

Fifth Creek Energy Company, LLC

Well Name: **Critter Creek 278-1527H**

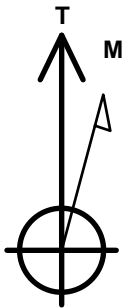
Surface Location: Critter Creek Pad 15-11N-63W
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone

Ground Elevation: 5227.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1578366.14	3299705.75	40.915953	-104.415617	
Original Well Elev WELL @ 5240.0ft (Original Well Elev)						

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 279'FSL & 1690'FEL, SEC.15	1.0	0.0	0.0	Point
BHL 300'FSL & 1650'FEL, SEC.27	7443.0	-10524.4	134.4	Point
LP 300'FNL & 1600'FEL, SEC.22	7483.0	-577.8	93.1	Point



Azimuths to True North
Magnetic North: 7.94°

Magnetic Field
Strength: 52830.9snT
Dip Angle: 67.32°
Date: 2/21/2017
Model: IGRF2010

Critter Creek Pad 15-11N-63W
Critter Creek 278-1527H
Plan 1 (Feb 14, 2017)
14:22, February 21 2017

ANNOTATIONS

TVD	MD	Annotation
2300.0	2300.0	KOP - Start Build 1.50
5340.4	5344.9	Start Drop -2.00
6766.8	6771.4	Start Build 8.00
7483.0	7900.0	Start DLS 1.00 TFO 87.37
7483.0	7900.9	Start 9945.8 hold at 7900.9 MD
7443.0	17846.8	TD at 17846.8

South(-)/North(+) (3300 ft/in)

SHL 279'FSL & 1690'FEL, SEC.15

SEC.22-T11N-R63W

LP 300'FNL & 1600'FEL, SEC.22

Critter Creek 18-22H (Exist)

SEC.27-T11N-R63W

BHL 300'FSL & 1650'FEL, SEC.27

Critter Creek 278-1527H

Critter Creek 22-27H (Exist)

West(-)/East(+) (3300 ft/in)

SECTION DETAILS

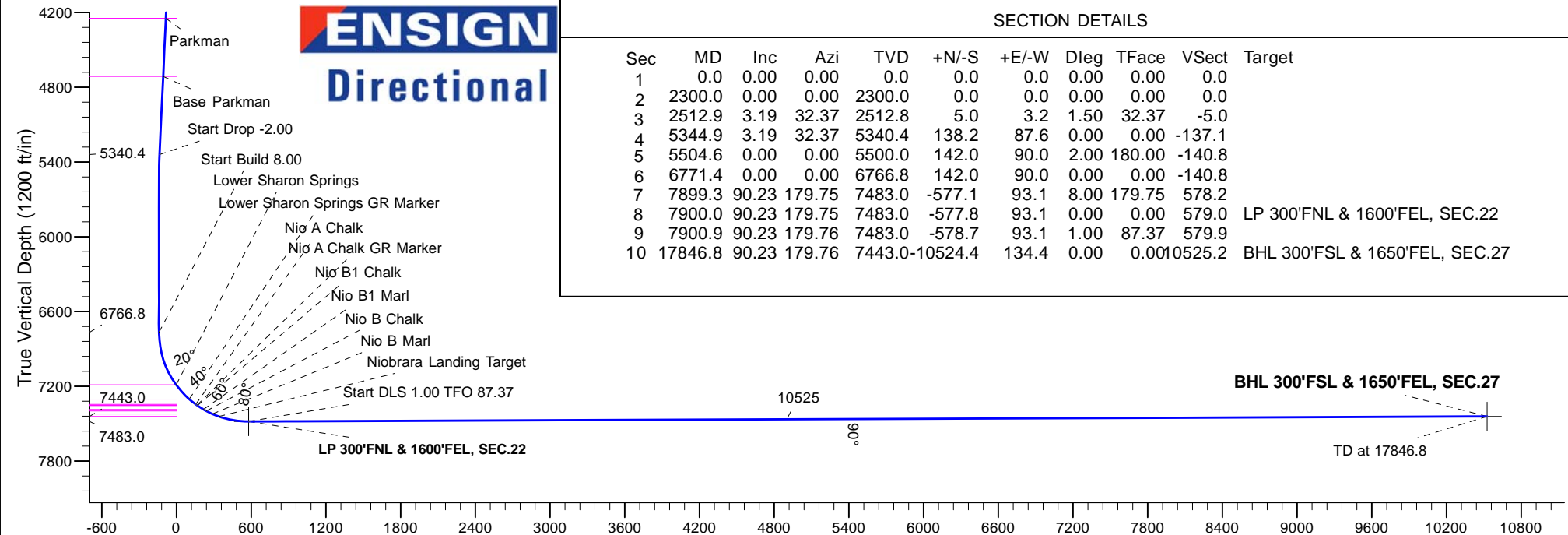
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2300.0	0.00	0.00	2300.0	0.0	0.0	0.00	0.00	0.0	
3	2512.9	3.19	32.37	2512.8	5.0	3.2	1.50	32.37	-5.0	
4	5344.9	3.19	32.37	5340.4	138.2	87.6	0.00	0.00	-137.1	
5	5504.6	0.00	0.00	5500.0	142.0	90.0	2.00	180.00	-140.8	
6	6771.4	0.00	0.00	6766.8	142.0	90.0	0.00	0.00	-140.8	
7	7899.3	90.23	179.75	7483.0	-577.1	93.1	8.00	179.75	578.2	
8	7900.0	90.23	179.75	7483.0	-577.8	93.1	0.00	0.00	579.0	LP 300'FNL & 1600'FEL, SEC.22
9	7900.9	90.23	179.76	7483.0	-578.7	93.1	1.00	87.37	579.9	
10	17846.8	90.23	179.76	7443.0-10524.4	134.4	0.00	0.00	10525.2		BHL 300'FSL & 1650'FEL, SEC.27

BHL 300'FSL & 1650'FEL, SEC.27

TD at 17846.8

Vertical Section at 179.27° (1200 ft/in)

ENSIGN
Directional





Fifth Creek Energy Company, LLC

Sec.15-T11N-R63W

Critter Creek Pad 15-11N-63W

Critter Creek 278-1527H

Wellbore #1

Plan: Plan 1 (Feb 14, 2017)

Standard Planning Report

21 February, 2017

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Project	Sec.15-T11N-R63W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Critter Creek Pad 15-11N-63W				
Site Position:		Northing:	1,578,381.47 usft	Latitude:	40.915969
From:	Lat/Long	Easting:	3,300,480.34 usft	Longitude:	-104.412814
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.70 °

Well	Critter Creek 278-1527H					
Well Position	+N/-S	-5.8 ft	Northing:	1,578,366.14 usft	Latitude:	40.915953
	+E/-W	-774.7 ft	Easting:	3,299,705.75 usft	Longitude:	-104.415617
Position Uncertainty		0.0 ft	Wellhead Elevation:	5,239.0 ft	Ground Level:	5,227.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/21/2017	7.94	67.32	52,831

Design	Plan 1 (Feb 14, 2017)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	179.27

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,512.9	3.19	32.37	2,512.8	5.0	3.2	1.50	1.50	0.00	32.37	
5,344.9	3.19	32.37	5,340.4	138.2	87.6	0.00	0.00	0.00	0.00	
5,504.6	0.00	0.00	5,500.0	142.0	90.0	2.00	-2.00	0.00	180.00	
6,771.4	0.00	0.00	6,766.8	142.0	90.0	0.00	0.00	0.00	0.00	
7,899.3	90.23	179.75	7,483.0	-577.1	93.1	8.00	8.00	0.00	179.75	
7,900.0	90.23	179.75	7,483.0	-577.8	93.1	0.00	0.00	0.00	0.00	LP 300'FNL & 1600'FI
7,900.9	90.23	179.76	7,483.0	-578.7	93.1	1.00	0.05	1.00	87.37	
17,846.8	90.23	179.76	7,443.0	-10,524.4	134.4	0.00	0.00	0.00	0.00	BHL 300'FSL & 1650'FI

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.50									
2,400.0	1.50	32.37	2,400.0	1.1	0.7	-1.1	1.50	1.50	0.00
2,500.0	3.00	32.37	2,499.9	4.4	2.8	-4.4	1.50	1.50	0.00
2,512.9	3.19	32.37	2,512.8	5.0	3.2	-5.0	1.50	1.50	0.00
2,600.0	3.19	32.37	2,599.8	9.1	5.8	-9.0	0.00	0.00	0.00
2,700.0	3.19	32.37	2,699.6	13.8	8.8	-13.7	0.00	0.00	0.00
2,800.0	3.19	32.37	2,799.4	18.5	11.7	-18.4	0.00	0.00	0.00
2,900.0	3.19	32.37	2,899.3	23.2	14.7	-23.0	0.00	0.00	0.00
3,000.0	3.19	32.37	2,999.1	27.9	17.7	-27.7	0.00	0.00	0.00
3,100.0	3.19	32.37	3,099.0	32.6	20.7	-32.4	0.00	0.00	0.00
3,200.0	3.19	32.37	3,198.8	37.3	23.7	-37.0	0.00	0.00	0.00
3,300.0	3.19	32.37	3,298.7	42.0	26.6	-41.7	0.00	0.00	0.00
3,400.0	3.19	32.37	3,398.5	46.7	29.6	-46.4	0.00	0.00	0.00
3,500.0	3.19	32.37	3,498.4	51.4	32.6	-51.0	0.00	0.00	0.00
3,600.0	3.19	32.37	3,598.2	56.2	35.6	-55.7	0.00	0.00	0.00
3,700.0	3.19	32.37	3,698.0	60.9	38.6	-60.4	0.00	0.00	0.00
3,800.0	3.19	32.37	3,797.9	65.6	41.6	-65.0	0.00	0.00	0.00
3,900.0	3.19	32.37	3,897.7	70.3	44.5	-69.7	0.00	0.00	0.00
4,000.0	3.19	32.37	3,997.6	75.0	47.5	-74.4	0.00	0.00	0.00
4,100.0	3.19	32.37	4,097.4	79.7	50.5	-79.0	0.00	0.00	0.00
4,200.0	3.19	32.37	4,197.3	84.4	53.5	-83.7	0.00	0.00	0.00
4,249.8	3.19	32.37	4,247.0	86.7	55.0	-86.0	0.00	0.00	0.00
Parkman									
4,300.0	3.19	32.37	4,297.1	89.1	56.5	-88.4	0.00	0.00	0.00
4,400.0	3.19	32.37	4,397.0	93.8	59.4	-93.0	0.00	0.00	0.00
4,500.0	3.19	32.37	4,496.8	98.5	62.4	-97.7	0.00	0.00	0.00
4,600.0	3.19	32.37	4,596.6	103.2	65.4	-102.4	0.00	0.00	0.00
4,700.0	3.19	32.37	4,696.5	107.9	68.4	-107.0	0.00	0.00	0.00
4,717.5	3.19	32.37	4,714.0	108.7	68.9	-107.8	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
Base Parkman										
4,800.0	3.19	32.37	4,796.3	112.6	71.4	-111.7	0.00	0.00	0.00	
4,900.0	3.19	32.37	4,896.2	117.3	74.4	-116.4	0.00	0.00	0.00	
5,000.0	3.19	32.37	4,996.0	122.0	77.3	-121.0	0.00	0.00	0.00	
5,100.0	3.19	32.37	5,095.9	126.7	80.3	-125.7	0.00	0.00	0.00	
5,200.0	3.19	32.37	5,195.7	131.4	83.3	-130.4	0.00	0.00	0.00	
5,300.0	3.19	32.37	5,295.6	136.1	86.3	-135.0	0.00	0.00	0.00	
5,344.9	3.19	32.37	5,340.4	138.2	87.6	-137.1	0.00	0.00	0.00	
Start Drop -2.00										
5,400.0	2.09	32.37	5,395.4	140.4	89.0	-139.2	2.00	-2.00	0.00	
5,500.0	0.09	32.37	5,495.4	142.0	90.0	-140.8	2.00	-2.00	0.00	
5,504.6	0.00	0.00	5,500.0	142.0	90.0	-140.8	2.00	-2.00	0.00	
5,600.0	0.00	0.00	5,595.4	142.0	90.0	-140.8	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,695.4	142.0	90.0	-140.8	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,795.4	142.0	90.0	-140.8	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,895.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,995.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,095.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,195.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,295.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,395.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,495.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,595.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,695.4	142.0	90.0	-140.8	0.00	0.00	0.00	
6,771.4	0.00	0.00	6,766.8	142.0	90.0	-140.8	0.00	0.00	0.00	
Start Build 8.00										
6,800.0	2.29	179.75	6,795.4	141.4	90.0	-140.3	8.00	8.00	0.00	
6,900.0	10.29	179.75	6,894.7	130.5	90.0	-129.3	8.00	8.00	0.00	
7,000.0	18.29	179.75	6,991.5	105.8	90.2	-104.7	8.00	8.00	0.00	
7,100.0	26.29	179.75	7,084.0	67.9	90.3	-66.8	8.00	8.00	0.00	
7,200.0	34.29	179.75	7,170.3	17.5	90.5	-16.4	8.00	8.00	0.00	
7,222.9	36.12	179.75	7,189.0	4.3	90.6	-3.2	8.00	8.00	0.00	
Lower Sharon Springs										
7,300.0	42.29	179.75	7,248.7	-44.4	90.8	45.5	8.00	8.00	0.00	
7,378.8	48.60	179.75	7,304.0	-100.5	91.0	101.7	8.00	8.00	0.00	
Lower Sharon Springs GR Marker										
7,400.0	50.29	179.75	7,317.8	-116.6	91.1	117.7	8.00	8.00	0.00	
7,446.0	53.97	179.75	7,346.0	-152.9	91.3	154.1	8.00	8.00	0.00	
Nio A Chalk										
7,458.1	54.93	179.75	7,353.0	-162.7	91.3	163.9	8.00	8.00	0.00	
Nio A Chalk GR Marker										
7,461.5	55.21	179.75	7,355.0	-165.6	91.3	166.7	8.00	8.00	0.00	
Nio B1 Chalk										
7,500.0	58.29	179.75	7,376.1	-197.7	91.5	198.9	8.00	8.00	0.00	
7,519.3	59.83	179.75	7,386.0	-214.3	91.5	215.4	8.00	8.00	0.00	
Nio B1 Marl										
7,546.0	61.97	179.75	7,399.0	-237.6	91.6	238.8	8.00	8.00	0.00	
Nio B Chalk										
7,600.0	66.29	179.75	7,422.5	-286.2	91.8	287.3	8.00	8.00	0.00	
7,601.1	66.38	179.75	7,423.0	-287.2	91.8	288.4	8.00	8.00	0.00	
Nio B Marl										
7,655.9	70.76	179.75	7,443.0	-338.2	92.1	339.3	8.00	8.00	0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Niobrara Landing Target									
7,700.0	74.29	179.75	7,456.2	-380.2	92.2	381.4	8.00	8.00	0.00
7,800.0	82.29	179.75	7,476.5	-478.1	92.7	479.2	8.00	8.00	0.00
7,899.3	90.23	179.75	7,483.0	-577.1	93.1	578.2	8.00	8.00	0.00
7,900.0	90.23	179.75	7,483.0	-577.8	93.1	578.9	0.00	0.00	0.00
Start DLS 1.00 TFO 87.37									
7,900.9	90.23	179.76	7,483.0	-578.7	93.1	579.8	0.95	0.04	0.95
Start 9945.8 hold at 7900.9 MD									
8,000.0	90.23	179.76	7,482.6	-677.8	93.5	678.9	0.00	0.00	0.00
8,100.0	90.23	179.76	7,482.2	-777.8	93.9	778.9	0.00	0.00	0.00
8,200.0	90.23	179.76	7,481.8	-877.8	94.3	878.9	0.00	0.00	0.00
8,300.0	90.23	179.76	7,481.4	-977.8	94.8	978.9	0.00	0.00	0.00
8,400.0	90.23	179.76	7,481.0	-1,077.8	95.2	1,078.9	0.00	0.00	0.00
8,500.0	90.23	179.76	7,480.6	-1,177.8	95.6	1,178.9	0.00	0.00	0.00
8,600.0	90.23	179.76	7,480.2	-1,277.8	96.0	1,278.9	0.00	0.00	0.00
8,700.0	90.23	179.76	7,479.8	-1,377.8	96.4	1,378.9	0.00	0.00	0.00
8,800.0	90.23	179.76	7,479.4	-1,477.8	96.8	1,478.9	0.00	0.00	0.00
8,900.0	90.23	179.76	7,479.0	-1,577.8	97.3	1,578.9	0.00	0.00	0.00
9,000.0	90.23	179.76	7,478.6	-1,677.8	97.7	1,678.9	0.00	0.00	0.00
9,100.0	90.23	179.76	7,478.2	-1,777.8	98.1	1,778.9	0.00	0.00	0.00
9,200.0	90.23	179.76	7,477.8	-1,877.8	98.5	1,878.9	0.00	0.00	0.00
9,300.0	90.23	179.76	7,477.4	-1,977.8	98.9	1,978.9	0.00	0.00	0.00
9,400.0	90.23	179.76	7,477.0	-2,077.8	99.3	2,078.9	0.00	0.00	0.00
9,500.0	90.23	179.76	7,476.6	-2,177.8	99.7	2,178.9	0.00	0.00	0.00
9,600.0	90.23	179.76	7,476.2	-2,277.8	100.2	2,278.9	0.00	0.00	0.00
9,700.0	90.23	179.76	7,475.8	-2,377.8	100.6	2,378.9	0.00	0.00	0.00
9,800.0	90.23	179.76	7,475.4	-2,477.8	101.0	2,478.8	0.00	0.00	0.00
9,900.0	90.23	179.76	7,475.0	-2,577.8	101.4	2,578.8	0.00	0.00	0.00
10,000.0	90.23	179.76	7,474.6	-2,677.8	101.8	2,678.8	0.00	0.00	0.00
10,100.0	90.23	179.76	7,474.2	-2,777.8	102.2	2,778.8	0.00	0.00	0.00
10,200.0	90.23	179.76	7,473.8	-2,877.8	102.6	2,878.8	0.00	0.00	0.00
10,300.0	90.23	179.76	7,473.3	-2,977.8	103.1	2,978.8	0.00	0.00	0.00
10,400.0	90.23	179.76	7,472.9	-3,077.7	103.5	3,078.8	0.00	0.00	0.00
10,500.0	90.23	179.76	7,472.5	-3,177.7	103.9	3,178.8	0.00	0.00	0.00
10,600.0	90.23	179.76	7,472.1	-3,277.7	104.3	3,278.8	0.00	0.00	0.00
10,700.0	90.23	179.76	7,471.7	-3,377.7	104.7	3,378.8	0.00	0.00	0.00
10,800.0	90.23	179.76	7,471.3	-3,477.7	105.1	3,478.8	0.00	0.00	0.00
10,900.0	90.23	179.76	7,470.9	-3,577.7	105.6	3,578.8	0.00	0.00	0.00
11,000.0	90.23	179.76	7,470.5	-3,677.7	106.0	3,678.8	0.00	0.00	0.00
11,100.0	90.23	179.76	7,470.1	-3,777.7	106.4	3,778.8	0.00	0.00	0.00
11,200.0	90.23	179.76	7,469.7	-3,877.7	106.8	3,878.8	0.00	0.00	0.00
11,300.0	90.23	179.76	7,469.3	-3,977.7	107.2	3,978.8	0.00	0.00	0.00
11,400.0	90.23	179.76	7,468.9	-4,077.7	107.6	4,078.8	0.00	0.00	0.00
11,500.0	90.23	179.76	7,468.5	-4,177.7	108.0	4,178.8	0.00	0.00	0.00
11,600.0	90.23	179.76	7,468.1	-4,277.7	108.5	4,278.8	0.00	0.00	0.00
11,700.0	90.23	179.76	7,467.7	-4,377.7	108.9	4,378.8	0.00	0.00	0.00
11,800.0	90.23	179.76	7,467.3	-4,477.7	109.3	4,478.8	0.00	0.00	0.00
11,900.0	90.23	179.76	7,466.9	-4,577.7	109.7	4,578.8	0.00	0.00	0.00
12,000.0	90.23	179.76	7,466.5	-4,677.7	110.1	4,678.7	0.00	0.00	0.00
12,100.0	90.23	179.76	7,466.1	-4,777.7	110.5	4,778.7	0.00	0.00	0.00
12,200.0	90.23	179.76	7,465.7	-4,877.7	110.9	4,878.7	0.00	0.00	0.00
12,300.0	90.23	179.76	7,465.3	-4,977.7	111.4	4,978.7	0.00	0.00	0.00
12,400.0	90.23	179.76	7,464.9	-5,077.7	111.8	5,078.7	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,500.0	90.23	179.76	7,464.5	-5,177.7	112.2	5,178.7	0.00	0.00	0.00
12,600.0	90.23	179.76	7,464.1	-5,277.7	112.6	5,278.7	0.00	0.00	0.00
12,700.0	90.23	179.76	7,463.7	-5,377.7	113.0	5,378.7	0.00	0.00	0.00
12,800.0	90.23	179.76	7,463.3	-5,477.7	113.4	5,478.7	0.00	0.00	0.00
12,900.0	90.23	179.76	7,462.9	-5,577.7	113.9	5,578.7	0.00	0.00	0.00
13,000.0	90.23	179.76	7,462.5	-5,677.7	114.3	5,678.7	0.00	0.00	0.00
13,100.0	90.23	179.76	7,462.1	-5,777.7	114.7	5,778.7	0.00	0.00	0.00
13,200.0	90.23	179.76	7,461.7	-5,877.7	115.1	5,878.7	0.00	0.00	0.00
13,300.0	90.23	179.76	7,461.3	-5,977.7	115.5	5,978.7	0.00	0.00	0.00
13,400.0	90.23	179.76	7,460.9	-6,077.7	115.9	6,078.7	0.00	0.00	0.00
13,500.0	90.23	179.76	7,460.5	-6,177.7	116.3	6,178.7	0.00	0.00	0.00
13,600.0	90.23	179.76	7,460.1	-6,277.7	116.8	6,278.7	0.00	0.00	0.00
13,700.0	90.23	179.76	7,459.7	-6,377.7	117.2	6,378.7	0.00	0.00	0.00
13,800.0	90.23	179.76	7,459.3	-6,477.7	117.6	6,478.7	0.00	0.00	0.00
13,900.0	90.23	179.76	7,458.9	-6,577.7	118.0	6,578.7	0.00	0.00	0.00
14,000.0	90.23	179.76	7,458.5	-6,677.7	118.4	6,678.7	0.00	0.00	0.00
14,100.0	90.23	179.76	7,458.1	-6,777.7	118.8	6,778.7	0.00	0.00	0.00
14,200.0	90.23	179.76	7,457.7	-6,877.7	119.2	6,878.6	0.00	0.00	0.00
14,300.0	90.23	179.76	7,457.3	-6,977.7	119.7	6,978.6	0.00	0.00	0.00
14,400.0	90.23	179.76	7,456.9	-7,077.7	120.1	7,078.6	0.00	0.00	0.00
14,500.0	90.23	179.76	7,456.5	-7,177.7	120.5	7,178.6	0.00	0.00	0.00
14,600.0	90.23	179.76	7,456.1	-7,277.7	120.9	7,278.6	0.00	0.00	0.00
14,700.0	90.23	179.76	7,455.7	-7,377.7	121.3	7,378.6	0.00	0.00	0.00
14,800.0	90.23	179.76	7,455.3	-7,477.7	121.7	7,478.6	0.00	0.00	0.00
14,900.0	90.23	179.76	7,454.9	-7,577.7	122.2	7,578.6	0.00	0.00	0.00
15,000.0	90.23	179.76	7,454.4	-7,677.7	122.6	7,678.6	0.00	0.00	0.00
15,100.0	90.23	179.76	7,454.0	-7,777.7	123.0	7,778.6	0.00	0.00	0.00
15,200.0	90.23	179.76	7,453.6	-7,877.7	123.4	7,878.6	0.00	0.00	0.00
15,300.0	90.23	179.76	7,453.2	-7,977.7	123.8	7,978.6	0.00	0.00	0.00
15,400.0	90.23	179.76	7,452.8	-8,077.7	124.2	8,078.6	0.00	0.00	0.00
15,500.0	90.23	179.76	7,452.4	-8,177.7	124.6	8,178.6	0.00	0.00	0.00
15,600.0	90.23	179.76	7,452.0	-8,277.7	125.1	8,278.6	0.00	0.00	0.00
15,700.0	90.23	179.76	7,451.6	-8,377.7	125.5	8,378.6	0.00	0.00	0.00
15,800.0	90.23	179.76	7,451.2	-8,477.7	125.9	8,478.6	0.00	0.00	0.00
15,900.0	90.23	179.76	7,450.8	-8,577.7	126.3	8,578.6	0.00	0.00	0.00
16,000.0	90.23	179.76	7,450.4	-8,677.7	126.7	8,678.6	0.00	0.00	0.00
16,100.0	90.23	179.76	7,450.0	-8,777.7	127.1	8,778.6	0.00	0.00	0.00
16,200.0	90.23	179.76	7,449.6	-8,877.7	127.5	8,878.6	0.00	0.00	0.00
16,300.0	90.23	179.76	7,449.2	-8,977.7	128.0	8,978.6	0.00	0.00	0.00
16,400.0	90.23	179.76	7,448.8	-9,077.6	128.4	9,078.5	0.00	0.00	0.00
16,500.0	90.23	179.76	7,448.4	-9,177.6	128.8	9,178.5	0.00	0.00	0.00
16,600.0	90.23	179.76	7,448.0	-9,277.6	129.2	9,278.5	0.00	0.00	0.00
16,700.0	90.23	179.76	7,447.6	-9,377.6	129.6	9,378.5	0.00	0.00	0.00
16,800.0	90.23	179.76	7,447.2	-9,477.6	130.0	9,478.5	0.00	0.00	0.00
16,900.0	90.23	179.76	7,446.8	-9,577.6	130.5	9,578.5	0.00	0.00	0.00
17,000.0	90.23	179.76	7,446.4	-9,677.6	130.9	9,678.5	0.00	0.00	0.00
17,100.0	90.23	179.76	7,446.0	-9,777.6	131.3	9,778.5	0.00	0.00	0.00
17,200.0	90.23	179.76	7,445.6	-9,877.6	131.7	9,878.5	0.00	0.00	0.00
17,300.0	90.23	179.76	7,445.2	-9,977.6	132.1	9,978.5	0.00	0.00	0.00
17,400.0	90.23	179.76	7,444.8	-10,077.6	132.5	10,078.5	0.00	0.00	0.00
17,500.0	90.23	179.76	7,444.4	-10,177.6	132.9	10,178.5	0.00	0.00	0.00
17,600.0	90.23	179.76	7,444.0	-10,277.6	133.4	10,278.5	0.00	0.00	0.00
17,700.0	90.23	179.76	7,443.6	-10,377.6	133.8	10,378.5	0.00	0.00	0.00
17,800.0	90.23	179.76	7,443.2	-10,477.6	134.2	10,478.5	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,846.8	90.23	179.76	7,443.0	-10,524.4	134.4	10,525.2	0.00	0.00	0.00
TD at 17846.8									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL 279'FSL & 1690'FE - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,578,366.16	3,299,705.75	40.915953	-104.415617
BHL 300'FSL & 1650'FE - plan hits target center - Point	0.00	0.00	7,443.0	-10,524.4	134.4	1,567,843.95	3,299,968.82	40.887067	-104.415131
LP 300'FNL & 1600'FEL - plan hits target center - Point	0.00	0.00	7,483.0	-577.8	93.1	1,577,789.47	3,299,805.91	40.914367	-104.415280

