

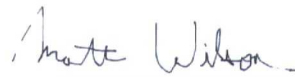
MS Energy Services Survey Data Certification

MS Energy Job Number: DDMO-170733
Survey Type: MWD
Operating Company: Devon Energy Production Co, LP
Well Name & Number: Arabian 30-19 Fed Com 2H
Location: Lea County, NM
API Number: 30-025-43773
Tie In Depth: Surface
Surveyed Depths: 183' – 17,731' MD
Projected TD Survey: 17,783' MD
Dates Performed: 07/28/2017 – 08/16/2017

HOBBS OCD
DEC 26 2017
RECEIVED

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

Digitally signed by:



MWD Surveyor Name:

Matt Wilson

Date:

09-10-2017

Email:

mwilson@msenergyservices.com

Company:	Devon Energy Production Co, LP				
Well Name:	Arabian 30-19 Fed Com 2H				
Location:	Lea County, NM				
Rig:	Cactus #126			Magnetic Declination:	6.75
Job Number:	DDMO-170733			REFERENCE	
API #:	30-025-43773				

Vertical Section Azimuth:	0.00	Proposed Direction:	0.00
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	INC	AZM	TVD	N/S	
	17,783	89.4	0.6	10479.41	7585.21	3.0

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Distance
TIE IN	0	0.00	0.00	0.00	0.00	0.00		
1	183	0.40	305.10	183.00	0.37	-0.52	0.37	0.64
2	276	0.10	355.50	276.00	0.63	-0.79	0.63	1.02
3	368	0.10	355.70	368.00	0.79	-0.81	0.79	1.13
4	461	0.40	264.70	461.00	0.85	-1.14	0.85	1.42
5	557	0.50	268.20	556.99	0.80	-1.89	0.80	2.05
6	646	0.60	268.00	645.99	0.77	-2.74	0.77	2.85
7	739	0.40	280.20	738.99	0.81	-3.55	0.81	3.64
8	831	0.60	266.60	830.98	0.84	-4.35	0.84	4.43
9	923	0.20	253.70	922.98	0.77	-4.98	0.77	5.04
10	1,075	0.20	8.90	1074.98	0.96	-5.19	0.96	5.28
11	1,167	1.30	344.00	1166.97	2.12	-5.46	2.12	5.85
12	1,258	0.60	332.50	1257.96	3.53	-5.96	3.53	6.93
13	1,351	1.00	337.00	1350.95	4.71	-6.50	4.71	8.03
14	1,442	0.80	343.80	1441.94	6.05	-6.99	6.05	9.25
15	1,534	1.20	344.40	1533.92	7.60	-7.43	7.60	10.63
16	1,626	1.00	347.10	1625.91	9.31	-7.87	9.31	12.19
17	1,719	0.80	346.20	1718.89	10.73	-8.20	10.73	13.51
18	1,813	0.60	351.50	1812.89	11.85	-8.43	11.85	14.55
19	1,907	0.60	353.70	1906.88	12.83	-8.56	12.83	15.42
20	2,001	0.30	4.90	2000.88	13.56	-8.59	13.56	16.06
21	2,095	0.20	15.30	2094.88	13.97	-8.53	13.97	16.37
22	2,190	0.10	12.10	2189.88	14.21	-8.47	14.21	16.54
23	2,284	1.00	109.10	2283.87	14.02	-7.67	14.02	15.98
24	2,378	0.30	101.20	2377.87	13.70	-6.66	13.70	15.24
25	2,472	1.50	150.00	2471.85	12.59	-5.80	12.59	13.86
26	2,566	0.00	139.80	2565.84	11.53	-5.19	11.53	12.64
27	2,660	1.50	201.00	2659.83	10.38	-5.63	10.38	11.80
28	2,754	0.90	238.40	2753.81	8.84	-6.70	8.84	11.09
29	2,848	0.00	136.50	2847.81	8.45	-7.33	8.45	11.19
30	2,942	0.80	128.50	2941.81	8.05	-6.81	8.05	10.54
31	3,037	0.80	101.40	3036.80	7.50	-5.64	7.50	9.39
32	3,131	1.00	139.80	3130.79	6.75	-4.47	6.75	8.09
33	3,225	0.10	150.60	3224.78	6.05	-3.90	6.05	7.20

Company:	Devon Energy Production Co, LP				
Well Name:	Arabian 30-19 Fed Com 2H				
Location:	Lea County, NM				
Rig:	Cactus #126			Magnetic Declination:	6.75
Job Number:	DDMO-170733				
API #:	30-025-43773				
Vertical Section Azimuth:	0.00			Proposed Direction:	0.00
Survey Calculation Method:	Minimum Curvature				

