



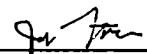
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MS Directional Survey Data Certification

MS Directional Job Number: MSMO-60705
Survey Type: MWD
Operating Company: Matador Production Co.
Well Name & Number: Irvin Wall State COM #133H
Location: Lea County, NM
API Number: 30-025-45431
Tie In Depth: Surface
Surveyed Depths: 177' – 16,701' MD
Projected TD Survey: 16,759' MD
Dates Performed: 01/09/2019 – 01/26/2019

HOBBS OCD
SEP 06 2019
RECEIVED

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: Jason Fulton

Date: 02-22-2019

Email: Jason.Fulton@msdir.com

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Company:	Matador Production Co.		
Well Name:	Irvin Wall State COM #133H		
Location:	Lea County, NM		
Rig:	Patterson #810	Magnetic Declination:	6.27
Job Number:	MSMO-60705		
API #:	30-025-45431		

Vertical Section Azimuth:	359.43	Proposed Direction:	359.43
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD		INC		AZM		TVD		N/S		E/W		VS	
	16,759		97.1		359.4		11651.35		4913.7		702.26		4906.47	
#	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	177	0.50	278.00	177.00	0.11	-0.76	0.12	0.77	278.00	0.28	0.28			
2	331	0.90	280.50	330.99	0.42	-2.62	0.45	2.65	279.14	0.26	0.26			
3	516	1.10	278.50	515.96	0.95	-5.80	1.01	5.88	279.28	0.11	0.11			
4	697	0.40	148.70	696.95	0.67	-7.19	0.74	7.23	275.29	0.77	-0.39			
5	882	0.90	143.40	881.94	-1.05	-5.99	-0.99	6.08	260.04	0.27	0.27			
6	973	0.50	146.50	972.93	-1.96	-5.35	-1.90	5.69	249.89	0.44	-0.44			
7	1,069	1.60	151.10	1068.91	-3.48	-4.47	-3.44	5.66	232.09	1.15	1.15			
8	1,164	3.10	140.00	1163.83	-6.61	-2.18	-6.59	6.96	198.22	1.64	1.58			
9	1,259	3.90	138.70	1258.65	-11.00	1.61	-11.02	11.12	171.69	0.85	0.84			
10	1,354	4.00	138.80	1353.42	-15.92	5.92	-15.98	16.99	159.60	0.11	0.11			
11	1,449	4.80	137.80	1448.14	-21.36	10.77	-21.47	23.93	153.23	0.85	0.84			
12	1,544	5.80	133.10	1542.74	-27.59	16.95	-27.75	32.38	148.43	1.15	1.05			
13	1,640	6.80	124.30	1638.16	-34.10	25.19	-34.35	42.40	143.55	1.45	1.04			
14	1,734	7.10	112.60	1731.47	-39.47	35.15	-39.82	52.85	138.32	1.54	0.32			
15	1,829	7.20	103.00	1825.74	-43.07	46.37	-43.53	63.28	132.89	1.26	0.11			
16	1,924	7.00	99.30	1920.01	-45.34	57.88	-45.92	73.53	128.07	0.53	-0.21			
17	2,114	5.90	105.20	2108.81	-49.77	78.73	-50.56	93.15	122.30	0.68	-0.58			
18	2,305	5.80	105.90	2298.81	-54.99	97.49	-55.96	111.93	119.43	0.06	-0.05			
19	2,495	6.10	107.60	2487.79	-60.67	116.34	-61.83	131.21	117.54	0.18	0.16			
20	2,685	6.10	108.00	2676.71	-66.85	135.57	-68.19	151.15	116.25	0.02	0.00			
21	2,876	6.10	108.80	2866.63	-73.25	154.83	-74.79	171.28	115.32	0.04	0.00			
22	3,066	6.00	114.00	3055.57	-80.55	173.45	-82.27	191.24	114.91	0.29	-0.05			
23	3,256	6.20	121.10	3244.50	-89.88	191.31	-91.78	211.37	115.17	0.41	0.11			
24	3,447	7.50	123.80	3434.13	-102.15	210.50	-104.24	233.98	115.89	0.70	0.68			
25	3,637	7.20	115.60	3622.58	-114.19	231.54	-116.49	258.17	116.25	0.57	-0.16			
26	3,827	7.20	105.60	3811.09	-122.54	253.75	-125.06	281.79	115.78	0.66	0.00			
27	4,017	7.20	102.90	3999.59	-128.40	276.83	-131.14	305.15	114.88	0.18	0.00			
28	4,208	4.50	85.50	4189.59	-130.48	295.97	-133.42	323.45	113.79	1.68	-1.41			
29	4,397	5.10	79.00	4377.93	-128.30	311.61	-131.39	336.98	112.38	0.43	0.32			
30	4,587	5.80	95.00	4567.08	-127.52	329.46	-130.79	353.28	111.16	0.88	0.37			
31	4,777	5.20	94.70	4756.20	-129.06	347.61	-132.52	370.79	110.37	0.32	-0.32			
32	4,967	5.10	94.90	4945.44	-130.49	364.60	-134.11	387.25	109.69	0.05	-0.05			
33	5,157	5.10	98.50	5134.68	-132.46	381.37	-136.25	403.72	109.15	0.17	0.00			

