

HOBBS OCD

APR 29 2016

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5D Plan Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Green Wave 20-29 Fed 76H*
Well Name: *Green Wave 20-29 Fed 76H*
Plan: *P1:V1*

06 May 2015



Weatherford®

MAY 03 2016

Green Wave 20-29 Fed 76H

Field Name Lea Co: NM: Nad 83 NMEZ	Map Units : US ft Vertical Reference Datum (VRD) : Mean Sea Level Projected Coordinate System : NAD83 / New Mexico East (ftUS) Comment :		Company Name : Devon Energy	
Site Name Green Wave 20- 29 Fed 76H	Units : US ft Position	North Reference : Grid Northing : 375210.52 US ft Easting : 803702.93 US ft	Convergence Angle : 0.45 Latitude : 32° 1' 43.35" Longitude : -103° 29' 12.16" Elevation above Mean Sea Level: 3349.00 US ft Comment :	
Slot Name Green Wave 20- 29 Fed 76H	Position (Offsets relative to Site Centre) +N / -S : 0.00 US ft Northing : 375210.52 US ft Latitude : 32° 1' 43.35" +E / -W : 0.00 US ft Easting : 803702.93 US ft Longitude : -103° 29' 12.16" Slot TVD Reference : Ground Elevation Elevation above Mean Sea Level : 3349.00 US ft Comment :			
Well Name Green Wave 20- 29 Fed 76H	Type : Main well UWI : Plan : P1:V1 Rig Height : Well TVD Reference : 30.00 US ft Comment : Relative to Mean Sea Level: 3379.00 US ft Closure Distance : 7530.73 US ft Closure Azimuth : 183.95° Vertical Section (Position of Origin Relative to Slot) +N / -S : 0.00 US ft +E / -W : 0.00 US ft Az : 179.49° Magnetic Parameters Model : BGGM Field Strength : 48035.8nT Dec : 7.19° Dip : 59.90° Date : 15/Oct/2015			

Target Set	
Name : Green Wave 20-29 Fed 76H	Number of Targets : 2

Comment :

Target Name: S.Tgt	Position (Relative to Slot centre) +N / -S : 36.67 US ft Northing : 375247.19 US ft Latitude : 32° 1' 43.76" +E / -W : -585.48 US ft Easting : 803117.45 US ft Longitude : -103° 29' 18.95"	
Shape: Cuboid	TVD (Well TVD Reference) : 12102.00 US ft Orientation Azimuth : 0.00° Inclination : 0.00° Dimensions Length : 20.00 US ft Breadth : 20.00 US ft Height : 20.00 US ft	

5D Plan Report

Target Name: PBHL 76H Shape: Cuboid	Position (Relative to Slot centre)		
	+N / -S : 7512.84US ft	Northing : 367697.68 US ft	Latitude : 32°0'29.05"
	+E / -W : 518.75 US ft	Easting : 803184.18US ft	Longitude : -103°29'18.87"
	TVD (Well TVD Reference) : 12601.00 US ft		
	Orientation	Azimuth : 0.00°	Inclination : 0.00°
Dimensions	Length : 20.00 US ft	Breadth : 20.00 US ft	Height : 20.00 US ft

Well path created using minimum curvature

Salient Points (Relative to Slot centre, TVD relative to Well TVD Reference)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	B Rate (°/100 US ft)	T Rate (°/100 US ft)	T Face (°)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	
5400.00	0.00	0.00	5400.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	Nudge
5964.27	5.64	273.58	5963.36	1.74	-27.71	-1.98	1.00	1.00	0.00	273.58	Hold
11365.73	5.64	273.58	11338.64	34.93	-557.77	-39.90	0.00	0.00	0.00	0.00	Drop
11930.00	0.00	0.00	11902.01	36.67	-585.48	-41.88	1.00	-1.00	0.00	180.00	Hold
12130.00	0.00	0.00	12102.01	36.67	-585.48	-41.88	0.00	0.00	0.00	0.00	KOP
12949.81	90.18	179.49	12622.87	-485.80	-580.86	480.61	11.00	11.00	0.00	179.49	LP
19977.15	90.18	179.49	12601.00	-7512.84	-518.75	7507.92	0.00	0.00	0.00	0.00	PBHL 76H

