



NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 12 2018

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Matador Resources

Eddy County, NM

Sec 31, T23S, R28E

Charlie Sweeney Fed Com #228H

Wellbore #1

30-015-44028

Design: Wellbore #1

QES Survey Report

02 November, 2017





Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well Charlie Sweeney Fed Com #228H
Project:	Eddy County, NM	TVD Reference:	Well @ 3128.5usft (Patterson #282)
Site:	Sec 31, T23S, R28E	MD Reference:	Well @ 3128.5usft (Patterson #282)
Well:	Charlie Sweeney Fed Com #228H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 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)
815.0	0.99	269.42	814.9	-7.1	-10.2	-7.2	0.52	0.41	-23.90
909.0	1.17	257.11	908.8	-7.4	-12.0	-7.5	0.31	0.19	-13.10
1,004.0	1.30	143.54	1,003.8	-8.5	-12.3	-8.6	2.18	0.14	-119.55
1,098.0	2.93	131.13	1,097.8	-10.9	-9.8	-11.0	1.79	1.73	-13.20
1,192.0	3.48	126.00	1,191.6	-14.1	-5.7	-14.2	0.66	0.59	-5.46
1,286.0	2.69	126.62	1,285.5	-17.1	-1.6	-17.2	0.84	-0.84	0.66
1,381.0	2.23	125.73	1,380.4	-19.6	1.6	-19.5	0.49	-0.48	-0.94
1,475.0	3.05	120.66	1,474.3	-21.9	5.3	-21.8	0.91	0.87	-5.39
1,569.0	4.75	118.55	1,568.1	-25.0	10.8	-24.9	1.81	1.81	-2.24
1,663.0	5.17	117.61	1,661.7	-28.9	18.0	-28.7	0.46	0.45	-1.00
1,757.0	4.82	119.49	1,755.4	-32.8	25.2	-32.5	0.41	-0.37	2.00
1,852.0	4.18	127.70	1,850.1	-36.8	31.4	-36.6	0.95	-0.67	8.64
1,946.0	4.29	109.64	1,943.8	-40.1	37.4	-39.8	1.42	0.12	-19.21
2,040.0	5.23	110.93	2,037.5	-42.8	44.8	-42.4	1.01	1.00	1.37
2,134.0	3.94	118.07	2,131.2	-45.9	51.6	-45.4	1.50	-1.37	7.60
2,229.0	3.85	125.80	2,226.0	-49.3	57.1	-48.8	0.56	-0.09	8.14
2,323.0	2.50	142.61	2,319.8	-52.8	60.9	-52.2	1.73	-1.44	17.88
2,374.0	1.99	155.64	2,370.8	-54.4	61.9	-53.9	1.41	-1.00	25.55
2,473.0	1.83	154.77	2,469.7	-57.4	63.3	-56.9	0.16	-0.16	-0.88
2,568.0	2.41	146.63	2,564.7	-60.5	65.0	-59.9	0.69	0.61	-8.57
2,662.0	2.46	140.07	2,658.6	-63.7	67.4	-63.1	0.30	0.05	-6.98
2,757.0	3.42	136.68	2,753.5	-67.3	70.7	-66.7	1.03	1.01	-3.57
2,850.0	3.57	136.98	2,846.3	-71.4	74.6	-70.8	0.16	0.16	0.32
2,943.0	3.46	132.15	2,939.1	-75.4	78.6	-74.8	0.34	-0.12	-5.19
3,038.0	3.23	126.10	3,033.9	-78.9	82.9	-78.2	0.44	-0.24	-6.37
3,131.0	3.05	131.79	3,126.8	-82.1	86.9	-81.4	0.39	-0.19	6.12
3,225.0	2.58	132.15	3,220.7	-85.2	90.3	-84.4	0.50	-0.50	0.38
3,319.0	3.24	126.56	3,314.6	-88.2	94.0	-87.4	0.76	0.70	-5.95
3,412.0	3.08	122.12	3,407.4	-91.1	98.2	-90.3	0.31	-0.17	-4.77
3,505.0	3.94	125.56	3,500.3	-94.3	102.9	-93.4	0.95	0.92	3.70
3,599.0	4.17	129.95	3,594.0	-98.4	108.2	-97.4	0.41	0.24	4.67
3,693.0	3.82	131.05	3,687.8	-102.6	113.2	-101.7	0.38	-0.37	1.17
3,787.0	3.52	132.60	3,781.6	-106.6	117.7	-105.6	0.34	-0.32	1.65
3,880.0	2.95	133.26	3,874.5	-110.2	121.5	-109.2	0.61	-0.61	0.71
3,974.0	3.02	135.10	3,968.3	-113.6	125.0	-112.5	0.13	0.07	1.96
4,067.0	2.83	138.97	4,061.2	-117.1	128.2	-116.0	0.29	-0.20	4.16
4,161.0	3.63	133.30	4,155.1	-120.9	131.9	-119.7	0.92	0.85	-6.03
4,255.0	4.10	133.63	4,248.8	-125.2	136.5	-124.1	0.50	0.50	0.35
4,349.0	3.87	133.65	4,342.6	-129.7	141.3	-128.5	0.24	-0.24	0.02
4,443.0	3.76	135.36	4,436.4	-134.1	145.7	-132.9	0.17	-0.12	1.82
4,538.0	3.30	141.78	4,531.2	-138.5	149.6	-137.2	0.64	-0.48	6.76
4,632.0	3.08	141.96	4,625.1	-142.6	152.8	-141.3	0.23	-0.23	0.19
4,726.0	2.40	143.08	4,719.0	-146.2	155.6	-144.8	0.73	-0.72	1.19



