50	1,763.2	-10.3	-21.7	23.4	13.35	13.23	7.42
1,797.0	20.00	243.00	1,793.6	-14.9	-30.6	33.1	10.95	10.94	1.56
1,828.0	23.10	243.50	1,822.4	-20.0	-40.8	44.2	10.02	10.00	1.61
1,859.0	26.10	244.20	1,850.6	-25.7	-52.4	56.7	9.72	9.68	2.26
1,890.0	29.50	245.10	1,878.0	-31.8	-65.5	70.8	11.05	10.97	2.90
1,922.0	32.40	246.10	1,905.5	-38.6	-80.4	86.9	9.20	9.06	3.13
1,953.0	35.10	247.00	1,931.2	-45.5	-96.2	103.8	8.66	8.71	2.90
1,985.0	38.00	247.70	1,956.9	-52.8	-113.8	122.6	9.16	9.06	2.19
2,013.0	40.40	248.20	1,978.6	-59.5	-130.2	140.1	8.65	8.57	1.79
2,045.0	42.70	248.20	2,002.6	-67.3	-149.9	161.0	7.19	7.19	0.00
2,077.0	44.80	248.10	2,025.7	-75.6	-170.5	182.9	6.88	6.88	-0.31
2,108.0	46.90	247.80	2,047.2	-83.9	-191.1	204.8	6.49	6.45	-0.97
2,139.0	48.70	247.30	2,068.1	-92.7	-212.3	227.4	5.93	5.81	-1.61
2,171.0	50.70	246.60	2,088.8	-102.3	-234.8	251.4	6.47	6.25	-2.19
2,203.0	52.20	246.00	2,108.7	-112.3	-257.7	276.0	4.91	4.69	-1.88
2,235.0	55.10	245.70	2,127.7	-122.9	-281.2	301.2	9.09	8.06	-0.94
2,266.0	57.70	246.10	2,144.8	-133.4	-304.8	326.5	8.46	8.39	1.29
2,297.0	60.50	245.90	2,160.7	-144.2	-329.1	352.6	9.05	9.03	-0.65
2,328.0	64.30	247.00	2,175.1	-155.2	-354.3	379.6	12.65	12.26	3.55
2,360.0	68.60	248.00	2,187.9	-166.4	-381.4	408.5	13.74	13.44	3.13
2,392.0	73.00	248.10	2,198.4	-177.7	-409.4	438.3	13.75	13.75	0.31
2,423.0	77.80	248.00	2,208.2	-188.9	-437.2	467.9	15.48	15.48	-0.32
2,426.2	78.24	247.96	2,206.9	-190.1	-440.1	470.9	13.80	13.75	-1.27
LP Bogle Flats Fed Unit 9 Y1AD 1H									
2,456.0	82.20	247.60	2,211.8	-200.8	-466.4	488.9	13.80	13.75	-1.25
2,486.0	86.30	247.80	2,214.9	-212.5	-494.9	529.3	13.24	13.23	0.65
2,518.0	88.30	248.40	2,216.4	-224.5	-524.6	560.9	6.52	6.25	1.88
2,549.0	89.90	249.20	2,216.9	-235.7	-553.5	591.5	5.77	5.16	2.58
2,581.0	91.80	249.80	2,216.4	-246.9	-583.4	623.2	6.23	5.94	1.88
2,612.0	92.70	250.00	2,215.2	-257.5	-612.5	653.9	2.97	2.90	0.65
2,644.0	92.70	250.40	2,213.7	-268.3	-642.6	685.6	1.25	0.00	1.25



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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)
2,675.0	90.90	251.10	2,212.7	-278.6	-671.8	716.4	6.23	-5.81	2.26
2,706.0	90.50	252.00	2,212.3	-288.4	-701.3	747.2	3.18	-1.29	2.90
2,738.0	89.80	253.90	2,212.2	-297.8	-731.8	779.1	6.33	-2.19	5.94