Interpolated Points (Relative to Slot centre, TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
5400.00	0.00	0.00	5400.00	0.00	0.00	-0.00	0.00	375210.52	803702.93	Nudge
5500.00	1.00	273.58	5499.99	0.05	-0.87	-0.06	1.00	375210.57	803702.06	
5600.00	2.00	273.58	5599.96	0.22	-3.48	-0.25	1.00	375210.74	803699.45	
5700.00	3.00	273.58	5699.86	0.49	-7.84	-0.56	1.00	375211.01	803695.09	
5800.00	4.00	273.58	5799.68	0.87	-13.93	-1.00	1.00	375211.39	803689.00	
5900.00	5.00	273.58	5899.37	1.36	-21.76	-1.56	1.00	375211.88	803681.17	
5964.27	5.64	273.58	5963.36	1.74	-27.71	-1.98	1.00	375212.26	803675.22	Hold
6000.00	5.64	273.58	5998.92	1.96	-31.22	-2.23	0.00	375212.48	803671.71	
6100.00	5.64	273.58	6098.43	2.57	-41.03	-2.93	0.00	375213.09	803661.90	
6200.00	5.64	273.58	6197.95	3.18	-50.84	-3.64	0.00	375213.70	803652.09	
6300.00	5.64	273.58	6297.46	3.80	-60.66	-4.34	0.00	375214.32	803642.27	
6400.00	5.64	273.58	6396.98	4.41	-70.47	-5.04	0.00	375214.93	803632.46	
6500.00	5.64	273.58	6496.49	5.03	-80.28	-5.74	0.00	375215.55	803622.65	
6600.00	5.64	273.58	6596.01	5.64	-90.10	-6.44	0.00	375216.16	803612.83	
6700.00	5.64	273.58	6695.52	6.26	-99.91	-7.15	0.00	375216.78	803603.02	
6800.00	5.64	273.58	6795.04	6.87	-109.72	-7.85	0.00	375217.39	803593.21	
6900.00	5.64	273.58	6894.55	7.49	-119.54	-8.55	0.00	375218.01	803583.39	
7000.00	5.64	273.58	6994.07	8.10	-129.35	-9.25	0.00	375218.62	803573.58	
7100.00	5.64	273.58	7093.58	8.72	-139.16	-9.95	0.00	375219.24	803563.77	
7200.00	5.64	273.58	7193.10	9.33	-148.98	-10.66	0.00	375219.85	803553.95	
7300.00	5.64	273.58	7292.62	9.95	-158.79	-11.36	0.00	375220.47	803544.14	
7400.00	5.64	273.58	7392.13	10.56	-168.60	-12.06	0.00	375221.08	803534.33	
7500.00	5.64	273.58	7491.65	11.17	-178.41	-12.76	0.00	375221.69	803524.52	
7600.00	5.64	273.58	7591.16	11.79	-188.23	-13.46	0.00	375222.31	803514.70	
7700.00	5.64	273.58	7690.68	12.40	-198.04	-14.17	0.00	375222.92	803504.89	
7800.00	5.64	273.58	7790.19	13.02	-207.85	-14.87	0.00	375223.54	803495.08	
7900.00	5.64	273.58	7889.71	13.63	-217.67	-15.57	0.00	375224.15	803485.26	
8000.00	5.64	273.58	7989.22	14.25	-227.48	-16.27	0.00	375224.77	803475.45	
8100.00	5.64	273.58	8088.74	14.86	-237.29	-16.97	0.00	375225.38	803465.64	
8200.00	5.64	273.58	8188.25	15.48	-247.11	-17.68	0.00	375226.00	803455.82	
8300.00	5.64	273.58	8287.77	16.09	-256.92	-18.38	0.00	375226.61	803446.01	
8400.00	5.64	273.58	8387.29	16.71	-266.73	-19.08	0.00	375227.23	803436.20	