Survey Report



Company: Matador Resources
Project: Eddy County, NM
Site: Sec 31, T23S, R28E
Well: Charlie Sweeney Fed Com #228H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Charlie Sweeney Fed Com #228H
TVD Reference: Well @ 3128.5usft (Patterson #282)
MD Reference: Well @ 3128.5usft (Patterson #282)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 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)
8,858.0	0.34	62.36	8,850.3	-159.9	163.6	-158.5	0.15	-0.11	-16.69
8,951.0	0.34	220.30	8,943.3	-159.9	163.7	-158.5	0.72	0.00	169.83
9,044.0	0.83	231.51	9,036.3	-160.6	162.9	-159.2	0.54	0.53	12.05
9,138.0	0.11	252.55	9,130.3	-161.0	162.3	-159.6	0.77	-0.77	22.38
9,231.0	0.45	9.27	9,223.3	-160.7	162.3	-159.3	0.55	0.37	125.51
9,325.0	0.44	263.02	9,317.3	-160.4	162.0	-159.0	0.76	-0.01	-113.03
9,418.0	0.60	222.84	9,410.3	-160.8	161.3	-159.4	0.42	0.17	-43.20
9,512.0	0.59	246.72	9,504.3	-161.3	160.5	-159.9	0.26	-0.01	25.40
9,606.0	0.60	235.98	9,598.3	-161.8	159.7	-160.4	0.12	0.01	-11.43
9,700.0	0.65	194.39	9,692.2	-162.6	159.1	-161.2	0.47	0.05	-44.24
9,794.0	1.06	204.54	9,786.2	-163.9	158.7	-162.5	0.46	0.44	10.80
9,831.0	1.22	194.09	9,823.2	-164.6	158.4	-163.2	0.71	0.43	-28.24
9,924.0	5.63	358.29	9,916.1	-161.0	158.0	-159.6	7.32	4.74	176.56
10,017.0	17.54	357.44	10,007.0	-142.3	157.3	-141.0	12.81	12.81	-0.91
10,112.0	25.90	356.71	10,095.2	-107.3	155.4	-105.9	8.80	8.80	-0.77
10,206.0	38.69	0.83	10,174.5	-57.2	154.7	-55.9	13.80	13.61	4.38
10,299.0	46.50	357.76	10,242.9	5.7	153.8	7.0	8.69	8.40	-3.30
10,393.0	55.29	354.54	10,302.2	78.4	148.8	79.6	9.72	9.35	-3.43
330°HL Crossed @ 10469.7' MD / 10344.3' TVD									
10,469.7	58.09	355.46	10,344.3	142.2	143.2	143.4	3.78	3.65	1.20
10,487.0	58.72	355.66	10,353.4	156.9	142.0	158.1	3.78	3.65	1.15
10,583.0	60.99	359.36	10,401.6	239.8	138.5	241.0	4.09	2.36	3.85
MWD Tie-in @ 10614.0' MD / 10416.2' TVD									
10,614.0	62.87	2.40	10,416.2	267.2	138.9	268.3	10.57	6.06	9.81
