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Survey Company: MS Energy Services
MWD Surveyor Name: Randall Nesloney
Survey Type: MWD
Operating Company: Devon Energy Production Company, LP
Well Name & Number: Rebel 20 FED 7H
API Number: 30-025-42996
Surveyed Depths: 144' – 15,470' MD; PTB: 15,529'
Dates Performed: 05/14/2017 – 06/01/2017
Location: Lea County, NM

HOBBS OCD
NOV 30 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: Randall Nesloney
Title: MWD Field Specialist
Date: 06-09-2017
Email: rnesloney@msenergyservices.com

V09.04.02

Company:	Devon Energy Production Company, LP				
Well Name:	Rebel 20 FED 7H				
Location:	Lea County, NM				
Rig:	Cactus #126				Magnetic Declination: 6
Job Number:	DDMO-170429				
API #:	30-025-42996				

Vertical Section Azimuth:	180.00	Proposed Direction:	180
Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S
	15,529	92	182.6	10799.28	-4853.13

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec
TIE IN	0	0.00	0.00	0.00	0.00	0.00	
1	144	0.10	246.00	144.00	-0.05	-0.11	0.05
2	243	0.10	232.80	243.00	-0.14	-0.26	0.14
3	274	0.20	188.70	274.00	-0.21	-0.29	0.21
4	366	0.30	167.40	366.00	-0.60	-0.26	0.60
5	459	0.40	150.60	459.00	-1.12	-0.05	1.12
6	551	0.40	136.60	550.99	-1.64	0.33	1.64
7	643	0.50	168.10	642.99	-2.26	0.63	2.26
8	736	0.40	179.90	735.99	-2.98	0.71	2.98
9	829	0.60	187.40	828.99	-3.79	0.65	3.79
10	978	0.40	172.40	977.98	-5.08	0.62	5.08
11	1,071	0.90	218.60	1070.97	-5.97	0.21	5.97
12	1,164	0.30	178.40	1163.97	-6.79	-0.24	6.79
13	1,257	0.30	221.30	1256.97	-7.21	-0.39	7.21
14	1,350	0.60	204.20	1349.96	-7.84	-0.76	7.84
15	1,443	0.40	187.60	1442.96	-8.61	-1.00	8.61
16	1,536	0.20	221.20	1535.96	-9.05	-1.15	9.05
17	1,628	0.50	225.90	1627.96	-9.45	-1.54	9.45
18	1,720	0.40	174.50	1719.96	-10.05	-1.80	10.05
19	1,815	0.40	215.00	1814.95	-10.65	-1.96	10.65
20	1,909	0.20	213.00	1908.95	-11.06	-2.24	11.06
21	2,003	0.20	256.10	2002.95	-11.23	-2.48	11.23
22	2,097	0.60	208.30	2096.95	-11.71	-2.88	11.71
23	2,191	0.70	169.40	2190.94	-12.70	-3.00	12.70
24	2,285	0.00	15.00	2284.94	-13.27	-2.90	13.27
25	2,379	0.40	220.50	2378.94	-13.52	-3.11	13.52
26	2,473	0.30	251.10	2472.94	-13.85	-3.56	13.85
27	2,567	0.50	202.00	2566.94	-14.31	-3.94	14.31
28	2,661	0.30	247.30	2660.93	-14.78	-4.32	14.78
29	2,756	0.40	152.10	2755.93	-15.17	-4.40	15.17
30	2,850	0.40	140.50	2849.93	-15.72	-4.04	15.72
31	2,944	0.20	169.20	2943.93	-16.13	-3.80	16.13
32	3,038	0.50	146.30	3037.93	-16.63	-3.54	16.63
33	3,132	0.50	177.90	3131.92	-17.38	-3.30	17.38

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HOBBS OCD

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Rig:	Cactus #126			Magnetic Declination: 6
Job Number:	DDMO-170429			
API #:	30-025-42996			

Vertical Section Azimuth:	180.00	Proposed Direction:	180
Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S
	15,529	92	182.6	10799.28	-4853.13