5D Plan Report

Interpolated Points (Relative to Slot Centre, TVD relative to Well TVD Reference)										
MD (US.ft)	Inc (°)	Az (°)	TVD (US.ft)	N Offset (US.ft)	E Offset (US.ft)	VS (US.ft)	DLS (%/100 US.ft)	Northing (US.ft)	Easting (US.ft)	Comment
8500.00	5.64	273.58	8486.80	17.32	-276.55	-19.78	0.00	375227.84	803426.38	
8600.00	5.64	273.58	8586.32	17.94	-286.36	-20.48	0.00	375228.46	803416.57	
8700.00	5.64	273.58	8685.83	18.55	-296.17	-21.19	0.00	375229.07	803406.76	
8800.00	5.64	273.58	8785.35	19.16	-305.99	-21.89	0.00	375229.68	803396.94	
8900.00	5.64	273.58	8884.86	19.78	-315.80	-22.59	0.00	375230.30	803387.13	
9000.00	5.64	273.58	8984.38	20.39	-325.61	-23.29	0.00	375230.91	803377.32	
9100.00	5.64	273.58	9083.89	21.01	-335.43	-23.99	0.00	375231.53	803367.50	
9200.00	5.64	273.58	9183.41	21.62	-345.24	-24.70	0.00	375232.14	803357.69	
9300.00	5.64	273.58	9282.92	22.24	-355.05	-25.40	0.00	375232.76	803347.88	
9400.00	5.64	273.58	9382.44	22.85	-364.87	-26.10	0.00	375233.37	803338.06	
9500.00	5.64	273.58	9481.96	23.47	-374.68	-26.80	0.00	375233.99	803328.25	
9600.00	5.64	273.58	9581.47	24.08	-384.49	-27.50	0.00	375234.60	803318.44	
9700.00	5.64	273.58	9680.99	24.70	-394.31	-28.21	0.00	375235.22	803308.62	
9800.00	5.64	273.58	9780.50	25.31	-404.12	-28.91	0.00	375235.83	803298.81	
9900.00	5.64	273.58	9880.02	25.93	-413.93	-29.61	0.00	375236.45	803289.00	
10000.00	5.64	273.58	9979.53	26.54	-423.75	-30.31	0.00	375237.06	803279.18	
10100.00	5.64	273.58	10079.05	27.15	-433.56	-31.01	0.00	375237.67	803269.37	
10200.00	5.64	273.58	10178.56	27.77	-443.37	-31.71	0.00	375238.29	803259.56	
10300.00	5.64	273.58	10278.08	28.38	-453.19	-32.42	0.00	375238.90	803249.74	
10400.00	5.64	273.58	10377.59	29.00	-463.00	-33.12	0.00	375239.52	803239.93	
10500.00	5.64	273.58	10477.11	29.61	-472.81	-33.82	0.00	375240.13	803230.12	
10600.00	5.64	273.58	10576.63	30.23	-482.63	-34.52	0.00	375240.75	803220.30	
10700.00	5.64	273.58	10676.14	30.84	-492.44	-35.22	0.00	375241.36	803210.49	
10800.00	5.64	273.58	10775.66	31.46	-502.25	-35.93	0.00	375241.98	803200.68	
10900.00	5.64	273.58	10875.17	32.07	-512.07	-36.63	0.00	375242.59	803190.86	
11000.00	5.64	273.58	10974.69	32.69	-521.88	-37.33	0.00	375243.21	803181.05	
11100.00	5.64	273.58	11074.20	33.30	-531.69	-38.03	0.00	375243.82	803171.24	
11200.00	5.64	273.58	11173.72	33.92	-541.51	-38.73	0.00	375244.44	803161.42	
11300.00	5.64	273.58	11273.23	34.53	-551.32	-39.44	0.00	375245.05	803151.61	
