

Fifth Creek Energy Company, LLC

Well Name: **Critter Creek 279-1527H**

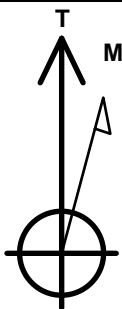
Surface Location: Critter Creek Pad 15-11N-63W
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone
Ground Elevation: 5226.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1578379.19	3300355.15	40.915967	-104.413267	

Original Well Elev WELL @ 5239.0ft (Original Well Elev)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 279'FSL & 1040'FEL, SEC.15	1.0	0.0	0.0	Point
BHL 300'FSL & 1000'FEL, SEC.27	7443.0	-10525.5	135.2	Point
LP 300'FNL & 950' FEL, SEC.22	7483.0	-578.9	93.1	Point



Azimuths to True North
Magnetic North: 7.94°

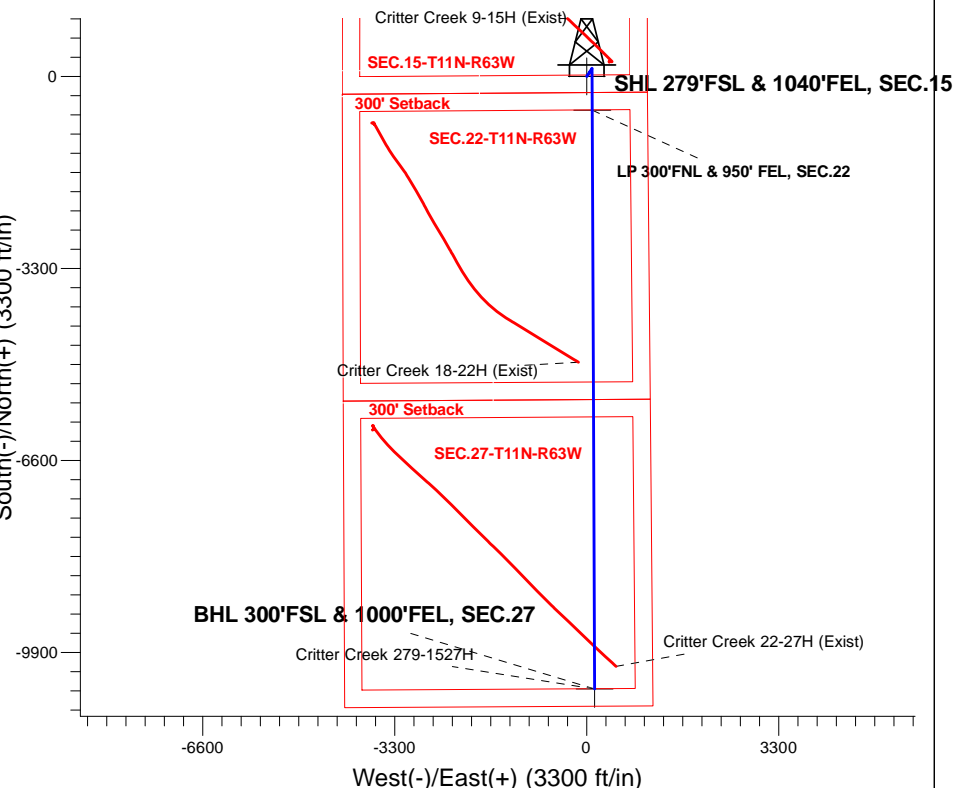
Magnetic Field
Strength: 52831.1snT
Dip Angle: 67.32°
Date: 2/21/2017
Model: IGRF2010

Critter Creek Pad 15-11N-63W
Critter Creek 279-1527H
Plan 1 (Feb 14, 2017)
14:28, February 21 2017

ANNOTATIONS

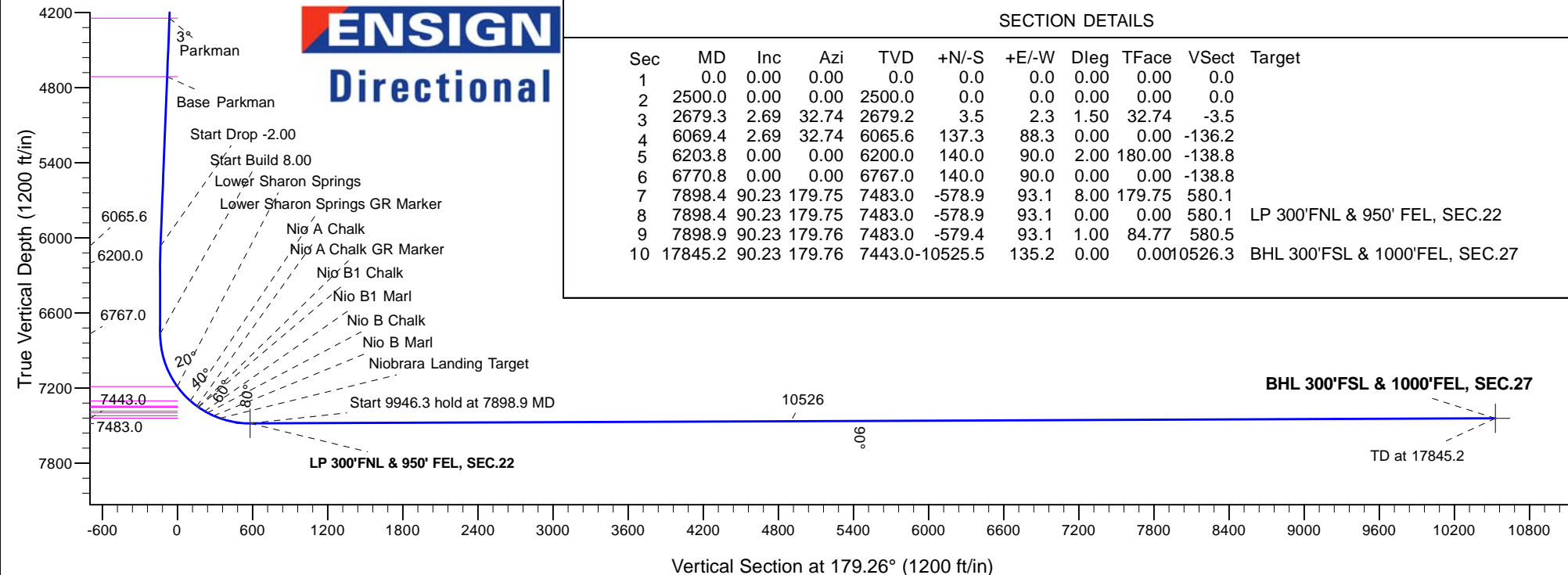
TVD	MD	Annotation
2500.0	2500.0	KOP - Start Build 1.50
6065.6	6069.4	Start Drop -2.00
6200.0	6203.8	Start 567.0 hold at 6203.8 MD
6767.0	6770.8	Start Build 8.00
7483.0	7898.9	Start 9946.3 hold at 7898.9 MD
7443.0	17845.2	TD at 17845.2

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



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
3	2679.3	2.69	32.74	2679.2	3.5	2.3	1.50	32.74	-3.5	
4	6069.4	2.69	32.74	6065.6	137.3	88.3	0.00	0.00	-136.2	
5	6203.8	0.00	0.00	6200.0	140.0	90.0	2.00	180.00	-138.8	
6	6770.8	0.00	0.00	6767.0	140.0	90.0	0.00	0.00	-138.8	
7	7898.4	90.23	179.75	7483.0	-578.9	93.1	8.00	179.75	580.1	
8	7898.4	90.23	179.75	7483.0	-578.9	93.1	0.00	0.00	580.1	LP 300'FNL & 950' FEL, SEC.22
9	7898.9	90.23	179.76	7483.0	-579.4	93.1	1.00	84.77	580.5	
10	17845.2	90.23	179.76	7443.0-10525.5	135.2	0.00	0.00	10526.3		BHL 300'FSL & 1000'FEL, SEC.27





Fifth Creek Energy Company, LLC

Sec.15-T11N-R63W

Critter Creek Pad 15-11N-63W

Critter Creek 279-1527H

Wellbore #1

Plan: Plan 1 (Feb 14, 2017)

Standard Planning Report

21 February, 2017

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 279-1527H	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	Crittter Creek 279-1527H					
Well Position	+N/-S	-0.8 ft	Northing:	1,578,379.18 usft	Latitude:	40.915967
	+E/-W	-125.2 ft	Easting:	3,300,355.16 usft	Longitude:	-104.413267
Position Uncertainty		0.0 ft	Wellhead Elevation:	5,239.0 ft	Ground Level:	5,226.0 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) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	179.26

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	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,679.3	2.69	32.74	2,679.2	3.5	2.3	1.50	1.50	0.00	32.74	
6,069.4	2.69	32.74	6,065.6	137.3	88.3	0.00	0.00	0.00	0.00	
6,203.8	0.00	0.00	6,200.0	140.0	90.0	2.00	-2.00	0.00	180.00	
6,770.8	0.00	0.00	6,767.0	140.0	90.0	0.00	0.00	0.00	0.00	
7,898.4	90.23	179.75	7,483.0	-578.9	93.1	8.00	8.00	0.00	179.75	
7,898.4	90.23	179.75	7,483.0	-578.9	93.1	0.00	0.00	0.00	0.00	LP 300'FNL & 950' FE
7,898.9	90.23	179.76	7,483.0	-579.4	93.1	1.00	0.09	1.00	84.77	
17,845.2	90.23	179.76	7,443.0	-10,525.5	135.2	0.00	0.00	0.00	0.00	BHL 300'FSL & 1000' FE

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 279-1527H	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
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.50									
2,600.0	1.50	32.74	2,600.0	1.1	0.7	-1.1	1.50	1.50	0.00
2,679.3	2.69	32.74	2,679.2	3.5	2.3	-3.5	1.50	1.50	0.00
2,700.0	2.69	32.74	2,699.9	4.4	2.8	-4.3	0.00	0.00	0.00
2,800.0	2.69	32.74	2,799.8	8.3	5.3	-8.2	0.00	0.00	0.00
2,900.0	2.69	32.74	2,899.7	12.3	7.9	-12.1	0.00	0.00	0.00
3,000.0	2.69	32.74	2,999.6	16.2	10.4	-16.1	0.00	0.00	0.00
3,100.0	2.69	32.74	3,099.5	20.1	12.9	-20.0	0.00	0.00	0.00
3,200.0	2.69	32.74	3,199.4	24.1	15.5	-23.9	0.00	0.00	0.00
3,300.0	2.69	32.74	3,299.3	28.0	18.0	-27.8	0.00	0.00	0.00
3,400.0	2.69	32.74	3,399.1	32.0	20.6	-31.7	0.00	0.00	0.00
3,500.0	2.69	32.74	3,499.0	35.9	23.1	-35.6	0.00	0.00	0.00
3,600.0	2.69	32.74	3,598.9	39.9	25.6	-39.5	0.00	0.00	0.00
3,700.0	2.69	32.74	3,698.8	43.8	28.2	-43.5	0.00	0.00	0.00
3,800.0	2.69	32.74	3,798.7	47.8	30.7	-47.4	0.00	0.00	0.00
3,900.0	2.69	32.74	3,898.6	51.7	33.2	-51.3	0.00	0.00	0.00
4,000.0	2.69	32.74	3,998.5	55.7	35.8	-55.2	0.00	0.00	0.00
4,100.0	2.69	32.74	4,098.4	59.6	38.3	-59.1	0.00	0.00	0.00
4,200.0	2.69	32.74	4,198.3	63.6	40.9	-63.0	0.00	0.00	0.00
4,247.8	2.69	32.74	4,246.0	65.4	42.1	-64.9	0.00	0.00	0.00
Parkman									
4,300.0	2.69	32.74	4,298.1	67.5	43.4	-66.9	0.00	0.00	0.00
4,400.0	2.69	32.74	4,398.0	71.5	45.9	-70.9	0.00	0.00	0.00
4,500.0	2.69	32.74	4,497.9	75.4	48.5	-74.8	0.00	0.00	0.00
4,600.0	2.69	32.74	4,597.8	79.3	51.0	-78.7	0.00	0.00	0.00
4,700.0	2.69	32.74	4,697.7	83.3	53.5	-82.6	0.00	0.00	0.00
4,715.3	2.69	32.74	4,713.0	83.9	53.9	-83.2	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 279-1527H	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	2.69	32.74	4,797.6	87.2	56.1	-86.5	0.00	0.00	0.00
4,900.0	2.69	32.74	4,897.5	91.2	58.6	-90.4	0.00	0.00	0.00
5,000.0	2.69	32.74	4,997.4	95.1	61.2	-94.3	0.00	0.00	0.00
5,100.0	2.69	32.74	5,097.3	99.1	63.7	-98.3	0.00	0.00	0.00
5,200.0	2.69	32.74	5,197.2	103.0	66.2	-102.2	0.00	0.00	0.00
5,300.0	2.69	32.74	5,297.0	107.0	68.8	-106.1	0.00	0.00	0.00
5,400.0	2.69	32.74	5,396.9	110.9	71.3	-110.0	0.00	0.00	0.00
5,500.0	2.69	32.74	5,496.8	114.9	73.8	-113.9	0.00	0.00	0.00
5,600.0	2.69	32.74	5,596.7	118.8	76.4	-117.8	0.00	0.00	0.00
5,700.0	2.69	32.74	5,696.6	122.8	78.9	-121.7	0.00	0.00	0.00
5,800.0	2.69	32.74	5,796.5	126.7	81.5	-125.7	0.00	0.00	0.00
5,900.0	2.69	32.74	5,896.4	130.7	84.0	-129.6	0.00	0.00	0.00
6,000.0	2.69	32.74	5,996.3	134.6	86.5	-133.5	0.00	0.00	0.00
6,069.4	2.69	32.74	6,065.6	137.3	88.3	-136.2	0.00	0.00	0.00
Start Drop -2.00									
6,100.0	2.08	32.74	6,096.2	138.4	89.0	-137.3	2.00	-2.00	0.00
6,200.0	0.08	32.74	6,196.2	140.0	90.0	-138.8	2.00	-2.00	0.00
6,203.8	0.00	32.74	6,200.0	140.0	90.0	-138.8	2.00	-2.00	0.00
Start 567.0 hold at 6203.8 MD									
6,300.0	0.00	0.00	6,296.2	140.0	90.0	-138.8	0.00	0.00	0.00
6,400.0	0.00	0.00	6,396.2	140.0	90.0	-138.8	0.00	0.00	0.00
6,500.0	0.00	0.00	6,496.2	140.0	90.0	-138.8	0.00	0.00	0.00
6,600.0	0.00	0.00	6,596.2	140.0	90.0	-138.8	0.00	0.00	0.00
6,700.0	0.00	0.00	6,696.2	140.0	90.0	-138.8	0.00	0.00	0.00
6,770.8	0.00	0.00	6,767.0	140.0	90.0	-138.8	0.00	0.00	0.00
Start Build 8.00									
6,800.0	2.34	179.75	6,796.1	139.4	90.0	-138.2	8.00	8.00	0.00
6,900.0	10.34	179.75	6,895.5	128.4	90.1	-127.2	8.00	8.00	0.00
7,000.0	18.34	179.75	6,992.3	103.6	90.2	-102.5	8.00	8.00	0.00
7,100.0	26.34	179.75	7,084.7	65.7	90.3	-64.5	8.00	8.00	0.00
7,200.0	34.34	179.75	7,170.9	15.2	90.5	-14.0	8.00	8.00	0.00
7,220.9	36.02	179.75	7,188.0	3.1	90.6	-2.0	8.00	8.00	0.00
Lower Sharon Springs									
7,300.0	42.34	179.75	7,249.3	-46.8	90.8	48.0	8.00	8.00	0.00
7,376.6	48.47	179.75	7,303.0	-101.3	91.0	102.5	8.00	8.00	0.00
Lower Sharon Springs GR Marker									
7,400.0	50.35	179.75	7,318.3	-119.1	91.1	120.3	8.00	8.00	0.00
7,443.5	53.83	179.75	7,345.0	-153.4	91.3	154.6	8.00	8.00	0.00
Nio A Chalk									
7,455.5	54.79	179.75	7,352.0	-163.2	91.3	164.4	8.00	8.00	0.00
Nio A Chalk GR Marker									
7,459.0	55.07	179.75	7,354.0	-166.0	91.3	167.2	8.00	8.00	0.00
Nio B1 Chalk									
7,500.0	58.35	179.75	7,376.5	-200.3	91.5	201.4	8.00	8.00	0.00
7,516.5	59.67	179.75	7,385.0	-214.5	91.5	215.6	8.00	8.00	0.00
Nio B1 Marl									
7,543.1	61.80	179.75	7,398.0	-237.7	91.6	238.8	8.00	8.00	0.00
Nio B Chalk									
7,597.9	66.18	179.75	7,422.0	-286.8	91.8	288.0	8.00	8.00	0.00
Nio B Marl									
7,600.0	66.35	179.75	7,422.9	-288.8	91.8	290.0	8.00	8.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 279-1527H	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)
7,652.1	70.52	179.75	7,442.0	-337.2	92.1	338.4	8.00	8.00	0.00
Niobrara Landing Target									
7,700.0	74.35	179.75	7,456.5	-382.9	92.3	384.0	8.00	8.00	0.00
7,800.0	82.35	179.75	7,476.6	-480.8	92.7	481.9	8.00	8.00	0.00
7,898.4	90.23	179.75	7,483.0	-578.9	93.1	580.1	8.00	8.00	0.00
7,898.9	90.23	179.76	7,483.0	-579.4	93.1	580.5	1.00	0.09	1.00
Start 9946.3 hold at 7898.9 MD									
7,900.0	90.23	179.76	7,483.0	-580.5	93.1	581.6	0.00	0.00	0.00
8,000.0	90.23	179.76	7,482.6	-680.5	93.5	681.6	0.00	0.00	0.00
8,100.0	90.23	179.76	7,482.2	-780.5	94.0	781.6	0.00	0.00	0.00
8,200.0	90.23	179.76	7,481.8	-880.5	94.4	881.6	0.00	0.00	0.00
8,300.0	90.23	179.76	7,481.4	-980.5	94.8	981.6	0.00	0.00	0.00
8,400.0	90.23	179.76	7,481.0	-1,080.5	95.2	1,081.6	0.00	0.00	0.00
8,500.0	90.23	179.76	7,480.6	-1,180.5	95.6	1,181.6	0.00	0.00	0.00
8,600.0	90.23	179.76	7,480.2	-1,280.5	96.1	1,281.6	0.00	0.00	0.00
8,700.0	90.23	179.76	7,479.8	-1,380.5	96.5	1,381.6	0.00	0.00	0.00
8,800.0	90.23	179.76	7,479.4	-1,480.5	96.9	1,481.6	0.00	0.00	0.00
8,900.0	90.23	179.76	7,479.0	-1,580.5	97.3	1,581.6	0.00	0.00	0.00
9,000.0	90.23	179.76	7,478.6	-1,680.5	97.8	1,681.6	0.00	0.00	0.00
9,100.0	90.23	179.76	7,478.2	-1,780.5	98.2	1,781.6	0.00	0.00	0.00
9,200.0	90.23	179.76	7,477.8	-1,880.4	98.6	1,881.6	0.00	0.00	0.00
9,300.0	90.23	179.76	7,477.4	-1,980.4	99.0	1,981.6	0.00	0.00	0.00
9,400.0	90.23	179.76	7,477.0	-2,080.4	99.5	2,081.6	0.00	0.00	0.00
9,500.0	90.23	179.76	7,476.6	-2,180.4	99.9	2,181.5	0.00	0.00	0.00
9,600.0	90.23	179.76	7,476.2	-2,280.4	100.3	2,281.5	0.00	0.00	0.00
9,700.0	90.23	179.76	7,475.8	-2,380.4	100.7	2,381.5	0.00	0.00	0.00
9,800.0	90.23	179.76	7,475.4	-2,480.4	101.2	2,481.5	0.00	0.00	0.00
9,900.0	90.23	179.76	7,475.0	-2,580.4	101.6	2,581.5	0.00	0.00	0.00
10,000.0	90.23	179.76	7,474.5	-2,680.4	102.0	2,681.5	0.00	0.00	0.00
10,100.0	90.23	179.76	7,474.1	-2,780.4	102.4	2,781.5	0.00	0.00	0.00
10,200.0	90.23	179.76	7,473.7	-2,880.4	102.8	2,881.5	0.00	0.00	0.00
10,300.0	90.23	179.76	7,473.3	-2,980.4	103.3	2,981.5	0.00	0.00	0.00
10,400.0	90.23	179.76	7,472.9	-3,080.4	103.7	3,081.5	0.00	0.00	0.00
10,500.0	90.23	179.76	7,472.5	-3,180.4	104.1	3,181.5	0.00	0.00	0.00
10,600.0	90.23	179.76	7,472.1	-3,280.4	104.5	3,281.5	0.00	0.00	0.00
10,700.0	90.23	179.76	7,471.7	-3,380.4	105.0	3,381.5	0.00	0.00	0.00
10,800.0	90.23	179.76	7,471.3	-3,480.4	105.4	3,481.5	0.00	0.00	0.00
10,900.0	90.23	179.76	7,470.9	-3,580.4	105.8	3,581.5	0.00	0.00	0

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 279-1527H	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)
12,600.0	90.23	179.76	7,464.1	-5,280.4	113.0	5,281.4	0.00	0.00	0.00
12,700.0	90.23	179.76	7,463.7	-5,380.4	113.4	5,381.4	0.00	0.00	0.00
12,800.0	90.23	179.76	7,463.3	-5,480.4	113.9	5,481.4	0.00	0.00	0.00
12,900.0	90.23	179.76	7,462.9	-5,580.4	114.3	5,581.4	0.00	0.00	0.00
13,000.0	90.23	179.76	7,462.5	-5,680.4	114.7	5,681.4	0.00	0.00	0.00
13,100.0	90.23	179.76	7,462.1	-5,780.4	115.1	5,781.4	0.00	0.00	0.00
13,200.0	90.23	179.76	7,461.7	-5,880.4	115.5	5,881.4	0.00	0.00	0.00
13,300.0	90.23	179.76	7,461.3	-5,980.4	116.0	5,981.4	0.00	0.00	0.00
13,400.0	90.23	179.76	7,460.9	-6,080.4	116.4	6,081.4	0.00	0.00	0.00
13,500.0	90.23	179.76	7,460.5	-6,180.4	116.8	6,181.4	0.00	0.00	0.00
13,600.0	90.23	179.76	7,460.1	-6,280.4	117.2	6,281.4	0.00	0.00	0.00
13,700.0	90.23	179.76	7,459.7	-6,380.4	117.7	6,381.4	0.00	0.00	0.00
13,800.0	90.23	179.76	7,459.3	-6,480.4	118.1	6,481.4	0.00	0.00	0.00
13,900.0	90.23	179.76	7,458.9	-6,580.4	118.5	6,581.3	0.00	0.00	0.00
14,000.0	90.23	179.76	7,458.5	-6,680.4	118.9	6,681.3	0.00	0.00	0.00
14,100.0	90.23	179.76	7,458.1	-6,780.4	119.4	6,781.3	0.00	0.00	0.00
14,200.0	90.23	179.76	7,457.7	-6,880.4	119.8	6,881.3	0.00	0.00	0.00
14,300.0	90.23	179.76	7,457.3	-6,980.4	120.2	6,981.3	0.00	0.00	0.00
14,400.0	90.23	179.76	7,456.9	-7,080.4	120.6	7,081.3	0.00	0.00	0.00
14,500.0	90.23	179.76	7,456.5	-7,180.4	121.0	7,181.3	0.00	0.00	0.00
14,600.0	90.23	179.76	7,456.1	-7,280.4	121.5	7,281.3	0.00	0.00	0.00
14,700.0	90.23	179.76	7,455.6	-7,380.4	121.9	7,381.3	0.00	0.00	0.00
14,800.0	90.23	179.76	7,455.2	-7,480.4	122.3	7,481.3	0.00	0.00	0.00
14,900.0	90.23	179.76	7,454.8	-7,580.4	122.7	7,581.3	0.00	0.00	0.00
15,000.0	90.23	179.76	7,454.4	-7,680.3	123.2	7,681.3	0.00	0.00	0.00
15,100.0	90.23	179.76	7,454.0	-7,780.3	123.6	7,781.3	0.00	0.00	0.00
15,200.0	90.23	179.76	7,453.6	-7,880.3	124.0	7,881.3	0.00	0.00	0.00
15,300.0	90.23	179.76	7,453.2	-7,980.3	124.4	7,981.3	0.00	0.00	0.00
15,400.0	90.23	179.76	7,452.8	-8,080.3	124.9	8,081.3	0.00	0.00	0.00
15,500.0	90.23	179.76	7,452.4	-8,180.3	125.3	8,181.3	0.00	0.00	0.00
15,600.0	90.23	179.76	7,452.0	-8,280.3	125.7	8,281.3	0.00	0.00	0.00
15,700.0	90.23	179.76	7,451.6	-8,380.3	126.1	8,381.3	0.00	0.00	0.00
15,800.0	90.23	179.76	7,451.2	-8,480.3	126.6	8,481.3	0.00	0.00	0.00
15,900.0	90.23	179.76	7,450.8	-8,580.3	127.0	8,581.3	0.00	0.00	0.00
16,000.0	90.23	179.76	7,450.4	-8,680.3	127.4	8,681.3	0.00	0.00	0.00
16,100.0	90.23	179.76	7,450.0	-8,780.3	127.8	8,781.2	0.00	0.00	0.00
16,200.0	90.23	179.76	7,449.6	-8,880.3	128.2	8,881.2	0.00	0.00	0.00
16,300.0	90.23	179.76	7,449.2	-8,980.3	128.7	8,981.2	0.00	0.00	0.00
16,400.0	90.23	179.76	7,448.8	-9,080.3	129.1	9,081.2	0.00	0.00	0.00
16,500.0	90.23	179.76	7,448.4	-9,180.3	129.5	9,181.2	0.00	0.00	0.00
16,600.0	90.23	179.76	7,448.0	-9,280.3	129.9	9,281.2	0.00	0.00	0.00
16,700.0	90.23	179.76	7,447.6	-9,380.3	130.4	9,381.2	0.00	0.00	0.00
16,800.0	90.23	179.76	7,447.2	-9,480.3	130.8	9,481.2	0.00	0.00	0.00
16,900.0	90.23	179.76	7,446.8	-9,580.3	131.2	9,581.2	0.00	0.00	0.00
17,000.0	90.23	179.76	7,446.4	-9,680.3	131.6	9,681.2	0.00	0.00	0.00
17,100.0	90.23	179.76	7,446.0	-9,780.3	132.1	9,781.2	0.00	0.00	0.00
17,200.0	90.23	179.76	7,445.6	-9,880.3	132.5	9,881.2	0.00	0.00	0.00
17,300.0	90.23	179.76	7,445.2	-9,980.3	132.9	9,981.2	0.00	0.00	0.00
17,400.0	90.23	179.76	7,444.8	-10,080.3	133.3	10,081.2	0.00	0.00	0.00
17,500.0	90.23	179.76	7,444.4	-10,180.3	133.7	10,181.2	0.00	0.00	0.00
17,600.0	90.23	179.76	7,444.0	-10,280.3	134.2	10,281.2	0.00	0.00	0.00
17,700.0	90.23	179.76	7,443.6	-10,380.3	134.6	10,381.2	0.00	0.00	0.00
17,800.0	90.23	179.76	7,443.2	-10,480.3	135.0	10,481.2	0.00	0.00	0.00
17,845.2	90.23	179.76	7,443.0	-10,525.5	135.2	10,526.3	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 279-1527H	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)
TD at 17845.2									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL 279'FSL & 1040'FE - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,578,379.21	3,300,355.16	40.915967	-104.413267
BHL 300'FSL & 1000'FE - plan hits target center - Point	0.00	0.00	7,443.0	-10,525.5	135.2	1,567,855.92	3,300,619.35	40.887078	-104.412778
LP 300'FNL & 950' FEL, - plan hits target center - Point	0.00	0.00	7,483.0	-578.9	93.1	1,577,801.44	3,300,455.35	40.914378	-104.412930

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 (°)
4,247.8	4,246.0	Parkman		0.00	
4,715.3	4,713.0	Base Parkman		0.00	
7,220.9	7,188.0	Lower Sharon Springs		0.00	
7,376.6	7,303.0	Lower Sharon Springs GR Marker		0.00	
7,443.5	7,345.0	Nio A Chalk		0.00	
7,455.5	7,352.0	Nio A Chalk GR Marker		0.00	
7,459.0	7,354.0	Nio B1 Chalk		0.00	
7,516.5	7,385.0	Nio B1 Marl		0.00	
7,543.1	7,398.0	Nio B Chalk		0.00	
7,597.9	7,422.0	Nio B Marl		0.00	
7,652.1	7,442.0	Niobrara Landing Target		0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 279-1527H	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)	
2,500.0	2,500.0	0.0	0.0	KOP - Start Build 1.50
6,069.4	6,065.6	3.5	2.3	Start Drop -2.00
6,203.8	6,200.0	137.3	88.3	Start 567.0 hold at 6203.8 MD
6,770.8	6,767.0	140.0	90.0	Start Build 8.00
7,898.9	7,483.0	140.0	90.0	Start 9946.3 hold at 7898.9 MD
17,845.2	7,443.0	-579.4	93.1	TD at 17845.2



