

State of New Mexico

Form C-102

Energy, Minerals &amp; Natural Resources Department

Revised August 1, 2011

OIL CONSERVATION DIVISION

Submit one copy to appropriate

District Office

1220 South St. Francis Dr.

Santa Fe, NM 87505

☒ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-025-46048</b>		<sup>2</sup> Pool Code <b>98094</b>		<sup>3</sup> Pool Name <b>BOBCAT DRAW-UPR WOLFCAMP</b>	
<sup>4</sup> Property Code		<sup>5</sup> Property Name <b>GREEN WAVE 20-32 FED STATE COM</b>			
<sup>7</sup> OGRID No. <b>6137</b>		<sup>8</sup> Operator Name <b>DEVON ENERGY PRODUCTION COMPANY, L.P.</b>			
		<sup>6</sup> Well Number <b>6H</b>		<sup>9</sup> Elevation <b>3344.1</b>	
<sup>10</sup> Surface Location <b>SL</b>					
UL or lot no. <b>I</b>	Section <b>20</b>	Township <b>26 S</b>	Range <b>34 E</b>	Lot Idn	Feet from the <b>2424</b>
				North/South line <b>SOUTH</b>	Feet from the <b>329</b>
				East/West line <b>EAST</b>	County <b>LEA</b>
<sup>11</sup> Bottom Hole Location If Different From Surface					
UL or lot no. <b>1</b>	Section <b>32</b>	Township <b>26 S</b>	Range <b>34 E</b>	Lot Idn	Feet from the <b>2384</b>
				North/South line <b>NORTH</b>	Feet from the <b>930</b>
				East/West line <b>EAST</b>	County <b>LEA</b>
<sup>12</sup> Dedicated Acres <b>1264.64</b>		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code	
				<sup>15</sup> Order No.	

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p><b>17 OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Rebecca Deal</i> 5/13/2020 Signature Date</p> <p><b>Rebecca Deal, Regulatory Analyst</b> Printed Name</p> <p><b>rebecca.deal@dv.com</b> E-mail Address</p>		<p><b>18 SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JULY 18, 2018 Date of Survey</p> <p><i>Imon E. Jaramillo</i> Signature and Seal of Professional Surveyor</p> <p>Certificate Number: <b>12797</b> NEW MEXICO PROFESSIONAL SURVEYOR NO. 6411</p>	
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Intent ☐ As Drilled ☒

Rec'd 7/6/2020 - NMOCD

API #  
30-025-46048

Operator Name: DEVON ENERGY PRODUCTION COMPANY, L.P.	Property Name: GREEN WAVE 20-32 FED STATE COM	Well Number 6H
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Kick Off Point (KOP)

UL I	Section 20	Township 23S	Range 34E	Lot	Feet 2606	From N/S SOUTH	Feet 1054	From E/W EAST	County LEA
Latitude 32.0288336					Longitude 103.4867553				NAD 83

First Take Point (FTP)

UL I	Section 20	Township 26S	Range 34E	Lot	Feet 2252	From N/S SOUTH	Feet 1042	From E/W EAST	County LEA
Latitude 32.0278620					Longitude 103.4867151				NAD 83

Last Take Point (LTP)

UL H	Section 32	Township 26S	Range 34E	Lot 1	Feet 2261	From N/S NORTH	Feet 936	From E/W EAST	County LEA
Latitude 32.0009453					Longitude 103.4863522				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #  
30-025-46050

Operator Name: DEVON ENERGY PRODUCTION COMPANY, L.P.	Property Name: GREEN WAVE 20-32 FED STATE COM	Well Number 8H
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KZ 06/29/2018

Rec'd 7/6/2020 - NMOCD

STATE OF NEW MEXICO  
COUNTY OF LEA

I, **Seth Crawley**, certify that; I am employed by **Skyline Directional Drilling, LLC**; that I did on the day(s) of **12/13/2019 to 1/28/2020** conduct or supervise the taking of MWD surveys from a depth of **212 feet to a depth of 22,955 feet**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Skyline Directional Drilling, LLC**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **Devon Energy Production Co.** for the **GREEN WAVE 20-32 FED STATE COM 6H**, with the **API #30-025-46048** in **Bobcat Draw/Upper Wolcamp** field of **Lea County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Skyline Directional Drilling, LLC**.

A handwritten signature in cursive script that reads 'Seth Crawley'. The signature is written in black ink and is positioned above a horizontal line.

