



30-015-43477

Matador Resources

Eddy County, New Mexico (NAD 27)

Jimmy Kone 05-24S-28E RB

#223H

Wellbore #1

Plan: Design #1

Standard Planning Report

11 November, 2016



MS Energy Services
Planning Report



Database:	EDM Conroe	Local Co-ordinate Reference:	Well #223H
Company:	Matador Resources	TVD Reference:	WELL @ 3071.00usft (Patterson 297)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	WELL @ 3071.00usft (Patterson 297)
Site:	Jimmy Kone 05-24S-28E RB	North Reference:	Grid
Well:	#223H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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	#223H			
Well Position	+N/-S	453,456.00 usft	Northing:	453,456.00 usft
	+E/-W	571,659.00 usft	Easting:	571,659.00 usft
Position Uncertainty		0.00 usft	Wellhead Elevation:	
			Latitude:	32° 14' 47.238 N
			Longitude:	104° 6' 5.578 W
			Ground Level:	3,042.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	BGGM2016	11/24/2016	(°)	(°)	(nT)
			7.32	60.00	48,037

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	269.51

Plan Survey Tool Program	Date 11/11/2016			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.00	15,311.92 Design #1 (Wellbore #1)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth (usft)	(°)	(°)	Depth (usft)	(usft)	(usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)	(°)	
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	
1,266.67	4.00	143.94	1,266.45	-7.52	5.48	1.50	1.50	0.00	143.94	VP - Jimmy Kone #
2,700.00	4.00	143.94	2,696.29	-88.35	64.33	0.00	0.00	0.00	0.00	
2,966.57	8.00	143.94	2,961.35	-110.87	80.73	1.50	1.50	0.00	0.00	
5,010.60	8.00	143.94	4,985.49	-340.79	248.16	0.00	0.00	0.00	0.00	
5,543.84	0.00	0.00	5,517.00	-370.83	270.03	1.50	-1.50	0.00	180.00	VP - Jimmy Kone #
9,922.84	0.00	0.00	9,896.00	-370.83	270.03	0.00	0.00	0.00	0.00	
10,722.84	80.00	277.28	10,460.25	-310.83	-199.62	10.00	10.00	0.00	277.28	
10,907.84	91.10	277.28	10,474.59	-287.50	-382.29	6.00	6.00	0.00	0.00	
11,296.38	91.10	269.51	10,467.12	-264.52	-769.78	2.00	0.00	-2.00	-89.93	
15,311.95	91.10	269.51	10,390.09	-299.01	-4,784.46	0.00	0.00	0.00	0.00	PBHL - Jimmy Kone