2,767.8	90.09	254.28	2,212.3	-305.9	-760.5	808.8	1.61	0.97	1.29
FTP Bogle Flats Fed Unit Y1AD									
2,769.0	90.10	254.30	2,212.3	-306.2	-761.7	810.1	1.61	0.97	1.29
2,801.0	90.50	255.40	2,212.1	-314.6	-792.5	842.0	3.66	1.25	3.44
2,833.0	90.40	257.20	2,211.8	-322.2	-823.6	874.0	5.63	-0.31	5.63
2,864.0	90.90	258.10	2,211.5	-328.8	-853.9	905.0	3.32	1.61	2.90
2,896.0	90.70	259.30	2,211.0	-335.1	-885.3	937.0	3.80	-0.63	3.75
2,928.0	90.00	261.70	2,210.8	-340.4	-916.8	969.0	7.81	-2.19	7.50
2,959.0	90.30	262.40	2,210.8	-344.7	-947.5	999.9	2.46	0.97	2.26
2,991.0	91.00	262.90	2,210.4	-348.7	-979.3	1,031.7	2.69	2.19	1.56
3,022.0	91.50	263.70	2,209.7	-352.4	-1,010.1	1,062.6	3.04	1.61	2.58
3,054.0	91.80	265.20	2,208.8	-355.5	-1,041.9	1,094.3	4.78	0.94	4.69
3,085.0	92.50	265.70	2,207.6	-357.9	-1,072.8	1,125.0	2.77	2.26	1.61
3,117.0	92.70	266.60	2,206.2	-360.1	-1,104.7	1,156.6	2.88	0.63	2.81
3,148.0	92.45	268.60	2,204.8	-361.4	-1,135.6	1,187.0	6.50	-0.81	6.45
3,179.0	91.90	269.70	2,203.6	-361.8	-1,166.6	1,217.4	3.96	-1.77	3.55
3,211.0	89.90	270.80	2,203.1	-361.7	-1,198.6	1,248.6	7.13	-6.25	3.44
3,242.0	89.70	270.90	2,203.2	-361.2	-1,229.6	1,278.7	0.72	-0.65	0.32
3,274.0	90.20	271.40	2,203.3	-360.6	-1,261.6	1,309.8	2.21	1.56	1.56
3,306.0	90.50	271.10	2,203.1	-359.9	-1,293.6	1,340.9	1.33	0.94	-0.94
3,338.0	91.00	271.30	2,202.6	-359.2	-1,325.6	1,372.0	1.68	1.56	0.63
3,369.0	91.70	271.90	2,201.9	-358.3	-1,356.5	1,402.0	2.97	2.26	1.94
3,401.0	92.10	272.50	2,200.8	-357.1	-1,388.5	1,432.9	2.25	1.25	1.88
3,432.0	90.60	272.20	2,200.1	-355.8	-1,419.5	1,462.9	4.93	-4.84	-0.97
3,464.0	89.90	271.80	2,200.0	-354.7	-1,451.4	1,493.8	2.52	-2.19	-1.25
3,495.0	88.80	270.90	2,200.3	-354.0	-1,482.4	1,523.9	4.58	-3.55	-2.90
3,526.0	88.80	270.40	2,201.0	-353.6	-1,513.4	1,554.1	1.61	0.00	-1.61
3,558.0	89.80	270.00	2,201.4	-353.5	-1,545.4	1,585.3	3.37	3.13	-1.25
3,589.0	91.60	270.00	2,201.0	-353.5	-1,578.4	1,615.6	5.81	5.81	0.00
3,620.0	92.40	270.10	2,199.9	-353.5	-1,607.4	1,645.8	2.60	2.58	0.32
3,652.0	93.60	270.00	2,198.3	-353.5	-1,639.3	1,677.0	3.45	3.44	-0.31
3,684.0	94.10	269.60	2,196.1	-353.6	-1,671.3	1,708.2	2.25	1.88	-1.25
3,715.0	94.80	269.50	2,193.7	-353.8	-1,702.2	1,738.4	2.26	2.26	-0.32
3,747.0	94.30	270.40	2,191.2	-353.9	-1,734.1	1,769.5	3.21	-1.56	2.81