Seth Crawley  
Senior Well Planner



## **Devon Energy Production Company, L.P.**

**Lea Co, New Mexico (NAD-83)**

**Green Wave 20-32 Fed State Com 6H**

**Green Wave 20-32 Fed State Com 6H**

**30-025-46048**

**Sidetrack #1**

**Design: Sidetrack #1**

## **Standard Survey Report**

**25 March, 2020**



<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

<b>Project</b>	Lea Co, New Mexico (NAD-83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

<b>Site</b>	Green Wave 20-32 Fed State Com 6H		
<b>Site Position:</b>		<b>Northing:</b>	375,079.00 usft
<b>From:</b>	Map	<b>Easting:</b>	804,414.98 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	32° 1' 41.991 N
		<b>Longitude:</b>	103° 29' 3.898 W

<b>Well</b>	Green Wave 20-32 Fed State Com 6H		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b> 375,079.00 usft
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b> 804,414.98 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>	0.45 °	<b>Ground Level:</b>	3,344.1 usft

<b>Wellbore</b>	Sidetrack #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	1/17/2020	6.62	59.86	47,566.15971649

<b>Design</b>	Sidetrack #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	18,532.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	179.51	

<b>Survey Program</b>	<b>Date</b>	3/25/2020			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
212.0	18,532.0	Survey #1 (Lateral #1)	MWD	MWD - Skyline	
18,595.0	22,955.0	Survey #2 (Sidetrack #1)	MWD	MWD - Skyline	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
212.0	0.30	268.20	212.0	0.0	-0.6	0.0	0.14	0.14	0.00	
302.0	0.70	310.20	302.0	0.3	-1.2	-0.3	0.58	0.44	46.67	
393.0	0.30	285.40	393.0	0.8	-1.9	-0.8	0.49	-0.44	-27.25	
485.0	0.30	303.90	485.0	1.0	-2.3	-1.0	0.10	0.00	20.11	
576.0	0.40	290.30	576.0	1.2	-2.8	-1.2	0.14	0.11	-14.95	
667.0	0.80	327.40	667.0	1.8	-3.4	-1.9	0.59	0.44	40.77	
758.0	0.70	333.50	758.0	2.9	-4.0	-2.9	0.14	-0.11	6.70	
880.0	0.60	23.90	880.0	4.1	-4.1	-4.2	0.46	-0.08	41.31	

<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
972.0	0.80	25.90	972.0	5.1	-3.6	-5.2	0.22	0.22	2.17	
1,063.0	0.90	16.30	1,063.0	6.4	-3.1	-6.4	0.19	0.11	-10.55	
1,155.0	0.60	44.80	1,154.9	7.4	-2.6	-7.5	0.51	-0.33	30.98	
1,246.0	0.40	37.80	1,245.9	8.0	-2.1	-8.0	0.23	-0.22	-7.69	
1,337.0	0.60	74.50	1,336.9	8.4	-1.4	-8.4	0.40	0.22	40.33	