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Site:	Jimmy Kone 05-24S-28E RB	North Reference:	Grid
Well:	#223H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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, 1.50°/100' Build										
1,100.00	1.50	143.94	1,099.99	-1.06	0.77	-0.76	1.50	1.50	0.00	
1,200.00	3.00	143.94	1,199.91	-4.23	3.08	-3.05	1.50	1.50	0.00	
1,266.67	4.00	143.94	1,266.45	-7.52	5.48	-5.41	1.50	1.50	0.00	
Begin 4.00° Tangent										
1,300.00	4.00	143.94	1,299.70	-9.40	6.85	-6.77	0.00	0.00	0.00	
1,400.00	4.00	143.94	1,399.46	-15.04	10.95	-10.82	0.00	0.00	0.00	
1,500.00	4.00	143.94	1,499.22	-20.68	15.06	-14.88	0.00	0.00	0.00	
1,600.00	4.00	143.94	1,598.97	-26.32	19.16	-18.94	0.00	0.00	0.00	
1,700.00	4.00	143.94	1,698.73	-31.96	23.27	-23.00	0.00	0.00	0.00	
1,800.00	4.00	143.94	1,798.48	-37.60	27.38	-27.05	0.00	0.00	0.00	
1,900.00	4.00	143.94	1,898.24	-43.24	31.48	-31.11	0.00	0.00	0.00	
2,000.00	4.00	143.94	1,998.00	-48.87	35.59	-35.17	0.00	0.00	0.00	
2,100.00	4.00	143.94	2,097.75	-54.51	39.70	-39.23	0.00	0.00	0.00	
2,200.00	4.00	143.94	2,197.51	-60.15	43.80	-43.29	0.00	0.00	0.00	
2,300.00	4.00	143.94	2,297.27	-65.79	47.91	-47.34	0.00	0.00	0.00	
2,400.00	4.00	143.94	2,397.02	-71.43	52.01	-51.40	0.00	0.00	0.00	
2,500.00	4.00	143.94	2,496.78	-77.07	56.12	-55.46	0.00	0.00	0.00	
2,600.00	4.00	143.94	2,596.54	-82.71	60.23	-59.52	0.00	0.00	0.00	
2,700.00	4.00	143.94	2,696.29	-88.35	64.33	-63.58	0.00	0.00	0.00	
Begin 1.50°/100' Build										
2,800.00	5.50	143.94	2,795.95	-95.04	69.21	-68.39	1.50	1.50	0.00	
2,900.00	7.00	143.94	2,895.35	-103.84	75.62	-74.72	1.50	1.50	0.00	
2,966.57	8.00	143.94	2,961.35	-110.87	80.73	-79.78	1.50	1.50	0.00	
Begin 8.00° Tangent										
3,000.00	8.00	143.94	2,994.45	-114.63	83.47	-82.48	0.00	0.00	0.00	
3,100.00	8.00	143.94	3,093.48	-125.87	91.66	-90.58	0.00	0.00	0.00	
3,200.00	8.00	143.94	3,192.51	-137.12	99.85	-98.67	0.00	0.00	0.00	
3,300.00	8.00	143.94	3,291.53	-148.37	108.04	-106.77	0.00	0.00	0.00	
3,400.00	8.00	143.94	3,390.56	-159.62	116.23	-114.86	0.00	0.00	0.00	
3,500.00	8.00	143.94	3,489.59	-170.87	124.42	-122.96	0.00	0.00	0.00	
3,600.00	8.00	143.94	3,588.62	-182.12	132.61	-131.05	0.00	0.00	0.00	
3,700.00	8.00	143.94	3,687.64	-193.37	140.80	-139.15	0.00	0.00	0.00	
3,800.00	8.00	143.94	3,786.67	-204.61	149.00	-147.24	0.00	0.00	0.00	
3,900.00	8.00	143.94	3,885.70	-215.86	157.19	-155.34	0.00	0.00	0.00	
4,000.00	8.00	143.94	3,984.72	-227.11	165.38	-163.43	0.00	0.00	0.00	
4,100.00	8.00	143.94	4,083.75	-238.36	173.57	-171.52	0.00	0.00	0.00	
4,200.00	8.00	143.94	4,182.78	-249.61	181.76	-179.62	0.00	0.00	0.00	
4,300.00	8.00	143.94	4,281.81	-260.86	189.95	-187.71	0.00	0.00	0.00	
4,400.00	8.00	143.94	4,380.83	-272.11	198.14	-195.81	0.00	0.00	0.00	
4,500.00	8.00	143.94	4,479.86	-283.36	206.33	-203.90	0.00	0.00	0.00	
4,600.00	8.00	143.94	4,578.89	-294.60	214.52	-212.00	0.00	0.00	0.00	
4,700.00	8.00	143.94	4,677.91	-305.85	222.71	-220.09	0.00	0.00	0.00	



