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MS Directional Survey Data Certification

MS Directional Job Number: DDMO-180172
Survey Type: MWD
Operating Company: Matador Production Company
Well Name & Number: Jimmy Kone 05-24S-28E RB 202H
Location: Eddy County, NM
API Number: 30-015-44658
Tie In Depth: Surface
Surveyed Depths: 137' – 14,265' MD
Projected TD Survey: 14,350' MD
Dates Performed: 02/16/2018 – 03/05/2018

I certify that the data is true, correct and complete and within the limitations of the tool set forth by MS Directional; 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 Directional.

Digitally signed by:

MWD Surveyor Name:

Tyler Teague

Date:

04-02-2018

Email:

tteague@msdir.com

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V09.04.02

Company:	Matador Production Company		
Well Name:	Jimmy Kone 05-24S-28E RB 202H		
Location:	Eddy County, NM		
Rig:	Patterson #810	Magnetic Declination:	7.08
Job Number:	DDMO-180172		
API #:	30-015-44658		
Vertical Section Azimuth:	269.74	Proposed Direction:	269.74
Survey Calculation Method:	Minimum Curvature		

Survey Calculation Worksheet											
PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	14,350	92.9	274.1	9356.39	263.55	-4889.76	4888.51				
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
TIE IN	0	0.00	0.00	0.00	0.00	0.00			0.00		
1	137	0.50	287.50	137.00	0.18	-0.57	0.57	0.60	287.50	0.36	0.36
2	328	1.40	321.70	327.97	2.26	-2.81	2.80	3.61	308.82	0.54	0.47
3	512	2.00	280.00	511.90	4.58	-7.37	7.35	8.68	301.89	0.72	0.33
4	544	1.90	274.40	543.88	4.72	-8.45	8.42	9.68	299.20	0.67	-0.31
5	696	1.90	283.30	695.79	5.49	-13.41	13.38	14.49	292.28	0.19	0.00
6	882	1.90	356.60	881.72	9.28	-16.59	16.55	19.01	299.22	1.22	0.00
7	1,073	2.10	3.90	1072.60	15.93	-16.54	16.47	22.97	313.92	0.17	0.10
8	1,263	2.40	19.20	1262.46	23.16	-15.00	14.89	27.60	327.08	0.35	0.16
9	1,453	3.70	24.70	1452.18	32.49	-11.13	10.98	34.34	341.09	0.70	0.68
10	1,644	3.80	38.30	1642.78	43.06	-4.63	4.43	43.31	353.86	0.47	0.05
11	1,834	5.00	43.70	1832.21	53.98	4.99	-5.24	54.21	5.28	0.67	0.63
12	2,024	5.00	61.50	2021.50	63.92	17.99	-18.28	66.41	15.72	0.81	0.00
13	2,213	4.80	69.70	2209.81	70.60	32.65	-32.97	77.78	24.82	0.39	-0.11
14	2,403	4.90	77.80	2399.14	75.07	48.03	-48.37	89.12	32.61	0.36	0.05
15	2,548	3.60	61.70	2543.74	78.54	58.09	-58.45	97.69	36.49	1.21	-0.90
16	2,691	3.20	74.40	2686.49	81.74	65.89	-66.26	104.99	38.87	0.59	-0.28
17	2,881	6.50	51.70	2875.80	89.83	79.44	-79.85	119.92	41.49	1.98	1.74
18	3,071	7.10	37.90	3064.47	105.76	95.10	-95.58	142.23	41.96	0.91	0.32
19	3,262	6.90	36.70	3254.05	124.28	109.21	-109.77	165.44	41.31	0.13	-0.10
20	3,452	5.50	31.20	3442.94	141.22	120.74	-121.38	185.80	40.53	0.80	-0.74
21	3,642	5.40	30.30	3632.08	156.72	129.97	-130.68	203.60	39.67	0.07	-0.05
22	3,833	5.50	29.50	3822.21	172.45	139.01	-139.79	221.50	38.87	0.07	0.05
23	4,022	5.70	34.20	4010.31	188.10	148.75	-149.60	239.80	38.34	0.26	0.11
24	4,213	5.50	35.30	4200.40	203.41	159.37	-160.29	258.41	38.08	0.12	-0.10
25	4,403	5.30	35.00	4389.56	218.03	169.66	-170.65	276.27	37.89	0.11	-0.11
26	4,594	4.50	35.00	4579.86	231.40	179.02	-180.07	292.56	37.73	0.42	-0.42
27	4,784	2.20	17.30	4769.53	240.98	184.38	-185.47	303.43	37.42	1.31	-1.21
28	4,974	1.70	356.70	4959.42	247.28	185.30	-186.42	309.01	36.85	0.45	-0.26
29	5,165	0.80	349.00	5150.37	251.42	184.89	-186.03	312.08	36.33	0.48	-0.47
30	5,355	0.50	328.80	5340.36	253.43	184.20	-185.35	313.30	36.01	0.20	-0.16
31	5,545	0.50	289.80	5530.35	254.42	182.99	-184.15	313.39	35.73	0.18	0.00
32	5,736	1.10	328.20	5721.33	256.26	181.24	-182.41	313.88	35.27	0.40	0.31
33	5,925	0.70	292.60	5910.31	258.24	179.22	-180.39	314.34	34.76	0.35	-0.21



