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Survey Company: MS Energy Services
MWD Surveyor Name: Robert Burnham
Survey Type: MWD
Operating Company: Matador Production Company
Well Name & Number: B Banker 33-23S-28E RB 201H
API Number: 30-015-44138
Surveyed Depths: 199' – 14,331' MD; PTB: 14,418'
Dates Performed: 05/10/2017 – 05/26/2017
Location: Eddy County, NM

I certify that the data is true, correct and complete and within the limitations of the tool set forth by MS Energy Services; that I am authorized and qualified to make this report and that I have reviewed this report and find it conforms to the principles and procedures as set forth by MS Energy Services.

Robert Burnham

Digitally signed by: _____
Title: MWD Field Specialist
Date: 06-15-2017
Email: rburnham@msenergyservices.com



V09 04.02

SURVEY CALCULATION PROGRAM

6/14/17 9:54

Company:	Matador Production Company		
Well Name:	B Banker 33-23S-28E RB 201H		
Location:	Eddy County, NM		
Rig:	Patterson #810		
Job Number:	DDMO-170417		
API #:	30-015-44138		

REFERENCED TO GRID NORTH

Magnetic Declination:

7.14

Proposed Direction:

269.56

Vertical Section Azimuth:		269.56	
Survey Calculation Method:		Minimum Curvature	
PTB:	MD	INC	AZM
	14,418	87.3	271.3

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Distance	Closure Azm	DLS/ 100	BUR/ 100'
TIE IN	0	0.00	0.00	0.00	0.00	0.00		0.00			
1	199	1.70	253.80	198.97	-0.82	-2.83	2.84	2.95	0.00	0.85	0.85
2	340	1.40	259.30	339.92	-1.73	-6.54	6.55	6.76	253.80	0.24	-0.21
3	464	1.40	241.70	463.88	-2.73	-9.36	9.38	9.75	255.20	0.35	0.00
4	648	1.80	235.40	647.81	-5.43	-13.72	13.76	14.75	253.76	0.24	0.22
5	800	1.10	236.40	799.76	-7.60	-16.90	16.95	18.52	248.39	0.46	-0.46
6	987	1.00	242.00	986.73	-9.36	-19.83	19.90	21.93	245.79	0.08	-0.05
7	1,177	0.50	221.40	1176.71	-10.76	-21.84	21.93	24.35	244.75	0.29	-0.26
8	1,367	0.00	149.50	1366.71	-11.38	-22.39	22.48	25.12	243.79	0.26	-0.26
9	1,557	0.50	36.40	1556.71	-10.71	-21.90	21.98	24.38	243.07	0.26	0.26
10	1,747	1.00	54.50	1746.69	-9.08	-20.06	20.13	22.02	243.94	0.29	0.26
11	1,937	3.00	75.50	1936.57	-6.87	-13.89	13.95	15.50	245.64	1.10	1.05
12	2,127	3.70	82.80	2126.24	-4.86	-3.00	3.04	5.71	243.68	0.43	0.37
13	2,318	3.90	84.40	2316.82	-3.45	9.58	-9.55	10.18	211.68	0.12	0.10
14	2,508	3.80	62.30	2506.40	0.10	21.59	-21.59	21.59	109.82	0.78	-0.05
15	2,659	3.30	62.70	2657.11	4.42	29.88	-29.91	30.20	89.72	0.33	-0.33
16	2,790	3.10	59.50	2787.91	7.95	36.28	-36.34	37.14	81.58	0.20	-0.15
17	2,980	5.00	44.80	2977.43	16.43	46.54	-46.67	49.36	77.64	1.13	1.00
18	3,170	7.20	53.50	3166.35	29.39	61.95	-62.17	68.57	70.55	1.25	1.16
19	3,360	8.60	59.00	3354.54	43.79	83.70	-84.03	94.46	64.62	0.84	0.74
20	3,550	7.10	53.50	3542.76	58.10	105.32	-105.76	120.28	62.38	0.88	-0.79
21	3,740	8.80	56.30	3730.93	73.15	126.85	-127.41	146.43	61.12	0.92	0.89
22	3,930	7.60	55.30	3918.98	88.36	149.27	-149.95	173.46	60.03	0.64	-0.63
23	4,120	7.50	57.90	4107.34	102.10	170.11	-170.88	198.40	59.38	0.19	-0.05
24	4,310	10.00	58.90	4295.11	117.22	194.74	-195.63	227.30	59.03	1.32	1.32
25	4,501	9.00	57.10	4483.49	133.90	221.48	-222.50	258.81	58.96	0.55	-0.52
26	4,691	7.40	56.70	4671.54	148.69	244.19	-245.32	285.90	58.84	0.84	-0.84
27	4,881	7.50	51.40	4859.94	163.14	264.11	-265.35	310.43	58.66	0.37	0.05
28	5,072	5.70	47.70	5049.67	177.30	280.87	-282.22	332.15	58.30	0.97	-0.94
29	5,262	7.00	51.70	5238.50	190.83	296.93	-298.39	352.96	57.74	0.72	0.68
30	5,453	5.40	46.40	5428.37	204.24	312.57	-314.13	373.39	57.27	0.89	-0.84
31	5,644	4.50	45.60	5618.66	215.68	324.44	-326.08	389.59	56.84	0.47	-0.47
32	5,835	3.30	43.50	5809.21	224.91	333.57	-335.29	402.32	56.38	0.63	-0.63
33	6,026	2.60	50.50	5999.96	231.66	340.70	-342.47	412.00	56.01	0.41	-0.37



