



# **Fifth Creek Energy**

**State Line**

**Critter Creek 17-4 Pad**

**Critter Creek 243-1708H**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**05 September, 2017**

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well Critter Creek 243-1708H
<b>Company:</b>	Fifth Creek Energy	<b>TVD Reference:</b>	KB @ 5338.0usft (Original Well Elev)
<b>Project:</b>	State Line	<b>MD Reference:</b>	KB @ 5338.0usft (Original Well Elev)
<b>Site:</b>	Critter Creek 17-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Critter Creek 243-1708H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	State Line		
<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>	Colorado Northern Zone		

Site		Critter Creek 17-4 Pad			
Site Position:		Northing:	1,578,127.82 usft	Latitude:	40° 54' 56.632 N
From:	Lat/Long	Easting:	3,286,542.33 usft	Longitude:	104° 27' 47.700 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.67 °

Well	Critter Creek 243-1708H					
Well Position	+N/-S	-1.1 usft	Northing:	1,578,125.27 usft	Latitude:	40° 54' 56.621 N
	+E/-W	-124.4 usft	Easting:	3,286,417.97 usft	Longitude:	104° 27' 49.320 W
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	5,323.0 usft

<b>Wellbore</b>	Wellbore #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	9/5/2017	8.07	67.30	52,659.89908702

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<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	357.83

<b>Plan Survey Tool Program</b>	<b>Date</b>	9/5/2017		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	17,912.9	Design #1 (Wellbore #1)	

<b>Plan Sections</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>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	6.00	217.69	299.4	-12.4	-9.6	2.00	2.00	0.00	217.69	
6,239.7	6.00	217.69	6,206.6	-503.7	-389.2	0.00	0.00	0.00	0.00	
6,539.7	0.00	0.10	6,506.0	-516.1	-398.8	2.00	-2.00	0.00	180.00	
7,039.7	0.00	0.10	7,006.0	-516.1	-398.8	0.00	0.00	0.00	0.00	
7,942.5	90.29	0.10	7,579.0	59.8	-397.7	10.00	10.00	0.00	0.00	CC 243-1708H LP
17,912.9	90.29	0.10	7,529.0	10,030.0	-379.9	0.00	0.00	0.00	0.00	CC 243-1708H PB

