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MS Directional Survey Data Certification

MS Directional Job Number: DDMO-180630
Survey Type: MWD
Operating Company: Matador Production Company
Well Name & Number: Leslie FED COM 214H
Location: Lea County, NM
API Number: 30-025-44332
Tie In Depth: Surface
Surveyed Depths: 198' – 17,172' MD
Projected TD Survey: 17,231' MD
Dates Performed: 06/26/2018 – 07/25/2018

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: Nathaniel LeBlanc
MWD Surveyor Name: Nate LeBlanc
Date: 08-09-2018
Email: nleblanc@msdir.com

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SURVEY CALCULATION PROGRAM

8/9/18 15:06

VO9.04.02

Company:	Matador Production Company		
Well Name:	Leslie FED COM 214H		
Location:	Lea County, NM		
Rig:	Patterson #282	Magnetic Declination:	6.32
Job Number:	DDMO-180630		REFERENCED TO GRID NORTH
API #:	30-025-44332		
Vertical Section Azimuth:	359.49	Proposed Direction:	359.49

Survey Calculation Method:	Minimum Curvature						
PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	17,231	89	352.4	12482.42	4660.82	100.62	4659.74

#	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	198	0.50	177.10	198.00	-0.86	0.04	-0.86	0.86	177.10	0.25	0.25
2	380	0.90	188.00	379.98	-3.07	-0.12	-3.07	3.07	182.15	0.23	0.22
3	567	0.80	202.00	566.96	-5.74	-0.81	-5.73	5.79	188.02	0.12	-0.05
4	750	0.80	205.10	749.95	-8.08	-1.83	-8.06	8.28	192.76	0.02	0.00
5	906	1.80	181.70	905.90	-11.51	-2.36	-11.49	11.75	191.60	0.71	0.64
6	1,027	2.70	176.90	1026.81	-16.26	-2.27	-16.24	16.42	187.93	0.76	0.74
7	1,215	2.30	169.30	1214.63	-24.39	-1.33	-24.37	24.42	183.11	0.28	-0.21
8	1,404	2.50	148.20	1403.47	-31.62	1.55	-31.63	31.65	177.19	0.48	0.11
9	1,591	2.50	140.70	1590.29	-38.24	6.28	-38.29	38.75	170.67	0.17	0.00
10	1,780	2.70	136.30	1779.10	-44.65	11.97	-44.75	46.22	164.99	0.15	0.11
11	1,969	3.00	142.50	1967.86	-51.79	18.06	-51.95	54.85	160.78	0.23	0.16
12	2,158	2.90	139.60	2156.61	-59.35	24.16	-59.57	64.08	157.85	0.10	-0.05
13	2,347	2.70	133.30	2345.39	-66.05	30.50	-66.32	72.75	155.21	0.19	-0.11
14	2,536	2.70	129.60	2534.18	-71.94	37.17	-72.27	80.97	152.67	0.09	0.00
15	2,724	3.20	166.80	2721.94	-79.87	41.78	-80.24	90.14	152.38	1.03	0.27
16	2,913	2.90	160.70	2910.68	-89.52	44.57	-89.91	100.00	153.53	0.23	-0.16
17	3,102	2.70	147.90	3099.45	-97.80	48.51	-98.23	109.17	153.62	0.35	-0.11
18	3,290	1.80	126.20	3287.31	-103.30	53.25	-103.77	116.21	152.73	0.65	-0.48
19	3,477	3.10	124.00	3474.14	-107.86	59.81	-108.39	123.33	150.99	0.70	0.70
20	3,666	3.40	125.50	3662.83	-113.97	68.61	-114.58	133.03	148.95	0.16	0.16
21	3,856	3.30	137.60	3852.51	-121.28	76.89	-121.96	143.60	147.63	0.38	-0.05
22	4,044	2.60	140.30	4040.26	-128.56	83.26	-129.29	153.16	147.07	0.38	-0.37
23	4,233	3.20	156.30	4229.02	-136.69	88.12	-137.47	162.63	147.19	0.53	0.32
24	4,422	2.70	144.40	4417.77	-145.14	92.83	-145.96	172.28	147.40	0.42	-0.26
25	4,610	3.80	160.00	4605.47	-154.59	97.54	-155.45	182.79	147.75	0.75	0.59
26	4,799	1.70	121.80	4794.25	-161.96	102.06	-162.86	191.43	147.78	1.42	-1.11
27	4,989	4.20	131.40	4983.99	-168.04	109.68	-169.01	200.67	146.87	1.34	1.32
28	5,177	3.10	155.50	5171.61	-177.22	116.95	-178.26	212.33	146.58	0.99	-0.59
29	5,365	2.20	163.20	5359.41	-185.30	120.10	-186.36	220.82	147.05	0.51	-0.48
30	5,416	2.20	154.50	5410.37	-187.12	120.81	-188.19	222.73	147.15	0.65	0.00
31	5,656	1.50	155.90	5650.25	-194.15	124.07	-195.24	230.41	147.42	0.29	-0.29
32	5,845	3.00	146.80	5839.10	-200.55	127.79	-201.67	237.80	147.49	0.81	0.79
33	6,035	3.30	173.70	6028.82	-210.14	131.11	-211.30	247.69	148.04	0.79	0.16