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")
1,400.0	1,400.0	9 5/8"		9-5/8	12-1/4

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,249.8	4,247.0	Parkman		0.00		
4,717.5	4,714.0	Base Parkman		0.00		
7,222.9	7,189.0	Lower Sharon Springs		0.00		
7,378.8	7,304.0	Lower Sharon Springs GR Marker		0.00		
7,446.0	7,346.0	Nio A Chalk		0.00		
7,458.1	7,353.0	Nio A Chalk GR Marker		0.00		
7,461.5	7,355.0	Nio B1 Chalk		0.00		
7,519.3	7,386.0	Nio B1 Marl		0.00		
7,546.0	7,399.0	Nio B Chalk		0.00		
7,601.1	7,423.0	Nio B Marl		0.00		
7,655.9	7,443.0	Niobrara Landing Target		0.00		

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,300.0	2,300.0	0.0	0.0	KOP - Start Build 1.50
5,344.9	5,340.4	5.0	3.2	Start Drop -2.00
6,771.4	6,766.8	138.2	87.6	Start Build 8.00
7,900.0	7,483.0	142.0	90.0	Start DLS 1.00 TFO 87.37
7,900.9	7,483.0	142.0	90.0	Start 9945.8 hold at 7900.9 MD
17,846.8	7,443.0	-577.1	93.1	TD at 17846.8



Fifth Creek Energy Company, LLC

**Sec.15-T11N-R63W
Crittter Creek Pad 15-11N-63W
Crittter Creek 278-1527H**

**Wellbore #1
Plan 1 (Feb 14, 2017)**

Anticollision Report

21 February, 2017

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Reference	Plan 1 (Feb 14, 2017)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 800.0 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	2/21/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	17,846.8	Plan 1 (Feb 14, 2017) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Critter Creek Pad 15-11N-63W						
Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,499.5	2,499.2	23.1	12.1	2.112	CC
Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,512.9	2,512.5	23.1	12.1	2.105	ES, SF
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,594.9	7,654.5	547.2	512.6	15.811	CC
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,600.0	7,651.2	547.2	512.5	15.796	ES
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,700.0	7,587.7	552.6	517.3	15.634	SF
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	1,500.0	1,499.0	774.7	768.2	118.897	CC, ES
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	2,100.0	2,035.7	798.5	789.6	89.460	SF
Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14,	5,368.6	5,351.1	632.0	607.9	26.247	CC
Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,846.8	17,845.2	650.6	242.9	1.596	ES, SF
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	1,700.0	1,699.0	749.3	741.9	101.052	CC, ES
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	2,300.0	2,200.0	787.5	777.7	80.135	SF
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,900.0	1,899.0	725.0	716.7	87.198	CC
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,000.0	1,993.9	725.3	716.6	83.130	ES
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	3,500.0	3,433.6	796.5	780.9	51.080	SF
Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,700.0	1,699.0	74.6	67.2	10.065	CC
Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,705.4	7,613.9	86.8	50.4	2.388	ES, SF
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,666.3	1,667.3	25.2	17.9	3.460	CC
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,700.0	1,701.0	25.2	17.7	3.390	ES
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,800.0	1,800.6	25.9	18.1	3.302	SF
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,466.3	1,467.3	50.6	44.2	7.941	CC
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,501.0	50.6	44.1	7.757	ES
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,846.8	17,972.9	585.5	187.6	1.471	Level 3, SF
Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,500.0	50.0	43.5	7.677	CC
Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,846.8	17,945.3	235.8	-105.1	0.692	Level 1, ES, SF
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,100.0	2,099.0	699.5	690.3	75.929	CC, ES
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	3,900.0	3,832.6	796.9	779.8	46.651	SF
Existing Wells Sec.15 (Fifth Creek)						
Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1	11,988.5	12,141.1	186.9	116.2	2.643	CC
Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1	12,000.0	12,147.0	187.2	115.9	2.627	ES
Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1	12,200.0	12,246.5	260.4	153.2	2.430	SF
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	16,492.2	11,544.1	184.9	85.3	1.856	CC
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	16,600.0	11,617.2	200.4	78.4	1.642	ES
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	16,700.0	11,685.3	238.0	81.0	1.516	SF