SURVEY CALCULATION PROGRAM

4/2/18 11:31

V09.04.02

Company:		Matador Production Company									
Well Name:		Jimmy Kone 05-24S-28E RB 202H									
Location:		Eddy County, NM									
Rig:		Patterson #810				Magnetic Declination:		7.08		REFERENCED TO GRID NORTH	
Job Number:		DDMO-180172									
API #:		30-015-44658									
Vertical Section Azimuth:				269.74		Proposed Direction:		269.74			
Survey Calculation Method:				Minimum Curvature							
PTB:	MD		INC		AZM	TVD	N/S	E/W		VS	
	14,350		92.9		274.1	9356.39	263.55	-4889.76		4888.51	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'
34	6,116	1.00	270.90	6101.29	258.72	176.48	-177.65	313.18	34.30	0.23	0.16
35	6,306	0.60	86.90	6291.28	258.80	175.81	-176.99	312.87	34.19	0.84	-0.21
36	6,496	1.30	114.70	6481.26	257.95	178.77	-179.93	313.84	34.72	0.43	0.37
37	6,686	1.40	42.70	6671.21	258.76	182.30	-183.47	316.52	35.17	0.84	0.05
38	6,876	0.90	336.30	6861.18	261.83	183.27	-184.46	319.60	34.99	0.70	-0.26
39	7,067	1.10	274.50	7052.16	263.35	180.84	-182.04	319.46	34.48	0.55	0.10
40	7,257	1.90	260.90	7242.09	262.99	175.91	-177.11	316.40	33.78	0.46	0.42
41	7,447	0.30	125.90	7432.06	262.20	173.21	-174.39	314.25	33.45	1.12	-0.84
42	7,542	1.00	169.50	7527.05	261.24	173.56	-174.74	313.64	33.60	0.85	0.74
43	7,638	1.50	173.60	7623.03	259.17	173.85	-175.03	312.08	33.85	0.53	0.52
44	7,732	0.40	45.40	7717.02	258.18	174.22	-175.39	311.46	34.01	1.89	-1.17
45	7,828	0.40	307.00	7813.02	258.61	174.19	-175.36	311.81	33.96	0.63	0.00
46	7,923	1.10	258.40	7908.01	258.63	173.03	-174.21	311.18	33.78	0.93	0.74
47	8,018	1.30	263.80	8002.99	258.33	171.07	-172.24	309.84	33.51	0.24	0.21
48	8,112	1.30	262.60	8096.97	258.08	168.95	-170.12	308.46	33.21	0.03	0.00
49	8,207	1.10	250.20	8191.95	257.63	167.03	-168.19	307.04	32.96	0.34	-0.21
50	8,301	1.30	240.00	8285.93	256.79	165.25	-166.42	305.37	32.76	0.31	0.21
51	8,396	1.40	224.50	8380.90	255.42	163.51	-164.66	303.28	32.62	0.40	0.11
52	8,491	1.50	81.00	8475.89	254.79	163.92	-165.08	302.97	32.76	2.90	0.11
53	8,586	1.20	82.00	8570.86	255.12	166.14	-167.29	304.45	33.07	0.32	-0.32
54	8,682	0.90	81.00	8666.85	255.38	167.88	-169.03	305.62	33.32	0.31	-0.31
55	8,777	0.90	111.10	8761.83	255.23	169.31	-170.46	306.28	33.56	0.49	0.00
56	8,844	0.50	105.90	8828.83	254.96	170.08	-171.24	306.48	33.71	0.60	-0.60
57	8,881	0.60	113.30	8865.83	254.84	170.41	-171.57	306.57	33.77	0.33	0.27
58	8,976	2.20	268.00	8960.81	254.58	169.05	-170.20	305.59	33.59	2.90	1.68
59	9,023	7.30	265.40	9007.63	254.31	165.17	-166.32	303.24	33.00	10.86	10.85
60	9,070	13.60	268.00	9053.83	253.87	156.66	-157.81	298.32	31.68	13.44	13.40
61	9,118	16.60	267.90	9100.17	253.43	144.16	-145.31	291.56	29.63	6.25	6.25
62	9,165	18.70	264.80	9144.95	252.50	129.95	-131.09	283.98	27.23	4.89	4.47
63	9,212	23.00	259.90	9188.87	250.20	113.40	-114.53	274.70	24.38	9.87	9.15
64	9,232	25.20	259.70	9207.12	248.76	105.36	-106.49	270.15	22.96	11.01	11.00
65	9,259	28.10	258.70	9231.25	246.48	93.47	-94.59	263.61	20.77	10.87	10.74
66	9,307	32.50	260.70	9272.69	242.18	69.64	-70.74	252.00	16.04	9.40	9.17
67	9,354	39.10	265.30	9310.79	238.92	42.38	-43.46	242.65	10.06	15.16	14.04

