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MS Directional Survey Data Certification

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AUG 31 2018

DISTRICT II-ARTESIA O.C.D.

MS Directional Job Number: DDMO-180479
Survey Type: MWD
Operating Company: Matador Production Company
Well Name & Number: Brantley State 13-24S-27E RB 206H
Location: Eddy County, NM
API Number: 30-015-44597

Original Wellbore

Tie In Depth: Surface
Surveyed Depths: 174' – 9,307' MD
Projected TD Survey: 9,375' MD

Sidetrack

Tie In Depth: 8,579' MD
Surveyed Depths: 8,593' – 13,989' MD
Projected TD Survey: 14,061' MD

Dates Performed: 05/07/2018 – 06/04/2018

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: 06-19-2018

Email: tteague@msdir.com

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Company:		Matador Production Company												
Well Name:		Brantley State 13-24S-27E RB 206H - Original Wellbore												
Location:		Eddy County, NM												
Rig:		Patterson #810					Magnetic Declination:		7.08		REFERENCED TO GRID NORTH			
Job Number:		DDMO-180479												
API #:		30-015-44597												
Vertical Section Azimuth:					269.10			Proposed Direction:		269.10				
Survey Calculation Method:					Minimum Curvature									
PTB:	MD		INC		AZM		TVD		N/S		E/W		VS	
	9,375		58.2		273		9269.48		-313.05		-96.3		101.2	
#	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	174	1.00	22.20	173.99	1.41	0.57	-0.60	1.52	22.20	0.57	0.57			
2	233	1.50	32.70	232.98	2.53	1.19	-1.23	2.80	25.08	0.93	0.85			
3	414	1.00	27.60	413.93	5.93	3.20	-3.29	6.73	28.35	0.28	-0.28			
4	600	0.60	48.50	599.92	8.01	4.68	-4.80	9.28	30.29	0.26	-0.22			
5	777	0.50	19.40	776.91	9.35	5.63	-5.78	10.92	31.04	0.17	-0.06			
6	973	5.40	159.60	972.64	1.51	9.13	-9.15	9.25	80.62	2.96	2.50			
7	1,163	3.70	164.80	1162.03	-12.79	13.85	-13.65	18.86	132.71	0.92	-0.89			
8	1,353	2.50	167.80	1351.75	-22.76	16.34	-15.98	28.01	144.32	0.64	-0.63			
9	1,544	3.80	160.80	1542.46	-32.81	19.30	-18.78	38.06	149.53	0.71	0.68			
10	1,733	3.50	143.80	1731.08	-43.38	24.77	-24.08	49.95	150.27	0.59	-0.16			
11	1,923	1.90	152.70	1920.86	-50.85	29.64	-28.83	58.86	149.77	0.87	-0.84			
12	2,114	4.90	143.20	2111.51	-60.20	35.98	-35.03	70.13	149.14	1.59	1.57			
13	2,304	3.60	140.90	2300.98	-71.33	44.60	-43.47	84.13	147.98	0.69	-0.68			
14	2,466	3.60	137.40	2462.66	-79.02	51.25	-50.00	94.19	147.03	0.14	0.00			
15	2,619	3.10	139.00	2615.40	-85.68	57.22	-55.86	103.03	146.26	0.33	-0.33			
16	2,683	3.90	138.40	2679.28	-88.61	59.80	-58.40	106.90	145.99	1.25	1.25			
17	2,778	5.90	151.90	2773.93	-95.34	64.24	-62.74	114.96	146.03	2.42	2.11			
18	2,873	7.10	155.40	2868.32	-104.98	68.99	-67.33	125.62	146.69	1.33	1.26			
19	2,968	7.40	157.00	2962.56	-115.95	73.82	-71.99	137.46	147.52	0.38	0.32			
20	3,158	7.50	159.00	3150.95	-138.79	83.05	-80.85	161.74	149.11	0.15	0.05			
21	3,349	6.90	159.70	3340.45	-161.19	91.49	-88.95	185.35	150.42	0.32	-0.31			
22	3,539	6.80	160.70	3529.09	-182.51	99.17	-96.29	207.71	151.48	0.08	-0.05			
23	3,729	6.20	163.60	3717.87	-202.97	105.78	-102.58	228.88	152.47	0.36	-0.32			
24	3,919	2.80	153.00	3907.26	-216.95	110.79	-107.37	243.60	152.95	1.83	-1.79			
25	4,109	7.70	149.00	4096.40	-232.00	119.46	-115.80	260.95	152.76	2.58	2.58			
26	4,203	3.40	152.40	4189.94	-239.88	123.99	-120.21	270.03	152.67	4.59	-4.57			
27	4,298	6.50	151.80	4284.58	-247.11	127.84	-123.94	278.22	152.65	3.26	3.26			
28	4,393	4.80	152.50	4379.11	-255.38	132.22	-128.19	287.58	152.63	1.79	-1.79			
29	4,488	5.30	143.30	4473.74	-262.42	136.68	-132.54	295.88	152.49	1.00	0.53			
30	4,584	2.80	143.20	4569.50	-267.86	140.73	-136.51	302.58	152.28	2.60	-2.60			
31	4,679	1.70	133.60	4664.42	-270.69	143.14	-138.87	306.20	152.13	1.22	-1.16			
32	4,774	2.20	137.30	4759.37	-273.00	145.40	-141.09	309.30	151.96	0.54	0.53			
33	4,870	0.80	88.80	4855.33	-274.34	147.32	-142.99	311.39	151.76	1.85	-1.46			