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<b>Company:</b>	Fifth Creek Energy	<b>TVD Reference:</b>	KB @ 5338.0usft (Original Well Elev)
<b>Project:</b>	State Line	<b>MD Reference:</b>	KB @ 5338.0usft (Original Well Elev)
<b>Site:</b>	Critter Creek 17-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Critter Creek 243-1708H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	2.00	217.69	100.0	-1.4	-1.1	-1.3	2.00	2.00	0.00
200.0	4.00	217.69	199.8	-5.5	-4.3	-5.4	2.00	2.00	0.00
300.0	6.00	217.69	299.4	-12.4	-9.6	-12.0	2.00	2.00	0.00
400.0	6.00	217.69	398.9	-20.7	-16.0	-20.1	0.00	0.00	0.00
500.0	6.00	217.69	498.4	-29.0	-22.4	-28.1	0.00	0.00	0.00
600.0	6.00	217.69	597.8	-37.2	-28.8	-36.1	0.00	0.00	0.00
700.0	6.00	217.69	697.3	-45.5	-35.2	-44.1	0.00	0.00	0.00
800.0	6.00	217.69	796.7	-53.8	-41.5	-52.2	0.00	0.00	0.00
900.0	6.00	217.69	896.2	-62.0	-47.9	-60.2	0.00	0.00	0.00
1,000.0	6.00	217.69	995.6	-70.3	-54.3	-68.2	0.00	0.00	0.00
1,100.0	6.00	217.69	1,095.1	-78.6	-60.7	-76.2	0.00	0.00	0.00
1,200.0	6.00	217.69	1,194.5	-86.9	-67.1	-84.2	0.00	0.00	0.00
1,300.0	6.00	217.69	1,294.0	-95.1	-73.5	-92.3	0.00	0.00	0.00
1,400.0	6.00	217.69	1,393.4	-103.4	-79.9	-100.3	0.00	0.00	0.00
1,500.0	6.00	217.69	1,492.9	-111.7	-86.3	-108.3	0.00	0.00	0.00
1,600.0	6.00	217.69	1,592.3	-119.9	-92.7	-116.3	0.00	0.00	0.00
1,700.0	6.00	217.69	1,691.8	-128.2	-99.1	-124.4	0.00	0.00	0.00
1,800.0	6.00	217.69	1,791.2	-136.5	-105.5	-132.4	0.00	0.00	0.00
1,900.0	6.00	217.69	1,890.7	-144.7	-111.8	-140.4	0.00	0.00	0.00
2,000.0	6.00	217.69	1,990.1	-153.0	-118.2	-148.4	0.00	0.00	0.00
2,100.0	6.00	217.69	2,089.6	-161.3	-124.6	-156.5	0.00	0.00	0.00
2,200.0	6.00	217.69	2,189.0	-169.6	-131.0	-164.5	0.00	0.00	0.00
2,300.0	6.00	217.69	2,288.5	-177.8	-137.4	-172.5	0.00	0.00	0.00
2,400.0	6.00	217.69	2,388.0	-186.1	-143.8	-180.5	0.00	0.00	0.00
2,500.0	6.00	217.69	2,487.4	-194.4	-150.2	-188.5	0.00	0.00	0.00
2,600.0	6.00	217.69	2,586.9	-202.6	-156.6	-196.6	0.00	0.00	0.00
2,700.0	6.00	217.69	2,686.3	-210.9	-163.0	-204.6	0.00	0.00	0.00
2,800.0	6.00	217.69	2,785.8	-219.2	-169.4	-212.6	0.00	0.00	0.00
2,900.0	6.00	217.69	2,885.2	-227.4	-175.7	-220.6	0.00	0.00	0.00
3,000.0	6.00	217.69	2,984.7	-235.7	-182.1	-228.7	0.00	0.00	0.00
3,100.0	6.00	217.69	3,084.1	-244.0	-188.5	-236.7	0.00	0.00	0.00
3,200.0	6.00	217.69	3,183.6	-252.3	-194.9	-244.7	0.00	0.00	0.00
3,300.0	6.00	217.69	3,283.0	-260.5	-201.3	-252.7	0.00	0.00	0.00
3,400.0	6.00	217.69	3,382.5	-268.8	-207.7	-260.7	0.00	0.00	0.00
3,500.0	6.00	217.69	3,481.9	-277.1	-214.1	-268.8	0.00	0.00	0.00
3,600.0	6.00	217.69	3,581.4	-285.3	-220.5	-276.8	0.00	0.00	0.00
3,700.0	6.00	217.69	3,680.8	-293.6	-226.9	-284.8	0.00	0.00	0.00
3,800.0	6.00	217.69	3,780.3	-301.9	-233.3	-292.8	0.00	0.00	0.00
3,900.0	6.00	217.69	3,879.7	-310.1	-239.6	-300.9	0.00	0.00	0.00
4,000.0	6.00	217.69	3,979.2	-318.4	-246.0	-308.9	0.00	0.00	0.00
4,100.0	6.00	217.69	4,078.6	-326.7	-252.4	-316.9	0.00	0.00	0.00
4,200.0	6.00	217.69	4,178.1	-335.0	-258.8	-324.9	0.00	0.00	0.00
4,300.0	6.00	217.69	4,277.5	-343.2	-265.2	-332.9	0.00	0.00	0.00
4,400.0	6.00	217.69	4,377.0	-351.5	-271.6	-341.0	0.00	0.00	0.00
4,500.0	6.00	217.69	4,476.4	-359.8	-278.0	-349.0	0.00	0.00	0.00
4,600.0	6.00	217.69	4,575.9	-368.0	-284.4	-357.0	0.00	0.00	0.00
4,700.0	6.00	217.69	4,675.4	-376.3	-290.8	-365.0	0.00	0.00	0.00
4,800.0	6.00	217.69	4,774.8	-384.6	-297.2	-373.1	0.00	0.00	0.00
4,900.0	6.00	217.69	4,874.3	-392.9	-303.6	-381.1	0.00	0.00	0.00
5,000.0	6.00	217.69	4,973.7	-401.1	-309.9	-389.1	0.00	0.00	0.00
5,100.0	6.00	217.69	5,073.2	-409.4	-316.3	-397.1	0.00	0.00	0.00
5,200.0	6.00	217.69	5,172.6	-417.7	-322.7	-405.1	0.00	0.00	0.00
5,300.0	6.00	217.69	5,272.1	-425.9	-329.1	-413.2	0.00	0.00	0.00