1,428.0	1.50	301.20	1,427.9	9.1	-2.0	-9.2	2.15	0.99	-146.48	
1,522.0	2.40	284.30	1,521.9	10.3	-4.9	-10.3	1.13	0.96	-17.98	
1,616.0	2.60	284.90	1,615.8	11.3	-8.9	-11.4	0.21	0.21	0.64	
1,711.0	2.80	292.10	1,710.7	12.7	-13.1	-12.8	0.41	0.21	7.58	
1,806.0	2.30	290.40	1,805.6	14.3	-17.1	-14.4	0.53	-0.53	-1.79	
1,900.0	2.70	289.60	1,899.5	15.7	-20.9	-15.8	0.43	0.43	-0.85	
1,995.0	3.00	285.60	1,994.4	17.1	-25.4	-17.3	0.38	0.32	-4.21	
2,090.0	3.10	280.00	2,089.2	18.2	-30.4	-18.5	0.33	0.11	-5.89	
2,184.0	2.10	254.30	2,183.1	18.2	-34.5	-18.5	1.61	-1.06	-27.34	
2,278.0	1.80	256.90	2,277.1	17.4	-37.6	-17.7	0.33	-0.32	2.77	
2,373.0	1.90	246.60	2,372.0	16.4	-40.5	-16.8	0.36	0.11	-10.84	
2,468.0	1.50	193.10	2,467.0	14.6	-42.2	-14.9	1.65	-0.42	-56.32	
2,562.0	0.60	31.90	2,561.0	13.8	-42.3	-14.2	2.21	-0.96	-171.49	
2,656.0	1.00	22.40	2,655.0	15.0	-41.7	-15.3	0.45	0.43	-10.11	
2,750.0	0.80	57.60	2,749.0	16.1	-40.8	-16.4	0.61	-0.21	37.45	
2,844.0	0.70	32.40	2,843.0	16.9	-40.0	-17.3	0.36	-0.11	-26.81	
2,938.0	0.40	31.70	2,937.0	17.7	-39.5	-18.0	0.32	-0.32	-0.74	
3,033.0	0.20	279.40	3,032.0	18.0	-39.5	-18.3	0.54	-0.21	-118.21	
3,127.0	0.40	261.60	3,126.0	18.0	-39.9	-18.3	0.23	0.21	-18.94	
3,221.0	0.70	245.50	3,220.0	17.7	-40.8	-18.0	0.36	0.32	-17.13	
3,315.0	1.10	247.60	3,313.9	17.1	-42.2	-17.5	0.43	0.43	2.23	
3,409.0	1.20	240.40	3,407.9	16.3	-43.8	-16.6	0.19	0.11	-7.66	
3,504.0	1.50	235.30	3,502.9	15.1	-45.7	-15.5	0.34	0.32	-5.37	
3,596.0	2.80	249.80	3,594.8	13.6	-48.8	-14.0	1.52	1.41	15.76	
3,690.0	2.90	237.80	3,688.7	11.6	-53.0	-12.0	0.64	0.11	-12.77	
3,784.0	3.30	267.60	3,782.6	10.2	-57.7	-10.7	1.74	0.43	31.70	
3,878.0	3.30	264.00	3,876.4	9.8	-63.1	-10.3	0.22	0.00	-3.83	
3,971.0	3.50	280.10	3,969.3	10.0	-68.6	-10.6	1.05	0.22	17.31	
4,065.0	5.10	299.00	4,063.0	12.5	-75.0	-13.2	2.25	1.70	20.11	
4,159.0	6.20	305.30	4,156.6	17.5	-82.8	-18.2	1.34	1.17	6.70	
4,254.0	7.90	298.30	4,250.8	23.5	-92.8	-24.3	2.00	1.79	-7.37	
4,348.0	6.70	304.70	4,344.1	29.7	-103.0	-30.6	1.54	-1.28	6.81	
4,442.0	8.40	291.50	4,437.3	35.4	-113.9	-36.3	2.57	1.81	-14.04	
4,536.0	10.20	280.50	4,530.0	39.4	-128.4	-40.5	2.68	1.91	-11.70	
4,630.0	10.30	281.70	4,622.5	42.6	-144.9	-43.9	0.25	0.11	1.28	
4,724.0	9.50	277.70	4,715.1	45.4	-160.8	-46.7	1.12	-0.85	-4.26	
4,818.0	7.50	274.40	4,808.1	46.9	-174.6	-48.4	2.19	-2.13	-3.51	
4,912.0	8.30	286.80	4,901.2	49.3	-187.2	-50.9	2.00	0.85	13.19	

