



7821 Will Rogers Blvd.
Fort Worth, Texas 76140
817.568.1038 (office)
817.568.1499 (fax)
www.msdir.com

30-01544743

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MS Directional Survey Data Certification

AUG 31 2018

MS Directional Job Number: DDMO-180336 DISTRICT II-ARTESIA O.C.D.
Survey Type: MWD
Operating Company: Matador Production Company
Well Name & Number: Brantley State COM 13-24S-27E RB 211H
Location: Eddy County, NM
API Number: 30-015-44743
Tie In Depth: Surface
Surveyed Depths: 200' – 14,281' MD
Projected TD Survey: 14,388' MD
Dates Performed: 04/09/2018 – 04/24/2018

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: 05-25-2018
Email: tteague@msdir.com

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V09.04.02

Company:	Matador Production Company		
Well Name:	Brantley State COM 13-24S-27E RB 211H		
Location:	Eddy County, NM		
Rig:	Patterson #810	Magnetic Declination:	7.10
Job Number:	DDMO-180336		
API #:	30-015-44743		

REFERENCED TO GRID NORTH

Vertical Section Azimuth:	269.64	Proposed Direction:	269.64
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	14,388	90.6	265.7	9267.97	73.06	-5315.89	5315.33

#	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	200	0.40	133.40	200.00	-0.48	0.51	-0.50	0.70	133.40	0.20	0.20
2	331	0.50	141.10	330.99	-1.24	1.20	-1.19	1.72	135.95	0.09	0.08
3	418	1.60	119.30	417.98	-2.13	2.50	-2.48	3.28	130.46	1.32	1.26
4	516	0.70	116.30	515.96	-3.06	4.23	-4.21	5.22	125.94	0.92	-0.92
5	609	0.40	144.30	608.95	-3.58	4.92	-4.90	6.09	126.01	0.42	-0.32
6	699	0.70	148.00	698.95	-4.30	5.40	-5.37	6.90	128.53	0.34	0.33
7	789	0.50	136.40	788.94	-5.05	5.96	-5.93	7.81	130.27	0.26	-0.22
8	879	0.60	127.60	878.94	-5.62	6.61	-6.57	8.67	130.40	0.15	0.11
9	974	0.50	119.30	973.94	-6.13	7.36	-7.32	9.58	129.78	0.13	-0.11
10	1,068	0.70	140.40	1067.93	-6.77	8.08	-8.04	10.55	129.95	0.31	0.21
11	1,163	2.20	123.60	1162.90	-8.23	9.97	-9.92	12.93	129.52	1.62	1.58
12	1,258	0.20	334.30	1257.88	-9.09	11.42	-11.36	14.60	128.51	2.50	-2.11
13	1,353	1.00	320.40	1352.87	-8.30	10.82	-10.77	13.64	127.49	0.85	0.84
14	1,446	1.00	329.30	1445.86	-6.98	9.89	-9.84	12.10	125.20	0.17	0.00
15	1,541	1.00	351.60	1540.84	-5.44	9.34	-9.31	10.81	120.22	0.41	0.00
16	1,636	0.80	33.10	1635.83	-4.07	9.59	-9.56	10.41	113.00	0.70	-0.21
17	1,731	1.50	77.90	1730.81	-3.25	11.16	-11.14	11.63	106.24	1.15	0.74
18	1,826	2.80	78.90	1825.74	-2.54	14.66	-14.64	14.88	99.85	1.37	1.37
19	1,922	2.40	95.90	1921.65	-2.30	18.96	-18.94	19.10	96.92	0.90	-0.42
20	2,016	2.30	109.00	2015.57	-3.12	22.70	-22.68	22.91	97.82	0.58	-0.11
21	2,111	2.00	129.10	2110.50	-4.78	25.79	-25.76	26.23	100.51	0.85	-0.32
22	2,207	2.40	131.00	2206.43	-7.16	28.60	-28.56	29.49	104.05	0.42	0.42
23	2,302	0.50	109.10	2301.40	-8.60	30.50	-30.44	31.69	105.75	2.05	-2.00
24	2,397	0.30	18.30	2396.40	-8.50	30.97	-30.91	32.11	105.35	0.62	-0.21
25	2,460	0.30	340.40	2459.40	-8.19	30.96	-30.91	32.03	104.81	0.31	0.00
26	2,598	0.30	295.70	2597.39	-7.69	30.52	-30.47	31.47	104.14	0.17	0.00
27	2,678	1.50	337.00	2677.38	-6.63	29.92	-29.88	30.65	102.50	1.61	1.50
28	2,773	3.10	339.30	2772.30	-3.09	28.52	-28.50	28.69	96.18	1.69	1.68
29	2,868	4.50	348.70	2867.09	2.97	26.89	-26.90	27.05	83.69	1.61	1.47
30	2,964	4.60	349.40	2962.79	10.45	25.44	-25.51	27.50	67.67	0.12	0.10
31	3,059	4.40	350.80	3057.50	17.79	24.16	-24.27	30.00	53.63	0.24	-0.21
32	3,154	4.10	352.40	3152.24	24.75	23.13	-23.28	33.87	43.05	0.34	-0.32
33	3,249	3.80	350.90	3247.01	31.23	22.18	-22.37	38.30	35.38	0.33	-0.32