Fifth Creek Energy Company, LLC

**Sec.15-T11N-R63W
Crittter Creek Pad 15-11N-63W
Crittter Creek 279-1527H**

**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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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	17,845.2	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,	2,266.3	2,267.3	624.9	615.0	62.710	CC
Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,500.0	2,499.5	625.2	614.2	57.209	ES
Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,850.0	7,500.0	776.0	739.3	21.182	SF
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,398.5	2,398.5	24.6	14.0	2.333	CC
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,500.0	2,499.9	24.9	14.0	2.277	ES, SF
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	1,500.0	1,500.0	125.2	118.7	19.208	CC, ES
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	7,700.0	7,593.6	502.2	466.0	13.894	SF
Critter Creek 278-1527H - Wellbore #1 - Plan 1 (Feb 14,	5,351.1	5,368.6	632.0	607.9	26.247	CC
Critter Creek 278-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,845.2	17,845.4	650.6	242.9	1.596	ES, SF
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	1,700.0	1,700.0	99.8	92.4	13.452	CC, ES
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	17,845.2	17,884.8	649.5	241.5	1.592	SF
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,900.0	1,900.0	75.5	67.1	9.073	CC
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,000.0	1,999.4	75.8	67.1	8.682	ES
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,700.9	7,618.9	196.4	160.0	5.403	SF
Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,700.2	7,620.9	562.7	526.4	15.497	CC, ES
Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,800.0	7,557.2	567.6	530.4	15.252	SF
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,666.0	1,668.0	674.7	667.4	92.817	CC
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,700.0	1,700.0	674.7	667.3	90.960	ES
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	3,000.0	2,904.5	796.9	783.9	61.103	SF
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,466.0	1,468.0	700.1	693.7	109.909	CC
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,500.0	700.1	693.6	107.407	ES
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,500.0	2,407.9	789.0	778.2	72.913	SF
Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14,	6,846.7	6,851.6	459.5	429.1	15.104	CC
Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,845.2	17,944.0	480.4	86.9	1.221	Level 2, ES, SF
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,100.0	2,100.0	50.0	40.8	5.428	CC
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,845.2	17,957.3	330.4	-44.6	0.881	Level 1, ES, SF
Existing Wells Sec.15 (Fifth Creek)						
Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1	12,233.5	12,605.0	322.7	163.5	2.028	CC, ES, SF
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	16,900.0	12,291.3	240.6	69.7	1.408	Level 3, SF
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	17,000.0	12,360.2	202.0	65.3	1.478	Level 3, ES
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	17,113.3	12,438.0	184.2	73.4	1.662	CC
Critter Creek 9-15H (Exist) - Wellbore #1 - Wellbore #1	6,972.3	7,044.4	359.2	330.9	12.700	CC, ES, SF

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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)	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	1.0	1.0	0.0	0.0	-90.47	-5.1	-624.9	624.9					
100.0	100.0	101.0	101.0	0.1	0.1	-90.47	-5.1	-624.9	624.9	624.7	0.23	2,752.811		
200.0	200.0	201.0	201.0	0.3	0.3	-90.47	-5.1	-624.9	624.9	624.2	0.68	923.701		
300.0	300.0	301.0	301.0	0.6	0.6	-90.47	-5.1	-624.9	624.9	623.8	1.13	554.958		
400.0	400.0	401.0	401.0	0.8	0.8	-90.47	-5.1	-624.9	624.9	623.4	1.58	396.625		
500.0	500.0	501.0	501.0	1.0	1.0	-90.47	-5.1	-624.9	624.9	622.9	2.03	308.584		
600.0	600.0	601.0	601.0	1.2	1.2	-90.47	-5.1	-624.9	624.9	622.5	2.47	252.529		
700.0	700.0	701.0	701.0	1.5	1.5	-90.47	-5.1	-624.9	624.9	622.0	2.92	213.708		
800.0	800.0	801.0	801.0	1.7	1.7	-90.47	-5.1	-624.9	624.9	621.6	3.37	185.232		
900.0	900.0	901.0	901.0	1.9	1.9	-90.47	-5.1	-624.9	624.9	621.1	3.82	163.453		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.47	-5.1	-624.9	624.9	620.7	4.27	146.257		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.47	-5.1	-624.9	624.9	620.2	4.72	132.334		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.47	-5.1	-624.9	624.9	619.8	5.17	120.832		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.47	-5.1	-624.9	624.9	619.3	5.62	111.169		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.47	-5.1	-624.9	624.9	618.9	6.07	102.937		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	-90.47	-5.1	-624.9	624.9	618.4	6.52	95.841		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	-90.47	-5.1	-624.9	624.9	618.0	6.97	89.659		
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	-90.47	-5.1	-624.9	624.9	617.5	7.42	84.227		
1,800.0	1,800.0	1,801.0	1,801.0	3.9	3.9	-90.47	-5.1	-624.9	624.9	617.1	7.87	79.416		
1,900.0	1,900.0	1,901.0	1,901.0	4.2	4.2	-90.47	-5.1	-624.9	624.9	616.6	8.32	75.124		
2,000.0	2,000.0	2,001.0	2,001.0	4.4	4.4	-90.47	-5.1	-624.9	624.9	616.2	8.77	71.272		
2,100.0	2,100.0	2,101.0	2,101.0	4.6	4.6	-90.47	-5.1	-624.9	624.9	615.7	9.22	67.797		
2,200.0	2,200.0	2,201.0	2,201.0	4.8	4.8	-90.47	-5.1	-624.9	624.9	615.3	9.67	64.644		
2,266.3	2,266.3	2,267.3	2,267.3	5.0	5.0	-90.47	-5.1	-624.9	624.9	615.0	9.97	62.710 CC		
2,300.0	2,300.0	2,301.0	2,301.0	5.1	5.1	-90.47	-5.1	-624.9	624.9	614.8	10.12	61.773		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-90.55	-6.0	-625.0	625.0	614.4	10.53	59.327		
2,500.0	2,500.0	2,499.5	2,499.5	5.5	5.4	-90.80	-8.7	-625.1	625.2	614.2	10.93	57.209 ES		
2,600.0	2,600.0	2,598.5	2,598.4	5.7	5.6	-124.03	-13.2	-625.3	626.2	614.9	11.32	55.326		
2,679.3	2,679.2	2,676.7	2,676.4	5.9	5.7	-124.66	-18.1	-625.6	628.3	616.6	11.63	54.024		
2,700.0	2,699.9	2,697.1	2,696.7	6.0	5.8	-124.87	-19.5	-625.7	628.9	617.2	11.71	53.706		
2,800.0	2,799.8	2,795.2	2,794.5	6.2	5.9	-125.93	-27.5	-626.1	632.5	620.4	12.11	52.220		
2,900.0	2,899.7	2,892.8	2,891.6	6.4	6.1	-127.13	-37.2	-626.6	636.5	624.0	12.52	50.831		
3,000.0	2,999.6	2,989.9	2,988.1	6.6	6.3	-128.46	-48.6	-627.2	641.0	628.1	12.94	49.532		
3,100.0	3,099.5	3,086.4	3,083.7	6.8	6.5	-129.92	-61.6	-627.9	646.3	632.9	13.37	48.323		
3,200.0	3,199.4	3,182.3	3,178.5	7.1	6.8	-131.48	-76.2	-628.7	652.3	638.5	13.82	47.202		
3,300.0	3,299.3	3,277.5	3,272.3	7.3	7.0	-133.15	-92.3	-629.5	659.2	645.0	14.28	46.170		
3,400.0	3,399.1	3,372.0	3,365.1	7.5	7.3	-134.90	-109.9	-630.5	667.2	652.5	14.75	45.228		
3,500.0	3,499.0	3,465.6	3,456.8	7.7	7.6	-136.72	-128.9	-631.5	676.4	661.2	15.24	44.378		
3,600.0	3,598.9	3,558.5	3,547.4	8.0	7.8	-138.61	-149.4	-632.6	686.9	671.1	15.74	43.627		
3,700.0	3,698.8	3,653.6	3,639.9	8.2	8.2	-140.57	-171.4	-633.7	698.6	682.3	16.27	42.940		
3,800.0	3,798.7	3,749.8	3,733.4	8.4	8.5	-142.50	-193.8	-634.9	711.2	694.4	16.80	42.323		
3,900.0	3,898.6	3,846.0	3,827.0	8.7	8.9	-144.36	-216.2	-636.1	724.6	707.3	17.34	41.780		
4,000.0	3,998.5	3,942.2	3,920.5	8.9	9.2	-146.16	-238.6	-637.3	738.8	720.9	17.89	41.305		
4,100.0	4,098.4	4,038.4	4,014.1	9.1	9.6	-147.89	-261.0	-638.5	753.7	735.3	18.43	40.895		
4,200.0	4,198.3	4,134.6	4,107.6	9.4	10.0	-149.56	-283.4	-639.7	769.3	750.4	18.98	40.544		
4,300.0	4,298.1	4,230.8	4,201.1	9.6	10.4	-151.16	-305.7	-640.9	785.6	766.1	19.52	40.247		
7,250.0	7,211.2	7,923.8	7,481.8	15.8	17.9	101.94	-28.4	-660.4	798.1	764.8	33.36	23.928		
7,300.0	7,249.3	7,879.5	7,477.9	15.9	17.8	100.31	-72.5	-660.5	785.4	752.1	33.36	23.541		
7,350.0	7,285.0	7,838.1	7,471.7	16.0	17.7	98.68	-113.4	-660.6	774.8	741.4	33.44	23.168		
7,400.0	7,318.3	7,799.1	7,463.8	16.1	17.6	97.02	-151.6	-660.7	766.3	732.7	33.59	22.813		
7,450.0	7,348.8	7,762.0	7,454.3	16.3	17.6	95.32	-187.5	-660.8	759.8	726.0	33.80	22.478		
7,500.0	7,376.5	7,726.3	7,443.5	16.6	17.6	93.56	-221.5	-660.8	755.5	721.4	34.07	22.174		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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		
7,550.0	7,401.2	7,691.8	7,431.4	16.8	17.6	91.73	-253.8	-660.9	753.2	718.8	34.38	21.905		
7,583.7	7,416.2	7,669.1	7,422.6	17.0	17.6	90.46	-274.7	-661.0	752.8	718.1	34.62	21.741		
7,600.0	7,422.9	7,658.4	7,418.2	17.1	17.6	89.84	-284.5	-661.0	752.9	718.1	34.74	21.674		
7,650.0	7,441.3	7,625.7	7,404.0	17.5	17.7	87.88	-313.9	-661.0	754.4	719.3	35.11	21.483		
7,700.0	7,456.5	7,593.8	7,388.8	17.9	17.7	85.88	-342.0	-661.1	757.6	722.1	35.50	21.340		
7,750.0	7,468.3	7,562.4	7,372.6	18.3	17.8	83.84	-368.9	-661.2	762.4	726.5	35.89	21.241		
7,800.0	7,476.6	7,531.6	7,355.6	18.8	17.9	81.77	-394.6	-661.2	768.6	732.3	36.27	21.188		
7,850.0	7,481.6	7,500.0	7,337.1	19.3	18.0	79.63	-420.1	-661.3	776.0	739.3	36.63	21.182 SF		
7,898.4	7,483.0	7,472.1	7,319.8	19.9	18.0	77.67	-442.0	-661.3	784.1	747.2	36.97	21.210		
7,898.4	7,483.0	7,472.1	7,319.8	19.9	18.0	77.67	-442.0	-661.3	784.1	747.2	36.97	21.210		
7,898.9	7,483.0	7,471.8	7,319.6	19.9	18.0	77.66	-442.2	-661.3	784.2	747.2	36.97	21.210		
7,900.0	7,483.0	7,471.2	7,319.2	19.9	18.0	77.63	-442.8	-661.3	784.4	747.4	36.98	21.210		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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	89.99	0.0	24.6	24.6					
100.0	100.0	100.0	100.0	0.1	0.1	89.99	0.0	24.6	24.6	24.4	0.22	109.439		
200.0	200.0	200.0	200.0	0.3	0.3	89.99	0.0	24.6	24.6	23.9	0.67	36.480		
300.0	300.0	300.0	300.0	0.6	0.6	89.99	0.0	24.6	24.6	23.5	1.12	21.888		
400.0	400.0	400.0	400.0	0.8	0.8	89.99	0.0	24.6	24.6	23.0	1.57	15.634		
500.0	500.0	500.0	500.0	1.0	1.0	89.99	0.0	24.6	24.6	22.6	2.02	12.160		
600.0	600.0	600.0	600.0	1.2	1.2	89.99	0.0	24.6	24.6	22.1	2.47	9.949		
700.0	700.0	700.0	700.0	1.5	1.5	89.99	0.0	24.6	24.6	21.7	2.92	8.418		
800.0	800.0	800.0	800.0	1.7	1.7	89.99	0.0	24.6	24.6	21.2	3.37	7.296		
900.0	900.0	900.0	900.0	1.9	1.9	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	0.0	24.6	24.6	14.5	10.11	2.432		
2,398.5	2,398.5	2,398.5	2,398.5	5.3	5.3	92.95	-1.3	24.5	24.6	14.0	10.53	2.333 CC		
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	93.04	-1.3	24.5	24.6	14.0	10.53	2.332		
2,500.0	2,500.0	2,499.9	2,499.8	5.5	5.4	102.10	-5.2	24.3	24.9	14.0	10.93	2.277 ES, SF		
2,600.0	2,600.0	2,599.4	2,599.1	5.7	5.6	86.03	-11.7	24.0	26.6	15.3	11.32	2.349		
2,679.3	2,679.2	2,677.8	2,677.1	5.9	5.7	103.14	-18.6	23.6	30.9	19.2	11.64	2.652		
2,700.0	2,699.9	2,698.1	2,697.4	6.0	5.8	107.44	-20.7	23.5	32.6	20.9	11.72	2.783		
2,800.0	2,799.8	2,796.0	2,794.6	6.2	6.0	123.44	-32.1	22.9	44.4	32.3	12.12	3.661		
2,900.0	2,899.7	2,893.1	2,890.7	6.4	6.2	133.07	-45.9	22.2	60.6	48.0	12.53	4.833		
3,000.0	2,999.6	2,989.2	2,985.5	6.6	6.4	138.90	-61.9	21.4	80.1	67.2	12.93	6.196		
3,100.0	3,099.5	3,084.2	3,078.7	6.8	6.6	142.61	-80.1	20.5	102.7	89.3	13.34	7.694		
3,200.0	3,199.4	3,178.0	3,170.3	7.1	6.9	145.06	-100.3	19.4	127.8	114.1	13.75	9.295		
3,300.0	3,299.3	3,273.4	3,263.0	7.3	7.2	146.78	-122.6	18.3	154.9	140.7	14.17	10.932		
3,400.0	3,399.1	3,369.5	3,356.5	7.5	7.5	148.00	-145.0	17.1	182.1	167.5	14.59	12.485		
3,500.0	3,499.0	3,465.7	3,450.0	7.7	7.8	148.91	-167.5	16.0	209.4	194.4	15.01	13.951		
3,600.0	3,598.9	3,561.9	3,543.5	8.0	8.2	149.61	-190.0	14.8	236.7	221.3	15.44	15.335		
3,700.0	3,698.8	3,658.0	3,637.0	8.2	8.5	150.16	-212.5	13.7	264.1	248.2	15.87	16.643		
3,800.0	3,798.7	3,754.2	3,730.5	8.4	8.9	150.61	-235.0	12.5	291.4	275.1	16.30	17.878		
3,900.0	3,898.6	3,850.3	3,824.0	8.7	9.3	150.98	-257.5	11.3	318.8	302.1	16.74	19.047		
4,000.0	3,998.5	3,946.5	3,917.5	8.9	9.7	151.29	-279.9	10.2	346.2	329.0	17.18	20.153		
4,100.0	4,098.4	4,042.7	4,010.9	9.1	10.1	151.56	-302.4	9.0	373.6	356.0	17.62	21.200		
4,200.0	4,198.3	4,138.8	4,104.4	9.4	10.5	151.79	-324.9	7.9	401.0	382.9	18.07	22.194		
4,300.0	4,298.1	4,235.0	4,197.9	9.6	10.9	151.99	-347.4	6.7	428.4	409.9	18.52	23.137		
4,400.0	4,398.0	4,331.1	4,291.4	9.8	11.3	152.17	-369.9	5.5	455.8	436.9	18.97	24.033		
4,500.0	4,497.9	4,427.3	4,384.9	10.1	11.8	152.32	-392.4	4.4	483.2	463.8	19.42	24.885		
4,600.0	4,597.8	4,523.5	4,478.4	10.3	12.2	152.46	-414.8	3.2	510.7	490.8	19.87	25.695		
4,700.0	4,697.7	4,619.6	4,571.9	10.5	12.6	152.59	-437.3	2.1	538.1	517.7	20.33	26.467		
4,800.0	4,797.6	4,715.8	4,665.4	10.8	13.1	152.70	-459.8	0.9	565.5	544.7	20.79	27.203		
4,900.0	4,897.5	4,811.9	4,758.8	11.0	13.5	152.80	-482.3	-0.2	592.9	571.7	21.25	27.906		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 (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	4,997.4	4,908.1	4,852.3	11.2	13.9	152.90	-504.8	-1.4	620.4	598.7	21.71	28.577		
5,100.0	5,097.3	5,004.3	4,945.8	11.5	14.4	152.98	-527.3	-2.6	647.8	625.6	22.17	29.218		
5,200.0	5,197.2	5,100.4	5,039.3	11.7	14.8	153.06	-549.7	-3.7	675.2	652.6	22.63	29.831		
5,300.0	5,297.0	5,196.6	5,132.8	11.9	15.3	153.14	-572.2	-4.9	702.7	679.6	23.10	30.418		
5,400.0	5,396.9	5,292.7	5,226.3	12.2	15.7	153.20	-594.7	-6.0	730.1	706.5	23.57	30.980		
5,500.0	5,496.8	5,388.9	5,319.8	12.4	16.2	153.27	-617.2	-7.2	757.5	733.5	24.03	31.520		
5,600.0	5,596.7	5,517.5	5,445.3	12.6	16.6	153.35	-644.9	-8.6	783.2	758.6	24.57	31.877		
6,700.0	6,696.2	8,093.6	7,482.5	15.0	18.6	-88.09	143.3	-9.7	792.7	759.1	33.52	23.647		
6,770.8	6,767.0	8,093.4	7,482.5	15.2	18.6	-88.25	143.0	-9.7	722.5	688.8	33.67	21.455		
6,800.0	6,796.1	8,092.6	7,482.5	15.2	18.6	107.45	142.3	-9.7	693.6	660.0	33.54	20.678		
6,850.0	6,846.0	8,088.7	7,482.5	15.3	18.6	126.36	138.4	-9.7	644.3	611.4	32.88	19.598		
6,900.0	6,895.5	8,081.2	7,482.6	15.4	18.5	137.34	130.9	-9.7	595.5	563.3	32.26	18.461		
6,950.0	6,944.3	8,070.3	7,482.6	15.4	18.4	143.72	120.0	-9.7	547.5	515.8	31.74	17.252		
7,000.0	6,992.3	8,056.1	7,482.7	15.5	18.4	147.49	105.8	-9.8	500.5	469.3	31.23	16.027		
7,050.0	7,039.1	8,038.5	7,482.7	15.6	18.3	149.65	88.2	-9.8	454.7	424.1	30.69	14.820		
7,100.0	7,084.7	8,017.7	7,482.8	15.6	18.2	150.73	67.4	-9.8	410.5	380.5	30.09	13.644		
7,150.0	7,128.7	7,993.8	7,482.9	15.7	18.0	150.97	43.5	-9.9	368.2	338.7	29.45	12.500		
7,200.0	7,170.9	7,964.3	7,483.0	15.7	17.9	150.20	14.0	-9.9	327.9	299.0	28.83	11.372		
7,250.0	7,211.2	7,916.9	7,481.2	15.8	17.8	146.64	-33.3	-10.0	288.8	260.3	28.48	10.141		
7,300.0	7,249.3	7,873.3	7,476.8	15.9	17.7	142.47	-76.7	-10.1	250.7	222.4	28.34	8.847		
7,350.0	7,285.0	7,832.7	7,470.4	16.0	17.6	137.40	-116.9	-10.2	214.0	185.5	28.54	7.500		
7,400.0	7,318.3	7,794.2	7,462.1	16.1	17.5	131.09	-154.4	-10.3	179.5	150.3	29.22	6.143		
7,450.0	7,348.8	7,757.6	7,452.5	16.3	17.5	123.11	-189.8	-10.3	148.5	118.0	30.48	4.870		
7,500.0	7,376.5	7,722.3	7,441.4	16.6	17.5	113.10	-223.2	-10.4	123.0	90.8	32.20	3.819		
7,550.0	7,401.2	7,688.2	7,429.3	16.8	17.5	100.96	-255.0	-10.5	106.5	72.6	33.87	3.145		
7,588.8	7,418.3	7,662.5	7,419.0	17.1	17.6	90.44	-278.7	-10.5	102.3	67.8	34.58	2.959		
7,600.0	7,422.9	7,655.1	7,416.0	17.1	17.6	87.33	-285.4	-10.5	102.7	68.1	34.63	2.965		
7,650.0	7,441.3	7,622.8	7,401.7	17.5	17.6	73.61	-314.3	-10.6	112.0	78.2	33.85	3.309		
7,700.0	7,456.5	7,591.2	7,386.4	17.9	17.7	61.26	-342.1	-10.7	131.0	99.3	31.68	4.136		
7,750.0	7,468.3	7,560.1	7,370.2	18.3	17.7	51.04	-368.6	-10.7	155.6	126.8	28.81	5.401		
7,800.0	7,476.6	7,529.5	7,353.2	18.8	17.8	42.95	-394.0	-10.8	182.9	157.1	25.87	7.071		
7,850.0	7,481.6	7,500.0	7,335.8	19.3	17.9	36.74	-417.8	-10.8	211.4	188.2	23.26	9.092		
7,898.4	7,483.0	7,470.5	7,317.4	19.9	18.0	31.88	-440.9	-10.9	239.4	218.3	21.08	11.353		
7,898.4	7,483.0	7,470.5	7,317.4	19.9	18.0	31.88	-440.9	-10.9	239.4	218.3	21.08	11.353		
7,898.9	7,483.0	7,470.2	7,317.2	19.9	18.0	31.86	-441.1	-10.9	239.6	218.6	21.08	11.370		
7,900.0	7,483.0	7,469.6	7,316.8	19.9	18.0	31.79	-441.6	-10.9	240.3	219.2	21.05	11.413		
8,000.0	7,482.6	7,414.3	7,279.8	21.0	18.2	26.98	-482.6	-11.0	302.0	282.6	19.39	15.575		
8,100.0	7,482.2	7,366.2	7,245.1	22.3	18.3	23.56	-515.9	-11.0	370.5	352.1	18.39	20.139		
8,200.0	7,481.8	7,324.3	7,213.1	23.7	18.5	21.07	-543.0	-11.1	444.1	426.2	17.87	24.846		
8,300.0	7,481.4	7,287.7	7,183.9	25.1	18.6	19.20	-565.0	-11.1	521.8	504.2	17.68	29.508		
8,400.0	7,481.0	7,250.0	7,152.7	26.6	18.7	17.52	-586.2	-11.2	602.9	585.3	17.60	34.252		
8,500.0	7,480.6	7,227.5	7,133.5	28.2	18.8	16.63	-598.0	-11.2	686.4	668.5	17.93	38.280		
8,600.0	7,480.2	7,200.0	7,109.6	29.8	18.8	15.64	-611.6	-11.2	772.1	753.9	18.21	42.405		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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		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	89.66	0.8	125.2	125.2					
100.0	100.0	100.0	100.0	0.1	0.1	89.66	0.8	125.2	125.2	125.0	0.22	557.043		
200.0	200.0	200.0	200.0	0.3	0.3	89.66	0.8	125.2	125.2	124.5	0.67	185.681		
300.0	300.0	300.0	300.0	0.6	0.6	89.66	0.8	125.2	125.2	124.1	1.12	111.409		
400.0	400.0	400.0	400.0	0.8	0.8	89.66	0.8	125.2	125.2	123.6	1.57	79.578		
500.0	500.0	500.0	500.0	1.0	1.0	89.66	0.8	125.2	125.2	123.2	2.02	61.894		
600.0	600.0	600.0	600.0	1.2	1.2	89.66	0.8	125.2	125.2	122.7	2.47	50.640		
700.0	700.0	700.0	700.0	1.5	1.5	89.66	0.8	125.2	125.2	122.3	2.92	42.849		
800.0	800.0	800.0	800.0	1.7	1.7	89.66	0.8	125.2	125.2	121.8	3.37	37.136		
900.0	900.0	900.0	900.0	1.9	1.9	89.66	0.8	125.2	125.2	121.4	3.82	32.767		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.66	0.8	125.2	125.2	120.9	4.27	29.318		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.66	0.8	125.2	125.2	120.5	4.72	26.526		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.66	0.8	125.2	125.2	120.0	5.17	24.219		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.66	0.8	125.2	125.2	119.6	5.62	22.282		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.66	0.8	125.2	125.2	119.1	6.07	20.631		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.66	0.8	125.2	125.2	118.7	6.52	19.208 CC, ES		
1,600.0	1,600.0	1,598.2	1,598.2	3.5	3.5	90.14	-0.3	125.9	125.9	119.0	6.94	18.149		
1,700.0	1,700.0	1,696.3	1,696.2	3.7	3.6	91.54	-3.5	128.0	128.1	120.8	7.34	17.460		
1,800.0	1,800.0	1,794.1	1,793.8	3.9	3.8	93.78	-8.7	131.5	131.9	124.1	7.74	17.034		
1,900.0	1,900.0	1,891.6	1,890.9	4.2	4.0	96.68	-16.0	136.3	137.5	129.4	8.16	16.855		
2,000.0	2,000.0	1,988.5	1,987.2	4.4	4.2	100.05	-25.2	142.4	145.2	136.6	8.59	16.909		
2,100.0	2,100.0	2,084.8	2,082.5	4.6	4.4	103.68	-36.5	149.9	155.3	146.2	9.04	17.183		
2,200.0	2,200.0	2,180.4	2,176.8	4.8	4.7	107.37	-49.6	158.6	167.8	158.3	9.50	17.661		
2,300.0	2,300.0	2,275.1	2,269.8	5.1	5.0	110.97	-64.6	168.5	183.0	173.0	9.98	18.325		
2,400.0	2,400.0	2,370.6	2,363.1	5.3	5.3	114.38	-81.4	179.7	200.7	190.2	10.49	19.130		
2,500.0	2,500.0	2,468.2	2,458.5	5.5	5.6	117.35	-99.0	191.3	219.3	208.3	11.01	19.915		
2,600.0	2,600.0	2,565.7	2,553.7	5.7	6.0	87.15	-116.5	202.9	238.4	227.2	11.23	21.232		
2,679.3	2,679.2	2,642.9	2,629.0	5.9	6.3	89.26	-130.3	212.1	253.9	242.3	11.58	21.923		
2,700.0	2,699.9	2,663.0	2,648.6	6.0	6.3	89.88	-134.0	214.5	258.0	246.3	11.67	22.105		
2,800.0	2,799.8	2,760.1	2,743.5	6.2	6.7	92.60	-151.4	226.1	278.2	266.1	12.11	22.971		
2,900.0	2,899.7	2,857.2	2,838.3	6.4	7.1	94.95	-168.9	237.6	298.9	286.4	12.55	23.815		
3,000.0	2,999.6	2,954.4	2,933.2	6.6	7.5	96.99	-186.3	249.2	320.1	307.1	12.99	24.631		
3,100.0	3,099.5	3,051.5	3,028.0	6.8	7.9	98.79	-203.8	260.8	341.6	328.1	13.44	25.415		
3,200.0	3,199.4	3,148.6	3,122.9	7.1	8.3	100.37	-221.2	272.3	363.3	349.5	13.89	26.165		
3,300.0	3,299.3	3,245.8	3,217.7	7.3	8.8	101.77	-238.7	283.9	385.3	371.0	14.34	26.880		
3,400.0	3,399.1	3,342.9	3,312.6	7.5	9.2	103.03	-256.2	295.5	407.6	392.8	14.79	27.560		
3,500.0	3,499.0	3,440.0	3,407.4	7.7	9.6	104.15	-273.6	307.1	429.9	414.7	15.24	28.207		
3,600.0	3,598.9	3,537.2	3,502.3	8.0	10.0	105.16	-291.1	318.6	452.4	436.8	15.70	28.821		
3,700.0	3,698.8	3,634.3	3,597.1	8.2	10.5	106.08	-308.5	330.2	475.1	458.9	16.16	29.404		
3,800.0	3,798.7	3,731.4	3,692.0	8.4	10.9	106.91	-326.0	341.8	497.8	481.2	16.62	29.957		
3,900.0	3,898.6	3,828.6	3,786.8	8.7	11.4	107.67	-343.4	353.3	520.7	503.6	17.08	30.483		
4,000.0	3,998.5	3,925.7	3,881.7	8.9	11.8	108.37	-360.9	364.9	543.6	526.0	17.55	30.982		
4,100.0	4,098.4	4,022.8	3,976.5	9.1	12.2	109.01	-378.3	376.5	566.6	548.6	18.01	31.456		
4,200.0	4,198.3	4,120.0	4,071.4	9.4	12.7	109.60	-395.8	388.1	589.6	571.1	18.48	31.906		
4,300.0	4,298.1	4,217.1	4,166.2	9.6	13.1	110.15	-413.3	399.6	612.7	593.8	18.95	32.335		
4,400.0	4,398.0	4,314.2	4,261.1	9.8	13.6	110.66	-430.7	411.2	635.9	616.5	19.42	32.743		
4,500.0	4,497.9	4,411.4	4,355.9	10.1	14.0	111.13	-448.2	422.8	659.1	639.2	19.89	33.131		
4,600.0	4,497.8	4,408.5	4,450.8	10.3	14.5	111.57	-465.6	434.3	682.3	662.0	20.37	33.502		
4,700.0	4,497.7	4,605.6	4,545.6	10.5	14.9	111.98	-483.1	445.9	705.6	684.8	20.84	33.855		
4,800.0	4,797.6	4,702.8	4,640.5	10.8	15.4	112.36	-500.5	457.5	728.9	707.6	21.32	34.192		
4,900.0	4,897.5	4,799.9	4,735.3	11.0	15.8	112.73	-518.0	469.0	752.2	730.4	21.80	34.514		
5,000.0	4,997.4	4,897.0	4,830.1	11.2	16.3	113.06	-535.5	480.6	775.6	753.3	22.27	34.822		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 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)				
5,100.0	5,097.3	4,994.2	4,925.0	11.5	16.7	113.38	-552.9	492.2	799.0	776.2	22.75	35.116			
6,900.0	6,895.5	8,081.3	7,482.6	15.4	19.4	-101.55	127.3	590.3	771.3	736.8	34.51	22.349			
6,950.0	6,944.3	8,070.4	7,482.6	15.4	19.3	-104.58	116.5	590.2	734.8	700.4	34.44	21.334			
7,000.0	6,992.3	8,056.2	7,482.7	15.5	19.3	-106.80	102.2	590.1	700.3	666.0	34.33	20.398			
7,050.0	7,039.1	8,038.6	7,482.8	15.6	19.2	-108.29	84.7	590.0	668.3	634.1	34.20	19.541			
7,100.0	7,084.7	8,017.8	7,482.8	15.6	19.2	-109.12	63.9	589.9	638.8	604.8	34.05	18.762			
7,150.0	7,128.7	7,993.9	7,482.9	15.7	19.2	-109.36	40.0	589.7	612.2	578.3	33.92	18.050			
7,200.0	7,170.9	7,957.7	7,482.8	15.7	19.2	-108.27	3.8	589.5	588.5	554.6	33.86	17.378			
7,250.0	7,211.2	7,911.9	7,480.1	15.8	19.2	-106.07	-42.0	589.2	567.1	533.2	33.87	16.744			
7,300.0	7,249.3	7,869.6	7,475.0	15.9	19.3	-103.88	-83.9	588.9	548.1	514.2	33.93	16.154			
7,350.0	7,285.0	7,830.1	7,468.0	16.0	19.3	-101.65	-122.8	588.7	531.9	497.8	34.06	15.618			
7,400.0	7,318.3	7,792.6	7,459.4	16.1	19.4	-99.33	-159.3	588.5	518.6	484.3	34.24	15.143			
7,450.0	7,348.8	7,756.8	7,449.5	16.3	19.5	-96.91	-193.7	588.3	508.3	473.8	34.49	14.737			
7,500.0	7,376.5	7,722.4	7,438.3	16.6	19.6	-94.36	-226.2	588.1	501.1	466.3	34.79	14.404			
7,550.0	7,401.2	7,689.0	7,425.9	16.8	19.7	-91.69	-257.3	587.9	497.0	461.9	35.12	14.153			
7,593.1	7,420.1	7,661.0	7,414.4	17.1	19.8	-89.29	-282.8	587.7	495.9	460.5	35.42	14.001			
7,600.0	7,422.9	7,656.5	7,412.5	17.1	19.8	-88.90	-286.9	587.7	496.0	460.5	35.47	13.984			
7,650.0	7,441.3	7,624.7	7,398.2	17.5	19.9	-86.01	-315.2	587.5	497.7	461.9	35.82	13.897			
7,700.0	7,456.5	7,593.6	7,382.9	17.9	20.0	-83.04	-342.3	587.4	502.2	466.0	36.14	13.894 SF			
7,750.0	7,468.3	7,563.0	7,366.7	18.3	20.1	-80.02	-368.3	587.2	509.0	472.5	36.44	13.966			
7,800.0	7,476.6	7,532.9	7,349.7	18.8	20.2	-76.98	-393.2	587.0	517.9	481.2	36.70	14.109			
7,850.0	7,481.6	7,500.0	7,330.0	19.3	20.3	-73.73	-419.5	586.9	528.5	491.6	36.89	14.327			
7,898.4	7,483.0	7,474.6	7,314.0	19.9	20.4	-71.06	-439.2	586.8	540.2	503.1	37.09	14.565			
7,898.4	7,483.0	7,474.6	7,314.0	19.9	20.4	-71.06	-439.2	586.8	540.2	503.1	37.09	14.565			
7,898.9	7,483.0	7,474.3	7,313.8	19.9	20.4	-71.04	-439.4	586.8	540.3	503.2	37.09	14.567			
7,900.0	7,483.0	7,473.7	7,313.4	19.9	20.4	-71.00	-439.9	586.8	540.6	503.5	37.09	14.573			
8,000.0	7,482.6	7,419.1	7,276.6	21.0	20.6	-67.27	-480.1	586.5	570.6	533.1	37.57	15.188			
8,100.0	7,482.2	7,371.6	7,242.1	22.3	20.7	-63.96	-512.8	586.3	609.7	571.6	38.04	16.029			
8,200.0	7,481.8	7,330.2	7,210.4	23.7	20.9	-61.05	-539.4	586.1	657.2	618.6	38.52	17.059			
8,300.0	7,481.4	7,300.0	7,186.2	25.1	20.9	-58.95	-557.6	586.0	712.2	673.0	39.18	18.178			
8,400.0	7,481.0	7,262.4	7,155.2	26.6	21.0	-56.37	-578.8	585.9	773.7	734.1	39.63	19.525			