11365.73	5.64	273.58	11338.64	34.93	-557.77	-39.90	0.00	375245.45	803145.16	Drop
11400.00	5.30	273.58	11372.76	35.14	-561.03	-40.13	1.00	375245.66	803141.90	
11500.00	4.30	273.58	11472.41	35.66	-569.38	-40.73	1.00	375246.18	803133.55	
11600.00	3.30	273.58	11572.19	36.08	-576.00	-41.20	1.00	375246.60	803126.93	
11700.00	2.30	273.58	11672.06	36.38	-580.87	-41.55	1.00	375246.90	803122.06	
11800.00	1.30	273.58	11772.01	36.58	-584.01	-41.77	1.00	375247.10	803118.92	
11900.00	0.30	273.58	11872.00	36.67	-585.40	-41.87	1.00	375247.19	803117.53	
11930.00	0.00	0.00	11902.01	36.67	-585.48	-41.88	1.00	375247.19	803117.45	Hold
12000.00	0.00	0.00	11972.00	36.67	-585.48	-41.88	0.00	375247.19	803117.45	
12100.00	0.00	0.00	12072.00	36.67	-585.48	-41.88	0.00	375247.19	803117.45	
12130.00	0.00	0.00	12102.01	36.67	-585.48	-41.88	0.00	375247.19	803117.45	KOP
12200.00	7.70	179.49	12171.79	31.97	-585.44	-37.18	11.00	375242.49	803117.49	
12300.00	18.70	179.49	12269.00	9.18	-585.24	-14.38	11.00	375219.70	803117.69	
12400.00	29.70	179.49	12360.07	-31.75	-584.88	26.54	11.00	375178.77	803118.05	
12500.00	40.70	179.49	12441.66	-89.30	-584.37	84.10	11.00	375121.22	803118.56	
12600.00	51.70	179.49	12510.77	-161.37	-583.73	156.16	11.00	375049.15	803119.20	
12700.00	62.70	179.49	12564.86	-245.29	-582.99	240.09	11.00	374965.23	803119.94	
12800.00	73.70	179.49	12601.94	-337.99	-582.17	332.80	11.00	374872.53	803120.76	
12900.00	84.70	179.49	12620.65	-436.07	-581.30	430.87	11.00	374774.45	803121.63	
12949.81	90.18	179.49	12622.87	-485.80	-580.86	480.61	11.00	374724.72	803122.07	LP
13000.00	90.18	179.49	12622.72	-535.99	-580.42	530.81	0.00	374674.53	803122.51	
13100.00	90.18	179.49	12622.41	-635.99	-579.53	630.80	0.00	374574.53	803123.40	
13200.00	90.18	179.49	12622.10	-735.98	-578.65	730.80	0.00	374474.54	803124.28	
13300.00	90.18	179.49	12621.78	-835.98	-577.77	830.80	0.00	374374.54	803125.16	
13400.00	90.18	179.49	12621.47	-935.98	-576.88	930.80	0.00	374274.54	803126.05	
13500.00	90.18	179.49	12621.16	-1035.97	-576.00	1030.80	0.00	374174.55	803126.93	
13600.00	90.18	179.49	12620.85	-1135.97	-575.12	1130.80	0.00	374074.55	803127.81	
13700.00	90.18	179.49	12620.54	-1235.96	-574.23	1230.80	0.00	373974.56	803128.70	
13800.00	90.18	179.49	12620.23	-1335.96	-573.35	1330.80	0.00	373874.56	803129.58	
13900.00	90.18	179.49	12619.92	-1435.95	-572.46	1430.80	0.00	373774.57	803130.47	