Company:	Matador Production Company		
Well Name:	Brantley State 13-24S-27E RB 206H - Original Wellbore		
Location:	Eddy County, NM		
Rig:	Patterson #810	Magnetic Declination:	7.08
Job Number:	DDMO-180479		
API #:	30-015-44597		
Vertical Section Azimuth:	269.10	Proposed Direction:	269.10
Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	9,375	58.2	273	9269.48	-313.05	-96.3	101.2				
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure		DLS/ 100	BUR/ 100'
								Distance	Azm		
34	4,965	1.30	50.40	4950.32	-273.64	148.81	-144.50	311.48	151.46	0.88	0.53
35	5,155	0.50	47.30	5140.29	-271.70	151.08	-146.80	310.88	150.92	0.42	-0.42
36	5,345	0.40	61.00	5330.29	-270.82	152.27	-148.00	310.69	150.65	0.08	-0.05
37	5,535	0.60	102.20	5520.28	-270.71	153.82	-149.55	311.36	150.39	0.21	0.11
38	5,725	0.80	148.00	5710.27	-272.04	155.50	-151.21	313.35	150.25	0.30	0.11
39	5,916	0.90	156.30	5901.25	-274.55	156.81	-152.48	316.17	150.27	0.08	0.05
40	6,105	1.50	94.40	6090.21	-276.09	159.87	-155.52	319.04	149.93	0.71	0.32
41	6,296	2.40	105.70	6281.10	-277.37	166.21	-161.84	323.36	149.07	0.51	0.47
42	6,487	1.60	125.70	6471.98	-280.01	172.23	-167.81	328.73	148.40	0.55	-0.42
43	6,677	0.60	139.70	6661.95	-282.31	175.03	-170.57	332.17	148.20	0.54	-0.53
44	6,867	0.40	20.10	6851.94	-282.45	175.90	-171.44	332.74	148.09	0.46	-0.11
45	7,058	0.30	302.40	7042.94	-281.56	175.71	-171.26	331.88	148.03	0.23	-0.05
46	7,248	0.60	256.00	7232.94	-281.53	174.32	-169.88	331.13	148.23	0.24	0.16
47	7,438	0.90	181.30	7422.92	-283.26	173.32	-168.85	332.08	148.54	0.50	0.16
48	7,628	2.40	185.50	7612.84	-288.71	172.91	-168.35	336.53	149.08	0.79	0.79
49	7,819	1.50	130.60	7803.74	-294.32	174.42	-169.78	342.12	149.35	1.03	-0.47
50	8,009	1.00	169.90	7993.70	-297.57	176.60	-171.90	346.03	149.31	0.51	-0.26
51	8,199	1.20	175.50	8183.66	-301.19	177.05	-172.29	349.37	149.55	0.12	0.11
52	8,389	2.20	221.50	8373.59	-305.90	174.79	-169.96	352.32	150.26	0.85	0.53
53	8,579	2.70	176.70	8563.43	-313.10	172.63	-167.69	357.54	151.13	1.01	0.26
54	8,675	2.50	175.60	8659.33	-317.45	172.92	-167.91	361.49	151.42	0.21	-0.21
55	8,690	2.70	178.00	8674.31	-318.13	172.96	-167.94	362.10	151.47	1.52	1.33
56	8,785	2.70	260.10	8769.24	-320.75	170.83	-165.77	363.40	151.96	3.73	0.00
57	8,832	6.50	286.30	8816.08	-320.19	167.18	-162.13	361.21	152.43	9.04	8.09
58	8,880	11.10	291.10	8863.51	-317.77	160.26	-155.25	355.89	153.24	9.70	9.58
59	8,927	14.40	282.20	8909.34	-314.90	150.32	-145.36	348.94	154.48	8.15	7.02
60	8,975	18.00	275.70	8955.43	-312.90	137.10	-132.17	341.62	156.34	8.39	7.50
61	9,022	21.80	269.30	8999.63	-312.29	121.14	-116.22	334.96	158.80	9.31	8.09
62	9,070	25.40	270.10	9043.60	-312.38	101.93	-97.01	328.59	161.93	7.53	7.50
63	9,117	29.60	267.50	9085.29	-312.87	80.24	-75.32	322.99	165.61	9.29	8.94
64	9,165	34.50	266.00	9125.96	-314.33	54.82	-49.88	319.08	170.11	10.34	10.21
65	9,212	39.90	267.20	9163.38	-316.00	26.47	-21.50	317.11	175.21	11.59	11.49
66	9,260	45.60	270.80	9198.62	-316.51	-6.08	11.06	316.57	181.10	12.92	11.88
67	9,307	50.70	272.20	9229.97	-315.58	-41.07	46.02	318.24	187.41	11.08	10.85

