



30-015-43929

Matador Resources

Eddy County, New Mexico (NAD 27)
Charlie Sweeney Federal 31-23S-28E
#202H

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 07 2017

RECEIVED

Wellbore #1

Plan: Design #1

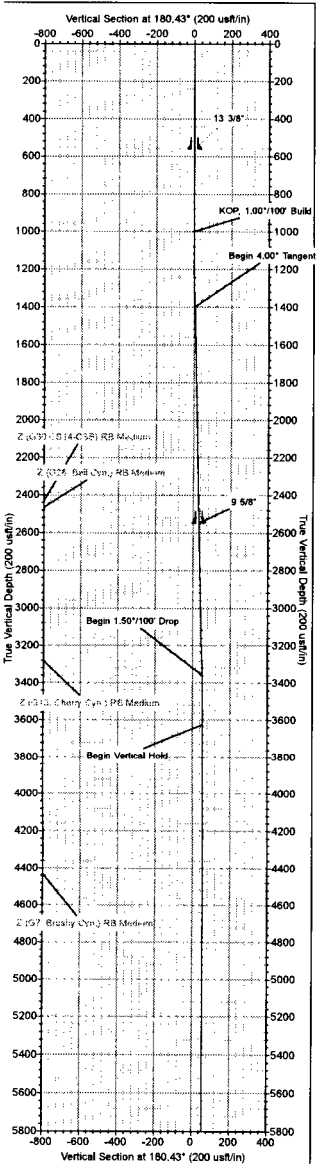
Standard Planning Report

26 May, 2017

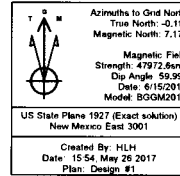


Company: Matador Resources
Site: Charlie Sweeney Federal 31-23S-28E
Well: #202H
Project: Eddy County, New Mexico (NAD 27)
Rig: Patterson 810

