

5D Plan Report

HOBBS OCD

APR 29 2016

RECEIVED

5D Plan Report

Devon Energy

Field Name: *Lea Co, NM Nad 83 NMEZ*
Site Name: *Green Wave 20-17 Fed 28H*
Well Name: *Green Wave 20-17 Fed 28H*
Plan: *P1:V1*

30 March 2015



Green Wave 20-17 Fed 28H

Field Name Lea Co, NM Nad 83 INMEZ	Map Units : US ft		Company Name : Devon Energy	
	Vertical Reference Datum (VRD) : Mean Sea Level			
	Projected Coordinate System : NAD83 / New Mexico East (ftUS)			
	Comment :			
Site Name Green Wave 20-17 Fed 28H	Units : US ft	North Reference : Grid	Convergence Angle : 0.45	
	Position	Northing : 375305.15 US ft	Latitude : 32° 1' 44.23"	
		Easting : 804412.02 US ft	Longitude : -103° 29' 3.91"	
	Elevation above Mean Sea Level: 3343.00 US ft			
Comment :				
Slot Name Green Wave 20-17 Fed 28H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing : 375305.15 US ft	Latitude : 32° 1' 44.23"	
	+E / -W : 0.00 US ft	Easting : 804412.02 US ft	Longitude : -103° 29' 3.91"	
	Slot TVD Reference : Ground Elevation			
	Elevation above Mean Sea Level : 3343.00 US ft			
Comment :				
Well Name Green Wave 20-17 Fed 28H	Type : Main well		UWI :	Plan : P1:V1
	Rig Height <i>Kelly Bushing</i> : 25.00 US ft		Comment :	
	Relative to Mean Sea Level: 3368.00 US ft			
	Closure Distance : 7580.56 US ft		Closure Azimuth : 359.128°	
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az : 359.13°
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48067.3nT	Dec : 7.21°	Dip : 59.91° Date : 15/Jul/2015

Target Set

Name : Green Wave 20-17 **Number of Targets :** 2
Fed 28H

Comment :

Target Name: LP Tgt Shape: Cuboid	Position (Relative to Slot centre)		
	+N / -S : 499.94 US ft	Northing : 375805.09 US ft	Latitude : 32° 1' 49.18"
	+E / -W : -29.29 US ft	Easting : 804382.73 US ft	Longitude : -103° 29' 4.21"
	TVD (Kelly Bushing) : 9883.00 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:	Position (Relative to Slot centre)		
PBHL 28H	+N / -S : 7579.68US ft	Northing : 382884.83 US ft	Latitude : 32°2'59.24"
	+E / -W : -115.40 US ft	Easting : 804296.62US ft	Longitude : -103°29'4.56"
Shape:	TVD (Kelly Bushing) : 9838.00 US ft		
Cuboid	Orientation Azimuth : 359.30°	Inclination : 0.36°	
	Dimensions Length : 14112.00 US ft	Breadth : 50.00 US ft	Height : 20.00 US ft

Well path created using minimum curvature.

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
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	
9361.00	0.00	0.00	9361.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
9633.73	30.00	353.26	9621.44	69.30	-8.19	69.42	11.00	11.00	0.00	353.26	Build/Turn
10184.15	90.36	359.30	9882.82	524.30	-29.72	524.69	11.00	10.97	1.10	6.95	LP
17240.20	90.36	359.30	9838.00	7579.68	-115.40	7580.56	0.00	0.00	0.00	0.00	PBHL 2*H