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<b>Well:</b>	Critter Creek 243-1708H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)
5,400.0	6.00	217.69	5,371.5	-434.2	-335.5	-421.2	0.00	0.00	0.00
5,500.0	6.00	217.69	5,471.0	-442.5	-341.9	-429.2	0.00	0.00	0.00
5,600.0	6.00	217.69	5,570.4	-450.7	-348.3	-437.2	0.00	0.00	0.00
5,700.0	6.00	217.69	5,669.9	-459.0	-354.7	-445.3	0.00	0.00	0.00
5,800.0	6.00	217.69	5,769.3	-467.3	-361.1	-453.3	0.00	0.00	0.00
5,900.0	6.00	217.69	5,868.8	-475.6	-367.5	-461.3	0.00	0.00	0.00
6,000.0	6.00	217.69	5,968.2	-483.8	-373.8	-469.3	0.00	0.00	0.00
6,100.0	6.00	217.69	6,067.7	-492.1	-380.2	-477.4	0.00	0.00	0.00
6,200.0	6.00	217.69	6,167.1	-500.4	-386.6	-485.4	0.00	0.00	0.00
6,239.7	6.00	217.69	6,206.6	-503.7	-389.2	-488.6	0.00	0.00	0.00
6,300.0	4.79	217.69	6,266.7	-508.1	-392.6	-492.9	2.00	-2.00	0.00
6,400.0	2.79	217.69	6,366.4	-513.4	-396.7	-498.0	2.00	-2.00	0.00
6,500.0	0.79	217.69	6,466.4	-515.8	-398.6	-500.4	2.00	-2.00	0.00
6,539.7	0.00	0.10	6,506.0	-516.1	-398.8	-500.6	2.00	-2.00	0.00
6,600.0	0.00	0.00	6,566.4	-516.1	-398.8	-500.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,666.4	-516.1	-398.8	-500.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,766.4	-516.1	-398.8	-500.6	0.00	0.00	0.00
6,900.0	0.00	0.00	6,866.4	-516.1	-398.8	-500.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,966.4	-516.1	-398.8	-500.6	0.00	0.00	0.00
7,039.7	0.00	0.10	7,006.0	-516.1	-398.8	-500.6	0.00	0.00	0.00
7,100.0	6.03	0.10	7,066.3	-512.9	-398.8	-497.4	10.00	10.00	0.00
7,200.0	16.03	0.10	7,164.3	-493.8	-398.7	-478.3	10.00	10.00	0.00
7,300.0	26.03	0.10	7,257.5	-457.9	-398.7	-442.5	10.00	10.00	0.00
7,400.0	36.03	0.10	7,343.1	-406.4	-398.6	-391.1	10.00	10.00	0.00
7,500.0	46.03	0.10	7,418.4	-340.9	-398.4	-325.6	10.00	10.00	0.00
7,600.0	56.03	0.10	7,481.2	-263.2	-398.3	-248.0	10.00	10.00	0.00
7,700.0	66.03	0.10	7,529.6	-175.9	-398.1	-160.7	10.00	10.00	0.00
7,800.0	76.03	0.10	7,562.1	-81.4	-398.0	-66.3	10.00	10.00	0.00
7,900.0	86.03	0.10	7,577.6	17.2	-397.8	32.3	10.00	10.00	0.00
7,942.5	90.29	0.10	7,579.0	59.8	-397.7	74.8	10.00	10.00	0.00
8,000.0	90.29	0.10	7,578.7	117.2	-397.6	132.2	0.00	0.00	0.00
8,100.0	90.29	0.10	7,578.2	217.2	-397.4	232.1	0.00	0.00	0.00
8,200.0	90.29	0.10	7,577.7	317.2	-397.3	332.0	0.00	0.00	0.00
8,300.0	90.29	0.10	7,577.2	417.2	-397.1	431.9	0.00	0.00	0.00
8,400.0	90.29	0.10	7,576.7	517.2	-396.9	531.9	0.00	0.00	0.00
8,500.0	90.29	0.10	7,576.2	617.2	-396.7	631.8	0.00	0.00	0.00
8,600.0	90.29	0.10	7,575.7	717.2	-396.5	731.7	0.00	0.00	0.00
8,700.0	90.29	0.10	7,575.2	817.2	-396.4	831.6	0.00	0.00	0.00
8,800.0	90.29	0.10	7,574.7	917.2	-396.2	931.5	0.00	0.00	0.00
8,900.0	90.29	0.10	7,574.2	1,017.2	-396.0	1,031.5	0.00	0.00	0.00
9,000.0	90.29	0.10	7,573.7	1,117.2	-395.8	1,131.4	0.00	0.00	0.00
9,100.0	90.29	0.10	7,573.2	1,217.2	-395.7	1,231.3	0.00	0.00	0.00
9,200.0	90.29	0.10	7,572.7	1,317.2	-395.5	1,331.2	0.00	0.00	0.00
9,300.0	90.29	0.10	7,572.2	1,417.2	-395.3	1,431.1	0.00	0.00	0.00
9,400.0	90.29	0.10	7,571.7	1,517.2	-395.1	1,531.1	0.00	0.00	0.00
9,500.0	90.29	0.10	7,571.2	1,617.2	-394.9	1,631.0	0.00	0.00	0.00
9,600.0	90.29	0.10	7,570.7	1,717.2	-394.8	1,730.9	0.00	0.00	0.00
9,700.0	90.29	0.10	7,570.2	1,817.2	-394.6	1,830.8	0.00	0.00	0.00
9,800.0	90.29	0.10	7,569.7	1,917.2	-394.4	1,930.7	0.00	0.00	0.00
9,900.0	90.29	0.10	7,569.2	2,017.2	-394.2	2,030.7	0.00	0.00	0.00
10,000.0	90.29	0.10	7,568.7	2,117.2	-394.0	2,130.6	0.00	0.00	0.00
10,100.0	90.29	0.10	7,568.2	2,217.2	-393.9	2,230.5	0.00	0.00	0.00
10,200.0	90.29	0.10	7,567.7	2,317.2	-393.7	2,330.4	0.00	0.00	0.00
10,300.0	90.29	0.10	7,567.2	2,417.2	-393.5	2,430.3	0.00	0.00	0.00