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Wellbore:	Wellbore #1		
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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)
4,800.00	8.00	143.94	4,776.94	-317.10	230.91	-228.19	0.00	0.00	0.00
4,900.00	8.00	143.94	4,875.97	-328.35	239.10	-236.28	0.00	0.00	0.00
5,000.00	8.00	143.94	4,975.00	-339.60	247.29	-244.37	0.00	0.00	0.00
5,010.60	8.00	143.94	4,985.49	-340.79	248.16	-245.23	0.00	0.00	0.00
Begin 1.50°/100' Drop									
5,100.00	6.66	143.94	5,074.16	-350.01	254.87	-251.87	1.50	-1.50	0.00
5,200.00	5.16	143.94	5,173.63	-358.33	260.93	-257.85	1.50	-1.50	0.00
5,300.00	3.66	143.94	5,273.33	-364.54	265.45	-262.32	1.50	-1.50	0.00
5,400.00	2.16	143.94	5,373.20	-368.64	268.44	-265.27	1.50	-1.50	0.00
5,500.00	0.66	143.94	5,473.16	-370.63	269.88	-266.70	1.50	-1.50	0.00
5,543.84	0.00	0.00	5,517.00	-370.83	270.03	-266.85	1.50	-1.50	0.00
Begin Vertical Hold									
5,600.00	0.00	0.00	5,573.16	-370.83	270.03	-266.85	0.00	0.00	0.00
5,700.00	0.00	0.00	5,673.16	-370.83	270.03	-266.85	0.00	0.00	0.00
5,800.00	0.00	0.00	5,773.16	-370.83	270.03	-266.85	0.00	0.00	0.00
5,900.00	0.00	0.00	5,873.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,000.00	0.00	0.00	5,973.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,100.00	0.00	0.00	6,073.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,200.00	0.00	0.00	6,173.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,300.00	0.00	0.00	6,273.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,400.00	0.00	0.00	6,373.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,500.00	0.00	0.00	6,473.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,600.00	0.00	0.00	6,573.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,700.00	0.00	0.00	6,673.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,800.00	0.00	0.00	6,773.16	-370.83	270.03	-266.85	0.00	0.00	0.00
6,900.00	0.00	0.00	6,873.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,000.00	0.00	0.00	6,973.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,100.00	0.00	0.00	7,073.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,200.00	0.00	0.00	7,173.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,300.00	0.00	0.00	7,273.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,400.00	0.00	0.00	7,373.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,500.00	0.00	0.00	7,473.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,600.00	0.00	0.00	7,573.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,700.00	0.00	0.00	7,673.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,800.00	0.00	0.00	7,773.16	-370.83	270.03	-266.85	0.00	0.00	0.00
7,900.00	0.00	0.00	7,873.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,000.00	0.00	0.00	7,973.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,100.00	0.00	0.00	8,073.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,200.00	0.00	0.00	8,173.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,300.00	0.00	0.00	8,273.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,400.00	0.00	0.00	8,373.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,500.00	0.00	0.00	8,473.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,600.00	0.00	0.00	8,573.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,700.00	0.00	0.00	8,673.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,800.00	0.00	0.00	8,773.16	-370.83	270.03	-266.85	0.00	0.00	0.00
8,900.00	0.00	0.00	8,873.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,000.00	0.00	0.00	8,973.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,100.00	0.00	0.00	9,073.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,200.00	0.00	0.00	9,173.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,300.00	0.00	0.00	9,273.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,400.00	0.00	0.00	9,373.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,500.00	0.00	0.00	9,473.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,600.00	0.00	0.00	9,573.16	-370.83	270.03	-266.85	0.00	0.00	0.00