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec
34	3,226	0.40	120.00	3225.92	-17.96	-3.00	17.96
35	3,320	0.40	156.70	3319.92	-18.42	-2.58	18.42
36	3,414	0.60	140.90	3413.92	-19.11	-2.14	19.11
37	3,508	0.30	133.50	3507.91	-19.66	-1.65	19.66
38	3,602	0.50	113.60	3601.91	-19.99	-1.10	19.99
39	3,696	0.40	116.00	3695.91	-20.30	-0.43	20.30
40	3,790	0.50	170.10	3789.91	-20.85	-0.06	20.85
41	3,884	0.30	96.90	3883.90	-21.28	0.25	21.28
42	3,978	0.50	99.40	3977.90	-21.38	0.90	21.38
43	4,072	0.60	138.30	4071.90	-21.81	1.63	21.81
44	4,166	0.80	118.60	4165.89	-22.49	2.54	22.49
45	4,260	1.00	141.00	4259.88	-23.44	3.63	23.44
46	4,354	1.30	142.60	4353.86	-24.93	4.79	24.93
47	4,448	1.50	143.70	4447.83	-26.77	6.17	26.77
48	4,542	1.70	146.10	4541.80	-28.92	7.67	28.92
49	4,581	1.70	145.50	4580.78	-29.87	8.32	29.87
50	4,631	1.40	142.90	4630.76	-30.97	9.11	30.97
51	4,725	0.60	114.60	4724.75	-32.09	10.25	32.09
52	4,819	2.20	37.10	4818.72	-30.86	11.79	30.86
53	4,913	3.80	15.30	4912.59	-26.41	13.70	26.41
54	5,007	4.80	14.30	5006.32	-19.60	15.49	19.60
55	5,101	5.90	13.30	5099.91	-11.09	17.58	11.09
56	5,195	5.10	11.20	5193.48	-2.29	19.50	2.29
57	5,289	5.60	7.50	5287.07	6.36	20.91	-6.36
58	5,383	5.60	8.50	5380.62	15.44	22.19	-15.44
59	5,477	6.00	8.20	5474.14	24.84	23.56	-24.84
60	5,571	5.50	8.30	5567.67	34.16	24.92	-34.16
61	5,665	4.80	6.50	5661.29	42.53	26.01	-42.53
62	5,759	6.10	5.30	5754.86	51.41	26.92	-51.41
63	5,853	6.10	5.00	5848.33	61.36	27.81	-61.36
64	5,947	6.20	5.30	5941.79	71.39	28.72	-71.39
65	6,041	6.30	5.40	6035.23	81.58	29.67	-81.58
66	6,135	6.30	5.90	6128.66	91.84	30.69	-91.84
67	6,230	6.30	6.10	6223.09	102.21	31.78	-102.21