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.98	0.0	24.6	24.6					
100.0	100.0	100.0	100.0	0.1	0.1	89.98	0.0	24.6	24.6	24.4	0.22	109.439		
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	24.6	24.6	23.9	0.67	36.480		
300.0	300.0	300.0	300.0	0.6	0.6	89.98	0.0	24.6	24.6	23.5	1.12	21.888		
400.0	400.0	400.0	400.0	0.8	0.8	89.98	0.0	24.6	24.6	23.0	1.57	15.634		
500.0	500.0	500.0	500.0	1.0	1.0	89.98	0.0	24.6	24.6	22.6	2.02	12.160		
600.0	600.0	600.0	600.0	1.2	1.2	89.98	0.0	24.6	24.6	22.1	2.47	9.949		
700.0	700.0	700.0	700.0	1.5	1.5	89.98	0.0	24.6	24.6	21.7	2.92	8.418		
800.0	800.0	800.0	800.0	1.7	1.7	89.98	0.0	24.6	24.6	21.2	3.37	7.296		
900.0	900.0	900.0	900.0	1.9	1.9	89.98	0.0	24.6	24.6	20.8	3.82	6.438		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.98	0.0	24.6	24.6	20.3	4.27	5.760		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.98	0.0	24.6	24.6	19.9	4.72	5.211		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.98	0.0	24.6	24.6	19.4	5.17	4.758		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.98	0.0	24.6	24.6	19.0	5.62	4.378		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.98	0.0	24.6	24.6	18.5	6.07	4.053		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.98	0.0	24.6	24.6	18.1	6.52	3.774		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	89.98	0.0	24.6	24.6	17.6	6.97	3.530		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.98	0.0	24.6	24.6	17.2	7.42	3.316		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	89.98	0.0	24.6	24.6	16.7	7.87	3.127		
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	89.98	0.0	24.6	24.6	16.3	8.32	2.958		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	89.98	0.0	24.6	24.6	15.8	8.77	2.806		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	89.98	0.0	24.6	24.6	15.4	9.22	2.669		
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	89.98	0.0	24.6	24.6	14.9	9.66	2.545		
2,300.0	2,300.0	2,300.0	2,300.0	5.1	5.1	89.98	0.0	24.6	24.6	14.5	10.11	2.432		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	62.46	-0.9	24.5	23.9	13.4	10.53	2.273		
2,499.5	2,499.4	2,499.2	2,499.2	5.5	5.4	77.98	-3.6	24.4	23.1	12.1	10.92	2.112 CC		
2,500.0	2,499.9	2,499.7	2,499.7	5.5	5.4	78.08	-3.6	24.4	23.1	12.1	10.92	2.112		
2,512.9	2,512.8	2,512.5	2,512.4	5.5	5.4	80.90	-4.1	24.4	23.1	12.1	10.97	2.105 ES, SF		
2,600.0	2,599.8	2,599.0	2,598.9	5.7	5.6	100.72	-8.2	24.2	25.3	13.9	11.31	2.232		
2,700.0	2,699.6	2,697.9	2,697.6	5.9	5.8	119.37	-14.5	23.8	32.1	20.4	11.72	2.742		
2,800.0	2,799.4	2,796.4	2,795.8	6.2	6.0	131.51	-22.5	23.4	42.8	30.7	12.12	3.534		
2,900.0	2,899.3	2,894.4	2,893.3	6.4	6.1	138.99	-32.3	22.9	56.4	43.9	12.52	4.507		
3,000.0	2,999.1	2,991.9	2,990.0	6.6	6.3	143.69	-43.7	22.3	72.4	59.5	12.93	5.598		
3,100.0	3,099.0	3,088.7	3,086.0	6.9	6.6	146.76	-56.8	21.6	90.4	77.0	13.34	6.776		
3,200.0	3,198.8	3,184.9	3,181.0	7.1	6.8	148.83	-71.5	20.8	110.3	96.6	13.75	8.022		
3,300.0	3,298.7	3,280.3	3,275.1	7.3	7.0	150.26	-87.7	19.9	132.0	117.9	14.16	9.321		
3,400.0	3,398.5	3,375.0	3,368.1	7.5	7.3	151.28	-105.4	19.0	155.5	140.9	14.58	10.666		
3,500.0	3,498.4	3,468.9	3,460.0	7.8	7.6	152.02	-124.5	18.0	180.7	165.7	15.00	12.049		
3,600.0	3,598.2	3,561.9	3,550.7	8.0	7.9	152.56	-145.0	16.9	207.6	192.2	15.42	13.463		
3,700.0	3,698.0	3,657.0	3,643.2	8.2	8.2	152.97	-167.1	15.7	235.6	219.8	15.85	14.869		
3,800.0	3,797.9	3,753.0	3,736.5	8.5	8.5	153.30	-189.5	14.6	263.7	247.4	16.28	16.202		
3,900.0	3,897.7	3,849.0	3,829.8	8.7	8.9	153.56	-211.8	13.4	291.8	275.1	16.71	17.463		
4,000.0	3,997.6	3,944.9	3,923.2	9.0	9.3	153.78	-234.1	12.2	319.9	302.8	17.15	18.656		
4,100.0	4,097.4	4,040.9	4,016.5	9.2	9.6	153.96	-256.5	11.0	348.0	330.4	17.59	19.787		
4,200.0	4,197.3	4,136.8	4,109.8	9.4	10.0	154.12	-278.8	9.8	376.1	358.1	18.03	20.860		
4,300.0	4,297.1	4,232.8	4,203.1	9.7	10.4	154.25	-301.1	8.6	404.2	385.7	18.48	21.878		
4,400.0	4,397.0	4,328.8	4,296.5	9.9	10.8	154.37	-323.5	7.5	432.3	413.4	18.92	22.846		
4,500.0	4,496.8	4,424.7	4,389.8	10.1	11.2	154.47	-345.8	6.3	460.4	441.1	19.37	23.766		
4,600.0	4,596.6	4,520.7	4,483.1	10.4	11.6	154.56	-368.1	5.1	488.6	468.7	19.83	24.642		
4,700.0	4,696.5	4,616.7	4,576.4	10.6	12.1	154.65	-390.5	3.9	516.7	496.4	20.28	25.476		
4,800.0	4,796.3	4,712.6	4,669.7	10.9	12.5	154.72	-412.8	2.7	544.8	524.0	20.74	26.272		
4,900.0	4,896.2	4,808.6	4,763.1	11.1	12.9	154.78	-435.1	1.5	572.9	551.7	21.19	27.031		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,996.0	4,904.6	4,856.4	11.3	13.3	154.84	-457.5	0.3	601.0	579.4	21.65	27.756		
5,100.0	5,095.9	5,000.5	4,949.7	11.6	13.8	154.90	-479.8	-0.8	629.1	607.0	22.11	28.448		
5,200.0	5,195.7	5,096.5	5,043.0	11.8	14.2	154.95	-502.1	-2.0	657.2	634.7	22.58	29.111		
5,300.0	5,295.6	5,192.5	5,136.4	12.0	14.7	154.99	-524.5	-3.2	685.4	662.3	23.04	29.746		
5,344.9	5,340.4	5,235.6	5,178.3	12.2	14.9	155.01	-534.5	-3.7	698.0	674.8	23.25	30.022		
5,400.0	5,395.4	5,288.5	5,229.8	12.3	15.1	155.15	-546.8	-4.4	713.0	689.5	23.52	30.311		
5,504.6	5,500.0	5,389.8	5,328.3	12.5	15.6	-172.35	-570.4	-5.6	739.0	715.0	24.00	30.791		
5,600.0	5,595.4	5,482.6	5,418.5	12.6	16.0	-172.49	-592.0	-6.8	761.2	736.8	24.42	31.172		
5,700.0	5,695.4	5,579.9	5,513.1	12.9	16.5	-172.62	-614.6	-8.0	784.4	759.5	24.88	31.524		
6,700.0	6,695.4	8,092.5	7,482.5	15.0	18.7	-88.10	145.3	-10.6	793.5	759.8	33.65	23.583		
6,771.4	6,766.8	8,092.2	7,482.5	15.2	18.7	-88.26	145.1	-10.6	722.7	688.9	33.80	21.381		
6,800.0	6,795.4	8,091.5	7,482.5	15.2	18.7	107.03	144.4	-10.6	694.4	660.8	33.67	20.622		
6,850.0	6,845.3	8,087.5	7,482.5	15.3	18.7	125.95	140.4	-10.6	645.2	612.2	32.99	19.557		
6,900.0	6,894.7	8,080.1	7,482.6	15.4	18.6	137.00	133.0	-10.6	596.4	564.0	32.35	18.438		
6,950.0	6,943.6	8,069.3	7,482.6	15.4	18.6	143.43	122.2	-10.6	548.4	516.6	31.80	17.242		
7,000.0	6,991.5	8,055.1	7,482.7	15.5	18.5	147.23	108.0	-10.6	501.3	470.1	31.29	16.024		
7,050.0	7,038.4	8,037.6	7,482.7	15.6	18.4	149.42	90.5	-10.7	455.6	424.9	30.74	14.822		
7,100.0	7,084.0	8,016.8	7,482.8	15.6	18.3	150.51	69.7	-10.7	411.4	381.3	30.14	13.648		
7,150.0	7,128.0	7,993.0	7,482.9	15.7	18.2	150.76	45.8	-10.8	369.0	339.5	29.51	12.506		
7,200.0	7,170.3	7,964.5	7,483.0	15.7	18.1	150.13	17.4	-10.8	328.7	299.9	28.88	11.383		
7,250.0	7,210.6	7,916.9	7,481.4	15.8	17.9	146.56	-30.1	-10.9	289.8	261.2	28.54	10.154		
7,300.0	7,248.7	7,873.2	7,477.1	15.9	17.8	142.38	-73.7	-11.0	251.8	223.4	28.41	8.863		
7,350.0	7,284.5	7,832.3	7,470.7	16.0	17.7	137.33	-114.0	-11.1	215.2	186.5	28.61	7.520		
7,400.0	7,317.8	7,793.7	7,462.6	16.1	17.6	131.05	-151.7	-11.2	180.7	151.4	29.30	6.169		
7,450.0	7,348.3	7,757.0	7,452.9	16.3	17.6	123.13	-187.2	-11.3	149.7	119.2	30.55	4.901		
7,500.0	7,376.1	7,721.6	7,441.9	16.5	17.6	113.21	-220.8	-11.3	124.3	92.0	32.25	3.853		
7,550.0	7,400.9	7,687.5	7,429.8	16.8	17.6	101.20	-252.7	-11.4	107.7	73.8	33.91	3.175		
7,590.1	7,418.5	7,660.8	7,419.2	17.1	17.6	90.45	-277.2	-11.5	103.3	68.6	34.65	2.981		
7,600.0	7,422.5	7,654.3	7,416.5	17.1	17.6	87.71	-283.2	-11.5	103.5	68.9	34.69	2.985		
7,650.0	7,441.0	7,621.9	7,402.2	17.5	17.7	74.09	-312.2	-11.5	112.5	78.5	33.97	3.312		
7,700.0	7,456.2	7,590.2	7,387.0	17.9	17.7	61.77	-340.0	-11.6	131.2	99.3	31.85	4.118		
7,750.0	7,468.1	7,559.1	7,370.8	18.3	17.8	51.53	-366.6	-11.7	155.5	126.5	29.01	5.359		
7,800.0	7,476.5	7,528.4	7,353.8	18.8	17.9	43.40	-392.1	-11.7	182.6	156.5	26.08	7.001		
7,850.0	7,481.5	7,500.0	7,337.1	19.3	18.0	37.29	-415.1	-11.8	211.0	187.5	23.53	8.966		
7,899.3	7,483.0	7,468.8	7,317.7	19.8	18.1	32.17	-439.5	-11.8	239.3	218.1	21.25	11.262		
7,900.0	7,483.0	7,468.4	7,317.4	19.8	18.1	32.12	-439.8	-11.8	239.7	218.5	21.23	11.292		
7,900.9	7,483.0	7,467.8	7,317.1	19.8	18.1	32.08	-440.2	-11.8	240.3	219.0	21.22	11.325		
8,000.0	7,482.6	7,413.0	7,280.4	20.9	18.2	27.26	-481.0	-11.9	301.2	281.7	19.51	15.438		
8,100.0	7,482.2	7,364.8	7,245.6	22.2	18.4	23.80	-514.4	-12.0	369.5	351.0	18.50	19.974		
8,200.0	7,481.8	7,322.8	7,213.6	23.5	18.5	21.28	-541.5	-12.1	443.1	425.1	17.97	24.659		
8,300.0	7,481.4	7,286.1	7,184.4	25.0	18.6	19.39	-563.7	-12.1	520.7	502.9	17.77	29.306		
8,400.0	7,481.0	7,250.0	7,154.5	26.5	18.7	17.77	-584.0	-12.1	601.6	583.9	17.71	33.966		
8,500.0	7,480.6	7,225.7	7,133.9	28.0	18.8	16.80	-596.8	-12.2	685.1	667.1	18.00	38.059		
8,600.0	7,480.2	7,200.0	7,111.6	29.6	18.9	15.85	-609.6	-12.2	770.8	752.5	18.31	42.103		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.57	5.1	674.1	674.1					
100.0	100.0	99.0	99.0	0.1	0.1	89.57	5.1	674.1	674.1	673.9	0.22	3,014.256		
200.0	200.0	199.0	199.0	0.3	0.3	89.57	5.1	674.1	674.1	673.4	0.67	1,003.081		
300.0	300.0	299.0	299.0	0.6	0.6	89.57	5.1	674.1	674.1	673.0	1.12	601.044		
400.0	400.0	399.0	399.0	0.8	0.8	89.57	5.1	674.1	674.1	672.5	1.57	429.072		
500.0	500.0	499.0	499.0	1.0	1.0	89.57	5.1	674.1	674.1	672.1	2.02	333.616		
600.0	600.0	599.0	599.0	1.2	1.2	89.57	5.1	674.1	674.1	671.7	2.47	272.904		
700.0	700.0	699.0	699.0	1.5	1.5	89.57	5.1	674.1	674.1	671.2	2.92	230.886		
800.0	800.0	799.0	799.0	1.7	1.7	89.57	5.1	674.1	674.1	670.8	3.37	200.081		
900.0	900.0	899.0	899.0	1.9	1.9	89.57	5.1	674.1	674.1	670.3	3.82	176.528		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.57	5.1	674.1	674.1	669.9	4.27	157.936		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.57	5.1	674.1	674.1	669.4	4.72	142.888		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.57	5.1	674.1	674.1	669.0	5.17	130.457		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.57	5.1	674.1	674.1	668.5	5.62	120.016		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.57	5.1	674.1	674.1	668.1	6.07	111.123		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.57	5.1	674.1	674.1	667.6	6.52	103.457		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.57	5.1	674.1	674.1	667.2	6.97	96.780		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.57	5.1	674.1	674.1	666.7	7.42	90.913		
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.57	5.1	674.1	674.1	666.3	7.86	85.716		
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.57	5.1	674.1	674.1	665.8	8.31	81.082		
2,000.0	2,000.0	1,999.0	1,999.0	4.4	4.4	89.57	5.1	674.1	674.1	665.4	8.76	76.923		
2,100.0	2,100.0	2,099.0	2,099.0	4.6	4.6	89.57	5.1	674.1	674.1	664.9	9.21	73.169		
2,200.0	2,200.0	2,199.0	2,199.0	4.8	4.8	89.57	5.1	674.1	674.1	664.5	9.66	69.765		
2,300.0	2,300.0	2,299.0	2,299.0	5.1	5.1	89.57	5.1	674.1	674.1	664.0	10.11	66.664		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	57.41	3.8	674.0	673.3	662.8	10.53	63.943		
2,500.0	2,499.9	2,500.6	2,500.5	5.5	5.4	58.06	-0.1	673.8	671.0	660.1	10.92	61.474		
2,512.9	2,512.8	2,513.5	2,513.4	5.5	5.4	58.18	-0.8	673.8	670.6	659.7	10.97	61.157		
2,600.0	2,599.8	2,600.5	2,600.2	5.7	5.6	59.03	-6.7	673.5	667.9	656.6	11.31	59.063		
2,700.0	2,699.6	2,699.8	2,699.1	5.9	5.8	60.22	-15.8	673.0	664.9	653.2	11.71	56.784		
2,800.0	2,799.4	2,798.3	2,796.9	6.2	6.0	61.63	-27.3	672.4	662.3	650.2	12.12	54.630		
2,900.0	2,899.3	2,895.9	2,893.5	6.4	6.2	63.25	-41.2	671.7	660.2	647.6	12.55	52.598		
3,000.0	2,999.1	2,992.5	2,988.7	6.6	6.4	65.07	-57.4	670.9	658.8	645.8	13.00	50.684		
3,083.0	3,082.0	3,071.7	3,066.5	6.8	6.6	66.72	-72.5	670.1	658.4	645.0	13.39	49.184		
3,100.0	3,099.0	3,087.9	3,082.3	6.9	6.6	67.07	-75.8	669.9	658.4	645.0	13.47	48.894		
3,200.0	3,198.8	3,182.1	3,174.3	7.1	6.9	69.25	-96.2	668.9	659.3	645.4	13.96	47.232		
3,300.0	3,298.7	3,277.5	3,267.0	7.3	7.2	71.57	-118.4	667.7	661.6	647.1	14.48	45.695		
3,400.0	3,398.5	3,373.4	3,360.3	7.5	7.5	73.89	-140.8	666.6	665.1	650.0	15.02	44.288		
3,500.0	3,498.4	3,469.3	3,453.6	7.8	7.8	76.19	-163.3	665.4	669.7	654.1	15.57	43.021		
3,600.0	3,598.2	3,565.3	3,546.8	8.0	8.2	78.46	-185.7	664.3	675.5	659.4	16.13	41.889		
3,700.0	3,698.0	3,661.2	3,640.1	8.2	8.6	80.68	-208.1	663.1	682.4	665.7	16.69	40.886		
3,800.0	3,797.9	3,757.1	3,733.4	8.5	8.9	82.87	-230.6	662.0	690.4	673.1	17.26	40.005		
3,900.0	3,897.7	3,853.1	3,826.6	8.7	9.3	85.00	-253.0	660.8	699.4	681.6	17.83	39.238		
4,000.0	3,997.6	3,949.0	3,919.9	9.0	9.7	87.08	-275.4	659.7	709.5	691.1	18.39	38.577		
4,100.0	4,097.4	4,044.9	4,013.2	9.2	10.1	89.10	-297.8	658.5	720.5	701.6	18.96	38.011		
4,200.0	4,197.3	4,140.9	4,106.4	9.4	10.5	91.06	-320.3	657.4	732.4	712.9	19.51	37.534		
4,300.0	4,297.1	4,236.8	4,199.7	9.7	10.9	92.97	-342.7	656.2	745.3	725.2	20.07	37.136		
4,400.0	4,397.0	4,332.7	4,293.0	9.9	11.3	94.81	-365.1	655.0	758.9	738.3	20.62	36.811		
4,500.0	4,496.8	4,428.7	4,386.2	10.1	11.8	96.58	-387.6	653.9	773.4	752.2	21.16	36.550		
4,600.0	4,596.6	4,524.6	4,479.5	10.4	12.2	98.30	-410.0	652.7	788.6	766.9	21.70	36.347		
6,950.0	6,943.6	8,066.3	7,482.6	15.4	18.4	-103.52	121.1	639.8	770.6	737.0	33.54	22.978		
7,000.0	6,991.5	8,052.1	7,482.7	15.5	18.3	-105.58	106.9	639.7	737.7	704.3	33.42	22.072		
7,050.0	7,038.4	8,034.6	7,482.7	15.6	18.2	-106.95	89.4	639.7	707.3	674.0	33.29	21.246		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
7,100.0	7,084.0	8,013.8	7,482.8	15.6	18.1	-107.72	68.6	639.7	679.4	646.3	33.14	20.500		
7,150.0	7,128.0	7,990.0	7,482.9	15.7	18.0	-107.95	44.8	639.6	654.4	621.4	33.02	19.817		
7,200.0	7,170.3	7,957.0	7,482.9	15.7	17.9	-107.21	11.8	639.6	632.3	599.4	32.96	19.186		
7,250.0	7,210.6	7,910.2	7,480.7	15.8	17.8	-105.12	-34.9	639.5	612.6	579.6	32.95	18.590		
7,300.0	7,248.7	7,867.2	7,476.0	15.9	17.7	-103.06	-77.7	639.4	595.1	562.1	33.02	18.025		
7,350.0	7,284.5	7,827.0	7,469.3	16.0	17.6	-100.98	-117.3	639.3	580.2	547.1	33.15	17.501		
7,400.0	7,317.8	7,788.9	7,460.9	16.1	17.5	-98.84	-154.4	639.2	568.0	534.6	33.36	17.029		
7,450.0	7,348.3	7,752.7	7,451.0	16.3	17.5	-96.61	-189.3	639.2	558.6	525.0	33.62	16.616		
7,500.0	7,376.1	7,717.8	7,439.9	16.5	17.5	-94.27	-222.4	639.1	552.0	518.1	33.93	16.267		
7,550.0	7,400.9	7,684.0	7,427.6	16.8	17.5	-91.84	-253.9	639.0	548.2	513.9	34.28	15.993		
7,594.9	7,420.5	7,654.5	7,415.7	17.1	17.6	-89.56	-280.9	639.0	547.2	512.6	34.61	15.811 CC		
7,600.0	7,422.5	7,651.2	7,414.3	17.1	17.6	-89.30	-283.9	639.0	547.2	512.5	34.64	15.796 ES		
7,650.0	7,441.0	7,619.1	7,399.9	17.5	17.6	-86.67	-312.5	638.9	548.7	513.7	35.01	15.674		
7,700.0	7,456.2	7,587.7	7,384.6	17.9	17.7	-83.98	-340.0	638.8	552.6	517.3	35.35	15.634 SF		
7,750.0	7,468.1	7,556.8	7,368.5	18.3	17.8	-81.23	-366.2	638.8	558.7	523.0	35.65	15.669		
7,800.0	7,476.5	7,526.5	7,351.4	18.8	17.8	-78.45	-391.4	638.7	566.7	530.7	35.92	15.777		
7,850.0	7,481.5	7,500.0	7,335.8	19.3	17.9	-75.91	-412.7	638.7	576.3	540.1	36.15	15.943		
7,899.3	7,483.0	7,467.3	7,315.3	19.8	18.0	-72.97	-438.2	638.6	587.1	550.8	36.28	16.182		
7,900.0	7,483.0	7,466.8	7,315.0	19.8	18.0	-72.95	-438.6	638.6	587.3	551.0	36.29	16.185		
7,900.9	7,483.0	7,466.3	7,314.7	19.8	18.0	-72.91	-439.0	638.6	587.5	551.2	36.29	16.189		
8,000.0	7,482.6	7,411.9	7,278.1	20.9	18.2	-69.48	-479.2	638.6	614.8	578.0	36.79	16.709		
8,100.0	7,482.2	7,364.0	7,243.4	22.2	18.3	-66.36	-512.3	638.5	650.8	613.4	37.39	17.408		
8,200.0	7,481.8	7,322.4	7,211.6	23.5	18.5	-63.62	-539.1	638.4	695.2	657.2	38.00	18.293		
8,300.0	7,481.4	7,286.0	7,182.5	25.0	18.6	-61.22	-560.9	638.4	747.0	708.4	38.65	19.327		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	89.57	5.9	774.7	774.7					
100.0	100.0	99.0	99.0	0.1	0.1	89.57	5.9	774.7	774.7	774.5	0.22	3,464.107		
200.0	200.0	199.0	199.0	0.3	0.3	89.57	5.9	774.7	774.7	774.1	0.67	1,152.782		
300.0	300.0	299.0	299.0	0.6	0.6	89.57	5.9	774.7	774.7	773.6	1.12	690.745		
400.0	400.0	399.0	399.0	0.8	0.8	89.57	5.9	774.7	774.7	773.2	1.57	493.107		
500.0	500.0	499.0	499.0	1.0	1.0	89.57	5.9	774.7	774.7	772.7	2.02	383.406		
600.0	600.0	599.0	599.0	1.2	1.2	89.57	5.9	774.7	774.7	772.3	2.47	313.632		
700.0	700.0	699.0	699.0	1.5	1.5	89.57	5.9	774.7	774.7	771.8	2.92	265.344		
800.0	800.0	799.0	799.0	1.7	1.7	89.57	5.9	774.7	774.7	771.4	3.37	229.941		
900.0	900.0	899.0	899.0	1.9	1.9	89.57	5.9	774.7	774.7	770.9	3.82	202.873		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.57	5.9	774.7	774.7	770.5	4.27	181.507		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.57	5.9	774.7	774.7	770.0	4.72	164.212		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.57	5.9	774.7	774.7	769.6	5.17	149.927		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.57	5.9	774.7	774.7	769.1	5.62	137.928		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.57	5.9	774.7	774.7	768.7	6.07	127.707		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.57	5.9	774.7	774.7	768.2	6.52	118.897 CC, ES		
1,600.0	1,600.0	1,589.1	1,589.1	3.5	3.4	89.63	5.0	775.3	775.4	768.4	6.92	112.052		