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Wellbore:	Wellbore #1		
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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)
9,700.00	0.00	0.00	9,673.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,800.00	0.00	0.00	9,773.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,900.00	0.00	0.00	9,873.16	-370.83	270.03	-266.85	0.00	0.00	0.00
9,922.84	0.00	0.00	9,896.00	-370.83	270.03	-266.85	0.00	0.00	0.00
Begin 10.00°/100' Build									
9,950.00	2.72	277.28	9,923.15	-370.75	269.39	-266.21	10.00	10.00	0.00
10,000.00	7.72	277.28	9,972.93	-370.17	264.88	-261.71	10.00	10.00	0.00
10,050.00	12.72	277.28	10,022.12	-369.05	256.09	-252.92	10.00	10.00	0.00
10,100.00	17.72	277.28	10,070.35	-367.39	243.08	-239.93	10.00	10.00	0.00
10,150.00	22.72	277.28	10,117.26	-365.20	225.94	-222.81	10.00	10.00	0.00
10,200.00	27.72	277.28	10,162.48	-362.50	204.82	-201.71	10.00	10.00	0.00
10,250.00	32.72	277.28	10,205.67	-359.31	179.87	-176.79	10.00	10.00	0.00
10,300.00	37.72	277.28	10,246.51	-355.66	151.28	-148.23	10.00	10.00	0.00
10,350.00	42.72	277.28	10,284.68	-351.57	119.26	-116.25	10.00	10.00	0.00
10,400.00	47.72	277.28	10,319.89	-347.07	84.07	-81.10	10.00	10.00	0.00
10,450.00	52.72	277.28	10,351.87	-342.21	45.97	-43.04	10.00	10.00	0.00
10,500.00	57.72	277.28	10,380.39	-337.00	5.25	-2.37	10.00	10.00	0.00
10,550.00	62.72	277.28	10,405.21	-331.51	-37.78	40.62	10.00	10.00	0.00
10,600.00	67.72	277.28	10,426.17	-325.76	-82.80	85.58	10.00	10.00	0.00
10,650.00	72.72	277.28	10,443.09	-319.80	-129.45	132.18	10.00	10.00	0.00
10,700.00	77.72	277.28	10,455.84	-313.67	-177.39	180.07	10.00	10.00	0.00
10,722.84	80.00	277.28	10,460.25	-310.83	-199.62	202.27	10.00	10.00	0.00
Begin 6.00°/100' Build									
10,750.00	81.63	277.28	10,464.59	-307.44	-226.22	228.84	6.00	6.00	0.00
10,800.00	84.63	277.28	10,470.57	-301.15	-275.45	278.02	6.00	6.00	0.00
10,850.00	87.63	277.28	10,473.94	-294.83	-324.93	327.44	6.00	6.00	0.00
10,900.00	90.63	277.28	10,474.70	-288.49	-374.51	376.97	6.00	6.00	0.00
10,907.84	91.10	277.28	10,474.59	-287.50	-382.29	384.73	6.00	6.00	0.00
Begin 91.10° Lateral; Begin 2.00°/100' Turn									
11,000.00	91.10	275.44	10,472.81	-277.29	-473.86	476.22	2.00	0.00	-2.00
11,100.00	91.10	273.44	10,470.89	-269.56	-573.54	575.82	2.00	0.00	-2.00
11,200.00	91.10	271.44	10,468.97	-265.31	-673.43	675.67	2.00	0.00	-2.00
11,296.38	91.10	269.51	10,467.12	-264.52	-769.78	772.01	2.00	0.00	-2.00
Hold 269.51° Azm									
11,300.00	91.10	269.51	10,467.05	-264.55	-773.40	775.63	0.00	0.00	0.00
11,400.00	91.10	269.51	10,465.13	-265.41	-873.38	875.61	0.00	0.00	0.00
11,500.00	91.10	269.51	10,463.21	-266.27	-973.35	975.60	0.00	0.00	0.00
11,600.00	91.10	269.51	10,461.29	-267.13	-1,073.33	1,075.58	0.00	0.00	0.00
11,700.00	91.10	269.51	10,459.37	-267.98	-1,173.31	1,175.56	0.00	0.00	0.00
11,800.00	91.10	269.51	10,457.46	-268.84	-1,273.29	1,275.54	0.00	0.00	0.00
11,900.00	91.10	269.51	10,455.54	-269.70	-1,373.27	1,375.52	0.00	0.00	0.00
12,000.00	91.10	269.51	10,453.62	-270.56	-1,473.24	1,475.50	0.00	0.00	0.00
12,100.00	91.10	269.51	10,451.70	-271.42	-1,573.22	1,575.49	0.00	0.00	0.00
12,200.00	91.10	269.51	10,449.78	-272.28	-1,673.20	1,675.47	0.00	0.00	0.00
12,300.00	91.10	269.51	10,447.87	-273.14	-1,773.18	1,775.45	0.00	0.00	0.00
12,400.00	91.10	269.51	10,445.95	-274.00	-1,873.16	1,875.43	0.00	0.00	0.00
12,500.00	91.10	269.51	10,444.03	-274.86	-1,973.13	1,975.41	0.00	0.00	0.00
12,600.00	91.10	269.51	10,442.11	-275.72	-2,073.11	2,075.39	0.00	0.00	0.00
12,700.00	91.10	269.51	10,440.19	-276.57	-2,173.09	2,175.38	0.00	0.00	0.00
12,800.00	91.10	269.51	10,438.27	-277.43	-2,273.07	2,275.36	0.00	0.00	0.00
12,900.00	91.10	269.51	10,436.36	-278.29	-2,373.05	2,375.34	0.00	0.00	0.00
13,000.00	91.10	269.51	10,434.44	-279.15	-2,473.02	2,475.32	0.00	0.00	0.00
13,100.00	91.10	269.51	10,432.52	-280.01	-2,573.00	2,575.30	0.00	0.00	0.00