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<b>Site:</b>	Critter Creek 17-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Critter Creek 243-1708H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)
10,400.0	90.29	0.10	7,566.7	2,517.2	-393.3	2,530.3	0.00	0.00	0.00
10,500.0	90.29	0.10	7,566.2	2,617.2	-393.1	2,630.2	0.00	0.00	0.00
10,600.0	90.29	0.10	7,565.7	2,717.2	-393.0	2,730.1	0.00	0.00	0.00
10,700.0	90.29	0.10	7,565.2	2,817.2	-392.8	2,830.0	0.00	0.00	0.00
10,800.0	90.29	0.10	7,564.7	2,917.2	-392.6	2,929.9	0.00	0.00	0.00
10,900.0	90.29	0.10	7,564.2	3,017.2	-392.4	3,029.9	0.00	0.00	0.00
11,000.0	90.29	0.10	7,563.7	3,117.2	-392.3	3,129.8	0.00	0.00	0.00
11,100.0	90.29	0.10	7,563.2	3,217.2	-392.1	3,229.7	0.00	0.00	0.00
11,200.0	90.29	0.10	7,562.7	3,317.2	-391.9	3,329.6	0.00	0.00	0.00
11,300.0	90.29	0.10	7,562.2	3,417.2	-391.7	3,429.5	0.00	0.00	0.00
11,400.0	90.29	0.10	7,561.7	3,517.2	-391.5	3,529.5	0.00	0.00	0.00
11,500.0	90.29	0.10	7,561.2	3,617.2	-391.4	3,629.4	0.00	0.00	0.00
11,600.0	90.29	0.10	7,560.7	3,717.2	-391.2	3,729.3	0.00	0.00	0.00
11,700.0	90.29	0.10	7,560.2	3,817.2	-391.0	3,829.2	0.00	0.00	0.00
11,800.0	90.29	0.10	7,559.7	3,917.2	-390.8	3,929.1	0.00	0.00	0.00
11,900.0	90.29	0.10	7,559.2	4,017.2	-390.6	4,029.1	0.00	0.00	0.00
12,000.0	90.29	0.10	7,558.7	4,117.2	-390.5	4,129.0	0.00	0.00	0.00
12,100.0	90.29	0.10	7,558.2	4,217.2	-390.3	4,228.9	0.00	0.00	0.00
12,200.0	90.29	0.10	7,557.6	4,317.2	-390.1	4,328.8	0.00	0.00	0.00
12,300.0	90.29	0.10	7,557.1	4,417.2	-389.9	4,428.7	0.00	0.00	0.00
12,400.0	90.29	0.10	7,556.6	4,517.2	-389.7	4,528.7	0.00	0.00	0.00
12,500.0	90.29	0.10	7,556.1	4,617.2	-389.6	4,628.6	0.00	0.00	0.00
12,600.0	90.29	0.10	7,555.6	4,717.2	-389.4	4,728.5	0.00	0.00	0.00
12,700.0	90.29	0.10	7,555.1	4,817.1	-389.2	4,828.4	0.00	0.00	0.00
12,800.0	90.29	0.10	7,554.6	4,917.1	-389.0	4,928.3	0.00	0.00	0.00