3,779.0	92.90	270.90	2,189.2	-353.5	-1,766.0	1,800.6	4.64	-4.38	1.56
3,810.0	92.50	271.00	2,187.7	-353.0	-1,797.0	1,830.7	1.33	-1.29	0.32
3,841.0	92.60	271.10	2,186.3	-352.4	-1,827.9	1,860.8	0.46	0.32	0.32
3,873.0	92.90	271.40	2,184.8	-351.7	-1,859.9	1,891.9	1.33	0.94	0.94
3,904.0	93.20	271.40	2,183.2	-351.0	-1,890.8	1,921.9	0.97	0.97	0.00

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3,938.0	93.70	271.70	2,181.2	-350.1	-1,922.8	1,952.9	1.82	1.56	0.94
3,968.0	93.80	272.50	2,179.1	-348.9	-1,954.7	1,983.8	2.51	0.31	2.50
3,999.0	92.60	272.40	2,177.4	-347.6	-1,985.6	2,013.7	3.88	-3.87	-0.32
4,031.0	92.70	272.40	2,175.9	-346.3	-2,017.5	2,044.5	0.31	0.31	0.00
4,062.0	93.20	272.80	2,174.3	-344.9	-2,048.5	2,074.4	2.06	1.61	1.29
4,094.0	93.00	273.10	2,172.6	-343.2	-2,080.4	2,105.2	1.13	-0.63	0.94
4,125.0	91.90	273.10	2,171.3	-341.5	-2,111.3	2,135.0	3.55	-3.55	0.00
4,157.0	91.50	272.90	2,170.3	-339.9	-2,143.2	2,165.8	1.40	-1.25	-0.63
4,188.0	91.60	273.10	2,169.5	-338.2	-2,174.2	2,195.7	0.72	0.32	0.65
4,219.0	91.80	272.80	2,168.6	-336.7	-2,205.1	2,225.5	1.16	0.65	-0.97
4,251.0	91.30	270.90	2,167.7	-335.6	-2,237.1	2,256.5	6.14	-1.56	-5.94
4,282.0	91.60	270.70	2,166.9	-335.2	-2,268.1	2,286.7	1.16	0.97	-0.65
4,313.0	92.00	270.30	2,166.0	-334.9	-2,299.1	2,318.8	1.82	1.29	-1.29
4,345.0	92.70	270.70	2,164.6	-334.6	-2,331.1	2,348.0	2.52	2.19	1.25
4,376.0	93.30	270.80	2,163.0	-334.2	-2,362.0	2,378.1	1.96	1.94	0.32
4,408.0	92.60	270.90	2,161.4	-333.8	-2,394.0	2,409.2	2.21	-2.19	0.31
4,439.0	91.20	270.50	2,160.3	-333.4	-2,424.9	2,439.4	4.70	-4.52	-1.29
4,470.0	90.80	270.30	2,159.8	-333.2	-2,455.9	2,469.6	1.44	-1.29	-0.65
4,500.0	90.90	270.40	2,159.4	-333.0	-2,485.9	2,498.8	0.47	0.33	0.33
4,532.0	91.10	270.20	2,158.8	-332.8	-2,517.9	2,530.0	0.88	0.63	-0.63
4,563.0	91.30	270.20	2,158.2	-332.7	-2,548.9	2,560.2	0.65	0.65	0.00
4,594.0	91.60	270.20	2,157.4	-332.6	-2,579.9	2,590.4	0.97	0.97	0.00
4,625.0	92.00	270.20	2,156.4	-332.5	-2,610.9	2,620.6	1.29	1.29	0.00
4,657.0	92.50	270.00	2,155.1	-332.4	-2,642.9	2,651.8	1.68	1.56	-0.63
4,689.0	92.50	270.20	2,153.7	-332.4	-2,674.8	2,683.0	0.62	0.00	0.63
4,720.0	92.80	270.20	2,152.3	-332.3	-2,705.8	2,713.2	0.97	0.97	0.00
4,751.0	93.20	270.20	2,150.7	-332.2	-2,736.8	2,743.4	1.29	1.29	0.00