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 278-1527H - 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	-90.45	-5.1	-649.5	649.5					
100.0	100.0	101.0	101.0	0.1	0.1	-90.45	-5.1	-649.5	649.5	649.3	0.23	2,861.164		
200.0	200.0	201.0	201.0	0.3	0.3	-90.45	-5.1	-649.5	649.5	648.8	0.68	960.058		
300.0	300.0	301.0	301.0	0.6	0.6	-90.45	-5.1	-649.5	649.5	648.4	1.13	576.801		
400.0	400.0	401.0	401.0	0.8	0.8	-90.45	-5.1	-649.5	649.5	647.9	1.58	412.236		
500.0	500.0	501.0	501.0	1.0	1.0	-90.45	-5.1	-649.5	649.5	647.5	2.03	320.730		
600.0	600.0	601.0	601.0	1.2	1.2	-90.45	-5.1	-649.5	649.5	647.0	2.47	262.468		
700.0	700.0	701.0	701.0	1.5	1.5	-90.45	-5.1	-649.5	649.5	646.6	2.92	222.120		
800.0	800.0	801.0	801.0	1.7	1.7	-90.45	-5.1	-649.5	649.5	646.1	3.37	192.523		
900.0	900.0	901.0	901.0	1.9	1.9	-90.45	-5.1	-649.5	649.5	645.7	3.82	169.887		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.45	-5.1	-649.5	649.5	645.3	4.27	152.013		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.45	-5.1	-649.5	649.5	644.8	4.72	137.543		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.45	-5.1	-649.5	649.5	644.4	5.17	125.588		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.45	-5.1	-649.5	649.5	643.9	5.62	115.545		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.45	-5.1	-649.5	649.5	643.5	6.07	106.989		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	-90.45	-5.1	-649.5	649.5	643.0	6.52	99.613		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	-90.45	-5.1	-649.5	649.5	642.6	6.97	93.188		
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	-90.45	-5.1	-649.5	649.5	642.1	7.42	87.542		
1,800.0	1,800.0	1,801.0	1,801.0	3.9	3.9	-90.45	-5.1	-649.5	649.5	641.7	7.87	82.541		
1,900.0	1,900.0	1,901.0	1,901.0	4.2	4.2	-90.45	-5.1	-649.5	649.5	641.2	8.32	78.081		
2,000.0	2,000.0	2,001.0	2,001.0	4.4	4.4	-90.45	-5.1	-649.5	649.5	640.8	8.77	74.078		
2,100.0	2,100.0	2,101.0	2,101.0	4.6	4.6	-90.45	-5.1	-649.5	649.5	640.3	9.22	70.465		
2,200.0	2,200.0	2,201.0	2,201.0	4.8	4.8	-90.45	-5.1	-649.5	649.5	639.9	9.67	67.188		
2,300.0	2,300.0	2,301.1	2,301.1	5.1	5.1	-90.45	-5.1	-649.5	649.5	639.4	10.12	64.202		
2,400.0	2,400.0	2,411.2	2,411.2	5.3	5.3	-90.33	-3.7	-648.6	648.7	638.1	10.59	61.281		
2,500.0	2,500.0	2,520.4	2,520.3	5.5	5.5	-89.98	0.3	-646.1	646.4	635.3	11.05	58.488		
2,600.0	2,600.0	2,620.3	2,620.0	5.7	5.8	-122.42	5.0	-643.1	644.1	632.6	11.49	56.059		
2,679.3	2,679.2	2,699.6	2,699.2	5.9	5.9	-122.31	8.7	-640.8	643.3	631.5	11.84	54.351		
2,700.0	2,699.9	2,720.3	2,719.9	6.0	6.0	-122.30	9.7	-640.1	643.2	631.3	11.93	53.927		
2,800.0	2,799.8	2,820.3	2,819.7	6.2	6.2	-122.23	14.4	-637.2	642.8	630.4	12.37	51.964		
2,900.0	2,899.7	2,920.3	2,919.5	6.4	6.4	-122.16	19.1	-634.2	642.4	629.6	12.81	50.126		
3,000.0	2,999.6	3,020.3	3,019.4	6.6	6.7	-122.10	23.8	-631.2	641.9	628.7	13.26	48.405		
3,100.0	3,099.5	3,120.3	3,119.2	6.8	6.9	-122.03	28.5	-628.2	641.5	627.8	13.71	46.789		
3,200.0	3,199.4	3,220.3	3,219.1	7.1	7.1	-121.96	33.2	-625.2	641.1	626.9	14.16	45.270		
3,300.0	3,299.3	3,320.3	3,318.9	7.3	7.4	-121.89	37.9	-622.3	640.6	626.0	14.61	43.840		
3,400.0	3,399.1	3,420.3	3,418.7	7.5	7.6	-121.82	42.6	-619.3	640.2	625.1	15.07	42.492		
3,500.0	3,499.0	3,520.3	3,518.6	7.7	7.8	-121.75	47.3	-616.3	639.8	624.2	15.52	41.219		
3,600.0	3,598.9	3,620.3	3,618.4	8.0	8.1	-121.69	52.0	-613.3	639.3	623.4	15.98	40.016		
3,700.0	3,698.8	3,720.3	3,718.3	8.2	8.3	-121.62	56.7	-610.3	638.9	622.5	16.43	38.876		
3,800.0	3,798.7	3,820.3	3,818.1	8.4	8.5	-121.55	61.4	-607.3	638.5	621.6	16.89	37.796		
3,900.0	3,898.6	3,920.2	3,918.0	8.7	8.8	-121.48	66.1	-604.4	638.0	620.7	17.35	36.771		
4,000.0	3,998.5	4,020.2	4,017.8	8.9	9.0	-121.41	70.8	-601.4	637.6	619.8	17.81	35.798		
4,100.0	4,098.4	4,120.2	4,117.6	9.1	9.2	-121.34	75.5	-598.4	637.2	618.9	18.27	34.871		
4,200.0	4,198.3	4,220.2	4,217.5	9.4	9.5	-121.27	80.2	-595.4	636.8	618.0	18.73	33.989		
4,300.0	4,298.1	4,320.2	4,317.3	9.6	9.7	-121.20	84.9	-592.4	636.3	617.1	19.20	33.149		
4,400.0	4,398.0	4,420.2	4,417.2	9.8	9.9	-121.13	89.7	-589.5	635.9	616.2	19.66	32.346		
4,500.0	4,497.9	4,520.2	4,517.0	10.1	10.2	-121.06	94.4	-586.5	635.5	615.4	20.12	31.580		
4,600.0	4,597.8	4,620.2	4,616.8	10.3	10.4	-120.99	99.1	-583.5	635.1	614.5	20.59	30.847		
4,700.0	4,697.7	4,720.2	4,716.7	10.5	10.7	-120.92	103.8	-580.5	634.6	613.6	21.05	30.146		
4,800.0	4,797.6	4,820.2	4,816.5	10.8	10.9	-120.85	108.5	-577.5	634.2	612.7	21.52	29.474		
4,900.0	4,897.5	4,920.2	4,916.4	11.0	11.1	-120.78	113.2	-574.5	633.8	611.8	21.98	28.831		
5,000.0	4,997.4	5,020.2	5,016.2	11.2	11.4	-120.71	117.9	-571.6	633.4	610.9	22.45	28.213		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 278-1527H - 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	5,097.3	5,120.2	5,116.0	11.5	11.6	-120.64	122.6	-568.6	633.0	610.0	22.92	27.620		
5,200.0	5,197.2	5,220.2	5,215.9	11.7	11.9	-120.57	127.3	-565.6	632.5	609.2	23.38	27.051		
5,300.0	5,297.0	5,320.2	5,315.7	11.9	12.1	-120.50	132.0	-562.6	632.1	608.3	23.85	26.503		
5,351.1	5,348.1	5,368.6	5,364.1	12.0	12.2	-120.48	134.2	-561.2	632.0	607.9	24.08	26.247 CC		
5,400.0	5,396.9	5,412.7	5,408.1	12.2	12.3	-120.50	135.7	-560.3	632.2	607.9	24.28	26.039		
5,500.0	5,496.8	5,504.6	5,500.0	12.4	12.5	-120.72	136.9	-559.5	633.7	609.1	24.67	25.690		
5,600.0	5,596.7	5,602.3	5,597.7	12.6	12.6	-121.08	136.9	-559.5	636.1	611.1	25.09	25.357		
5,700.0	5,696.6	5,702.2	5,697.6	12.9	12.9	-121.44	136.9	-559.5	638.6	613.0	25.53	25.009		
5,800.0	5,796.5	5,802.1	5,797.5	13.1	13.1	-121.80	136.9	-559.5	641.0	615.1	25.98	24.674		
5,900.0	5,896.4	5,902.0	5,897.4	13.3	13.3	-122.15	136.9	-559.5	643.5	617.1	26.43	24.351		
6,000.0	5,996.3	6,001.9	5,997.3	13.6	13.5	-122.50	136.9	-559.5	646.0	619.2	26.87	24.039		
6,069.4	6,065.6	6,071.2	6,066.6	13.7	13.7	-122.75	136.9	-559.5	647.8	620.6	27.18	23.829		
6,100.0	6,096.2	6,101.8	6,097.2	13.8	13.7	-122.85	136.9	-559.5	648.5	621.2	27.31	23.741		
6,203.8	6,200.0	6,205.6	6,201.0	14.0	14.0	-90.27	136.9	-559.5	649.5	621.8	27.72	23.430		
6,300.0	6,296.2	6,301.7	6,297.2	14.2	14.2	-90.27	136.9	-559.5	649.5	621.4	28.12	23.098		
6,400.0	6,396.2	6,401.7	6,397.2	14.4	14.4	-90.27	136.9	-559.5	649.5	620.9	28.56	22.744		
6,500.0	6,496.2	6,501.7	6,497.2	14.6	14.6	-90.27	136.9	-559.5	649.5	620.5	29.00	22.400		
6,600.0	6,596.2	6,601.7	6,597.2	14.8	14.8	-90.27	136.9	-559.5	649.5	620.1	29.43	22.066		
6,700.0	6,696.2	6,701.7	6,697.2	15.0	15.0	-90.27	136.9	-559.5	649.5	619.6	29.87	21.742		
6,746.8	6,743.0	6,748.6	6,744.0	15.1	15.1	-90.27	136.9	-559.5	649.5	619.4	30.08	21.593		
6,770.8	6,767.0	6,772.5	6,768.0	15.2	15.2	-90.27	136.9	-559.5	649.5	619.3	30.18	21.518		
6,800.0	6,796.1	6,801.7	6,797.1	15.2	15.2	89.97	136.3	-559.5	649.5	619.2	30.29	21.441		
6,850.0	6,846.0	6,851.7	6,846.9	15.3	15.3	89.96	132.4	-559.5	649.5	619.1	30.44	21.337		
6,900.0	6,895.5	6,901.7	6,896.4	15.4	15.4	89.96	125.1	-559.4	649.5	618.9	30.57	21.247		
6,950.0	6,944.3	6,951.6	6,945.1	15.4	15.5	89.95	114.4	-559.4	649.5	618.8	30.68	21.169		
7,000.0	6,992.3	7,001.6	6,993.1	15.5	15.5	89.94	100.2	-559.3	649.5	618.7	30.78	21.099		
7,050.0	7,039.1	7,051.5	7,039.9	15.6	15.6	89.94	82.8	-559.3	649.5	618.6	30.88	21.033		
7,100.0	7,084.7	7,101.5	7,085.3	15.6	15.6	89.93	62.2	-559.2	649.5	618.5	30.98	20.965		
7,150.0	7,128.7	7,151.4	7,129.3	15.7	15.7	89.93	38.4	-559.1	649.5	618.4	31.09	20.890		
7,200.0	7,170.9	7,201.4	7,171.4	15.7	15.7	89.92	11.7	-559.0	649.5	618.3	31.22	20.802		
7,250.0	7,211.2	7,251.3	7,211.6	15.8	15.8	89.92	-17.9	-558.8	649.5	618.1	31.39	20.693		
7,300.0	7,249.3	7,301.2	7,249.6	15.9	15.9	89.92	-50.3	-558.7	649.5	617.9	31.59	20.559		
7,350.0	7,285.0	7,351.2	7,285.3	16.0	16.0	89.91	-85.2	-558.5	649.5	617.7	31.85	20.394		
7,400.0	7,318.3	7,401.1	7,318.5	16.1	16.1	89.91	-122.5	-558.4	649.5	617.4	32.17	20.193		
7,450.0	7,348.8	7,451.0	7,348.9	16.3	16.3	89.91	-162.1	-558.2	649.5	617.0	32.55	19.954		
7,500.0	7,376.5	7,501.0	7,376.6	16.6	16.5	89.91	-203.6	-558.0	649.5	616.5	33.01	19.674		
7,550.0	7,401.2	7,550.9	7,401.3	16.8	16.8	89.91	-247.0	-557.9	649.5	616.0	33.56	19.356		
7,600.0	7,422.9	7,600.8	7,422.9	17.1	17.1	89.91	-292.0	-557.7	649.5	615.3	34.18	19.001		
7,650.0	7,441.3	7,650.7	7,441.3	17.5	17.5	89.90	-338.4	-557.5	649.5	614.6	34.90	18.612		
7,700.0	7,456.5	7,700.7	7,456.4	17.9	17.9	89.91	-386.0	-557.3	649.5	613.8	35.69	18.197		
7,750.0	7,468.3	7,750.6	7,468.2	18.3	18.3	89.91	-434.5	-557.1	649.5	613.0	36.57	17.760		
7,800.0	7,476.6	7,800.5	7,476.6	18.8	18.8	89.91	-483.7	-556.8	649.5	612.0	37.53	17.309		
7,850.0	7,481.6	7,850.4	7,481.5	19.3	19.3	89.91	-533.3	-556.6	649.5	611.0	38.55	16.850		
7,898.4	7,483.0	7,898.8	7,483.0	19.9	19.8	89.91	-581.7	-556.4	649.5	609.9	39.60	16.403		
7,898.4	7,483.0	7,898.8	7,483.0	19.9	19.8	89.91	-581.7	-556.4	649.5	609.9	39.60	16.403		
7,898.9	7,483.0	7,899.3	7,483.0	19.9	19.8	89.91	-582.2	-556.4	649.5	609.9	39.61	16.399		
7,900.0	7,483.0	7,900.3	7,483.0	19.9	19.8	89.91	-583.2	-556.4	649.5	609.9	39.63	16.390		
7,900.0	7,483.0	7,900.3	7,483.0	19.9	19.8	89.91	-583.2	-556.4	649.5	609.9	39.63	16.390		
8,000.0	7,482.6	8,000.3	7,482.6	21.0	20.9	89.91	-683.1	-556.0	649.5	607.7	41.88	15.508		
8,100.0	7,482.2	8,100.3	7,482.2	22.3	22.2	89.91	-783.1	-555.6	649.6	605.1	44.43	14.619		
8,200.0	7,481.8	8,200.3	7,481.8	23.7	23.5	89.91	-883.1	-555.2	649.6	602.4	47.16	13.773		
8,300.0	7,481.4	8,300.3	7,481.4	25.1	25.0	89.91	-983.1	-554.8	649.6	599.5	50.04	12.981		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 278-1527H - 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)						
8,400.0	7,481.0	8,400.3	7,481.0	26.6	26.5	89.91	-1,083.1	-554.4	649.6	596.5	53.04	12.247		
8,500.0	7,480.6	8,500.3	7,480.6	28.2	28.0	89.91	-1,183.1	-553.9	649.6	593.4	56.15	11.570		
8,600.0	7,480.2	8,600.3	7,480.2	29.8	29.6	89.91	-1,283.1	-553.5	649.6	590.3	59.34	10.947		
8,700.0	7,479.8	8,700.3	7,479.8	31.4	31.3	89.91	-1,383.1	-553.1	649.6	587.0	62.61	10.375		
8,800.0	7,479.4	8,800.3	7,479.4	33.1	32.9	89.91	-1,483.1	-552.7	649.6	583.7	65.94	9.851		
8,900.0	7,479.0	8,900.3	7,479.0	34.8	34.6	89.91	-1,583.1	-552.3	649.6	580.3	69.33	9.370		
9,000.0	7,478.6	9,000.3	7,478.6	36.5	36.3	89.91	-1,683.1	-551.9	649.7	576.9	72.77	8.928		
9,100.0	7,478.2	9,100.3	7,478.2	38.2	38.1	89.91	-1,783.1	-551.5	649.7	573.4	76.24	8.521		
9,200.0	7,477.8	9,200.3	7,477.8	40.0	39.8	89.91	-1,883.1	-551.1	649.7	569.9	79.75	8.146		
9,300.0	7,477.4	9,300.3	7,477.4	41.8	41.6	89.91	-1,983.1	-550.6	649.7	566.4	83.29	7.800		
9,400.0	7,477.0	9,400.3	7,477.0	43.5	43.4	89.91	-2,083.1	-550.2	649.7	562.8	86.86	7.480		
9,500.0	7,476.6	9,500.3	7,476.6	45.3	45.2	89.91	-2,183.1	-549.8	649.7	559.3	90.45	7.183		
9,600.0	7,476.2	9,600.3	7,476.2	47.1	47.0	89.91	-2,283.1	-549.4	649.7	555.7	94.07	6.907		
9,700.0	7,475.8	9,700.3	7,475.8	49.0	48.8	89.91	-2,383.1	-549.0	649.7	552.0	97.70	6.650		
9,800.0	7,475.4	9,800.3	7,475.4	50.8	50.6	89.91	-2,483.1	-548.6	649.7	548.4	101.35	6.411		
9,900.0	7,475.0	9,900.3	7,475.0	52.6	52.4	89.91	-2,583.1	-548.2	649.8	544.7	105.01	6.187		
10,000.0	7,474.5	10,000.3	7,474.6	54.4	54.3	89.91	-2,683.1	-547.8	649.8	541.1	108.69	5.978		
10,100.0	7,474.1	10,100.3	7,474.2	56.3	56.1	89.91	-2,783.1	-547.3	649.8	537.4	112.38	5.782		
10,200.0	7,473.7	10,200.3	7,473.7	58.1	58.0	89.91	-2,883.1	-546.9	649.8	533.7	116.08	5.598		
10,300.0	7,473.3	10,300.3	7,473.3	60.0	59.8	89.91	-2,983.1	-546.5	649.8	530.0	119.79	5.425		
10,400.0	7,472.9	10,400.3	7,472.9	61.9	61.7	89.91	-3,083.1	-546.1	649.8	526.3	123.51	5.261		
10,500.0	7,472.5	10,500.3	7,472.5	63.7	63.5	89.91	-3,183.1	-545.7	649.8	522.6	127.23	5.107		
10,600.0	7,472.1	10,600.3	7,472.1	65.6	65.4	89.91	-3,283.1	-545.3	649.8	518.9	130.97	4.962		
10,700.0	7,471.7	10,700.3	7,471.7	67.5	67.3	89.91	-3,383.1	-544.9	649.8	515.1	134.71	4.824		
10,800.0	7,471.3	10,800.3	7,471.3	69.3	69.2	89.91	-3,483.1	-544.5	649.8	511.4	138.46	4.693		
10,900.0	7,470.9	10,900.3	7,470.9	71.2	71.0	89.91	-3,583.1	-544.0	649.9	507.6	142.21	4.570		
11,000.0	7,470.5	11,000.3	7,470.5	73.1	72.9	89.91	-3,683.1	-543.6	649.9	503.9	145.97	4.452		
11,100.0	7,470.1	11,100.3	7,470.1	75.0	74.8	89.91	-3,783.1	-543.2	649.9	500.1	149.74	4.340		
11,200.0	7,469.7	11,200.3	7,469.7	76.9	76.7	89.91	-3,883.1	-542.8	649.9	496.4	153.51	4.234		
11,300.0	7,469.3	11,300.3	7,469.3	78.7	78.6	89.91	-3,983.1	-542.4	649.9	492.6	157.28	4.132		
11,400.0	7,468.9	11,400.3	7,468.9	80.6	80.5	89.91	-4,083.1	-542.0	649.9	488.9	161.06	4.035		
11,500.0	7,468.5	11,500.3	7,468.5	82.5	82.3	89.91	-4,183.1	-541.6	649.9	485.1	164.84	3.943		
11,600.0	7,468.1	11,600.3	7,468.1	84.4	84.2	89.91	-4,283.1	-541.2	649.9	481.3	168.63	3.854		
11,700.0	7,467.7	11,700.3	7,467.7	86.3	86.1	89.91	-4,383.1	-540.7	649.9	477.5	172.41	3.770		
11,800.0	7,467.3	11,800.3	7,467.3	88.2	88.0	89.91	-4,483.1	-540.3	650.0	473.8	176.20	3.689		
11,900.0	7,466.9	11,900.3	7,466.9	90.1	89.9	89.91	-4,583.1	-539.9	650.0	470.0	180.00	3.611		
12,000.0	7,466.5	12,000.3	7,466.5	92.0	91.8	89.91	-4,683.1	-539.5	650.0	466.2	183.80	3.536		
12,100.0	7,466.1	12,100.3	7,466.1	93.9	93.7	89.91	-4,783.1	-539.1	650.0	462.4	187.59	3.465		
12,200.0	7,465.7	12,200.3	7,465.7	95.8	95.6	89.91	-4,883.1	-538.7	650.0	458.6	191.40	3.396		
12,300.0	7,465.3	12,300.3	7,465.3	97.7	97.5	89.91	-4,983.1	-538.3	650.0	454.8	195.20	3.330		
12,400.0	7,464.9	12,400.3	7,464.9	99.6	99.4	89.91	-5,083.1	-537.9	650.0	451.0	199.01	3.266		
12,500.0	7,464.5	12,500.3	7,464.5	101.5	101.3	89.91	-5,183.1	-537.4	650.0	447.2	202.81	3.205		
12,600.0	7,464.1	12,600.3	7,464.1	103.4	103.2	89.91	-5,283.1	-537.0	650.0	443.4	206.62	3.146		
12,700.0	7,463.7	12,700.3	7,463.7	105.3	105.1	89.91	-5,383.1	-536.6	650.1	439.6	210.44	3.089		
12,800.0	7,463.3	12,800.3	7,463.3	107.2	107.0	89.91	-5,483.1	-536.2	650.1	435.8	214.25	3.034		
12,900.0	7,462.9	12,900.3	7,462.9	109.1	109.0	89.91	-5,583.1	-535.8	650.1	432.0	218.06	2.981		
13,000.0	7,462.5	13,000.3	7,462.5	111.0	110.9	89.91	-5,683.1	-535.4	650.1	428.2	221.88	2.930		
13,100.0	7,462.1	13,100.3	7,462.1	112.9	112.8	89.91	-5,783.1	-535.0	650.1	424.4	225.70	2.880		
13,200.0	7,461.7	13,200.3	7,461.7	114.9	114.7	89.91	-5,883.1	-534.6	650.1	420.6	229.52	2.833		
13,300.0	7,461.3	13,300.3	7,461.3	116.8	116.6	89.91	-5,983.1	-534.1	650.1	416.8	233.34	2.786		
13,400.0	7,460.9	13,400.3	7,460.9	118.7	118.5	89.91	-6,083.1	-533.7	650.1	413.0	237.16	2.741		
13,500.0	7,460.5	13,500.3	7,460.5	120.6	120.4	89.91	-6,183.1	-533.3	650.1	409.2	240.98	2.698		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 278-1527H - 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)						
13,600.0	7,460.1	13,600.3	7,460.1	122.5	122.3	89.91	-6,283.1	-532.9	650.2	405.4	244.80	2.656		
13,700.0	7,459.7	13,700.3	7,459.7	124.4	124.2	89.91	-6,383.0	-532.5	650.2	401.5	248.63	2.615		
13,800.0	7,459.3	13,800.3	7,459.3	126.3	126.2	89.91	-6,483.0	-532.1	650.2	397.7	252.46	2.575		
13,900.0	7,458.9	13,900.3	7,458.9	128.2	128.1	89.91	-6,583.0	-531.7	650.2	393.9	256.28	2.537		
14,000.0	7,458.5	14,000.3	7,458.5	130.1	130.0	89.91	-6,683.0	-531.3	650.2	390.1	260.11	2.500		
14,100.0	7,458.1	14,100.3	7,458.1	132.1	131.9	89.91	-6,783.0	-530.9	650.2	386.3	263.94	2.463		
14,200.0	7,457.7	14,200.3	7,457.7	134.0	133.8	89.91	-6,883.0	-530.4	650.2	382.5	267.77	2.428		
14,300.0	7,457.3	14,300.3	7,457.3	135.9	135.7	89.91	-6,983.0	-530.0	650.2	378.6	271.60	2.394		
14,400.0	7,456.9	14,400.3	7,456.9	137.8	137.6	89.91	-7,083.0	-529.6	650.2	374.8	275.43	2.361		
14,500.0	7,456.5	14,500.3	7,456.5	139.7	139.6	89.91	-7,183.0	-529.2	650.3	371.0	279.26	2.328		
14,600.0	7,456.1	14,600.3	7,456.1	141.6	141.5	89.91	-7,283.0	-528.8	650.3	367.2	283.09	2.297		
14,700.0	7,455.6	14,700.3	7,455.7	143.6	143.4	89.91	-7,383.0	-528.4	650.3	363.4	286.93	2.266		
14,800.0	7,455.2	14,800.3	7,455.3	145.5	145.3	89.91	-7,483.0	-528.0	650.3	359.5	290.76	2.237		
14,900.0	7,454.8	14,900.3	7,454.8	147.4	147.2	89.91	-7,583.0	-527.6	650.3	355.7	294.60	2.207		
15,000.0	7,454.4	15,000.3	7,454.4	149.3	149.1	89.91	-7,683.0	-527.1	650.3	351.9	298.43	2.179		
15,100.0	7,454.0	15,100.3	7,454.0	151.2	151.1	89.91	-7,783.0	-526.7	650.3	348.1	302.27	2.151		
15,200.0	7,453.6	15,200.3	7,453.6	153.1	153.0	89.91	-7,883.0	-526.3	650.3	344.2	306.10	2.125		
15,300.0	7,453.2	15,300.3	7,453.2	155.1	154.9	89.91	-7,983.0	-525.9	650.3	340.4	309.94	2.098		
15,400.0	7,452.8	15,400.3	7,452.8	157.0	156.8	89.91	-8,083.0	-525.5	650.4	336.6	313.78	2.073		
15,500.0	7,452.4	15,500.3	7,452.4	158.9	158.7	89.91	-8,183.0	-525.1	650.4	332.8	317.62	2.048		
15,600.0	7,452.0	15,600.3	7,452.0	160.8	160.6	89.91	-8,283.0	-524.7	650.4	328.9	321.45	2.023		
15,700.0	7,451.6	15,700.3	7,451.6	162.7	162.6	89.91	-8,383.0	-524.3	650.4	325.1	325.29	1.999		
15,800.0	7,451.2	15,800.3	7,451.2	164.7	164.5	89.91	-8,483.0	-523.8	650.4	321.3	329.13	1.976		
15,900.0	7,450.8	15,900.3	7,450.8	166.6	166.4	89.91	-8,583.0	-523.4	650.4	317.4	332.97	1.953		
16,000.0	7,450.4	16,000.3	7,450.4	168.5	168.3	89.91	-8,683.0	-523.0	650.4	313.6	336.81	1.931		
16,100.0	7,450.0	16,100.3	7,450.0	170.4	170.2	89.91	-8,783.0	-522.6	650.4	309.8	340.65	1.909		
16,200.0	7,449.6	16,200.3	7,449.6	172.3	172.2	89.91	-8,883.0	-522.2	650.4	305.9	344.49	1.888		
16,300.0	7,449.2	16,300.3	7,449.2	174.3	174.1	89.91	-8,983.0	-521.8	650.5	302.1	348.33	1.867		
16,400.0	7,448.8	16,400.3	7,448.8	176.2	176.0	89.91	-9,083.0	-521.4	650.5	298.3	352.18	1.847		
16,500.0	7,448.4	16,500.3	7,448.4	178.1	177.9	89.91	-9,183.0	-521.0	650.5	294.5	356.02	1.827		
16,600.0	7,448.0	16,600.3	7,448.0	180.0	179.9	89.91	-9,283.0	-520.5	650.5	290.6	359.86	1.808		
16,700.0	7,447.6	16,700.3	7,447.6	181.9	181.8	89.91	-9,383.0	-520.1	650.5	286.8	363.70	1.789		
16,800.0	7,447.2	16,800.3	7,447.2	183.9	183.7	89.91	-9,483.0	-519.7	650.5	283.0	367.55	1.770		
16,900.0	7,446.8	16,900.3	7,446.8	185.8	185.6	89.91	-9,583.0	-519.3	650.5	279.1	371.39	1.752		
17,000.0	7,446.4	17,000.3	7,446.4	187.7	187.5	89.91	-9,683.0	-518.9	650.5	275.3	375.23	1.734		
17,100.0	7,446.0	17,100.3	7,446.0	189.6	189.5	89.91	-9,783.0	-518.5	650.5	271.5	379.08	1.716		
17,200.0	7,445.6	17,200.3	7,445.6	191.6	191.4	89.91	-9,883.0	-518.1	650.6	267.6	382.92	1.699		
17,300.0	7,445.2	17,300.3	7,445.2	193.5	193.3	89.91	-9,983.0	-517.7	650.6	263.8	386.77	1.682		
17,400.0	7,444.8	17,400.3	7,444.8	195.4	195.2	89.91	-10,083.0	-517.2	650.6	260.0	390.61	1.666		
17,500.0	7,444.4	17,500.3	7,444.4	197.3	197.1	89.91	-10,183.0	-516.8	650.6	256.1	394.46	1.649		
17,600.0	7,444.0	17,600.3	7,444.0	199.2	199.1	89.91	-10,283.0	-516.4	650.6	252.3	398.30	1.633		
17,700.0	7,443.6	17,700.3	7,443.6	201.2	201.0	89.91	-10,383.0	-516.0	650.6	248.5	402.15	1.618		
17,800.0	7,443.2	17,800.3	7,443.2	203.1	202.9	89.91	-10,483.0	-515.6	650.6	244.6	405.99	1.603		
17,845.2	7,443.0	17,845.4	7,443.0	204.0	203.8	89.91	-10,528.2	-515.4	650.6	242.9	407.73	1.596 ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 (°)	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	0.7	99.8	99.8					
100.0	100.0	100.0	100.0	0.1	0.1	89.57	0.7	99.8	99.8	99.6	0.22	443.917		
200.0	200.0	200.0	200.0	0.3	0.3	89.57	0.7	99.8	99.8	99.1	0.67	147.972		
300.0	300.0	300.0	300.0	0.6	0.6	89.57	0.7	99.8	99.8	98.7	1.12	88.783		
400.0	400.0	400.0	400.0	0.8	0.8	89.57	0.7	99.8	99.8	98.2	1.57	63.417		
500.0	500.0	500.0	500.0	1.0	1.0	89.57	0.7	99.8	99.8	97.8	2.02	49.324		
600.0	600.0	600.0	600.0	1.2	1.2	89.57	0.7	99.8	99.8	97.3	2.47	40.356		
700.0	700.0	700.0	700.0	1.5	1.5	89.57	0.7	99.8	99.8	96.9	2.92	34.147		
800.0	800.0	800.0	800.0	1.7	1.7	89.57	0.7	99.8	99.8	96.4	3.37	29.594		
900.0	900.0	900.0	900.0	1.9	1.9	89.57	0.7	99.8	99.8	96.0	3.82	26.113		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.57	0.7	99.8	99.8	95.5	4.27	23.364		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.57	0.7	99.8	99.8	95.1	4.72	21.139		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.57	0.7	99.8	99.8	94.6	5.17	19.301		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.57	0.7	99.8	99.8	94.2	5.62	17.757		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.57	0.7	99.8	99.8	93.7	6.07	16.441		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.57	0.7	99.8	99.8	93.3	6.52	15.307		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	89.57	0.7	99.8	99.8	92.8	6.97	14.320		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.57	0.7	99.8	99.8	92.4	7.42	13.452 CC, ES		
1,800.0	1,800.0	1,797.5	1,797.5	3.9	3.9	89.41	1.0	101.0	101.0	93.2	7.85	12.867		
1,900.0	1,900.0	1,894.9	1,894.8	4.2	4.1	88.94	1.9	104.6	104.7	96.5	8.28	12.655		
2,000.0	2,000.0	1,992.0	1,991.7	4.4	4.3	88.23	3.4	110.6	111.0	102.3	8.71	12.747		
2,100.0	2,100.0	2,088.7	2,088.1	4.6	4.5	87.36	5.5	119.0	119.7	110.5	9.14	13.099		
2,200.0	2,200.0	2,185.0	2,183.7	4.8	4.8	86.41	8.1	129.6	130.9	121.3	9.57	13.675		
2,300.0	2,300.0	2,280.9	2,278.7	5.1	5.0	85.46	11.3	142.6	144.6	134.6	10.01	14.441		
2,400.0	2,400.0	2,379.8	2,376.5	5.3	5.3	84.58	14.9	156.9	159.4	148.9	10.46	15.230		
2,500.0	2,500.0	2,478.7	2,474.2	5.5	5.5	83.86	18.4	171.2	174.1	163.2	10.92	15.951		
2,600.0	2,600.0	2,577.7	2,572.1	5.7	5.8	83.06	22.0	185.6	188.1	176.8	11.31	16.636		
2,679.3	2,679.2	2,656.4	2,649.9	5.9	6.1	82.31	24.8	197.0	198.1	186.4	11.66	16.993		
2,700.0	2,699.9	2,676.9	2,670.2	6.0	6.1	81.56	25.5	200.0	200.5	188.8	11.75	17.070		
2,800.0	2,799.8	2,776.2	2,768.4	6.2	6.4	80.81	29.1	214.4	212.4	200.2	12.19	17.424		
2,900.0	2,899.7	2,875.5	2,866.6	6.4	6.7	80.06	32.7	228.8	224.3	211.7	12.64	17.750		
3,000.0	2,999.6	2,974.7	2,964.7	6.6	7.0	79.31	36.2	243.2	236.2	223.1	13.08	18.051		
3,100.0	3,099.5	3,074.0	3,062.9	6.8	7.3	78.56	39.8	257.5	248.1	234.6	13.54	18.329		
3,200.0	3,199.4	3,173.3	3,161.1	7.1	7.7	77.81	43.3	271.9	260.0	246.0	13.99	18.586		
3,300.0	3,299.3	3,272.6	3,259.2	7.3	8.0	77.06	46.9	286.3	271.9	257.5	14.44	18.826		
3,400.0	3,399.1	3,371.9	3,357.4	7.5	8.3	76.31	50.5	300.7	283.9	269.0	14.90	19.048		
3,500.0	3,499.0	3,471.1	3,455.6	7.7	8.6	75.56	54.0	315.1	295.8	280.4	15.36	19.255		
3,600.0	3,598.9	3,570.4	3,553.7	8.0	9.0	74.81	57.6	329.5	307.7	291.9	15.82	19.449		
3,700.0	3,698.8	3,669.7	3,651.9	8.2	9.3	74.06	61.1	343.9	319.7	303.4	16.28	19.630		
3,800.0	3,798.7	3,769.0	3,750.1	8.4	9.6	73.31	64.7	358.3	331.6	314.9	16.75	19.800		
3,900.0	3,898.6	3,868.3	3,848.2	8.7	10.0	72.56	68.3	372.7	343.6	326.3	17.21	19.959		
4,000.0	3,998.5	3,967.5	3,946.4	8.9	10.3	71.81	71.8	387.1	355.5	337.8	17.68	20.109		
4,100.0	4,098.4	4,066.8	4,044.6	9.1	10.6	71.06	75.4	401.5	367.5	349.3	18.15	20.249		
4,200.0	4,198.3	4,166.1	4,142.7	9.4	11.0	70.31	78.9	415.9	379.4	360.8	18.62	20.382		
4,300.0	4,298.1	4,265.4	4,240.9	9.6	11.3	69.56	82.5	430.3	391.4	372.3	19.08	20.508		
4,400.0	4,398.0	4,364.7	4,339.0	9.8	11.7	68.81	86.1	444.7	403.3	383.8	19.55	20.626		
4,500.0	4,497.9	4,463.9	4,437.2	10.1	12.0	68.06	89.6	459.1	415.3	395.3	20.03	20.738		
4,600.0	4,497.8	4,463.2	4,435.4	10.3	12.4	67.31	93.2	473.4	427.2	406.8	20.50	20.844		
4,700.0	4,497.7	4,462.5	4,433.5	10.5	12.7	66.56	96.7	487.8	439.2	418.2	20.97	20.945		