Company:		Matador Production Company										
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Location:		Eddy County, NM										
Rig:		Patterson #810					Magnetic Declination:		7.08		REFERENCED TO GRID NORTH	
Job Number:		DDMO-180172										
API #:		30-015-44658										
Vertical Section Azimuth:			269.74			Proposed Direction:		269.74				
Survey Calculation Method:			Minimum Curvature									
PTB:	MD		INC		AZM	TVD	N/S	E/W		VS		
	14,350		92.9		274.1	9356.39	263.55	-4889.76		4888.51		
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'	
68	9,402	44.70	270.10	9346.51	237.71	10.38	-11.46	237.94	2.50	13.44	11.67	
69	9,449	51.50	275.50	9377.90	239.50	-24.51	23.43	240.76	354.16	16.80	14.47	
70	9,498	59.50	277.30	9405.63	244.03	-64.61	63.50	252.44	345.17	16.60	16.33	
71	9,545	63.30	277.30	9428.12	249.27	-105.53	104.40	270.69	337.05	8.09	8.09	
72	9,593	66.90	276.60	9448.33	254.54	-148.74	147.58	294.81	329.70	7.62	7.50	
73	9,645	69.50	274.90	9467.64	259.37	-196.77	195.59	325.56	322.81	5.85	5.00	
74	9,688	73.30	273.20	9481.35	262.24	-237.42	236.22	353.75	317.84	9.60	8.84	
75	9,780	80.70	270.90	9502.04	265.42	-326.93	325.73	421.11	309.07	8.40	8.04	
76	9,827	84.60	270.10	9508.05	265.82	-373.54	372.33	458.47	305.44	8.47	8.30	
77	9,874	88.10	270.30	9511.04	265.99	-420.43	419.22	497.51	302.32	7.46	7.45	
78	9,969	90.40	270.10	9512.29	266.32	-515.42	514.20	580.16	297.33	2.43	2.42	
79	10,063	91.50	270.20	9510.73	266.56	-609.40	608.19	665.15	293.63	1.18	1.17	
80	10,157	91.30	269.30	9508.43	266.15	-703.37	702.16	752.04	290.73	0.98	-0.21	
81	10,251	89.90	268.40	9507.45	264.27	-797.35	796.14	840.00	288.34	1.77	-1.49	
82	10,346	90.60	268.90	9507.03	262.03	-892.32	891.12	929.99	286.36	0.91	0.74	
83	10,439	90.80	269.00	9505.89	260.32	-985.30	984.10	1019.10	284.80	0.24	0.22	
84	10,534	92.40	269.30	9503.24	258.92	-1080.24	1079.06	1110.84	283.48	1.71	1.68	
85	10,627	93.40	270.00	9498.54	258.35	-1173.12	1171.94	1201.23	282.42	1.31	1.08	
86	10,721	93.00	269.30	9493.29	257.77	-1266.97	1265.79	1292.93	281.50	0.86	-0.43	
87	10,815	93.00	268.90	9488.37	256.30	-1360.83	1359.66	1384.76	280.67	0.42	0.00	
88	10,909	91.10	268.20	9485.01	253.92	-1454.74	1453.57	1476.73	279.90	2.15	-2.02	
89	11,003	88.50	267.00	9485.34	249.99	-1548.64	1547.49	1568.69	279.17	3.05	-2.77	
90	11,098	88.70	266.70	9487.66	244.77	-1643.47	1642.34	1661.60	278.47	0.38	0.21	
91	11,192	90.20	267.90	9488.56	240.34	-1737.36	1736.25	1753.90	277.88	2.04	1.60	
92	11,287	92.70	270.50	9486.16	239.01	-1832.30	1831.20	1847.83	277.43	3.80	2.63	
93	11,381	93.40	270.00	9481.15	239.42	-1926.17	1925.06	1940.99	277.09	0.91	0.74	
94	11,476	93.10	270.10	9475.77	239.51	-2021.02	2019.91	2035.16	276.76	0.33	-0.32	
95	11,570	93.80	270.60	9470.11	240.08	-2114.84	2113.73	2128.43	276.48	0.91	0.74	
96	11,664	93.80	270.80	9463.88	241.22	-2208.63	2207.51	2221.76	276.23	0.21	0.00	
97	11,759	92.70	270.40	9458.50	242.22	-2303.47	2302.35	2316.17	276.00	1.23	-1.16	
98	11,853	92.80	270.80	9453.99	243.20	-2397.36	2396.23	2409.66	275.79	0.44	0.11	
99	11,947	91.20	271.20	9450.71	244.84	-2491.28	2490.14	2503.28	275.61	1.75	-1.70	
100	12,041	91.10	271.50	9448.82	247.05	-2585.24	2584.09	2597.01	275.46	0.34	-0.11	
101	12,135	89.40	270.90	9448.41	249.02	-2679.21	2678.05	2690.76	275.31	1.92	-1.81	