REFERENCE

PTB:	MD	INC	AZM	TVD	N/S	
	17,783	89.4	0.6	10479.41	7585.21	3:

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Cl Distance
34	3,319	0.20	143.60	3318.78	5.84	-3.76	5.84	6.95
35	3,413	0.30	161.50	3412.78	5.48	-3.59	5.48	6.55
36	3,507	0.30	164.30	3506.78	5.01	-3.44	5.01	6.08
37	3,601	0.30	157.00	3600.78	4.54	-3.28	4.54	5.60
38	3,695	0.50	142.20	3694.77	3.99	-2.93	3.99	4.96
39	3,789	0.70	130.10	3788.77	3.30	-2.24	3.30	3.99
40	3,884	0.70	131.70	3883.76	2.54	-1.36	2.54	2.88
41	3,978	0.90	129.20	3977.75	1.69	-0.36	1.69	1.73
42	4,072	2.50	128.00	4071.71	-0.04	1.82	-0.04	1.82
43	4,166	1.50	135.20	4165.65	-2.17	4.31	-2.17	4.82
44	4,260	1.40	138.70	4259.62	-3.91	5.93	-3.91	7.10
45	4,286	1.20	140.30	4285.61	-4.36	6.31	-4.36	7.67
46	4,355	1.00	133.80	4354.60	-5.33	7.21	-5.33	8.97
47	4,449	0.90	135.20	4448.59	-6.42	8.32	-6.42	10.51
48	4,543	0.80	145.10	4542.58	-7.48	9.22	-7.48	11.87
49	4,634	0.70	144.40	4633.57	-8.46	9.91	-8.46	13.02
50	4,825	0.70	147.80	4824.56	-10.39	11.21	-10.39	15.28
51	5,013	0.80	146.10	5012.54	-12.45	12.55	-12.45	17.68
52	5,201	1.00	110.20	5200.52	-14.11	14.82	-14.11	20.46
53	5,295	1.90	97.50	5294.49	-14.59	17.14	-14.59	22.51
54	5,389	2.20	86.20	5388.43	-14.68	20.48	-14.68	25.20
55	5,483	2.10	86.30	5482.36	-14.45	24.00	-14.45	28.01
56	5,577	2.90	85.50	5576.27	-14.15	28.09	-14.15	31.45
57	5,671	4.50	87.40	5670.07	-13.80	34.15	-13.80	36.83
58	5,765	4.20	87.70	5763.80	-13.49	41.27	-13.49	43.42
59	5,860	4.40	80.80	5858.53	-12.77	48.34	-12.77	50.00
60	5,954	5.10	82.30	5952.21	-11.63	56.04	-11.63	57.24
61	6,048	5.10	84.50	6045.84	-10.67	64.34	-10.67	65.22
62	6,142	4.80	85.10	6139.49	-9.94	72.42	-9.94	73.10
63	6,236	4.40	85.20	6233.18	-9.30	79.93	-9.30	80.47
64	6,330	3.90	84.80	6326.94	-8.71	86.71	-8.71	87.14
65	6,424	4.40	90.60	6420.69	-8.45	93.50	-8.45	93.88
66	6,518	4.60	89.10	6514.40	-8.43	100.87	-8.43	101.22
67	6,612	5.20	80.40	6608.06	-7.66	108.84	-7.66	109.11