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
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
9300.00	0.00	0.00	9300.00	0.00	0.00	0.00	0.00	375305.15	804412.02		
9361.00	0.00	0.00	9361.00	0.00	0.00	0.00	0.00	375305.15	804412.02		KOP
9400.00	4.29	353.26	9399.96	1.45	-0.17	1.45	11.00	375306.60	804411.85		
9500.00	15.29	353.26	9498.36	18.31	-2.16	18.34	11.00	375323.46	804409.86		
9600.00	26.29	353.26	9591.70	53.50	-6.32	53.59	11.00	375358.65	804405.70		
9633.73	30.00	353.26	9621.44	69.30	-8.19	69.42	11.00	375374.45	804403.83		Build/Turn
9700.00	37.25	354.71	9676.58	105.77	-11.99	105.94	11.00	375410.92	804400.03		
9800.00	48.20	356.18	9749.94	173.31	-17.28	173.55	11.00	375478.46	804394.74		
9900.00	59.17	357.21	9809.07	253.63	-21.87	253.93	11.00	375558.78	804390.15		
10000.00	70.15	358.03	9851.81	343.79	-25.58	344.14	11.00	375648.94	804386.44		
10100.00	81.12	358.74	9876.58	440.48	-28.30	440.86	11.00	375745.63	804383.72		
10184.15	90.36	359.30	9882.82	524.30	-29.72	524.69	11.00	375829.45	804382.30		LP
10200.00	90.36	359.30	9882.72	540.14	-29.92	540.53	0.00	375845.29	804382.10		
10300.00	90.36	359.30	9882.08	640.13	-31.13	640.53	0.00	375945.28	804380.89		
10400.00	90.36	359.30	9881.45	740.12	-32.34	740.53	0.00	376045.27	804379.68		
10500.00	90.36	359.30	9880.81	840.11	-33.56	840.52	0.00	376145.26	804378.46		
10600.00	90.36	359.30	9880.18	940.10	-34.77	940.52	0.00	376245.25	804377.25		
10700.00	90.36	359.30	9879.54	1040.09	-35.99	1040.52	0.00	376345.24	804376.03		
10800.00	90.36	359.30	9878.91	1140.08	-37.20	1140.52	0.00	376445.23	804374.82		
10900.00	90.36	359.30	9878.27	1240.07	-38.42	1240.51	0.00	376545.22	804373.60		
11000.00	90.36	359.30	9877.64	1340.06	-39.63	1340.51	0.00	376645.21	804372.39		
11100.00	90.36	359.30	9877.00	1440.06	-40.84	1440.51	0.00	376745.21	804371.18		
11200.00	90.36	359.30	9876.37	1540.05	-42.06	1540.51	0.00	376845.20	804369.96		
11300.00	90.36	359.30	9875.73	1640.04	-43.27	1640.50	0.00	376945.19	804368.75		
11400.00	90.36	359.30	9875.10	1740.03	-44.49	1740.50	0.00	377045.18	804367.53		
11500.00	90.36	359.30	9874.46	1840.02	-45.70	1840.50	0.00	377145.17	804366.32		
11600.00	90.36	359.30	9873.83	1940.01	-46.92	1940.50	0.00	377245.16	804365.10		
11700.00	90.36	359.30	9873.19	2040.00	-48.13	2040.49	0.00	377345.15	804363.89		
11800.00	90.36	359.30	9872.55	2139.99	-49.34	2140.49	0.00	377445.14	804362.68		
11900.00	90.36	359.30	9871.92	2239.98	-50.56	2240.49	0.00	377545.13	804361.46		
12000.00	90.36	359.30	9871.28	2339.97	-51.77	2340.49	0.00	377645.12	804360.25		
12100.00	90.36	359.30	9870.65	2439.96	-52.99	2440.48	0.00	377745.11	804359.03		
12200.00	90.36	359.30	9870.01	2539.95	-54.20	2540.48	0.00	377845.10	804357.82		
12300.00	90.36	359.30	9869.38	2639.94	-55.42	2640.48	0.00	377945.09	804356.60		
12400.00	90.36	359.30	9868.74	2739.93	-56.63	2740.48	0.00	378045.08	804355.39		