4,800.0	4,497.6	4,461.8	4,431.7	10.8	13.0	65.81	100.3	502.2	451.2	429.7	21.44	21.041		
4,900.0	4,497.5	4,461.0	4,429.9	11.0	13.4	65.06	103.9	516.6	463.1	441.2	21.92	21.132		
5,000.0	4,497.4	4,460.3	4,428.0	11.2	13.7	64.31	107.4	531.0	475.1	452.7	22.39	21.219		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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			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	5,097.3	5,059.6	5,026.2	11.5	14.1	55.55	111.0	545.4	487.1	464.2	22.87	21.302		
5,200.0	5,197.2	5,158.9	5,124.4	11.7	14.4	55.63	114.5	559.8	499.0	475.7	23.34	21.381		
5,300.0	5,297.0	5,258.2	5,222.5	11.9	14.8	55.71	118.1	574.2	511.0	487.2	23.82	21.456		
5,400.0	5,396.9	5,357.4	5,320.7	12.2	15.1	55.78	121.7	588.6	523.0	498.7	24.29	21.528		
5,500.0	5,496.8	5,456.7	5,418.9	12.4	15.5	55.85	125.2	603.0	535.0	510.2	24.77	21.597		
5,600.0	5,596.7	5,556.0	5,517.0	12.6	15.8	55.91	128.8	617.4	546.9	521.7	25.25	21.663		
5,700.0	5,696.6	5,655.3	5,615.2	12.9	16.2	55.97	132.3	631.8	558.9	533.2	25.72	21.726		
5,800.0	5,796.5	5,754.6	5,713.4	13.1	16.5	56.03	135.9	646.2	570.9	544.7	26.20	21.787		
5,900.0	5,896.4	5,863.7	5,821.3	13.3	16.9	56.11	139.7	661.6	582.5	555.8	26.69	21.822		
6,000.0	5,996.3	5,988.2	5,945.1	13.6	17.2	56.28	143.0	674.9	590.7	563.5	27.18	21.729		
6,069.4	6,065.6	6,075.0	6,031.6	13.7	17.4	56.47	144.6	681.2	593.9	566.4	27.51	21.585		
6,100.0	6,096.2	6,113.3	6,069.9	13.8	17.5	56.57	145.0	683.1	594.7	567.1	27.65	21.513		
6,203.8	6,200.0	6,243.5	6,200.0	14.0	17.7	89.45	145.7	686.0	596.0	568.0	28.05	21.251		
6,300.0	6,296.2	6,339.6	6,296.2	14.2	17.8	89.45	145.7	686.0	596.0	567.6	28.42	20.972		
6,400.0	6,396.2	6,439.6	6,396.2	14.4	18.0	89.45	145.7	686.0	596.0	567.2	28.84	20.666		
6,500.0	6,496.2	6,539.6	6,496.2	14.6	18.2	89.45	145.7	686.0	596.0	566.7	29.26	20.368		
6,600.0	6,596.2	6,639.6	6,596.2	14.8	18.3	89.45	145.7	686.0	596.0	566.3	29.68	20.079		
6,700.0	6,696.2	6,739.6	6,696.2	15.0	18.5	89.45	145.7	686.0	596.0	565.9	30.11	19.797		
6,770.8	6,767.0	6,810.4	6,767.0	15.2	18.6	89.45	145.7	686.0	596.0	565.6	30.41	19.602		
6,770.8	6,767.0	6,810.4	6,767.0	15.2	18.6	89.45	145.7	686.0	596.0	565.6	30.41	19.602		
6,800.0	6,796.1	6,839.6	6,796.2	15.2	18.7	-90.30	145.1	686.0	596.0	565.5	30.51	19.537		
6,850.0	6,846.0	6,889.6	6,846.0	15.3	18.7	-90.30	141.4	686.0	596.0	565.4	30.66	19.440		
6,900.0	6,895.5	6,939.7	6,895.5	15.4	18.8	-90.30	134.1	686.1	596.1	565.3	30.79	19.357		
6,950.0	6,944.3	6,989.7	6,944.3	15.4	18.8	-90.29	123.4	686.2	596.1	565.2	30.91	19.285		
7,000.0	6,992.3	7,039.7	6,992.3	15.5	18.9	-90.29	109.3	686.3	596.2	565.2	31.02	19.221		
7,050.0	7,039.1	7,089.7	7,039.2	15.6	18.9	-90.28	91.9	686.5	596.3	565.1	31.12	19.160		
7,100.0	7,084.7	7,139.7	7,084.7	15.6	19.0	-90.27	71.3	686.7	596.4	565.1	31.22	19.099		
7,150.0	7,128.7	7,189.7	7,128.7	15.7	19.0	-90.26	47.6	686.9	596.5	565.1	31.34	19.032		
7,200.0	7,170.9	7,239.7	7,171.0	15.7	19.1	-90.25	20.8	687.1	596.6	565.1	31.48	18.954		
7,250.0	7,211.2	7,289.7	7,211.2	15.8	19.1	-90.23	-8.8	687.4	596.8	565.1	31.64	18.858		
7,300.0	7,249.3	7,339.7	7,249.3	15.9	19.2	-90.22	-41.2	687.7	596.9	565.1	31.85	18.740		
7,350.0	7,285.0	7,389.7	7,285.1	16.0	19.3	-90.20	-76.2	688.0	597.1	565.0	32.11	18.595		
7,400.0	7,318.3	7,439.8	7,318.3	16.1	19.4	-90.19	-113.5	688.4	597.3	564.9	32.43	18.418		
7,450.0	7,348.8	7,489.8	7,348.9	16.3	19.5	-90.17	-153.1	688.7	597.5	564.7	32.81	18.208		
7,500.0	7,376.5	7,539.8	7,376.5	16.6	19.6	-90.15	-194.7	689.1	597.7	564.4	33.28	17.962		
7,550.0	7,401.2	7,589.8	7,401.3	16.8	19.8	-90.14	-238.2	689.5	597.9	564.1	33.82	17.680		
7,600.0	7,422.9	7,639.8	7,422.9	17.1	20.0	-90.12	-283.2	689.9	598.1	563.7	34.44	17.366		
7,650.0	7,441.3	7,689.8	7,441.3	17.5	20.3	-90.10	-329.7	690.4	598.4	563.2	35.15	17.022		
7,700.0	7,456.5	7,739.8	7,456.5	17.9	20.6	-90.08	-377.3	690.8	598.6	562.6	35.94	16.653		
7,750.0	7,468.3	7,789.8	7,468.3	18.3	20.9	-90.06	-425.9	691.3	598.8	562.0	36.82	16.265		
7,800.0	7,476.6	7,839.8	7,476.6	18.8	21.3	-90.04	-475.2	691.7	599.1	561.3	37.77	15.863		
7,850.0	7,481.6	7,889.8	7,481.6	19.3	21.7	-90.02	-525.0	692.2	599.3	560.5	38.78	15.453		
7,898.4	7,483.0	7,938.2	7,483.0	19.9	22.2	-90.00	-573.4	692.6	599.6	559.7	39.82	15.055		
7,898.4	7,483.0	7,938.2	7,483.0	19.9	22.2	-90.00	-573.4	692.6	599.6	559.7	39.82	15.055		
7,898.9	7,483.0	7,938.7	7,483.0	19.9	22.2	-90.00	-573.8	692.6	599.6	559.7	39.83	15.051		
7,900.0	7,483.0	7,939.8	7,483.0	19.9	22.2	-90.00	-574.9	692.6	599.6	559.7	39.86	15.043		
8,000.0	7,482.6	8,039.8	7,482.6	21.0	23.2	-90.00	-674.9	693.6	600.1	557.9	42.20	14.219		
8,100.0	7,482.2	8,139.8	7,482.2	22.3	24.4	-90.00	-774.9	694.5	600.6	555.8	44.74	13.423		
8,200.0	7,481.8	8,239.8	7,481.8	23.7	25.6	-90.00	-874.9	695.4	601.1	553.6	47.46	12.664		
8,300.0	7,481.4	8,339.8	7,481.4	25.1	26.9	-90.00	-974.9	696.3	601.6	551.2	50.33	11.952		
8,400.0	7,481.0	8,439.8	7,481.0	26.6	28.3	-90.00	-1,074.9	697.3	602.1	548.7	53.33	11.290		
8,500.0	7,480.6	8,539.8	7,480.6	28.2	29.8	-90.00	-1,174.9	698.2	602.6	546.2	56.43	10.679		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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			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		
8,600.0	7,480.2	8,639.8	7,480.2	29.8	31.3	-90.00	-1,274.9	699.1	603.1	543.5	59.62	10.116		
8,700.0	7,479.8	8,739.8	7,479.8	31.4	32.9	-90.00	-1,374.9	700.1	603.6	540.7	62.88	9.599		
8,800.0	7,479.4	8,839.8	7,479.4	33.1	34.5	-90.00	-1,474.9	701.0	604.1	537.9	66.21	9.124		
8,900.0	7,479.0	8,939.8	7,479.0	34.8	36.1	-90.00	-1,574.9	701.9	604.6	535.0	69.59	8.688		
9,000.0	7,478.6	9,039.8	7,478.6	36.5	37.8	-90.00	-1,674.9	702.8	605.1	532.1	73.02	8.286		
9,100.0	7,478.2	9,139.8	7,478.2	38.2	39.5	-90.00	-1,774.8	703.8	605.6	529.1	76.49	7.917		
9,200.0	7,477.8	9,239.8	7,477.8	40.0	41.2	-90.00	-1,874.8	704.7	606.1	526.1	80.00	7.576		
9,300.0	7,477.4	9,339.8	7,477.4	41.8	42.9	-90.00	-1,974.8	705.6	606.6	523.1	83.54	7.261		
9,400.0	7,477.0	9,439.8	7,477.0	43.5	44.6	-90.00	-2,074.8	706.5	607.1	520.0	87.10	6.970		
9,500.0	7,476.6	9,539.8	7,476.6	45.3	46.4	-90.00	-2,174.8	707.5	607.6	516.9	90.69	6.699		
9,600.0	7,476.2	9,639.8	7,476.2	47.1	48.2	-90.00	-2,274.8	708.4	608.1	513.8	94.31	6.448		
9,700.0	7,475.8	9,739.8	7,475.8	49.0	49.9	-90.00	-2,374.8	709.3	608.6	510.7	97.94	6.214		
9,800.0	7,475.4	9,839.8	7,475.4	50.8	51.7	-90.00	-2,474.8	710.2	609.1	507.5	101.58	5.996		
9,900.0	7,475.0	9,939.8	7,475.0	52.6	53.5	-90.00	-2,574.8	711.2	609.6	504.4	105.24	5.792		
10,000.0	7,474.5	10,039.8	7,474.5	54.4	55.3	-90.00	-2,674.8	712.1	610.1	501.2	108.92	5.601		
10,100.0	7,474.1	10,139.7	7,474.2	56.3	57.2	-90.00	-2,774.8	713.0	610.6	498.0	112.61	5.422		
10,200.0	7,473.7	10,239.7	7,473.8	58.1	59.0	-90.00	-2,874.8	713.9	611.1	494.8	116.31	5.254		
10,300.0	7,473.3	10,339.7	7,473.4	60.0	60.8	-90.00	-2,974.8	714.9	611.6	491.6	120.02	5.096		
10,400.0	7,472.9	10,439.7	7,473.0	61.9	62.7	-90.00	-3,074.8	715.8	612.1	488.4	123.74	4.947		
10,500.0	7,472.5	10,539.7	7,472.6	63.7	64.5	-90.00	-3,174.8	716.7	612.6	485.2	127.46	4.806		
10,600.0	7,472.1	10,639.7	7,472.2	65.6	66.3	-90.00	-3,274.7	717.6	613.1	481.9	131.20	4.673		
10,700.0	7,471.7	10,739.7	7,471.8	67.5	68.2	-90.00	-3,374.7	718.6	613.6	478.7	134.94	4.547		
10,800.0	7,471.3	10,839.7	7,471.4	69.3	70.1	-90.00	-3,474.7	719.5	614.1	475.4	138.69	4.428		
10,900.0	7,470.9	10,939.7	7,471.0	71.2	71.9	-90.00	-3,574.7	720.4	614.6	472.2	142.44	4.315		
11,000.0	7,470.5	11,039.7	7,470.6	73.1	73.8	-90.00	-3,674.7	721.3	615.1	468.9	146.20	4.207		
11,100.0	7,470.1	11,139.7	7,470.2	75.0	75.6	-90.00	-3,774.7	722.3	615.6	465.7	149.97	4.105		
11,200.0	7,469.7	11,239.7	7,469.7	76.9	77.5	-90.00	-3,874.7	723.2	616.1	462.4	153.74	4.008		
11,300.0	7,469.3	11,339.7	7,469.3	78.7	79.4	-90.00	-3,974.7	724.1	616.6	459.1	157.51	3.915		
11,400.0	7,468.9	11,439.7	7,468.9	80.6	81.3	-90.00	-4,074.7	725.0	617.1	455.9	161.29	3.826		
11,500.0	7,468.5	11,539.7	7,468.5	82.5	83.1	-90.00	-4,174.7	726.0	617.6	452.6	165.07	3.742		
11,600.0	7,468.1	11,639.7	7,468.1	84.4	85.0	-90.00	-4,274.7	726.9	618.2	449.3	168.86	3.661		
11,700.0	7,467.7	11,739.7	7,467.7	86.3	86.9	-90.00	-4,374.7	727.8	618.7	446.0	172.64	3.583		
11,800.0	7,467.3	11,839.7	7,467.3	88.2	88.8	-90.00	-4,474.7	728.7	619.2	442.7	176.44	3.509		
11,900.0	7,466.9	11,939.7	7,466.9	90.1	90.7	-90.00	-4,574.7	729.7	619.7	439.4	180.23	3.438		
12,000.0	7,466.5	12,039.7	7,466.5	92.0	92.6	-90.00	-4,674.7	730.6	620.2	436.1	184.03	3.370		
12,100.0	7,466.1	12,139.7	7,466.1	93.9	94.5	-90.00	-4,774.7	731.5	620.7	432.8	187.83	3.304		
12,200.0	7,465.7	12,239.7	7,465.7	95.8	96.4	-90.00	-4,874.6	732.5	621.2	429.5	191.63	3.241		
12,300.0	7,465.3	12,339.7	7,465.3	97.7	98.3	-90.00	-4,974.6	733.4	621.7	426.2	195.43	3.181		
12,400.0	7,464.9	12,439.7	7,464.9	99.6	100.1	-90.00	-5,074.6	734.3	622.2	422.9	199.24	3.123		
12,500.0	7,464.5	12,539.7	7,464.5	101.5	102.0	-90.00	-5,174.6	735.2	622.7	419.6	203.05	3.067		
12,600.0	7,464.1	12,639.7	7,464.1	103.4	103.9	-90.00	-5,274.6	736.2	623.2	416.3	206.86	3.013		
12,700.0	7,463.7	12,739.7	7,463.7	105.3	105.8	-90.00	-5,374.6	737.1	623.7	413.0	210.67	2.960		
12,800.0	7,463.3	12,839.7	7,463.3	107.2	107.7	-90.00	-5,474.6	738.0	624.2	409.7	214.49	2.910		
12,900.0	7,462.9	12,939.7	7,462.9	109.1	109.6	-90.00	-5,574.6	738.9	624.7	406.4	218.30	2.862		
13,000.0	7,462.5	13,039.7	7,462.5	111.0	111.5	-90.00	-5,674.6	739.9	625.2	403.1	222.12	2.815		
13,100.0	7,462.1	13,139.7	7,462.1	112.9	113.4	-90.00	-5,774.6	740.8	625.7	399.7	225.94	2.769		
13,200.0	7,461.7	13,239.7	7,461.7	114.9	115.4	-90.00	-5,874.6	741.7	626.2	396.4	229.76	2.725		
13,300.0	7,461.3	13,339.7	7,461.3	116.8	117.3	-90.00	-5,974.6	742.6	626.7	393.1	233.58	2.683		
13,400.0	7,460.9	13,439.7	7,460.9	118.7	119.2	-90.00	-6,074.6	743.6	627.2	389.8	237.40	2.642		
13,500.0	7,460.5	13,539.7	7,460.5	120.6	121.1	-90.00	-6,174.6	744.5	627.7	386.5	241.23	2.602		
13,600.0	7,460.1	13,639.7	7,460.1	122.5	123.0	-90.00	-6,274.6	745.4	628.2	383.1	245.05	2.564		
13,700.0	7,459.7	13,739.7	7,459.7	124.4	124.9	-90.00	-6,374.6	746.3	628.7	379.8	248.88	2.526		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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			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	13,839.7	7,459.3	126.3	126.8	-90.00	-6,474.5	747.3	629.2	376.5	252.70	2.490		
13,900.0	7,458.9	13,939.7	7,458.9	128.2	128.7	-90.00	-6,574.5	748.2	629.7	373.2	256.53	2.455		
14,000.0	7,458.5	14,039.7	7,458.5	130.1	130.6	-90.00	-6,674.5	749.1	630.2	369.8	260.36	2.421		
14,100.0	7,458.1	14,139.7	7,458.1	132.1	132.5	-90.00	-6,774.5	750.0	630.7	366.5	264.19	2.387		
14,200.0	7,457.7	14,239.7	7,457.7	134.0	134.4	-90.00	-6,874.5	751.0	631.2	363.2	268.02	2.355		
14,300.0	7,457.3	14,339.7	7,457.3	135.9	136.3	-90.00	-6,974.5	751.9	631.7	359.9	271.85	2.324		
14,400.0	7,456.9	14,439.7	7,456.9	137.8	138.3	-90.00	-7,074.5	752.8	632.2	356.5	275.69	2.293		
14,500.0	7,456.5	14,539.7	7,456.5	139.7	140.2	-90.00	-7,174.5	753.7	632.7	353.2	279.52	2.264		
14,600.0	7,456.1	14,639.7	7,456.1	141.6	142.1	-90.00	-7,274.5	754.7	633.2	349.9	283.35	2.235		
14,700.0	7,455.6	14,739.7	7,455.7	143.6	144.0	-90.00	-7,374.5	755.6	633.7	346.5	287.19	2.207		
14,800.0	7,455.2	14,839.7	7,455.3	145.5	145.9	-90.00	-7,474.5	756.5	634.2	343.2	291.02	2.179		
14,900.0	7,454.8	14,939.7	7,454.9	147.4	147.8	-90.00	-7,574.5	757.4	634.7	339.9	294.86	2.153		
15,000.0	7,454.4	15,039.7	7,454.5	149.3	149.7	-90.00	-7,674.5	758.4	635.2	336.5	298.69	2.127		
15,100.0	7,454.0	15,139.7	7,454.1	151.2	151.7	-90.00	-7,774.5	759.3	635.7	333.2	302.53	2.101		
15,200.0	7,453.6	15,239.7	7,453.7	153.1	153.6	-90.00	-7,874.5	760.2	636.2	329.9	306.37	2.077		
15,300.0	7,453.2	15,339.7	7,453.3	155.1	155.5	-90.00	-7,974.5	761.1	636.7	326.5	310.21	2.053		
15,400.0	7,452.8	15,439.7	7,452.9	157.0	157.4	-90.00	-8,074.4	762.1	637.2	323.2	314.05	2.029		
15,500.0	7,452.4	15,539.7	7,452.5	158.9	159.3	-90.00	-8,174.4	763.0	637.7	319.9	317.89	2.006		
15,600.0	7,452.0	15,639.7	7,452.1	160.8	161.2	-90.00	-8,274.4	763.9	638.2	316.5	321.73	1.984		
15,700.0	7,451.6	15,739.7	7,451.7	162.7	163.2	-90.00	-8,374.4	764.8	638.7	313.2	325.57	1.962		
15,800.0	7,451.2	15,839.7	7,451.3	164.7	165.1	-90.00	-8,474.4	765.8	639.3	309.8	329.41	1.941		
15,900.0	7,450.8	15,939.7	7,450.9	166.6	167.0	-90.00	-8,574.4	766.7	639.8	306.5	333.25	1.920		
16,000.0	7,450.4	16,039.7	7,450.5	168.5	168.9	-90.00	-8,674.4	767.6	640.3	303.2	337.09	1.899		
16,100.0	7,450.0	16,139.7	7,450.1	170.4	170.8	-90.00	-8,774.4	768.6	640.8	299.8	340.93	1.879		
16,200.0	7,449.6	16,239.7	7,449.7	172.3	172.8	-90.00	-8,874.4	769.5	641.3	296.5	344.77	1.860		
16,300.0	7,449.2	16,339.7	7,449.3	174.3	174.7	-90.00	-8,974.4	770.4	641.8	293.1	348.62	1.841		
16,400.0	7,448.8	16,439.7	7,448.9	176.2	176.6	-90.00	-9,074.4	771.3	642.3	289.8	352.46	1.822		
16,500.0	7,448.4	16,539.7	7,448.5	178.1	178.5	-90.00	-9,174.4	772.3	642.8	286.5	356.30	1.804		
16,600.0	7,448.0	16,639.7	7,448.1	180.0	180.4	-90.00	-9,274.4	773.2	643.3	283.1	360.15	1.786		
16,700.0	7,447.6	16,739.7	7,447.7	181.9	182.3	-90.00	-9,374.4	774.1	643.8	279.8	363.99	1.769		
16,800.0	7,447.2	16,839.7	7,447.3	183.9	184.3	-90.00	-9,474.4	775.0	644.3	276.4	367.84	1.752		
16,900.0	7,446.8	16,939.7	7,446.9	185.8	186.2	-90.00	-9,574.3	776.0	644.8	273.1	371.68	1.735		
17,000.0	7,446.4	17,039.7	7,446.5	187.7	188.1	-90.00	-9,674.3	776.9	645.3	269.8	375.53	1.718		
17,100.0	7,446.0	17,139.7	7,446.1	189.6	190.0	-90.00	-9,774.3	777.8	645.8	266.4	379.37	1.702		
17,200.0	7,445.6	17,239.7	7,445.7	191.6	192.0	-90.00	-9,874.3	778.7	646.3	263.1	383.22	1.686		
17,300.0	7,445.2	17,339.7	7,445.3	193.5	193.9	-90.01	-9,974.3	779.7	646.8	259.7	387.06	1.671		
17,400.0	7,444.8	17,439.7	7,444.9	195.4	195.8	-90.01	-10,074.3	780.6	647.3	256.4	390.91	1.656		
17,500.0	7,444.4	17,539.7	7,444.5	197.3	197.7	-90.01	-10,174.3	781.5	647.8	253.0	394.76	1.641		
17,600.0	7,444.0	17,639.7	7,444.1	199.2	199.6	-90.01	-10,274.3	782.4	648.3	249.7	398.60	1.626		
17,700.0	7,443.6	17,739.7	7,443.7	201.2	201.6	-90.01	-10,374.3	783.4	648.8	246.3	402.45	1.612		
17,800.0	7,443.2	17,839.7	7,443.3	203.1	203.5	-90.01	-10,474.3	784.3	649.3	243.0	406.30	1.598		
17,845.2	7,443.0	17,884.8	7,443.1	204.0	204.4	-90.01	-10,519.5	784.7	649.5	241.5	408.03	1.592 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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	89.99	0.0	75.5	75.5					
100.0	100.0	100.0	100.0	0.1	0.1	89.99	0.0	75.5	75.5	75.2	0.22	335.695		
200.0	200.0	200.0	200.0	0.3	0.3	89.99	0.0	75.5	75.5	74.8	0.67	111.898		
300.0	300.0	300.0	300.0	0.6	0.6	89.99	0.0	75.5	75.5	74.3	1.12	67.139		
400.0	400.0	400.0	400.0	0.8	0.8	89.99	0.0	75.5	75.5	73.9	1.57	47.956		
500.0	500.0	500.0	500.0	1.0	1.0	89.99	0.0	75.5	75.5	73.4	2.02	37.299		
600.0	600.0	600.0	600.0	1.2	1.2	89.99	0.0	75.5	75.5	73.0	2.47	30.518		
700.0	700.0	700.0	700.0	1.5	1.5	89.99	0.0	75.5	75.5	72.5	2.92	25.823		
800.0	800.0	800.0	800.0	1.7	1.7	89.99	0.0	75.5	75.5	72.1	3.37	22.380		
900.0	900.0	900.0	900.0	1.9	1.9	89.99	0.0	75.5	75.5	71.6	3.82	19.747		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.99	0.0	75.5	75.5	71.2	4.27	17.668		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.99	0.0	75.5	75.5	70.7	4.72	15.985		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.99	0.0	75.5	75.5	70.3	5.17	14.595		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.99	0.0	75.5	75.5	69.8	5.62	13.428		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.99	0.0	75.5	75.5	69.4	6.07	12.433		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.99	0.0	75.5	75.5	68.9	6.52	11.576		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	89.99	0.0	75.5	75.5	68.5	6.97	10.829		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.99	0.0	75.5	75.5	68.0	7.42	10.173		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	89.99	0.0	75.5	75.5	67.6	7.87	9.591		
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	89.99	0.0	75.5	75.5	67.1	8.32	9.073 CC		
2,000.0	2,000.0	1,999.4	1,999.4	4.4	4.4	90.92	-1.2	75.8	75.8	67.1	8.74	8.682 ES		
2,100.0	2,100.0	2,098.7	2,098.6	4.6	4.5	93.66	-4.9	77.0	77.1	68.0	9.13	8.448		
2,200.0	2,200.0	2,197.7	2,197.4	4.8	4.7	97.99	-11.1	78.9	79.7	70.1	9.53	8.358		
2,300.0	2,300.0	2,296.3	2,295.6	5.1	4.9	103.54	-19.6	81.5	83.9	74.0	9.94	8.442		
2,400.0	2,400.0	2,394.3	2,393.0	5.3	5.1	109.79	-30.5	84.8	90.4	80.1	10.36	8.726		
2,500.0	2,500.0	2,491.8	2,489.4	5.5	5.3	116.19	-43.7	88.9	99.6	88.8	10.80	9.225		
2,600.0	2,600.0	2,588.8	2,585.0	5.7	5.5	90.02	-59.1	93.6	111.7	100.5	11.20	9.975		
2,679.3	2,679.2	2,666.5	2,661.6	5.9	5.7	95.28	-72.0	97.6	122.9	111.3	11.54	10.651		
2,700.0	2,699.9	2,686.7	2,681.5	6.0	5.8	96.64	-75.4	98.6	126.0	114.3	11.62	10.839		
2,800.0	2,799.8	2,784.6	2,777.9	6.2	6.1	102.33	-91.6	103.6	141.8	129.8	12.04	11.774		
2,900.0	2,899.7	2,882.4	2,874.3	6.4	6.3	106.86	-107.8	108.5	158.7	146.3	12.47	12.734		
3,000.0	2,999.6	2,980.3	2,970.6	6.6	6.6	110.50	-124.0	113.5	176.5	163.6	12.89	13.689		
3,100.0	3,099.5	3,078.1	3,067.0	6.8	6.9	113.48	-140.3	118.5	194.7	181.4	13.32	14.624		
3,200.0	3,199.4	3,176.0	3,163.4	7.1	7.3	115.95	-156.5	123.5	213.5	199.7	13.75	15.528		
3,300.0	3,299.3	3,273.8	3,259.7	7.3	7.6	118.02	-172.7	128.4	232.5	218.3	14.18	16.397		
3,400.0	3,399.1	3,371.7	3,356.1	7.5	7.9	119.77	-189.0	133.4	251.8	237.2	14.62	17.228		
3,500.0	3,499.0	3,469.5	3,452.5	7.7	8.2	121.28	-205.2	138.4	271.3	256.2	15.05	18.021		
3,600.0	3,598.9	3,567.4	3,548.8	8.0	8.6	122.58	-221.4	143.4	290.9	275.4	15.49	18.776		
3,700.0	3,698.8	3,665.2	3,645.2	8.2	8.9	123.72	-237.6	148.4	310.7	294.8	15.94	19.494		
3,800.0	3,798.7	3,763.1	3,741.6	8.4	9.3	124.72	-253.9	153.3	330.6	314.2	16.38	20.177		
3,900.0	3,898.6	3,860.9	3,837.9	8.7	9.6	125.61	-270.1	158.3	350.5	333.7	16.83	20.827		
4,000.0	3,998.5	3,958.8	3,934.3	8.9	10.0	126.41	-286.3	163.3	370.6	353.3	17.28	21.445		
4,100.0	4,098.4	4,056.6	4,030.7	9.1	10.4	127.12	-302.5	168.3	390.7	372.9	17.73	22.033		
4,200.0	4,198.3	4,154.5	4,127.0	9.4	10.7	127.76	-318.8	173.2	410.8	392.6	18.18	22.592		
4,300.0	4,298.1	4,252.3	4,223.4	9.6	11.1	128.34	-335.0	178.2	431.0	412.4	18.64	23.125		
4,400.0	4,398.0	4,350.2	4,319.8	9.8	11.5	128.87	-351.2	183.2	451.2	432.1	19.09	23.632		
4,500.0	4,497.9	4,448.0	4,416.2	10.1	11.8	129.36	-367.4	188.2	471.5	451.9	19.55	24.116		
4,600.0	4,497.8	4,445.9	4,412.5	10.3	12.2	129.80	-383.7	193.2	491.8	471.8	20.01	24.578		
4,700.0	4,497.7	4,443.7	4,408.9	10.5	12.6	130.21	-399.9	198.1	512.1	491.6	20.47	25.019		
4,800.0	4,497.6	4,441.6	4,405.3	10.8	12.9	130.59	-416.1	203.1	532.5	511.5	20.93	25.440		
4,900.0	4,497.5	4,439.4	4,401.6	11.0	13.3	130.94	-432.3	208.1	552.8	531.4	21.39	25.843		
5,000.0	4,497.4	4,437.3	4,398.0	11.2	13.7	131.27	-448.6	213.1	573.2	551.4	21.85	26.228		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 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			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	5,097.3	5,035.1	4,994.4	11.5	14.1	131.57	-464.8	218.0	593.6	571.3	22.32	26.597			
5,200.0	5,197.2	5,133.0	5,090.7	11.7	14.4	131.85	-481.0	223.0	614.0	591.2	22.78	26.951			
5,300.0	5,297.0	5,230.8	5,187.1	11.9	14.8	132.12	-497.2	228.0	634.4	611.2	23.25	27.290			
5,400.0	5,396.9	5,328.7	5,283.5	12.2	15.2	132.37	-513.5	233.0	654.9	631.2	23.71	27.616			
5,500.0	5,496.8	5,426.6	5,379.8	12.4	15.6	132.60	-529.7	238.0	675.3	651.2	24.18	27.929			
5,600.0	5,596.7	5,524.4	5,476.2	12.6	16.0	132.82	-545.9	242.9	695.8	671.2	24.65	28.229			
5,700.0	5,696.6	5,622.3	5,572.6	12.9	16.4	133.03	-562.1	247.9	716.3	691.2	25.12	28.518			
5,800.0	5,796.5	5,720.1	5,668.9	13.1	16.7	133.22	-578.4	252.9	736.8	711.2	25.59	28.796			
5,900.0	5,896.4	5,818.0	5,765.3	13.3	17.1	133.41	-594.6	257.9	757.2	731.2	26.05	29.064			
6,000.0	5,996.3	5,915.8	5,861.7	13.6	17.5	133.58	-610.8	262.8	777.7	751.2	26.52	29.321			
6,069.4	6,065.6	5,983.7	5,928.5	13.7	17.8	133.70	-622.1	266.3	792.0	765.1	26.85	29.495			
6,100.0	6,096.2	6,013.7	5,958.1	13.8	17.9	133.83	-627.0	267.8	798.1	771.1	27.00	29.558			
6,850.0	6,846.0	8,163.3	7,582.0	15.3	19.4	-111.86	135.3	289.6	762.6	728.4	34.14	22.336			
6,900.0	6,895.5	8,156.0	7,582.0	15.4	19.3	-121.45	128.0	289.5	714.9	681.2	33.70	21.217			
6,950.0	6,944.3	8,145.3	7,582.0	15.4	19.3	-128.17	117.3	289.5	668.2	634.9	33.23	20.110			
7,000.0	6,992.3	8,131.3	7,582.0	15.5	19.2	-132.77	103.3	289.5	622.5	589.8	32.74	19.013			
7,050.0	7,039.1	8,113.9	7,582.0	15.6	19.1	-135.85	85.9	289.5	578.3	546.0	32.23	17.940			
7,100.0	7,084.7	8,093.3	7,582.0	15.6	19.0	-137.80	65.3	289.4	535.7	504.0	31.70	16.897			
7,150.0	7,128.7	8,069.6	7,582.0	15.7	18.9	-138.89	41.6	289.4	495.1	463.9	31.16	15.887			
7,200.0	7,170.9	8,031.6	7,581.7	15.7	18.8	-138.10	3.6	289.3	456.5	425.8	30.74	14.851			
7,250.0	7,211.2	7,972.7	7,577.7	15.8	18.6	-134.48	-55.1	289.2	418.8	388.2	30.67	13.657			
7,300.0	7,249.3	7,921.2	7,570.2	15.9	18.5	-130.94	-106.0	289.1	381.9	351.2	30.71	12.436			
7,350.0	7,285.0	7,874.9	7,560.4	16.0	18.5	-127.30	-151.3	289.0	346.3	315.4	30.91	11.203			
7,400.0	7,318.3	7,832.4	7,548.9	16.1	18.5	-123.43	-192.2	289.0	312.5	281.2	31.30	9.984			
7,450.0	7,348.8	7,792.8	7,535.9	16.3	18.5	-119.18	-229.6	288.9	281.2	249.3	31.90	8.816			
7,500.0	7,376.5	7,755.3	7,521.8	16.6	18.5	-114.45	-264.3	288.8	253.3	220.6	32.71	7.744			
7,550.0	7,401.2	7,719.6	7,506.6	16.8	18.6	-109.15	-296.7	288.8	229.7	196.0	33.67	6.821			
7,600.0	7,422.9	7,685.2	7,490.5	17.1	18.6	-103.24	-327.1	288.7	211.7	177.0	34.70	6.099			
7,650.0	7,441.3	7,651.9	7,473.6	17.5	18.7	-96.74	-355.7	288.7	200.3	164.7	35.64	5.619			
7,700.0	7,456.5	7,619.5	7,455.8	17.9	18.8	-89.76	-382.8	288.6	196.4	160.0	36.33	5.405			
7,700.9	7,456.7	7,618.9	7,455.5	17.9	18.8	-89.62	-383.3	288.6	196.4	160.0	36.34	5.403 SF			
7,750.0	7,468.3	7,587.9	7,437.3	18.3	18.9	-82.50	-408.5	288.6	199.9	163.3	36.61	5.460			
7,800.0	7,476.6	7,556.9	7,418.1	18.8	19.0	-75.22	-432.8	288.5	210.0	173.6	36.38	5.771			
7,850.0	7,481.6	7,526.4	7,398.2	19.3	19.0	-68.17	-455.9	288.5	225.3	189.7	35.68	6.315			
7,898.4	7,483.0	7,500.0	7,380.2	19.9	19.1	-62.20	-475.2	288.4	243.9	209.2	34.77	7.016			
7,898.4	7,483.0	7,500.0	7,380.2	19.9	19.1	-62.20	-475.2	288.4	243.9	209.2	34.77	7.016			
7,898.9	7,483.0	7,500.0	7,380.2	19.9	19.1	-62.20	-475.2	288.4	244.1	209.3	34.77	7.021			
7,900.0	7,483.0	7,500.0	7,380.2	19.9	19.1	-62.20	-475.2	288.4	244.6	209.8	34.78	7.032			
8,000.0	7,482.6	7,441.5	7,337.8	21.0	19.3	-53.35	-515.5	288.4	293.5	260.5	33.01	8.891			
8,100.0	7,482.2	7,400.0	7,305.8	22.3	19.4	-47.77	-541.9	288.3	354.7	322.8	31.88	11.127			
8,200.0	7,481.8	7,350.0	7,265.3	23.7	19.6	-41.88	-571.2	288.3	424.4	394.1	30.27	14.020			
8,300.0	7,481.4	7,320.1	7,240.2	25.1	19.6	-38.79	-587.4	288.2	500.1	470.4	29.77	16.798			
8,400.0	7,481.0	7,300.0	7,222.9	26.6	19.7	-36.87	-597.6	288.2	580.5	550.7	29.82	19.470			
8,500.0	7,480.6	7,264.3	7,191.5	28.2	19.8	-33.79	-614.7	288.2	663.9	634.8	29.14	22.786			
8,600.0	7,480.2	7,250.0	7,178.7	29.8	19.8	-32.65	-621.0	288.2	750.1	720.6	29.52	25.413			