SURVEY CALCULATION PROGRAM

8/9/18 15:06

V09.04.02

Company:		Matador Production Company												
Well Name:		Leslie FED COM 214H												
Location:		Lea County, NM												
Rlg:		Patterson #282			Magnetic Declination:		6.32		REFERENCED TO GRID NORTH					
Job Number:		DDMO-180630												
API #:		30-025-44332												
Vertical Section Azimuth:				359.49		Proposed Direction:		359.49						
Survey Calculation Method:				Minimum Curvature										
PTB:	MD		INC		AZM		TVD		N/S		E/W		VS	
	17,231		89		352.4		12482.42		4660.82		100.62		4659.74	
#	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	6,224	2.80	164.60	6217.55	-220.00	132.94	-221.17	257.04	148.86	0.37	-0.26			
35	6,412	2.70	160.00	6405.34	-228.59	135.67	-229.79	265.82	149.31	0.13	-0.05			
36	6,601	2.70	164.10	6594.13	-237.05	138.41	-238.27	274.50	149.72	0.10	0.00			
37	6,791	2.70	158.70	6783.92	-245.52	141.26	-246.77	283.26	150.09	0.13	0.00			
38	6,979	2.60	155.50	6971.71	-253.53	144.64	-254.81	291.89	150.29	0.09	-0.05			
39	7,168	2.60	150.00	7160.52	-261.14	148.56	-262.46	300.44	150.36	0.13	0.00			
40	7,357	2.60	145.00	7349.33	-268.37	153.16	-269.72	309.00	150.29	0.12	0.00			
41	7,547	2.90	182.30	7539.12	-276.70	155.44	-278.07	317.37	150.67	0.94	0.16			
42	7,735	2.80	189.00	7726.89	-285.99	154.53	-287.35	325.07	151.62	0.18	-0.05			
43	7,925	2.50	183.20	7916.69	-294.71	153.58	-296.06	332.32	152.48	0.21	-0.16			
44	8,113	2.10	170.10	8104.54	-302.20	153.94	-303.55	339.15	153.01	0.35	-0.21			
45	8,301	1.60	152.40	8292.44	-307.92	155.75	-309.29	345.06	153.17	0.40	-0.27			
46	8,490	2.30	155.90	8481.33	-313.72	158.52	-315.11	351.49	153.19	0.38	0.37			
47	8,679	2.70	155.80	8670.15	-321.24	161.89	-322.67	359.73	153.25	0.21	0.21			
48	8,869	2.80	156.90	8859.93	-329.59	165.55	-331.05	368.83	153.33	0.06	0.05			
49	9,058	1.50	123.80	9048.80	-335.21	169.42	-336.71	375.59	153.19	0.92	-0.69			