Company:		Devon Energy Production Co, LP							
Well Name:		Arabian 30-19 Fed Com 2H							
Location:		Lea County, NM							
Rig:		Cactus #126				Magnetic Declination:		6.75	REFERENCE
Job Number:		DDMO-170733							
API #:		30-025-43773							
Vertical Section Azimuth:					0.00		Proposed Direction:		0.00
Survey Calculation Method:					Minimum Curvature				
PTB:	MD		INC		AZM	TVD	N/S		
	17,783		89.4		0.6	10479.41	7585.21		3:
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Cl Distance	
68	6,707	5.00	80.80	6702.68	-6.28	117.17	-6.28	117.34	
69	6,801	4.90	79.70	6796.33	-4.91	125.16	-4.91	125.26	
70	6,895	4.50	76.40	6890.02	-3.33	132.70	-3.33	132.74	
71	6,989	4.60	90.70	6983.72	-2.51	140.05	-2.51	140.07	
72	7,083	4.10	91.00	7077.45	-2.61	147.18	-2.61	147.20	
73	7,177	4.60	94.00	7171.18	-2.93	154.30	-2.93	154.33	
74	7,271	4.10	96.50	7264.91	-3.57	161.40	-3.57	161.44	
75	7,365	5.10	99.20	7358.61	-4.62	168.86	-4.62	168.93	
76	7,459	4.90	101.40	7452.25	-6.08	176.92	-6.08	177.03	
77	7,553	4.70	103.30	7545.92	-7.76	184.61	-7.76	184.77	
78	7,648	4.60	92.40	7640.61	-8.82	192.20	-8.82	192.40	
79	7,742	4.50	93.10	7734.31	-9.18	199.65	-9.18	199.86	
80	7,836	5.30	90.90	7827.97	-9.44	207.67	-9.44	207.89	
81	7,930	5.10	92.40	7921.58	-9.69	216.19	-9.69	216.40	
82	8,024	4.70	93.40	8015.24	-10.09	224.21	-10.09	224.43	
83	8,118	4.20	93.90	8108.95	-10.55	231.48	-10.55	231.72	
84	8,212	4.90	92.10	8202.66	-10.93	238.93	-10.93	239.18	
85	8,306	4.50	92.70	8296.34	-11.25	246.63	-11.25	246.88	
86	8,400	5.20	84.80	8390.00	-11.04	254.55	-11.04	254.79	
87	8,494	4.80	83.80	8483.65	-10.23	262.70	-10.23	262.90	
88	8,588	4.20	83.20	8577.36	-9.40	270.03	-9.40	270.20	
89	8,682	3.70	83.80	8671.13	-8.66	276.46	-8.66	276.60	
90	8,776	4.50	86.00	8764.89	-8.08	283.16	-8.08	283.27	
91	8,870	3.60	87.50	8858.66	-7.69	289.79	-7.69	289.89	
92	8,964	3.90	88.20	8952.45	-7.46	295.93	-7.46	296.02	
93	9,058	4.20	85.40	9046.22	-7.09	302.56	-7.09	302.64	
94	9,152	3.80	82.70	9139.99	-6.42	309.08	-6.42	309.14	
95	9,246	3.10	74.70	9233.82	-5.35	314.62	-5.35	314.66	
96	9,340	2.60	78.00	9327.70	-4.24	319.15	-4.24	319.18	
97	9,434	2.90	95.30	9421.60	-4.01	323.61	-4.01	323.63	
98	9,528	2.80	96.90	9515.48	-4.51	328.26	-4.51	328.29	
99	9,622	2.30	99.90	9609.39	-5.11	332.39	-5.11	332.43	
100	9,716	1.70	101.80	9703.33	-5.72	335.62	-5.72	335.66	

Company:	Devon Energy Production Co, LP				
Well Name:	Arabian 30-19 Fed Com 2H				
Location:	Lea County, NM				
Rig:	Cactus #126			Magnetic Declination:	6.75
Job Number:	DDMO-170733			REFERENCE	
API #:	30-025-43773				

Vertical Section Azimuth:	0.00	Proposed Direction:	0.00
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Survey Calculation Method:	Minimum Curvature
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PTB:	MD	INC	AZM	TVD	N/S	
	17,783	89.4	0.6	10479.41	7585.21	3.0