MS Energy Services
Planning Report



Database:	EDM Conroe	Local Co-ordinate Reference:	Well #223H
Company:	Matador Resources	TVD Reference:	WELL @ 3071.00usft (Patterson 297)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	WELL @ 3071.00usft (Patterson 297)
Site:	Jimmy Kone 05-24S-28E RB	North Reference:	Grid
Well:	#223H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
13,200.00	91.10	269.51	10,430.60	-280.87	-2,672.98	2,675.28	0.00	0.00	0.00
13,300.00	91.10	269.51	10,428.68	-281.73	-2,772.96	2,775.27	0.00	0.00	0.00
13,400.00	91.10	269.51	10,426.76	-282.59	-2,872.94	2,875.25	0.00	0.00	0.00
13,500.00	91.10	269.51	10,424.85	-283.45	-2,972.91	2,975.23	0.00	0.00	0.00
13,600.00	91.10	269.51	10,422.93	-284.31	-3,072.89	3,075.21	0.00	0.00	0.00
13,700.00	91.10	269.51	10,421.01	-285.16	-3,172.87	3,175.19	0.00	0.00	0.00
13,800.00	91.10	269.51	10,419.09	-286.02	-3,272.85	3,275.17	0.00	0.00	0.00
13,900.00	91.10	269.51	10,417.17	-286.88	-3,372.82	3,375.15	0.00	0.00	0.00
14,000.00	91.10	269.51	10,415.25	-287.74	-3,472.80	3,475.14	0.00	0.00	0.00
14,100.00	91.10	269.51	10,413.34	-288.60	-3,572.78	3,575.12	0.00	0.00	0.00
14,200.00	91.10	269.51	10,411.42	-289.46	-3,672.76	3,675.10	0.00	0.00	0.00
14,300.00	91.10	269.51	10,409.50	-290.32	-3,772.74	3,775.08	0.00	0.00	0.00
14,400.00	91.10	269.51	10,407.58	-291.18	-3,872.71	3,875.06	0.00	0.00	0.00
14,500.00	91.10	269.51	10,405.66	-292.04	-3,972.69	3,975.04	0.00	0.00	0.00
14,600.00	91.10	269.51	10,403.75	-292.89	-4,072.67	4,075.03	0.00	0.00	0.00
14,700.00	91.10	269.51	10,401.83	-293.75	-4,172.65	4,175.01	0.00	0.00	0.00
14,800.00	91.10	269.51	10,399.91	-294.61	-4,272.63	4,274.99	0.00	0.00	0.00
14,900.00	91.10	269.51	10,397.99	-295.47	-4,372.60	4,374.97	0.00	0.00	0.00
15,000.00	91.10	269.51	10,396.07	-296.33	-4,472.58	4,474.95	0.00	0.00	0.00
15,100.00	91.10	269.51	10,394.15	-297.19	-4,572.56	4,574.93	0.00	0.00	0.00
15,200.00	91.10	269.51	10,392.24	-298.05	-4,672.54	4,674.92	0.00	0.00	0.00
15,300.00	91.10	269.51	10,390.32	-298.91	-4,772.52	4,774.90	0.00	0.00	0.00
15,311.95	91.10	269.51	10,390.09	-299.01	-4,784.46	4,786.84	0.00	0.00	0.00