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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			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	0.0	0.0	0.0	0.0	-90.40	-4.0	-574.9	574.9					
100.0	100.0	100.0	100.0	0.1	0.1	-90.40	-4.0	-574.9	574.9	574.7	0.22	2,557.741		
200.0	200.0	200.0	200.0	0.3	0.3	-90.40	-4.0	-574.9	574.9	574.2	0.67	852.580		
300.0	300.0	300.0	300.0	0.6	0.6	-90.40	-4.0	-574.9	574.9	573.8	1.12	511.548		
400.0	400.0	400.0	400.0	0.8	0.8	-90.40	-4.0	-574.9	574.9	573.3	1.57	365.392		
500.0	500.0	500.0	500.0	1.0	1.0	-90.40	-4.0	-574.9	574.9	572.9	2.02	284.193		
600.0	600.0	600.0	600.0	1.2	1.2	-90.40	-4.0	-574.9	574.9	572.4	2.47	232.522		
700.0	700.0	700.0	700.0	1.5	1.5	-90.40	-4.0	-574.9	574.9	572.0	2.92	196.749		
800.0	800.0	800.0	800.0	1.7	1.7	-90.40	-4.0	-574.9	574.9	571.5	3.37	170.516		
900.0	900.0	900.0	900.0	1.9	1.9	-90.40	-4.0	-574.9	574.9	571.1	3.82	150.455		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-90.40	-4.0	-574.9	574.9	570.6	4.27	134.618		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-90.40	-4.0	-574.9	574.9	570.2	4.72	121.797		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-90.40	-4.0	-574.9	574.9	569.7	5.17	111.206		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-90.40	-4.0	-574.9	574.9	569.3	5.62	102.310		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-90.40	-4.0	-574.9	574.9	568.8	6.07	94.731		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-90.40	-4.0	-574.9	574.9	568.4	6.52	88.198		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-90.40	-4.0	-574.9	574.9	567.9	6.97	82.508		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-90.40	-4.0	-574.9	574.9	567.5	7.42	77.507		
1,800.0	1,800.0	1,802.2	1,802.2	3.9	3.9	-90.54	-5.4	-574.7	574.7	566.9	7.84	73.290		
1,900.0	1,900.0	1,904.3	1,904.2	4.2	4.1	-90.96	-9.6	-574.0	574.1	565.9	8.24	69.666		
2,000.0	2,000.0	2,006.0	2,005.7	4.4	4.3	-91.66	-16.6	-573.0	573.3	564.6	8.65	66.284		
2,100.0	2,100.0	2,107.3	2,106.5	4.6	4.5	-92.64	-26.3	-571.6	572.2	563.1	9.07	63.113		
2,200.0	2,200.0	2,208.0	2,206.4	4.8	4.7	-93.88	-38.7	-569.7	571.1	561.6	9.50	60.133		
2,300.0	2,300.0	2,307.7	2,304.9	5.1	4.9	-95.39	-53.5	-567.5	570.0	560.1	9.94	57.335		
2,400.0	2,400.0	2,406.4	2,402.4	5.3	5.1	-96.97	-69.1	-565.2	569.4	559.0	10.40	54.760		
2,495.6	2,495.6	2,500.9	2,495.6	5.5	5.4	-98.48	-83.9	-563.0	569.2	558.3	10.84	52.495		
2,500.0	2,500.0	2,505.2	2,499.9	5.5	5.4	-98.55	-84.6	-562.9	569.2	558.3	10.86	52.396		
2,600.0	2,600.0	2,603.7	2,597.2	5.7	5.7	-132.94	-100.1	-560.6	570.3	558.9	11.40	50.023		
2,679.3	2,679.2	2,681.6	2,674.1	5.9	5.9	-134.36	-112.3	-558.7	572.9	561.1	11.80	48.567		
2,700.0	2,699.9	2,701.9	2,694.1	6.0	6.0	-134.74	-115.5	-558.3	573.7	561.9	11.90	48.217		
2,800.0	2,799.8	2,800.0	2,791.0	6.2	6.3	-136.61	-130.9	-556.0	578.4	566.0	12.41	46.609		
2,900.0	2,899.7	2,898.0	2,887.8	6.4	6.6	-138.44	-146.3	-553.7	583.6	570.7	12.93	45.150		
3,000.0	2,999.6	2,996.1	2,984.6	6.6	6.9	-140.24	-161.8	-551.4	589.5	576.0	13.45	43.829		
3,100.0	3,099.5	3,094.1	3,081.4	6.8	7.2	-142.00	-177.2	-549.1	595.9	581.9	13.98	42.638		
3,200.0	3,199.4	3,192.2	3,178.2	7.1	7.5	-143.73	-192.6	-546.8	602.9	588.4	14.51	41.565		
3,300.0	3,299.3	3,290.3	3,275.0	7.3	7.8	-145.41	-208.0	-544.5	610.5	595.5	15.04	40.600		
3,400.0	3,399.1	3,388.3	3,371.8	7.5	8.2	-147.05	-223.4	-542.2	618.6	603.0	15.57	39.733		
3,500.0	3,499.0	3,486.4	3,468.6	7.7	8.5	-148.66	-238.8	-539.9	627.2	611.1	16.10	38.956		
3,600.0	3,598.9	3,584.4	3,565.4	8.0	8.8	-150.21	-254.3	-537.6	636.3	619.6	16.63	38.259		
3,700.0	3,698.8	3,682.5	3,662.3	8.2	9.2	-151.73	-269.7	-535.3	645.8	628.7	17.16	37.636		
3,800.0	3,798.7	3,780.6	3,759.1	8.4	9.5	-153.20	-285.1	-533.0	655.8	638.1	17.69	37.079		
3,900.0	3,898.6	3,878.6	3,855.9	8.7	9.9	-154.63	-300.5	-530.7	666.3	648.1	18.21	36.582		
4,000.0	3,998.5	3,976.7	3,952.7	8.9	10.2	-156.01	-315.9	-528.4	677.1	658.4	18.74	36.139		
4,100.0	4,098.4	4,074.7	4,049.5	9.1	10.5	-157.35	-331.3	-526.1	688.3	669.1	19.26	35.745		
4,200.0	4,198.3	4,172.8	4,146.3	9.4	10.9	-158.65	-346.8	-523.8	699.9	680.1	19.77	35.395		
4,300.0	4,298.1	4,270.9	4,243.1	9.6	11.3	-159.90	-362.2	-521.5	711.9	691.6	20.29	35.084		
4,400.0	4,398.0	4,368.9	4,339.9	9.8	11.6	-161.12	-377.6	-519.2	724.1	703.3	20.80	34.810		
4,500.0	4,497.9	4,467.0	4,436.8	10.1	12.0	-162.29	-393.0	-516.9	736.7	715.4	21.31	34.568		
4,600.0	4,597.8	4,565.0	4,533.6	10.3	12.3	-163.43	-408.4	-514.6	749.6	727.8	21.82	34.355		
4,700.0	4,697.7	4,663.1	4,630.4	10.5	12.7	-164.52	-423.8	-512.3	762.8	740.5	22.33	34.168		
4,800.0	4,797.6	4,761.1	4,727.2	10.8	13.0	-165.58	-439.3	-510.0	776.3	753.5	22.83	34.006		
4,900.0	4,897.5	4,859.2	4,824.0	11.0	13.4	-166.61	-454.7	-507.7	790.0	766.7	23.33	33.864		