V09.04.02

Company:	Matador Production Company		
Well Name:	Brantley State COM 13-24S-27E RB 211H		
Location:	Eddy County, NM		
Rig:	Patterson #810	Magnetic Declination:	7.10
Job Number:	DDMO-180336		
API #:	30-015-44743		

Vertical Section Azimuth:	269.64	Proposed Direction:	269.64
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	14,388	90.6	265.7	9267.97	73.06	-5315.89	5315.33

#	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	3,344	4.50	337.30	3341.76	37.78	20.24	-20.48	42.86	28.18	1.27	0.74
35	3,535	4.70	336.40	3532.15	51.86	14.22	-14.54	53.77	15.33	0.11	0.10
36	3,725	4.40	331.90	3721.55	65.42	7.67	-8.08	65.87	6.69	0.25	-0.16
37	3,916	4.40	333.10	3911.99	78.42	0.90	-1.40	78.42	0.66	0.05	0.00
38	4,106	4.30	337.50	4101.44	91.50	-5.12	4.55	91.64	356.80	0.18	-0.05
39	4,297	3.70	336.00	4291.97	103.74	-10.37	9.72	104.26	354.29	0.32	-0.31
40	4,487	3.90	337.00	4481.56	115.29	-15.39	14.66	116.31	352.40	0.11	0.11
41	4,677	3.30	321.90	4671.18	125.54	-21.29	20.50	127.34	350.38	0.59	-0.32
42	4,868	2.80	318.60	4861.91	133.37	-27.76	26.92	136.23	348.24	0.28	-0.26
43	5,057	2.20	308.80	5050.73	139.10	-33.64	32.77	143.12	346.40	0.39	-0.32
44	5,247	2.50	299.90	5240.57	143.46	-40.08	39.17	148.95	344.39	0.25	0.16
45	5,436	0.30	246.60	5429.51	145.31	-44.10	43.19	151.86	343.12	1.23	-1.16
46	5,626	0.90	221.30	5619.50	144.00	-45.55	44.64	151.03	342.45	0.34	0.32
47	5,814	0.70	194.00	5807.48	141.77	-46.80	45.91	149.30	341.73	0.23	-0.11
48	6,004	0.80	187.90	5997.46	139.33	-47.26	46.39	147.13	341.26	0.07	0.05
49	6,194	1.80	7.60	6187.44	140.98	-47.05	46.16	148.62	341.54	1.37	0.53
50	6,385	1.20	329.80	6378.38	145.68	-47.66	46.74	153.28	341.88	0.59	-0.31
51	6,574	1.50	275.50	6567.33	147.63	-51.12	50.19	156.23	340.90	0.67	0.16
52	6,765	0.40	53.10	6758.31	148.27	-53.07	52.14	157.48	340.31	0.95	-0.58
53	6,955	0.20	245.90	6948.31	148.53	-52.84	51.91	157.65	340.42	0.31	-0.11
54	7,145	0.30	225.20	7138.31	148.04	-53.50	52.57	157.41	340.13	0.07	0.05
55	7,335	1.00	67.70	7328.30	148.32	-52.32	51.39	157.28	340.57	0.67	0.37
56	7,525	1.50	78.60	7518.26	149.44	-48.35	47.41	157.07	342.07	0.29	0.26
57	7,716	0.50	108.30	7709.23	149.67	-45.11	44.16	156.32	343.23	0.57	-0.52
58	7,906	0.60	121.10	7899.22	148.90	-43.47	42.53	155.12	343.73	0.08	0.05
59	8,096	0.90	152.70	8089.20	147.06	-41.93	41.01	152.92	344.09	0.26	0.16
60	8,287	2.80	132.20	8280.10	142.59	-37.79	36.89	147.52	345.16	1.04	0.99
61	8,476	2.40	119.20	8468.90	137.56	-30.91	30.05	140.99	347.34	0.38	-0.21
62	8,667	1.00	109.50	8659.81	135.05	-25.85	25.00	137.51	349.16	0.75	-0.73
63	8,741	1.10	101.80	8733.80	134.69	-24.55	23.70	136.91	349.67	0.23	0.14
64	8,869	9.60	268.30	8861.26	134.12	-34.04	33.20	138.38	345.76	8.34	6.64
65	8,917	14.80	275.20	8908.16	134.56	-44.15	43.31	141.62	341.83	11.23	10.83
66	8,964	23.20	271.60	8952.57	135.37	-59.41	58.56	147.83	336.30	18.04	17.87
67	9,012	32.10	268.80	8995.04	135.36	-81.66	80.81	158.09	328.90	18.73	18.54