SD Plan Report

Interpolated Points (Relative to Slot centre TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
14000.00	90.18	179.49	12619.61	-1535.95	-571.58	1530.80	0.00	373674.57	803131.35	
14100.00	90.18	179.49	12619.29	-1635.94	-570.70	1630.80	0.00	373574.58	803132.23	
14200.00	90.18	179.49	12618.98	-1735.94	-569.81	1730.80	0.00	373474.58	803133.12	
14300.00	90.18	179.49	12618.67	-1835.94	-568.93	1830.80	0.00	373374.58	803134.00	
14400.00	90.18	179.49	12618.36	-1935.93	-568.04	1930.80	0.00	373274.59	803134.89	
14500.00	90.18	179.49	12618.05	-2035.93	-567.16	2030.80	0.00	373174.59	803135.77	
14600.00	90.18	179.49	12617.74	-2135.92	-566.28	2130.80	0.00	373074.60	803136.65	
14700.00	90.18	179.49	12617.43	-2235.92	-565.39	2230.80	0.00	372974.60	803137.54	
14800.00	90.18	179.49	12617.12	-2335.91	-564.51	2330.80	0.00	372874.61	803138.42	
14900.00	90.18	179.49	12616.80	-2435.91	-563.63	2430.80	0.00	372774.61	803139.30	
15000.00	90.18	179.49	12616.49	-2535.91	-562.74	2530.80	0.00	372674.61	803140.19	
15100.00	90.18	179.49	12616.18	-2635.90	-561.86	2630.80	0.00	372574.62	803141.07	
15200.00	90.18	179.49	12615.87	-2735.90	-560.97	2730.79	0.00	372474.62	803141.96	
15300.00	90.18	179.49	12615.56	-2835.89	-560.09	2830.79	0.00	372374.63	803142.84	
15400.00	90.18	179.49	12615.25	-2935.89	-559.21	2930.79	0.00	372274.63	803143.72	
15500.00	90.18	179.49	12614.94	-3035.88	-558.32	3030.79	0.00	372174.64	803144.61	
15600.00	90.18	179.49	12614.62	-3135.88	-557.44	3130.79	0.00	372074.64	803145.49	
15700.00	90.18	179.49	12614.31	-3235.87	-556.55	3230.79	0.00	371974.65	803146.38	
15800.00	90.18	179.49	12614.00	-3335.87	-555.67	3330.79	0.00	371874.65	803147.26	
15900.00	90.18	179.49	12613.69	-3435.87	-554.79	3430.79	0.00	371774.65	803148.14	
16000.00	90.18	179.49	12613.38	-3535.86	-553.90	3530.79	0.00	371674.66	803149.03	
16100.00	90.18	179.49	12613.07	-3635.86	-553.02	3630.79	0.00	371574.66	803149.91	
16200.00	90.18	179.49	12612.76	-3735.85	-552.13	3730.79	0.00	371474.67	803150.80	
16300.00	90.18	179.49	12612.45	-3835.85	-551.25	3830.79	0.00	371374.67	803151.68	
16400.00	90.18	179.49	12612.13	-3935.84	-550.37	3930.79	0.00	371274.68	803152.56	
16500.00	90.18	179.49	12611.82	-4035.84	-549.48	4030.79	0.00	371174.68	803153.45	
16600.00	90.18	179.49	12611.51	-4135.83	-548.60	4130.79	0.00	371074.69	803154.33	
16700.00	90.18	179.49	12611.20	-4235.83	-547.72	4230.79	0.00	370974.69	803155.21	
16800.00	90.18	179.49	12610.89	-4335.83	-546.83	4330.79	0.00	370874.69	803156.10	
16900.00	90.18	179.49	12610.58	-4435.82	-545.95	4430.79	0.00	370774.70	803156.98	
17000.00	90.18	179.49	12610.27	-4535.82	-545.06	4530.79	0.00	370674.70	803157.87	