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Location:		Eddy County, NM									
Rig:		Patterson #810				Magnetic Declination:		7.08		REFERENCED TO GRID NORTH ▼	
Job Number:		DDMO-180479									
API #:		30-015-44597									
Vertical Section Azimuth:				269.10		Proposed Direction:		269.10			
Survey Calculation Method:				Minimum Curvature							
PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	9,375	58.2	273	9269.48	-313.05	-96.3	101.2				
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
PTB:	9,375	58.20	273.00	9269.48	-313.05	-96.30	101.20	327.53	197.10	11.07	11.03

Company:	Matador Production Company		
Well Name:	Brantley State 13-24S-27E RB 206H - Sidetrack		
Location:	Eddy County, NM		
Rig:	Patterson #810	Magnetic Declination:	7.08
Job Number:	DDMO-180479		
API #:	30-015-44597		
Vertical Section Azimuth:	269.10	Proposed Direction:	269.10
Survey Calculation Method:	Minimum Curvature		

Survey Calculation Method:

PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	14,061	90.3	263.5	9182.41	-382.15	-4932.12	4937.52				
#	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	8,579	2.70	176.70	8563.43	-313.10	172.63		357.54	151.13		
1	8,593	2.80	175.10	8577.41	-313.77	172.68	-167.73	358.15	151.17	0.90	0.71
2	8,688	9.60	268.60	8671.94	-316.28	164.94	-159.95	356.70	152.46	10.69	7.16
3	8,735	13.70	274.80	8717.96	-315.91	155.47	-150.49	352.09	153.80	9.11	8.72
4	8,783	19.90	277.60	8763.89	-314.35	141.69	-136.74	344.81	155.74	13.02	12.92
5	8,830	25.00	278.40	8807.32	-311.84	123.93	-119.01	335.57	158.33	10.87	10.85
6	8,878	32.50	279.00	8849.37	-308.34	101.12	-96.27	324.50	161.84	15.64	15.63
7	8,925	36.90	280.30	8888.00	-303.84	74.76	-69.98	312.90	166.18	9.49	9.36
8	8,973	41.80	280.40	8925.11	-298.37	44.83	-40.14	301.72	171.46	10.21	10.21
9	9,020	44.60	278.60	8959.37	-293.08	13.10	-8.49	293.37	177.44	6.51	5.96
10	9,068	48.00	272.40	8992.54	-289.81	-21.41	25.96	290.60	184.23	11.72	7.08
11	9,115	50.60	268.10	9023.20	-289.68	-57.02	61.57	295.24	191.14	8.87	5.53
12	9,163	52.70	266.40	9052.98	-291.49	-94.62	99.19	306.46	197.98	5.18	4.38
13	9,206	51.60	271.20	9079.37	-292.21	-128.55	133.12	319.24	203.75	9.18	-2.56
14	9,259	52.70	271.50	9111.89	-291.23	-170.38	174.94	337.41	210.33	2.12	2.08
15	9,306	56.90	270.60	9138.98	-290.53	-208.78	213.31	357.76	215.70	9.07	8.94
16	9,354	60.50	267.60	9163.92	-291.19	-249.77	254.31	383.64	220.62	9.21	7.50
17	9,401	67.20	262.50	9184.63	-294.88	-291.75	296.35	414.82	224.69	17.26	14.26
18	9,470	77.50	264.20	9205.52	-302.46	-356.98	361.68	467.88	229.73	15.11	14.93
19	9,519	76.70	263.60	9216.46	-307.54	-404.47	409.25	508.11	232.75	2.02	-1.63
20	9,567	76.40	263.30	9227.63	-312.86	-450.85	455.71	548.77	235.24	0.87	-0.62
21	9,614	76.40	263.80	9238.68	-317.99	-496.24	501.17	589.38	237.35	1.03	0.00
22	9,662	77.80	265.40	9249.40	-322.39	-542.82	547.81	631.34	239.29	4.37	2.92
23	9,694	81.40	267.60	9255.17	-324.31	-574.23	579.25	659.48	240.54	13.13	11.25
24	9,757	90.30	275.60	9259.73	-322.53	-636.92	641.91	713.93	243.14	18.96	14.13
25	9,851	91.20	275.40	9258.50	-313.53	-730.48	735.31	794.92	246.77	0.98	0.96
26	9,945	92.20	275.60	9255.71	-304.52	-824.00	828.69	878.47	249.72	1.08	1.06
27	10,039	90.30	273.70	9253.66	-296.90	-917.66	922.21	964.50	252.07	2.86	-2.02
28	10,133	92.00	273.90	9251.78	-290.68	-1011.44	1015.88	1052.38	253.97	1.82	1.81
29	10,228	92.60	274.60	9247.96	-283.64	-1106.10	1110.42	1141.89	255.62	0.97	0.63
30	10,321	88.70	272.60	9246.91	-277.80	-1198.88	1203.10	1230.65	256.95	4.71	-4.19
31	10,415	88.80	272.30	9248.96	-273.79	-1292.78	1296.92	1321.45	258.04	0.34	0.11
32	10,510	89.40	272.20	9250.45	-270.06	-1387.69	1391.76	1413.72	258.99	0.64	0.63
33	10,604	91.50	273.50	9249.71	-265.38	-1481.56	1485.55	1505.15	259.84	2.63	2.23