PBHL

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP - Jimmy Kone #22 - hit/miss target - Shape - Point	0.00	0.00	5,517.00	-370.83	270.03	453,085.17	571,929.03	32° 14' 43.562 N	104° 6' 2.443 W
PBHL - Jimmy Kone # - plan hits target center - Point	0.00	0.00	10,390.09	-299.01	-4,784.46	453,156.99	566,874.54	32° 14' 44.378 N	104° 7' 1.297 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
610.00	610.00	13 3/8"	13-3/8	17-1/2
2,600.00	2,596.54	9 5/8"	9-5/8	12-1/4
10,722.84	10,460.25	7"	7	7-1/2
15,311.95	10,390.09	4 1/2"	5-1/2	6



Database:	EDM Conroe	Local Co-ordinate Reference:	Well #223H
Company:	Matador Resources	TVD Reference:	WELL @ 3071.00usft (Patterson 297)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	WELL @ 3071.00usft (Patterson 297)
Site:	Jimmy Kone 05-24S-28E RB	North Reference:	Grid
Well:	#223H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,543.16	2,539.83	Z (G30:CS14-CSB) RB Medium		0.00	
2,562.71	2,559.34	Z (G26: Bell Cyn.) RB Medium		0.00	
3,456.90	3,446.91	Z (G13: Cherry Cyn.) RB Medium			
4,597.88	4,576.79	Z (G7: Brushy Cyn.) RB Medium			
6,190.70	6,163.86	Z (G4: BSG (CS9)) RB Medium			
6,841.03	6,814.19	Z (L5.3: FBSC)			
7,093.14	7,066.30	Z (L5.1: FBSG)			
7,388.76	7,361.92	Z (L4.3: SBSC)			
7,876.94	7,850.10	Z (L4.1: SBSC)			
8,107.82	8,080.98	Z (L3.3: TBSC)			
9,059.38	9,032.54	Z (L3.1: TBSG)			
9,403.87	9,377.03	Z (L2: WFMP A)			
9,434.73	9,407.89	Z (X Sand (T))			
9,473.14	9,446.30	Z (X Sand (B))			
9,503.84	9,477.00	Z (Y Sand (T))			
9,556.84	9,530.00	Z (Y Sand (B))			
9,559.84	9,533.00	Z (Z Sand (T))			
9,636.84	9,610.00	Z (Z Sand (B))			
9,713.84	9,687.00	Z (WFMP A Fat)			
9,845.84	9,819.00	Z (WFMP B)			
10,109.10	10,079.00	Z (WFMP B.1)			
10,332.98	10,272.00	Z (WFMP B.2)			

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, 1.50°/100' Build
1,266.67	1,266.45	-7.52	5.48	Begin 4.00° Tangent
2,700.00	2,696.29	-88.35	64.33	Begin 1.50°/100' Build
2,966.57	2,961.35	-110.87	80.73	Begin 8.00° Tangent
5,010.60	4,985.49	-340.79	248.16	Begin 1.50°/100' Drop
5,543.84	5,517.00	-370.83	270.03	Begin Vertical Hold
9,922.84	9,896.00	-370.83	270.03	Begin 10.00°/100' Build
10,722.84	10,460.25	-310.83	-199.62	Begin 6.00°/100' Build
10,907.84	10,474.59	-287.50	-382.29	Begin 91.10° Lateral; Begin 2.00°/100' Turn
11,296.38	10,467.12	-264.52	-769.78	Hold 269.51° Azm
15,311.95	10,390.09	-299.01	-4,784.46	PBHL