12,900.0	90.29	0.10	7,554.1	5,017.1	-388.9	5,028.3	0.00	0.00	0.00
13,000.0	90.29	0.10	7,553.6	5,117.1	-388.7	5,128.2	0.00	0.00	0.00
13,100.0	90.29	0.10	7,553.1	5,217.1	-388.5	5,228.1	0.00	0.00	0.00
13,200.0	90.29	0.10	7,552.6	5,317.1	-388.3	5,328.0	0.00	0.00	0.00
13,300.0	90.29	0.10	7,552.1	5,417.1	-388.1	5,427.9	0.00	0.00	0.00
13,400.0	90.29	0.10	7,551.6	5,517.1	-388.0	5,527.9	0.00	0.00	0.00
13,500.0	90.29	0.10	7,551.1	5,617.1	-387.8	5,627.8	0.00	0.00	0.00
13,600.0	90.29	0.10	7,550.6	5,717.1	-387.6	5,727.7	0.00	0.00	0.00
13,700.0	90.29	0.10	7,550.1	5,817.1	-387.4	5,827.6	0.00	0.00	0.00
13,800.0	90.29	0.10	7,549.6	5,917.1	-387.2	5,927.5	0.00	0.00	0.00
13,900.0	90.29	0.10	7,549.1	6,017.1	-387.1	6,027.5	0.00	0.00	0.00
14,000.0	90.29	0.10	7,548.6	6,117.1	-386.9	6,127.4	0.00	0.00	0.00
14,100.0	90.29	0.10	7,548.1	6,217.1	-386.7	6,227.3	0.00	0.00	0.00
14,200.0	90.29	0.10	7,547.6	6,317.1	-386.5	6,327.2	0.00	0.00	0.00
14,300.0	90.29	0.10	7,547.1	6,417.1	-386.3	6,427.2	0.00	0.00	0.00
14,400.0	90.29	0.10	7,546.6	6,517.1	-386.2	6,527.1	0.00	0.00	0.00
14,500.0	90.29	0.10	7,546.1	6,617.1	-386.0	6,627.0	0.00	0.00	0.00
14,600.0	90.29	0.10	7,545.6	6,717.1	-385.8	6,726.9	0.00	0.00	0.00
14,700.0	90.29	0.10	7,545.1	6,817.1	-385.6	6,826.8	0.00	0.00	0.00
14,800.0	90.29	0.10	7,544.6	6,917.1	-385.5	6,926.8	0.00	0.00	0.00
14,900.0	90.29	0.10	7,544.1	7,017.1	-385.3	7,026.7	0.00	0.00	0.00
15,000.0	90.29	0.10	7,543.6	7,117.1	-385.1	7,126.6	0.00	0.00	0.00
15,100.0	90.29	0.10	7,543.1	7,217.1	-384.9	7,226.5	0.00	0.00	0.00
15,200.0	90.29	0.10	7,542.6	7,317.1	-384.7	7,326.4	0.00	0.00	0.00
15,300.0	90.29	0.10	7,542.1	7,417.1	-384.6	7,426.4	0.00	0.00	0.00
15,400.0	90.29	0.10	7,541.6	7,517.1	-384.4	7,526.3	0.00	0.00	0.00
15,500.0	90.29	0.10	7,541.1	7,617.1	-384.2	7,626.2	0.00	0.00	0.00
15,600.0	90.29	0.10	7,540.6	7,717.1	-384.0	7,726.1	0.00	0.00	0.00
15,700.0	90.29	0.10	7,540.1	7,817.1	-383.8	7,826.0	0.00	0.00	0.00