V09.04.02

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-180479										
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Vertical Section Azimuth:					269.10			Proposed Direction:		269.10		
Survey Calculation Method:					Minimum Curvature							
PTB:	MD		INC		AZM		TVD	N/S		E/W		VS
	14,061		90.3		263.5		9182.41	-382.15		-4932.12		4937.52
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure		DLS/ 100	BUR/ 100'	
34	10,698	91.20	271.60	9247.50	-261.20	-1575.44	1579.35	1596.95	260.59	2.05	-0.32	
35	10,791	91.60	271.10	9245.23	-259.01	-1668.39	1672.25	1688.37	261.18	0.69	0.43	
36	10,885	91.00	269.40	9243.09	-258.60	-1762.36	1766.20	1781.23	261.65	1.92	-0.64	
37	10,980	91.00	269.80	9241.44	-259.27	-1857.34	1861.18	1875.35	262.05	0.42	0.00	
38	11,074	90.50	270.50	9240.21	-259.02	-1951.33	1955.16	1968.45	262.44	0.92	-0.53	
39	11,168	87.60	269.00	9241.76	-259.43	-2045.31	2049.13	2061.69	262.77	3.47	-3.09	
40	11,262	87.70	269.10	9245.62	-260.99	-2139.21	2143.05	2155.07	263.04	0.15	0.11	
41	11,356	87.20	267.60	9249.80	-263.69	-2233.08	2236.94	2248.59	263.27	1.68	-0.53	
42	11,450	88.20	265.80	9253.57	-269.10	-2326.84	2330.78	2342.35	263.40	2.19	1.06	
43	11,545	90.10	267.30	9254.98	-274.81	-2421.65	2425.67	2437.20	263.53	2.55	2.00	
44	11,638	95.80	269.70	9250.20	-277.25	-2514.45	2518.50	2529.69	263.71	6.65	6.13	
45	11,732	93.70	269.70	9242.41	-277.74	-2608.12	2612.16	2622.87	263.92	2.23	-2.23	
46	11,827	93.70	269.90	9236.28	-278.07	-2702.92	2706.96	2717.19	264.13	0.21	0.00	
47	11,921	91.10	269.30	9232.35	-278.73	-2796.83	2800.86	2810.68	264.31	2.84	-2.77	
48	12,015	90.10	269.70	9231.36	-279.55	-2890.82	2894.85	2904.31	264.48	1.15	-1.06	
49	12,110	90.30	269.50	9231.03	-280.21	-2985.82	2989.85	2998.94	264.64	0.30	0.21	
50	12,204	90.20	268.70	9230.62	-281.69	-3079.80	3083.85	3092.66	264.77	0.86	-0.11	
51	12,298	93.50	268.40	9227.59	-284.06	-3173.71	3177.78	3186.40	264.89	3.53	3.51	
52	12,392	92.90	268.20	9222.34	-286.85	-3267.52	3271.63	3280.09	264.98	0.67	-0.64	