Company:	Matador Production Co.		
Well Name:	Irvin Wall State COM #133H		
Location:	Lea County, NM		
Rig:	Patterson #810	Magnetic Declination:	6.27
Job Number:	MSMO-60705		
API #:	30-025-45431		
Vertical Section Azimuth:	359.43	Proposed Direction:	359.43
Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	16,759	97.1	359.4	11651.35	4913.7	702.26	4906.47				
#	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	5,345	4.90	101.10	5321.97	-135.24	397.51	-139.19	419.89	108.79	0.16	-0.11
35	5,436	6.00	100.20	5412.56	-136.83	406.00	-140.86	428.44	108.62	1.21	1.21
36	5,626	7.00	101.50	5601.33	-140.90	427.12	-145.14	449.76	108.26	0.53	0.53
37	5,816	7.30	97.60	5789.86	-144.80	450.43	-149.28	473.14	107.82	0.30	0.16
38	6,006	7.10	95.00	5978.36	-147.42	474.10	-152.13	496.49	107.27	0.20	-0.11
39	6,196	6.30	88.30	6167.06	-148.14	496.22	-153.07	517.86	106.62	0.59	-0.42
40	6,387	6.60	86.70	6356.85	-147.20	517.65	-152.34	538.17	105.87	0.18	0.16
41	6,577	6.50	85.50	6545.61	-145.72	539.27	-151.08	558.61	105.12	0.09	-0.05
42	6,766	6.80	84.10	6733.34	-143.73	561.07	-149.31	579.18	104.37	0.18	0.16
43	6,957	7.10	95.60	6922.95	-143.72	584.06	-149.53	601.49	103.82	0.74	0.16
44	7,145	6.90	107.80	7109.56	-148.31	606.38	-154.33	624.25	103.74	0.80	-0.11
45	7,335	7.20	107.20	7298.12	-155.32	628.62	-161.56	647.52	103.88	0.16	0.16
46	7,525	6.80	105.10	7486.70	-161.77	650.85	-168.24	670.66	103.96	0.25	-0.21
47	7,714	6.10	100.60	7674.51	-166.53	671.53	-173.20	691.87	103.93	0.46	-0.37
48	7,904	4.80	100.30	7863.64	-169.81	689.27	-176.66	709.88	103.84	0.68	-0.68
49	8,093	4.10	110.00	8052.08	-173.54	703.40	-180.52	724.49	103.86	0.54	-0.37
50	8,283	3.10	106.60	8241.70	-177.33	714.71	-184.43	736.38	103.93	0.54	-0.53
51	8,473	2.40	90.20	8431.48	-178.81	723.61	-186.00	745.37	103.88	0.55	-0.37
52	8,663	1.10	82.20	8621.39	-178.57	729.40	-185.82	750.94	103.76	0.69	-0.68
53	8,854	1.40	157.30	8812.35	-180.48	732.11	-187.75	754.03	103.85	0.81	0.16
54	9,044	1.10	146.60	9002.31	-184.14	734.01	-191.44	756.76	104.08	0.20	-0.16
55	9,233	1.00	142.90	9191.28	-186.97	736.01	-194.28	759.38	104.25	0.06	-0.05
56	9,424	0.80	155.80	9382.25	-189.52	737.56	-196.85	761.52	104.41	0.15	-0.10
57	9,615	0.70	105.90	9573.24	-191.05	739.23	-198.40	763.52	104.49	0.33	-0.05
58	9,805	1.70	61.60	9763.20	-190.03	742.82	-197.41	766.74	104.35	0.68	0.53
59	9,996	0.90	257.40	9954.18	-189.01	743.85	-196.40	767.49	104.26	1.35	-0.42
60	10,186	1.20	258.90	10144.15	-189.72	740.44	-197.08	764.36	104.37	0.16	0.16
61	10,376	1.00	237.30	10334.11	-191.00	737.09	-198.32	761.44	104.53	0.24	-0.11
62	10,566	1.70	267.20	10524.06	-192.03	732.88	-199.31	757.62	104.68	0.51	0.37
63	10,756	4.50	299.50	10713.77	-188.50	723.58	-195.69	747.73	104.60	1.68	1.47
64	10,946	0.40	244.90	10903.57	-185.11	716.49	-192.23	740.01	104.49	2.25	-2.16
65	11,137	1.10	190.00	11094.55	-187.20	715.57	-194.30	739.65	104.66	0.49	0.37
66	11,233	0.70	208.15	11190.54	-188.62	715.13	-195.73	739.59	104.78	0.51	-0.42
67	11,329	3.30	354.60	11286.49	-186.39	714.59	-193.49	738.50	104.62	4.07	2.71