SURVEY CALCULATION PROGRAM

6/14/17 9:54

Company:	Matador Production Company
Well Name:	B Banker 33-23S-28E RB 201H
Location:	Eddy County, NM
Rig:	Patterson #810
Job Number:	DDMO-170417
API #:	30-015-44138

REFERENCED TO GRID NORTH

Magnetic Declination:	7.14
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Proposed Direction:	269.56
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Vertical Section Azimuth:	269.56
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	14,418	INC	87.3	AZM	271.3	N/S	Feet	TVD	Feet	Surface	Vert Sec	Distance	Closure	Azm	DLS/100	BUR/100'
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#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S	Feet	E/W	Feet	TVD Feet	N/S	Surface Vert Sec	Distance	Closure	Azm	DLS/100	BUR/100'
34	6,217	0.80	341.70	6190.88	235.68	343.63	-345.42	416.68	343.63	235.68	-345.42	416.68	55.56	55.56	1.27	-0.94
35	6,408	0.40	309.10	6381.87	237.37	342.69	-344.50	416.87	342.69	237.37	-344.50	416.87	55.29	55.29	0.27	-0.21
36	6,598	0.30	20.40	6571.87	238.25	342.35	-344.17	417.09	342.35	238.25	-344.17	417.09	55.16	55.16	0.22	-0.05
37	6,790	1.20	223.70	6763.86	237.27	341.13	-342.95	415.53	341.13	237.27	-342.95	415.53	55.18	55.18	0.77	0.47
38	6,980	2.10	177.80	6953.78	232.35	339.89	-341.67	411.72	339.89	232.35	-341.67	411.72	55.64	55.64	0.81	0.47
39	7,171	0.90	216.20	7144.72	227.64	339.14	-340.88	408.46	339.14	227.64	-340.88	408.46	56.13	56.13	0.79	-0.63
40	7,362	1.40	197.00	7335.68	224.20	337.57	-339.28	405.24	337.57	224.20	-339.28	405.24	56.41	56.41	0.33	0.26
41	7,553	1.20	114.00	7526.65	221.16	338.72	-340.41	404.52	338.72	221.16	-340.41	404.52	56.86	56.86	0.91	-0.10
42	7,743	0.90	302.50	7716.63	221.15	339.28	-340.97	404.99	339.28	221.15	-340.97	404.99	56.90	56.90	1.10	-0.16
43	7,933	1.20	303.90	7906.60	223.06	336.37	-338.07	403.61	336.37	223.06	-338.07	403.61	56.45	56.45	0.16	0.16
44	8,124	0.70	274.50	8097.58	224.27	333.54	-335.26	401.93	333.54	224.27	-335.26	401.93	56.08	56.08	0.36	-0.26
45	8,315	0.80	243.50	8288.56	223.76	331.19	-332.90	399.69	331.19	223.76	-332.90	399.69	55.96	55.96	0.22	0.05
46	8,505	0.70	261.10	8478.54	222.99	328.85	-330.56	397.33	328.85	222.99	-330.56	397.33	55.86	55.86	0.13	-0.05
47	8,695	1.00	146.40	8668.53	221.43	328.62	-330.32	396.27	328.62	221.43	-330.32	396.27	56.03	56.03	0.76	0.16