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Rig:		Patterson #810					Magnetic Declination:		7.10		REFERENCED TO GRID NORTH ▼			
Job Number:		DDMO-180336												
API #:		30-015-44743												
Vertical Section Azimuth:					269.64		Proposed Direction:		269.64					
Survey Calculation Method:					Minimum Curvature									
PTB:	MD		INC		AZM		TVD		N/S		E/W		VS	
	14,388		90.6		265.7		9267.97		73.06		-5315.89		5315.33	
#	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	9,059	35.70	269.10	9034.05	134.89	-107.86	107.02	172.71	321.35	7.67	7.66			
69	9,107	39.20	270.20	9072.15	134.72	-137.05	136.20	192.17	314.51	7.42	7.29			
70	9,154	43.60	269.60	9107.39	134.66	-168.12	167.27	215.40	308.69	9.40	9.36			
71	9,202	48.20	270.10	9140.79	134.57	-202.58	201.73	243.20	303.60	9.61	9.58			
72	9,249	51.40	270.50	9171.12	134.76	-238.47	237.62	273.92	299.47	6.84	6.81			
73	9,297	54.40	272.20	9200.07	135.68	-276.74	275.88	308.21	296.12	6.86	6.25			
74	9,344	56.40	274.70	9226.76	138.01	-315.35	314.48	344.23	293.64	6.11	4.26			
75	9,392	59.60	275.90	9252.20	141.78	-355.87	354.98	383.08	291.72	7.00	6.67			
76	9,439	64.90	275.90	9274.07	146.06	-397.23	396.31	423.23	290.19	11.28	11.28			
77	9,487	68.50	276.10	9293.06	150.66	-441.07	440.12	466.09	288.86	7.51	7.50			
78	9,535	69.10	274.10	9310.42	154.64	-485.64	484.66	509.67	287.66	4.08	1.25			
79	9,589	68.90	272.80	9329.77	157.67	-535.96	534.96	558.67	286.39	2.28	-0.37			
80	9,714	77.90	270.20	9365.45	160.74	-655.58	654.56	675.00	283.78	7.47	7.20			
81	9,761	80.30	268.80	9374.34	160.34	-701.72	700.70	719.81	282.87	5.88	5.11			
82	9,808	82.40	268.30	9381.40	159.16	-748.17	747.16	764.91	282.01	4.59	4.47			
83	9,855	84.50	268.80	9386.77	157.98	-794.85	793.84	810.40	281.24	4.59	4.47			
84	9,949	87.90	268.80	9392.99	156.02	-888.61	887.61	902.20	279.96	3.62	3.62			
85	10,043	90.10	269.40	9394.63	154.54	-982.57	981.58	994.65	278.94	2.43	2.34			
86	10,137	91.90	269.50	9392.99	153.64	-1076.55	1075.57	1087.46	278.12	1.92	1.91			
87	10,231	92.50	269.10	9389.39	152.49	-1170.47	1169.49	1180.37	277.42	0.77	0.64			
88	10,326	92.70	269.10	9385.08	151.00	-1265.37	1264.39	1274.34	276.81	0.21	0.21			
89	10,418	93.60	269.00	9380.02	149.48	-1357.21	1356.25	1365.42	276.28	0.98	0.98			
90	10,514	93.30	269.40	9374.24	148.14	-1453.03	1452.07	1460.56	275.82	0.52	-0.31			
91	10,608	92.80	270.30	9369.24	147.89	-1546.89	1545.93	1553.95	275.46	1.09	-0.53			
92	10,702	92.60	270.90	9364.81	148.88	-1640.78	1639.82	1647.52	275.18	0.67	-0.21			
93	10,796	91.20	272.80	9361.70	151.91	-1734.68	1733.69	1741.32	275.00	2.51	-1.49			
94	10,890	91.00	272.70	9359.89	156.42	-1828.55	1827.53	1835.23	274.89	0.24	-0.21			
95	10,984	90.70	272.60	9358.50	160.77	-1922.44	1921.39	1929.15	274.78	0.34	-0.32			
96	11,078	90.30	272.00	9357.68	164.54	-2016.36	2015.29	2023.06	274.67	0.77	-0.43			
97	11,172	89.50	272.00	9357.84	167.82	-2110.30	2109.21	2116.96	274.55	0.85	-0.85			
98	11,266	89.60	271.60	9358.58	170.77	-2204.25	2203.14	2210.86	274.43	0.44	0.11			
99	11,360	89.20	271.20	9359.56	173.07	-2298.22	2297.09	2304.73	274.31	0.60	-0.43			
100	11,454	88.80	271.10	9361.21	174.95	-2392.19	2391.04	2398.58	274.18	0.44	-0.43			
101	11,548	90.40	271.90	9361.86	177.41	-2486.15	2484.98	2492.47	274.08	1.90	1.70			