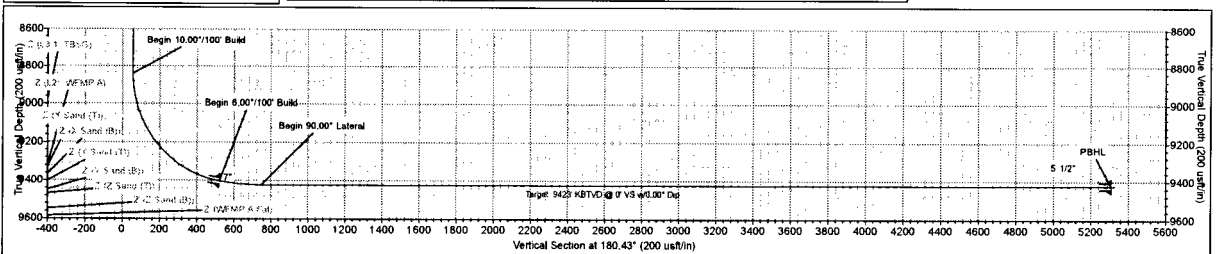
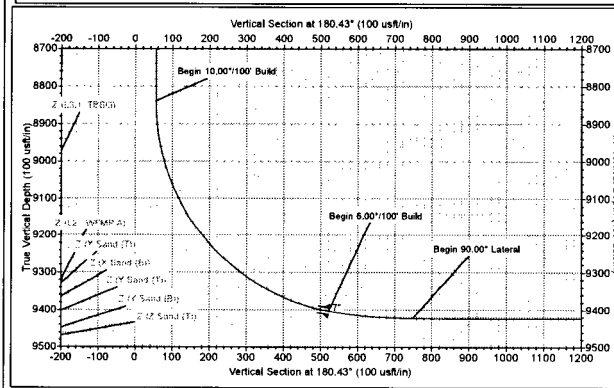
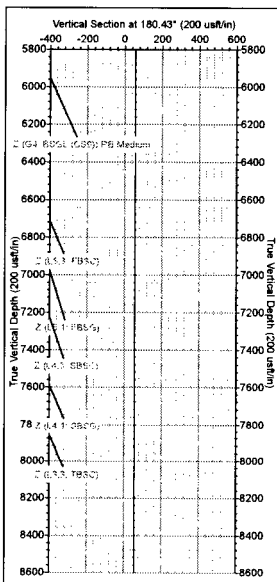
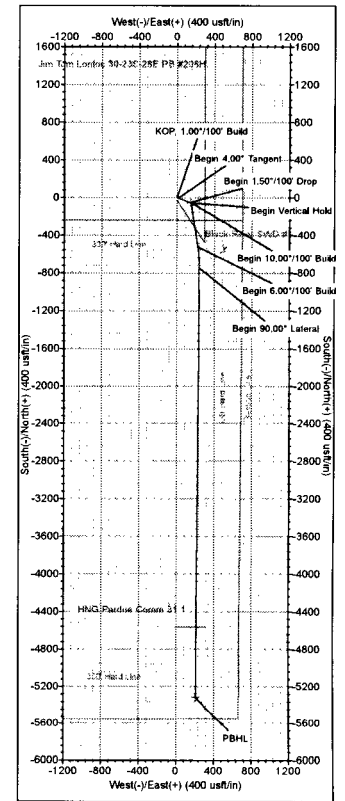
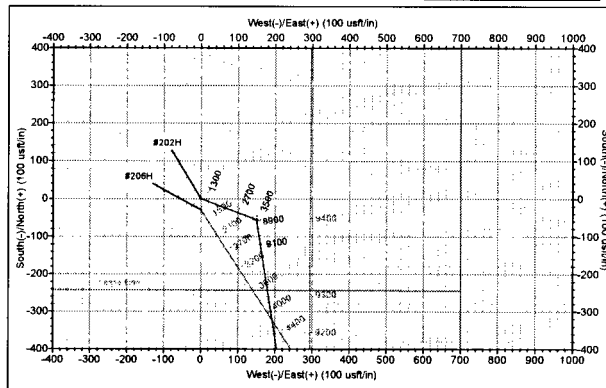
MS Energy Services.
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ANNOTATIONS									
MD	Inc	Azi	TVD	+N-S	+E-W	V-Sect	Departure	Annotation	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	KOP 1.00°/100' Build	
1399.63	4.00	110.47	1399.31	-4.67	13.05	4.77	13.93	Begin 4.00° Tangent	
3363.90	4.00	110.47	3358.80	-52.75	141.30	51.69	150.82	Begin 1.50°/100' Drop	
3630.32	0.00	0.00	3625.00	-58.00	150.00	54.87	160.11	Begin Vertical Hold	
8844.12	0.00	0.00	8838.80	-56.00	150.00	54.87	160.11	Begin 10.00°/100' Build	
9644.12	80.00	171.00	9403.00	-523.64	224.07	521.94	833.58	Begin 6.00°/100' Build	
9872.70	90.00	180.43	9423.00	-150.18	240.89	748.35	861.00	Begin 90.00° Lateral	
14432.14	90.00	180.43	9423.00	-5309.49	206.29	5307.79	5420.44	PBHL	



WELL DETAILS #202H			
+N-S	+E-W	Northing	Eastings
0.00	0.00	451773.42	5120.00
		Latitude	Longitude
		32° 16' 9.717" N	104° 7' 42.549" W



The customer should only rely on this document after independently verifying all path, target, coordinate, bore and hard data represented. Any decisions made or wells drilled relying on this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer. MS Energy is not responsible for the accuracy of this estimate or the information contained herein.