48	8,886	0.40	154.40	8859.52	219.44	329.84	-331.51	396.16	329.84	219.44	-331.51	396.16	56.36	56.36	0.32	-0.31
49	8,964	0.30	170.50	8937.52	219.00	329.99	-331.66	396.04	329.99	219.00	-331.66	396.04	56.43	56.43	0.18	-0.13
50	9,007	0.40	186.60	8980.52	218.74	329.99	-331.66	395.90	329.99	218.74	-331.66	395.90	56.46	56.46	0.32	0.23
51	9,055	4.50	286.90	9028.47	219.12	328.17	-329.84	394.59	328.17	219.12	-329.84	394.59	56.27	56.27	9.56	8.54
52	9,102	11.00	286.90	9075.01	220.96	322.11	-323.79	390.61	322.11	220.96	-323.79	390.61	55.55	55.55	13.83	13.83
53	9,151	17.90	288.80	9122.43	224.75	310.49	-312.21	383.30	310.49	224.75	-312.21	383.30	54.10	54.10	14.11	14.08
54	9,198	21.70	283.70	9166.65	229.14	295.20	-296.95	373.70	295.20	229.14	-296.95	373.70	52.18	52.18	8.87	8.09
55	9,246	26.20	275.50	9210.52	232.26	276.02	-277.79	360.73	276.02	232.26	-277.79	360.73	49.92	49.92	11.64	9.38
56	9,293	30.40	275.60	9251.89	234.41	253.85	-255.64	345.52	253.85	234.41	-255.64	345.52	47.28	47.28	8.94	8.94
57	9,341	35.80	278.80	9292.09	237.75	227.87	-229.68	329.31	227.87	237.75	-229.68	329.31	43.78	43.78	11.82	11.25
58	9,388	39.80	281.90	9329.22	242.95	199.55	-201.41	314.40	199.55	242.95	-201.41	314.40	39.40	39.40	9.42	8.51
59	9,436	43.60	283.90	9365.06	250.10	168.44	-170.35	301.53	168.44	250.10	-170.35	301.53	33.96	33.96	8.39	7.92
60	9,483	46.70	284.40	9398.20	258.25	136.13	-138.11	291.93	136.13	258.25	-138.11	291.93	27.79	27.79	6.64	6.60
61	9,532	50.90	283.40	9430.47	267.09	100.35	-102.40	285.32	100.35	267.09	-102.40	285.32	20.59	20.59	8.71	8.57
62	9,579	55.40	279.70	9458.66	274.59	63.51	-65.62	281.84	63.51	274.59	-65.62	281.84	13.02	13.02	11.46	9.57
63	9,627	59.00	276.70	9484.66	280.32	23.59	-25.74	281.31	23.59	280.32	-25.74	281.31	4.81	4.81	9.16	7.50
64	9,674	65.50	275.50	9506.53	284.72	-17.75	15.56	285.27	-17.75	284.72	15.56	285.27	356.43	356.43	14.01	13.83
65	9,722	70.60	276.40	9524.47	289.34	-62.01	59.79	295.91	-62.01	289.34	59.79	295.91	347.90	347.90	10.77	10.63
66	9,769	73.50	277.60	9538.95	294.79	-106.39	104.12	313.40	-106.39	294.79	104.12	313.40	340.16	340.16	6.63	6.17
67	9,856	74.90	278.40	9562.64	306.45	-189.28	186.92	360.19	-189.28	306.45	186.92	360.19	328.30	328.30	1.84	1.61