<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,006.0	10.20	279.40	4,994.0	52.6	-201.9	-54.4	2.38	2.02	-7.87
5,100.0	10.00	275.00	5,086.5	54.7	-218.2	-56.6	0.85	-0.21	-4.68
5,194.0	8.80	272.70	5,179.3	55.7	-233.6	-57.7	1.34	-1.28	-2.45
5,288.0	9.90	283.30	5,272.0	57.9	-248.6	-60.1	2.17	1.17	11.28
5,381.0	8.70	284.40	5,363.8	61.5	-263.2	-63.8	1.30	-1.29	1.18
5,475.0	8.90	282.00	5,456.7	64.8	-277.2	-67.2	0.44	0.21	-2.55
5,570.0	10.40	286.90	5,550.3	68.8	-292.6	-71.3	1.80	1.58	5.16
5,665.0	13.50	296.80	5,643.3	76.3	-310.7	-79.0	3.90	3.26	10.42
5,760.0	13.70	299.00	5,735.6	86.8	-330.4	-89.6	0.58	0.21	2.32
5,854.0	13.10	298.00	5,827.1	97.2	-349.6	-100.2	0.68	-0.64	-1.06
5,949.0	12.40	297.50	5,919.7	106.9	-368.1	-110.1	0.75	-0.74	-0.53
6,043.0	12.20	298.20	6,011.6	116.3	-385.8	-119.6	0.27	-0.21	0.74
6,137.0	11.40	290.70	6,103.6	124.3	-403.3	-127.7	1.84	-0.85	-7.98
6,232.0	11.50	279.60	6,196.7	129.2	-421.4	-132.8	2.32	0.11	-11.68
6,325.0	10.60	277.30	6,288.0	131.8	-439.0	-135.6	1.08	-0.97	-2.47
6,420.0	9.50	275.80	6,381.5	133.7	-455.5	-137.6	1.19	-1.16	-1.58
6,514.0	10.30	280.80	6,474.1	136.1	-471.5	-140.1	1.25	0.85	5.32
6,608.0	10.00	281.70	6,566.6	139.3	-487.7	-143.5	0.36	-0.32	0.96
6,702.0	9.80	281.60	6,659.2	142.6	-503.5	-146.9	0.21	-0.21	-0.11
6,796.0	9.40	280.40	6,751.9	145.6	-518.9	-150.0	0.48	-0.43	-1.28
6,889.0	9.50	280.00	6,843.7	148.3	-534.0	-152.8	0.13	0.11	-0.43
6,983.0	9.30	280.10	6,936.4	150.9	-549.1	-155.6	0.21	-0.21	0.11
7,077.0	9.00	279.40	7,029.2	153.5	-563.8	-158.3	0.34	-0.32	-0.74
7,171.0	8.90	279.90	7,122.1	155.9	-578.2	-160.9	0.13	-0.11	0.53
7,266.0	8.40	278.80	7,216.0	158.2	-592.3	-163.3	0.55	-0.53	-1.16
7,360.0	7.90	276.70	7,309.0	160.1	-605.5	-165.2	0.62	-0.53	-2.23
7,454.0	7.40	276.60	7,402.2	161.5	-617.9	-166.8	0.53	-0.53	-0.11
7,548.0	7.00	276.10	7,495.5	162.8	-629.7	-168.2	0.43	-0.43	-0.53
7,641.0	6.10	273.00	7,587.8	163.7	-640.2	-169.1	1.04	-0.97	-3.33
7,736.0	3.60	269.10	7,682.5	163.9	-648.3	-169.4	2.65	-2.63	-4.11
7,830.0	1.20	258.00	7,776.4	163.6	-652.2	-169.2	2.59	-2.55	-11.81
7,924.0	1.00	246.60	7,870.4	163.1	-653.9	-168.7	0.31	-0.21	-12.13
8,018.0	1.00	237.40	7,964.4	162.3	-655.3	-167.9	0.17	0.00	-9.79
8,112.0	1.30	238.20	8,058.4	161.3	-656.9	-166.9	0.32	0.32	0.85
8,207.0	1.20	221.70	8,153.3	160.0	-658.5	-165.6	0.39	-0.11	-17.37
8,300.0	1.00	223.50	8,246.3	158.7	-659.7	-164.3	0.22	-0.22	1.94
8,394.0	1.10	224.90	8,340.3	157.5	-660.9	-163.1	0.11	0.11	1.49
8,488.0	1.10	217.90	8,434.3	156.1	-662.1	-161.8	0.14	0.00	-7.45
8,582.0	1.70	299.70	8,528.3	156.1	-663.9	-161.8	2.01	0.64	87.02
8,676.0	1.50	301.90	8,622.2	157.4	-666.1	-163.1	0.22	-0.21	2.34
8,770.0	1.40	295.50	8,716.2	158.6	-668.2	-164.3	0.20	-0.11	-6.81
8,865.0	1.10	284.50	8,811.2	159.3	-670.1	-165.0	0.40	-0.32	-11.58
8,959.0	1.10	282.70	8,905.2	159.7	-671.9	-165.5	0.04	0.00	-1.91