MS Energy Services

Planning Report



Database: EDM Conroe
Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Site: Charlie Sweeney Federal 31-23S-28E
Well: #202H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well #202H
TVD Reference: WELL @ 3149.00usft (Patterson 810)
MD Reference: WELL @ 3149.00usft (Patterson 810)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,435.84	2,433.00	Z (G30:CS14-CSB) RB Medium		0.00	
2,468.92	2,466.00	Z (G26: Bell Cyn.) RB Medium		0.00	
3,286.91	3,282.00	Z (G13: Cherry Cyn.) RB Medium		0.00	
4,437.32	4,432.00	Z (G7: Brushy Cyn.) RB Medium		0.00	
5,957.32	5,952.00	Z (G4: BSG (CS9)) RB Medium		0.00	
6,717.32	6,712.00	Z (L5.3: FBSC)		0.00	
6,979.32	6,974.00	Z (L5.1: FBSC)		0.00	
7,228.32	7,223.00	Z (L4.3: SBSC)		0.00	
7,595.32	7,590.00	Z (L4.1: SBSC)		0.00	
7,863.32	7,858.00	Z (L3.3: TBSC)		0.00	
8,978.55	8,972.00	Z (L3.1: TBSC)		0.00	
9,415.36	9,320.00	Z (L2: WFMP A)		0.00	
9,432.33	9,329.00	Z (X Sand (T))		0.00	
9,511.04	9,365.00	Z (X Sand (B))		0.00	
9,638.22	9,402.00	Z (Y Sand (T))		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,000.00	1,000.00	0.00	0.00	KOP, 1.00°/100' Build
1,399.63	1,399.31	-4.87	13.05	Begin 4.00° Tangent
3,363.90	3,358.80	-52.75	141.30	Begin 1.50°/100' Drop
3,630.32	3,625.00	-56.00	150.00	Begin Vertical Hold
8,844.12	8,838.80	-56.00	150.00	Begin 10.00°/100' Build
9,644.12	9,403.05	-523.64	224.07	Begin 6.00°/100' Build
9,872.70	9,423.00	-750.18	240.89	Begin 90.00° Lateral
14,432.14	9,423.00	-5,309.49	206.29	PBHL



MS Energy Services

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MD Reference: WELL @ 3149.00usft (Patterson 810)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned 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)
13,800.00	90.00	180.43	9,423.00	-4,677.36	211.09	4,675.65	0.00	0.00	0.00
13,900.00	90.00	180.43	9,423.00	-4,777.36	210.33	4,775.65	0.00	0.00	0.00
14,000.00	90.00	180.43	9,423.00	-4,877.36	209.57	4,875.65	0.00	0.00	0.00
14,100.00	90.00	180.43	9,423.00	-4,977.36	208.81	4,975.65	0.00	0.00	0.00
14,200.00	90.00	180.43	9,423.00	-5,077.35	208.05	5,075.65	0.00	0.00	0.00
14,300.00	90.00	180.43	9,423.00	-5,177.35	207.29	5,175.65	0.00	0.00	0.00
14,400.00	90.00	180.43	9,423.00	-5,277.35	206.53	5,275.65	0.00	0.00	0.00
14,432.14	90.00	180.43	9,423.00	-5,309.49	206.29	5,307.79	0.00	0.00	0.00
PBHL									

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP - Charlie Sweeney - plan hits target center - Point	0.00	0.00	3,625.00	-56.00	150.00	461,717.42	563,465.36	32° 16' 9.160 N	104° 7' 40.803 W
PBHL - Charlie Sweer - plan hits target center - Point	0.00	0.00	9,423.00	-5,309.49	206.29	456,463.93	563,521.65	32° 15' 17.169 N	104° 7' 40.265 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
560.00	560.00	13 3/8"	13-3/8	17-1/2
2,550.00	2,546.88	9 5/8"	9-5/8	12-1/4
9,644.12	9,403.05	7"	7	7-1/2
14,432.14	9,423.00	5 1/2"	5-1/2	6