50	9,248	1.50	62.20	9238.75	-335.44	173.68	-336.97	377.73	152.63	0.81	0.00			
51	9,436	0.70	182.50	9426.72	-335.43	175.81	-336.99	378.72	152.34	1.04	-0.43			
52	9,624	0.40	203.30	9614.72	-337.18	175.50	-338.73	380.12	152.50	0.19	-0.16			
53	9,812	0.20	300.00	9802.71	-337.62	174.95	-339.17	380.26	152.61	0.25	-0.11			
54	10,000	0.30	58.40	9990.71	-337.20	175.09	-338.75	379.95	152.56	0.23	0.05			
55	10,188	1.00	86.30	10178.70	-336.84	177.15	-338.40	380.58	152.26	0.40	0.37			
56	10,378	1.30	121.80	10368.66	-337.87	180.63	-339.46	383.12	151.87	0.40	0.16			
57	10,567	1.20	98.30	10557.62	-339.28	184.41	-340.91	386.16	151.47	0.27	-0.05			
58	10,756	1.50	99.70	10746.57	-339.98	188.81	-341.65	388.89	150.95	0.16	0.16			
59	10,944	0.70	153.80	10934.54	-341.43	191.74	-343.12	391.59	150.68	0.65	-0.43			
60	11,133	2.80	239.40	11123.45	-344.82	188.28	-346.48	392.87	151.36	1.50	1.11			
61	11,322	3.20	271.70	11312.21	-347.01	179.03	-348.59	390.47	152.71	0.91	0.21			
62	11,510	2.10	265.90	11500.00	-347.10	170.35	-348.60	386.65	153.86	0.60	-0.59			
63	11,699	1.70	313.90	11688.91	-345.40	164.88	-346.86	382.74	154.48	0.84	-0.21			
64	11,851	0.40	309.00	11840.88	-343.51	162.84	-344.94	380.15	154.64	0.86	-0.86			
65	11,921	2.70	350.10	11910.85	-341.73	162.37	-343.16	378.34	154.59	3.45	3.29			
66	11,968	10.00	359.10	11957.53	-336.55	162.11	-337.98	373.56	154.28	15.63	15.53			
67	12,015	16.60	1.80	12003.25	-325.75	162.26	-327.18	363.92	153.52	14.10	14.04			



SURVEY CALCULATION PROGRAM

8/9/18 15:06

V09.04.02

Company:	Matador Production Company
Well Name:	Leslie FED COM 214H
Location:	Lea County, NM
Rig:	Patterson #282
Job Number:	DDMO-180630
API #:	30-025-44332

Magnetic Declination:	6.32	REFERENCED TO GRID NORTH
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Vertical Section Azimuth:	359.49	Proposed Direction:	359.49
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	17,231	89	352.4	12482.42	4660.82	100.62	4659.74