1,700.0	1,700.0	1,679.0	1,679.0	3.7	3.6	89.83	2.4	777.0	777.3	770.0	7.31	106.392		
1,800.0	1,800.0	1,768.7	1,768.5	3.9	3.8	90.15	-2.0	779.9	780.5	772.8	7.70	101.428		
1,900.0	1,900.0	1,858.2	1,857.6	4.2	3.9	90.59	-8.1	784.0	785.1	777.0	8.09	97.006		
2,000.0	2,000.0	1,947.2	1,946.2	4.4	4.1	91.16	-15.9	789.2	791.1	782.6	8.50	93.041		
2,100.0	2,100.0	2,035.7	2,034.0	4.6	4.3	91.83	-25.4	795.4	798.5	789.6	8.93	89.460 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.55	5.1	649.5	649.5					
100.0	100.0	99.0	99.0	0.1	0.1	89.55	5.1	649.5	649.5	649.3	0.22	2,904.271		
200.0	200.0	199.0	199.0	0.3	0.3	89.55	5.1	649.5	649.5	648.9	0.67	966.480		
300.0	300.0	299.0	299.0	0.6	0.6	89.55	5.1	649.5	649.5	648.4	1.12	579.113		
400.0	400.0	399.0	399.0	0.8	0.8	89.55	5.1	649.5	649.5	648.0	1.57	413.416		
500.0	500.0	499.0	499.0	1.0	1.0	89.55	5.1	649.5	649.5	647.5	2.02	321.443		
600.0	600.0	599.0	599.0	1.2	1.2	89.55	5.1	649.5	649.5	647.1	2.47	262.946		
700.0	700.0	699.0	699.0	1.5	1.5	89.55	5.1	649.5	649.5	646.6	2.92	222.462		
800.0	800.0	799.0	799.0	1.7	1.7	89.55	5.1	649.5	649.5	646.2	3.37	192.780		
900.0	900.0	899.0	899.0	1.9	1.9	89.55	5.1	649.5	649.5	645.7	3.82	170.087		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.55	5.1	649.5	649.5	645.3	4.27	152.174		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.55	5.1	649.5	649.5	644.8	4.72	137.674		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.55	5.1	649.5	649.5	644.4	5.17	125.697		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.55	5.1	649.5	649.5	643.9	5.62	115.637		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.55	5.1	649.5	649.5	643.5	6.07	107.068		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.55	5.1	649.5	649.5	643.0	6.52	99.682		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.55	5.1	649.5	649.5	642.6	6.97	93.249		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.55	5.1	649.5	649.5	642.1	7.42	87.595		
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.55	5.1	649.5	649.5	641.7	7.86	82.589		
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.55	5.1	649.5	649.5	641.2	8.31	78.123		
2,000.0	2,000.0	1,999.0	1,999.0	4.4	4.4	89.55	5.1	649.5	649.5	640.8	8.76	74.116		
2,100.0	2,100.0	2,099.0	2,099.0	4.6	4.6	89.55	5.1	649.5	649.5	640.3	9.21	70.500		
2,200.0	2,200.0	2,199.0	2,199.0	4.8	4.8	89.55	5.1	649.5	649.5	639.9	9.66	67.220		
2,300.0	2,300.0	2,299.0	2,299.0	5.1	5.1	89.55	5.1	649.5	649.5	639.4	10.11	64.232		
2,400.0	2,400.0	2,399.0	2,399.0	5.3	5.3	57.29	5.1	649.5	648.8	638.3	10.56	61.453		
2,500.0	2,499.9	2,498.9	2,498.9	5.5	5.5	57.61	5.1	649.5	646.7	635.7	11.00	58.797		
2,512.9	2,512.8	2,510.8	2,510.8	5.5	5.5	57.66	5.1	649.5	646.3	635.3	11.05	58.477		
2,600.0	2,599.8	2,590.6	2,590.6	5.7	5.7	57.91	6.0	650.1	644.4	632.9	11.42	56.419		
2,700.0	2,699.6	2,682.5	2,682.5	5.9	5.9	58.05	8.8	651.9	643.3	631.5	11.84	54.319		
2,800.0	2,799.4	2,782.5	2,782.3	6.2	6.1	58.12	12.7	654.4	642.9	630.6	12.29	52.330		
2,900.0	2,899.3	2,882.5	2,882.2	6.4	6.4	58.19	16.7	656.9	642.5	629.7	12.73	50.469		
3,000.0	2,999.1	2,982.5	2,982.1	6.6	6.6	58.26	20.6	659.5	642.0	628.8	13.18	48.726		
3,100.0	3,099.0	3,082.5	3,082.0	6.9	6.8	58.33	24.6	662.0	641.6	628.0	13.62	47.091		
3,200.0	3,198.8	3,182.5	3,181.9	7.1	7.0	58.39	28.5	664.5	641.1	627.1	14.07	45.554		
3,300.0	3,298.7	3,282.5	3,281.8	7.3	7.3	58.46	32.5	667.1	640.7	626.2	14.53	44.108		
3,400.0	3,398.5	3,382.5	3,381.7	7.5	7.5	58.53	36.4	669.6	640.3	625.3	14.98	42.744		
3,500.0	3,498.4	3,482.5	3,481.6	7.8	7.7	58.60	40.3	672.2	639.8	624.4	15.43	41.457		
3,600.0	3,598.2	3,582.5	3,581.4	8.0	7.9	58.67	44.3	674.7	639.4	623.5	15.89	40.241		
3,700.0	3,698.0	3,682.5	3,681.3	8.2	8.2	58.74	48.2	677.2	639.0	622.6	16.35	39.090		
3,800.0	3,797.9	3,782.5	3,781.2	8.5	8.4	58.81	52.2	679.8	638.5	621.7	16.80	37.999		
3,900.0	3,897.7	3,882.5	3,881.1	8.7	8.6	58.87	56.1	682.3	638.1	620.9	17.26	36.964		
4,000.0	3,997.6	3,982.5	3,981.0	9.0	8.9	58.94	60.1	684.8	637.7	620.0	17.72	35.980		
4,100.0	4,097.4	4,082.5	4,080.9	9.2	9.1	59.01	64.0	687.4	637.3	619.1	18.18	35.045		
4,200.0	4,197.3	4,182.5	4,180.8	9.4	9.3	59.08	68.0	689.9	636.8	618.2	18.65	34.155		
4,300.0	4,297.1	4,282.5	4,280.6	9.7	9.5	59.15	71.9	692.5	636.4	617.3	19.11	33.307		
4,400.0	4,397.0	4,382.5	4,380.5	9.9	9.8	59.22	75.9	695.0	636.0	616.4	19.57	32.497		
4,500.0	4,496.8	4,482.5	4,480.4	10.1	10.0	59.29	79.8	697.5	635.6	615.5	20.03	31.724		
4,600.0	4,596.6	4,582.5	4,580.3	10.4	10.2	59.36	83.8	700.1	635.1	614.6	20.50	30.985		
4,700.0	4,696.5	4,682.5	4,680.2	10.6	10.5	59.43	87.7	702.6	634.7	613.8	20.96	30.278		
4,800.0	4,796.3	4,782.5	4,780.1	10.9	10.7	59.50	91.7	705.1	634.3	612.9	21.43	29.601		
4,900.0	4,896.2	4,882.4	4,880.0	11.1	10.9	59.57	95.6	707.7	633.9	612.0	21.89	28.952		
5,000.0	4,996.0	4,982.4	4,979.8	11.3	11.2	59.64	99.6	710.2	633.5	611.1	22.36	28.329		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,095.9	5,082.4	5,079.7	11.6	11.4	59.71	103.5	712.8	633.0	610.2	22.83	27.732		
5,200.0	5,195.7	5,182.4	5,179.6	11.8	11.6	59.78	107.4	715.3	632.6	609.3	23.29	27.158		
5,300.0	5,295.6	5,282.4	5,279.5	12.0	11.9	59.85	111.4	717.8	632.2	608.4	23.76	26.606		
5,344.9	5,340.4	5,327.4	5,324.4	12.2	12.0	59.88	113.2	719.0	632.0	608.1	23.97	26.365		
5,368.6	5,364.1	5,351.1	5,348.1	12.2	12.0	59.89	114.1	719.6	632.0	607.9	24.08	26.247 CC		
5,400.0	5,395.4	5,382.4	5,379.4	12.3	12.1	59.88	115.3	720.4	632.1	607.8	24.22	26.101		
5,504.6	5,500.0	5,487.0	5,483.8	12.5	12.4	92.04	119.5	723.0	633.6	609.0	24.64	25.714		
5,600.0	5,595.4	5,582.3	5,579.0	12.6	12.6	91.69	123.2	725.4	635.9	610.9	25.04	25.393		
5,700.0	5,695.4	5,682.2	5,678.8	12.9	12.8	91.33	127.2	728.0	638.3	612.8	25.49	25.044		
5,800.0	5,795.4	5,782.1	5,778.6	13.1	13.1	90.97	131.1	730.5	640.8	614.9	25.94	24.707		
5,900.0	5,895.4	5,881.9	5,878.4	13.3	13.3	90.62	135.1	733.0	643.3	616.9	26.38	24.383		
6,000.0	5,995.4	5,981.8	5,978.1	13.5	13.5	90.27	139.0	735.6	645.8	619.0	26.83	24.070		
6,100.0	6,095.4	6,083.5	6,079.6	13.7	13.8	89.91	143.0	738.1	648.3	621.0	27.28	23.767		
6,200.0	6,195.4	6,197.5	6,193.6	13.9	14.0	89.73	145.1	739.5	649.5	621.8	27.70	23.449		
6,300.0	6,295.4	6,298.3	6,294.4	14.2	14.2	89.73	145.1	739.5	649.5	621.4	28.11	23.104		
6,400.0	6,395.4	6,398.3	6,394.4	14.4	14.4	89.73	145.1	739.5	649.5	621.0	28.55	22.750		
6,500.0	6,495.4	6,498.3	6,494.4	14.6	14.6	89.73	145.1	739.5	649.5	620.5	28.99	22.406		
6,600.0	6,595.4	6,598.3	6,594.4	14.8	14.8	89.73	145.1	739.5	649.5	620.1	29.43	22.072		
6,700.0	6,695.4	6,698.3	6,694.4	15.0	15.0	89.73	145.1	739.5	649.5	619.6	29.87	21.747		
6,771.4	6,766.8	6,769.7	6,765.8	15.2	15.2	89.73	145.1	739.5	649.5	619.3	30.18	21.521		
6,800.0	6,795.4	6,798.3	6,794.4	15.2	15.2	-90.03	144.6	739.5	649.5	619.2	30.29	21.445		
6,850.0	6,845.3	6,848.3	6,844.3	15.3	15.3	-90.04	140.9	739.5	649.5	619.1	30.44	21.341		
6,900.0	6,894.7	6,898.3	6,893.8	15.4	15.4	-90.04	133.8	739.5	649.5	618.9	30.56	21.250		
6,950.0	6,943.6	6,948.4	6,942.7	15.4	15.4	-90.05	123.2	739.6	649.5	618.8	30.68	21.172		
7,000.0	6,991.5	6,998.4	6,990.7	15.5	15.5	-90.06	109.2	739.7	649.5	618.7	30.78	21.102		
7,050.0	7,038.4	7,048.5	7,037.7	15.6	15.6	-90.06	91.9	739.7	649.5	618.6	30.88	21.035		
7,100.0	7,084.0	7,098.5	7,083.3	15.6	15.6	-90.07	71.4	739.8	649.5	618.5	30.98	20.968		
7,150.0	7,128.0	7,148.6	7,127.4	15.7	15.7	-90.07	47.8	739.9	649.5	618.4	31.09	20.893		
7,200.0	7,170.3	7,198.6	7,169.8	15.7	15.7	-90.08	21.1	740.0	649.5	618.3	31.22	20.804		
7,250.0	7,210.6	7,248.7	7,210.1	15.8	15.8	-90.08	-8.5	740.2	649.5	618.1	31.38	20.697		
7,300.0	7,248.7	7,298.7	7,248.3	15.9	15.9	-90.08	-40.9	740.3	649.5	617.9	31.59	20.563		
7,350.0	7,284.5	7,348.8	7,284.2	16.0	16.0	-90.09	-75.8	740.5	649.5	617.7	31.84	20.398		
7,400.0	7,317.8	7,398.9	7,317.5	16.1	16.1	-90.09	-113.1	740.6	649.5	617.4	32.16	20.198		
7,450.0	7,348.3	7,449.0	7,348.2	16.3	16.3	-90.09	-152.7	740.8	649.5	617.0	32.54	19.959		
7,500.0	7,376.1	7,499.0	7,376.0	16.5	16.6	-90.09	-194.4	741.0	649.5	616.5	33.00	19.680		
7,550.0	7,400.9	7,549.1	7,400.8	16.8	16.8	-90.10	-237.8	741.2	649.5	616.0	33.55	19.362		
7,600.0	7,422.5	7,599.2	7,422.5	17.1	17.1	-90.10	-282.9	741.4	649.5	615.3	34.17	19.007		
7,650.0	7,441.0	7,649.2	7,441.1	17.5	17.5	-90.10	-329.4	741.6	649.5	614.6	34.89	18.618		
7,700.0	7,456.2	7,699.3	7,456.3	17.9	17.9	-90.10	-377.1	741.8	649.5	613.8	35.68	18.203		
7,750.0	7,468.1	7,749.4	7,468.1	18.3	18.3	-90.09	-425.8	742.0	649.5	613.0	36.56	17.765		
7,800.0	7,476.5	7,799.5	7,476.6	18.8	18.8	-90.09	-475.1	742.2	649.5	612.0	37.52	17.313		
7,850.0	7,481.5	7,849.5	7,481.5	19.3	19.3	-90.09	-524.9	742.4	649.5	611.0	38.54	16.854		
7,899.3	7,483.0	7,898.9	7,483.0	19.8	19.9	-90.09	-574.3	742.6	649.5	609.9	39.61	16.399		
7,900.0	7,483.0	7,899.7	7,483.0	19.8	19.9	-90.09	-575.1	742.6	649.5	609.9	39.62	16.392		
7,900.3	7,483.0	7,900.0	7,483.0	19.8	19.9	-90.09	-575.3	742.6	649.5	609.9	39.63	16.390		
7,900.9	7,483.0	7,900.6	7,483.0	19.8	19.9	-90.09	-576.0	742.6	649.5	609.9	39.64	16.385		
8,000.0	7,482.6	7,999.7	7,482.6	20.9	21.0	-90.09	-675.0	743.0	649.5	607.7	41.88	15.511		
8,100.0	7,482.2	8,099.7	7,482.2	22.2	22.3	-90.09	-775.0	743.5	649.6	605.1	44.43	14.621		
8,200.0	7,481.8	8,199.7	7,481.8	23.5	23.7	-90.09	-875.0	743.9	649.6	602.4	47.15	13.776		
8,300.0	7,481.4	8,299.7	7,481.4	25.0	25.1	-90.09	-975.0	744.3	649.6	599.5	50.03	12.984		
8,400.0	7,481.0	8,399.7	7,481.0	26.5	26.6	-90.09	-1,075.0	744.8	649.6	596.6	53.03	12.249		
8,500.0	7,480.6	8,499.7	7,480.6	28.0	28.2	-90.09	-1,175.0	745.2	649.6	593.5	56.14	11.572		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design				Crittter Creek Pad 15-11N-63W - Crittter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)										Offset Site Error:		0.0 ft
Survey Program: 0-MWD														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
8,600.0	7,480.2	8,599.7	7,480.2	29.6	29.8	-90.09	-1,275.0	745.6	649.6	590.3	59.33	10.949				
8,700.0	7,479.8	8,699.7	7,479.8	31.3	31.4	-90.09	-1,375.0	746.0	649.6	587.0	62.60	10.377				
8,800.0	7,479.4	8,799.7	7,479.4	32.9	33.1	-90.09	-1,475.0	746.5	649.6	583.7	65.93	9.853				
8,900.0	7,479.0	8,899.7	7,479.0	34.6	34.8	-90.09	-1,575.0	746.9	649.6	580.3	69.32	9.371				
9,000.0	7,478.6	8,999.7	7,478.6	36.3	36.5	-90.09	-1,675.0	747.3	649.7	576.9	72.76	8.929				
9,100.0	7,478.2	9,099.7	7,478.2	38.1	38.2	-90.09	-1,775.0	747.7	649.7	573.4	76.23	8.522				
9,200.0	7,477.8	9,199.7	7,477.8	39.8	40.0	-90.09	-1,875.0	748.2	649.7	569.9	79.74	8.147				
9,300.0	7,477.4	9,299.7	7,477.4	41.6	41.7	-90.09	-1,975.0	748.6	649.7	566.4	83.28	7.801				
9,400.0	7,477.0	9,399.7	7,477.0	43.4	43.5	-90.09	-2,075.0	749.0	649.7	562.8	86.85	7.481				
9,500.0	7,476.6	9,499.7	7,476.6	45.2	45.3	-90.09	-2,175.0	749.4	649.7	559.3	90.44	7.184				
9,600.0	7,476.2	9,599.7	7,476.2	47.0	47.1	-90.09	-2,275.0	749.9	649.7	555.7	94.06	6.908				
9,700.0	7,475.8	9,699.7	7,475.8	48.8	48.9	-90.09	-2,375.0	750.3	649.7	552.0	97.69	6.651				
9,800.0	7,475.4	9,799.7	7,475.4	50.6	50.8	-90.09	-2,475.0	750.7	649.7	548.4	101.34	6.412				
9,900.0	7,475.0	9,899.7	7,475.0	52.4	52.6	-90.09	-2,575.0	751.1	649.8	544.8	105.00	6.188				
10,000.0	7,474.6	9,999.7	7,474.6	54.3	54.4	-90.09	-2,675.0	751.6	649.8	541.1	108.68	5.979				
10,100.0	7,474.2	10,099.7	7,474.1	56.1	56.3	-90.09	-2,775.0	752.0	649.8	537.4	112.37	5.783				
10,200.0	7,473.8	10,199.7	7,473.7	58.0	58.1	-90.09	-2,875.0	752.4	649.8	533.7	116.07	5.598				
10,300.0	7,473.3	10,299.7	7,473.3	59.8	60.0	-90.09	-2,975.0	752.8	649.8	530.0	119.78	5.425				
10,400.0	7,472.9	10,399.7	7,472.9	61.7	61.8	-90.09	-3,075.0	753.3	649.8	526.3	123.50	5.262				
10,500.0	7,472.5	10,499.7	7,472.5	63.5	63.7	-90.09	-3,175.0	753.7	649.8	522.6	127.22	5.108				
10,600.0	7,472.1	10,599.7	7,472.1	65.4	65.6	-90.09	-3,275.0	754.1	649.8	518.9	130.96	4.962				
10,700.0	7,471.7	10,699.7	7,471.7	67.3	67.4	-90.09	-3,375.0	754.6	649.8	515.1	134.70	4.824				
10,800.0	7,471.3	10,799.7	7,471.3	69.2	69.3	-90.09	-3,475.0	755.0	649.8	511.4	138.45	4.694				
10,900.0	7,470.9	10,899.7	7,470.9	71.0	71.2	-90.09	-3,575.0	755.4	649.9	507.7	142.20	4.570				
11,000.0	7,470.5	10,999.7	7,470.5	72.9	73.1	-90.09	-3,675.0	755.8	649.9	503.9	145.96	4.452				
11,100.0	7,470.1	11,099.7	7,470.1	74.8	75.0	-90.09	-3,775.0	756.3	649.9	500.2	149.73	4.340				
11,200.0	7,469.7	11,199.7	7,469.7	76.7	76.8	-90.09	-3,875.0	756.7	649.9	496.4	153.50	4.234				
11,300.0	7,469.3	11,299.7	7,469.3	78.6	78.7	-90.09	-3,975.0	757.1	649.9	492.6	157.27	4.132				
11,400.0	7,468.9	11,399.7	7,468.9	80.5	80.6	-90.09	-4,075.0	757.5	649.9	488.9	161.05	4.036				
11,500.0	7,468.5	11,499.7	7,468.5	82.3	82.5	-90.09	-4,175.0	758.0	649.9	485.1	164.83	3.943				
11,600.0	7,468.1	11,599.7	7,468.1	84.2	84.4	-90.09	-4,275.0	758.4	649.9	481.3	168.61	3.855				
11,700.0	7,467.7	11,699.7	7,467.7	86.1	86.3	-90.09	-4,375.0	758.8	649.9	477.5	172.40	3.770				
11,800.0	7,467.3	11,799.7	7,467.3	88.0	88.2	-90.09	-4,475.0	759.2	650.0	473.8	176.19	3.689				
11,900.0	7,466.9	11,899.7	7,466.9	89.9	90.1	-90.09	-4,575.0	759.7	650.0	470.0	179.99	3.611				
12,000.0	7,466.5	11,999.7	7,466.5	91.8	92.0	-90.09	-4,675.0	760.1	650.0	466.2	183.78	3.537				
12,100.0	7,466.1	12,099.7	7,466.1	93.7	93.9	-90.09	-4,775.0	760.5	650.0	462.4	187.58	3.465				
12,200.0	7,465.7	12,199.7	7,465.7	95.6	95.8	-90.09	-4,875.0	760.9	650.0	458.6	191.38	3.396				
12,300.0	7,465.3	12,299.7	7,465.3	97.5	97.7	-90.09	-4,975.0	761.4	650.0	454.8	195.19	3.330				
12,400.0	7,464.9	12,399.7	7,464.9	99.4	99.6	-90.09	-5,075.0	761.8	650.0	451.0	198.99	3.267				
12,500.0	7,464.5	12,499.7	7,464.5	101.3	101.5	-90.09	-5,174.9	762.2	650.0	447.2	202.80	3.205				
12,600.0	7,464.1	12,599.7	7,464.1	103.2	103.4	-90.09	-5,274.9	762.6	650.0	443.4	206.61	3.146				
12,700.0	7,463.7	12,699.7	7,463.7	105.1	105.3	-90.09	-5,374.9	763.1	650.1	439.6	210.42	3.089				
12,800.0	7,463.3	12,799.7	7,463.3	107.0	107.2	-90.09	-5,474.9	763.5	650.1	435.8	214.24	3.034				
12,900.0	7,462.9	12,899.7	7,462.9	109.0	109.1	-90.09	-5,574.9	763.9	650.1	432.0	218.05	2.981				
13,000.0	7,462.5	12,999.7	7,462.5	110.9	111.0	-90.09	-5,674.9	764.4	650.1	428.2	221.87	2.930				
13,100.0	7,462.1	13,099.7	7,462.1	112.8	112.9	-90.09	-5,774.9	764.8	650.1	424.4	225.69	2.881				
13,200.0	7,461.7	13,199.7	7,461.7	114.7	114.8	-90.09	-5,874.9	765.2	650.1	420.6	229.50	2.833				
13,300.0	7,461.3	13,299.7	7,461.3	116.6	116.8	-90.09	-5,974.9	765.6	650.1	416.8	233.32	2.786				
13,400.0	7,460.9	13,399.7	7,460.9	118.5	118.7	-90.09	-6,074.9	766.1	650.1	413.0	237.15	2.741				
13,500.0	7,460.5	13,499.7	7,460.5	120.4	120.6	-90.09	-6,174.9	766.5	650.1	409.2	240.97	2.698				
13,600.0	7,460.1	13,599.7	7,460.1	122.3	122.5	-90.09	-6,274.9	766.9	650.2	405.4	244.79	2.656				
13,700.0	7,459.7	13,699.7	7,459.7	124.2	124.4	-90.09	-6,374.9	767.3	650.2	401.6	248.62	2.615				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
13,800.0	7,459.3	13,799.7	7,459.3	126.1	126.3	-90.09	-6,474.9	767.8	650.2	397.7	252.44	2.576		
13,900.0	7,458.9	13,899.7	7,458.9	128.1	128.2	-90.09	-6,574.9	768.2	650.2	393.9	256.27	2.537		
14,000.0	7,458.5	13,999.7	7,458.5	130.0	130.1	-90.09	-6,674.9	768.6	650.2	390.1	260.10	2.500		
14,100.0	7,458.1	14,099.7	7,458.1	131.9	132.1	-90.09	-6,774.9	769.0	650.2	386.3	263.93	2.464		
14,200.0	7,457.7	14,199.7	7,457.7	133.8	134.0	-90.09	-6,874.9	769.5	650.2	382.5	267.76	2.428		
14,300.0	7,457.3	14,299.7	7,457.3	135.7	135.9	-90.09	-6,974.9	769.9	650.2	378.6	271.59	2.394		
14,400.0	7,456.9	14,399.7	7,456.9	137.6	137.8	-90.09	-7,074.9	770.3	650.2	374.8	275.42	2.361		
14,500.0	7,456.5	14,499.7	7,456.5	139.5	139.7	-90.09	-7,174.9	770.7	650.3	371.0	279.25	2.329		
14,600.0	7,456.1	14,599.7	7,456.1	141.5	141.6	-90.09	-7,274.9	771.2	650.3	367.2	283.08	2.297		
14,700.0	7,455.7	14,699.7	7,455.6	143.4	143.5	-90.09	-7,374.9	771.6	650.3	363.4	286.92	2.266		
14,800.0	7,455.3	14,799.7	7,455.2	145.3	145.5	-90.09	-7,474.9	772.0	650.3	359.5	290.75	2.237		
14,900.0	7,454.9	14,899.7	7,454.8	147.2	147.4	-90.09	-7,574.9	772.4	650.3	355.7	294.58	2.208		
15,000.0	7,454.4	14,999.7	7,454.4	149.1	149.3	-90.09	-7,674.9	772.9	650.3	351.9	298.42	2.179		
15,100.0	7,454.0	15,099.7	7,454.0	151.1	151.2	-90.09	-7,774.9	773.3	650.3	348.1	302.26	2.152		
15,200.0	7,453.6	15,199.7	7,453.6	153.0	153.1	-90.09	-7,874.9	773.7	650.3	344.2	306.09	2.125		
15,300.0	7,453.2	15,299.7	7,453.2	154.9	155.1	-90.09	-7,974.9	774.1	650.3	340.4	309.93	2.098		