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Planned 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)
9,350.00	50.59	171.00	9,281.47	-262.62	182.73	261.24	10.00	10.00	0.00
9,400.00	55.59	171.00	9,311.49	-302.09	188.98	300.67	10.00	10.00	0.00
9,450.00	60.59	171.00	9,337.91	-344.00	195.61	342.52	10.00	10.00	0.00
9,500.00	65.59	171.00	9,360.54	-388.02	202.59	386.49	10.00	10.00	0.00
9,550.00	70.59	171.00	9,379.19	-433.82	209.84	432.24	10.00	10.00	0.00
9,600.00	75.59	171.00	9,393.73	-481.06	217.32	479.41	10.00	10.00	0.00
9,644.12	80.00	171.00	9,403.05	-523.64	224.07	521.94	10.00	10.00	0.00
Begin 6.00°/100' Build									
9,650.00	80.26	171.25	9,404.06	-529.36	224.96	527.66	6.00	4.34	4.21
9,700.00	82.43	173.34	9,411.59	-578.34	231.59	576.59	6.00	4.35	4.18
9,750.00	84.61	175.41	9,417.23	-627.78	236.46	625.99	6.00	4.37	4.14
9,800.00	86.81	177.46	9,420.97	-677.54	239.55	675.72	6.00	4.38	4.11
9,850.00	89.00	179.51	9,422.80	-727.48	240.88	725.65	6.00	4.39	4.09
9,872.70	90.00	180.43	9,423.00	-750.18	240.89	748.35	6.00	4.39	4.09
Begin 90.00° Lateral									
9,900.00	90.00	180.43	9,423.00	-777.48	240.68	775.65	0.00	0.00	0.00
10,000.00	90.00	180.43	9,423.00	-877.47	239.92	875.65	0.00	0.00	0.00
10,100.00	90.00	180.43	9,423.00	-977.47	239.16	975.65	0.00	0.00	0.00
10,200.00	90.00	180.43	9,423.00	-1,077.47	238.40	1,075.65	0.00	0.00	0.00
10,300.00	90.00	180.43	9,423.00	-1,177.46	237.64	1,175.65	0.00	0.00	0.00
10,400.00	90.00	180.43	9,423.00	-1,277.46	236.89	1,275.65	0.00	0.00	0.00
10,500.00	90.00	180.43	9,423.00	-1,377.46	236.13	1,375.65	0.00	0.00	0.00
10,600.00	90.00	180.43	9,423.00	-1,477.46	235.37	1,475.65	0.00	0.00	0.00
10,700.00	90.00	180.43	9,423.00	-1,577.45	234.61	1,575.65	0.00	0.00	0.00
10,800.00	90.00	180.43	9,423.00	-1,677.45	233.85	1,675.65	0.00	0.00	0.00
10,900.00	90.00	180.43	9,423.00	-1,777.45	233.09	1,775.65	0.00	0.00	0.00
11,000.00	90.00	180.43	9,423.00	-1,877.44	232.33	1,875.65	0.00	0.00	0.00
11,100.00	90.00	180.43	9,423.00	-1,977.44	231.57	1,975.65	0.00	0.00	0.00
11,200.00	90.00	180.43	9,423.00	-2,077.44	230.82	2,075.65	0.00	0.00	0.00
11,300.00	90.00	180.43	9,423.00	-2,177.44	230.06	2,175.65	0.00	0.00	0.00
11,400.00	90.00	180.43	9,423.00	-2,277.43	229.30	2,275.65	0.00	0.00	0.00
11,500.00	90.00	180.43	9,423.00	-2,377.43	228.54	2,375.65	0.00	0.00	0.00
11,600.00	90.00	180.43	9,423.00	-2,477.43	227.78	2,475.65	0.00	0.00	0.00
11,700.00	90.00	180.43	9,423.00	-2,577.42	227.02	2,575.65	0.00	0.00	0.00
11,800.00	90.00	180.43	9,423.00	-2,677.42	226.26	2,675.65	0.00	0.00	0.00
11,900.00	90.00	180.43	9,423.00	-2,777.42	225.50	2,775.65	0.00	0.00	0.00
12,000.00	90.00	180.43	9,423.00	-2,877.42	224.75	2,875.65	0.00	0.00	0.00
12,100.00	90.00	180.43	9,423.00	-2,977.41	223.99	2,975.65	0.00	0.00	0.00
12,200.00	90.00	180.43	9,423.00	-3,077.41	223.23	3,075.65	0.00	0.00	0.00
12,300.00	90.00	180.43	9,423.00	-3,177.41	222.47	3,175.65	0.00	0.00	0.00
12,400.00	90.00	180.43	9,423.00	-3,277.40	221.71	3,275.65	0.00	0.00	0.00
12,500.00	90.00	180.43	9,423.00	-3,377.40	220.95	3,375.65	0.00	0.00	0.00
12,600.00	90.00	180.43	9,423.00	-3,477.40	220.19	3,475.65	0.00	0.00	0.00
12,700.00	90.00	180.43	9,423.00	-3,577.40	219.43	3,575.65	0.00	0.00	0.00
12,800.00	90.00	180.43	9,423.00	-3,677.39	218.67	3,675.65	0.00	0.00	0.00
12,900.00	90.00	180.43	9,423.00	-3,777.39	217.92	3,775.65	0.00	0.00	0.00
13,000.00	90.00	180.43	9,423.00	-3,877.39	217.16	3,875.65	0.00	0.00	0.00
13,100.00	90.00	180.43	9,423.00	-3,977.38	216.40	3,975.65	0.00	0.00	0.00
13,200.00	90.00	180.43	9,423.00	-4,077.38	215.64	4,075.65	0.00	0.00	0.00
13,300.00	90.00	180.43	9,423.00	-4,177.38	214.88	4,175.65	0.00	0.00	0.00
13,400.00	90.00	180.43	9,423.00	-4,277.38	214.12	4,275.65	0.00	0.00	0.00
13,500.00	90.00	180.43	9,423.00	-4,377.37	213.36	4,375.65	0.00	0.00	0.00
13,600.00	90.00	180.43	9,423.00	-4,477.37	212.60	4,475.65	0.00	0.00	0.00
13,700.00	90.00	180.43	9,423.00	-4,577.37	211.85	4,575.65	0.00	0.00	0.00