#	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	12,062	22.20	5.30	12047.56	-310.18	163.29	-311.62	350.54	152.24	12.16	11.91
69	12,111	25.70	5.00	12092.34	-290.38	165.07	-291.83	334.02	150.38	7.15	7.14
70	12,158	31.20	0.30	12133.65	-268.03	166.02	-269.50	315.28	148.22	12.63	11.70
71	12,205	34.50	354.50	12173.14	-242.59	164.81	-244.05	293.28	145.81	9.69	7.02
72	12,252	36.00	354.50	12211.52	-215.59	162.21	-217.03	269.80	143.04	3.19	3.19
73	12,299	39.30	356.80	12248.73	-186.97	160.06	-188.39	246.12	139.44	7.63	7.02
74	12,346	45.00	359.50	12283.56	-155.47	159.08	-156.88	222.43	134.34	12.72	12.13
75	12,394	49.10	1.30	12316.26	-120.34	159.34	-121.76	199.68	127.06	8.97	8.54
76	12,441	52.60	0.70	12345.93	-83.91	159.97	-85.33	180.64	117.68	7.51	7.45
77	12,488	55.50	359.60	12373.52	-45.87	160.07	-47.29	166.51	105.99	6.45	6.17
78	12,535	58.70	358.20	12399.05	-6.42	159.30	-7.84	159.43	92.31	7.25	6.81
79	12,583	61.00	358.10	12423.16	35.06	157.96	33.66	161.81	77.48	4.80	4.79
80	12,630	62.90	359.70	12445.26	76.53	157.17	75.13	174.81	64.04	5.04	4.04
81	12,677	69.20	359.20	12464.33	119.46	156.75	118.06	197.09	52.69	13.44	13.40
82	12,724	75.50	1.70	12478.57	164.22	157.12	162.82	227.28	43.73	14.33	13.40
83	12,811	82.70	1.60	12495.01	249.56	159.58	248.13	296.22	32.60	8.28	8.28
84	12,858	88.30	360.00	12498.70	296.39	160.23	294.95	336.93	28.40	12.39	11.91
85	12,953	93.10	356.30	12497.54	391.29	157.17	389.88	421.67	21.88	6.38	5.05
86	13,047	91.00	356.20	12494.18	485.02	151.02	483.66	507.99	17.30	2.24	-2.23
87	13,141	91.70	358.80	12491.96	578.90	146.92	577.57	597.25	14.24	2.86	0.74
88	13,236	91.20	359.80	12489.56	673.86	145.76	672.54	689.44	12.21	1.18	-0.53
89	13,330	89.30	0.90	12489.15	767.85	146.34	766.52	781.67	10.79	2.34	-2.02
90	13,424	89.90	1.20	12489.80	861.83	148.06	860.48	874.46	9.75	0.71	0.64
91	13,519	91.20	1.90	12488.89	956.79	150.63	955.41	968.58	8.95	1.55	1.37
92	13,613	90.70	3.30	12487.33	1050.68	154.89	1049.26	1062.03	8.39	1.58	-0.53
93	13,707	93.50	4.80	12483.89	1144.37	161.53	1142.89	1155.71	8.03	3.38	2.98
94	13,802	91.50	3.30	12479.75	1239.03	168.23	1237.49	1250.40	7.73	2.63	-2.11
95	13,896	88.70	359.80	12479.58	1332.98	170.77	1331.40	1343.87	7.30	4.77	-2.98
96	13,990	88.20	359.80	12482.12	1426.94	170.44	1425.37	1437.08	6.81	0.53	-0.53
97	14,085	89.60	358.90	12483.95	1521.91	169.36	1520.35	1531.31	6.35	1.75	1.47
98	14,180	92.50	358.40	12482.21	1616.86	167.13	1615.31	1625.48	5.90	3.10	3.05
99	14,274	91.70	357.10	12478.76	1710.72	163.44	1709.20	1718.51	5.46	1.62	-0.85
100	14,368	91.80	356.60	12475.89	1804.54	158.28	1803.06	1811.46	5.01	0.54	0.11
101	14,463	92.00	357.00	12472.74	1899.34	152.98	1897.90	1905.49	4.60	0.47	0.21



SURVEY CALCULATION PROGRAM

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V09.04.02

Company:	Matador Production Company		
Well Name:	Leslie FED COM 214H		
Location:	Lea County, NM		
Rig:	Patterson #282	Magnetic Declination:	6.32
Job Number:	DDMO-180630		
API #:	30-025-44332		
Vertical Section Azimuth:	359.49	Proposed Direction:	359.49