15,400.0	7,452.8	15,399.7	7,452.8	156.8	157.0	-90.09	-8,074.9	774.6	650.4	336.6	313.77	2.073		
15,500.0	7,452.4	15,499.7	7,452.4	158.7	158.9	-90.09	-8,174.9	775.0	650.4	332.8	317.60	2.048		
15,600.0	7,452.0	15,599.7	7,452.0	160.6	160.8	-90.09	-8,274.9	775.4	650.4	328.9	321.44	2.023		
15,700.0	7,451.6	15,699.7	7,451.6	162.6	162.7	-90.09	-8,374.9	775.9	650.4	325.1	325.28	1.999		
15,800.0	7,451.2	15,799.7	7,451.2	164.5	164.7	-90.09	-8,474.9	776.3	650.4	321.3	329.12	1.976		
15,900.0	7,450.8	15,899.7	7,450.8	166.4	166.6	-90.09	-8,574.9	776.7	650.4	317.4	332.96	1.953		
16,000.0	7,450.4	15,999.7	7,450.4	168.3	168.5	-90.09	-8,674.9	777.1	650.4	313.6	336.80	1.931		
16,100.0	7,450.0	16,099.7	7,450.0	170.2	170.4	-90.09	-8,774.9	777.6	650.4	309.8	340.64	1.909		
16,200.0	7,449.6	16,199.7	7,449.6	172.2	172.3	-90.09	-8,874.9	778.0	650.4	306.0	344.48	1.888		
16,300.0	7,449.2	16,299.7	7,449.2	174.1	174.3	-90.09	-8,974.9	778.4	650.5	302.1	348.32	1.867		
16,400.0	7,448.8	16,399.7	7,448.8	176.0	176.2	-90.09	-9,074.9	778.8	650.5	298.3	352.16	1.847		
16,500.0	7,448.4	16,499.7	7,448.4	177.9	178.1	-90.09	-9,174.9	779.3	650.5	294.5	356.01	1.827		
16,600.0	7,448.0	16,599.7	7,448.0	179.8	180.0	-90.09	-9,274.9	779.7	650.5	290.6	359.85	1.808		
16,700.0	7,447.6	16,699.7	7,447.6	181.8	181.9	-90.09	-9,374.9	780.1	650.5	286.8	363.69	1.789		
16,800.0	7,447.2	16,799.7	7,447.2	183.7	183.9	-90.09	-9,474.9	780.5	650.5	283.0	367.54	1.770		
16,900.0	7,446.8	16,899.7	7,446.8	185.6	185.8	-90.09	-9,574.9	781.0	650.5	279.1	371.38	1.752		
17,000.0	7,446.4	16,999.7	7,446.4	187.5	187.7	-90.09	-9,674.9	781.4	650.5	275.3	375.22	1.734		
17,100.0	7,446.0	17,099.7	7,446.0	189.5	189.6	-90.09	-9,774.9	781.8	650.5	271.5	379.07	1.716		
17,200.0	7,445.6	17,199.7	7,445.6	191.4	191.5	-90.09	-9,874.9	782.2	650.6	267.6	382.91	1.699		
17,300.0	7,445.2	17,299.7	7,445.2	193.3	193.5	-90.09	-9,974.9	782.7	650.6	263.8	386.76	1.682		
17,400.0	7,444.8	17,399.7	7,444.8	195.2	195.4	-90.09	-10,074.9	783.1	650.6	260.0	390.60	1.666		
17,500.0	7,444.4	17,499.7	7,444.4	197.1	197.3	-90.09	-10,174.9	783.5	650.6	256.1	394.44	1.649		
17,600.0	7,444.0	17,599.7	7,444.0	199.1	199.2	-90.09	-10,274.9	783.9	650.6	252.3	398.29	1.633		
17,700.0	7,443.6	17,699.7	7,443.6	201.0	201.2	-90.09	-10,374.9	784.4	650.6	248.5	402.14	1.618		
17,800.0	7,443.2	17,799.7	7,443.2	202.9	203.1	-90.09	-10,474.9	784.8	650.6	244.6	405.98	1.603		
17,823.7	7,443.1	17,823.4	7,443.1	203.4	203.5	-90.09	-10,498.6	784.9	650.6	243.7	406.89	1.599		
17,846.8	7,443.0	17,845.2	7,443.0	203.8	204.0	-90.09	-10,520.4	785.0	650.6	242.9	407.76	1.596 ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	89.55	5.9	749.3	749.3					
100.0	100.0	99.0	99.0	0.1	0.1	89.55	5.9	749.3	749.3	749.1	0.22	3,350.415		
200.0	200.0	199.0	199.0	0.3	0.3	89.55	5.9	749.3	749.3	748.6	0.67	1,114.947		
300.0	300.0	299.0	299.0	0.6	0.6	89.55	5.9	749.3	749.3	748.2	1.12	668.075		
400.0	400.0	399.0	399.0	0.8	0.8	89.55	5.9	749.3	749.3	747.7	1.57	476.923		
500.0	500.0	499.0	499.0	1.0	1.0	89.55	5.9	749.3	749.3	747.3	2.02	370.822		
600.0	600.0	599.0	599.0	1.2	1.2	89.55	5.9	749.3	749.3	746.8	2.47	303.339		
700.0	700.0	699.0	699.0	1.5	1.5	89.55	5.9	749.3	749.3	746.4	2.92	256.635		
800.0	800.0	799.0	799.0	1.7	1.7	89.55	5.9	749.3	749.3	745.9	3.37	222.394		
900.0	900.0	899.0	899.0	1.9	1.9	89.55	5.9	749.3	749.3	745.5	3.82	196.215		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.55	5.9	749.3	749.3	745.0	4.27	175.550		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.55	5.9	749.3	749.3	744.6	4.72	158.823		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.55	5.9	749.3	749.3	744.1	5.17	145.006		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.55	5.9	749.3	749.3	743.7	5.62	133.401		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.55	5.9	749.3	749.3	743.2	6.07	123.516		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.55	5.9	749.3	749.3	742.8	6.52	114.995		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.55	5.9	749.3	749.3	742.3	6.97	107.573		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.55	5.9	749.3	749.3	741.9	7.42	101.052 CC, ES		
1,800.0	1,800.0	1,783.1	1,783.1	3.9	3.9	89.54	6.1	750.2	750.3	742.5	7.82	95.951		
1,900.0	1,900.0	1,867.0	1,867.0	4.2	4.1	89.49	6.7	752.8	753.5	745.3	8.22	91.678		
2,000.0	2,000.0	1,950.7	1,950.6	4.4	4.2	89.41	7.8	757.3	758.9	750.2	8.62	88.047		
2,100.0	2,100.0	2,034.2	2,033.8	4.6	4.4	89.30	9.4	763.5	766.3	757.3	9.02	84.958		
2,200.0	2,200.0	2,117.4	2,116.6	4.8	4.6	89.16	11.3	771.4	775.9	766.4	9.42	82.336		
2,300.0	2,300.0	2,200.0	2,198.6	5.1	4.8	89.00	13.7	781.0	787.5	777.7	9.83	80.135 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.60	5.1	725.0	725.0					
100.0	100.0	99.0	99.0	0.1	0.1	89.60	5.1	725.0	725.0	724.8	0.22	3,241.641		
200.0	200.0	199.0	199.0	0.3	0.3	89.60	5.1	725.0	725.0	724.3	0.67	1,078.750		
300.0	300.0	299.0	299.0	0.6	0.6	89.60	5.1	725.0	725.0	723.9	1.12	646.385		
400.0	400.0	399.0	399.0	0.8	0.8	89.60	5.1	725.0	725.0	723.4	1.57	461.439		
500.0	500.0	499.0	499.0	1.0	1.0	89.60	5.1	725.0	725.0	723.0	2.02	358.783		
600.0	600.0	599.0	599.0	1.2	1.2	89.60	5.1	725.0	725.0	722.5	2.47	293.491		
700.0	700.0	699.0	699.0	1.5	1.5	89.60	5.1	725.0	725.0	722.1	2.92	248.303		
800.0	800.0	799.0	799.0	1.7	1.7	89.60	5.1	725.0	725.0	721.6	3.37	215.174		
900.0	900.0	899.0	899.0	1.9	1.9	89.60	5.1	725.0	725.0	721.2	3.82	189.845		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.60	5.1	725.0	725.0	720.7	4.27	169.851		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.60	5.1	725.0	725.0	720.3	4.72	153.667		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.60	5.1	725.0	725.0	719.8	5.17	140.298		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.60	5.1	725.0	725.0	719.4	5.62	129.070		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.60	5.1	725.0	725.0	718.9	6.07	119.506		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.60	5.1	725.0	725.0	718.5	6.52	111.261		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.60	5.1	725.0	725.0	718.0	6.97	104.081		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.60	5.1	725.0	725.0	717.6	7.42	97.771		
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.60	5.1	725.0	725.0	717.1	7.86	92.182		
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.60	5.1	725.0	725.0	716.7	8.31	87.198 CC		
2,000.0	2,000.0	1,993.9	1,993.9	4.4	4.3	89.68	4.0	725.3	725.3	716.6	8.73	83.130 ES		
2,100.0	2,100.0	2,088.6	2,088.5	4.6	4.5	89.95	0.7	726.3	726.4	717.3	9.11	79.702		
2,200.0	2,200.0	2,183.1	2,182.8	4.8	4.7	90.39	-4.9	728.0	728.2	718.7	9.51	76.604		
2,300.0	2,300.0	2,277.2	2,276.6	5.1	4.9	90.99	-12.7	730.4	730.9	721.0	9.91	73.776		
2,400.0	2,400.0	2,370.8	2,369.6	5.3	5.0	59.44	-22.6	733.5	733.7	723.4	10.31	71.185		
2,500.0	2,499.9	2,463.4	2,461.4	5.5	5.2	60.57	-34.5	737.1	736.3	725.6	10.72	68.692		
2,512.9	2,512.8	2,475.3	2,473.1	5.5	5.3	60.74	-36.2	737.6	736.6	725.9	10.77	68.382		
2,600.0	2,599.8	2,555.1	2,551.9	5.7	5.4	61.96	-48.4	741.4	739.4	728.2	11.15	66.339		
2,700.0	2,699.6	2,652.0	2,647.3	5.9	5.7	63.53	-64.5	746.3	743.5	731.9	11.60	64.067		
2,800.0	2,799.4	2,749.7	2,743.5	6.2	6.0	65.10	-80.7	751.3	748.2	736.1	12.08	61.945		
2,900.0	2,899.3	2,847.4	2,839.8	6.4	6.2	66.64	-96.9	756.3	753.5	740.9	12.56	59.977		
3,000.0	2,999.1	2,945.1	2,936.0	6.6	6.5	68.16	-113.1	761.2	759.3	746.3	13.06	58.159		
3,100.0	3,099.0	3,042.8	3,032.2	6.9	6.8	69.66	-129.3	766.2	765.7	752.2	13.56	56.486		
3,200.0	3,198.8	3,140.5	3,128.4	7.1	7.1	71.13	-145.5	771.2	772.7	758.6	14.06	54.950		
3,300.0	3,298.7	3,238.2	3,224.6	7.3	7.5	72.58	-161.7	776.1	780.1	765.6	14.57	53.543		
3,400.0	3,398.5	3,335.9	3,320.9	7.5	7.8	74.00	-177.9	781.1	788.1	773.0	15.08	52.256		
3,500.0	3,498.4	3,433.6	3,417.1	7.8	8.1	75.39	-194.1	786.1	796.5	780.9	15.59	51.080 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.15	1.1	74.6	74.6					
100.0	100.0	99.0	99.0	0.1	0.1	89.15	1.1	74.6	74.6	74.4	0.22	333.708		
200.0	200.0	199.0	199.0	0.3	0.3	89.15	1.1	74.6	74.6	74.0	0.67	111.051		
300.0	300.0	299.0	299.0	0.6	0.6	89.15	1.1	74.6	74.6	73.5	1.12	66.542		
400.0	400.0	399.0	399.0	0.8	0.8	89.15	1.1	74.6	74.6	73.1	1.57	47.503		
500.0	500.0	499.0	499.0	1.0	1.0	89.15	1.1	74.6	74.6	72.6	2.02	36.935		
600.0	600.0	599.0	599.0	1.2	1.2	89.15	1.1	74.6	74.6	72.2	2.47	30.213		
700.0	700.0	699.0	699.0	1.5	1.5	89.15	1.1	74.6	74.6	71.7	2.92	25.561		
800.0	800.0	799.0	799.0	1.7	1.7	89.15	1.1	74.6	74.6	71.3	3.37	22.151		
900.0	900.0	899.0	899.0	1.9	1.9	89.15	1.1	74.6	74.6	70.8	3.82	19.543		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.15	1.1	74.6	74.6	70.4	4.27	17.485		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.15	1.1	74.6	74.6	69.9	4.72	15.819		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.15	1.1	74.6	74.6	69.5	5.17	14.443		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.15	1.1	74.6	74.6	69.0	5.62	13.287		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.15	1.1	74.6	74.6	68.6	6.07	12.302		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.15	1.1	74.6	74.6	68.1	6.52	11.454		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.15	1.1	74.6	74.6	67.7	6.97	10.715		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.15	1.1	74.6	74.6	67.2	7.42	10.065 CC		
1,800.0	1,800.0	1,798.7	1,798.7	3.9	3.9	90.16	-0.2	74.8	74.8	67.0	7.84	9.549		
1,900.0	1,900.0	1,898.3	1,898.2	4.2	4.1	93.18	-4.2	75.4	75.5	67.3	8.23	9.177		
2,000.0	2,000.0	1,997.5	1,997.2	4.4	4.3	98.06	-10.8	76.4	77.2	68.5	8.63	8.941		
2,100.0	2,100.0	2,096.4	2,095.6	4.6	4.4	104.44	-20.0	77.8	80.4	71.3	9.04	8.889		
2,200.0	2,200.0	2,194.6	2,193.2	4.8	4.6	111.79	-31.8	79.5	85.8	76.4	9.47	9.066		
2,300.0	2,300.0	2,292.3	2,289.7	5.1	4.9	119.41	-46.0	81.6	94.2	84.3	9.91	9.502		
2,400.0	2,400.0	2,390.9	2,387.0	5.3	5.1	94.41	-61.5	84.0	104.9	94.5	10.33	10.156		
2,500.0	2,499.9	2,489.0	2,484.0	5.5	5.4	101.52	-77.0	86.3	117.5	106.8	10.75	10.931		
2,512.9	2,512.8	2,501.6	2,496.4	5.5	5.4	102.40	-78.9	86.6	119.3	108.5	10.81	11.042		
2,600.0	2,599.8	2,586.9	2,580.6	5.7	5.6	107.97	-92.4	88.6	132.2	121.0	11.17	11.831		
2,700.0	2,699.6	2,684.8	2,677.3	5.9	5.9	113.14	-107.7	90.8	148.2	136.6	11.60	12.781		
2,800.0	2,799.4	2,782.8	2,774.0	6.2	6.2	117.29	-123.1	93.1	165.2	153.2	12.02	13.742		
2,900.0	2,899.3	2,880.7	2,870.6	6.4	6.5	120.65	-138.5	95.4	182.9	170.4	12.45	14.690		
3,000.0	2,999.1	2,978.6	2,967.3	6.6	6.8	123.42	-153.9	97.7	201.1	188.2	12.88	15.611		
3,100.0	3,099.0	3,076.5	3,063.9	6.9	7.1	125.73	-169.3	100.0	219.6	206.3	13.31	16.497		
3,200.0	3,198.8	3,174.4	3,160.6	7.1	7.4	127.68	-184.7	102.3	238.5	224.7	13.75	17.346		
3,300.0	3,298.7	3,272.3	3,257.3	7.3	7.8	129.35	-200.1	104.6	257.6	243.4	14.19	18.155		
3,400.0	3,398.5	3,370.2	3,353.9	7.5	8.1	130.78	-215.5	106.9	276.8	262.2	14.63	18.925		
3,500.0	3,498.4	3,468.1	3,450.6	7.8	8.4	132.03	-230.9	109.2	296.2	281.2	15.07	19.657		
3,600.0	3,598.2	3,566.0	3,547.2	8.0	8.8	133.13	-246.3	111.5	315.8	300.3	15.52	20.351		
3,700.0	3,698.0	3,663.9	3,643.9	8.2	9.1	134.09	-261.7	113.8	335.4	319.4	15.96	21.011		
3,800.0	3,797.9	3,761.8	3,740.6	8.5	9.4	134.95	-277.1	116.1	355.1	338.7	16.41	21.637		
3,900.0	3,897.7	3,859.7	3,837.2	8.7	9.8	135.72	-292.4	118.4	374.9	358.0	16.86	22.232		
4,000.0	3,997.6	3,957.6	3,933.9	9.0	10.1	136.42	-307.8	120.7	394.7	377.4	17.32	22.796		
4,100.0	4,097.4	4,055.5	4,030.5	9.2	10.5	137.04	-323.2	123.0	414.6	396.9	17.77	23.334		
4,200.0	4,197.3	4,153.4	4,127.2	9.4	10.8	137.61	-338.6	125.3	434.6	416.3	18.23	23.844		
4,300.0	4,297.1	4,251.3	4,223.9	9.7	11.2	138.13	-354.0	127.6	454.5	435.9	18.68	24.331		
4,400.0	4,397.0	4,349.2	4,320.5	9.9	11.5	138.61	-369.4	129.9	474.6	455.4	19.14	24.794		
4,500.0	4,496.8	4,447.2	4,417.2	10.1	11.9	139.04	-384.8	132.2	494.6	475.0	19.60	25.236		
4,600.0	4,496.6	4,445.1	4,413.9	10.4	12.2	139.45	-400.2	134.4	514.6	494.6	20.06	25.658		
4,700.0	4,496.5	4,443.0	4,410.5	10.6	12.6	139.82	-415.6	136.7	534.7	514.2	20.52	26.060		
4,800.0	4,496.3	4,440.9	4,407.2	10.9	13.0	140.16	-431.0	139.0	554.8	533.8	20.98	26.445		
4,900.0	4,496.2	4,438.8	4,403.8	11.1	13.3	140.49	-446.4	141.3	574.9	553.5	21.44	26.813		
5,000.0	4,496.0	4,436.7	4,400.5	11.3	13.7	140.79	-461.8	143.6	595.1	573.2	21.91	27.165		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittler Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)											Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
5,100.0	5,095.9	5,034.6	4,997.2	11.6	14.0	141.07	-477.2	145.9	615.2	592.9	22.37	27.503			
5,200.0	5,195.7	5,132.5	5,093.8	11.8	14.4	141.33	-492.5	148.2	635.4	612.6	22.83	27.826			
5,300.0	5,295.6	5,230.4	5,190.5	12.0	14.8	141.58	-507.9	150.5	655.6	632.3	23.30	28.137			
5,344.9	5,340.4	5,274.4	5,233.9	12.2	14.9	141.68	-514.9	151.5	664.6	641.1	23.51	28.272			
5,400.0	5,395.4	5,328.4	5,287.2	12.3	15.1	141.91	-523.3	152.8	675.4	651.6	23.78	28.405			
5,504.6	5,500.0	5,431.4	5,388.9	12.5	15.5	174.53	-539.5	155.2	693.4	669.2	24.24	28.609			
5,600.0	5,595.4	5,525.6	5,481.9	12.6	15.9	174.47	-554.3	157.4	708.6	683.9	24.65	28.745			
5,700.0	5,695.4	5,624.3	5,579.4	12.9	16.2	174.40	-569.9	159.7	724.5	699.4	25.11	28.852			
5,800.0	5,795.4	5,723.1	5,676.9	13.1	16.6	174.34	-585.4	162.1	740.3	714.8	25.57	28.956			
5,900.0	5,895.4	5,821.8	5,774.3	13.3	17.0	174.28	-600.9	164.4	756.2	730.2	26.03	29.055			
6,000.0	5,995.4	5,920.5	5,871.8	13.5	17.3	174.23	-616.4	166.7	772.1	745.6	26.49	29.150			
6,100.0	6,095.4	6,019.2	5,969.3	13.7	17.7	174.17	-632.0	169.0	788.0	761.0	26.95	29.242			
6,800.0	6,795.4	8,165.9	7,582.0	15.2	19.5	-108.97	141.3	179.9	792.7	758.5	34.23	23.158			
6,850.0	6,845.3	8,162.2	7,582.0	15.3	19.5	-131.76	137.5	179.9	743.2	710.1	33.07	22.476			
6,900.0	6,894.7	8,155.0	7,582.0	15.4	19.4	-143.72	130.3	179.9	694.1	661.9	32.25	21.523			
6,950.0	6,943.6	8,144.3	7,582.0	15.4	19.4	-150.28	119.7	179.9	645.7	614.0	31.66	20.394			
7,000.0	6,991.5	8,130.3	7,582.0	15.5	19.3	-154.14	105.7	179.9	598.2	567.1	31.11	19.227			
7,050.0	7,038.4	8,113.0	7,582.0	15.6	19.2	-156.50	88.3	179.8	551.9	521.4	30.52	18.081			
7,100.0	7,084.0	8,092.4	7,582.0	15.6	19.0	-157.91	67.8	179.8	507.0	477.1	29.85	16.982			
7,150.0	7,128.0	8,068.7	7,582.0	15.7	18.9	-158.69	44.1	179.8	463.7	434.6	29.10	15.935			
7,200.0	7,170.3	8,038.1	7,582.0	15.7	18.8	-158.71	13.4	179.7	422.2	393.9	28.28	14.929			
7,250.0	7,210.6	7,977.4	7,578.8	15.8	18.6	-156.16	-47.1	179.6	381.4	353.8	27.62	13.809			
7,300.0	7,248.7	7,924.5	7,571.9	15.9	18.4	-153.45	-99.5	179.5	340.6	313.6	27.03	12.601			
7,350.0	7,284.5	7,877.1	7,562.4	16.0	18.4	-150.40	-146.0	179.4	300.1	273.5	26.59	11.286			
7,400.0	7,317.8	7,833.7	7,551.1	16.1	18.3	-146.80	-187.9	179.4	260.3	233.9	26.43	9.851			
7,450.0	7,348.3	7,793.2	7,538.2	16.3	18.3	-142.38	-226.3	179.3	221.6	194.9	26.69	8.302			
7,500.0	7,376.1	7,755.1	7,524.1	16.5	18.3	-136.73	-261.7	179.2	184.4	156.9	27.59	6.686			
7,550.0	7,400.9	7,718.7	7,509.0	16.8	18.4	-129.32	-294.7	179.2	149.8	120.5	29.28	5.117			
7,600.0	7,422.5	7,683.9	7,492.9	17.1	18.4	-119.49	-325.7	179.1	119.5	87.7	31.76	3.761			
7,650.0	7,441.0	7,650.1	7,475.9	17.5	18.5	-106.74	-354.8	179.1	96.7	62.2	34.51	2.803			
7,700.0	7,456.2	7,617.4	7,458.1	17.9	18.5	-91.38	-382.3	179.0	86.9	50.6	36.28	2.395			
7,705.4	7,457.7	7,613.9	7,456.1	17.9	18.5	-89.63	-385.2	179.0	86.8	50.4	36.34	2.388 ES, SF			
7,750.0	7,468.1	7,585.4	7,439.5	18.3	18.6	-75.19	-408.4	179.0	93.1	57.3	35.76	2.603			
7,800.0	7,476.5	7,554.1	7,420.3	18.8	18.7	-60.58	-433.0	179.0	111.9	78.9	33.08	3.384			
7,850.0	7,481.5	7,523.3	7,400.3	19.3	18.8	-48.85	-456.4	178.9	137.6	108.1	29.49	4.666			
7,899.3	7,483.0	7,493.5	7,380.0	19.8	18.8	-40.09	-478.3	178.9	165.9	139.8	26.11	6.355			
7,900.0	7,483.0	7,493.0	7,379.6	19.8	18.8	-40.00	-478.6	178.9	166.4	140.3	26.07	6.381			
7,900.9	7,483.0	7,492.5	7,379.3	19.8	18.8	-39.89	-479.0	178.9	166.9	140.9	26.03	6.412			
8,000.0	7,482.6	7,437.6	7,339.5	20.9	19.0	-31.07	-516.8	178.8	231.0	208.5	22.46	10.285			
8,100.0	7,482.2	7,390.3	7,303.1	22.2	19.1	-25.61	-546.9	178.8	303.7	283.3	20.37	14.906			
8,200.0	7,481.8	7,350.0	7,270.5	23.5	19.3	-22.04	-570.6	178.7	381.7	362.5	19.23	19.853			
8,300.0	7,481.4	7,315.2	7,241.3	25.0	19.3	-19.57	-589.6	178.7	463.6	444.9	18.66	24.848			
8,400.0	7,481.0	7,285.2	7,215.4	26.5	19.4	-17.78	-604.8	178.7	548.4	529.9	18.46	29.705			
8,500.0	7,480.6	7,250.0	7,184.3	28.0	19.5	-16.01	-621.2	178.7	635.5	617.3	18.28	34.775			
8,600.0	7,480.2	7,236.1	7,171.8	29.6	19.5	-15.39	-627.3	178.6	724.2	705.5	18.72	38.678			