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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)
4,800.00	0.00	0.00	4,794.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,900.00	0.00	0.00	4,894.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,000.00	0.00	0.00	4,994.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,100.00	0.00	0.00	5,094.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,200.00	0.00	0.00	5,194.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,300.00	0.00	0.00	5,294.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,400.00	0.00	0.00	5,394.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,500.00	0.00	0.00	5,494.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,600.00	0.00	0.00	5,594.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,700.00	0.00	0.00	5,694.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,800.00	0.00	0.00	5,794.68	-56.00	150.00	54.87	0.00	0.00	0.00
5,900.00	0.00	0.00	5,894.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,000.00	0.00	0.00	5,994.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,100.00	0.00	0.00	6,094.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,200.00	0.00	0.00	6,194.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,300.00	0.00	0.00	6,294.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,400.00	0.00	0.00	6,394.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,500.00	0.00	0.00	6,494.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,600.00	0.00	0.00	6,594.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,700.00	0.00	0.00	6,694.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,800.00	0.00	0.00	6,794.68	-56.00	150.00	54.87	0.00	0.00	0.00
6,900.00	0.00	0.00	6,894.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,000.00	0.00	0.00	6,994.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,100.00	0.00	0.00	7,094.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,200.00	0.00	0.00	7,194.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,300.00	0.00	0.00	7,294.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,400.00	0.00	0.00	7,394.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,500.00	0.00	0.00	7,494.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,600.00	0.00	0.00	7,594.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,700.00	0.00	0.00	7,694.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,800.00	0.00	0.00	7,794.68	-56.00	150.00	54.87	0.00	0.00	0.00
7,900.00	0.00	0.00	7,894.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,000.00	0.00	0.00	7,994.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,100.00	0.00	0.00	8,094.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,200.00	0.00	0.00	8,194.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,300.00	0.00	0.00	8,294.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,400.00	0.00	0.00	8,394.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,500.00	0.00	0.00	8,494.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,600.00	0.00	0.00	8,594.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,700.00	0.00	0.00	8,694.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,800.00	0.00	0.00	8,794.68	-56.00	150.00	54.87	0.00	0.00	0.00
8,844.12	0.00	0.00	8,838.80	-56.00	150.00	54.87	0.00	0.00	0.00
Begin 10.00°/100' Build									
8,850.00	0.59	171.00	8,844.68	-56.03	150.00	54.90	10.00	10.00	0.00
8,900.00	5.59	171.00	8,894.60	-58.69	150.43	57.56	10.00	10.00	0.00
8,950.00	10.59	171.00	8,944.08	-65.64	151.53	64.50	10.00	10.00	0.00
9,000.00	15.59	171.00	8,992.77	-76.82	153.30	75.66	10.00	10.00	0.00
9,050.00	20.59	171.00	9,040.28	-92.14	155.72	90.97	10.00	10.00	0.00
9,100.00	25.59	171.00	9,086.26	-111.50	158.79	110.31	10.00	10.00	0.00
9,150.00	30.59	171.00	9,130.36	-134.75	162.47	133.53	10.00	10.00	0.00
9,200.00	35.59	171.00	9,172.24	-161.70	166.74	160.44	10.00	10.00	0.00
9,250.00	40.59	171.00	9,211.58	-192.15	171.56	190.86	10.00	10.00	0.00
9,300.00	45.59	171.00	9,248.08	-225.88	176.91	224.55	10.00	10.00	0.00