4,783.0	93.60	270.20	2,148.7	-332.0	-2,768.7	2,774.6	1.88	1.88	0.00
4,814.0	93.50	270.10	2,146.8	-332.0	-2,799.6	2,804.8	1.02	-0.97	-0.32
4,846.0	92.00	269.30	2,145.2	-332.1	-2,831.6	2,836.0	5.31	-4.69	-2.50
4,877.0	92.40	269.50	2,144.0	-332.5	-2,862.6	2,866.3	1.44	1.29	0.65
4,909.0	92.80	269.10	2,142.6	-332.8	-2,894.5	2,897.6	1.77	1.25	-1.25
4,941.0	92.30	270.00	2,141.2	-333.1	-2,926.5	2,928.8	3.21	-1.56	2.81
4,972.0	90.20	269.90	2,140.5	-333.1	-2,957.5	2,959.1	6.78	-6.77	-0.32
5,003.0	90.10	269.80	2,140.4	-333.2	-2,988.5	2,989.4	0.46	-0.32	-0.32
5,035.0	91.30	270.30	2,140.0	-333.2	-3,020.5	3,020.6	4.08	3.75	1.56
5,066.0	92.00	270.00	2,139.1	-333.1	-3,051.5	3,050.8	2.46	2.26	-0.97
5,098.0	91.90	271.00	2,138.0	-332.8	-3,083.5	3,082.0	3.14	-0.31	3.13
5,129.0	90.40	270.90	2,137.4	-332.3	-3,114.4	3,112.1	4.85	-4.84	-0.32
5,161.0	90.60	271.10	2,137.1	-331.7	-3,146.4	3,143.2	0.88	0.63	0.63
5,192.0	91.40	271.30	2,136.6	-331.1	-3,177.4	3,173.3	2.66	2.58	0.65
5,222.0	92.00	271.50	2,135.7	-330.4	-3,207.4	3,202.4	2.11	2.00	0.67
5,254.0	91.30	271.80	2,134.8	-329.4	-3,239.4	3,233.4	2.38	-2.19	0.94



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, N.M. Nad (83)
Site: Section 10-9-22S-23E Bogle Flats Fed Unit 9 Y1AD
Well: Bogle Flats Fed Unit 9 Y1AD 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Bogle Flats Fed Unit 9 Y1AD 1H
TVD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
MD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Buird Rate (°/100usft)	Turn Rate (°/100usft)
5,286.0	90.10	272.00	2,134.4	-328.4	-3,271.4	3,264.4	3.80	-3.75	0.63
5,317.0	89.70	271.70	2,134.4	-327.4	-3,302.3	3,294.4	1.61	-1.29	-0.97
5,348.0	91.00	271.90	2,134.2	-326.4	-3,333.3	3,324.4	4.24	4.19	0.65
5,380.0	91.90	272.30	2,133.4	-325.2	-3,385.3	3,355.4	3.08	2.81	1.25
5,411.0	92.40	272.00	2,132.3	-324.1	-3,396.3	3,385.3	1.88	1.61	-0.97
5,443.0	91.00	271.60	2,131.3	-323.1	-3,428.2	3,416.3	4.55	-4.38	-1.25
5,475.0	90.90	270.80	2,130.8	-322.4	-3,460.2	3,447.4	2.52	-0.31	-2.50
5,506.0	91.80	270.70	2,130.1	-322.0	-3,491.2	3,477.6	2.92	2.90	-0.32
5,537.0	92.40	270.70	2,128.9	-321.6	-3,522.2	3,507.7	1.94	1.94	0.00
5,568.0	92.50	270.50	2,127.6	-321.3	-3,554.1	3,538.8	0.70	0.31	-0.63
5,600.0	92.70	270.10	2,126.2	-321.1	-3,585.1	3,569.0	1.44	0.65	-1.29