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#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec
68	6,324	6.00	7.30	6316.55	112.21	32.95	-112.21
69	6,418	5.80	6.70	6410.05	121.80	34.13	-121.80
70	6,512	5.60	8.50	6503.58	131.05	35.36	-131.05
71	6,606	5.50	9.60	6597.14	140.03	36.79	-140.03
72	6,700	5.10	9.60	6690.74	148.59	38.24	-148.59
73	6,795	5.00	2.90	6785.37	156.89	39.15	-156.89
74	6,889	4.10	355.60	6879.08	164.33	39.10	-164.33
75	6,983	3.90	351.30	6972.85	170.84	38.36	-170.84
76	7,077	3.30	8.00	7066.66	176.68	38.25	-176.68
77	7,171	2.80	13.10	7160.53	181.60	39.15	-181.60
78	7,265	2.20	34.20	7254.44	185.33	40.68	-185.33
79	7,359	1.50	76.00	7348.40	187.12	42.89	-187.12
80	7,453	1.40	80.20	7442.37	187.61	45.22	-187.61
81	7,547	1.30	83.00	7536.34	187.93	47.41	-187.93
82	7,641	1.40	110.60	7630.32	187.66	49.54	-187.66
83	7,735	1.50	114.10	7724.29	186.75	51.74	-186.75
84	7,829	1.20	129.50	7818.26	185.62	53.62	-185.62
85	7,923	0.80	185.40	7912.25	184.35	54.32	-184.35
86	8,017	0.80	183.80	8006.24	183.04	54.21	-183.04
87	8,111	1.00	183.40	8100.23	181.56	54.12	-181.56
88	8,205	2.00	212.90	8194.19	179.37	53.18	-179.37
89	8,299	1.20	209.80	8288.16	177.14	51.80	-177.14
90	8,393	1.30	197.50	8382.14	175.26	50.99	-175.26
91	8,487	1.50	194.30	8476.11	173.06	50.37	-173.06
92	8,581	1.20	192.90	8570.08	170.90	49.84	-170.90
93	8,675	0.80	208.90	8664.07	169.37	49.31	-169.37
94	8,769	0.20	239.60	8758.06	168.71	48.85	-168.71
95	8,864	0.30	273.10	8853.06	168.64	48.46	-168.64
96	8,958	0.40	182.00	8947.06	168.33	48.20	-168.33
97	9,051	1.00	161.60	9040.05	167.23	48.44	-167.23
98	9,146	0.70	167.10	9135.04	165.88	48.84	-165.88
99	9,242	0.60	136.00	9231.04	164.95	49.32	-164.95
100	9,336	0.60	129.90	9325.03	164.28	50.04	-164.28
101	9,430	1.00	22.90	9419.03	164.72	50.73	-164.72

V09.04.02

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Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S
	15,529	92	182.6	10799.28	-4853.13

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec
102	9,524	1.40	5.20	9513.01	166.62	51.16	-166.62
103	9,618	1.00	9.90	9606.98	168.57	51.40	-168.57
104	9,712	0.70	359.20	9700.97	169.95	51.53	-169.95
105	9,807	0.00	177.30	9795.97	170.53	51.53	-170.53
106	9,901	0.10	307.90	9889.97	170.58	51.46	-170.58
107	9,995	0.30	27.30	9983.97	170.85	51.51	-170.85
108	10,089	0.20	294.70	10077.97	171.14	51.47	-171.14
109	10,140	0.20	7.70	10128.97	171.26	51.40	-171.26
110	10,184	0.20	271.10	10172.97	171.34	51.34	-171.34
111	10,231	6.30	193.90	10219.88	168.84	50.63	-168.84
112	10,278	12.40	191.80	10266.23	161.39	48.98	-161.39
113	10,325	18.00	189.50	10311.57	149.27	46.75	-149.27
114	10,371	22.90	186.80	10354.66	133.37	44.52	-133.37
115	10,419	27.10	186.30	10398.15	113.22	42.21	-113.22
116	10,465	31.30	185.30	10438.29	90.90	39.95	-90.90
117	10,512	33.80	185.60	10477.91	65.73	37.55	-65.73
118	10,559	38.00	185.10	10515.97	38.29	34.99	-38.29
119	10,606	42.70	182.40	10551.78	7.94	33.03	-7.94
120	10,653	47.00	178.80	10585.10	-25.19	32.73	25.19
121	10,700	52.80	177.70	10615.36	-61.11	33.84	61.11
122	10,748	57.70	177.40	10642.72	-100.50	35.53	100.50
123	10,795	60.70	178.60	10666.78	-140.84	36.93	140.84
124	10,841	62.40	180.10	10688.69	-181.28	37.38	181.28
125	10,888	64.80	181.00	10709.59	-223.37	36.97	223.37
126	10,935	69.60	181.10	10727.80	-266.68	36.18	266.68
127	10,982	74.70	181.00	10742.20	-311.39	35.36	311.39
128	11,029	80.50	180.70	10752.29	-357.27	34.68	357.27
129	11,089	83.70	179.60	10760.53	-416.69	34.53	416.69
130	11,139	86.50	179.80	10764.80	-466.50	34.79	466.50
131	11,183	89.30	178.90	10766.42	-510.47	35.29	510.47
132	11,277	90.50	179.70	10766.58	-604.46	36.44	604.46
133	11,371	88.70	180.90	10767.24	-698.45	35.94	698.45
134	11,465	89.10	181.70	10769.04	-792.41	33.81	792.41
135	11,559	88.50	181.70	10771.01	-886.34	31.02	886.34