<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,053.0	1.10	268.90	8,999.1	159.9	-673.7	-165.7	0.28	0.00	-14.68
9,148.0	1.20	266.30	9,094.1	159.8	-675.6	-165.6	0.12	0.11	-2.74
9,242.0	1.10	262.40	9,188.1	159.7	-677.4	-165.4	0.14	-0.11	-4.15
9,336.0	1.30	265.00	9,282.1	159.4	-679.4	-165.2	0.22	0.21	2.77
9,430.0	1.40	263.90	9,376.1	159.2	-681.6	-165.0	0.11	0.11	-1.17
9,524.0	1.30	263.40	9,470.0	159.0	-683.8	-164.8	0.11	-0.11	-0.53
9,618.0	1.40	266.20	9,564.0	158.8	-686.0	-164.6	0.13	0.11	2.98
9,712.0	1.10	261.80	9,658.0	158.6	-688.1	-164.5	0.33	-0.32	-4.68
9,806.0	1.20	270.40	9,752.0	158.5	-689.9	-164.3	0.21	0.11	9.15
9,901.0	1.40	281.80	9,846.9	158.7	-692.1	-164.6	0.34	0.21	12.00
9,995.0	1.60	275.60	9,940.9	159.1	-694.5	-165.0	0.27	0.21	-6.60
10,089.0	1.70	305.50	10,034.9	160.0	-696.9	-166.0	0.91	0.11	31.81
10,184.0	0.90	329.50	10,129.8	161.5	-698.5	-167.4	1.00	-0.84	25.26
10,278.0	1.20	30.00	10,223.8	162.9	-698.3	-168.9	1.16	0.32	64.36
10,373.0	1.60	11.60	10,318.8	165.1	-697.6	-171.1	0.63	0.42	-19.37
10,467.0	1.10	330.20	10,412.8	167.2	-697.8	-173.1	1.13	-0.53	-44.04
10,562.0	1.20	328.20	10,507.8	168.8	-698.7	-174.8	0.11	0.11	-2.11
10,656.0	1.40	311.60	10,601.7	170.4	-700.1	-176.4	0.45	0.21	-17.66
10,750.0	1.80	300.50	10,695.7	171.9	-702.2	-177.9	0.54	0.43	-11.81
10,845.0	1.20	301.10	10,790.7	173.2	-704.4	-179.2	0.63	-0.63	0.63
10,940.0	1.10	306.70	10,885.7	174.3	-706.0	-180.3	0.16	-0.11	5.89
11,033.0	0.70	313.70	10,978.6	175.2	-707.1	-181.2	0.45	-0.43	7.53
11,127.0	0.40	358.70	11,072.6	175.9	-707.5	-182.0	0.54	-0.32	47.87
11,221.0	0.30	334.70	11,166.6	176.5	-707.6	-182.5	0.19	-0.11	-25.53
11,315.0	0.00	161.00	11,260.6	176.7	-707.7	-182.7	0.32	-0.32	0.00
11,410.0	1.00	305.90	11,355.6	177.2	-708.4	-183.2	1.05	1.05	0.00
11,504.0	1.20	304.80	11,449.6	178.2	-709.9	-184.3	0.21	0.21	-1.17
11,599.0	2.60	276.00	11,544.6	179.0	-712.8	-185.1	1.74	1.47	-30.32
11,694.0	2.50	272.10	11,639.5	179.3	-717.1	-185.4	0.21	-0.11	-4.11
11,788.0	2.70	259.60	11,733.4	179.0	-721.3	-185.1	0.64	0.21	-13.30
11,911.0	3.70	246.10	11,856.2	176.8	-727.8	-183.1	1.01	0.81	-10.98
12,005.0	2.50	286.50	11,950.0	176.2	-732.5	-182.5	2.57	-1.28	42.98
12,099.0	2.00	278.40	12,044.0	177.0	-736.1	-183.3	0.63	-0.53	-8.62
12,194.0	1.90	276.10	12,138.9	177.4	-739.3	-183.7	0.13	-0.11	-2.42
12,288.0	0.70	216.10	12,232.9	177.1	-741.2	-183.5	1.77	-1.28	-63.83
12,382.0	0.30	45.70	12,326.9	176.8	-741.3	-183.2	1.06	-0.43	-181.28
12,475.0	5.60	153.70	12,419.7	172.9	-739.2	-179.3	6.13	5.70	116.13
12,549.0	12.00	158.00	12,492.8	162.6	-734.7	-168.8	8.69	8.65	5.81
12,569.0	14.00	159.80	12,512.3	158.4	-733.1	-164.6	10.20	10.00	9.00
12,664.0	30.10	169.90	12,600.1	123.9	-724.9	-130.1	17.35	16.95	10.63
12,712.0	38.60	176.30	12,639.7	97.0	-721.8	-103.2	19.22	17.71	13.33
12,757.0	48.10	176.80	12,672.4	66.2	-719.9	-72.4	21.12	21.11	1.11
12,803.0	57.00	177.30	12,700.4	29.8	-718.1	-35.9	19.37	19.35	1.09
12,830.0	61.90	177.80	12,714.1	6.6	-717.1	-12.7	18.22	18.15	1.85