10,687.0	62.80	2.60	10,449.5	332.1	141.7	333.3	0.26	-0.10	0.27
10,719.0	65.20	3.50	10,463.5	360.8	143.3	362.0	7.91	7.50	2.81
10,750.0	70.40	4.00	10,475.2	389.4	145.1	390.6	16.84	16.77	1.61
10,782.0	76.60	2.40	10,484.3	420.0	146.8	421.3	19.96	19.38	-5.00
10,814.0	82.50	0.80	10,490.1	451.5	147.7	452.7	19.08	18.44	-5.00
10,845.0	86.30	359.70	10,493.2	482.3	147.9	483.6	12.76	12.26	-3.55
10,876.0	89.20	359.90	10,494.4	513.3	147.7	514.5	9.38	9.35	0.65
10,970.0	92.50	359.20	10,493.0	607.3	147.0	608.5	3.59	3.51	-0.74
11,064.0	92.00	0.70	10,489.3	701.2	146.9	702.4	1.68	-0.53	1.60
11,158.0	91.60	359.70	10,486.3	795.1	147.3	796.4	1.15	-0.43	-1.06
11,252.0	89.80	358.40	10,485.2	889.1	145.7	890.3	2.36	-1.91	-1.38
11,347.0	93.20	359.90	10,482.7	984.0	144.3	985.2	3.91	3.58	1.58
11,441.0	94.90	359.40	10,476.1	1,077.8	143.7	1,079.0	1.88	1.81	-0.53
11,535.0	95.30	359.20	10,467.7	1,171.4	142.6	1,172.6	0.48	0.43	-0.21
11,629.0	94.10	0.70	10,460.0	1,265.1	142.5	1,266.3	2.04	-1.28	1.60
11,724.0	91.70	3.00	10,455.2	1,359.9	145.6	1,361.1	3.50	-2.53	2.42
11,819.0	87.70	4.40	10,455.7	1,454.7	151.7	1,455.9	4.46	-4.21	1.47
11,913.0	86.20	4.30	10,460.7	1,548.3	158.8	1,549.6	1.60	-1.60	-0.11
12,008.0	84.60	1.80	10,468.3	1,642.8	163.8	1,644.2	3.12	-1.68	-2.63
12,102.0	85.90	0.00	10,476.1	1,736.5	165.3	1,737.9	2.36	1.38	-1.91



Survey Report



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Project:	Eddy County, NM	TVD Reference:	Well @ 3128.5usft (Patterson #282)
Site:	Sec 31, T23S, R28E	MD Reference:	Well @ 3128.5usft (Patterson #282)
Well:	Charlie Sweeney Fed Com #228H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,469.7	10,344.3	142.2	143.2	330'HL Crossed @ 10469.7' MD / 10344.3' TVD
10,614.0	10,416.2	267.2	138.9	MWD Tie-in @ 10614.0' MD / 10416.2' TVD
15,141.5	10,523.1	4,773.5	217.9	330'HL Crossed @ 15141.5' MD / 10523.1' TVD
15,247.0	10,517.9	4,878.7	222.6	TD @ 15247.0' MD / 10517.9' TVD