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PTB:	MD	INC		AZM	TVD	N/S	
	15,529	92		182.6	10799.28	-4853.13	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec
136	11,652	88.90	181.20	10773.12	-979.29	28.67	979.29
137	11,746	87.30	180.30	10776.24	-1073.23	27.44	1073.23
138	11,840	87.30	180.70	10780.66	-1167.12	26.62	1167.12
139	11,934	86.90	180.60	10785.42	-1260.99	25.56	1260.99
140	12,028	87.80	181.00	10789.77	-1354.88	24.25	1354.88
141	12,122	89.20	181.90	10792.23	-1448.81	21.87	1448.81
142	12,216	89.30	181.80	10793.46	-1542.76	18.83	1542.76
143	12,310	89.90	182.10	10794.11	-1636.70	15.64	1636.70
144	12,404	91.00	180.80	10793.38	-1730.66	13.26	1730.66
145	12,498	91.80	179.80	10791.08	-1824.63	12.76	1824.63
146	12,592	93.30	179.00	10786.90	-1918.53	13.75	1918.53
147	12,686	94.50	179.00	10780.50	-2012.30	15.38	2012.30
148	12,780	93.50	178.30	10773.95	-2106.04	17.59	2106.04
149	12,874	91.60	178.20	10769.76	-2199.90	20.46	2199.90
150	12,968	89.40	178.20	10768.94	-2293.84	23.41	2293.84
151	13,062	88.80	178.30	10770.42	-2387.79	26.28	2387.79
152	13,156	89.10	178.40	10772.14	-2481.73	28.99	2481.73
153	13,250	89.60	178.80	10773.21	-2575.70	31.29	2575.70
154	13,344	90.20	179.00	10773.37	-2669.68	33.09	2669.68
155	13,438	91.40	180.10	10772.06	-2763.66	33.83	2763.66
156	13,532	90.70	179.10	10770.34	-2857.64	34.49	2857.64
157	13,626	91.00	179.20	10768.94	-2951.62	35.88	2951.62
158	13,720	90.60	179.10	10767.63	-3045.60	37.27	3045.60
159	13,814	90.40	178.80	10766.81	-3139.58	39.00	3139.58
160	13,908	89.00	177.80	10767.30	-3233.54	41.79	3233.54
161	14,002	89.80	177.90	10768.29	-3327.47	45.31	3327.47
162	14,096	87.50	178.20	10770.50	-3421.38	48.51	3421.38
163	14,190	87.40	178.70	10774.68	-3515.25	51.05	3515.25
164	14,284	87.70	179.60	10778.70	-3609.15	52.44	3609.15
165	14,378	88.10	180.10	10782.15	-3703.09	52.69	3703.09
166	14,472	88.20	180.30	10785.18	-3797.04	52.36	3797.04
167	14,566	89.20	180.70	10787.31	-3891.01	51.54	3891.01
168	14,660	89.80	180.80	10788.13	-3985.00	50.31	3985.00
169	14,754	87.80	180.80	10790.10	-4078.97	49.00	4078.97

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	15,529	92		182.6	10799.28	-4853.13	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec
170	14,848	87.70	181.50	10793.79	-4172.87	47.11	4172.87
171	14,942	88.20	181.90	10797.16	-4266.77	44.33	4266.77
172	15,036	88.40	182.00	10799.95	-4360.68	41.13	4360.68
173	15,130	88.50	181.90	10802.49	-4454.59	37.93	4454.59
174	15,224	88.80	182.10	10804.70	-4548.50	34.65	4548.50
175	15,318	90.90	182.60	10804.95	-4642.42	30.80	4642.42
176	15,412	91.40	182.50	10803.06	-4736.31	26.62	4736.31
177	15,470	92.00	182.60	10801.34	-4794.22	24.04	4794.22