MS Energy Services Planning Report



Database: EDM Conroe
Company: Matador Resources
Project: Eddy County, New Mexico (NAD 27)
Site: Charlie Sweeney Federal 31-23S-28E
Well: #202H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well #202H
TVD Reference: WELL @ 3149.00usft (Patterson 810)
MD Reference: WELL @ 3149.00usft (Patterson 810)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 1.00°/100' Build									
1,100.00	1.00	110.47	1,099.99	-0.31	0.82	0.30	1.00	1.00	0.00
1,200.00	2.00	110.47	1,199.96	-1.22	3.27	1.20	1.00	1.00	0.00
1,300.00	3.00	110.47	1,299.86	-2.75	7.36	2.69	1.00	1.00	0.00
1,399.63	4.00	110.47	1,399.31	-4.87	13.05	4.77	1.00	1.00	0.00
Begin 4.00° Tangent									
1,500.00	4.00	110.47	1,499.43	-7.32	19.60	7.17	0.00	0.00	0.00
1,600.00	4.00	110.47	1,599.19	-9.76	26.13	9.56	0.00	0.00	0.00
1,700.00	4.00	110.47	1,698.95	-12.19	32.66	11.95	0.00	0.00	0.00
1,800.00	4.00	110.47	1,798.70	-14.63	39.19	14.34	0.00	0.00	0.00
1,900.00	4.00	110.47	1,898.46	-17.07	45.72	16.73	0.00	0.00	0.00
2,000.00	4.00	110.47	1,998.22	-19.51	52.25	19.11	0.00	0.00	0.00
2,100.00	4.00	110.47	2,097.97	-21.94	58.78	21.50	0.00	0.00	0.00
2,200.00	4.00	110.47	2,197.73	-24.38	65.31	23.89	0.00	0.00	0.00
2,300.00	4.00	110.47	2,297.49	-26.82	71.84	26.28	0.00	0.00	0.00
2,400.00	4.00	110.47	2,397.24	-29.26	78.37	28.67	0.00	0.00	0.00
2,500.00	4.00	110.47	2,497.00	-31.69	84.89	31.06	0.00	0.00	0.00
2,600.00	4.00	110.47	2,596.76	-34.13	91.42	33.44	0.00	0.00	0.00
2,700.00	4.00	110.47	2,696.51	-36.57	97.95	35.83	0.00	0.00	0.00
2,800.00	4.00	110.47	2,796.27	-39.01	104.48	38.22	0.00	0.00	0.00
2,900.00	4.00	110.47	2,896.03	-41.44	111.01	40.61	0.00	0.00	0.00
3,000.00	4.00	110.47	2,995.78	-43.88	117.54	43.00	0.00	0.00	0.00
3,100.00	4.00	110.47	3,095.54	-46.32	124.07	45.39	0.00	0.00	0.00
3,200.00	4.00	110.47	3,195.30	-48.76	130.60	47.78	0.00	0.00	0.00
3,300.00	4.00	110.47	3,295.06	-51.19	137.13	50.16	0.00	0.00	0.00
3,363.90	4.00	110.47	3,358.80	-52.75	141.30	51.69	0.00	0.00	0.00
Begin 1.50°/100' Drop									
3,400.00	3.45	110.47	3,394.82	-53.57	143.50	52.49	1.50	-1.50	0.00
3,500.00	1.95	110.47	3,494.71	-55.22	147.92	54.11	1.50	-1.50	0.00
3,600.00	0.45	110.47	3,594.68	-55.96	149.89	54.83	1.50	-1.50	0.00
3,630.32	0.00	0.00	3,625.00	-56.00	150.00	54.87	1.50	-1.50	0.00
Begin Vertical Hold									
3,700.00	0.00	0.00	3,694.68	-56.00	150.00	54.87	0.00	0.00	0.00
3,800.00	0.00	0.00	3,794.68	-56.00	150.00	54.87	0.00	0.00	0.00
3,900.00	0.00	0.00	3,894.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,000.00	0.00	0.00	3,994.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,100.00	0.00	0.00	4,094.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,200.00	0.00	0.00	4,194.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,300.00	0.00	0.00	4,294.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,400.00	0.00	0.00	4,394.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,500.00	0.00	0.00	4,494.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,600.00	0.00	0.00	4,594.68	-56.00	150.00	54.87	0.00	0.00	0.00
4,700.00	0.00	0.00	4,694.68	-56.00	150.00	54.87	0.00	0.00	0.00