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.01	0.0	-25.2	25.2	25.1	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	-90.01	0.0	-25.2	25.2	24.9	0.23	110.791		
200.0	200.0	201.0	201.0	0.3	0.3	-90.01	0.0	-25.2	25.2	24.5	0.68	37.176		
300.0	300.0	301.0	301.0	0.6	0.6	-90.01	0.0	-25.2	25.2	24.0	1.13	22.335		
400.0	400.0	401.0	401.0	0.8	0.8	-90.01	0.0	-25.2	25.2	23.6	1.58	15.963		
500.0	500.0	501.0	501.0	1.0	1.0	-90.01	0.0	-25.2	25.2	23.1	2.03	12.419		
600.0	600.0	601.0	601.0	1.2	1.2	-90.01	0.0	-25.2	25.2	22.7	2.47	10.163		
700.0	700.0	701.0	701.0	1.5	1.5	-90.01	0.0	-25.2	25.2	22.2	2.92	8.601		
800.0	800.0	801.0	801.0	1.7	1.7	-90.01	0.0	-25.2	25.2	21.8	3.37	7.455		
900.0	900.0	901.0	901.0	1.9	1.9	-90.01	0.0	-25.2	25.2	21.3	3.82	6.578		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.01	0.0	-25.2	25.2	20.9	4.27	5.886		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.01	0.0	-25.2	25.2	20.4	4.72	5.326		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.01	0.0	-25.2	25.2	20.0	5.17	4.863		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.01	0.0	-25.2	25.2	19.5	5.62	4.474		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.01	0.0	-25.2	25.2	19.1	6.07	4.143		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	-90.01	0.0	-25.2	25.2	18.6	6.52	3.857		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	-90.01	0.0	-25.2	25.2	18.2	6.97	3.608		
1,666.3	1,666.3	1,667.3	1,667.3	3.6	3.6	-90.01	0.0	-25.2	25.2	17.9	7.27	3.460 CC		
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	-90.01	0.0	-25.2	25.2	17.7	7.42	3.390 ES		
1,800.0	1,800.0	1,800.6	1,800.6	3.9	3.9	-92.48	-1.1	-25.9	25.9	18.1	7.84	3.302 SF		
1,900.0	1,900.0	1,900.0	1,899.9	4.2	4.1	-98.95	-4.4	-28.0	28.3	20.1	8.24	3.440		
2,000.0	2,000.0	1,999.3	1,999.0	4.4	4.3	-107.40	-9.9	-31.5	33.1	24.4	8.65	3.823		
2,100.0	2,100.0	2,098.1	2,097.4	4.6	4.5	-115.63	-17.4	-36.4	40.5	31.4	9.06	4.470		
2,200.0	2,200.0	2,196.4	2,195.0	4.8	4.7	-122.49	-27.1	-42.6	50.8	41.3	9.47	5.364		
2,300.0	2,300.0	2,294.0	2,291.6	5.1	4.9	-127.76	-38.8	-50.1	64.0	54.1	9.89	6.471		
2,400.0	2,400.0	2,390.6	2,386.9	5.3	5.1	-164.24	-52.4	-58.8	81.3	71.0	10.30	7.886		
2,500.0	2,499.9	2,486.5	2,480.9	5.5	5.4	-167.50	-67.8	-68.7	103.6	92.9	10.71	9.666		
2,512.9	2,512.8	2,498.9	2,493.1	5.5	5.4	-167.85	-69.8	-70.0	106.7	95.9	10.77	9.911		
2,600.0	2,599.8	2,583.3	2,575.8	5.7	5.7	-169.86	-83.8	-79.0	128.2	117.1	11.13	11.521		
2,700.0	2,699.6	2,680.0	2,670.7	5.9	6.0	-171.47	-99.9	-89.3	153.1	141.5	11.55	13.250		
2,800.0	2,799.4	2,776.8	2,765.6	6.2	6.3	-172.63	-115.9	-99.6	178.0	166.0	11.98	14.860		
2,900.0	2,899.3	2,873.6	2,860.5	6.4	6.7	-173.51	-131.9	-109.9	203.0	190.6	12.41	16.358		
3,000.0	2,999.1	2,970.4	2,955.4	6.6	7.0	-174.19	-148.0	-120.3	228.0	215.1	12.84	17.754		
3,100.0	3,099.0	3,067.2	3,050.3	6.9	7.4	-174.74	-164.0	-130.6	253.0	239.7	13.28	19.056		
3,200.0	3,198.8	3,164.0	3,145.2	7.1	7.7	-175.19	-180.1	-140.9	278.1	264.3	13.72	20.272		
3,300.0	3,298.7	3,260.8	3,240.1	7.3	8.1	-175.56	-196.1	-151.2	303.1	289.0	14.16	21.410		
3,400.0	3,398.5	3,357.6	3,335.0	7.5	8.5	-175.88	-212.2	-161.5	328.2	313.6	14.60	22.477		
3,500.0	3,498.4	3,454.4	3,429.9	7.8	8.9	-176.15	-228.2	-171.8	353.3	338.2	15.05	23.478		
3,600.0	3,598.2	3,551.2	3,524.8	8.0	9.2	-176.39	-244.2	-182.1	378.4	362.9	15.50	24.419		
3,700.0	3,698.0	3,648.0	3,619.7	8.2	9.6	-176.60	-260.3	-192.4	403.5	387.5	15.94	25.304		
3,800.0	3,797.9	3,744.7	3,714.6	8.5	10.0	-176.78	-276.3	-202.7	428.6	412.2	16.40	26.139		
3,900.0	3,897.7	3,841.5	3,809.5	8.7	10.4	-176.94	-292.4	-213.0	453.7	436.8	16.85	26.927		
4,000.0	3,997.6	3,938.3	3,904.4	9.0	10.8	-177.09	-308.4	-223.3	478.8	461.5	17.30	27.671		
4,100.0	4,097.4	4,035.1	3,999.2	9.2	11.2	-177.22	-324.4	-233.6	503.9	486.1	17.76	28.376		
4,200.0	4,197.3	4,131.9	4,094.1	9.4	11.6	-177.34	-340.5	-244.0	529.0	510.8	18.21	29.044		
4,300.0	4,297.1	4,228.7	4,189.0	9.7	12.0	-177.45	-356.5	-254.3	554.1	535.4	18.67	29.677		
4,400.0	4,397.0	4,325.5	4,283.9	9.9	12.4	-177.54	-372.6	-264.6	579.2	560.1	19.13	30.279		
4,500.0	4,496.8	4,422.3	4,378.8	10.1	12.8	-177.63	-388.6	-274.9	604.3	584.7	19.59	30.851		
4,600.0	4,596.6	4,519.1	4,473.7	10.4	13.3	-177.72	-404.6	-285.2	629.4	609.4	20.05	31.396		
4,700.0	4,696.5	4,615.9	4,568.6	10.6	13.7	-177.79	-420.7	-295.5	654.5	634.0	20.51	31.915		
4,800.0	4,796.3	4,712.7	4,663.5	10.9	14.1	-177.87	-436.7	-305.8	679.7	658.7	20.97	32.410		
4,900.0	4,896.2	4,809.4	4,758.4	11.1	14.5	-177.93	-452.8	-316.1	704.8	683.4	21.43	32.883		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,996.0	4,906.2	4,853.3	11.3	14.9	-177.99	-468.8	-326.4	729.9	708.0	21.90	33.335		
5,100.0	5,095.9	5,003.0	4,948.2	11.6	15.3	-178.05	-484.9	-336.7	755.0	732.7	22.36	33.767		
5,200.0	5,195.7	5,099.8	5,043.1	11.8	15.7	-178.10	-500.9	-347.0	780.1	757.3	22.82	34.181		
7,050.0	7,038.4	8,137.7	7,582.0	15.6	19.1	109.62	83.7	-481.0	787.8	753.6	34.22	23.023		
7,100.0	7,084.0	8,117.1	7,582.0	15.6	19.1	110.90	63.2	-480.8	757.1	723.1	34.04	22.243		
7,150.0	7,128.0	8,093.4	7,582.0	15.7	19.1	111.63	39.5	-480.6	728.9	695.0	33.85	21.530		
7,200.0	7,170.3	8,070.1	7,582.0	15.7	19.1	112.14	16.1	-480.4	703.3	669.6	33.69	20.873		
7,250.0	7,210.6	7,999.6	7,579.5	15.8	19.1	109.10	-53.2	-479.8	680.1	646.4	33.70	20.183		
7,300.0	7,248.7	7,947.2	7,572.5	15.9	19.2	106.97	-105.1	-479.4	658.0	624.3	33.74	19.501		
7,350.0	7,284.5	7,900.2	7,562.9	16.0	19.3	104.98	-151.2	-479.0	637.9	604.1	33.86	18.842		
7,400.0	7,317.8	7,857.0	7,551.5	16.1	19.5	103.03	-192.8	-478.6	620.2	586.1	34.05	18.215		
7,450.0	7,348.3	7,816.8	7,538.7	16.3	19.6	101.08	-230.9	-478.3	604.9	570.6	34.31	17.632		
7,500.0	7,376.1	7,778.9	7,524.6	16.5	19.7	99.06	-266.1	-478.0	592.2	557.6	34.63	17.100		
7,550.0	7,400.9	7,742.8	7,509.5	16.8	19.8	96.96	-298.9	-477.7	582.3	547.3	35.02	16.629		
7,600.0	7,422.5	7,708.0	7,493.4	17.1	19.9	94.77	-329.7	-477.5	575.2	539.8	35.46	16.222		
7,650.0	7,441.0	7,674.4	7,476.5	17.5	20.0	92.46	-358.7	-477.2	570.9	535.0	35.94	15.885		
7,700.0	7,456.2	7,641.8	7,458.7	17.9	20.1	90.05	-386.0	-477.0	569.3	532.8	36.44	15.623		
7,706.2	7,457.9	7,637.8	7,456.5	17.9	20.2	89.74	-389.3	-477.0	569.3	532.8	36.50	15.594		
7,750.0	7,468.1	7,609.9	7,440.2	18.3	20.3	87.55	-412.0	-476.8	570.2	533.3	36.94	15.435		
7,800.0	7,476.5	7,578.7	7,420.9	18.8	20.4	84.96	-436.6	-476.6	573.5	536.1	37.43	15.322		
7,850.0	7,481.5	7,550.0	7,402.3	19.3	20.5	82.45	-458.4	-476.4	579.1	541.2	37.90	15.280		
7,899.3	7,483.0	7,518.3	7,380.7	19.8	20.6	79.67	-481.6	-476.2	586.4	548.1	38.31	15.306		
7,900.0	7,483.0	7,517.8	7,380.4	19.8	20.6	79.64	-482.0	-476.2	586.5	548.2	38.32	15.307		
7,900.9	7,483.0	7,517.3	7,380.0	19.8	20.6	79.61	-482.4	-476.2	586.7	548.3	38.32	15.308		
8,000.0	7,482.6	7,462.5	7,340.4	20.9	20.8	75.80	-520.1	-475.9	607.9	568.9	39.06	15.564		
8,100.0	7,482.2	7,415.4	7,304.0	22.2	20.9	72.42	-550.1	-475.6	639.0	599.2	39.85	16.036		
8,200.0	7,481.8	7,375.0	7,271.4	23.5	21.0	69.49	-573.8	-475.4	679.5	638.9	40.63	16.724		
8,300.0	7,481.4	7,350.0	7,250.5	25.0	21.1	67.67	-587.6	-475.3	728.7	687.1	41.60	17.518		
8,400.0	7,481.0	7,300.0	7,207.4	26.5	21.2	64.06	-612.9	-475.1	785.3	743.3	42.06	18.672		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.01	0.0	-50.6	50.6	50.6	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	-90.01	0.0	-50.6	50.6	50.4	0.23	222.799		
200.0	200.0	201.0	201.0	0.3	0.3	-90.01	0.0	-50.6	50.6	49.9	0.68	74.760		
300.0	300.0	301.0	301.0	0.6	0.6	-90.01	0.0	-50.6	50.6	49.5	1.13	44.916		
400.0	400.0	401.0	401.0	0.8	0.8	-90.01	0.0	-50.6	50.6	49.0	1.58	32.101		
500.0	500.0	501.0	501.0	1.0	1.0	-90.01	0.0	-50.6	50.6	48.6	2.03	24.975		
600.0	600.0	601.0	601.0	1.2	1.2	-90.01	0.0	-50.6	50.6	48.1	2.47	20.438		
700.0	700.0	701.0	701.0	1.5	1.5	-90.01	0.0	-50.6	50.6	47.7	2.92	17.296		
800.0	800.0	801.0	801.0	1.7	1.7	-90.01	0.0	-50.6	50.6	47.2	3.37	14.992		
900.0	900.0	901.0	901.0	1.9	1.9	-90.01	0.0	-50.6	50.6	46.8	3.82	13.229		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.01	0.0	-50.6	50.6	46.3	4.27	11.837		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.01	0.0	-50.6	50.6	45.9	4.72	10.710		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.01	0.0	-50.6	50.6	45.4	5.17	9.780		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.01	0.0	-50.6	50.6	45.0	5.62	8.997		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.01	0.0	-50.6	50.6	44.5	6.07	8.331		
1,466.3	1,466.3	1,467.3	1,467.3	3.2	3.2	-90.01	0.0	-50.6	50.6	44.2	6.37	7.941 CC		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	-90.01	0.0	-50.6	50.6	44.1	6.52	7.757 ES		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-89.66	0.3	-51.8	51.9	44.9	6.96	7.454		
1,700.0	1,700.0	1,698.3	1,698.2	3.7	3.7	-88.71	1.2	-55.6	55.7	48.3	7.39	7.536		
1,800.0	1,800.0	1,796.6	1,796.3	3.9	3.9	-87.41	2.8	-61.7	62.0	54.2	7.82	7.929		
1,900.0	1,900.0	1,894.5	1,893.8	4.2	4.1	-85.97	5.0	-70.3	70.9	62.6	8.25	8.585		
2,000.0	2,000.0	1,992.8	1,991.4	4.4	4.3	-84.57	7.7	-81.4	82.3	73.6	8.70	9.462		
2,100.0	2,100.0	2,091.1	2,088.9	4.6	4.6	-83.41	10.8	-93.6	95.0	85.9	9.15	10.390		
2,200.0	2,200.0	2,190.2	2,187.2	4.8	4.9	-82.52	13.9	-106.0	107.8	98.2	9.60	11.229		
2,300.0	2,300.0	2,289.4	2,285.6	5.1	5.1	-81.81	17.0	-118.4	120.6	110.5	10.06	11.991		
2,400.0	2,400.0	2,388.5	2,383.8	5.3	5.4	-113.94	20.1	-130.7	133.9	123.5	10.44	12.829		
2,500.0	2,499.9	2,487.4	2,482.0	5.5	5.7	-114.63	23.2	-143.1	148.3	137.4	10.87	13.639		
2,512.9	2,512.8	2,500.1	2,494.6	5.5	5.7	-114.77	23.6	-144.7	150.2	139.3	10.93	13.746		
2,600.0	2,599.8	2,586.2	2,579.9	5.7	6.0	-115.86	26.3	-155.4	163.4	152.1	11.31	14.445		
2,700.0	2,699.6	2,685.0	2,677.9	5.9	6.3	-116.90	29.4	-167.7	178.6	166.9	11.76	15.192		
2,800.0	2,799.4	2,783.8	2,775.9	6.2	6.5	-117.79	32.5	-180.1	193.9	181.7	12.20	15.885		
2,900.0	2,899.3	2,882.6	2,873.8	6.4	6.8	-118.54	35.6	-192.4	209.2	196.5	12.65	16.528		
3,000.0	2,999.1	2,981.4	2,971.8	6.6	7.1	-119.19	38.7	-204.7	224.5	211.4	13.11	17.126		
3,100.0	3,099.0	3,080.2	3,069.8	6.9	7.4	-119.76	41.8	-217.0	239.8	226.2	13.56	17.683		
3,200.0	3,198.8	3,179.0	3,167.7	7.1	7.7	-120.26	44.9	-229.4	255.2	241.1	14.02	18.202		
3,300.0	3,298.7	3,277.8	3,265.7	7.3	8.1	-120.70	48.0	-241.7	270.5	256.1	14.48	18.688		
3,400.0	3,398.5	3,376.6	3,363.7	7.5	8.4	-121.09	51.1	-254.0	285.9	271.0	14.94	19.142		
3,500.0	3,498.4	3,475.3	3,461.7	7.8	8.7	-121.45	54.2	-266.3	301.3	285.9	15.40	19.569		
3,600.0	3,598.2	3,574.1	3,559.6	8.0	9.0	-121.77	57.3	-278.7	316.7	300.9	15.86	19.969		
3,700.0	3,698.0	3,672.9	3,657.6	8.2	9.3	-122.06	60.4	-291.0	332.2	315.8	16.33	20.346		
3,800.0	3,797.9	3,771.7	3,755.6	8.5	9.6	-122.32	63.5	-303.3	347.6	330.8	16.79	20.701		
3,900.0	3,897.7	3,870.5	3,853.5	8.7	9.9	-122.57	66.6	-315.6	363.0	345.8	17.26	21.035		
4,000.0	3,997.6	3,969.3	3,951.5	9.0	10.2	-122.79	69.7	-328.0	378.5	360.7	17.73	21.352		
4,100.0	4,097.4	4,068.1	4,049.5	9.2	10.5	-122.99	72.8	-340.3	393.9	375.7	18.19	21.651		
4,200.0	4,197.3	4,166.9	4,147.4	9.4	10.9	-123.18	75.9	-352.6	409.4	390.7	18.66	21.935		
4,300.0	4,297.1	4,265.7	4,245.4	9.7	11.2	-123.36	79.0	-364.9	424.8	405.7	19.13	22.204		
4,400.0	4,397.0	4,364.5	4,343.4	9.9	11.5	-123.52	82.1	-377.3	440.3	420.7	19.60	22.459		
4,500.0	4,496.8	4,463.2	4,441.4	10.1	11.8	-123.68	85.2	-389.6	455.7	435.7	20.07	22.702		
4,600.0	4,596.6	4,562.0	4,539.3	10.4	12.1	-123.82	88.3	-401.9	471.2	450.6	20.55	22.933		
4,700.0	4,696.5	4,660.8	4,637.3	10.6	12.5	-123.95	91.4	-414.3	486.7	465.6	21.02	23.153		
4,800.0	4,796.3	4,759.6	4,735.3	10.9	12.8	-124.08	94.5	-426.6	502.1	480.6	21.49	23.363		
4,900.0	4,896.2	4,858.4	4,833.2	11.1	13.1	-124.19	97.6	-438.9	517.6	495.6	21.97	23.564		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,996.0	4,957.2	4,931.2	11.3	13.4	-124.30	100.7	-451.2	533.1	510.6	22.44	23.756		
5,100.0	5,095.9	5,056.0	5,029.2	11.6	13.7	-124.41	103.8	-463.6	548.5	525.6	22.91	23.939		
5,200.0	5,195.7	5,154.8	5,127.1	11.8	14.1	-124.51	106.9	-475.9	564.0	540.6	23.39	24.115		
5,300.0	5,295.6	5,253.6	5,225.1	12.0	14.4	-124.60	110.0	-488.2	579.5	555.6	23.86	24.283		
5,344.9	5,340.4	5,298.0	5,269.1	12.2	14.5	-124.64	111.4	-493.7	586.5	562.4	24.08	24.357		
5,400.0	5,395.4	5,352.4	5,323.1	12.3	14.7	-124.78	113.1	-500.5	594.7	570.3	24.34	24.430		
5,504.6	5,500.0	5,456.0	5,425.9	12.5	15.0	-92.43	116.4	-513.5	608.7	583.9	24.79	24.549		
5,600.0	5,595.4	5,550.7	5,519.7	12.6	15.4	-92.11	119.3	-525.3	620.4	595.2	25.20	24.618		
5,700.0	5,695.4	5,649.8	5,618.1	12.9	15.7	-91.79	122.4	-537.6	632.8	607.2	25.66	24.666		
5,800.0	5,795.4	5,749.0	5,716.4	13.1	16.0	-91.47	125.6	-550.0	645.2	619.1	26.11	24.712		
5,900.0	5,895.4	5,848.2	5,814.8	13.3	16.3	-91.17	128.7	-562.4	657.6	631.1	26.56	24.758		
6,000.0	5,995.4	5,971.3	5,937.1	13.5	16.6	-90.86	132.0	-575.9	668.6	641.5	27.03	24.735		
6,100.0	6,095.4	6,100.3	6,065.8	13.7	16.9	-90.66	134.2	-584.5	675.3	647.8	27.49	24.568		
6,200.0	6,195.4	6,229.9	6,195.3	13.9	17.1	-90.59	135.0	-587.6	677.6	649.7	27.93	24.258		
6,300.0	6,295.4	6,331.0	6,296.4	14.2	17.3	-90.59	135.0	-587.6	677.6	649.3	28.35	23.903		
6,400.0	6,395.4	6,431.0	6,396.4	14.4	17.4	-90.59	135.0	-587.6	677.6	648.8	28.77	23.553		
6,500.0	6,495.4	6,531.0	6,496.4	14.6	17.6	-90.59	135.0	-587.6	677.6	648.4	29.19	23.212		
6,600.0	6,595.4	6,631.0	6,596.4	14.8	17.8	-90.59	135.0	-587.6	677.6	648.0	29.62	22.880		
6,700.0	6,695.4	6,731.0	6,696.4	15.0	18.0	-90.59	135.0	-587.6	677.6	647.6	30.04	22.557		
6,771.4	6,766.8	6,802.4	6,767.8	15.2	18.1	-90.59	135.0	-587.6	677.6	647.3	30.34	22.332		
6,800.0	6,795.4	6,831.0	6,796.4	15.2	18.1	89.70	135.0	-587.6	677.6	647.2	30.46	22.246		
6,848.0	6,843.2	6,878.8	6,844.2	15.3	18.2	90.00	135.0	-587.6	677.6	647.0	30.62	22.127		
6,850.0	6,845.3	6,880.8	6,846.3	15.3	18.2	90.02	135.0	-587.6	677.6	647.0	30.63	22.123		
6,900.0	6,894.7	6,930.9	6,896.3	15.4	18.3	90.57	134.3	-587.6	677.6	646.9	30.78	22.017		
6,950.0	6,943.6	6,981.6	6,946.9	15.4	18.4	91.15	130.4	-587.5	677.7	646.8	30.90	21.930		
7,000.0	6,991.5	7,032.8	6,997.5	15.5	18.5	91.73	122.8	-587.4	677.8	646.8	31.01	21.857		
7,050.0	7,038.4	7,084.6	7,048.0	15.6	18.5	92.30	111.4	-587.2	677.9	646.8	31.11	21.792		
7,100.0	7,084.0	7,136.9	7,098.0	15.6	18.6	92.86	96.3	-587.0	678.1	646.9	31.20	21.730		
7,150.0	7,128.0	7,189.7	7,147.3	15.7	18.6	93.41	77.4	-586.8	678.2	646.9	31.30	21.666		
7,200.0	7,170.3	7,243.0	7,195.5	15.7	18.7	93.94	54.6	-586.4	678.4	647.0	31.42	21.595		
7,250.0	7,210.6	7,296.8	7,242.3	15.8	18.7	94.46	28.1	-586.1	678.6	647.1	31.55	21.509		
7,300.0	7,248.7	7,351.1	7,287.4	15.9	18.8	94.96	-2.2	-585.6	678.8	647.1	31.72	21.401		
7,350.0	7,284.5	7,406.0	7,330.4	16.0	18.8	95.43	-36.2	-585.1	679.0	647.0	31.93	21.264		
7,400.0	7,317.8	7,461.3	7,371.1	16.1	18.9	95.88	-73.6	-584.6	679.1	646.9	32.20	21.091		
7,450.0	7,348.3	7,517.0	7,409.0	16.3	19.0	96.30	-114.5	-584.0	679.2	646.7	32.53	20.879		
7,500.0	7,376.1	7,573.2	7,443.9	16.5	19.1	96.68	-158.4	-583.4	679.3	646.4	32.94	20.622		
7,550.0	7,400.9	7,629.7	7,475.5	16.8	19.3	97.03	-205.4	-582.7	679.3	645.9	33.43	20.319		
7,600.0	7,422.5	7,686.6	7,503.4	17.1	19.5	97.34	-254.9	-582.0	679.3	645.3	34.01	19.972		
7,650.0	7,441.0	7,743.8	7,527.4	17.5	19.7	97.62	-306.8	-581.3	679.2	644.5	34.69	19.582		
7,700.0	7,456.2	7,801.3	7,547.2	17.9	20.0	97.85	-360.7	-580.5	679.0	643.6	35.45	19.153		
7,750.0	7,468.1	7,858.9	7,562.7	18.3	20.4	98.03	-416.2	-579.7	678.8	642.5	36.32	18.690		
7,800.0	7,476.5	7,916.7	7,573.8	18.8	20.8	98.17	-472.9	-578.9	678.5	641.2	37.27	18.204		
7,850.0	7,481.5	7,974.6	7,580.2	19.3	21.3	98.27	-530.4	-578.1	678.1	639.8	38.30	17.703		
7,899.3	7,483.0	8,030.9	7,582.0	19.8	21.8	98.32	-586.7	-577.3	677.6	638.2	39.38	17.207		
7,900.0	7,483.0	8,031.7	7,582.0	19.8	21.8	98.32	-587.5	-577.3	677.6	638.2	39.40	17.199		
7,900.9	7,483.0	8,032.6	7,582.0	19.8	21.8	98.32	-588.3	-577.3	677.6	638.2	39.42	17.191		
8,000.0	7,482.6	8,131.6	7,582.0	20.9	22.8	98.36	-687.4	-575.9	676.6	635.1	41.57	16.279		
8,100.0	7,482.2	8,231.6	7,582.0	22.2	24.0	98.41	-787.4	-574.4	675.7	631.6	44.07	15.333		
8,200.0	7,481.8	8,331.6	7,582.0	23.5	25.3	98.46	-887.4	-573.0	674.7	628.0	46.75	14.433		
8,300.0	7,481.4	8,431.6	7,582.0	25.0	26.6	98.50	-987.3	-571.6	673.8	624.2	49.58	13.590		
8,400.0	7,481.0	8,531.6	7,582.0	26.5	28.0	98.55	-1,087.3	-570.1	672.8	620.3	52.53	12.808		
8,500.0	7,480.6	8,631.6	7,582.0	28.0	29.5	98.60	-1,187.3	-568.7	671.9	616.3	55.59	12.086		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)											Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
8,600.0	7,480.2	8,731.6	7,582.0	29.6	31.0	98.64	-1,287.3	-567.3	670.9	612.2	58.74	11.422			
8,700.0	7,479.8	8,831.6	7,582.0	31.3	32.6	98.69	-1,387.3	-565.8	670.0	608.0	61.97	10.812			
8,800.0	7,479.4	8,931.6	7,582.0	32.9	34.2	98.74	-1,487.3	-564.4	669.1	603.8	65.25	10.253			
8,900.0	7,479.0	9,031.6	7,582.0	34.6	35.9	98.79	-1,587.2	-563.0	668.1	599.5	68.59	9.740			
9,000.0	7,478.6	9,131.6	7,582.0	36.3	37.5	98.83	-1,687.2	-561.5	667.2	595.2	71.98	9.269			
9,100.0	7,478.2	9,231.6	7,582.0	38.1	39.2	98.88	-1,787.2	-560.1	666.2	590.8	75.41	8.835			
9,200.0	7,477.8	9,331.6	7,582.0	39.8	40.9	98.93	-1,887.2	-558.6	665.3	586.4	78.87	8.435			
9,300.0	7,477.4	9,431.6	7,582.0	41.6	42.7	98.98	-1,987.2	-557.2	664.3	582.0	82.36	8.066			
9,400.0	7,477.0	9,531.6	7,582.0	43.4	44.4	99.03	-2,087.2	-555.8	663.4	577.5	85.88	7.724			
9,500.0	7,476.6	9,631.6	7,582.0	45.2	46.2	99.07	-2,187.1	-554.3	662.4	573.0	89.42	7.408			
9,600.0	7,476.2	9,731.5	7,582.0	47.0	48.0	99.12	-2,287.1	-552.9	661.5	568.5	92.98	7.114			
9,700.0	7,475.8	9,831.5	7,582.0	48.8	49.7	99.17	-2,387.1	-551.5	660.5	564.0	96.56	6.841			