Company:	Matador Production Co.		
Well Name:	Irvin Wall State COM #133H		
Location:	Lea County, NM		
Rig:	Patterson #810	Magnetic Declination:	6.27
Job Number:	MSMO-60705		
API #:	30-025-45431		

REFERENCED TO GRID NORTH

Vertical Section Azimuth:	359.43	Proposed Direction:	359.43
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	16,759	97.1	359.4	11651.35	4913.7	702.26	4906.47

#	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	11,377	6.20	357.30	11334.32	-182.42	714.34	-189.52	737.26	104.33	6.06	6.04
69	11,424	10.10	4.10	11380.84	-175.77	714.52	-182.87	735.82	103.82	8.53	8.30
70	11,472	12.30	11.10	11427.93	-166.56	715.80	-173.67	734.92	103.10	5.38	4.58
71	11,519	17.10	15.60	11473.38	-154.98	718.62	-162.12	735.15	102.17	10.49	10.21
72	11,614	24.50	4.80	11562.15	-121.84	724.04	-129.04	734.22	99.55	8.74	7.79
73	11,662	29.70	359.70	11604.88	-100.01	724.81	-107.22	731.68	97.86	11.86	10.83
74	11,710	34.90	358.80	11645.43	-74.38	724.46	-81.58	728.27	95.86	10.88	10.83
75	11,758	41.60	359.00	11683.11	-44.68	723.89	-51.88	725.27	93.53	13.96	13.96
76	11,805	50.10	359.50	11715.82	-10.99	723.46	-18.19	723.55	90.87	18.10	18.09
77	11,853	57.30	359.90	11744.21	27.67	723.27	20.47	723.80	87.81	15.01	15.00
78	11,900	66.00	0.60	11766.51	68.99	723.46	61.79	726.74	84.55	18.56	18.51
79	11,995	79.00	2.00	11795.02	159.37	725.55	152.14	742.84	77.61	13.76	13.68
80	12,090	83.50	1.30	11809.47	253.20	728.25	245.94	771.01	70.83	4.79	4.74
81	12,186	86.50	2.50	11817.83	348.77	731.42	341.48	810.32	64.51	3.36	3.13
82	12,281	88.10	2.10	11822.31	443.58	735.23	436.25	858.68	58.90	1.74	1.68
83	12,376	87.50	2.00	11825.95	538.45	738.62	531.08	914.06	53.91	0.64	-0.63
84	12,471	87.60	2.00	11830.02	633.31	741.94	625.90	975.47	49.52	0.11	0.11
85	12,566	87.80	1.70	11833.83	728.18	745.00	720.74	1041.77	45.65	0.38	0.21
86	12,662	88.40	1.60	11837.01	824.09	747.76	816.61	1112.78	42.22	0.63	0.63
87	12,756	88.90	1.30	11839.23	918.03	750.14	910.52	1185.54	39.25	0.62	0.53
88	12,851	90.30	1.30	11839.89	1013.00	752.30	1005.47	1261.79	36.60	1.47	1.47
89	12,947	91.20	0.90	11838.63	1108.98	754.14	1101.42	1341.10	34.22	1.03	0.94
90	13,042	92.00	1.30	11835.98	1203.92	755.96	1196.34	1421.59	32.13	0.94	0.84
91	13,137	92.30	1.20	11832.42	1298.83	758.03	1291.23	1503.85	30.27	0.33	0.32
92	13,231	91.30	0.10	11829.46	1392.78	759.10	1385.16	1586.21	28.59	1.58	-1.06
93	13,326	91.90	0.10	11826.81	1487.74	759.26	1480.11	1670.28	27.04	0.63	0.63
94	13,421	91.00	359.90	11824.41	1582.71	759.26	1575.08	1755.40	25.63	0.97	-0.95
95	13,516	88.80	359.30	11824.57	1677.70	758.60	1670.07	1841.24	24.33	2.40	-2.32
96	13,612	89.10	359.40	11826.33	1773.68	757.51	1766.05	1928.67	23.13	0.33	0.31
97	13,705	89.50	359.30	11827.47	1866.66	756.46	1859.05	2014.11	22.06	0.44	0.43
98	13,801	89.80	359.50	11828.05	1962.66	755.45	1955.04	2103.03	21.05	0.38	0.31
99	13,896	90.80	359.70	11827.56	2057.65	754.79	2050.04	2191.72	20.14	1.07	1.05
100	13,991	91.40	359.90	11825.73	2152.63	754.46	2145.02	2281.02	19.31	0.67	0.63
101	14,086	92.30	359.90	11822.67	2247.58	754.29	2239.97	2370.78	18.55	0.95	0.95