SURVEY CALCULATION PROGRAM

6/14/17 9:54

Company:	Matador Production Company
Well Name:	B Banker 33-23S-28E RB 201H
Location:	Eddy County, NM
Rig:	Patterson #810
Job Number:	DDMO-170417
API #:	30-015-44138

Magnetic Declination:

7.14

REFERENCED TO GRID NORTH

Proposed Direction:

269.56

Vertical Section Azimuth:

269.56

Survey Calculation Method:

Minimum Curvature

#	Depth Feet	Inc		Azimuth		TVD		N/S		E/W		Surface		Closure		DLS/		BUR/	
		MD	14.418	Degrees	Inc	Feet	MD	271.3	Feet	9553.38	Feet	405.21	Feet	Distance	Azimuth	100	100'	100'	100'

68	9,893	72.50	275.00	9573.03	310.59	-224.54	222.15	383.26	324.14	10.95	-6.49
69	9,987	72.40	274.70	9601.37	318.17	-313.84	311.39	446.91	315.39	0.32	-0.11
70	10,019	77.10	277.10	9609.79	321.35	-344.54	342.06	471.14	313.01	16.37	14.69
71	10,082	85.20	279.50	9619.47	330.34	-406.08	403.53	523.48	309.13	13.40	12.86
72	10,177	92.00	278.60	9621.79	345.27	-499.82	497.15	607.48	304.64	7.22	7.16
73	10,271	93.90	275.90	9616.95	357.12	-592.93	590.17	692.17	301.06	3.51	2.02
74	10,366	95.80	274.20	9608.92	365.45	-687.21	684.39	778.34	298.00	2.68	2.00
75	10,460	94.30	272.70	9600.65	371.09	-780.67	777.80	864.38	295.42	2.25	-1.60
76	10,554	94.20	272.30	9593.68	375.18	-874.32	871.42	951.42	293.22	0.44	-0.11
77	10,648	92.00	270.20	9588.60	377.22	-968.15	965.23	1039.05	291.29	3.23	-2.34
78	10,742	92.90	268.70	9584.58	376.32	-1062.06	1059.14	1126.76	289.51	1.86	0.96
79	10,837	92.80	270.60	9579.85	375.74	-1156.94	1154.02	1216.42	287.99	2.00	-0.11
80	10,932	92.40	269.50	9575.54	375.82	-1251.84	1248.91	1307.03	286.71	1.23	-0.42
81	11,026	91.20	269.10	9572.59	374.68	-1345.78	1342.86	1396.96	285.56	1.35	-1.28
82	11,119	90.20	269.80	9571.46	373.78	-1438.77	1435.86	1486.53	284.56	1.31	-1.08
83	11,213	91.70	269.40	9569.90	373.13	-1532.75	1529.84	1577.51	283.68	1.65	1.60
84	11,307	88.70	269.40	9569.57	372.14	-1626.73	1623.83	1668.76	282.89	3.19	-3.19
85	11,402	86.70	268.60	9573.38	370.49	-1721.64	1718.74	1761.05	282.14	2.27	-2.11
86	11,496	87.40	268.80	9578.22	368.36	-1815.49	1812.61	1852.48	281.47	0.77	0.74
87	11,591	89.50	269.80	9580.79	367.20	-1910.44	1907.56	1945.41	280.88	2.45	2.21
88	11,685	91.80	271.30	9579.72	368.10	-2004.42	2001.53	2037.94	280.41	2.92	2.45
89	11,779	89.60	269.80	9578.57	369.00	-2098.40	2095.50	2130.60	279.97	2.83	-2.34
90	11,874	94.00	270.50	9575.59	369.25	-2193.33	2190.43	2224.19	279.56	4.69	4.63
91	11,969	94.50	270.50	9568.55	370.08	-2288.06	2285.15	2317.80	279.19	0.53	0.53
92	12,062	92.30	270.40	9563.03	370.80	-2380.89	2377.97	2409.59	278.85	2.37	-2.37
93	12,157	89.20	270.90	9561.79	371.88	-2475.87	2472.94	2503.64	278.54	3.31	-3.26
94	12,251	92.00	271.80	9560.81	374.10	-2569.82	2566.88	2596.91	278.28	3.13	2.98
95	12,345	88.50	269.40	9560.40	375.08	-2663.80	2660.84	2690.07	278.01	4.51	-3.72
96	12,439	87.90	269.40	9563.35	374.10	-2757.74	2754.79	2783.00	277.73	0.64	-0.64
97	12,533	88.00	268.40	9566.71	372.29	-2851.67	2848.72	2875.86	277.44	1.07	0.11
98	12,627	89.60	269.50	9568.68	370.57	-2945.62	2942.69	2968.84	277.17	2.07	1.70
99	12,722	91.00	269.80	9568.18	369.99	-3040.62	3037.69	3063.05	276.94	1.51	1.47
100	12,816	89.50	270.10	9567.77	369.91	-3134.62	3131.68	3156.37	276.73	1.63	-1.60
101	12,911	94.50	272.70	9564.46	372.22	-3229.49	3226.54	3250.87	276.57	5.93	5.26



V09 04.02

SURVEY CALCULATION PROGRAM

6/14/17 9:54

Company:	Matador Production Company
Well Name:	B Banker 33-23S-28E RB 201H
Location:	Eddy County, NM
Rig:	Patterson #810
Job Number:	DDMO-170417
API #:	30-015-44138

REFERENCED TO GRID NORTH

Magnetic Declination:	7.14
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Vertical Section Azimuth:	269.56
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Survey Calculation Method:	Minimum Curvature
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#	Depth Feet	Inc		Azim		TVD		N/S		Feet		E/W		Surface		Distance		Closure		Azim		DLS/		BUR/	
		MD	MD	MD	MD	INC	INC	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD
PTB:	14,418					87.3	87.3																		
102	13,005					88.60	88.60																		
103	13,100					89.70	89.70																		
104	13,195					92.80	92.80																		
105	13,290					90.90	90.90																		
106	13,384					88.20	88.20																		
107	13,479					88.40	88.40																		
108	13,574					90.50	90.50																		
109	13,669					89.60	89.60																		
110	13,764					93.20	93.20																		
111	13,858					92.30	92.30																		
112	13,953					91.20	91.20																		
113	14,048					89.70	89.70																		
114	14,142					92.30	92.30																		
115	14,237					90.90	90.90																		
116	14,331					87.30	87.30																		
PTB:	14,418					87.30	87.30																		