REFERENCED TO GRID NORTH

Survey Calculation Method:		Minimum Curvature									
PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	17,231	89	352.4	12482.42	4660.82	100.62	4659.74				
#	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	14,558	92.20	357.00	12469.26	1994.14	148.01	1992.75	1999.63	4.24	0.21	0.21
103	14,652	90.70	356.50	12466.88	2087.96	142.68	2086.60	2092.83	3.91	1.68	-1.60
104	14,746	91.40	357.00	12465.16	2181.79	137.35	2180.48	2186.11	3.60	0.92	0.74
105	14,841	88.80	352.90	12464.99	2276.39	128.99	2275.15	2280.04	3.24	5.11	-2.74
106	14,935	87.70	350.50	12467.87	2369.36	115.43	2368.23	2372.17	2.79	2.81	-1.17
107	15,029	92.20	355.50	12467.95	2462.60	103.98	2461.58	2464.80	2.42	7.16	4.79
108	15,123	94.00	358.80	12462.86	2556.33	99.31	2555.35	2558.26	2.22	3.99	1.91
109	15,217	94.20	358.80	12456.14	2650.07	97.35	2649.10	2651.86	2.10	0.21	0.21
110	15,311	95.10	359.40	12448.52	2743.75	95.88	2742.79	2745.42	2.00	1.15	0.96
111	15,406	92.10	0.70	12442.56	2838.55	95.96	2837.58	2840.17	1.94	3.44	-3.16
112	15,500	91.50	0.30	12439.60	2932.50	96.78	2931.52	2934.09	1.89	0.77	-0.64
113	15,594	89.20	1.10	12439.03	3026.48	97.93	3025.49	3028.07	1.85	2.59	-2.45
114	15,689	87.90	1.40	12441.43	3121.43	100.00	3120.41	3123.03	1.83	1.40	-1.37
115	15,783	89.00	0.30	12443.98	3215.38	101.39	3214.35	3216.98	1.81	1.65	1.17
116	15,878	89.50	0.30	12445.22	3310.37	101.89	3309.33	3311.94	1.76	0.53	0.53
117	15,973	90.20	0.60	12445.47	3405.36	102.64	3404.32	3406.91	1.73	0.80	0.74
118	16,067	87.30	2.20	12447.52	3499.30	104.93	3498.23	3500.87	1.72	3.52	-3.09
119	16,161	86.80	1.70	12452.36	3593.12	108.13	3592.02	3594.75	1.72	0.75	-0.53
120	16,255	90.50	2.20	12454.57	3687.02	111.33	3685.89	3688.70	1.73	3.97	3.94
121	16,349	90.50	2.80	12453.75	3780.93	115.43	3779.75	3782.69	1.75	0.64	0.00
122	16,444	86.60	1.60	12456.15	3875.81	119.07	3874.60	3877.64	1.76	4.30	-4.11
123	16,538	88.70	2.00	12460.01	3969.68	122.02	3968.44	3971.55	1.76	2.27	2.23
124	16,632	85.80	1.00	12464.52	4063.53	124.48	4062.26	4065.43	1.75	3.26	-3.09
125	16,727	87.00	1.40	12470.48	4158.32	126.47	4157.03	4160.24	1.74	1.33	1.26
126	16,821	88.50	0.20	12474.17	4252.23	127.78	4250.93	4254.15	1.72	2.04	1.60
127	16,915	88.50	358.80	12476.63	4346.19	126.96	4344.89	4348.05	1.67	1.49	0.00
128	17,010	89.00	356.80	12478.71	4441.10	123.31	4439.82	4442.81	1.59	2.17	0.53
129	17,104	89.10	354.50	12480.27	4534.81	116.18	4533.59	4536.29	1.47	2.45	0.11
130	17,172	89.00	352.40	12481.39	4602.35	108.43	4601.20	4603.63	1.35	3.09	-0.15
PTB:	17,231	89.00	352.40	12482.42	4660.82	100.62	4659.74	4661.91	1.24	0.00	0.00