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Cl Distance
101	9,810	1.50	107.30	9797.29	-6.37	338.16	-6.37	338.22
102	9,907	4.60	15.20	9894.18	-2.99	340.39	-2.99	340.40
103	9,956	10.60	5.30	9942.73	3.40	341.32	3.40	341.34
104	10,001	15.10	3.60	9986.59	13.38	342.07	13.38	342.33
105	10,048	20.40	4.60	10031.34	27.66	343.11	27.66	344.23
106	10,095	24.90	3.10	10074.70	45.72	344.31	45.72	347.33
107	10,142	29.40	358.70	10116.52	67.14	344.58	67.14	351.06
108	10,189	32.90	357.30	10156.73	91.43	343.72	91.43	355.67
109	10,236	38.40	0.70	10194.91	118.80	343.29	118.80	363.27
110	10,283	42.00	3.70	10230.81	149.10	344.49	149.10	375.37
111	10,330	45.70	3.80	10264.70	181.59	346.62	181.59	391.30
112	10,377	50.20	2.30	10296.17	216.43	348.46	216.43	410.20
113	10,424	54.50	2.20	10324.87	253.60	349.92	253.60	432.15
114	10,471	59.50	2.40	10350.46	292.98	351.50	292.98	457.59
115	10,518	64.40	0.90	10372.56	334.43	352.68	334.43	486.03
116	10,565	68.90	1.80	10391.18	377.55	353.70	377.55	517.35
117	10,612	72.70	3.10	10406.64	421.89	355.61	421.89	551.77
118	10,659	76.70	3.20	10419.04	467.15	358.10	467.15	588.61
119	10,706	79.80	2.40	10428.61	513.10	360.34	513.10	626.99
120	10,753	82.70	2.40	10435.76	559.51	362.29	559.51	666.56
121	10,795	84.00	2.20	10440.62	601.19	363.96	601.19	702.78
122	10,870	85.40	2.00	10447.55	675.82	366.70	675.82	768.89
123	10,964	85.90	2.10	10454.68	769.49	370.05	769.49	853.84
124	11,058	86.40	1.50	10460.99	863.23	373.00	863.23	940.37
125	11,152	87.00	1.70	10466.40	957.03	375.62	957.03	1028.11
126	11,246	87.20	2.00	10471.16	1050.86	378.65	1050.86	1117.00
127	11,341	87.90	1.30	10475.22	1145.74	381.38	1145.74	1207.54
128	11,435	89.10	0.00	10477.68	1239.69	382.45	1239.69	1297.35
129	11,529	90.20	358.60	10478.25	1333.68	381.30	1333.68	1387.12
130	11,623	91.50	359.20	10476.86	1427.65	379.49	1427.65	1477.23
131	11,717	90.10	357.30	10475.54	1521.59	376.62	1521.59	1567.51
132	11,811	90.50	358.10	10475.05	1615.51	372.85	1615.51	1657.98
133	11,905	90.40	358.00	10474.31	1709.46	369.65	1709.46	1748.97

SURVEY CALCULATION PROGRAM

Company:		Devon Energy Production Co, LP								
Well Name:		Arabian 30-19 Fed Com 2H								
Location:		Lea County, NM								
Rig:		Cactus #126				Magnetic Declination:		6.75		
Job Number:		DDMO-170733								
API #:		30-025-43773								
Vertical Section Azimuth:				0.00		Proposed Direction:		0.00		
Survey Calculation Method:				Minimum Curvature						
PTB:	MD		INC		AZM		TVD		N/S	
	17,783		89.4		0.6		10479.41		7585.21	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Cl		
134	11,999	89.80	358.10	10474.15	1803.40	366.45	1803.40	1840.26		
135	12,093	90.20	358.60	10474.15	1897.36	363.75	1897.36	1931.92		
136	12,187	90.80	358.90	10473.33	1991.34	361.70	1991.34	2023.92		
137	12,281	89.60	358.80	10473.00	2085.32	359.81	2085.32	2116.13		
138	12,375	90.10	358.90	10473.25	2179.30	357.92	2179.30	2208.49		
139	12,469	90.20	358.10	10473.00	2273.26	355.46	2273.26	2300.89		
140	12,563	89.40	357.30	10473.33	2367.18	351.69	2367.18	2393.17		
141	12,657	90.00	357.30	10473.82	2461.08	347.26	2461.08	2485.46		
142	12,751	88.20	357.70	10475.30	2554.97	343.16	2554.97	2577.92		
143	12,845	88.10	357.30	10478.33	2648.83	339.07	2648.83	2670.45		
144	12,940	88.30	359.10	10481.32	2743.74	336.08	2743.74	2764.24		
145	13,034	88.70	358.70	10483.78	2837.69	334.28	2837.69	2857.31		
146	13,128	90.20	359.30	10484.68	2931.67	332.64	2931.67	2950.48		
147	13,222	90.90	0.00	10483.78	3025.66	332.06	3025.66	3043.83		
148	13,316	91.50	0.20	10481.81	3119.64	332.23	3119.64	3137.28		
149	13,410	90.60	0.10	10480.09	3213.62	332.47	3213.62	3230.77		
150	13,504	92.10	0.70	10477.87	3307.59	333.13	3307.59	3324.32		
151	13,598	90.60	1.40	10475.66	3401.54	334.85	3401.54	3417.99		
152	13,692	90.00	1.10	10475.17	3495.52	336.90	3495.52	3511.72		
153	13,786	91.20	1.70	10474.18	3589.48	339.20	3589.48	3605.47		
154	13,880	91.10	0.90	10472.29	3683.44	341.33	3683.44	3699.22		
155	13,974	89.50	0.40	10471.80	3777.43	342.40	3777.43	3792.92		
156	14,068	88.70	0.40	10473.28	3871.41	343.05	3871.41	3886.58		
157	14,162	89.00	0.90	10475.17	3965.39	344.12	3965.39	3980.29		
158	14,257	89.10	1.60	10476.74	4060.35	346.19	4060.35	4075.08		
159	14,351	90.20	2.20	10477.31	4154.30	349.31	4154.30	4168.96		
160	14,445	91.10	3.10	10476.25	4248.19	353.65	4248.19	4262.88		
161	14,539	89.60	2.40	10475.67	4342.08	358.16	4342.08	4356.82		
162	14,633	88.70	0.20	10477.07	4436.03	360.30	4436.03	4450.64		
163	14,727	88.90	0.40	10479.04	4530.01	360.79	4530.01	4544.36		
164	14,821	88.90	1.00	10480.84	4623.99	361.94	4623.99	4638.13		
165	14,915	90.20	0.90	10481.58	4717.97	363.50	4717.97	4731.95		
166	15,009	91.20	358.90	10480.43	4811.96	363.33	4811.96	4825.65		