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

Crittter Creek Pad 15-11N-63W - Crittter 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							
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)			
7,050.0	7,039.1	8,116.9	7,582.0	15.6	19.2	110.51	87.2	-469.7	779.9	745.7	34.15	22.834		
7,100.0	7,084.7	8,096.3	7,582.0	15.6	19.1	111.77	66.6	-469.7	749.0	715.0	33.93	22.071		
7,150.0	7,128.7	8,072.6	7,582.0	15.7	19.0	112.49	42.9	-469.7	720.6	686.9	33.73	21.365		
7,200.0	7,170.9	8,045.9	7,582.0	15.7	18.8	112.73	16.1	-469.8	695.0	661.4	33.53	20.727		
7,250.0	7,211.2	7,985.6	7,579.5	15.8	18.6	110.28	-44.1	-469.9	671.4	638.0	33.45	20.071		
7,300.0	7,249.3	7,931.8	7,573.1	15.9	18.5	108.02	-97.4	-470.0	649.5	616.1	33.47	19.404		
7,350.0	7,285.0	7,883.7	7,563.9	16.0	18.4	105.91	-144.7	-470.1	629.7	596.1	33.59	18.746		
7,400.0	7,318.3	7,839.7	7,552.8	16.1	18.3	103.87	-187.3	-470.1	612.1	578.3	33.79	18.113		
7,450.0	7,348.8	7,798.7	7,540.1	16.3	18.3	101.81	-226.2	-470.2	597.0	562.9	34.08	17.519		
7,500.0	7,376.5	7,760.1	7,526.1	16.6	18.3	99.71	-262.2	-470.3	584.6	550.1	34.44	16.974		
7,550.0	7,401.2	7,723.4	7,511.0	16.8	18.4	97.52	-295.7	-470.3	574.9	540.1	34.86	16.492		
7,600.0	7,422.9	7,688.1	7,494.9	17.1	18.4	95.25	-327.0	-470.4	568.1	532.8	35.33	16.082		
7,650.0	7,441.3	7,654.1	7,478.0	17.5	18.5	92.87	-356.6	-470.4	564.1	528.2	35.82	15.749		
7,700.0	7,456.5	7,621.0	7,460.1	17.9	18.5	90.39	-384.4	-470.5	562.7	526.4	36.31	15.498		
7,700.2	7,456.5	7,620.9	7,460.1	17.9	18.5	90.38	-384.5	-470.5	562.7	526.4	36.31	15.497	CC, ES	
7,750.0	7,468.3	7,588.7	7,441.6	18.3	18.6	87.81	-410.8	-470.5	564.0	527.2	36.78	15.332		
7,800.0	7,476.6	7,557.2	7,422.2	18.8	18.7	85.17	-435.7	-470.5	567.6	530.4	37.22	15.252	SF	
7,850.0	7,481.6	7,526.2	7,402.2	19.3	18.8	82.46	-459.4	-470.6	573.5	535.9	37.59	15.254		
7,898.4	7,483.0	7,500.0	7,384.5	19.9	18.8	80.04	-478.7	-470.6	581.0	543.1	37.91	15.326		
7,898.4	7,483.0	7,500.0	7,384.5	19.9	18.8	80.04	-478.7	-470.6	581.0	543.1	37.91	15.326		
7,898.9	7,483.0	7,500.0	7,384.5	19.9	18.8	80.04	-478.7	-470.6	581.1	543.1	37.91	15.326		
7,900.0	7,483.0	7,495.7	7,381.5	19.9	18.8	79.75	-481.7	-470.6	581.2	543.3	37.90	15.336		
8,000.0	7,482.6	7,439.9	7,341.3	21.0	19.0	75.86	-520.4	-470.7	603.3	564.6	38.64	15.614		
8,100.0	7,482.2	7,392.4	7,304.7	22.3	19.1	72.44	-550.7	-470.7	634.9	595.6	39.35	16.135		
8,200.0	7,481.8	7,350.0	7,270.5	23.7	19.3	69.35	-575.7	-470.8	676.0	635.9	40.05	16.880		
8,300.0	7,481.4	7,316.8	7,242.7	25.1	19.3	66.93	-593.8	-470.8	725.5	684.7	40.83	17.771		
8,400.0	7,481.0	7,286.6	7,216.7	26.6	19.4	64.73	-609.2	-470.8	782.6	741.0	41.62	18.803		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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
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	2.0	2.0	0.0	0.0	-90.43	-5.1	-674.7	674.7					
100.0	100.0	102.0	102.0	0.1	0.1	-90.43	-5.1	-674.7	674.7	674.4	0.23	2,942.814		
200.0	200.0	202.0	202.0	0.3	0.3	-90.43	-5.1	-674.7	674.7	674.0	0.68	993.931		
300.0	300.0	302.0	302.0	0.6	0.6	-90.43	-5.1	-674.7	674.7	673.5	1.13	597.942		
400.0	400.0	402.0	402.0	0.8	0.8	-90.43	-5.1	-674.7	674.7	673.1	1.58	427.588		
500.0	500.0	502.0	502.0	1.0	1.0	-90.43	-5.1	-674.7	674.7	672.6	2.03	332.779		
600.0	600.0	602.0	602.0	1.2	1.2	-90.43	-5.1	-674.7	674.7	672.2	2.48	272.384		
700.0	700.0	702.0	702.0	1.5	1.5	-90.43	-5.1	-674.7	674.7	671.7	2.93	230.543		
800.0	800.0	802.0	802.0	1.7	1.7	-90.43	-5.1	-674.7	674.7	671.3	3.38	199.845		
900.0	900.0	902.0	902.0	1.9	1.9	-90.43	-5.1	-674.7	674.7	670.8	3.83	176.361		
1,000.0	1,000.0	1,002.0	1,002.0	2.1	2.1	-90.43	-5.1	-674.7	674.7	670.4	4.28	157.817		
1,100.0	1,100.0	1,102.0	1,102.0	2.4	2.4	-90.43	-5.1	-674.7	674.7	669.9	4.72	142.801		
1,200.0	1,200.0	1,202.0	1,202.0	2.6	2.6	-90.43	-5.1	-674.7	674.7	669.5	5.17	130.394		
1,300.0	1,300.0	1,302.0	1,302.0	2.8	2.8	-90.43	-5.1	-674.7	674.7	669.0	5.62	119.971		
1,400.0	1,400.0	1,402.0	1,402.0	3.0	3.0	-90.43	-5.1	-674.7	674.7	668.6	6.07	111.091		
1,500.0	1,500.0	1,502.0	1,502.0	3.3	3.3	-90.43	-5.1	-674.7	674.7	668.2	6.52	103.435		
1,600.0	1,600.0	1,602.0	1,602.0	3.5	3.5	-90.43	-5.1	-674.7	674.7	667.7	6.97	96.766		
1,666.0	1,666.0	1,668.0	1,668.0	3.6	3.6	-90.43	-5.1	-674.7	674.7	667.4	7.27	92.817 CC		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-90.43	-5.1	-674.7	674.7	667.3	7.42	90.960 ES		
1,800.0	1,800.0	1,793.0	1,793.0	3.9	3.9	-90.51	-6.0	-675.3	675.4	667.5	7.83	86.294		
1,900.0	1,900.0	1,884.1	1,884.0	4.2	4.1	-90.75	-8.8	-677.1	677.3	669.1	8.21	82.478		
2,000.0	2,000.0	1,974.9	1,974.7	4.4	4.2	-91.13	-13.4	-680.0	680.7	672.1	8.60	79.138		
2,100.0	2,100.0	2,065.5	2,064.9	4.6	4.4	-91.66	-19.8	-684.1	685.4	676.4	8.99	76.207		
2,200.0	2,200.0	2,155.6	2,154.5	4.8	4.6	-92.32	-27.9	-689.3	691.5	682.1	9.39	73.640		
2,300.0	2,300.0	2,245.2	2,243.4	5.1	4.8	-93.11	-37.8	-695.7	699.1	689.4	9.79	71.404		
2,400.0	2,400.0	2,334.3	2,331.3	5.3	5.0	-94.01	-49.3	-703.1	708.3	698.1	10.20	69.470		
2,500.0	2,500.0	2,422.6	2,418.3	5.5	5.2	-95.01	-62.4	-711.5	719.1	708.5	10.60	67.816		
2,600.0	2,600.0	2,516.3	2,510.2	5.7	5.5	-128.82	-77.8	-721.4	732.2	721.1	11.12	65.828		
2,679.3	2,679.2	2,593.4	2,585.8	5.9	5.7	-129.77	-90.6	-729.6	744.1	732.6	11.49	64.739		
2,700.0	2,699.9	2,613.5	2,605.5	6.0	5.8	-130.06	-93.9	-731.7	747.3	735.7	11.59	64.472		
2,800.0	2,799.8	2,710.5	2,700.6	6.2	6.1	-131.43	-110.0	-742.1	763.5	751.4	12.07	63.253		
2,900.0	2,899.7	2,807.5	2,795.7	6.4	6.4	-132.74	-126.1	-752.4	780.0	767.4	12.55	62.131		
3,000.0	2,999.6	2,904.5	2,890.8	6.6	6.8	-134.01	-142.2	-762.7	796.9	783.9	13.04	61.103 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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	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	2.0	2.0	0.0	0.0	-90.42	-5.1	-700.1	700.1					
100.0	100.0	102.0	102.0	0.1	0.1	-90.42	-5.1	-700.1	700.1	699.9	0.23	3,053.721		
200.0	200.0	202.0	202.0	0.3	0.3	-90.42	-5.1	-700.1	700.1	699.4	0.68	1,031.389		
300.0	300.0	302.0	302.0	0.6	0.6	-90.42	-5.1	-700.1	700.1	699.0	1.13	620.477		
400.0	400.0	402.0	402.0	0.8	0.8	-90.42	-5.1	-700.1	700.1	698.5	1.58	443.703		
500.0	500.0	502.0	502.0	1.0	1.0	-90.42	-5.1	-700.1	700.1	698.1	2.03	345.321		
600.0	600.0	602.0	602.0	1.2	1.2	-90.42	-5.1	-700.1	700.1	697.6	2.48	282.649		
700.0	700.0	702.0	702.0	1.5	1.5	-90.42	-5.1	-700.1	700.1	697.2	2.93	239.232		
800.0	800.0	802.0	802.0	1.7	1.7	-90.42	-5.1	-700.1	700.1	696.7	3.38	207.377		
900.0	900.0	902.0	902.0	1.9	1.9	-90.42	-5.1	-700.1	700.1	696.3	3.83	183.008		
1,000.0	1,000.0	1,002.0	1,002.0	2.1	2.1	-90.42	-5.1	-700.1	700.1	695.8	4.28	163.764		
1,100.0	1,100.0	1,102.0	1,102.0	2.4	2.4	-90.42	-5.1	-700.1	700.1	695.4	4.72	148.182		
1,200.0	1,200.0	1,202.0	1,202.0	2.6	2.6	-90.42	-5.1	-700.1	700.1	694.9	5.17	135.308		
1,300.0	1,300.0	1,302.0	1,302.0	2.8	2.8	-90.42	-5.1	-700.1	700.1	694.5	5.62	124.492		
1,400.0	1,400.0	1,402.0	1,402.0	3.0	3.0	-90.42	-5.1	-700.1	700.1	694.0	6.07	115.277		
1,466.0	1,466.0	1,468.0	1,468.0	3.2	3.2	-90.42	-5.1	-700.1	700.1	693.7	6.37	109.909 CC		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-90.42	-5.1	-700.1	700.1	693.6	6.52	107.407 ES		
1,600.0	1,600.0	1,586.6	1,586.6	3.5	3.4	-90.40	-4.9	-701.0	701.2	694.3	6.93	101.206		
1,700.0	1,700.0	1,671.4	1,671.4	3.7	3.6	-90.34	-4.2	-703.8	704.5	697.2	7.33	96.113		
1,800.0	1,800.0	1,756.1	1,755.9	3.9	3.8	-90.24	-3.0	-708.4	709.9	702.2	7.73	91.812		
1,900.0	1,900.0	1,840.5	1,840.1	4.2	4.0	-90.11	-1.4	-714.8	717.5	709.3	8.14	88.164		
2,000.0	2,000.0	1,924.6	1,923.7	4.4	4.2	-89.95	0.7	-722.9	727.2	718.6	8.55	85.073		
2,100.0	2,100.0	2,011.2	2,009.7	4.6	4.4	-89.75	3.2	-733.2	739.0	730.0	8.97	82.386		
2,200.0	2,200.0	2,110.3	2,108.0	4.8	4.6	-89.51	6.3	-745.5	751.5	742.0	9.42	79.731		
2,300.0	2,300.0	2,209.5	2,206.3	5.1	4.9	-89.29	9.4	-757.9	764.0	754.1	9.89	77.279		
2,400.0	2,400.0	2,308.7	2,304.7	5.3	5.2	-89.07	12.6	-770.3	776.5	766.2	10.35	75.011		
2,500.0	2,500.0	2,407.9	2,403.0	5.5	5.5	-88.85	15.7	-782.7	789.0	778.2	10.82	72.913 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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		
0.0	0.0	1.0	1.0	0.0	0.0	-90.38	-4.0	-599.5	599.5					
100.0	100.0	101.0	101.0	0.1	0.1	-90.38	-4.0	-599.5	599.5	599.3	0.23	2,640.771		
200.0	200.0	201.0	201.0	0.3	0.3	-90.38	-4.0	-599.5	599.5	598.8	0.68	886.106		
300.0	300.0	301.0	301.0	0.6	0.6	-90.38	-4.0	-599.5	599.5	598.4	1.13	532.371		
400.0	400.0	401.0	401.0	0.8	0.8	-90.38	-4.0	-599.5	599.5	597.9	1.58	380.482		
500.0	500.0	501.0	501.0	1.0	1.0	-90.38	-4.0	-599.5	599.5	597.5	2.03	296.024		
600.0	600.0	601.0	601.0	1.2	1.2	-90.38	-4.0	-599.5	599.5	597.0	2.47	242.251		
700.0	700.0	701.0	701.0	1.5	1.5	-90.38	-4.0	-599.5	599.5	596.6	2.92	205.010		
800.0	800.0	801.0	801.0	1.7	1.7	-90.38	-4.0	-599.5	599.5	596.1	3.37	177.693		
900.0	900.0	901.0	901.0	1.9	1.9	-90.38	-4.0	-599.5	599.5	595.7	3.82	156.801		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.38	-4.0	-599.5	599.5	595.2	4.27	140.304		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.38	-4.0	-599.5	599.5	594.8	4.72	126.948		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.38	-4.0	-599.5	599.5	594.3	5.17	115.914		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.38	-4.0	-599.5	599.5	593.9	5.62	106.644		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.38	-4.0	-599.5	599.5	593.4	6.07	98.748		
1,500.0	1,500.0	1,501.2	1,501.2	3.3	3.3	-90.38	-4.0	-599.5	599.5	593.0	6.52	91.936		
1,600.0	1,600.0	1,616.7	1,616.7	3.5	3.5	-90.29	-3.1	-597.9	598.2	591.2	7.00	85.492		
1,700.0	1,700.0	1,731.5	1,731.3	3.7	3.8	-90.04	-0.4	-593.5	594.2	586.8	7.47	79.577		
1,800.0	1,800.0	1,831.3	1,831.0	3.9	4.0	-89.74	2.7	-588.4	589.1	581.2	7.91	74.514		
1,900.0	1,900.0	1,931.1	1,930.6	4.2	4.2	-89.44	5.7	-583.3	584.1	575.7	8.35	69.981		
2,000.0	2,000.0	2,030.9	2,030.3	4.4	4.4	-89.13	8.8	-578.2	579.0	570.2	8.79	65.893		
2,100.0	2,100.0	2,130.8	2,129.9	4.6	4.7	-88.82	11.8	-573.1	574.0	564.7	9.23	62.190		
2,200.0	2,200.0	2,230.6	2,229.6	4.8	4.9	-88.50	14.9	-568.0	568.9	559.2	9.67	58.821		
2,300.0	2,300.0	2,330.4	2,329.2	5.1	5.1	-88.17	17.9	-562.9	563.9	553.8	10.12	55.745		
2,400.0	2,400.0	2,430.2	2,428.9	5.3	5.4	-87.84	21.0	-557.8	558.9	548.4	10.56	52.926		
2,500.0	2,500.0	2,530.1	2,528.5	5.5	5.6	-87.51	24.1	-552.7	553.9	542.9	11.01	50.333		
2,600.0	2,600.0	2,629.9	2,628.2	5.7	5.8	-120.08	27.1	-547.6	549.6	538.2	11.46	47.954		
2,679.3	2,679.2	2,709.2	2,707.3	5.9	6.0	-120.10	29.5	-543.6	547.2	535.3	11.81	46.320		
2,700.0	2,699.9	2,729.9	2,728.0	6.0	6.1	-120.11	30.2	-542.5	546.6	534.7	11.90	45.917		
2,800.0	2,799.8	2,829.9	2,827.8	6.2	6.3	-120.19	33.2	-537.4	544.0	531.7	12.35	44.051		
2,900.0	2,899.7	2,929.8	2,927.6	6.4	6.5	-120.28	36.3	-532.3	541.4	528.6	12.80	42.310		
3,000.0	2,999.6	3,029.8	3,027.3	6.6	6.8	-120.36	39.3	-527.2	538.8	525.6	13.24	40.681		
3,100.0	3,099.5	3,129.7	3,127.1	6.8	7.0	-120.44	42.4	-522.1	536.2	522.5	13.69	39.156		
3,200.0	3,199.4	3,229.7	3,226.9	7.1	7.3	-120.52	45.5	-517.0	533.6	519.5	14.15	37.724		
3,300.0	3,299.3	3,329.7	3,326.7	7.3	7.5	-120.61	48.5	-511.9	531.0	516.4	14.60	36.378		
3,400.0	3,399.1	3,429.6	3,426.5	7.5	7.7	-120.69	51.6	-506.8	528.4	513.4	15.05	35.111		
3,500.0	3,499.0	3,529.6	3,526.3	7.7	8.0	-120.78	54.6	-501.7	525.8	510.3	15.50	33.916		
3,600.0	3,598.9	3,629.6	3,626.1	8.0	8.2	-120.87	57.7	-496.6	523.2	507.3	15.96	32.788		
3,700.0	3,698.8	3,729.5	3,725.8	8.2	8.5	-120.96	60.8	-491.5	520.6	504.2	16.41	31.721		
3,800.0	3,798.7	3,829.5	3,825.6	8.4	8.7	-121.05	63.8	-486.4	518.1	501.2	16.87	30.710		
3,900.0	3,898.6	3,929.5	3,925.4	8.7	9.0	-121.14	66.9	-481.3	515.5	498.1	17.33	29.751		
4,000.0	3,998.5	4,029.4	4,025.2	8.9	9.2	-121.23	69.9	-476.2	512.9	495.1	17.78	28.841		
4,100.0	4,098.4	4,129.4	4,125.0	9.1	9.4	-121.32	73.0	-471.2	510.3	492.1	18.24	27.976		
4,200.0	4,198.3	4,229.3	4,224.8	9.4	9.7	-121.41	76.1	-466.1	507.7	489.0	18.70	27.152		
4,300.0	4,298.1	4,329.3	4,324.6	9.6	9.9	-121.50	79.1	-461.0	505.1	486.0	19.16	26.368		
4,400.0	4,398.0	4,429.3	4,424.4	9.8	10.2	-121.60	82.2	-455.9	502.5	482.9	19.62	25.620		
4,500.0	4,497.9	4,529.2	4,524.1	10.1	10.4	-121.69	85.2	-450.8	500.0	479.9	20.07	24.905		
4,600.0	4,597.8	4,629.2	4,623.9	10.3	10.7	-121.79	88.3	-445.7	497.4	476.8	20.53	24.222		
4,700.0	4,697.7	4,729.2	4,723.7	10.5	10.9	-121.89	91.4	-440.6	494.8	473.8	20.99	23.569		
4,800.0	4,797.6	4,829.1	4,823.5	10.8	11.2	-121.99	94.4	-435.5	492.2	470.8	21.45	22.944		
4,900.0	4,897.5	4,929.1	4,923.3	11.0	11.4	-122.09	97.5	-430.4	489.6	467.7	21.91	22.345		
5,000.0	4,997.4	5,029.0	5,023.1	11.2	11.7	-122.19	100.5	-425.3	487.1	464.7	22.37	21.770		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
5,100.0	5,097.3	5,129.0	5,122.9	11.5	11.9	-122.29	103.6	-420.2	484.5	461.7	22.83	21.218		
5,200.0	5,197.2	5,229.0	5,222.6	11.7	12.1	-122.39	106.7	-415.1	481.9	458.6	23.30	20.688		
5,300.0	5,297.0	5,328.9	5,322.4	11.9	12.4	-122.50	109.7	-410.0	479.4	455.6	23.76	20.179		
5,400.0	5,396.9	5,428.9	5,422.2	12.2	12.6	-122.60	112.8	-404.9	476.8	452.6	24.22	19.689		
5,500.0	5,496.8	5,528.9	5,522.0	12.4	12.9	-122.71	115.8	-399.8	474.2	449.5	24.68	19.217		
5,600.0	5,596.7	5,628.8	5,621.8	12.6	13.1	-122.81	118.9	-394.7	471.7	446.5	25.14	18.762		
5,700.0	5,696.6	5,728.8	5,721.6	12.9	13.4	-122.92	121.9	-389.6	469.1	443.5	25.60	18.324		
5,800.0	5,796.5	5,828.8	5,821.4	13.1	13.6	-123.03	125.0	-384.5	466.5	440.5	26.06	17.901		
5,900.0	5,896.4	5,928.7	5,921.1	13.3	13.9	-123.14	128.1	-379.4	464.0	437.5	26.52	17.493		
6,000.0	5,996.3	6,028.7	6,020.9	13.6	14.1	-123.25	131.1	-374.3	461.4	434.4	26.98	17.100		
6,069.4	6,065.6	6,090.7	6,082.8	13.7	14.3	-123.36	132.8	-371.5	460.1	432.9	27.27	16.871		
6,100.0	6,096.2	6,117.5	6,109.7	13.8	14.3	-123.41	133.3	-370.7	459.9	432.5	27.39	16.793		
6,203.8	6,200.0	6,208.9	6,201.0	14.0	14.5	-90.75	134.0	-369.5	459.5	431.8	27.72	16.575		
6,300.0	6,296.2	6,305.0	6,297.2	14.2	14.6	-90.75	134.0	-369.5	459.5	431.4	28.10	16.354		
6,400.0	6,396.2	6,405.0	6,397.2	14.4	14.9	-90.75	134.0	-369.5	459.5	431.0	28.53	16.107		
6,500.0	6,496.2	6,505.0	6,497.2	14.6	15.1	-90.75	134.0	-369.5	459.5	430.6	28.96	15.867		
6,600.0	6,596.2	6,605.0	6,597.2	14.8	15.3	-90.75	134.0	-369.5	459.5	430.1	29.39	15.634		
6,700.0	6,696.2	6,705.0	6,697.2	15.0	15.5	-90.75	134.0	-369.5	459.5	429.7	29.83	15.407		
6,770.8	6,767.0	6,775.8	6,768.0	15.2	15.6	-90.75	134.0	-369.5	459.5	429.4	30.13	15.250		
6,800.0	6,796.1	6,805.0	6,797.1	15.2	15.7	89.57	134.0	-369.5	459.5	429.3	30.25	15.192		
6,846.7	6,842.7	6,851.6	6,843.7	15.3	15.8	90.00	134.0	-369.5	459.5	429.1	30.42	15.104 CC		
6,850.0	6,846.0	6,854.9	6,847.0	15.3	15.8	90.04	134.0	-369.5	459.5	429.1	30.43	15.098		
6,900.0	6,895.5	6,904.6	6,896.7	15.4	15.9	90.86	133.3	-369.5	459.5	428.9	30.61	15.014		
6,950.0	6,944.3	6,954.9	6,946.8	15.4	16.0	91.70	129.4	-369.5	459.7	429.0	30.75	14.947		
7,000.0	6,992.3	7,005.6	6,997.0	15.5	16.0	92.54	121.9	-369.4	460.0	429.1	30.89	14.892		
7,050.0	7,039.1	7,056.8	7,047.0	15.6	16.1	93.37	110.7	-369.4	460.3	429.3	31.00	14.848		
7,100.0	7,084.7	7,108.6	7,096.5	15.6	16.2	94.19	95.8	-369.3	460.8	429.7	31.11	14.811		
7,150.0	7,128.7	7,160.9	7,145.4	15.7	16.2	94.99	77.2	-369.3	461.3	430.1	31.22	14.778		
7,200.0	7,170.9	7,213.7	7,193.2	15.7	16.3	95.76	54.8	-369.2	461.9	430.6	31.33	14.745		
7,250.0	7,211.2	7,267.0	7,239.6	15.8	16.3	96.51	28.7	-369.1	462.6	431.1	31.45	14.709		
7,300.0	7,249.3	7,320.8	7,284.5	15.9	16.4	97.23	-1.1	-369.0	463.3	431.7	31.60	14.662		
7,350.0	7,285.0	7,375.1	7,327.3	16.0	16.5	97.91	-34.5	-368.8	464.1	432.3	31.79	14.600		
7,400.0	7,318.3	7,430.0	7,367.8	16.1	16.6	98.55	-71.4	-368.7	464.8	432.8	32.02	14.517		
7,450.0	7,348.8	7,485.3	7,405.8	16.3	16.7	99.15	-111.6	-368.6	465.6	433.3	32.32	14.407		
7,500.0	7,376.5	7,541.0	7,440.7	16.6	16.9	99.70	-155.0	-368.4	466.4	433.7	32.69	14.267		
7,550.0	7,401.2	7,597.2	7,472.4	16.8	17.1	100.20	-201.4	-368.2	467.1	434.0	33.15	14.091		
7,600.0	7,422.9	7,653.8	7,500.6	17.1	17.4	100.65	-250.4	-368.0	467.8	434.1	33.71	13.878		
7,650.0	7,441.3	7,710.7	7,524.9	17.5	17.7	101.04	-301.9	-367.8	468.4	434.1	34.37	13.628		
7,700.0	7,456.5	7,767.9	7,545.1	17.9	18.1	101.36	-355.3	-367.6	469.0	433.8	35.14	13.345		
7,750.0	7,468.3	7,825.3	7,561.1	18.3	18.6	101.63	-410.5	-367.4	469.5	433.4	36.02	13.032		
7,800.0	7,476.6	7,883.0	7,572.7	18.8	19.1	101.83	-467.0	-367.2	469.8	432.8	37.00	12.696		
7,850.0	7,481.6	7,940.8	7,579.7	19.3	19.7	101.96	-524.4	-367.0	470.1	432.0	38.08	12.343		
7,898.4	7,483.0	7,996.9	7,582.0	19.9	20.3	102.03	-580.4	-366.8	470.2	431.0	39.21	11.991		
7,898.4	7,483.0	7,996.9	7,582.0	19.9	20.3	102.03	-580.4	-366.8	470.2	431.0	39.21	11.991		
7,898.9	7,483.0	7,997.4	7,582.0	19.9	20.3	102.03	-580.9	-366.8	470.2	431.0	39.22	11.988		
7,900.0	7,483.0	7,998.7	7,582.0	19.9	20.3	102.03	-582.2	-366.8	470.2	431.0	39.25	11.981		
8,000.0	7,482.6	8,098.9	7,582.0	21.0	21.4	102.08	-682.4	-366.4	470.3	428.8	41.47	11.342		
8,100.0	7,482.2	8,198.9	7,582.0	22.3	22.6	102.13	-782.4	-365.9	470.4	426.4	43.96	10.701		
8,200.0	7,481.8	8,298.9	7,582.0	23.7	24.0	102.17	-882.4	-365.5	470.5	423.9	46.62	10.091		
8,300.0	7,481.4	8,398.9	7,582.0	25.1	25.4	102.22	-982.4	-365.1	470.6	421.1	49.43	9.520		
8,400.0	7,481.0	8,498.9	7,582.0	26.6	26.9	102.27	-1,082.4	-364.7	470.7	418.3	52.36	8.988		
8,500.0	7,480.6	8,598.9	7,582.0	28.2	28.4	102.32	-1,182.4	-364.3	470.8	415.4	55.40	8.498		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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		
8,600.0	7,480.2	8,698.9	7,582.0	29.8	30.0	102.36	-1,282.4	-363.8	470.8	412.3	58.51	8.047		
8,700.0	7,479.8	8,798.9	7,582.0	31.4	31.6	102.41	-1,382.4	-363.4	470.9	409.2	61.71	7.632		
8,800.0	7,479.4	8,898.9	7,582.0	33.1	33.2	102.46	-1,482.4	-363.0	471.0	406.1	64.96	7.251		
8,900.0	7,479.0	8,998.9	7,582.0	34.8	34.9	102.51	-1,582.4	-362.6	471.1	402.8	68.26	6.901		
9,000.0	7,478.6	9,098.9	7,582.0	36.5	36.6	102.56	-1,682.4	-362.2	471.2	399.6	71.61	6.580		
9,100.0	7,478.2	9,198.9	7,582.0	38.2	38.3	102.60	-1,782.4	-361.7	471.3	396.3	75.00	6.284		
9,200.0	7,477.8	9,298.9	7,582.0	40.0	40.1	102.65	-1,882.4	-361.3	471.4	392.9	78.42	6.011		
9,300.0	7,477.4	9,398.9	7,582.0	41.8	41.8	102.70	-1,982.4	-360.9	471.5	389.6	81.88	5.758		
9,400.0	7,477.0	9,498.9	7,582.0	43.5	43.6	102.75	-2,082.4	-360.5	471.6	386.2	85.35	5.525		
9,500.0	7,476.6	9,598.9	7,582.0	45.3	45.4	102.79	-2,182.4	-360.1	471.6	382.8	88.85	5.308		
9,600.0	7,476.2	9,698.9	7,582.0	47.1	47.2	102.84	-2,282.4	-359.6	471.7	379.4	92.37	5.107		
9,700.0	7,475.8	9,798.9	7,582.0	49.0	49.0	102.89	-2,382.4	-359.2	471.8	375.9	95.91	4.919		
9,800.0	7,475.4	9,898.9	7,582.0	50.8	50.8	102.94	-2,482.4	-358.8	471.9	372.5	99.46	4.745		
9,900.0	7,475.0	9,998.9	7,582.0	52.6	52.6	102.98	-2,582.4	-358.4	472.0	369.0	103.03	4.581		
10,000.0	7,474.5	10,098.9	7,582.0	54.4	54.5	103.03	-2,682.4	-357.9	472.1	365.5	106.61	4.428		
10,100.0	7,474.1	10,198.9	7,582.0	56.3	56.3	103.08	-2,782.4	-357.5	472.2	362.0	110.20	4.285		
10,200.0	7,473.7	10,298.9	7,582.0	58.1	58.1	103.13	-2,882.4	-357.1	472.3	358.5	113.79	4.150		
10,300.0	7,473.3	10,398.9	7,582.0	60.0	60.0	103.17	-2,982.4	-356.7	472.4	355.0	117.40	4.024		
10,400.0	7,472.9	10,498.9	7,582.0	61.9	61.9	103.22	-3,082.4	-356.3	472.5	351.5	121.02	3.904		
10,500.0	7,472.5	10,598.9	7,582.0	63.7	63.7	103.27	-3,182.4	-355.8	472.6	347.9	124.64	3.792		
10,600.0	7,472.1	10,698.9	7,582.0	65.6	65.6	103.32	-3,282.4	-355.4	472.7	344.4	128.27	3.685		
10,700.0	7,471.7	10,798.9	7,582.0	67.5	67.4	103.36	-3,382.4	-355.0	472.8	340.9	131.90	3.584		
10,800.0	7,471.3	10,898.9	7,582.0	69.3	69.3	103.41	-3,482.4	-354.6	472.9	337.3	135.54	3.489		
10,900.0	7,470.9	10,998.9	7,582.0	71.2	71.2	103.46	-3,582.4	-354.2	473.0	333.8	139.18	3.398		
11,000.0	7,470.5	11,098.9	7,582.0	73.1	73.1	103.51	-3,682.4	-353.7	473.0	330.2	142.83	3.312		
11,100.0	7,470.1	11,198.9	7,582.0	75.0	74.9	103.55	-3,782.4	-353.3	473.1	326.7	146.48	3.230		
11,200.0	7,469.7	11,298.9	7,582.0	76.9	76.8	103.60	-3,882.4	-352.9	473.2	323.1	150.14	3.152		
11,300.0	7,469.3	11,398.9	7,582.0	78.7	78.7	103.65	-3,982.4	-352.5	473.3	319.5	153.79	3.078		
11,400.0	7,468.9	11,498.9	7,582.0	80.6	80.6	103.69	-4,082.3	-352.0	473.4	316.0	157.45	3.007		
11,500.0	7,468.5	11,598.9	7,582.0	82.5	82.5	103.74	-4,182.3	-351.6	473.5	312.4	161.11	2.939		
11,600.0	7,468.1	11,698.9	7,582.0	84.4	84.4	103.79	-4,282.3	-351.2	473.6	308.9	164.78	2.874		
11,700.0	7,467.7	11,798.9	7,582.0	86.3	86.3	103.84	-4,382.3	-350.8	473.7	305.3	168.45	2.812		
11,800.0	7,467.3	11,898.9	7,582.0	88.2	88.2	103.88	-4,482.3	-350.4	473.8	301.7	172.11	2.753		
11,900.0	7,466.9	11,998.9	7,582.0	90.1	90.0	103.93	-4,582.3	-349.9	473.9	298.1	175.78	2.696		
12,000.0	7,466.5	12,098.9	7,582.0	92.0	91.9	103.98	-4,682.3	-349.5	474.0	294.6	179.45	2.641		
12,100.0	7,466.1	12,198.9	7,582.0	93.9	93.8	104.02	-4,782.3	-349.1	474.1	291.0	183.13	2.589		
12,200.0	7,465.7	12,298.9	7,582.0	95.8	95.7	104.07	-4,882.3	-348.7	474.2	287.4	186.80	2.539		
12,300.0	7,465.3	12,398.9	7,582.0	97.7	97.6	104.12	-4,982.3	-348.3	474.3	283.9	190.47	2.490		
12,400.0	7,464.9	12,498.9	7,582.0	99.6	99.5	104.17	-5,082.3	-347.8	474.4	280.3	194.15	2.444		
12,500.0	7,464.5	12,598.9	7,582.0	101.5	101.4	104.21	-5,182.3	-347.4	474.5	276.7	197.82	2.399		
12,600.0	7,464.1	12,698.9	7,582.0	103.4	103.3	104.26	-5,282.3	-347.0	474.6	273.1	201.50	2.356		
12,700.0	7,463.7	12,798.9	7,582.0	105.3	105.2	104.31	-5,382.3	-346.6	474.7	269.6	205.17	2.314		
12,800.0	7,463.3	12,898.9	7,582.0	107.2	107.2	104.35	-5,482.3	-346.1	474.8	266.0	208.85	2.274		
12,900.0	7,462.9	12,998.9	7,582.0	109.1	109.1	104.40	-5,582.3	-345.7	474.9	262.4	212.52	2.235		
13,000.0	7,462.5	13,098.9	7,582.0	111.0	111.0	104.45	-5,682.3	-345.3	475.0	258.8	216.20	2.197		
13,100.0	7,462.1	13,198.9	7,582.0	112.9	112.9	104.49	-5,782.3	-344.9	475.1	255.3	219.88	2.161		
13,200.0	7,461.7	13,298.9	7,582.0	114.9	114.8	104.54	-5,882.3	-344.5	475.2	251.7	223.55	2.126		
13,300.0	7,461.3	13,398.9	7,582.0	116.8	116.7	104.59	-5,982.3	-344.0	475.3	248.1	227.23	2.092		
13,400.0	7,460.9	13,498.9	7,582.0	118.7	118.6	104.63	-6,082.3	-343.6	475.4	244.5	230.90	2.059		
13,500.0	7,460.5	13,598.9	7,582.0	120.6	120.5	104.68	-6,182.3	-343.2	475.5	241.0	234.58	2.027		
13,600.0	7,460.1	13,698.9	7,582.0	122.5	122.4	104.73	-6,282.3	-342.8	475.7	237.4	238.25	1.996		
13,700.0	7,459.7	13,798.9	7,582.0	124.4	124.3	104.78	-6,382.3	-342.4	475.8	233.8	241.93	1.967		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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		
13,800.0	7,459.3	13,898.9	7,582.0	126.3	126.2	104.82	-6,482.3	-341.9	475.9	230.3	245.60	1.938		
13,900.0	7,458.9	13,998.9	7,582.0	128.2	128.2	104.87	-6,582.3	-341.5	476.0	226.7	249.27	1.909		
14,000.0	7,458.5	14,098.9	7,582.0	130.1	130.1	104.92	-6,682.3	-341.1	476.1	223.1	252.95	1.882		