5,631.0	90.90	268.90	2,125.2	-321.4	-3,616.1	3,599.3	6.98	-5.81	-3.87
5,662.0	90.60	268.40	2,124.8	-322.1	-3,647.1	3,629.7	1.88	-0.97	-1.61
5,694.0	91.10	268.60	2,124.3	-323.0	-3,679.1	3,661.1	1.88	1.56	0.63
5,725.0	92.10	268.50	2,123.4	-323.7	-3,710.0	3,691.5	3.24	3.23	-0.32
5,757.0	91.60	268.80	2,122.4	-324.5	-3,742.0	3,722.9	1.82	-1.58	0.94
5,788.0	90.30	268.20	2,121.9	-325.3	-3,773.0	3,753.3	4.62	-4.19	-1.94
5,820.0	90.20	268.60	2,121.7	-326.2	-3,805.0	3,784.7	1.29	-0.31	1.25
5,851.0	91.60	269.30	2,121.3	-326.8	-3,836.0	3,815.1	5.05	4.52	2.26
5,883.0	92.80	269.50	2,120.0	-327.1	-3,868.0	3,846.4	3.80	3.75	0.63
5,914.0	92.00	270.00	2,118.7	-327.2	-3,898.9	3,876.6	3.04	-2.58	1.61
5,946.0	90.50	270.40	2,118.0	-327.1	-3,930.9	3,907.8	4.85	-4.69	1.25
5,995.0	91.60	271.10	2,117.1	-326.5	-3,979.9	3,955.5	2.86	2.24	1.43
6,026.0	90.60	271.60	2,116.5	-325.8	-4,010.9	3,985.6	3.61	-3.23	1.61
6,058.0	89.40	272.20	2,116.5	-324.7	-4,042.9	4,016.6	4.19	-3.75	1.88
6,089.0	89.20	272.20	2,116.9	-323.5	-4,073.8	4,046.6	0.65	-0.65	0.00
6,121.0	89.10	272.00	2,117.4	-322.3	-4,105.8	4,077.5	0.70	-0.31	-0.63
6,152.0	90.00	272.20	2,117.6	-321.2	-4,136.8	4,107.5	2.97	2.90	0.65
6,184.0	90.50	272.20	2,117.5	-320.0	-4,168.8	4,138.4	1.56	1.56	0.00
6,215.0	91.00	272.20	2,117.1	-318.8	-4,199.7	4,168.4	1.61	1.61	0.00
6,247.0	91.30	272.00	2,116.5	-317.6	-4,231.7	4,199.4	1.13	0.94	-0.63
6,278.0	91.30	272.10	2,115.7	-316.5	-4,262.7	4,229.3	0.32	0.00	0.32
6,310.0	89.50	271.30	2,115.5	-315.5	-4,294.7	4,260.4	6.16	-5.63	-2.50
6,342.0	89.50	270.90	2,115.8	-314.9	-4,326.7	4,291.4	1.25	0.00	-1.25
6,373.0	89.70	270.80	2,116.0	-314.5	-4,357.7	4,321.6	0.72	0.65	-0.32
6,405.0	90.50	271.10	2,116.0	-313.9	-4,389.7	4,352.7	2.87	2.50	0.94
6,436.0	91.30	271.20	2,115.5	-313.3	-4,420.7	4,382.8	2.80	2.58	0.32
6,468.0	92.00	271.50	2,114.6	-312.6	-4,452.6	4,413.9	2.38	2.19	0.94
6,499.0	92.50	271.30	2,113.3	-311.8	-4,483.6	4,443.9	1.74	1.61	-0.65
6,531.0	92.50	270.90	2,111.9	-311.2	-4,515.6	4,475.0	1.25	0.00	-1.25
6,562.0	91.30	270.10	2,110.9	-310.9	-4,546.5	4,505.2	4.85	-3.87	-2.58
6,594.0	91.40	269.70	2,110.2	-311.0	-4,578.5	4,536.4	1.29	0.31	-1.25



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, N.M. Nad (83)
Site: Section 10-9-22S-23E Bogle Flats Fed Unit 9 Y1AD