MS Energy Services

Planning Report



Database: EDM Conroe
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Project: Eddy County, New Mexico (NAD 27)
Site: Charlie Sweeney Federal 31-23S-28E
Well: #202H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well #202H
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North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy County, New Mexico (NAD 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well #202H
Well Position +N/-S 461,773.42 usft **Northing:** 461,773.42 usft **Latitude:** 32° 16' 9.717 N
 +E/-W 563,315.36 usft **Easting:** 563,315.36 usft **Longitude:** 104° 7' 42.549 W
Position Uncertainty 0.00 usft **Wellhead Elevation:** **Ground Level:** 3,120.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2017	6/15/2017	7.28	59.99	47,972.60

Design Design #1

Audit Notes:

Version: **Phase:** PROTOTYPE **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	180.43

Plan Survey Tool Program **Date** 5/26/2017

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	14,432.14	Design #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,399.63	4.00	110.47	1,399.31	-4.87	13.05	1.00	1.00	0.00	110.47	
3,363.90	4.00	110.47	3,358.80	-52.75	141.30	0.00	0.00	0.00	0.00	
3,630.32	0.00	0.00	3,625.00	-56.00	150.00	1.50	-1.50	0.00	180.00	VP - Charlie Sween
8,844.12	0.00	0.00	8,838.80	-56.00	150.00	0.00	0.00	0.00	0.00	
9,644.12	80.00	171.00	9,403.05	-523.64	224.07	10.00	10.00	0.00	171.00	
9,872.70	90.00	180.43	9,423.00	-750.18	240.89	6.00	4.37	4.13	43.74	
14,432.14	90.00	180.43	9,423.00	-5,309.49	206.29	0.00	0.00	0.00	0.00	PBHL - Charlie Sween