14,100.0	7,458.1	14,198.9	7,582.0	132.1	132.0	104.96	-6,782.3	-340.7	476.2	219.6	256.62	1.856		
14,200.0	7,457.7	14,298.9	7,582.0	134.0	133.9	105.01	-6,882.3	-340.3	476.3	216.0	260.29	1.830		
14,300.0	7,457.3	14,398.9	7,582.0	135.9	135.8	105.06	-6,982.3	-339.8	476.4	212.4	263.96	1.805		
14,400.0	7,456.9	14,498.9	7,582.0	137.8	137.7	105.10	-7,082.3	-339.4	476.5	208.9	267.63	1.780		
14,500.0	7,456.5	14,598.9	7,582.0	139.7	139.6	105.15	-7,182.3	-339.0	476.6	205.3	271.30	1.757		
14,600.0	7,456.1	14,698.9	7,582.0	141.6	141.5	105.20	-7,282.3	-338.6	476.7	201.7	274.97	1.734		
14,700.0	7,455.6	14,798.9	7,582.0	143.6	143.5	105.24	-7,382.3	-338.1	476.8	198.2	278.64	1.711		
14,800.0	7,455.2	14,898.9	7,582.0	145.5	145.4	105.29	-7,482.3	-337.7	476.9	194.6	282.31	1.689		
14,900.0	7,454.8	14,998.9	7,582.0	147.4	147.3	105.33	-7,582.3	-337.3	477.0	191.1	285.97	1.668		
15,000.0	7,454.4	15,098.9	7,582.0	149.3	149.2	105.38	-7,682.3	-336.9	477.1	187.5	289.64	1.647		
15,100.0	7,454.0	15,198.9	7,582.0	151.2	151.1	105.43	-7,782.3	-336.5	477.3	183.9	293.30	1.627		
15,200.0	7,453.6	15,298.9	7,582.0	153.1	153.0	105.47	-7,882.3	-336.0	477.4	180.4	296.96	1.607		
15,300.0	7,453.2	15,398.9	7,582.0	155.1	155.0	105.52	-7,982.3	-335.6	477.5	176.8	300.63	1.588		
15,400.0	7,452.8	15,498.9	7,582.0	157.0	156.9	105.57	-8,082.3	-335.2	477.6	173.3	304.29	1.569		
15,500.0	7,452.4	15,598.9	7,582.0	158.9	158.8	105.61	-8,182.3	-334.8	477.7	169.7	307.95	1.551		
15,600.0	7,452.0	15,698.9	7,582.0	160.8	160.7	105.66	-8,282.3	-334.4	477.8	166.2	311.61	1.533		
15,700.0	7,451.6	15,798.9	7,582.0	162.7	162.6	105.71	-8,382.3	-333.9	477.9	162.6	315.26	1.516		
15,800.0	7,451.2	15,898.9	7,582.0	164.7	164.6	105.75	-8,482.3	-333.5	478.0	159.1	318.92	1.499 Level 3		
15,900.0	7,450.8	15,998.9	7,582.0	166.6	166.5	105.80	-8,582.3	-333.1	478.1	155.6	322.58	1.482 Level 3		
16,000.0	7,450.4	16,098.9	7,582.0	168.5	168.4	105.85	-8,682.3	-332.7	478.2	152.0	326.23	1.466 Level 3		
16,100.0	7,450.0	16,198.9	7,582.0	170.4	170.3	105.89	-8,782.3	-332.2	478.3	148.5	329.89	1.450 Level 3		
16,200.0	7,449.6	16,298.9	7,582.0	172.3	172.2	105.94	-8,882.3	-331.8	478.5	144.9	333.54	1.435 Level 3		
16,300.0	7,449.2	16,398.9	7,582.0	174.3	174.2	105.98	-8,982.3	-331.4	478.6	141.4	337.19	1.419 Level 3		
16,400.0	7,448.8	16,498.9	7,582.0	176.2	176.1	106.03	-9,082.3	-331.0	478.7	137.9	340.84	1.404 Level 3		
16,500.0	7,448.4	16,598.9	7,582.0	178.1	178.0	106.08	-9,182.3	-330.6	478.8	134.3	344.49	1.390 Level 3		
16,600.0	7,448.0	16,698.9	7,582.0	180.0	179.9	106.12	-9,282.3	-330.1	478.9	130.8	348.13	1.376 Level 3		
16,700.0	7,447.6	16,798.9	7,582.0	181.9	181.8	106.17	-9,382.3	-329.7	479.0	127.3	351.78	1.362 Level 3		
16,800.0	7,447.2	16,898.9	7,582.0	183.9	183.8	106.21	-9,482.3	-329.3	479.1	123.7	355.42	1.348 Level 3		
16,900.0	7,446.8	16,998.9	7,582.0	185.8	185.7	106.26	-9,582.3	-328.9	479.3	120.2	359.07	1.335 Level 3		
17,000.0	7,446.4	17,098.9	7,582.0	187.7	187.6	106.31	-9,682.3	-328.5	479.4	116.7	362.71	1.322 Level 3		
17,100.0	7,446.0	17,198.9	7,582.0	189.6	189.5	106.35	-9,782.3	-328.0	479.5	113.1	366.35	1.309 Level 3		
17,200.0	7,445.6	17,298.9	7,582.0	191.6	191.4	106.40	-9,882.3	-327.6	479.6	109.6	369.99	1.296 Level 3		
17,300.0	7,445.2	17,398.9	7,582.0	193.5	193.4	106.44	-9,982.2	-327.2	479.7	106.1	373.63	1.284 Level 3		
17,400.0	7,444.8	17,498.9	7,582.0	195.4	195.3	106.49	-10,082.2	-326.8	479.8	102.6	377.26	1.272 Level 3		
17,500.0	7,444.4	17,598.9	7,582.0	197.3	197.2	106.54	-10,182.2	-326.4	480.0	99.1	380.90	1.260 Level 3		
17,600.0	7,444.0	17,698.9	7,582.0	199.2	199.1	106.58	-10,282.2	-325.9	480.1	95.5	384.53	1.248 Level 2		
17,700.0	7,443.6	17,798.9	7,582.0	201.2	201.1	106.63	-10,382.2	-325.5	480.2	92.0	388.16	1.237 Level 2		
17,800.0	7,443.2	17,898.9	7,582.0	203.1	203.0	106.67	-10,482.2	-325.1	480.3	88.5	391.79	1.226 Level 2		
17,845.2	7,443.0	17,944.0	7,582.0	204.0	203.8	106.70	-10,527.4	-324.9	480.4	86.9	393.43	1.221 Level 2, ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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	89.98	0.0	50.0	50.0					
100.0	100.0	100.0	100.0	0.1	0.1	89.98	0.0	50.0	50.0	49.8	0.22	222.567		
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	50.0	50.0	49.4	0.67	74.189		
300.0	300.0	300.0	300.0	0.6	0.6	89.98	0.0	50.0	50.0	48.9	1.12	44.513		
400.0	400.0	400.0	400.0	0.8	0.8	89.98	0.0	50.0	50.0	48.5	1.57	31.795		
500.0	500.0	500.0	500.0	1.0	1.0	89.98	0.0	50.0	50.0	48.0	2.02	24.730		
600.0	600.0	600.0	600.0	1.2	1.2	89.98	0.0	50.0	50.0	47.6	2.47	20.233		
700.0	700.0	700.0	700.0	1.5	1.5	89.98	0.0	50.0	50.0	47.1	2.92	17.121		
800.0	800.0	800.0	800.0	1.7	1.7	89.98	0.0	50.0	50.0	46.7	3.37	14.838		
900.0	900.0	900.0	900.0	1.9	1.9	89.98	0.0	50.0	50.0	46.2	3.82	13.092		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	89.98	0.0	50.0	50.0	45.8	4.27	11.714		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	89.98	0.0	50.0	50.0	45.3	4.72	10.598		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	89.98	0.0	50.0	50.0	44.9	5.17	9.677		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	89.98	0.0	50.0	50.0	44.4	5.62	8.903		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	89.98	0.0	50.0	50.0	44.0	6.07	8.243		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	89.98	0.0	50.0	50.0	43.5	6.52	7.675		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	89.98	0.0	50.0	50.0	43.1	6.97	7.180		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.98	0.0	50.0	50.0	42.6	7.42	6.744		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	89.98	0.0	50.0	50.0	42.2	7.87	6.359		
1,900.0	1,900.0	1,900.0	1,900.0	4.2	4.2	89.98	0.0	50.0	50.0	41.7	8.32	6.015		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	89.98	0.0	50.0	50.0	41.3	8.77	5.707		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	89.98	0.0	50.0	50.0	40.8	9.22	5.428 CC		
2,200.0	2,200.0	2,198.8	2,198.8	4.8	4.8	89.44	0.5	51.2	51.2	41.6	9.65	5.306		
2,300.0	2,300.0	2,297.4	2,297.3	5.1	5.0	87.96	1.9	54.7	54.8	44.8	10.08	5.438		
2,400.0	2,400.0	2,395.8	2,395.5	5.3	5.2	85.90	4.3	60.6	60.9	50.4	10.52	5.794		
2,500.0	2,500.0	2,494.2	2,493.5	5.5	5.5	83.63	7.7	68.8	69.5	58.5	10.95	6.344		
2,600.0	2,600.0	2,593.8	2,592.7	5.7	5.7	49.60	11.3	77.7	78.0	66.6	11.38	6.856		
2,679.3	2,679.2	2,672.9	2,671.4	5.9	5.9	49.72	14.2	84.8	83.6	71.9	11.72	7.131		
2,700.0	2,699.9	2,693.6	2,692.0	6.0	5.9	49.88	15.0	86.6	84.9	73.1	11.81	7.189		
2,800.0	2,799.8	2,793.4	2,791.3	6.2	6.2	50.57	18.6	95.6	91.2	79.0	12.24	7.452		
2,900.0	2,899.7	2,893.2	2,890.6	6.4	6.4	51.16	22.3	104.5	97.6	84.9	12.68	7.697		
3,000.0	2,999.6	2,993.0	2,989.9	6.6	6.6	51.69	26.0	113.5	104.0	90.8	13.12	7.924		
3,100.0	3,099.5	3,092.8	3,089.3	6.8	6.9	52.16	29.6	122.4	110.3	96.8	13.56	8.136		
3,200.0	3,199.4	3,192.6	3,188.6	7.1	7.1	52.57	33.3	131.4	116.7	102.7	14.01	8.334		
3,300.0	3,299.3	3,292.4	3,287.9	7.3	7.4	52.94	36.9	140.3	123.1	108.7	14.45	8.519		
3,400.0	3,399.1	3,392.1	3,387.2	7.5	7.7	53.27	40.6	149.3	129.5	114.6	14.90	8.692		
3,500.0	3,499.0	3,491.9	3,486.6	7.7	7.9	53.58	44.2	158.2	135.9	120.6	15.35	8.854		
3,600.0	3,598.9	3,591.7	3,585.9	8.0	8.2	53.85	47.9	167.1	142.3	126.5	15.80	9.006		
3,700.0	3,698.8	3,691.5	3,685.2	8.2	8.4	54.10	51.6	176.1	148.7	132.5	16.26	9.149		
3,800.0	3,798.7	3,791.3	3,784.5	8.4	8.7	54.34	55.2	185.0	155.1	138.4	16.71	9.284		
3,900.0	3,898.6	3,891.1	3,883.9	8.7	9.0	54.55	58.9	194.0	161.6	144.4	17.17	9.411		
4,000.0	3,998.5	3,990.9	3,983.2	8.9	9.2	54.75	62.5	202.9	168.0	150.3	17.62	9.531		
4,100.0	4,098.4	4,090.7	4,082.5	9.1	9.5	54.93	66.2	211.9	174.4	156.3	18.08	9.645		
4,200.0	4,198.3	4,190.5	4,181.8	9.4	9.8	55.10	69.8	220.8	180.8	162.3	18.54	9.752		
4,300.0	4,298.1	4,290.3	4,281.1	9.6	10.0	55.25	73.5	229.7	187.2	168.2	19.00	9.854		
4,400.0	4,398.0	4,390.1	4,380.5	9.8	10.3	55.40	77.1	238.7	193.6	174.2	19.46	9.951		
4,500.0	4,497.9	4,489.9	4,479.8	10.1	10.6	55.54	80.8	247.6	200.1	180.1	19.92	10.043		
4,600.0	4,597.8	4,589.7	4,579.1	10.3	10.9	55.67	84.5	256.6	206.5	186.1	20.38	10.131		
4,700.0	4,697.7	4,689.4	4,678.4	10.5	11.1	55.79	88.1	265.5	212.9	192.1	20.84	10.214		
4,800.0	4,797.6	4,789.2	4,777.8	10.8	11.4	55.90	91.8	274.5	219.3	198.0	21.31	10.293		
4,900.0	4,897.5	4,889.0	4,877.1	11.0	11.7	56.01	95.4	283.4	225.8	204.0	21.77	10.369		
5,000.0	4,997.4	4,988.8	4,976.4	11.2	12.0	56.11	99.1	292.4	232.2	209.9	22.24	10.442		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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			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	5,097.3	5,088.6	5,075.7	11.5	12.2	56.21	102.7	301.3	238.6	215.9	22.70	10.511		
5,200.0	5,197.2	5,188.4	5,175.1	11.7	12.5	56.30	106.4	310.2	245.0	221.9	23.17	10.577		
5,300.0	5,297.0	5,288.2	5,274.4	11.9	12.8	56.39	110.1	319.2	251.5	227.8	23.63	10.641		
5,400.0	5,396.9	5,388.0	5,373.7	12.2	13.1	56.47	113.7	328.1	257.9	233.8	24.10	10.701		
5,500.0	5,496.8	5,487.8	5,473.0	12.4	13.3	56.55	117.4	337.1	264.3	239.8	24.57	10.760		
5,600.0	5,596.7	5,587.6	5,572.4	12.6	13.6	56.62	121.0	346.0	270.7	245.7	25.03	10.816		
5,700.0	5,696.6	5,687.4	5,671.7	12.9	13.9	56.69	124.7	355.0	277.2	251.7	25.50	10.870		
5,800.0	5,796.5	5,787.2	5,771.0	13.1	14.2	56.76	128.3	363.9	283.6	257.6	25.97	10.921		
5,900.0	5,896.4	5,887.0	5,870.3	13.3	14.5	56.83	132.0	372.9	290.0	263.6	26.44	10.971		
6,000.0	5,996.3	5,991.8	5,974.7	13.6	14.7	56.92	135.7	381.8	296.1	269.2	26.91	11.004		
6,069.4	6,065.6	6,068.5	6,051.2	13.7	14.9	57.14	137.6	386.4	298.5	271.3	27.22	10.968		
6,100.0	6,096.2	6,102.4	6,085.1	13.8	15.0	57.27	138.1	387.9	299.1	271.8	27.34	10.940		
6,203.8	6,200.0	6,217.3	6,200.0	14.0	15.2	90.19	139.0	390.0	300.0	272.3	27.73	10.821		
6,300.0	6,296.2	6,313.5	6,296.2	14.2	15.3	90.19	139.0	390.0	300.0	271.9	28.10	10.676		
6,400.0	6,396.2	6,413.5	6,396.2	14.4	15.5	90.19	139.0	390.0	300.0	271.5	28.53	10.516		
6,500.0	6,496.2	6,513.5	6,496.2	14.6	15.7	90.19	139.0	390.0	300.0	271.1	28.96	10.360		
6,600.0	6,596.2	6,613.5	6,596.2	14.8	15.9	90.19	139.0	390.0	300.0	270.6	29.39	10.208		
6,700.0	6,696.2	6,713.5	6,696.2	15.0	16.1	90.19	139.0	390.0	300.0	270.2	29.82	10.060		
6,770.8	6,767.0	6,784.3	6,767.0	15.2	16.3	90.19	139.0	390.0	300.0	269.9	30.13	9.958		
6,800.0	6,796.1	6,813.5	6,796.1	15.2	16.3	-89.68	139.0	390.0	300.0	269.8	30.24	9.922		
6,827.9	6,824.0	6,841.3	6,824.0	15.3	16.4	-90.00	139.0	390.0	300.0	269.7	30.33	9.891		
6,850.0	6,846.0	6,863.3	6,846.0	15.3	16.4	-90.40	139.0	390.0	300.0	269.6	30.41	9.868		
6,900.0	6,895.5	6,913.1	6,895.8	15.4	16.5	-91.66	138.4	390.0	300.1	269.6	30.54	9.828		
6,950.0	6,944.3	6,963.5	6,946.0	15.4	16.6	-92.97	134.6	390.0	300.4	269.8	30.65	9.802		
7,000.0	6,992.3	7,014.4	6,996.3	15.5	16.7	-94.28	127.2	390.1	300.9	270.1	30.74	9.787		
7,050.0	7,039.1	7,065.8	7,046.5	15.6	16.7	-95.57	116.1	390.1	301.5	270.6	30.82	9.781		
7,100.0	7,084.7	7,117.7	7,096.3	15.6	16.8	-96.83	101.3	390.2	302.2	271.3	30.90	9.781		
7,150.0	7,128.7	7,170.1	7,145.3	15.7	16.8	-98.05	82.7	390.3	303.1	272.1	30.97	9.786		
7,200.0	7,170.9	7,223.1	7,193.3	15.7	16.9	-99.24	60.3	390.4	304.1	273.0	31.04	9.794		
7,250.0	7,211.2	7,276.7	7,240.0	15.8	16.9	-100.38	34.1	390.5	305.1	274.0	31.13	9.801		
7,300.0	7,249.3	7,330.7	7,285.0	15.9	17.0	-101.47	4.3	390.6	306.3	275.0	31.24	9.802		
7,350.0	7,285.0	7,385.3	7,328.1	16.0	17.1	-102.49	-29.2	390.8	307.4	276.1	31.37	9.801		
7,400.0	7,318.3	7,440.3	7,368.8	16.1	17.2	-103.45	-66.3	391.0	308.6	277.1	31.54	9.785		
7,450.0	7,348.8	7,495.9	7,406.8	16.3	17.3	-104.34	-106.7	391.2	309.8	278.1	31.76	9.754		
7,500.0	7,376.5	7,551.9	7,441.9	16.6	17.4	-105.15	-150.3	391.4	311.0	278.9	32.05	9.705		
7,550.0	7,401.2	7,608.3	7,473.7	16.8	17.6	-105.88	-196.9	391.6	312.1	279.7	32.40	9.632		
7,600.0	7,422.9	7,665.1	7,502.0	17.1	17.9	-106.52	-246.2	391.8	313.1	280.3	32.84	9.536		
7,650.0	7,441.3	7,722.2	7,526.3	17.5	18.2	-107.08	-297.9	392.0	314.0	280.7	33.36	9.413		
7,700.0	7,456.5	7,779.7	7,546.6	17.9	18.5	-107.54	-351.6	392.3	314.8	280.9	33.98	9.266		
7,750.0	7,468.3	7,837.4	7,562.5	18.3	19.0	-107.91	-407.0	392.5	315.5	280.8	34.69	9.093		
7,800.0	7,476.6	7,895.3	7,574.0	18.8	19.5	-108.18	-463.8	392.8	316.0	280.5	35.51	8.899		
7,850.0	7,481.6	7,953.3	7,580.8	19.3	20.0	-108.35	-521.4	393.1	316.3	279.9	36.42	8.684		
7,896.8	7,483.0	8,009.1	7,582.0	19.8	20.6	-108.25	-576.1	393.3	316.1	278.7	37.41	8.450		
7,898.4	7,483.0	8,010.5	7,582.0	19.9	20.6	-108.25	-577.6	393.3	316.1	278.7	37.44	8.443		
7,898.4	7,483.0	8,010.5	7,582.0	19.9	20.6	-108.25	-577.6	393.3	316.1	278.7	37.44	8.443		
7,898.9	7,483.0	8,011.0	7,582.0	19.9	20.6	-108.25	-578.0	393.3	316.1	278.7	37.45	8.441		
7,900.0	7,483.0	8,012.2	7,582.0	19.9	20.6	-108.25	-579.2	393.3	316.1	278.7	37.47	8.436		
8,000.0	7,482.6	8,112.2	7,582.0	21.0	21.7	-108.32	-679.2	393.8	316.3	276.6	39.62	7.982		
8,100.0	7,482.2	8,212.2	7,582.0	22.3	22.9	-108.39	-779.2	394.2	316.4	274.3	42.04	7.526		
8,200.0	7,481.8	8,312.2	7,582.0	23.7	24.3	-108.46	-879.2	394.6	316.5	271.9	44.62	7.093		
8,300.0	7,481.4	8,412.2	7,582.0	25.1	25.7	-108.53	-979.2	395.0	316.6	269.3	47.35	6.687		
8,400.0	7,481.0	8,512.2	7,582.0	26.6	27.1	-108.60	-1,079.2	395.4	316.7	266.5	50.20	6.310		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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			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		
8,500.0	7,480.6	8,612.2	7,582.0	28.2	28.6	-108.67	-1,179.2	395.8	316.9	263.7	53.15	5.962		
8,600.0	7,480.2	8,712.2	7,582.0	29.8	30.2	-108.74	-1,279.2	396.3	317.0	260.8	56.18	5.643		
8,700.0	7,479.8	8,812.2	7,582.0	31.4	31.8	-108.80	-1,379.2	396.7	317.1	257.8	59.28	5.350		
8,800.0	7,479.4	8,912.2	7,582.0	33.1	33.4	-108.87	-1,479.2	397.1	317.2	254.8	62.44	5.081		
8,900.0	7,479.0	9,012.2	7,582.0	34.8	35.1	-108.94	-1,579.2	397.5	317.4	251.7	65.65	4.835		
9,000.0	7,478.6	9,112.2	7,582.0	36.5	36.8	-109.01	-1,679.2	397.9	317.5	248.6	68.90	4.608		
9,100.0	7,478.2	9,212.2	7,582.0	38.2	38.5	-109.08	-1,779.2	398.4	317.6	245.4	72.19	4.400		
9,200.0	7,477.8	9,312.2	7,582.0	40.0	40.3	-109.15	-1,879.2	398.8	317.7	242.2	75.51	4.208		
9,300.0	7,477.4	9,412.2	7,582.0	41.8	42.0	-109.22	-1,979.2	399.2	317.9	239.0	78.85	4.031		
9,400.0	7,477.0	9,512.2	7,582.0	43.5	43.8	-109.29	-2,079.2	399.6	318.0	235.8	82.22	3.868		
9,500.0	7,476.6	9,612.2	7,582.0	45.3	45.6	-109.36	-2,179.2	400.0	318.1	232.5	85.61	3.716		
9,600.0	7,476.2	9,712.2	7,582.0	47.1	47.4	-109.42	-2,279.2	400.4	318.3	229.2	89.02	3.575		
9,700.0	7,475.8	9,812.2	7,582.0	49.0	49.2	-109.49	-2,379.2	400.9	318.4	226.0	92.44	3.444		
9,800.0	7,475.4	9,912.2	7,582.0	50.8	51.0	-109.56	-2,479.2	401.3	318.5	222.6	95.87	3.322		
9,900.0	7,475.0	10,012.2	7,582.0	52.6	52.8	-109.63	-2,579.2	401.7	318.7	219.3	99.32	3.208		
10,000.0	7,474.5	10,112.2	7,582.0	54.4	54.6	-109.70	-2,679.2	402.1	318.8	216.0	102.78	3.102		
10,100.0	7,474.1	10,212.2	7,582.0	56.3	56.4	-109.77	-2,779.2	402.5	318.9	212.7	106.25	3.002		
10,200.0	7,473.7	10,312.2	7,582.0	58.1	58.3	-109.83	-2,879.2	403.0	319.0	209.3	109.72	2.908		
10,300.0	7,473.3	10,412.2	7,582.0	60.0	60.1	-109.90	-2,979.2	403.4	319.2	206.0	113.20	2.820		
10,400.0	7,472.9	10,512.2	7,582.0	61.9	62.0	-109.97	-3,079.2	403.8	319.3	202.6	116.69	2.736		
10,500.0	7,472.5	10,612.2	7,582.0	63.7	63.8	-110.04	-3,179.2	404.2	319.4	199.3	120.18	2.658		
10,600.0	7,472.1	10,712.2	7,582.0	65.6	65.7	-110.11	-3,279.2	404.6	319.6	195.9	123.68	2.584		
10,700.0	7,471.7	10,812.2	7,582.0	67.5	67.6	-110.18	-3,379.2	405.0	319.7	192.5	127.18	2.514		
10,800.0	7,471.3	10,912.2	7,582.0	69.3	69.4	-110.24	-3,479.2	405.5	319.8	189.2	130.68	2.448		
10,900.0	7,470.9	11,012.2	7,582.0	71.2	71.3	-110.31	-3,579.2	405.9	320.0	185.8	134.19	2.385		
11,000.0	7,470.5	11,112.2	7,582.0	73.1	73.2	-110.38	-3,679.2	406.3	320.1	182.4	137.69	2.325		
11,100.0	7,470.1	11,212.2	7,582.0	75.0	75.1	-110.45	-3,779.2	406.7	320.2	179.0	141.20	2.268		
11,200.0	7,469.7	11,312.2	7,582.0	76.9	76.9	-110.51	-3,879.2	407.1	320.4	175.7	144.72	2.214		
11,300.0	7,469.3	11,412.2	7,582.0	78.7	78.8	-110.58	-3,979.2	407.6	320.5	172.3	148.23	2.162		
11,400.0	7,468.9	11,512.2	7,582.0	80.6	80.7	-110.65	-4,079.2	408.0	320.7	168.9	151.74	2.113		
11,500.0	7,468.5	11,612.2	7,582.0	82.5	82.6	-110.72	-4,179.2	408.4	320.8	165.5	155.26	2.066		
11,600.0	7,468.1	11,712.2	7,582.0	84.4	84.5	-110.78	-4,279.2	408.8	320.9	162.2	158.78	2.021		
11,700.0	7,467.7	11,812.2	7,582.0	86.3	86.4	-110.85	-4,379.2	409.2	321.1	158.8	162.29	1.978		
11,800.0	7,467.3	11,912.2	7,582.0	88.2	88.3	-110.92	-4,479.1	409.7	321.2	155.4	165.81	1.937		
11,900.0	7,466.9	12,012.2	7,582.0	90.1	90.1	-110.99	-4,579.1	410.1	321.3	152.0	169.32	1.898		
12,000.0	7,466.5	12,112.2	7,582.0	92.0	92.0	-111.05	-4,679.1	410.5	321.5	148.6	172.84	1.860		
12,100.0	7,466.1	12,212.2	7,582.0	93.9	93.9	-111.12	-4,779.1	410.9	321.6	145.3	176.35	1.824		
12,200.0	7,465.7	12,312.2	7,582.0	95.8	95.8	-111.19	-4,879.1	411.3	321.8	141.9	179.87	1.789		
12,300.0	7,465.3	12,412.2	7,582.0	97.7	97.7	-111.26	-4,979.1	411.7	321.9	138.5	183.38	1.755		
12,400.0	7,464.9	12,512.2	7,582.0	99.6	99.6	-111.32	-5,079.1	412.2	322.1	135.2	186.89	1.723		
12,500.0	7,464.5	12,612.2	7,582.0	101.5	101.5	-111.39	-5,179.1	412.6	322.2	131.8	190.40	1.692		
12,600.0	7,464.1	12,712.2	7,582.0	103.4	103.4	-111.46	-5,279.1	413.0	322.3	128.4	193.91	1.662		
12,700.0	7,463.7	12,812.2	7,582.0	105.3	105.3	-111.52	-5,379.1	413.4	322.5	125.1	197.42	1.633		
12,800.0	7,463.3	12,912.2	7,582.0	107.2	107.2	-111.59	-5,479.1	413.8	322.6	121.7	200.93	1.606		
12,900.0	7,462.9	13,012.2	7,582.0	109.1	109.1	-111.66	-5,579.1	414.3	322.8	118.3	204.44	1.579		
13,000.0	7,462.5	13,112.2	7,582.0	111.0	111.0	-111.72	-5,679.1	414.7	322.9	115.0	207.94	1.553		
13,100.0	7,462.1	13,212.2	7,582.0	112.9	113.0	-111.79	-5,779.1	415.1	323.1	111.6	211.45	1.528		
13,200.0	7,461.7	13,312.2	7,582.0	114.9	114.9	-111.86	-5,879.1	415.5	323.2	108.2	214.95	1.504		
13,300.0	7,461.3	13,412.2	7,582.0	116.8	116.8	-111.92	-5,979.1	415.9	323.3	104.9	218.45	1.480 Level 3		
13,400.0	7,460.9	13,512.1	7,582.0	118.7	118.7	-111.99	-6,079.1	416.3	323.5	101.5	221.94	1.458 Level 3		
13,500.0	7,460.5	13,612.1	7,582.0	120.6	120.6	-112.06	-6,179.1	416.8	323.6	98.2	225.44	1.436 Level 3		
13,600.0	7,460.1	13,712.1	7,582.0	122.5	122.5	-112.12	-6,279.1	417.2	323.8	94.8	228.93	1.414 Level 3		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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			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		
13,700.0	7,459.7	13,812.1	7,582.0	124.4	124.4	-112.19	-6,379.1	417.6	323.9	91.5	232.43	1.394	Level 3	
13,800.0	7,459.3	13,912.1	7,582.0	126.3	126.3	-112.25	-6,479.1	418.0	324.1	88.2	235.92	1.374	Level 3	
13,900.0	7,458.9	14,012.1	7,582.0	128.2	128.2	-112.32	-6,579.1	418.4	324.2	84.8	239.40	1.354	Level 3	
14,000.0	7,458.5	14,112.1	7,582.0	130.1	130.1	-112.39	-6,679.1	418.9	324.4	81.5	242.89	1.335	Level 3	
14,100.0	7,458.1	14,212.1	7,582.0	132.1	132.1	-112.45	-6,779.1	419.3	324.5	78.1	246.37	1.317	Level 3	
14,200.0	7,457.7	14,312.1	7,582.0	134.0	134.0	-112.52	-6,879.1	419.7	324.7	74.8	249.85	1.299	Level 3	
14,300.0	7,457.3	14,412.1	7,582.0	135.9	135.9	-112.58	-6,979.1	420.1	324.8	71.5	253.33	1.282	Level 3	
14,400.0	7,456.9	14,512.1	7,582.0	137.8	137.8	-112.65	-7,079.1	420.5	325.0	68.2	256.81	1.265	Level 3	
14,500.0	7,456.5	14,612.1	7,582.0	139.7	139.7	-112.72	-7,179.1	420.9	325.1	64.8	260.28	1.249	Level 2	
14,600.0	7,456.1	14,712.1	7,582.0	141.6	141.6	-112.78	-7,279.1	421.4	325.3	61.5	263.76	1.233	Level 2	
14,700.0	7,455.6	14,812.1	7,582.0	143.6	143.5	-112.85	-7,379.1	421.8	325.4	58.2	267.22	1.218	Level 2	
14,800.0	7,455.2	14,912.1	7,582.0	145.5	145.4	-112.91	-7,479.1	422.2	325.6	54.9	270.69	1.203	Level 2	
14,900.0	7,454.8	15,012.1	7,582.0	147.4	147.4	-112.98	-7,579.1	422.6	325.7	51.6	274.16	1.188	Level 2	
15,000.0	7,454.4	15,112.1	7,582.0	149.3	149.3	-113.04	-7,679.1	423.0	325.9	48.3	277.62	1.174	Level 2	
15,100.0	7,454.0	15,212.1	7,582.0	151.2	151.2	-113.11	-7,779.1	423.5	326.0	45.0	281.08	1.160	Level 2	
15,200.0	7,453.6	15,312.1	7,582.0	153.1	153.1	-113.17	-7,879.1	423.9	326.2	41.6	284.53	1.146	Level 2	
15,300.0	7,453.2	15,412.1	7,582.0	155.1	155.0	-113.24	-7,979.1	424.3	326.3	38.3	287.99	1.133	Level 2	
15,400.0	7,452.8	15,512.1	7,582.0	157.0	156.9	-113.30	-8,079.1	424.7	326.5	35.1	291.44	1.120	Level 2	
15,500.0	7,452.4	15,612.1	7,582.0	158.9	158.9	-113.37	-8,179.1	425.1	326.6	31.8	294.89	1.108	Level 2	
15,600.0	7,452.0	15,712.1	7,582.0	160.8	160.8	-113.43	-8,279.1	425.5	326.8	28.5	298.34	1.095	Level 2	
15,700.0	7,451.6	15,812.1	7,582.0	162.7	162.7	-113.50	-8,379.1	426.0	327.0	25.2	301.78	1.083	Level 2	
15,800.0	7,451.2	15,912.1	7,582.0	164.7	164.6	-113.56	-8,479.1	426.4	327.1	21.9	305.22	1.072	Level 2	
15,900.0	7,450.8	16,012.1	7,582.0	166.6	166.5	-113.63	-8,579.1	426.8	327.3	18.6	308.66	1.060	Level 2	
16,000.0	7,450.4	16,112.1	7,582.0	168.5	168.5	-113.69	-8,679.1	427.2	327.4	15.3	312.09	1.049	Level 2	
16,100.0	7,450.0	16,212.1	7,582.0	170.4	170.4	-113.76	-8,779.1	427.6	327.6	12.1	315.53	1.038	Level 2	
16,200.0	7,449.6	16,312.1	7,582.0	172.3	172.3	-113.82	-8,879.1	428.1	327.7	8.8	318.96	1.028	Level 2	
16,300.0	7,449.2	16,412.1	7,582.0	174.3	174.2	-113.89	-8,979.1	428.5	327.9	5.5	322.38	1.017	Level 2	
16,400.0	7,448.8	16,512.1	7,582.0	176.2	176.1	-113.95	-9,079.1	428.9	328.1	2.3	325.81	1.007	Level 2	
16,500.0	7,448.4	16,612.1	7,582.0	178.1	178.1	-114.02	-9,179.1	429.3	328.2	-1.0	329.23	0.997	Level 1	
16,600.0	7,448.0	16,712.1	7,582.0	180.0	180.0	-114.08	-9,279.1	429.7	328.4	-4.3	332.65	0.987	Level 1	
16,700.0	7,447.6	16,812.1	7,582.0	181.9	181.9	-114.15	-9,379.1	430.1	328.5	-7.5	336.06	0.978	Level 1	
16,800.0	7,447.2	16,912.1	7,582.0	183.9	183.8	-114.21	-9,479.1	430.6	328.7	-10.8	339.48	0.968	Level 1	
16,900.0	7,446.8	17,012.1	7,582.0	185.8	185.7	-114.28	-9,579.1	431.0	328.9	-14.0	342.89	0.959	Level 1	
17,000.0	7,446.4	17,112.1	7,582.0	187.7	187.7	-114.34	-9,679.1	431.4	329.0	-17.3	346.29	0.950	Level 1	
17,100.0	7,446.0	17,212.1	7,582.0	189.6	189.6	-114.40	-9,779.1	431.8	329.2	-20.5	349.70	0.941	Level 1	
17,200.0	7,445.6	17,312.1	7,582.0	191.6	191.5	-114.47	-9,879.1	432.2	329.3	-23.8	353.10	0.933	Level 1	
17,300.0	7,445.2	17,412.1	7,582.0	193.5	193.4	-114.53	-9,979.1	432.7	329.5	-27.0	356.50	0.924	Level 1	
17,400.0	7,444.8	17,512.1	7,582.0	195.4	195.3	-114.60	-10,079.1	433.1	329.7	-30.2	359.89	0.916	Level 1	
17,500.0	7,444.4	17,612.1	7,582.0	197.3	197.3	-114.66	-10,179.1	433.5	329.8	-33.5	363.28	0.908	Level 1	
17,600.0	7,444.0	17,712.1	7,582.0	199.2	199.2	-114.72	-10,279.1	433.9	330.0	-36.7	366.67	0.900	Level 1	
17,700.0	7,443.6	17,812.1	7,582.0	201.2	201.1	-114.79	-10,379.0	434.3	330.2	-39.9	370.06	0.892	Level 1	
17,800.0	7,443.2	17,912.1	7,582.0	203.1	203.0	-114.85	-10,479.0	434.7	330.3	-43.1	373.44	0.885	Level 1	
17,845.2	7,443.0	17,957.3	7,582.0	204.0	203.9	-114.88	-10,524.2	434.9	330.4	-44.6	374.97	0.881	Level 1, ES, SF	