Well: Bogle Flats Fed Unit 9 Y1AD 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Bogle Flats Fed Unit 9 Y1AD 1H
TVD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
MD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

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)
6,628.0	91.80	269.30	2,109.3	-311.3	-4,610.5	4,567.7	1.77	1.25	-1.25
6,657.0	92.40	269.50	2,108.1	-311.6	-4,641.5	4,598.0	2.04	1.94	0.65
6,688.0	92.90	269.10	2,106.7	-312.0	-4,672.5	4,628.3	2.06	1.61	-1.29
6,720.0	93.00	269.50	2,105.1	-312.4	-4,704.4	4,659.6	1.29	0.31	1.25
6,751.0	91.10	269.20	2,103.9	-312.7	-4,735.4	4,689.9	6.20	-6.13	-0.97
6,783.0	91.10	269.30	2,103.3	-313.1	-4,767.4	4,721.2	0.31	0.00	0.31
6,815.0	91.80	269.70	2,102.5	-313.4	-4,799.4	4,752.5	2.52	2.19	1.25
6,846.0	92.40	269.70	2,101.4	-313.6	-4,830.3	4,782.7	1.94	1.94	0.00
6,878.0	92.80	269.30	2,099.9	-313.8	-4,862.3	4,814.0	1.77	1.25	-1.25
6,909.0	93.70	269.70	2,098.2	-314.1	-4,893.3	4,844.3	3.18	2.90	1.29
6,940.0	93.90	269.50	2,096.1	-314.3	-4,924.2	4,874.5	0.91	0.65	-0.65
6,972.0	94.30	270.20	2,093.8	-314.4	-4,956.1	4,905.7	2.51	1.25	2.19
7,003.0	92.40	270.50	2,092.0	-314.2	-4,987.1	4,935.8	6.20	-6.13	0.97
7,034.0	92.10	270.30	2,090.8	-314.0	-5,018.0	4,966.0	1.16	-0.97	-0.65
7,065.0	91.70	271.10	2,089.8	-313.6	-5,049.0	4,996.2	2.88	-1.29	2.58
7,097.0	90.20	271.60	2,089.2	-312.9	-5,081.0	5,027.2	4.94	-4.69	1.56
7,128.0	90.10	271.60	2,089.2	-312.0	-5,112.0	5,057.3	0.32	-0.32	0.00
7,160.0	90.50	271.90	2,089.0	-311.0	-5,144.0	5,088.3	1.56	1.25	0.94
7,191.0	90.90	271.60	2,088.6	-310.1	-5,175.0	5,118.3	1.81	1.29	-0.97
7,223.0	91.80	271.60	2,087.9	-309.2	-5,206.9	5,149.3	2.81	2.81	0.00
7,254.0	92.60	271.50	2,086.7	-308.4	-5,237.9	5,179.4	2.60	2.58	-0.32
7,286.0	93.40	271.50	2,085.0	-307.5	-5,269.8	5,210.4	2.50	2.50	0.00
7,317.0	93.10	271.90	2,083.2	-306.6	-5,300.8	5,240.4	1.81	-0.97	1.29
7,349.0	91.80	271.80	2,081.9	-305.6	-5,332.7	5,271.3	4.07	-4.06	-0.31
7,381.0	91.90	271.90	2,080.8	-304.5	-5,364.7	5,302.3	0.44	0.31	0.31
7,412.0	92.40	272.30	2,079.7	-303.4	-5,395.7	5,332.3	2.06	1.61	1.29
7,444.0	91.80	272.10	2,078.5	-302.2	-5,427.6	5,363.2	1.98	-1.88	-0.63
7,475.0	90.10	271.50	2,078.0	-301.2	-5,458.6	5,393.2	5.82	-5.48	-1.94
7,506.0	90.00	271.20	2,078.0	-300.5	-5,489.6	5,423.3	1.02	-0.32	-0.97