17100.00	90.18	179.49	12609.96	-4635.81	-544.18	4630.79	0.00	370574.71	803158.75	
17200.00	90.18	179.49	12609.64	-4735.81	-543.30	4730.79	0.00	370474.71	803159.63	
17300.00	90.18	179.49	12609.33	-4835.80	-542.41	4830.78	0.00	370374.72	803160.52	
17400.00	90.18	179.49	12609.02	-4935.80	-541.53	4930.78	0.00	370274.72	803161.40	
17500.00	90.18	179.49	12608.71	-5035.80	-540.64	5030.78	0.00	370174.72	803162.29	
17600.00	90.18	179.49	12608.40	-5135.79	-539.76	5130.78	0.00	370074.73	803163.17	
17700.00	90.18	179.49	12608.09	-5235.79	-538.88	5230.78	0.00	369974.73	803164.05	
17800.00	90.18	179.49	12607.78	-5335.78	-537.99	5330.78	0.00	369874.74	803164.94	
17900.00	90.18	179.49	12607.47	-5435.78	-537.11	5430.78	0.00	369774.74	803165.82	
18000.00	90.18	179.49	12607.15	-5535.77	-536.23	5530.78	0.00	369674.75	803166.70	
18100.00	90.18	179.49	12606.84	-5635.77	-535.34	5630.78	0.00	369574.75	803167.59	
18200.00	90.18	179.49	12606.53	-5735.76	-534.46	5730.78	0.00	369474.76	803168.47	
18300.00	90.18	179.49	12606.22	-5835.76	-533.57	5830.78	0.00	369374.76	803169.36	
18400.00	90.18	179.49	12605.91	-5935.76	-532.69	5930.78	0.00	369274.76	803170.24	
18500.00	90.18	179.49	12605.60	-6035.75	-531.81	6030.78	0.00	369174.77	803171.12	
18600.00	90.18	179.49	12605.29	-6135.75	-530.92	6130.78	0.00	369074.77	803172.01	
18700.00	90.18	179.49	12604.98	-6235.74	-530.04	6230.78	0.00	368974.78	803172.89	
18800.00	90.18	179.49	12604.66	-6335.74	-529.15	6330.78	0.00	368874.78	803173.78	
18900.00	90.18	179.49	12604.35	-6435.73	-528.27	6430.78	0.00	368774.79	803174.66	
19000.00	90.18	179.49	12604.04	-6535.73	-527.39	6530.78	0.00	368674.79	803175.54	
19100.00	90.18	179.49	12603.73	-6635.73	-526.50	6630.78	0.00	368574.79	803176.43	
19200.00	90.18	179.49	12603.42	-6735.72	-525.62	6730.78	0.00	368474.80	803177.31	
19300.00	90.18	179.49	12603.11	-6835.72	-524.74	6830.77	0.00	368374.80	803178.19	
19400.00	90.18	179.49	12602.80	-6935.71	-523.85	6930.77	0.00	368274.81	803179.08	
19500.00	90.18	179.49	12602.49	-7035.71	-522.97	7030.77	0.00	368174.81	803179.96	
19600.00	90.18	179.49	12602.17	-7135.70	-522.08	7130.77	0.00	368074.82	803180.85	
19700.00	90.18	179.49	12601.86	-7235.70	-521.20	7230.77	0.00	367974.82	803181.73	
19800.00	90.18	179.49	12601.55	-7335.69	-520.32	7330.77	0.00	367874.83	803182.61	

SD Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Well TVD Reference)										
MD (US.ft)	Inc (°)	Az (°)	TVD (US.ft)	N. Offset (US.ft)	E. Offset (US.ft)	VS (US.ft)	DLS (°/100 US.ft)	Northing (US.ft)	Easting (US.ft)	Comment
19900.00	90.18	179.49	12601.24	-7435.69	-519.43	7430.77	0.00	367774.83	803183.50	
19977.15	90.18	179.49	12601.00	-7512.84	-518.75	7507.92	0.00	367697.68	803184.18	PBHL 76H