Company: Matador Resources
 Site: Jimmy Kone 05-24S-28E RB
 Well: #223H
 Project: Eddy County, New Mexico (NAD 27)
 Rig: Patterson 297



WELL DETAILS #223H

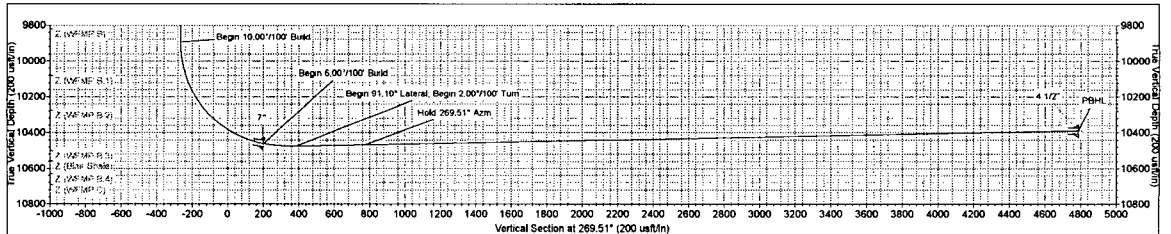
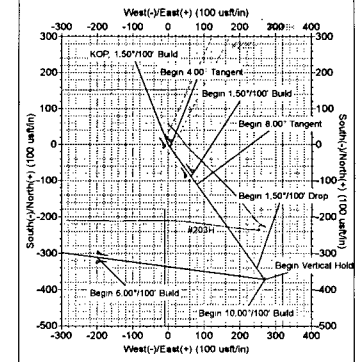
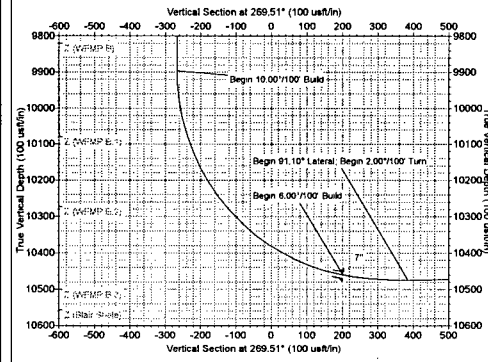
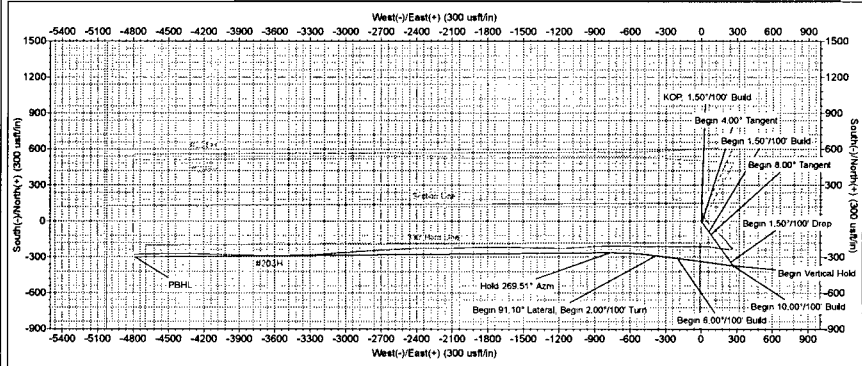
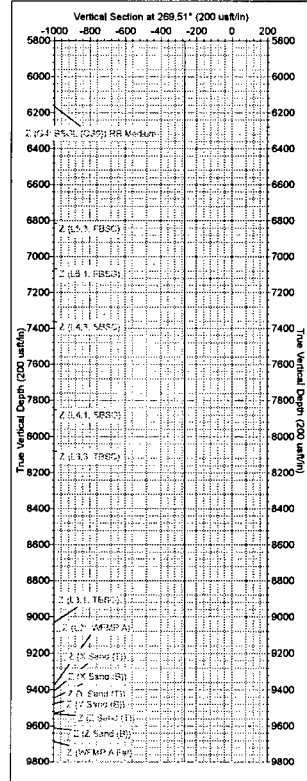
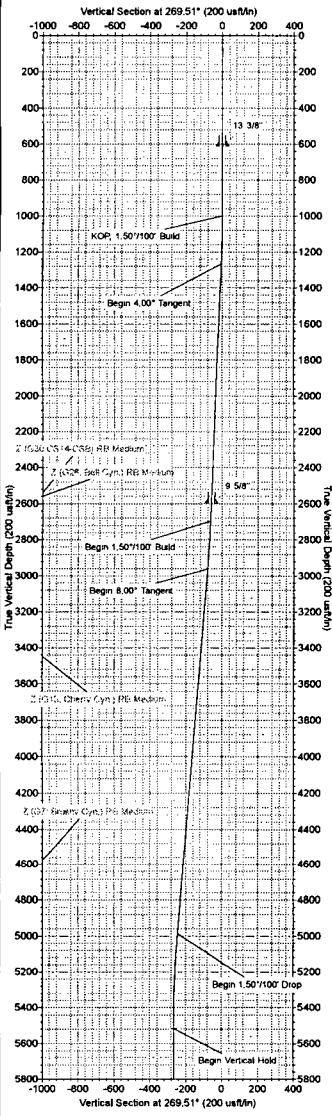
+N-S	+E-W	Magnetic	3042.00	Latitude	Longitude
0.00	0.00	453456.00	571658.00	32° 14' 47.238 N	104° 8' 5.578 W