9,800.0	7,475.4	9,931.5	7,582.0	50.6	51.5	99.22	-2,487.1	-550.0	659.6	559.4	100.16	6.586			
9,900.0	7,475.0	10,031.5	7,582.0	52.4	53.4	99.27	-2,587.1	-548.6	658.7	554.9	103.77	6.347			
10,000.0	7,474.6	10,131.5	7,582.0	54.3	55.2	99.32	-2,687.1	-547.2	657.7	550.3	107.39	6.124			
10,100.0	7,474.2	10,231.5	7,582.0	56.1	57.0	99.37	-2,787.1	-545.7	656.8	545.8	111.03	5.916			
10,200.0	7,473.8	10,331.5	7,582.0	58.0	58.8	99.41	-2,887.0	-544.3	655.8	541.2	114.67	5.719			
10,300.0	7,473.3	10,431.5	7,582.0	59.8	60.7	99.46	-2,987.0	-542.9	654.9	536.6	118.32	5.535			
10,400.0	7,472.9	10,531.5	7,582.0	61.7	62.5	99.51	-3,087.0	-541.4	654.0	532.0	121.99	5.361			
10,500.0	7,472.5	10,631.5	7,582.0	63.5	64.4	99.56	-3,187.0	-540.0	653.0	527.4	125.65	5.197			
10,600.0	7,472.1	10,731.5	7,582.0	65.4	66.2	99.61	-3,287.0	-538.6	652.1	522.8	129.33	5.042			
10,700.0	7,471.7	10,831.5	7,582.0	67.3	68.1	99.66	-3,387.0	-537.1	651.1	518.1	133.01	4.895			
10,800.0	7,471.3	10,931.5	7,582.0	69.2	69.9	99.71	-3,486.9	-535.7	650.2	513.5	136.70	4.757			
10,900.0	7,470.9	11,031.5	7,582.0	71.0	71.8	99.76	-3,586.9	-534.3	649.3	508.9	140.39	4.625			
11,000.0	7,470.5	11,131.5	7,582.0	72.9	73.7	99.81	-3,686.9	-532.8	648.3	504.3	144.08	4.500			
11,100.0	7,470.1	11,231.5	7,582.0	74.8	75.5	99.86	-3,786.9	-531.4	647.4	499.6	147.78	4.381			
11,200.0	7,469.7	11,331.5	7,582.0	76.7	77.4	99.91	-3,886.9	-530.0	646.5	495.0	151.49	4.267			
11,300.0	7,469.3	11,431.4	7,582.0	78.6	79.3	99.96	-3,986.9	-528.5	645.5	490.3	155.19	4.160			
11,400.0	7,468.9	11,531.4	7,582.0	80.5	81.2	100.02	-4,086.8	-527.1	644.6	485.7	158.90	4.057			
11,500.0	7,468.5	11,631.4	7,582.0	82.3	83.0	100.07	-4,186.8	-525.7	643.7	481.0	162.61	3.958			
11,600.0	7,468.1	11,731.4	7,582.0	84.2	84.9	100.12	-4,286.8	-524.2	642.7	476.4	166.33	3.864			
11,700.0	7,467.7	11,831.4	7,582.0	86.1	86.8	100.17	-4,386.8	-522.8	641.8	471.7	170.04	3.774			
11,800.0	7,467.3	11,931.4	7,582.0	88.0	88.7	100.22	-4,486.8	-521.3	640.9	467.1	173.76	3.688			
11,900.0	7,466.9	12,031.4	7,582.0	89.9	90.6	100.27	-4,586.8	-519.9	639.9	462.4	177.48	3.606			
12,000.0	7,466.5	12,131.4	7,582.0	91.8	92.5	100.32	-4,686.7	-518.5	639.0	457.8	181.20	3.526			
12,100.0	7,466.1	12,231.4	7,582.0	93.7	94.4	100.38	-4,786.7	-517.0	638.1	453.1	184.92	3.450			
12,200.0	7,465.7	12,331.4	7,582.0	95.6	96.3	100.43	-4,886.7	-515.6	637.1	448.5	188.65	3.377			
12,300.0	7,465.3	12,431.4	7,582.0	97.5	98.2	100.48	-4,986.7	-514.2	636.2	443.8	192.37	3.307			
12,400.0	7,464.9	12,531.4	7,582.0	99.4	100.1	100.53	-5,086.7	-512.7	635.3	439.2	196.10	3.240			
12,500.0	7,464.5	12,631.4	7,582.0	101.3	102.0	100.59	-5,186.7	-511.3	634.3	434.5	199.82	3.175			
12,600.0	7,464.1	12,731.4	7,582.0	103.2	103.9	100.64	-5,286.6	-509.9	633.4	429.9	203.55	3.112			
12,700.0	7,463.7	12,831.4	7,582.0	105.1	105.8	100.69	-5,386.6	-508.4	632.5	425.2	207.28	3.051			
12,800.0	7,463.3	12,931.4	7,582.0	107.0	107.7	100.74	-5,486.6	-507.0	631.6	420.6	211.00	2.993			
12,900.0	7,462.9	13,031.3	7,582.0	109.0	109.6	100.80	-5,586.6	-505.6	630.6	415.9	214.73	2.937			
13,000.0	7,462.5	13,131.3	7,582.0	110.9	111.5	100.85	-5,686.6	-504.1	629.7	411.3	218.46	2.883			
13,100.0	7,462.1	13,231.3	7,582.0	112.8	113.4	100.90	-5,786.6	-502.7	628.8	406.6	222.19	2.830			
13,200.0	7,461.7	13,331.3	7,582.0	114.7	115.3	100.96	-5,886.5	-501.3	627.9	401.9	225.91	2.779			
13,300.0	7,461.3	13,431.3	7,582.0	116.6	117.2	101.01	-5,986.5	-499.8	626.9	397.3	229.64	2.730			
13,400.0	7,460.9	13,531.3	7,582.0	118.5	119.1	101.07	-6,086.5	-498.4	626.0	392.6	233.37	2.683			
13,500.0	7,460.5	13,631.3	7,582.0	120.4	121.0	101.12	-6,186.5	-497.0	625.1	388.0	237.10	2.636			
13,600.0	7,460.1	13,731.3	7,582.0	122.3	122.9	101.17	-6,286.5	-495.5	624.2	383.3	240.82	2.592			
13,700.0	7,459.7	13,831.3	7,582.0	124.2	124.8	101.23	-6,386.5	-494.1	623.2	378.7	244.55	2.549			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
13,800.0	7,459.3	13,931.3	7,582.0	126.1	126.8	101.28	-6,486.4	-492.7	622.3	374.0	248.27	2.507		
13,900.0	7,458.9	14,031.3	7,582.0	128.1	128.7	101.34	-6,586.4	-491.2	621.4	369.4	252.00	2.466		
14,000.0	7,458.5	14,131.3	7,582.0	130.0	130.6	101.39	-6,686.4	-489.8	620.5	364.8	255.72	2.426		
14,100.0	7,458.1	14,231.3	7,582.0	131.9	132.5	101.45	-6,786.4	-488.3	619.6	360.1	259.45	2.388		
14,200.0	7,457.7	14,331.3	7,582.0	133.8	134.4	101.50	-6,886.4	-486.9	618.6	355.5	263.17	2.351		
14,300.0	7,457.3	14,431.3	7,582.0	135.7	136.3	101.56	-6,986.4	-485.5	617.7	350.8	266.89	2.315		
14,400.0	7,456.9	14,531.3	7,582.0	137.6	138.2	101.61	-7,086.4	-484.0	616.8	346.2	270.61	2.279		
14,500.0	7,456.5	14,631.3	7,582.0	139.5	140.1	101.67	-7,186.3	-482.6	615.9	341.6	274.33	2.245		
14,600.0	7,456.1	14,731.2	7,582.0	141.5	142.1	101.73	-7,286.3	-481.2	615.0	336.9	278.05	2.212		
14,700.0	7,455.7	14,831.2	7,582.0	143.4	144.0	101.78	-7,386.3	-479.7	614.1	332.3	281.77	2.179		
14,800.0	7,455.3	14,931.2	7,582.0	145.3	145.9	101.84	-7,486.3	-478.3	613.1	327.6	285.49	2.148		
14,900.0	7,454.9	15,031.2	7,582.0	147.2	147.8	101.89	-7,586.3	-476.9	612.2	323.0	289.20	2.117		
15,000.0	7,454.4	15,131.2	7,582.0	149.1	149.7	101.95	-7,686.3	-475.4	611.3	318.4	292.92	2.087		
15,100.0	7,454.0	15,231.2	7,582.0	151.1	151.7	102.01	-7,786.2	-474.0	610.4	313.8	296.63	2.058		
15,200.0	7,453.6	15,331.2	7,582.0	153.0	153.6	102.06	-7,886.2	-472.6	609.5	309.1	300.35	2.029		
15,300.0	7,453.2	15,431.2	7,582.0	154.9	155.5	102.12	-7,986.2	-471.1	608.6	304.5	304.06	2.001		
15,400.0	7,452.8	15,531.2	7,582.0	156.8	157.4	102.18	-8,086.2	-469.7	607.7	299.9	307.77	1.974		
15,500.0	7,452.4	15,631.2	7,582.0	158.7	159.3	102.24	-8,186.2	-468.3	606.7	295.3	311.48	1.948		
15,600.0	7,452.0	15,731.2	7,582.0	160.6	161.2	102.29	-8,286.2	-466.8	605.8	290.6	315.19	1.922		
15,700.0	7,451.6	15,831.2	7,582.0	162.6	163.2	102.35	-8,386.1	-465.4	604.9	286.0	318.89	1.897		
15,800.0	7,451.2	15,931.2	7,582.0	164.5	165.1	102.41	-8,486.1	-464.0	604.0	281.4	322.60	1.872		
15,900.0	7,450.8	16,031.2	7,582.0	166.4	167.0	102.47	-8,586.1	-462.5	603.1	276.8	326.30	1.848		
16,000.0	7,450.4	16,131.2	7,582.0	168.3	168.9	102.53	-8,686.1	-461.1	602.2	272.2	330.00	1.825		
16,100.0	7,450.0	16,231.2	7,582.0	170.2	170.8	102.58	-8,786.1	-459.7	601.3	267.6	333.70	1.802		
16,200.0	7,449.6	16,331.2	7,582.0	172.2	172.8	102.64	-8,886.1	-458.2	600.4	263.0	337.40	1.779		
16,300.0	7,449.2	16,431.1	7,582.0	174.1	174.7	102.70	-8,986.0	-456.8	599.5	258.4	341.10	1.757		
16,400.0	7,448.8	16,531.1	7,582.0	176.0	176.6	102.76	-9,086.0	-455.3	598.6	253.8	344.80	1.736		
16,500.0	7,448.4	16,631.1	7,582.0	177.9	178.5	102.82	-9,186.0	-453.9	597.7	249.2	348.49	1.715		
16,600.0	7,448.0	16,731.1	7,582.0	179.8	180.5	102.88	-9,286.0	-452.5	596.8	244.6	352.18	1.694		
16,700.0	7,447.6	16,831.1	7,582.0	181.8	182.4	102.94	-9,386.0	-451.0	595.8	240.0	355.87	1.674		
16,800.0	7,447.2	16,931.1	7,582.0	183.7	184.3	103.00	-9,486.0	-449.6	594.9	235.4	359.56	1.655		
16,900.0	7,446.8	17,031.1	7,582.0	185.6	186.2	103.06	-9,585.9	-448.2	594.0	230.8	363.25	1.635		
17,000.0	7,446.4	17,131.1	7,582.0	187.5	188.1	103.12	-9,685.9	-446.7	593.1	226.2	366.93	1.616		
17,100.0	7,446.0	17,231.1	7,582.0	189.5	190.1	103.18	-9,785.9	-445.3	592.2	221.6	370.62	1.598		
17,200.0	7,445.6	17,331.1	7,582.0	191.4	192.0	103.24	-9,885.9	-443.9	591.3	217.0	374.30	1.580		
17,300.0	7,445.2	17,431.1	7,582.0	193.3	193.9	103.30	-9,985.9	-442.4	590.4	212.5	377.98	1.562		
17,400.0	7,444.8	17,531.1	7,582.0	195.2	195.8	103.36	-10,085.9	-441.0	589.5	207.9	381.66	1.545		
17,500.0	7,444.4	17,631.1	7,582.0	197.1	197.8	103.42	-10,185.8	-439.6	588.6	203.3	385.33	1.528		
17,600.0	7,444.0	17,731.1	7,582.0	199.1	199.7	103.48	-10,285.8	-438.1	587.7	198.7	389.01	1.511		
17,700.0	7,443.6	17,831.1	7,582.0	201.0	201.6	103.54	-10,385.8	-436.7	586.8	194.2	392.68	1.494 Level 3		
17,800.0	7,443.2	17,931.1	7,582.0	202.9	203.5	103.61	-10,485.8	-435.3	585.9	189.6	396.35	1.478 Level 3		
17,846.8	7,443.0	17,972.9	7,582.0	203.8	204.3	103.63	-10,527.7	-434.7	585.5	187.6	397.98	1.471 Level 3, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	88.74	1.1	50.0	50.0					
100.0	100.0	100.0	100.0	0.1	0.1	88.74	1.1	50.0	50.0	49.8	0.22	222.621		
200.0	200.0	200.0	200.0	0.3	0.3	88.74	1.1	50.0	50.0	49.4	0.67	74.207		
300.0	300.0	300.0	300.0	0.6	0.6	88.74	1.1	50.0	50.0	48.9	1.12	44.524		
400.0	400.0	400.0	400.0	0.8	0.8	88.74	1.1	50.0	50.0	48.5	1.57	31.803		
500.0	500.0	500.0	500.0	1.0	1.0	88.74	1.1	50.0	50.0	48.0	2.02	24.736		
600.0	600.0	600.0	600.0	1.2	1.2	88.74	1.1	50.0	50.0	47.6	2.47	20.238		
700.0	700.0	700.0	700.0	1.5	1.5	88.74	1.1	50.0	50.0	47.1	2.92	17.125		
800.0	800.0	800.0	800.0	1.7	1.7	88.74	1.1	50.0	50.0	46.7	3.37	14.841		
900.0	900.0	900.0	900.0	1.9	1.9	88.74	1.1	50.0	50.0	46.2	3.82	13.095		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	88.74	1.1	50.0	50.0	45.8	4.27	11.717		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	88.74	1.1	50.0	50.0	45.3	4.72	10.601		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	88.74	1.1	50.0	50.0	44.9	5.17	9.679		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	88.74	1.1	50.0	50.0	44.4	5.62	8.905		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	88.74	1.1	50.0	50.0	44.0	6.07	8.245		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	88.74	1.1	50.0	50.0	43.5	6.52	7.677 CC		
1,600.0	1,600.0	1,598.9	1,598.8	3.5	3.5	88.03	1.8	51.1	51.2	44.2	6.96	7.353		
1,700.0	1,700.0	1,697.6	1,697.5	3.7	3.7	86.08	3.7	54.4	54.6	47.2	7.39	7.383		
1,800.0	1,800.0	1,797.0	1,796.8	3.9	3.9	83.55	6.7	59.4	59.8	52.0	7.83	7.640		
1,900.0	1,900.0	1,896.8	1,896.4	4.2	4.1	81.39	9.8	64.5	65.3	57.0	8.27	7.893		
2,000.0	2,000.0	1,996.7	1,996.1	4.4	4.4	79.56	12.8	69.6	70.8	62.1	8.72	8.128		
2,100.0	2,100.0	2,096.5	2,095.7	4.6	4.6	78.00	15.9	74.7	76.4	67.3	9.16	8.346		
2,200.0	2,200.0	2,196.3	2,195.3	4.8	4.8	76.65	18.9	79.7	82.1	72.5	9.60	8.547		
2,300.0	2,300.0	2,296.1	2,295.0	5.1	5.0	75.47	22.0	84.8	87.8	77.7	10.05	8.734		
2,400.0	2,400.0	2,296.0	2,294.7	5.3	5.3	42.57	25.0	89.9	92.5	82.1	10.48	8.831		
2,500.0	2,499.9	2,496.0	2,494.5	5.5	5.5	43.16	28.1	95.0	95.4	84.5	10.92	8.738		
2,512.9	2,512.8	2,508.8	2,507.3	5.5	5.5	43.31	28.5	95.7	95.6	84.6	10.97	8.714		
2,600.0	2,599.8	2,595.9	2,594.3	5.7	5.7	44.40	31.2	100.1	97.1	85.7	11.36	8.546		
2,700.0	2,699.6	2,695.9	2,694.0	5.9	6.0	45.61	34.2	105.2	98.8	87.0	11.80	8.370		
2,800.0	2,799.4	2,795.9	2,793.8	6.2	6.2	46.77	37.3	110.3	100.5	88.3	12.25	8.208		
2,900.0	2,899.3	2,895.8	2,893.6	6.4	6.5	47.90	40.3	115.4	102.3	89.6	12.69	8.059		
3,000.0	2,999.1	2,995.8	2,993.4	6.6	6.7	48.99	43.4	120.5	104.1	91.0	13.14	7.923		
3,100.0	3,099.0	3,095.7	3,093.2	6.9	6.9	50.04	46.5	125.6	106.0	92.4	13.60	7.797		
3,200.0	3,198.8	3,195.7	3,193.0	7.1	7.2	51.05	49.5	130.7	107.9	93.9	14.05	7.680		
3,300.0	3,298.7	3,295.7	3,292.8	7.3	7.4	52.03	52.6	135.8	109.8	95.3	14.51	7.572		
3,400.0	3,398.5	3,395.6	3,392.6	7.5	7.7	52.97	55.6	140.9	111.8	96.8	14.96	7.472		
3,500.0	3,498.4	3,495.6	3,492.3	7.8	7.9	53.88	58.7	146.0	113.8	98.4	15.42	7.379		
3,600.0	3,598.2	3,595.6	3,592.1	8.0	8.1	54.76	61.8	151.1	115.8	99.9	15.88	7.293		
3,700.0	3,698.0	3,695.5	3,691.9	8.2	8.4	55.61	64.8	156.2	117.9	101.5	16.34	7.212		
3,800.0	3,797.9	3,795.5	3,791.7	8.5	8.6	56.43	67.9	161.3	119.9	103.1	16.81	7.137		
3,900.0	3,897.7	3,895.5	3,891.5	8.7	8.9	57.22	70.9	166.4	122.0	104.8	17.27	7.066		
4,000.0	3,997.6	3,995.4	3,991.3	9.0	9.1	57.99	74.0	171.5	124.2	106.4	17.74	7.000		
4,100.0	4,097.4	4,095.4	4,091.1	9.2	9.4	58.73	77.1	176.6	126.3	108.1	18.20	6.938		
4,200.0	4,197.3	4,195.4	4,190.8	9.4	9.6	59.44	80.1	181.7	128.5	109.8	18.67	6.880		
4,300.0	4,297.1	4,295.3	4,290.6	9.7	9.9	60.13	83.2	186.8	130.6	111.5	19.14	6.826		
4,400.0	4,397.0	4,395.3	4,390.4	9.9	10.1	60.80	86.2	191.9	132.8	113.2	19.61	6.774		
4,500.0	4,496.8	4,495.2	4,490.2	10.1	10.3	61.45	89.3	197.0	135.1	115.0	20.08	6.726		
4,600.0	4,596.6	4,595.2	4,590.0	10.4	10.6	62.07	92.3	202.1	137.3	116.7	20.55	6.680		
4,700.0	4,696.5	4,695.2	4,689.8	10.6	10.8	62.68	95.4	207.2	139.5	118.5	21.03	6.637		
4,800.0	4,796.3	4,795.1	4,789.6	10.9	11.1	63.26	98.5	212.3	141.8	120.3	21.50	6.596		
4,900.0	4,896.2	4,895.1	4,889.4	11.1	11.3	63.83	101.5	217.4	144.1	122.1	21.97	6.557		
5,000.0	4,996.0	4,995.1	4,989.1	11.3	11.6	64.38	104.6	222.5	146.4	123.9	22.45	6.521		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)											Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
5,100.0	5,095.9	5,095.0	5,088.9	11.6	11.8	64.91	107.6	227.6	148.7	125.8	22.92	6.486			
5,200.0	5,195.7	5,195.0	5,188.7	11.8	12.1	65.43	110.7	232.7	151.0	127.6	23.40	6.453			
5,300.0	5,295.6	5,295.0	5,288.5	12.0	12.3	65.93	113.8	237.8	153.3	129.5	23.88	6.422			
5,344.9	5,340.4	5,339.9	5,333.4	12.2	12.4	66.15	115.1	240.1	154.4	130.3	24.09	6.408			
5,400.0	5,395.4	5,394.9	5,388.3	12.3	12.6	66.26	116.8	242.9	155.9	131.5	24.34	6.405			
5,504.6	5,500.0	5,499.4	5,492.6	12.5	12.8	97.91	120.0	248.2	159.9	135.2	24.75	6.461			
5,600.0	5,595.4	5,594.6	5,587.7	12.6	13.0	96.67	122.9	253.1	164.4	139.2	25.14	6.539			
5,700.0	5,695.4	5,694.5	5,687.3	12.9	13.3	95.44	126.0	258.2	169.1	143.6	25.57	6.614			
5,800.0	5,795.4	5,794.3	5,787.0	13.1	13.5	94.27	129.0	263.3	174.0	148.0	26.00	6.690			
5,900.0	5,895.4	5,894.1	5,886.6	13.3	13.8	93.18	132.1	268.4	178.9	152.4	26.44	6.765			
6,000.0	5,995.4	5,993.9	5,986.2	13.5	14.0	92.14	135.2	273.5	183.8	156.9	26.87	6.841			
6,100.0	6,095.4	6,097.1	6,089.2	13.7	14.3	91.22	138.0	278.2	188.3	161.0	27.30	6.899			
6,200.0	6,195.4	6,203.0	6,195.1	13.9	14.5	90.88	139.1	280.0	190.0	162.3	27.70	6.860			
6,300.0	6,295.4	6,303.3	6,295.4	14.2	14.6	90.88	139.1	280.0	190.0	161.9	28.12	6.759			
6,400.0	6,395.4	6,403.3	6,395.4	14.4	14.9	90.88	139.1	280.0	190.0	161.5	28.55	6.657			
6,500.0	6,495.4	6,503.3	6,495.4	14.6	15.1	90.88	139.1	280.0	190.0	161.1	28.98	6.558			
6,600.0	6,595.4	6,603.3	6,595.4	14.8	15.3	90.88	139.1	280.0	190.0	160.6	29.41	6.462			
6,700.0	6,695.4	6,703.3	6,695.4	15.0	15.5	90.88	139.1	280.0	190.0	160.2	29.84	6.368			
6,771.4	6,766.8	6,774.7	6,766.8	15.2	15.6	90.88	139.1	280.0	190.0	159.9	30.15	6.303			
6,800.0	6,795.4	6,803.3	6,795.4	15.2	15.7	-89.05	139.1	280.0	190.0	159.8	30.26	6.280			
6,844.4	6,839.7	6,847.5	6,839.7	15.3	15.8	-90.00	139.1	280.0	190.0	159.6	30.41	6.249			
6,850.0	6,845.3	6,853.1	6,845.3	15.3	15.8	-90.18	139.1	280.0	190.0	159.6	30.43	6.245			
6,900.0	6,894.7	6,902.9	6,895.0	15.4	15.9	-92.15	138.5	280.0	190.1	159.6	30.56	6.222			
6,950.0	6,943.6	6,953.2	6,945.1	15.4	16.0	-94.21	134.7	280.0	190.5	159.9	30.66	6.214			
7,000.0	6,991.5	7,003.9	6,995.4	15.5	16.0	-96.25	127.3	280.1	191.2	160.4	30.74	6.218			
7,050.0	7,038.4	7,055.2	7,045.4	15.6	16.1	-98.25	116.2	280.1	192.0	161.2	30.81	6.233			
7,100.0	7,084.0	7,107.0	7,095.1	15.6	16.2	-100.21	101.4	280.2	193.1	162.2	30.85	6.259			
7,150.0	7,128.0	7,159.4	7,144.0	15.7	16.2	-102.10	82.9	280.2	194.4	163.5	30.88	6.295			
7,200.0	7,170.3	7,212.3	7,191.9	15.7	16.3	-103.92	60.6	280.3	195.8	164.9	30.89	6.339			
7,250.0	7,210.6	7,265.6	7,238.5	15.8	16.3	-105.65	34.5	280.4	197.4	166.5	30.89	6.389			
7,300.0	7,248.7	7,319.6	7,283.5	15.9	16.4	-107.29	4.7	280.5	199.0	168.1	30.89	6.443			
7,350.0	7,284.5	7,374.0	7,326.4	16.0	16.5	-108.82	-28.6	280.7	200.8	169.9	30.89	6.499			
7,400.0	7,317.8	7,428.9	7,367.1	16.1	16.6	-110.25	-65.5	280.8	202.5	171.6	30.92	6.551			
7,450.0	7,348.3	7,484.3	7,405.1	16.3	16.7	-111.56	-105.8	280.9	204.3	173.3	30.97	6.597			
7,500.0	7,376.1	7,540.2	7,440.2	16.5	16.9	-112.74	-149.3	281.1	206.0	174.9	31.06	6.632			
7,550.0	7,400.9	7,596.5	7,472.0	16.8	17.1	-113.81	-195.7	281.3	207.6	176.4	31.21	6.651			
7,600.0	7,422.5	7,653.1	7,500.3	17.1	17.4	-114.74	-244.8	281.5	209.1	177.6	31.44	6.650			
7,650.0	7,441.0	7,710.1	7,524.7	17.5	17.7	-115.55	-296.3	281.7	210.4	178.6	31.76	6.624			
7,700.0	7,456.2	7,767.4	7,545.0	17.9	18.1	-116.22	-349.8	281.9	211.6	179.4	32.19	6.573			
7,750.0	7,468.1	7,825.0	7,561.1	18.3	18.6	-116.76	-405.1	282.1	212.5	179.8	32.72	6.494			
7,800.0	7,476.5	7,882.8	7,572.6	18.8	19.1	-117.16	-461.7	282.3	213.2	179.8	33.38	6.388			
7,850.0	7,481.5	7,940.7	7,579.7	19.3	19.7	-117.43	-519.1	282.5	213.7	179.5	34.16	6.257			
7,899.3	7,483.0	7,997.8	7,582.0	19.8	20.3	-117.57	-576.2	282.7	213.9	178.9	35.04	6.105			
7,900.0	7,483.0	7,998.7	7,582.0	19.8	20.3	-117.57	-577.1	282.7	213.9	178.9	35.06	6.102			
7,900.9	7,483.0	7,999.6	7,582.0	19.8	20.3	-117.57	-578.0	282.7	213.9	178.8	35.07	6.099			
8,000.0	7,482.6	8,098.6	7,582.0	20.9	21.4	-117.66	-677.0	283.1	214.1	177.1	36.99	5.789			
8,100.0	7,482.2	8,198.6	7,582.0	22.2	22.6	-117.76	-777.0	283.6	214.3	175.1	39.25	5.460			
8,200.0	7,481.8	8,298.6	7,582.0	23.5	24.0	-117.85	-877.0	284.0	214.5	172.8	41.68	5.146			
8,300.0	7,481.4	8,398.6	7,582.0	25.0	25.4	-117.94	-977.0	284.4	214.7	170.5	44.24	4.853			
8,400.0	7,481.0	8,498.6	7,582.0	26.5	26.8	-118.04	-1,077.0	284.8	214.9	168.0	46.91	4.581			
8,500.0	7,480.6	8,598.6	7,582.0	28.0	28.4	-118.13	-1,177.0	285.3	215.1	165.4	49.68	4.330			
8,600.0	7,480.2	8,698.6	7,582.0	29.6	30.0	-118.22	-1,277.0	285.7	215.3	162.8	52.52	4.099			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
8,700.0	7,479.8	8,798.6	7,582.0	31.3	31.6	-118.32	-1,377.0	286.1	215.5	160.1	55.42	3.888		
8,800.0	7,479.4	8,898.6	7,582.0	32.9	33.2	-118.41	-1,477.0	286.5	215.7	157.3	58.37	3.695		
8,900.0	7,479.0	8,998.6	7,582.0	34.6	34.9	-118.50	-1,577.0	287.0	215.9	154.5	61.38	3.517		
9,000.0	7,478.6	9,098.6	7,582.0	36.3	36.6	-118.60	-1,677.0	287.4	216.1	151.7	64.41	3.355		