<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,880.0	71.60	178.40	12,733.8	-39.3	-715.6	33.2	19.43	19.40	1.20	
12,928.0	74.50	179.10	12,747.8	-85.2	-714.6	79.1	6.20	6.04	1.46	
12,974.0	76.10	177.90	12,759.5	-129.7	-713.4	123.5	4.30	3.48	-2.61	
13,022.0	75.50	176.80	12,771.2	-176.1	-711.2	170.0	2.55	-1.25	-2.29	
13,068.0	77.00	175.90	12,782.2	-220.7	-708.4	214.7	3.77	3.26	-1.96	
13,144.0	84.40	177.90	12,794.4	-295.6	-704.4	289.5	10.08	9.74	2.63	
13,162.0	84.20	178.50	12,796.2	-313.5	-703.8	307.4	3.50	-1.11	3.33	
13,256.0	87.30	176.60	12,803.2	-407.1	-699.8	401.1	3.86	3.30	-2.02	
13,349.0	92.90	177.80	12,803.0	-500.0	-695.2	494.0	6.16	6.02	1.29	
13,444.0	91.80	177.80	12,799.1	-594.8	-691.6	588.9	1.16	-1.16	0.00	
13,538.0	90.60	178.00	12,797.2	-688.7	-688.1	682.8	1.29	-1.28	0.21	
13,632.0	89.10	178.50	12,797.4	-782.7	-685.3	776.8	1.68	-1.60	0.53	
13,726.0	93.00	178.50	12,795.7	-876.6	-682.8	870.7	4.15	4.15	0.00	
13,820.0	91.80	179.20	12,791.7	-970.5	-680.9	964.6	1.48	-1.28	0.74	
13,915.0	92.50	178.00	12,788.2	-1,065.4	-678.6	1,059.6	1.46	0.74	-1.26	
14,009.0	93.50	178.80	12,783.3	-1,159.2	-676.0	1,153.4	1.36	1.06	0.85	
14,104.0	93.30	178.10	12,777.6	-1,254.0	-673.4	1,248.2	0.77	-0.21	-0.74	
14,198.0	92.90	178.50	12,772.5	-1,347.9	-670.6	1,342.1	0.60	-0.43	0.43	
14,292.0	92.30	178.30	12,768.3	-1,441.7	-668.0	1,436.0	0.67	-0.64	-0.21	
14,387.0	89.90	178.40	12,766.5	-1,536.7	-665.3	1,530.9	2.53	-2.53	0.11	
14,481.0	87.30	177.80	12,768.8	-1,630.6	-662.2	1,624.8	2.84	-2.77	-0.64	
14,575.0	88.90	178.50	12,771.9	-1,724.5	-659.1	1,718.8	1.86	1.70	0.74	
14,669.0	88.90	178.20	12,773.7	-1,818.4	-656.4	1,812.7	0.32	0.00	-0.32	
14,763.0	91.60	179.90	12,773.3	-1,912.4	-654.9	1,906.7	3.39	2.87	1.81	
14,857.0	89.30	177.80	12,772.5	-2,006.3	-653.0	2,000.7	3.31	-2.45	-2.23	
14,951.0	90.50	174.30	12,772.7	-2,100.1	-646.5	2,094.5	3.94	1.28	-3.72	
15,044.0	89.40	172.90	12,772.8	-2,192.5	-636.1	2,187.0	1.91	-1.18	-1.51	
15,138.0	90.20	174.50	12,773.1	-2,286.0	-625.8	2,280.5	1.90	0.85	1.70	
15,232.0	89.50	172.70	12,773.3	-2,379.4	-615.4	2,374.0	2.05	-0.74	-1.91	
15,335.0	87.80	171.20	12,775.8	-2,481.3	-600.9	2,476.1	2.20	-1.65	-1.46	
15,430.0	91.40	175.30	12,776.4	-2,575.6	-589.8	2,570.5	5.74	3.79	4.32	
15,524.0	91.90	177.00	12,773.7	-2,669.4	-583.5	2,664.3	1.88	0.53	1.81	
15,619.0	92.70	179.80	12,769.9	-2,764.2	-580.8	2,759.2	3.06	0.84	2.95	
15,713.0	92.20	179.70	12,765.9	-2,858.2	-580.4	2,853.1	0.54	-0.53	-0.11	
15,807.0	91.30	182.60	12,763.0	-2,952.1	-582.3	2,947.0	3.23	-0.96	3.09	
15,902.0	89.80	181.40	12,762.1	-3,047.0	-585.6	3,041.9	2.02	-1.58	-1.26	
15,996.0	90.50	182.30	12,761.9	-3,141.0	-588.6	3,135.8	1.21	0.74	0.96	
16,090.0	89.30	182.30	12,762.0	-3,234.9	-592.4	3,229.7	1.28	-1.28	0.00	
16,185.0	93.00	184.10	12,760.1	-3,329.7	-597.7	3,324.5	4.33	3.89	1.89	
16,278.0	88.90	184.20	12,758.6	-3,422.4	-604.4	3,417.1	4.41	-4.41	0.11	
16,372.0	87.90	184.00	12,761.2	-3,516.1	-611.2	3,510.8	1.08	-1.06	-0.21	
16,466.0	91.50	184.20	12,761.7	-3,609.9	-617.9	3,604.5	3.84	3.83	0.21	
16,560.0	88.90	182.80	12,761.4	-3,703.7	-623.6	3,698.2	3.14	-2.77	-1.49	