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
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
12500.00	90.36	359.30	9868.11	2839.92	-57.84	2840.47	0.00	378145.07	804354.18	
12600.00	90.36	359.30	9867.47	2939.91	-59.06	2940.47	0.00	378245.06	804352.96	
12700.00	90.36	359.30	9866.84	3039.90	-60.27	3040.47	0.00	378345.05	804351.75	
12800.00	90.36	359.30	9866.20	3139.90	-61.49	3140.47	0.00	378445.05	804350.53	
12900.00	90.36	359.30	9865.57	3239.89	-62.70	3240.46	0.00	378545.04	804349.32	
13000.00	90.36	359.30	9864.93	3339.88	-63.91	3340.46	0.00	378645.03	804348.11	
13100.00	90.36	359.30	9864.30	3439.87	-65.13	3440.46	0.00	378745.02	804346.89	
13200.00	90.36	359.30	9863.66	3539.86	-66.34	3540.46	0.00	378845.01	804345.68	
13300.00	90.36	359.30	9863.03	3639.85	-67.56	3640.45	0.00	378945.00	804344.46	
13400.00	90.36	359.30	9862.39	3739.84	-68.77	3740.45	0.00	379044.99	804343.25	
13500.00	90.36	359.30	9861.76	3839.83	-69.99	3840.45	0.00	379144.98	804342.03	
13600.00	90.36	359.30	9861.12	3939.82	-71.20	3940.45	0.00	379244.97	804340.82	
13700.00	90.36	359.30	9860.49	4039.81	-72.41	4040.44	0.00	379344.96	804339.61	
13800.00	90.36	359.30	9859.85	4139.80	-73.63	4140.44	0.00	379444.95	804338.39	
13900.00	90.36	359.30	9859.22	4239.79	-74.84	4240.44	0.00	379544.94	804337.18	
14000.00	90.36	359.30	9858.58	4339.78	-76.06	4340.44	0.00	379644.93	804335.96	
14100.00	90.36	359.30	9857.95	4439.77	-77.27	4440.43	0.00	379744.92	804334.75	
14200.00	90.36	359.30	9857.31	4539.76	-78.49	4540.43	0.00	379844.91	804333.53	
14300.00	90.36	359.30	9856.68	4639.75	-79.70	4640.43	0.00	379944.90	804332.32	
14400.00	90.36	359.30	9856.04	4739.75	-80.91	4740.43	0.00	380044.90	804331.11	
14500.00	90.36	359.30	9855.41	4839.74	-82.13	4840.43	0.00	380144.89	804329.89	
14600.00	90.36	359.30	9854.77	4939.73	-83.34	4940.42	0.00	380244.88	804328.68	
14700.00	90.36	359.30	9854.13	5039.72	-84.56	5040.42	0.00	380344.87	804327.46	
14800.00	90.36	359.30	9853.50	5139.71	-85.77	5140.42	0.00	380444.86	804326.25	
14900.00	90.36	359.30	9852.86	5239.70	-86.98	5240.42	0.00	380544.85	804325.04	
15000.00	90.36	359.30	9852.23	5339.69	-88.20	5340.41	0.00	380644.84	804323.82	
15100.00	90.36	359.30	9851.59	5439.68	-89.41	5440.41	0.00	380744.83	804322.61	
15200.00	90.36	359.30	9850.96	5539.67	-90.63	5540.41	0.00	380844.82	804321.39	
15300.00	90.36	359.30	9850.32	5639.66	-91.84	5640.41	0.00	380944.81	804320.18	
15400.00	90.36	359.30	9849.69	5739.65	-93.06	5740.40	0.00	381044.80	804318.96	
15500.00	90.36	359.30	9849.05	5839.64	-94.27	5840.40	0.00	381144.79	804317.75	
15600.00	90.36	359.30	9848.42	5939.63	-95.48	5940.40	0.00	381244.78	804316.54	
15700.00	90.36	359.30	9847.78	6039.62	-96.70	6040.40	0.00	381344.77	804315.32	
15800.00	90.36	359.30	9847.15	6139.61	-97.91	6140.39	0.00	381444.76	804314.11	
15900.00	90.36	359.30	9846.51	6239.60	-99.13	6240.39	0.00	381544.75	804312.89	
16000.00	90.36	359.30	9845.88	6339.60	-100.34	6340.39	0.00	381644.75	804311.68	
16100.00	90.36	359.30	9845.24	6439.59	-101.56	6440.39	0.00	381744.74	804310.46	
16200.00	90.36	359.30	9844.61	6539.58	-102.77	6540.38	0.00	381844.73	804309.25	
16300.00	90.36	359.30	9843.97	6639.57	-103.98	6640.38	0.00	381944.72	804308.04	
16400.00	90.36	359.30	9843.34	6739.56	-105.20	6740.38	0.00	382044.71	804306.82	
16500.00	90.36	359.30	9842.70	6839.55	-106.41	6840.38	0.00	382144.70	804305.61	
16600.00	90.36	359.30	9842.07	6939.54	-107.63	6940.37	0.00	382244.69	804304.39	
16700.00	90.36	359.30	9841.43	7039.53	-108.84	7040.37	0.00	382344.68	804303.18	
16800.00	90.36	359.30	9840.80	7139.52	-110.05	7140.37	0.00	382444.67	804301.97	
16900.00	90.36	359.30	9840.16	7239.51	-111.27	7240.37	0.00	382544.66	804300.75	
17000.00	90.36	359.30	9839.53	7339.50	-112.48	7340.36	0.00	382644.65	804299.54	
17100.00	90.36	359.30	9838.89	7439.49	-113.70	7440.36	0.00	382744.64	804298.32	
17200.00	90.36	359.30	9838.26	7539.48	-114.91	7540.36	0.00	382844.63	804297.11	
17240.20	90.36	359.30	9838.00	7579.68	-115.40	7580.56	0.00	382884.83	804296.62	PBHL 2*H

**Weatherford®****Weatherford Drilling Services**

GeoDec4 v2.1.0.0

Report Date: March 30, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Green Wave 20-17 Fed 28H
API Number: _____
Rig Name: _____
Location: Lea Co, NM Nad83 NME
Block: _____
Engineer: RWJ

NAD83 / New Mexico East (ftUS)	NAD83 (1986)
Projected Coordinate System	Geodetic Coordinate System
Datum: North American Datum 1983 (1986)	Datum: North American Datum 1983 (1986)
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
EPSG: 2257	EPSG: 4269
North: 375305.15 US Survey Foot	Latitude: 32.028952 Degree
East: 804412.02 US Survey Foot	Longitude: -103.48442 Degree
Convergence: 0.45°	
Declination: 7.21°	
<u>Total Correction: 6.76°</u>	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 01' 44.23" N
Longitude = 103° 29' 03.91" W

Magnetic Declination = 7.21 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6784
Local Field Strength = 48067 nT	Magnetic Vector X = 23910 nT
Magnetic Dip = 59.91 deg	Magnetic Vector Y = 3024 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41589 nT
Run Date = July 15, 2015	Magnetic Vector H = 24100 nT

Signed: _____ Date: _____

© 2013 Weatherford

Warning: This information is controlled, and any printed version is deemed as uncontrolled unless suitably endorsed by a controlling authority or accompanied by a controlled table of contents in order to ensure adequate revision control.