Company:	Matador Production Co.		
Well Name:	Irvin Wall State COM #133H		
Location:	Lea County, NM		
Rig:	Patterson #810	Magnetic Declination:	6.27 REFERENCED TO GRID NORTH ▼
Job Number:	MSMO-60705		
API #:	30-025-45431		
Vertical Section Azimuth:	359.43	Proposed Direction:	359.43
Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	16,759	97.1	359.4	11651.35	4913.7	702.26	4906.47				
#	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	14,182	92.60	0.20	11818.56	2343.49	754.37	2335.87	2461.92	17.84	0.44	0.31
103	14,277	93.60	0.80	11813.42	2438.35	755.20	2430.72	2552.62	17.21	1.23	1.05
104	14,372	94.10	0.50	11807.05	2533.13	756.28	2525.48	2643.61	16.62	0.61	0.53
105	14,467	92.10	359.80	11801.91	2627.98	756.53	2620.33	2734.71	16.06	2.23	-2.11
106	14,562	92.10	359.90	11798.43	2722.92	756.28	2715.26	2825.99	15.52	0.11	0.00
107	14,657	92.40	358.40	11794.70	2817.83	754.87	2810.18	2917.19	15.00	1.61	0.32
108	14,752	93.30	357.90	11789.97	2912.67	751.81	2905.04	3008.13	14.47	1.08	0.95
109	14,848	94.60	357.90	11783.36	3008.37	748.30	3000.78	3100.04	13.97	1.35	1.35
110	14,943	94.00	357.30	11776.24	3103.02	744.33	3095.46	3191.04	13.49	0.89	-0.63
111	15,038	94.60	357.50	11769.12	3197.65	740.03	3190.13	3282.17	13.03	0.67	0.63
112	15,133	93.60	358.30	11762.32	3292.35	736.56	3284.85	3373.73	12.61	1.35	-1.05
113	15,228	94.00	358.20	11756.03	3387.09	733.67	3379.63	3465.64	12.22	0.43	0.42
114	15,323	92.90	358.30	11750.31	3481.87	730.77	3474.43	3557.73	11.85	1.16	-1.16
115	15,418	92.80	358.20	11745.59	3576.71	727.87	3569.29	3650.02	11.50	0.15	-0.11
116	15,513	93.50	358.10	11740.37	3671.52	724.81	3664.13	3742.38	11.17	0.74	0.74
117	15,609	93.80	358.20	11734.25	3767.27	721.72	3759.91	3835.78	10.85	0.33	0.31
118	15,704	94.50	358.30	11727.38	3861.98	718.82	3854.64	3928.31	10.54	0.74	0.74
119	15,799	93.30	358.20	11720.92	3956.71	715.93	3949.40	4020.96	10.26	1.27	-1.26
120	15,894	92.60	358.60	11716.03	4051.55	713.28	4044.25	4113.86	9.98	0.85	-0.74
121	15,989	92.70	359.20	11711.64	4146.43	711.46	4139.15	4207.03	9.74	0.64	0.11
122	16,084	92.50	359.30	11707.33	4241.32	710.22	4234.05	4300.38	9.51	0.24	-0.21
123	16,179	92.80	359.20	11702.94	4336.21	708.97	4328.95	4393.79	9.29	0.33	0.32
124	16,274	93.50	359.30	11697.72	4431.06	707.73	4423.80	4487.23	9.07	0.74	0.74
125	16,370	94.10	359.30	11691.35	4526.84	706.56	4519.59	4581.65	8.87	0.63	0.62
126	16,464	95.10	359.40	11683.81	4620.53	705.50	4613.29	4674.08	8.68	1.07	1.06
127	16,559	95.90	359.30	11674.71	4715.09	704.43	4707.85	4767.42	8.50	0.85	0.84
128	16,654	96.80	359.40	11664.20	4809.50	703.36	4802.26	4860.66	8.32	0.95	0.95
129	16,701	97.10	359.40	11658.51	4856.15	702.87	4848.92	4906.75	8.24	0.64	0.64
PTB:	16,759	97.10	359.40	11651.35	4913.70	702.26	4906.47	4963.63	8.13	0.00	0.00