<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,654.0	90.80	183.60	12,761.6	-3,797.5	-628.9	3,792.0	2.19	2.02	0.85	
16,748.0	91.50	184.30	12,759.7	-3,891.3	-635.3	3,885.7	1.05	0.74	0.74	
16,842.0	89.10	181.60	12,759.2	-3,985.2	-640.2	3,979.5	3.84	-2.55	-2.87	
16,937.0	91.20	181.90	12,759.0	-4,080.1	-643.1	4,074.5	2.23	2.21	0.32	
17,030.0	88.40	180.70	12,759.3	-4,173.1	-645.2	4,167.4	3.28	-3.01	-1.29	
17,124.0	88.90	181.00	12,761.5	-4,267.0	-646.6	4,261.4	0.62	0.53	0.32	
17,218.0	88.10	180.70	12,764.0	-4,361.0	-648.0	4,355.3	0.91	-0.85	-0.32	
17,312.0	88.20	178.60	12,767.0	-4,454.9	-647.4	4,449.2	2.24	0.11	-2.23	
17,405.0	89.90	179.60	12,768.6	-4,547.9	-645.9	4,542.2	2.12	1.83	1.08	
17,500.0	92.30	179.80	12,766.7	-4,642.9	-645.4	4,637.2	2.54	2.53	0.21	
17,594.0	91.50	179.90	12,763.6	-4,736.8	-645.2	4,731.1	0.86	-0.85	0.11	
17,688.0	91.50	179.90	12,761.2	-4,830.8	-645.0	4,825.1	0.00	0.00	0.00	
17,780.0	88.50	179.00	12,761.2	-4,922.8	-644.2	4,917.1	3.40	-3.26	-0.98	
17,874.0	87.80	178.50	12,764.2	-5,016.7	-642.1	5,011.0	0.91	-0.74	-0.53	
17,968.0	86.90	177.80	12,768.6	-5,110.6	-639.1	5,104.9	1.21	-0.96	-0.74	
18,061.0	90.10	177.80	12,771.0	-5,203.4	-635.5	5,197.8	3.44	3.44	0.00	
18,155.0	90.60	178.50	12,770.4	-5,297.4	-632.5	5,291.8	0.92	0.53	0.74	
18,249.0	90.90	178.80	12,769.2	-5,391.4	-630.3	5,385.8	0.45	0.32	0.32	
18,344.0	90.50	178.70	12,768.0	-5,486.3	-628.2	5,480.8	0.43	-0.42	-0.11	
18,438.0	89.00	178.00	12,768.4	-5,580.3	-625.5	5,574.7	1.76	-1.60	-0.74	
18,532.0	88.60	177.00	12,770.4	-5,674.2	-621.4	5,668.7	1.15	-0.43	-1.06	
18,595.0	89.50	178.00	12,771.4	-5,737.1	-618.6	5,731.6	2.14	1.43	1.59	
First Survey ST										
18,618.0	89.30	178.90	12,771.7	-5,760.1	-618.0	5,754.6	4.01	-0.87	3.91	
18,649.0	87.60	183.50	12,772.5	-5,791.1	-618.7	5,785.6	15.81	-5.48	14.84	
18,711.0	87.80	185.20	12,775.0	-5,852.8	-623.4	5,847.3	2.76	0.32	2.74	
18,806.0	89.00	184.10	12,777.7	-5,947.5	-631.1	5,941.9	1.71	1.26	-1.16	
18,920.0	89.50	184.80	12,779.2	-6,061.1	-639.9	6,055.4	0.75	0.44	0.61	
18,995.0	89.10	181.90	12,780.1	-6,136.0	-644.3	6,130.3	3.90	-0.53	-3.87	
19,089.0	90.70	180.00	12,780.2	-6,230.0	-645.8	6,224.2	2.64	1.70	-2.02	
19,184.0	90.40	179.60	12,779.3	-6,325.0	-645.5	6,319.2	0.53	-0.32	-0.42	
19,278.0	92.00	178.20	12,777.4	-6,418.9	-643.7	6,413.2	2.26	1.70	-1.49	
19,372.0	90.90	177.90	12,775.0	-6,512.8	-640.5	6,507.1	1.21	-1.17	-0.32	
19,466.0	91.90	179.00	12,772.7	-6,606.8	-638.0	6,601.1	1.58	1.06	1.17	
19,561.0	92.40	179.30	12,769.1	-6,701.7	-636.6	6,696.0	0.61	0.53	0.32	
19,655.0	91.80	178.80	12,765.7	-6,795.6	-635.0	6,789.9	0.83	-0.64	-0.53	
19,750.0	91.20	178.50	12,763.2	-6,890.6	-632.8	6,884.9	0.71	-0.63	-0.32	
19,845.0	91.60	178.10	12,760.9	-6,985.5	-629.9	6,979.8	0.60	0.42	-0.42	
19,939.0	89.80	179.30	12,759.7	-7,079.4	-627.8	7,073.8	2.30	-1.91	1.28	
20,033.0	89.40	179.40	12,760.4	-7,173.4	-626.7	7,167.8	0.44	-0.43	0.11	
20,126.0	89.20	179.10	12,761.5	-7,266.4	-625.5	7,260.8	0.39	-0.22	-0.32	
20,221.0	88.80	178.70	12,763.2	-7,361.4	-623.7	7,355.8	0.60	-0.42	-0.42	
20,315.0	89.20	179.00	12,764.8	-7,455.4	-621.8	7,449.8	0.53	0.43	0.32	
20,409.0	88.20	178.60	12,766.9	-7,549.3	-619.8	7,543.7	1.15	-1.06	-0.43	