V09.04.02

Company:		Devon Energy Production Co, LP						
Well Name:		Arabian 30-19 Fed Com 2H						
Location:		Lea County, NM						
Rig:		Cactus #126				Magnetic Declination:		6.75
Job Number:		DDMO-170733						
API #:		30-025-43773						
Vertical Section Azimuth:		0.00				Proposed Direction:		0.00
Survey Calculation Method:		Minimum Curvature						
PTB:	MD	INC		AZM		TVD	N/S	
	17,783	89.4		0.6		10479.41	7585.21	3
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Distance Feet
167	15,103	91.10	358.00	10478.55	4905.90	360.79	4905.90	4919.15
168	15,197	89.30	357.50	10478.22	4999.83	357.10	4999.83	5012.56
169	15,291	89.50	358.00	10479.20	5093.75	353.41	5093.75	5105.99
170	15,385	89.90	358.00	10479.69	5187.69	350.13	5187.69	5199.49
171	15,479	90.60	358.40	10479.28	5281.64	347.18	5281.64	5293.04
172	15,573	89.60	358.50	10479.12	5375.60	344.63	5375.60	5386.64
173	15,668	90.40	359.30	10479.12	5470.59	342.81	5470.59	5481.32
174	15,762	89.70	358.40	10479.04	5564.56	340.92	5564.56	5575.00
175	15,856	90.30	358.60	10479.04	5658.53	338.46	5658.53	5668.65
176	15,950	88.80	358.60	10479.78	5752.50	336.17	5752.50	5762.31
177	16,044	88.60	358.80	10481.91	5846.45	334.03	5846.45	5855.98
178	16,138	88.70	359.50	10484.12	5940.41	332.64	5940.41	5949.72
179	16,232	89.10	359.40	10485.93	6034.39	331.74	6034.39	6043.50
180	16,326	89.30	359.40	10487.24	6128.38	330.75	6128.38	6137.30
181	16,420	89.40	359.40	10488.31	6222.37	329.77	6222.37	6231.10
182	16,514	90.50	359.90	10488.39	6316.36	329.20	6316.36	6324.93
183	16,608	90.80	359.90	10487.32	6410.36	329.03	6410.36	6418.79
184	16,702	91.20	0.00	10485.68	6504.34	328.95	6504.34	6512.65
185	16,796	91.50	0.20	10483.47	6598.31	329.11	6598.31	6606.52
186	16,890	91.60	0.20	10480.92	6692.28	329.44	6692.28	6700.38
187	16,985	90.20	0.00	10479.43	6787.27	329.61	6787.27	6795.26
188	17,079	90.80	0.00	10478.61	6881.26	329.61	6881.26	6889.15
189	17,173	90.70	0.30	10477.38	6975.25	329.85	6975.25	6983.05
190	17,267	90.50	0.60	10476.40	7069.24	330.59	7069.24	7076.97
191	17,361	89.90	0.60	10476.07	7163.24	331.58	7163.24	7170.91
192	17,455	89.70	0.20	10476.40	7257.24	332.23	7257.24	7264.84
193	17,549	89.70	0.30	10476.89	7351.23	332.64	7351.23	7358.76
194	17,643	89.20	0.20	10477.79	7445.23	333.05	7445.23	7452.67
195	17,731	89.40	0.60	10478.87	7533.22	333.67	7533.22	7540.60