7,537.0	90.40	271.00	2,077.9	-299.9	-5,520.6	5,453.4	1.44	1.29	-0.65
7,568.0	90.70	270.90	2,077.5	-299.3	-5,552.6	5,484.5	0.99	0.94	-0.31
7,600.0	91.50	271.20	2,077.0	-298.8	-5,583.6	5,514.7	2.76	2.58	0.97
7,632.0	91.60	270.90	2,076.1	-298.2	-5,615.5	5,545.8	0.99	0.31	-0.94
7,663.0	91.70	270.90	2,075.2	-297.7	-5,646.5	5,575.9	0.32	0.32	0.00
7,695.0	90.00	270.70	2,074.7	-297.3	-5,678.5	5,607.0	5.35	-5.31	-0.63
7,726.0	89.80	270.20	2,074.8	-297.0	-5,709.5	5,637.2	1.74	-0.65	-1.61
7,758.0	90.10	270.20	2,074.8	-296.9	-5,741.5	5,668.4	0.94	0.94	0.00
7,792.0	91.30	269.90	2,074.4	-296.9	-5,775.5	5,701.6	3.64	3.53	-0.88
7,855.0	91.30	269.90	2,073.0	-297.0	-5,838.5	5,763.1	0.00	0.00	0.00

7855.0' MD Projected to 8ft - PBHL Bogle Flats Fed Unit 9 Y1AD 1H



Microsoft Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, N.M. Nad (83)
Site: Section 10-9-22S-23E Bogle Flats Fed Unit 9
Y1AD
Well: Bogle Flats Fed Unit 9 Y1AD 1H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Bogle Flats Fed Unit 9 Y1AD 1H
TVD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
MD Reference: 4103 + 27 @ 4130.0usft (Silver Oak #4)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
454.0	454.0	-0.8	0.1	454.0' MD MS Gyro Survey
7,855.0	2,073.0	-287.0	-5,838.5	7855.0' MD Projected to Bit



COMPANY: Mewbourne Oil Company
WELL: Bogle Flats Fed Unit 9 Y1AD 1H
COUNTY: Eddy County, N.M. Nad (83)
DATUM: North American Datum 1983
RIG: Silver Oak #4



OFFICE: 936.582.7296

GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.45°

GEODETIC ZONE: New Mexico Eastern Zone										
4103 + 27 @ 4130.0ust (Silver Oak #4)										
GROUND ELEVATION: 4103.0										
+N-S	+E-W	Northing	Easting	Latitude	Longitude	Slot				
0.0	0.0	513905.50	460704.40	32° 24' 45.081 N	104° 35' 40.655 W					
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSeet	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1728.0	0.00	0.00	1728.0	0.0	0.0	0.00	0.00	0.0	
3	2458.9	87.47	248.00	2205.0	-185.6	-416.9	12.00	246.00	425.5	
4	3286.8	91.70	270.85	2211.1	-352.8	-1233.1	3.00	80.58	1248.8	
5	7912.4	91.70	270.85	2074.0	-284.7	-5846.2	0.00	0.00	5853.1	PBHL Bogle Flats Fed Unit 9 Y1AD 1H

SHL: 25' FNL: 660' FWL
Section 10-22S-23E
PBHL: 330' FNL: 100' FWL
Section 9-22S-23E