<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,503.0	89.70	177.10	12,768.7	-7,643.2	-616.3	7,637.7	2.26	1.60	-1.60
20,567.3	90.17	176.90	12,768.7	-7,707.4	-613.0	7,701.9	0.80	0.74	-0.32
<b>Cross Sec 29 to 32; 20567' MD; 1010' FEL</b>									
20,598.0	90.40	176.80	12,768.6	-7,738.1	-611.3	7,732.6	0.80	0.74	-0.32
20,692.0	90.40	176.70	12,767.9	-7,831.9	-605.9	7,826.5	0.11	0.00	-0.11
20,786.0	90.00	177.80	12,767.6	-7,925.8	-601.4	7,920.4	1.25	-0.43	1.17
20,880.0	89.50	179.90	12,768.0	-8,019.8	-599.5	8,014.4	2.30	-0.53	2.23
20,975.0	91.00	180.20	12,767.6	-8,114.8	-599.6	8,109.4	1.61	1.58	0.32
21,069.0	90.80	179.20	12,766.1	-8,208.8	-599.1	8,203.4	1.08	-0.21	-1.06
21,162.0	89.20	178.70	12,766.1	-8,301.8	-597.4	8,296.3	1.80	-1.72	-0.54
21,257.0	88.60	177.80	12,767.9	-8,396.7	-594.5	8,391.3	1.14	-0.63	-0.95
21,351.0	89.70	176.90	12,769.3	-8,490.6	-590.2	8,485.2	1.51	1.17	-0.96
21,445.0	89.40	177.80	12,770.1	-8,584.5	-585.8	8,579.2	1.01	-0.32	0.96
21,539.0	91.10	178.20	12,769.7	-8,678.4	-582.6	8,673.1	1.86	1.81	0.43
21,633.0	91.30	179.40	12,767.7	-8,772.4	-580.6	8,767.1	1.29	0.21	1.28
21,728.0	90.50	178.50	12,766.2	-8,867.3	-578.8	8,862.1	1.27	-0.84	-0.95
21,822.0	88.80	177.80	12,766.8	-8,961.3	-575.8	8,956.0	1.96	-1.81	-0.74
21,916.0	88.50	177.80	12,769.0	-9,055.2	-572.2	9,050.0	0.32	-0.32	0.00
22,011.0	90.10	177.80	12,770.1	-9,150.1	-568.6	9,144.9	1.68	1.68	0.00
22,104.0	90.00	176.50	12,770.1	-9,243.0	-563.9	9,237.8	1.40	-0.11	-1.40
22,199.0	91.50	177.00	12,768.8	-9,337.8	-558.5	9,332.7	1.66	1.58	0.53
22,293.0	91.20	177.70	12,766.6	-9,431.7	-554.2	9,426.6	0.81	-0.32	0.74
22,388.0	90.70	176.90	12,765.0	-9,526.6	-549.7	9,521.5	0.99	-0.53	-0.84
22,482.0	89.20	175.40	12,765.1	-9,620.4	-543.4	9,615.4	2.26	-1.60	-1.60
22,576.0	90.00	176.80	12,765.8	-9,714.1	-537.0	9,709.2	1.72	0.85	1.49
22,670.0	89.80	176.70	12,765.9	-9,808.0	-531.7	9,803.1	0.24	-0.21	-0.11
22,764.0	90.70	176.60	12,765.5	-9,901.8	-526.2	9,897.0	0.96	0.96	-0.11
22,858.0	90.70	176.20	12,764.4	-9,995.6	-520.3	9,990.8	0.43	0.00	-0.43
22,906.0	91.00	176.50	12,763.7	-10,043.5	-517.2	10,038.7	0.88	0.63	0.63
<b>Last Survey ST</b>									
22,955.0	91.00	176.50	12,762.8	-10,092.4	-514.3	10,087.7	0.00	0.00	0.00
<b>PTB: 22955' MD; 930' FEL, 120' FCL</b>									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
18,595.0	12,771.4	-5,737.1	-618.6	First Survey ST
20,567.3	12,768.7	-7,707.4	-613.0	Cross Sec 29 to 32; 20567' MD; 1010' FEL
22,906.0	12,763.7	-10,043.5	-517.2	Last Survey ST
22,955.0	12,762.8	-10,092.4	-514.3	PTB: 22955' MD; 930' FEL, 120' FCL



<b>Company:</b>	Devon Energy Production Company, L.P.	<b>Local Co-ordinate Reference:</b>	Site Green Wave 20-32 Fed State Com 6H
<b>Project:</b>	Lea Co, New Mexico (NAD-83)	<b>TVD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Site:</b>	Green Wave 20-32 Fed State Com 6H	<b>MD Reference:</b>	3344.1+24 @ 3368.1usft (Cactus 168)
<b>Well:</b>	Green Wave 20-32 Fed State Com 6H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Sidetrack #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Sidetrack #1	<b>Database:</b>	Compass_DSN

Checked By:	_____	Approved By:	_____	Date:	_____
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