53	12,486	92.40	268.30	9217.99	-289.71	-3361.38	3365.51	3373.84	265.07	0.54	-0.53	
54	12,580	90.80	268.30	9215.37	-292.50	-3455.30	3459.47	3467.66	265.16	1.70	-1.70	
55	12,674	91.60	267.60	9213.40	-295.86	-3549.22	3553.43	3561.53	265.23	1.13	0.85	
56	12,768	91.30	267.90	9211.02	-299.55	-3643.11	3647.37	3655.41	265.30	0.45	-0.32	
57	12,863	91.00	266.70	9209.12	-304.03	-3737.99	3742.30	3750.33	265.35	1.30	-0.32	
58	12,957	91.00	267.20	9207.48	-309.03	-3831.84	3836.22	3844.28	265.39	0.53	0.00	
59	13,051	92.00	268.10	9205.02	-312.88	-3925.73	3930.16	3938.17	265.44	1.43	1.06	
60	13,145	92.80	268.90	9201.08	-315.34	-4019.61	4024.07	4031.96	265.51	1.20	0.85	
61	13,239	92.60	269.30	9196.65	-316.81	-4113.49	4117.96	4125.68	265.60	0.48	-0.21	
62	13,333	91.70	269.40	9193.12	-317.88	-4207.42	4211.89	4219.41	265.68	0.96	-0.96	
63	13,428	91.10	267.20	9190.80	-320.70	-4302.34	4306.85	4314.28	265.74	2.40	-0.63	
64	13,522	89.50	265.70	9190.31	-326.52	-4396.16	4400.74	4408.27	265.75	2.33	-1.70	
65	13,615	90.80	265.20	9190.07	-333.89	-4488.86	4493.55	4501.26	265.75	1.50	1.40	
66	13,709	91.40	264.50	9188.26	-342.33	-4582.46	4587.27	4595.23	265.73	0.98	0.64	
67	13,803	91.80	263.90	9185.64	-351.83	-4675.94	4680.89	4689.16	265.70	0.77	0.43	

V09.04.02

Company:	Matador Production Company										
Well Name:	Brantley State 13-24S-27E RB 206H - Sidetrack										
Location:	Eddy County, NM										
Rig:	Patterson #810					Magnetic Declination:	7.08		REFERENCED TO GRID NORTH ▼		
Job Number:	DDMO-180479										
API #:	30-015-44597										
Vertical Section Azimuth:	269.10					Proposed Direction:	269.10				
Survey Calculation Method:	Minimum Curvature										
PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	14,061	90.3	263.5	9182.41	-382.15	-4932.12	4937.52				
#	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	13,897	90.70	262.60	9183.59	-362.87	-4769.27	4774.38	4783.05	265.65	1.81	-1.17
69	13,989	90.30	263.50	9182.78	-374.00	-4860.59	4865.86	4874.95	265.60	1.07	-0.43
PTB:	14,061	90.30	263.50	9182.41	-382.15	-4932.12	4937.52	4946.91	265.57	0.00	0.00