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well Critter Creek 243-1708H
<b>Company:</b>	Fifth Creek Energy	<b>TVD Reference:</b>	KB @ 5338.0usft (Original Well Elev)
<b>Project:</b>	State Line	<b>MD Reference:</b>	KB @ 5338.0usft (Original Well Elev)
<b>Site:</b>	Critter Creek 17-4 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Critter Creek 243-1708H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned 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)	
15,800.0	90.29	0.10	7,539.6	7,917.1	-383.7	7,926.0	0.00	0.00	0.00	
15,900.0	90.29	0.10	7,539.1	8,017.1	-383.5	8,025.9	0.00	0.00	0.00	
16,000.0	90.29	0.10	7,538.6	8,117.1	-383.3	8,125.8	0.00	0.00	0.00	
16,100.0	90.29	0.10	7,538.1	8,217.1	-383.1	8,225.7	0.00	0.00	0.00	
16,200.0	90.29	0.10	7,537.6	8,317.1	-382.9	8,325.6	0.00	0.00	0.00	
16,300.0	90.29	0.10	7,537.1	8,417.1	-382.8	8,425.6	0.00	0.00	0.00	
16,400.0	90.29	0.10	7,536.6	8,517.1	-382.6	8,525.5	0.00	0.00	0.00	
16,500.0	90.29	0.10	7,536.1	8,617.1	-382.4	8,625.4	0.00	0.00	0.00	
16,600.0	90.29	0.10	7,535.6	8,717.1	-382.2	8,725.3	0.00	0.00	0.00	
16,700.0	90.29	0.10	7,535.1	8,817.1	-382.1	8,825.2	0.00	0.00	0.00	
16,800.0	90.29	0.10	7,534.6	8,917.1	-381.9	8,925.2	0.00	0.00	0.00	
16,900.0	90.29	0.10	7,534.1	9,017.1	-381.7	9,025.1	0.00	0.00	0.00	
17,000.0	90.29	0.10	7,533.6	9,117.1	-381.5	9,125.0	0.00	0.00	0.00	
17,100.0	90.29	0.10	7,533.1	9,217.1	-381.3	9,224.9	0.00	0.00	0.00	
17,200.0	90.29	0.10	7,532.6	9,317.1	-381.2	9,324.8	0.00	0.00	0.00	
17,300.0	90.29	0.10	7,532.1	9,417.1	-381.0	9,424.8	0.00	0.00	0.00	
17,400.0	90.29	0.10	7,531.6	9,517.1	-380.8	9,524.7	0.00	0.00	0.00	
17,500.0	90.29	0.10	7,531.1	9,617.1	-380.6	9,624.6	0.00	0.00	0.00	
17,600.0	90.29	0.10	7,530.6	9,717.1	-380.4	9,724.5	0.00	0.00	0.00	
17,700.0	90.29	0.10	7,530.1	9,817.1	-380.3	9,824.4	0.00	0.00	0.00	
17,800.0	90.29	0.10	7,529.6	9,917.1	-380.1	9,924.4	0.00	0.00	0.00	
17,900.0	90.29	0.10	7,529.1	10,017.1	-379.9	10,024.3	0.00	0.00	0.00	
17,912.9	90.29	0.10	7,529.0	10,030.0	-379.9	10,037.2	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
CC 243-1708H PBHL - hit/miss target - Shape - Point	0.00	0.00	7,529.0	10,030.0	-379.9	1,588,150.11	3,285,920.90	40° 56' 35.722 N	104° 27' 54.270 W	
CC 243-1708H LP - plan hits target center - Point	0.00	0.00	7,579.0	59.8	-397.7	1,578,180.38	3,286,019.57	40° 54' 57.211 N	104° 27' 54.500 W	