Azimuth to Grid North

True North	-0.12°
Magnetic North	7.15°
Magnetic Field Strength	4803.1nT
Dip Angle	60.00°
Date	11/04/2016
Model	BGM2015
US State Plane 1927 (Exact solution)	New Mexico East 3001
Created By	HLH
Date	9/04/November/11/2016
Plan	Design #1

ANNOTATIONS

MD	Inc	Azi	TVD	+N-S	+E-W	VSet	Departure	Annotation
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	KOP: 1.50°/100' Build
1266.67	4.00	143.94	1266.45	-7.52	5.48	-5.41	9.30	Begin 4.00° Tangent
2700.00	4.00	143.94	2696.29	-8.25	64.33	-63.58	109.29	Begin 1.50°/100' Build
2966.57	8.00	143.94	2961.35	-110.87	80.73	-79.78	137.14	Begin 6.00° Tangent
5010.60	8.00	143.94	4985.49	-340.79	248.16	-245.23	421.57	Begin 1.50°/100' Drop
5543.84	0.00	0.00	5517.00	-370.83	270.03	-266.85	458.73	Begin Vertical Hold
9922.84	0.00	0.00	9996.00	-370.83	270.03	-266.85	458.73	Begin 10.00°/100' Build
10722.84	80.00	277.28	10460.25	-310.83	-199.62	202.27	932.19	Begin 6.00°/100' Build
10907.84	91.10	277.28	10474.58	-287.50	-382.29	384.73	1116.35	Begin 91.10° Lateral, Begin 2.00°/100' Turn
11296.38	91.10	289.51	10467.12	-284.52	-769.78	772.01	1504.82	Hold 269.51° Azm
15311.95	91.10	289.51	10390.09	-299.01	-4784.46	4788.84	5519.65	PBHL



This customer should only rely on this document after independently verifying all points, targets, coordinates, base and grid files represented. Any decisions made or work orders affecting 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 information or the information contained herein.