9,100.0	7,478.2	9,198.6	7,582.0	38.1	38.3	-118.69	-1,777.0	287.8	216.3	148.8	67.48	3.205		
9,200.0	7,477.8	9,298.6	7,582.0	39.8	40.1	-118.78	-1,877.0	288.2	216.5	145.9	70.58	3.067		
9,300.0	7,477.4	9,398.6	7,582.0	41.6	41.8	-118.87	-1,977.0	288.7	216.7	143.0	73.70	2.940		
9,400.0	7,477.0	9,498.6	7,582.0	43.4	43.6	-118.96	-2,077.0	289.1	216.9	140.1	76.84	2.823		
9,500.0	7,476.6	9,598.6	7,582.0	45.2	45.4	-119.06	-2,177.0	289.5	217.1	137.1	79.99	2.714		
9,600.0	7,476.2	9,698.6	7,582.0	47.0	47.2	-119.15	-2,277.0	289.9	217.3	134.1	83.16	2.613		
9,700.0	7,475.8	9,798.6	7,582.0	48.8	49.0	-119.24	-2,377.0	290.4	217.5	131.2	86.34	2.519		
9,800.0	7,475.4	9,898.6	7,582.0	50.6	50.8	-119.33	-2,477.0	290.8	217.7	128.2	89.53	2.431		
9,900.0	7,475.0	9,998.6	7,582.0	52.4	52.6	-119.42	-2,577.0	291.2	217.9	125.2	92.73	2.350		
10,000.0	7,474.6	10,098.6	7,582.0	54.3	54.5	-119.51	-2,677.0	291.6	218.1	122.2	95.94	2.273		
10,100.0	7,474.2	10,198.6	7,582.0	56.1	56.3	-119.60	-2,776.9	292.1	218.3	119.2	99.15	2.202		
10,200.0	7,473.8	10,298.6	7,582.0	58.0	58.1	-119.69	-2,876.9	292.5	218.5	116.2	102.37	2.135		
10,300.0	7,473.3	10,398.6	7,582.0	59.8	60.0	-119.78	-2,976.9	292.9	218.7	113.1	105.59	2.072		
10,400.0	7,472.9	10,498.6	7,582.0	61.7	61.8	-119.87	-3,076.9	293.3	218.9	110.1	108.81	2.012		
10,500.0	7,472.5	10,598.6	7,582.0	63.5	63.7	-119.96	-3,176.9	293.7	219.2	107.1	112.04	1.956		
10,600.0	7,472.1	10,698.6	7,582.0	65.4	65.6	-120.05	-3,276.9	294.2	219.4	104.1	115.27	1.903		
10,700.0	7,471.7	10,798.6	7,582.0	67.3	67.4	-120.14	-3,376.9	294.6	219.6	101.1	118.49	1.853		
10,800.0	7,471.3	10,898.6	7,582.0	69.2	69.3	-120.23	-3,476.9	295.0	219.8	98.1	121.72	1.806		
10,900.0	7,470.9	10,998.6	7,582.0	71.0	71.2	-120.32	-3,576.9	295.4	220.0	95.0	124.95	1.761		
11,000.0	7,470.5	11,098.6	7,582.0	72.9	73.1	-120.41	-3,676.9	295.9	220.2	92.0	128.18	1.718		
11,100.0	7,470.1	11,198.6	7,582.0	74.8	74.9	-120.50	-3,776.9	296.3	220.4	89.0	131.41	1.677		
11,200.0	7,469.7	11,298.6	7,582.0	76.7	76.8	-120.59	-3,876.9	296.7	220.6	86.0	134.64	1.639		
11,300.0	7,469.3	11,398.6	7,582.0	78.6	78.7	-120.68	-3,976.9	297.1	220.8	83.0	137.86	1.602		
11,400.0	7,468.9	11,498.6	7,582.0	80.5	80.6	-120.77	-4,076.9	297.6	221.0	80.0	141.09	1.567		
11,500.0	7,468.5	11,598.6	7,582.0	82.3	82.5	-120.85	-4,176.9	298.0	221.3	77.0	144.31	1.533		
11,600.0	7,468.1	11,698.6	7,582.0	84.2	84.4	-120.94	-4,276.9	298.4	221.5	73.9	147.53	1.501		
11,700.0	7,467.7	11,798.6	7,582.0	86.1	86.3	-121.03	-4,376.9	298.8	221.7	70.9	150.75	1.471 Level 3		
11,800.0	7,467.3	11,898.6	7,582.0	88.0	88.1	-121.12	-4,476.9	299.3	221.9	67.9	153.96	1.441 Level 3		
11,900.0	7,466.9	11,998.6	7,582.0	89.9	90.0	-121.21	-4,576.9	299.7	222.1	64.9	157.18	1.413 Level 3		
12,000.0	7,466.5	12,098.6	7,582.0	91.8	91.9	-121.29	-4,676.9	300.1	222.3	62.0	160.39	1.386 Level 3		
12,100.0	7,466.1	12,198.6	7,582.0	93.7	93.8	-121.38	-4,776.9	300.5	222.6	59.0	163.60	1.360 Level 3		
12,200.0	7,465.7	12,298.6	7,582.0	95.6	95.7	-121.47	-4,876.9	301.0	222.8	56.0	166.80	1.336 Level 3		
12,300.0	7,465.3	12,398.6	7,582.0	97.5	97.6	-121.55	-4,976.9	301.4	223.0	53.0	170.00	1.312 Level 3		
12,400.0	7,464.9	12,498.6	7,582.0	99.4	99.5	-121.64	-5,076.9	301.8	223.2	50.0	173.20	1.289 Level 3		
12,500.0	7,464.5	12,598.6	7,582.0	101.3	101.4	-121.73	-5,176.9	302.2	223.4	47.0	176.39	1.267 Level 3		
12,600.0	7,464.1	12,698.6	7,582.0	103.2	103.3	-121.81	-5,276.9	302.6	223.6	44.1	179.58	1.245 Level 2		
12,700.0	7,463.7	12,798.6	7,582.0	105.1	105.2	-121.90	-5,376.9	303.1	223.9	41.1	182.77	1.225 Level 2		
12,800.0	7,463.3	12,898.6	7,582.0	107.0	107.1	-121.99	-5,476.9	303.5	224.1	38.1	185.96	1.205 Level 2		
12,900.0	7,462.9	12,998.6	7,582.0	109.0	109.1	-122.07	-5,576.9	303.9	224.3	35.2	189.14	1.186 Level 2		
13,000.0	7,462.5	13,098.6	7,582.0	110.9	111.0	-122.16	-5,676.9	304.3	224.5	32.2	192.31	1.168 Level 2		
13,100.0	7,462.1	13,198.6	7,582.0	112.8	112.9	-122.24	-5,776.9	304.8	224.8	29.3	195.48	1.150 Level 2		
13,200.0	7,461.7	13,298.6	7,582.0	114.7	114.8	-122.33	-5,876.9	305.2	225.0	26.3	198.65	1.132 Level 2		
13,300.0	7,461.3	13,398.6	7,582.0	116.6	116.7	-122.41	-5,976.9	305.6	225.2	23.4	201.82	1.116 Level 2		
13,400.0	7,460.9	13,498.6	7,582.0	118.5	118.6	-122.50	-6,076.9	306.0	225.4	20.4	204.98	1.100 Level 2		
13,500.0	7,460.5	13,598.6	7,582.0	120.4	120.5	-122.58	-6,176.9	306.5	225.6	17.5	208.13	1.084 Level 2		
13,600.0	7,460.1	13,698.6	7,582.0	122.3	122.4	-122.67	-6,276.9	306.9	225.9	14.6	211.29	1.069 Level 2		
13,700.0	7,459.7	13,798.6	7,582.0	124.2	124.3	-122.75	-6,376.9	307.3	226.1	11.7	214.43	1.054 Level 2		
13,800.0	7,459.3	13,898.6	7,582.0	126.1	126.2	-122.84	-6,476.9	307.7	226.3	8.7	217.58	1.040 Level 2		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
13,900.0	7,458.9	13,998.5	7,582.0	128.1	128.1	-122.92	-6,576.9	308.2	226.5	5.8	220.72	1.026 Level 2		
14,000.0	7,458.5	14,098.5	7,582.0	130.0	130.1	-123.01	-6,676.9	308.6	226.8	2.9	223.85	1.013 Level 2		
14,100.0	7,458.1	14,198.5	7,582.0	131.9	132.0	-123.09	-6,776.9	309.0	227.0	0.0	226.98	1.000 Level 2		
14,200.0	7,457.7	14,298.5	7,582.0	133.8	133.9	-123.17	-6,876.9	309.4	227.2	-2.9	230.11	0.987 Level 1		
14,300.0	7,457.3	14,398.5	7,582.0	135.7	135.8	-123.26	-6,976.9	309.9	227.5	-5.8	233.23	0.975 Level 1		
14,400.0	7,456.9	14,498.5	7,582.0	137.6	137.7	-123.34	-7,076.9	310.3	227.7	-8.7	236.35	0.963 Level 1		
14,500.0	7,456.5	14,598.5	7,582.0	139.5	139.6	-123.42	-7,176.9	310.7	227.9	-11.6	239.46	0.952 Level 1		
14,600.0	7,456.1	14,698.5	7,582.0	141.5	141.5	-123.51	-7,276.9	311.1	228.1	-14.4	242.57	0.941 Level 1		
14,700.0	7,455.7	14,798.5	7,582.0	143.4	143.5	-123.59	-7,376.9	311.6	228.4	-17.3	245.67	0.930 Level 1		
14,800.0	7,455.3	14,898.5	7,582.0	145.3	145.4	-123.67	-7,476.9	312.0	228.6	-20.2	248.77	0.919 Level 1		
14,900.0	7,454.9	14,998.5	7,582.0	147.2	147.3	-123.76	-7,576.9	312.4	228.8	-23.0	251.87	0.909 Level 1		
15,000.0	7,454.4	15,098.5	7,582.0	149.1	149.2	-123.84	-7,676.9	312.8	229.1	-25.9	254.96	0.898 Level 1		
15,100.0	7,454.0	15,198.5	7,582.0	151.1	151.1	-123.92	-7,776.9	313.2	229.3	-28.8	258.04	0.889 Level 1		
15,200.0	7,453.6	15,298.5	7,582.0	153.0	153.0	-124.00	-7,876.9	313.7	229.5	-31.6	261.13	0.879 Level 1		
15,300.0	7,453.2	15,398.5	7,582.0	154.9	155.0	-124.08	-7,976.9	314.1	229.8	-34.4	264.20	0.870 Level 1		
15,400.0	7,452.8	15,498.5	7,582.0	156.8	156.9	-124.17	-8,076.9	314.5	230.0	-37.3	267.27	0.860 Level 1		
15,500.0	7,452.4	15,598.5	7,582.0	158.7	158.8	-124.25	-8,176.9	314.9	230.2	-40.1	270.34	0.852 Level 1		
15,600.0	7,452.0	15,698.5	7,582.0	160.6	160.7	-124.33	-8,276.9	315.4	230.5	-42.9	273.40	0.843 Level 1		
15,700.0	7,451.6	15,798.5	7,582.0	162.6	162.6	-124.41	-8,376.9	315.8	230.7	-45.8	276.46	0.834 Level 1		
15,800.0	7,451.2	15,898.5	7,582.0	164.5	164.6	-124.49	-8,476.9	316.2	230.9	-48.6	279.51	0.826 Level 1		
15,900.0	7,450.8	15,998.5	7,582.0	166.4	166.5	-124.57	-8,576.8	316.6	231.2	-51.4	282.56	0.818 Level 1		
16,000.0	7,450.4	16,098.5	7,582.0	168.3	168.4	-124.65	-8,676.8	317.1	231.4	-54.2	285.61	0.810 Level 1		
16,100.0	7,450.0	16,198.5	7,582.0	170.2	170.3	-124.73	-8,776.8	317.5	231.6	-57.0	288.65	0.802 Level 1		
16,200.0	7,449.6	16,298.5	7,582.0	172.2	172.2	-124.81	-8,876.8	317.9	231.9	-59.8	291.68	0.795 Level 1		
16,300.0	7,449.2	16,398.5	7,582.0	174.1	174.2	-124.89	-8,976.8	318.3	232.1	-62.6	294.71	0.788 Level 1		
16,400.0	7,448.8	16,498.5	7,582.0	176.0	176.1	-124.97	-9,076.8	318.8	232.3	-65.4	297.74	0.780 Level 1		
16,500.0	7,448.4	16,598.5	7,582.0	177.9	178.0	-125.05	-9,176.8	319.2	232.6	-68.2	300.76	0.773 Level 1		
16,600.0	7,448.0	16,698.5	7,582.0	179.8	179.9	-125.13	-9,276.8	319.6	232.8	-71.0	303.77	0.766 Level 1		
16,700.0	7,447.6	16,798.5	7,582.0	181.8	181.8	-125.21	-9,376.8	320.0	233.1	-73.7	306.78	0.760 Level 1		
16,800.0	7,447.2	16,898.5	7,582.0	183.7	183.8	-125.29	-9,476.8	320.5	233.3	-76.5	309.79	0.753 Level 1		
16,900.0	7,446.8	16,998.5	7,582.0	185.6	185.7	-125.37	-9,576.8	320.9	233.5	-79.3	312.79	0.747 Level 1		
17,000.0	7,446.4	17,098.5	7,582.0	187.5	187.6	-125.45	-9,676.8	321.3	233.8	-82.0	315.79	0.740 Level 1		
17,100.0	7,446.0	17,198.5	7,582.0	189.5	189.5	-125.53	-9,776.8	321.7	234.0	-84.8	318.78	0.734 Level 1		
17,200.0	7,445.6	17,298.5	7,582.0	191.4	191.4	-125.61	-9,876.8	322.1	234.3	-87.5	321.76	0.728 Level 1		
17,300.0	7,445.2	17,398.5	7,582.0	193.3	193.4	-125.69	-9,976.8	322.6	234.5	-90.2	324.75	0.722 Level 1		
17,400.0	7,444.8	17,498.5	7,582.0	195.2	195.3	-125.77	-10,076.8	323.0	234.7	-93.0	327.72	0.716 Level 1		
17,500.0	7,444.4	17,598.5	7,582.0	197.1	197.2	-125.84	-10,176.8	323.4	235.0	-95.7	330.70	0.711 Level 1		
17,600.0	7,444.0	17,698.5	7,582.0	199.1	199.1	-125.92	-10,276.8	323.8	235.2	-98.4	333.66	0.705 Level 1		
17,700.0	7,443.6	17,798.5	7,582.0	201.0	201.0	-126.00	-10,376.8	324.3	235.5	-101.2	336.63	0.700 Level 1		
17,800.0	7,443.2	17,898.5	7,582.0	202.9	203.0	-126.08	-10,476.8	324.7	235.7	-103.9	339.59	0.694 Level 1		
17,846.8	7,443.0	17,945.3	7,582.0	203.8	203.9	-126.11	-10,523.6	324.9	235.8	-105.1	340.97	0.692 Level 1, ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.58	5.1	699.5	699.5					
100.0	100.0	99.0	99.0	0.1	0.1	89.58	5.1	699.5	699.5	699.3	0.22	3,127.949		
200.0	200.0	199.0	199.0	0.3	0.3	89.58	5.1	699.5	699.5	698.9	0.67	1,040.915		
300.0	300.0	299.0	299.0	0.6	0.6	89.58	5.1	699.5	699.5	698.4	1.12	623.715		
400.0	400.0	399.0	399.0	0.8	0.8	89.58	5.1	699.5	699.5	698.0	1.57	445.256		
500.0	500.0	499.0	499.0	1.0	1.0	89.58	5.1	699.5	699.5	697.5	2.02	346.200		
600.0	600.0	599.0	599.0	1.2	1.2	89.58	5.1	699.5	699.5	697.1	2.47	283.197		
700.0	700.0	699.0	699.0	1.5	1.5	89.58	5.1	699.5	699.5	696.6	2.92	239.595		
800.0	800.0	799.0	799.0	1.7	1.7	89.58	5.1	699.5	699.5	696.2	3.37	207.628		
900.0	900.0	899.0	899.0	1.9	1.9	89.58	5.1	699.5	699.5	695.7	3.82	183.186		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.58	5.1	699.5	699.5	695.3	4.27	163.893		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.58	5.1	699.5	699.5	694.8	4.72	148.277		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.58	5.1	699.5	699.5	694.4	5.17	135.378		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.58	5.1	699.5	699.5	693.9	5.62	124.543		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.58	5.1	699.5	699.5	693.5	6.07	115.314		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.58	5.1	699.5	699.5	693.0	6.52	107.359		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.58	5.1	699.5	699.5	692.6	6.97	100.430		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.58	5.1	699.5	699.5	692.1	7.42	94.342		
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.58	5.1	699.5	699.5	691.7	7.86	88.949		
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.58	5.1	699.5	699.5	691.2	8.31	84.140		
2,000.0	2,000.0	1,999.0	1,999.0	4.4	4.4	89.58	5.1	699.5	699.5	690.8	8.76	79.824		
2,100.0	2,100.0	2,099.0	2,099.0	4.6	4.6	89.58	5.1	699.5	699.5	690.3	9.21	75.929 CC, ES		
2,200.0	2,200.0	2,184.6	2,184.6	4.8	4.8	89.55	5.5	700.4	700.6	690.9	9.62	72.802		
2,300.0	2,300.0	2,270.0	2,269.9	5.1	5.0	89.47	6.6	703.0	703.7	693.6	10.03	70.174		
2,400.0	2,400.0	2,355.2	2,355.0	5.3	5.2	56.98	8.3	707.4	708.1	697.7	10.43	67.923		
2,500.0	2,499.9	2,440.4	2,439.9	5.5	5.3	56.94	10.9	713.6	713.2	702.4	10.82	65.914		
2,512.9	2,512.8	2,451.3	2,450.8	5.5	5.4	56.94	11.2	714.5	713.9	703.1	10.87	65.671		
2,600.0	2,599.8	2,535.0	2,534.1	5.7	5.6	57.02	14.3	721.9	719.1	707.8	11.24	63.973		
2,700.0	2,699.6	2,634.8	2,633.4	5.9	5.8	57.10	17.9	730.9	725.1	713.4	11.67	62.105		
2,800.0	2,799.4	2,734.6	2,732.8	6.2	6.0	57.19	21.6	739.8	731.0	718.9	12.11	60.356		
2,900.0	2,899.3	2,834.4	2,832.1	6.4	6.3	57.27	25.3	748.8	737.0	724.5	12.55	58.712		
3,000.0	2,999.1	2,934.2	2,931.5	6.6	6.5	57.36	28.9	757.7	743.0	730.0	13.00	57.168		
3,100.0	3,099.0	3,034.0	3,030.8	6.9	6.7	57.44	32.6	766.7	749.0	735.6	13.44	55.716		
3,200.0	3,198.8	3,133.8	3,130.2	7.1	7.0	57.52	36.2	775.6	755.0	741.1	13.89	54.347		
3,300.0	3,298.7	3,233.7	3,229.5	7.3	7.3	57.59	39.9	784.5	761.0	746.6	14.34	53.057		
3,400.0	3,398.5	3,333.5	3,328.8	7.5	7.5	57.67	43.5	793.5	767.0	752.2	14.80	51.838		
3,500.0	3,498.4	3,433.3	3,428.2	7.8	7.8	57.75	47.2	802.4	772.9	757.7	15.25	50.686		
3,600.0	3,598.2	3,533.1	3,527.5	8.0	8.0	57.82	50.9	811.4	778.9	763.2	15.71	49.596		
3,700.0	3,698.0	3,632.9	3,626.9	8.2	8.3	57.90	54.5	820.3	784.9	768.8	16.16	48.562		
3,800.0	3,797.9	3,732.7	3,726.2	8.5	8.5	57.97	58.2	829.3	790.9	774.3	16.62	47.582		
3,900.0	3,897.7	3,832.6	3,825.6	8.7	8.8	58.04	61.8	838.2	796.9	779.8	17.08	46.651 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.15 (Fifth Creek) - Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1365-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
11,100.0	7,470.1	11,657.0	7,308.1	74.8	106.4	65.91	-4,414.8	-301.4	778.9	631.7	147.22	5.291		
11,200.0	7,469.7	11,720.9	7,305.2	76.7	107.9	62.42	-4,448.6	-247.2	697.7	551.6	146.10	4.775		
11,300.0	7,469.3	11,781.9	7,305.3	78.6	109.4	58.58	-4,480.4	-195.1	615.9	472.0	143.96	4.278		
11,400.0	7,468.9	11,835.2	7,305.7	80.5	110.8	54.38	-4,507.8	-149.5	534.9	394.3	140.58	3.805		
11,500.0	7,468.5	11,887.4	7,305.1	82.3	112.1	49.01	-4,534.4	-104.5	455.5	320.9	134.64	3.383		
11,600.0	7,468.1	11,938.2	7,305.2	84.2	113.3	42.57	-4,560.5	-61.0	379.0	253.1	125.83	3.012		
11,700.0	7,467.7	11,983.8	7,305.0	86.1	114.5	35.33	-4,584.3	-22.0	307.6	193.2	114.41	2.689		
11,800.0	7,467.3	12,038.1	7,303.6	88.0	115.8	24.51	-4,612.2	24.5	246.0	150.3	95.72	2.570		
11,900.0	7,466.9	12,094.3	7,303.1	89.9	117.2	11.26	-4,641.2	72.6	201.7	125.4	76.30	2.643		
11,988.5	7,466.6	12,141.1	7,303.7	91.6	118.4	-0.77	-4,665.5	112.6	186.9	116.2	70.74	2.643	CC	
12,000.0	7,466.5	12,147.0	7,303.7	91.8	118.5	-2.31	-4,668.6	117.6	187.2	115.9	71.25	2.627	ES	
12,100.0	7,466.1	12,198.3	7,304.0	93.7	119.8	-15.38	-4,695.3	161.5	209.8	124.0	85.82	2.445		
12,200.0	7,465.7	12,246.5	7,303.8	95.6	121.0	-26.36	-4,720.2	202.7	260.4	153.2	107.16	2.430	SF	
12,300.0	7,465.3	12,296.3	7,302.6	97.5	122.3	-35.72	-4,746.0	245.3	326.4	198.7	127.70	2.556		
12,400.0	7,464.9	12,344.0	7,300.4	99.4	123.5	-42.75	-4,770.9	286.0	400.1	256.6	143.49	2.788		
12,500.0	7,464.5	12,403.4	7,297.2	101.3	125.0	-49.52	-4,801.8	336.6	477.8	319.6	158.21	3.020		
12,600.0	7,464.1	12,463.5	7,295.1	103.2	126.5	-54.86	-4,833.6	387.5	556.8	387.2	169.57	3.284		
12,700.0	7,463.7	12,514.6	7,293.7	105.1	127.8	-58.50	-4,860.7	430.8	637.1	459.5	177.53	3.588		
12,800.0	7,463.3	12,573.1	7,292.1	107.0	129.3	-61.85	-4,892.0	480.1	718.1	533.3	184.79	3.886		
12,900.0	7,462.9	12,605.0	7,291.6	109.0	130.1	-63.44	-4,909.1	507.1	799.9	610.8	189.08	4.231		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 278-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 278-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.15 (Fifth Creek) - Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1339-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
15,400.0	7,452.8	10,752.1	7,266.8	156.8	91.6	71.28	-8,607.8	-428.0	788.7	577.0	211.70	3.726		
15,500.0	7,452.4	10,820.1	7,267.2	158.7	93.3	69.75	-8,656.9	-381.0	721.9	508.9	212.95	3.390		
15,600.0	7,452.0	10,898.3	7,266.5	160.6	95.2	67.52	-8,713.4	-326.9	655.8	442.5	213.32	3.074		
15,700.0	7,451.6	10,974.3	7,265.6	162.6	97.0	64.83	-8,768.0	-274.0	589.9	377.3	212.63	2.774		
15,800.0	7,451.2	11,046.6	7,265.4	164.5	98.8	61.74	-8,819.6	-223.4	524.3	313.6	210.76	2.488		
15,900.0	7,450.8	11,123.8	7,265.0	166.4	100.8	57.51	-8,874.2	-168.8	459.4	253.1	206.25	2.227		
16,000.0	7,450.4	11,199.2	7,265.5	168.3	102.6	52.29	-8,927.2	-115.3	395.6	197.0	198.59	1.992		
16,100.0	7,450.0	11,270.4	7,266.6	170.2	104.4	45.84	-8,976.9	-64.3	333.9	147.3	186.60	1.789		
16,200.0	7,449.6	11,336.7	7,266.9	172.2	106.1	37.94	-9,023.4	-17.0	277.5	108.4	169.10	1.641		
16,300.0	7,449.2	11,409.2	7,267.2	174.1	107.9	26.84	-9,074.6	34.4	229.6	88.0	141.70	1.621		
16,400.0	7,448.8	11,478.8	7,267.4	176.0	109.6	13.54	-9,123.4	84.0	196.1	84.1	111.96	1.752		
16,492.2	7,448.4	11,544.1	7,267.6	177.8	111.2	-0.56	-9,169.1	130.6	184.9	85.3	99.58	1.856 CC		
16,500.0	7,448.4	11,549.5	7,267.6	177.9	111.3	-1.76	-9,172.9	134.4	184.9	85.0	99.99	1.850		
16,600.0	7,448.0	11,617.2	7,267.7	179.8	113.0	-16.30	-9,220.2	182.9	200.4	78.4	122.03	1.642 ES		
16,700.0	7,447.6	11,685.3	7,267.2	181.8	114.7	-29.08	-9,267.4	232.0	238.0	81.0	156.96	1.516 SF		
16,800.0	7,447.2	11,758.0	7,267.3	183.7	116.6	-40.10	-9,317.3	284.8	288.9	99.0	189.92	1.521		
16,900.0	7,446.8	11,826.2	7,268.3	185.6	118.3	-48.16	-9,364.2	334.4	347.1	133.6	213.47	1.626		
17,000.0	7,446.4	11,894.7	7,269.1	187.5	120.0	-54.37	-9,411.2	384.2	409.9	179.1	230.82	1.776		
17,100.0	7,446.0	11,963.1	7,270.0	189.5	121.7	-59.19	-9,458.0	434.0	475.6	231.8	243.81	1.951		
17,200.0	7,445.6	12,034.0	7,270.7	191.4	123.5	-63.09	-9,506.7	485.6	543.0	288.9	254.12	2.137		
17,300.0	7,445.2	12,110.9	7,271.7	193.3	125.4	-66.43	-9,560.0	541.0	610.8	347.9	262.86	2.324		
17,400.0	7,444.8	12,177.3	7,271.3	195.2	127.1	-68.60	-9,606.3	588.5	679.4	410.2	269.16	2.524		
17,500.0	7,444.4	12,249.0	7,270.1	197.1	128.9	-70.48	-9,656.6	639.7	748.4	473.5	274.89	2.723		

Reference Depths are relative to WELL @ 5240.0ft (Original Well Elev)	Coordinates are relative to: Critter Creek 278-1527H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000	Grid Convergence at Surface is: 0.70°



Reference Depths are relative to WELL @ 5240.0ft (Original Well Elev)	Coordinates are relative to: Critter Creek 278-1527H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000	Grid Convergence at Surface is: 0.70°