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Survey Calculation Method:				Minimum Curvature										
PTB:	MD		INC		AZM		TVD		N/S		E/W		VS	
	14,350		92.9		274.1		9356.39		263.55		-4889.76		4888.51	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure		DLS/ 100	BUR/ 100'			
								Distance	Azm					
102	12,230	92.40	271.80	9446.92	251.26	-2774.16	2772.99	2785.52	275.18	3.30	3.16			
103	12,323	92.00	272.00	9443.35	254.34	-2867.04	2865.86	2878.30	275.07	0.48	-0.43			
104	12,418	90.20	270.80	9441.52	256.66	-2961.99	2960.79	2973.09	274.95	2.28	-1.89			
105	12,512	92.40	271.50	9439.39	258.55	-3055.94	3054.74	3066.86	274.84	2.46	2.34			
106	12,606	91.10	270.60	9436.52	260.27	-3149.88	3148.66	3160.61	274.72	1.68	-1.38			
107	12,700	92.30	271.00	9433.73	261.58	-3243.82	3242.60	3254.35	274.61	1.35	1.28			
108	12,794	91.70	269.60	9430.45	262.07	-3337.76	3336.54	3348.04	274.49	1.62	-0.64			
109	12,888	91.20	268.00	9428.07	260.10	-3431.71	3430.49	3441.55	274.33	1.78	-0.53			
110	12,982	91.70	268.60	9425.69	257.32	-3525.64	3524.43	3535.01	274.17	0.83	0.53			
111	13,077	91.60	268.40	9422.96	254.83	-3620.57	3619.37	3629.52	274.03	0.24	-0.11			
112	13,171	92.50	268.20	9419.59	252.04	-3714.46	3713.28	3723.00	273.88	0.98	0.96			
113	13,265	96.80	267.40	9411.98	248.45	-3808.06	3806.89	3816.16	273.73	4.65	4.57			
114	13,359	97.80	267.90	9400.03	244.63	-3901.22	3900.07	3908.88	273.59	1.19	1.06			
115	13,454	96.90	267.90	9387.88	241.17	-3995.37	3994.24	4002.65	273.45	0.95	-0.95			
116	13,548	89.90	268.00	9382.31	237.82	-4089.09	4087.97	4096.00	273.33	7.45	-7.45			
117	13,642	92.30	268.80	9380.50	235.20	-4183.03	4181.92	4189.64	273.22	2.69	2.55			
118	13,731	92.30	269.70	9376.93	234.03	-4271.95	4270.84	4278.35	273.14	1.01	0.00			
119	13,826	91.70	271.50	9373.62	235.03	-4366.88	4365.77	4373.20	273.08	2.00	-0.63			
120	13,920	91.10	272.30	9371.32	238.14	-4460.80	4459.67	4467.15	273.06	1.06	-0.64			
121	14,013	91.60	273.30	9369.13	242.68	-4553.66	4552.51	4560.12	273.05	1.20	0.54			
122	14,107	92.10	273.30	9366.09	248.09	-4647.46	4646.28	4654.07	273.06	0.53	0.53			
123	14,202	91.50	273.20	9363.11	253.48	-4742.26	4741.06	4749.03	273.06	0.64	-0.63			
124	14,265	92.90	274.10	9360.69	257.48	-4805.08	4803.86	4811.97	273.07	2.64	2.22			
PTB:	14,350	92.90	274.10	9356.39	263.55	-4889.76	4888.51	4896.85	273.09	0.00	0.00			