V09.04.02

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Location:	Eddy County, NM		
Rig:	Patterson #810	Magnetic Declination:	7.10
Job Number:	DDMO-180336		REFERENCED TO GRID NORTH
API #:	30-015-44743		

Vertical Section Azimuth:	269.64	Proposed Direction:	269.64
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	14,388	90.6	265.7	9267.97	73.06	-5315.89	5315.33

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
102	11,642	95.60	269.90	9356.94	178.89	-2579.97	2578.80	2586.16	273.97	5.93	5.53
103	11,736	96.50	270.10	9347.04	178.89	-2673.45	2672.27	2679.42	273.83	0.98	0.96
104	11,831	97.10	270.90	9335.79	179.71	-2767.77	2766.59	2773.60	273.72	1.05	0.63
105	11,925	98.00	271.10	9323.44	181.34	-2860.94	2859.75	2866.68	273.63	0.98	0.96
106	12,019	96.90	273.10	9311.25	184.76	-2954.08	2952.86	2959.85	273.58	2.41	-1.17
107	12,113	94.90	273.20	9301.59	189.90	-3047.44	3046.18	3053.35	273.57	2.13	-2.13
108	12,207	94.40	271.70	9293.96	193.90	-3141.04	3139.76	3147.02	273.53	1.68	-0.53
109	12,302	93.00	271.10	9287.83	196.22	-3235.81	3234.51	3241.75	273.47	1.60	-1.47
110	12,396	92.90	271.90	9283.00	198.67	-3329.65	3328.34	3335.57	273.41	0.86	-0.11
111	12,490	91.20	270.10	9279.63	200.31	-3423.57	3422.24	3429.42	273.35	2.63	-1.81
112	12,585	89.10	269.50	9279.39	199.98	-3518.56	3517.24	3524.24	273.25	2.30	-2.21
113	12,679	87.80	269.70	9281.93	199.32	-3612.52	3611.20	3618.02	273.16	1.40	-1.38
114	12,773	88.40	269.30	9285.04	198.50	-3706.47	3705.15	3711.78	273.07	0.77	0.64
115	12,868	87.00	266.80	9288.86	195.28	-3801.33	3800.02	3806.34	272.94	3.01	-1.47
116	12,961	88.80	264.40	9292.27	188.14	-3893.98	3892.72	3898.52	272.77	3.22	1.94
117	13,055	90.40	264.60	9292.92	179.14	-3987.54	3986.34	3991.56	272.57	1.72	1.70
118	13,150	90.20	265.10	9292.42	170.61	-4082.16	4081.00	4085.72	272.39	0.57	-0.21
119	13,244	92.20	265.90	9290.46	163.24	-4175.84	4174.73	4179.03	272.24	2.29	2.13
120	13,338	92.20	265.00	9286.85	155.78	-4269.47	4268.41	4272.32	272.09	0.96	0.00
121	13,432	91.20	265.00	9284.06	147.59	-4363.07	4362.06	4365.57	271.94	1.06	-1.06
122	13,526	90.00	264.80	9283.07	139.24	-4456.70	4455.73	4458.87	271.79	1.29	-1.28
123	13,621	88.90	265.10	9283.99	130.88	-4551.32	4550.41	4553.20	271.65	1.20	-1.16
124	13,715	91.20	265.30	9283.90	123.01	-4644.98	4644.12	4646.61	271.52	2.46	2.45
125	13,810	91.60	265.10	9281.58	115.07	-4739.62	4738.81	4741.02	271.39	0.47	0.42
126	13,904	92.60	265.80	9278.14	107.61	-4833.26	4832.49	4834.46	271.28	1.30	1.06
127	13,998	91.70	266.20	9274.61	101.06	-4926.97	4926.23	4928.00	271.18	1.05	-0.96
128	14,093	91.40	265.80	9272.04	94.44	-5021.70	5021.01	5022.59	271.08	0.53	-0.32
129	14,187	90.80	266.10	9270.24	87.80	-5115.45	5114.79	5116.20	270.98	0.71	-0.64
130	14,281	90.60	265.70	9269.09	81.08	-5209.20	5208.59	5209.83	270.89	0.48	-0.21
PTB:	14,388	90.60	265.70	9267.97	73.06	-5315.89	5315.33	5316.39	270.79	0.00	0.00