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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)			
11,500.0	7,468.5	12,421.8	7,296.4	82.5	125.5	64.54	-4,816.6	-297.5	779.9	617.2	162.67	4.794		
11,600.0	7,468.1	12,476.7	7,294.8	84.4	126.9	61.58	-4,845.7	-251.0	698.8	537.3	161.54	4.326		
11,700.0	7,467.7	12,523.8	7,293.4	86.3	128.0	58.52	-4,870.7	-211.1	618.7	458.9	159.77	3.872		
11,800.0	7,467.3	12,582.4	7,292.0	88.2	129.5	53.96	-4,902.1	-161.6	539.9	384.6	155.34	3.476		
11,900.0	7,466.9	12,605.0	7,291.6	90.1	130.1	51.92	-4,914.2	-142.5	464.0	310.1	153.90	3.015		
12,000.0	7,466.5	12,605.0	7,291.6	92.0	130.1	51.92	-4,914.2	-142.5	398.3	242.8	155.46	2.562		
12,100.0	7,466.1	12,605.0	7,291.6	93.9	130.1	51.92	-4,914.2	-142.5	349.2	192.2	157.02	2.224		
12,200.0	7,465.7	12,605.0	7,291.6	95.8	130.1	51.92	-4,914.2	-142.5	324.4	165.8	158.59	2.046		
12,233.5	7,465.6	12,605.0	7,291.6	96.4	130.1	51.92	-4,914.2	-142.5	322.7	163.5	159.11	2.028 CC, ES, SF		
12,300.0	7,465.3	12,605.0	7,291.6	97.7	130.1	51.92	-4,914.2	-142.5	329.4	169.3	160.15	2.057		
12,400.0	7,464.9	12,605.0	7,291.6	99.6	130.1	51.92	-4,914.2	-142.5	363.1	201.4	161.71	2.245		
12,500.0	7,464.5	12,605.0	7,291.6	101.5	130.1	51.92	-4,914.2	-142.5	418.5	255.2	163.28	2.563		
12,600.0	7,464.1	12,605.0	7,291.6	103.4	130.1	51.92	-4,914.2	-142.5	488.3	323.4	164.84	2.962		
12,700.0	7,463.7	12,605.0	7,291.6	105.3	130.1	51.92	-4,914.2	-142.5	567.2	400.8	166.41	3.408		
12,800.0	7,463.3	12,605.0	7,291.6	107.2	130.1	51.92	-4,914.2	-142.5	651.9	484.0	167.98	3.881		
12,900.0	7,462.9	12,605.0	7,291.6	109.1	130.1	51.92	-4,914.2	-142.5	740.5	570.9	169.54	4.367		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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	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)				
16,100.0	7,450.0	11,749.0	7,267.1	170.4	116.3	69.68	-9,316.3	-371.5	756.2	516.9	239.28	3.160			
16,200.0	7,449.6	11,818.9	7,268.2	172.3	118.1	67.75	-9,364.3	-320.7	686.0	446.4	239.57	2.863			
16,300.0	7,449.2	11,884.6	7,269.0	174.3	119.7	65.55	-9,409.3	-272.9	616.1	377.1	239.06	2.577			
16,400.0	7,448.8	11,954.5	7,269.9	176.2	121.5	62.65	-9,457.2	-222.0	547.0	309.9	237.06	2.307			
16,500.0	7,448.4	12,021.2	7,270.6	178.1	123.2	59.19	-9,503.0	-173.5	478.9	245.6	233.30	2.053			
16,600.0	7,448.0	12,086.5	7,271.4	180.0	124.8	54.95	-9,548.1	-126.3	412.7	185.7	227.02	1.818			
16,700.0	7,447.6	12,151.9	7,271.5	181.9	126.4	49.45	-9,593.7	-79.4	349.8	133.2	216.57	1.615			
16,800.0	7,447.2	12,218.8	7,270.6	183.9	128.1	42.02	-9,640.4	-31.6	291.5	92.3	199.24	1.463	Level 3		
16,900.0	7,446.8	12,291.3	7,269.4	185.8	129.9	31.50	-9,691.2	20.2	240.6	69.7	170.88	1.408	Level 3, SF		
17,000.0	7,446.4	12,360.2	7,268.4	187.7	131.6	18.85	-9,739.3	69.5	202.0	65.3	136.68	1.478	Level 3, ES		
17,100.0	7,446.0	12,428.8	7,267.1	189.6	133.4	4.05	-9,786.7	119.1	184.5	72.8	111.73	1.651			
17,113.3	7,445.9	12,438.0	7,266.8	189.9	133.6	1.96	-9,792.9	125.8	184.2	73.4	110.85	1.662	CC		
17,200.0	7,445.6	12,496.7	7,265.2	191.6	135.1	-11.29	-9,832.3	169.3	195.1	71.3	123.75	1.576			
17,300.0	7,445.2	12,562.2	7,263.4	193.5	136.7	-24.57	-9,876.2	218.0	230.2	70.7	159.43	1.444	Level 3		
17,400.0	7,444.8	12,631.5	7,259.9	195.4	138.5	-35.49	-9,923.5	268.5	280.9	85.9	195.01	1.440	Level 3		
17,500.0	7,444.4	12,699.1	7,256.4	197.3	140.2	-43.65	-9,969.7	317.8	339.8	117.9	221.93	1.531			
17,600.0	7,444.0	12,768.1	7,253.1	199.2	141.9	-50.06	-10,016.6	368.2	403.3	160.9	242.39	1.664			
17,700.0	7,443.6	12,832.6	7,250.5	201.2	143.6	-54.77	-10,060.3	415.6	469.7	212.6	257.10	1.827			
17,800.0	7,443.2	12,897.1	7,248.6	203.1	145.2	-58.64	-10,103.5	463.4	538.2	269.3	268.88	2.002			
17,845.2	7,443.0	12,928.9	7,247.8	204.0	146.0	-60.28	-10,124.7	487.1	569.7	295.9	273.78	2.081			

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 9-15H (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1367-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	12.0	12.0	0.0	0.0	57.52	246.0	386.4	458.0	458.0	0.01	N/A		
100.0	100.0	112.0	112.0	0.1	0.1	57.52	246.0	386.4	458.0	457.8	0.24	1,920.940		
200.0	200.0	212.0	212.0	0.3	0.2	57.52	246.0	386.4	458.0	457.4	0.58	795.768		
300.0	300.0	312.0	312.0	0.6	0.4	57.52	246.0	386.4	458.0	457.1	0.91	501.828		
400.0	400.0	412.0	412.0	0.8	0.5	57.52	246.0	386.4	458.0	456.8	1.25	366.464		
500.0	500.0	512.0	512.0	1.0	0.6	57.52	246.0	386.4	458.0	456.4	1.59	288.613		
600.0	600.0	612.0	612.0	1.2	0.7	57.52	246.0	386.4	458.0	456.1	1.92	238.043		
700.0	700.0	712.0	712.0	1.5	0.8	57.52	246.0	386.4	458.0	455.8	2.26	202.553		
800.0	800.0	812.0	812.0	1.7	0.9	57.52	246.0	386.4	458.0	455.4	2.60	176.272		
900.0	900.0	912.0	912.0	1.9	1.0	57.52	246.0	386.4	458.0	455.1	2.94	156.028		
1,000.0	1,000.0	1,012.0	1,012.0	2.1	1.1	57.52	246.0	386.4	458.0	454.7	3.27	139.954		
1,100.0	1,100.0	1,112.0	1,112.0	2.4	1.2	57.52	246.0	386.4	458.0	454.4	3.61	126.883		
1,200.0	1,200.0	1,212.0	1,212.0	2.6	1.4	57.52	246.0	386.4	458.0	454.1	3.95	116.045		
1,300.0	1,300.0	1,312.0	1,312.0	2.8	1.5	57.52	246.0	386.4	458.0	453.7	4.28	106.913		
1,339.5	1,339.5	1,351.5	1,351.5	2.9	1.5	57.52	246.0	386.4	458.0	453.6	4.42	103.686		
1,400.0	1,400.0	1,411.9	1,411.9	3.0	1.6	57.51	246.1	386.3	458.0	453.4	4.67	98.064		
1,500.0	1,500.0	1,512.1	1,512.1	3.3	1.8	57.41	246.7	385.9	458.0	452.9	5.11	89.721		
1,600.0	1,600.0	1,612.5	1,612.5	3.5	2.1	57.31	247.4	385.4	458.0	452.4	5.54	82.718		
1,700.0	1,700.0	1,712.8	1,712.8	3.7	2.3	57.20	248.0	384.9	457.8	451.9	5.97	76.713		
1,794.8	1,794.8	1,806.9	1,806.8	3.9	2.5	57.11	248.6	384.4	457.7	451.4	6.37	71.820		
1,800.0	1,800.0	1,812.0	1,812.0	3.9	2.5	57.10	248.6	384.3	457.7	451.3	6.40	71.573		
1,900.0	1,900.0	1,911.0	1,911.0	4.2	2.7	56.99	249.4	384.0	457.9	451.0	6.82	67.109		
2,000.0	2,000.0	2,010.2	2,010.2	4.4	2.9	56.88	250.3	383.7	458.2	450.9	7.25	63.199		
2,100.0	2,100.0	2,111.0	2,110.9	4.6	3.1	56.78	251.2	383.5	458.5	450.8	7.68	59.716		
2,200.0	2,200.0	2,211.7	2,211.7	4.8	3.3	56.68	251.9	383.2	458.6	450.5	8.11	56.580		
2,300.0	2,300.0	2,312.2	2,312.1	5.1	3.5	56.60	252.5	382.9	458.6	450.1	8.53	53.749		
2,327.6	2,327.6	2,339.7	2,339.6	5.1	3.5	56.58	252.6	382.8	458.6	450.0	8.65	53.022		
2,400.0	2,400.0	2,411.7	2,411.6	5.3	3.7	56.53	252.9	382.6	458.7	449.7	8.96	51.215		
2,500.0	2,500.0	2,511.1	2,511.1	5.5	3.9	56.48	253.4	382.5	458.8	449.4	9.38	48.921		
2,600.0	2,600.0	2,610.5	2,610.5	5.7	4.1	23.77	253.8	382.5	457.9	448.1	9.80	46.714		
2,679.3	2,679.2	2,689.2	2,689.1	5.9	4.2	23.88	254.3	382.5	455.5	445.4	10.14	44.936		
2,700.0	2,699.9	2,709.7	2,709.6	6.0	4.3	23.91	254.5	382.5	454.7	444.5	10.23	44.469		
2,800.0	2,799.8	2,808.9	2,808.8	6.2	4.5	24.03	255.6	382.5	451.0	440.4	10.66	42.328		
2,900.0	2,899.7	2,908.1	2,908.1	6.4	4.7	24.12	257.0	382.5	447.5	436.4	11.08	40.369		
3,000.0	2,999.6	3,007.5	3,007.4	6.6	4.9	24.26	258.1	382.8	444.1	432.6	11.51	38.568		
3,100.0	3,099.5	3,106.8	3,106.8	6.8	5.1	24.47	259.0	383.4	440.8	428.8	11.94	36.906		
3,200.0	3,199.4	3,207.1	3,207.0	7.1	5.3	24.73	259.5	384.3	437.6	425.2	12.37	35.369		
3,300.0	3,299.3	3,307.8	3,307.7	7.3	5.5	24.98	260.1	385.1	434.2	421.4	12.80	33.924		
3,400.0	3,399.1	3,408.5	3,408.5	7.5	5.7	25.23	260.5	385.6	430.7	417.5	13.23	32.559		
3,500.0	3,499.0	3,508.1	3,508.0	7.7	5.9	25.48	261.0	386.1	427.1	413.4	13.66	31.269		
3,600.0	3,598.9	3,607.4	3,607.3	8.0	6.2	25.73	261.5	386.6	423.6	409.6	14.09	30.066		
3,700.0	3,698.8	3,706.7	3,706.6	8.2	6.4	25.99	262.1	387.4	420.3	405.8	14.52	28.945		
3,800.0	3,798.7	3,805.3	3,805.2	8.4	6.6	26.27	262.7	388.3	417.3	402.3	14.95	27.905		
3,900.0	3,898.6	3,903.9	3,903.8	8.7	6.8	26.62	263.0	389.8	414.6	399.2	15.39	26.944		
4,000.0	3,998.5	4,002.6	4,002.5	8.9	7.0	27.03	263.2	391.8	412.2	396.3	15.82	26.058		
4,100.0	4,098.4	4,102.7	4,102.6	9.1	7.2	27.53	262.9	394.2	409.9	393.7	16.25	25.226		
4,200.0	4,198.3	4,202.8	4,202.6	9.4	7.4	28.13	262.0	396.9	407.7	391.0	16.68	24.436		
4,300.0	4,298.1	4,302.8	4,302.5	9.6	7.6	28.83	260.5	399.8	405.4	388.3	17.12	23.686		
4,400.0	4,398.0	4,402.7	4,402.4	9.8	7.8	29.54	259.0	402.8	403.2	385.6	17.55	22.974		
4,500.0	4,497.9	4,502.6	4,502.3	10.1	8.0	30.23	257.7	405.6	401.0	383.0	17.98	22.299		
4,600.0	4,597.8	4,602.4	4,602.0	10.3	8.2	30.89	256.5	408.3	398.9	380.5	18.42	21.656		
4,700.0	4,697.7	4,702.0	4,701.6	10.5	8.5	31.57	255.3	411.1	396.9	378.0	18.86	21.048		

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 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 9-15H (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1367-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		
4,800.0	4,797.6	4,801.5	4,801.0	10.8	8.7	32.28	254.0	414.1	395.0	375.7	19.29	20.474		
4,900.0	4,897.5	4,901.4	4,900.8	11.0	8.9	33.01	252.7	417.1	393.3	373.5	19.73	19.931		
5,000.0	4,997.4	5,001.5	5,001.0	11.2	9.1	33.69	251.7	419.9	391.5	371.4	20.17	19.411		
5,100.0	5,097.3	5,101.8	5,101.1	11.5	9.3	34.31	251.1	422.5	389.8	369.1	20.61	18.911		
5,200.0	5,197.2	5,201.4	5,200.8	11.7	9.5	34.86	250.9	424.9	388.0	366.9	21.05	18.432		
5,300.0	5,297.0	5,300.8	5,300.1	11.9	9.7	35.36	251.0	427.2	386.4	364.9	21.49	17.980		
5,400.0	5,396.9	5,400.2	5,399.5	12.2	9.9	35.83	251.5	429.6	385.0	363.0	21.93	17.554		
5,500.0	5,496.8	5,503.5	5,502.8	12.4	10.2	36.28	252.2	431.7	383.3	360.9	22.38	17.130		
5,600.0	5,596.7	5,607.8	5,607.1	12.6	10.4	36.74	252.4	432.7	380.5	357.7	22.82	16.673		
5,700.0	5,696.6	5,711.7	5,710.9	12.9	10.6	37.20	252.2	432.6	376.6	353.4	23.27	16.185		
5,800.0	5,796.5	5,809.7	5,809.0	13.1	10.8	37.63	252.1	432.3	372.5	348.8	23.71	15.715		
5,900.0	5,896.4	5,907.8	5,907.0	13.3	11.0	38.04	252.3	432.3	369.0	344.8	24.14	15.284		
6,000.0	5,996.3	6,006.2	6,005.5	13.6	11.2	38.43	252.8	432.8	365.9	341.3	24.58	14.887		
6,069.4	6,065.6	6,075.8	6,075.1	13.7	11.4	38.70	253.3	433.1	363.8	339.0	24.88	14.622		
6,100.0	6,066.2	6,106.5	6,105.8	13.8	11.4	38.79	253.5	433.3	363.0	338.0	25.01	14.515		
6,182.9	6,179.0	6,189.7	6,188.9	13.9	11.6	38.90	254.0	433.7	362.1	336.8	25.33	14.296		
6,203.8	6,200.0	6,210.8	6,210.0	14.0	11.6	71.63	254.2	433.7	362.2	336.8	25.41	14.254		
6,300.0	6,296.2	6,307.3	6,306.5	14.2	11.8	71.56	254.7	434.1	362.7	336.9	25.80	14.058		
6,400.0	6,396.2	6,407.5	6,406.8	14.4	12.0	71.49	255.3	434.3	363.1	336.9	26.23	13.845		
6,500.0	6,496.2	6,507.8	6,507.1	14.6	12.3	71.42	255.8	434.5	363.4	336.8	26.65	13.636		
6,600.0	6,596.2	6,607.7	6,606.9	14.8	12.5	71.35	256.3	434.6	363.7	336.7	27.08	13.432		
6,700.0	6,696.2	6,707.0	6,706.2	15.0	12.7	71.30	256.8	434.9	364.2	336.7	27.51	13.240		
6,770.8	6,767.0	6,776.5	6,775.8	15.2	12.8	71.27	257.1	435.3	364.6	336.8	27.81	13.112		
6,800.0	6,796.1	6,808.3	6,807.6	15.2	12.9	-108.62	257.5	435.3	365.0	337.1	27.92	13.071		
6,850.0	6,846.0	6,888.7	6,887.4	15.3	13.0	-110.71	263.4	429.9	364.3	336.2	28.13	12.949		
6,900.0	6,895.5	6,957.7	6,953.8	15.4	13.2	-114.98	276.4	416.8	361.7	333.5	28.27	12.797		
6,950.0	6,944.3	7,020.7	7,011.5	15.4	13.3	-120.62	293.9	398.6	359.6	331.3	28.30	12.704		
6,972.3	6,965.8	7,044.4	7,032.3	15.5	13.4	-123.10	301.6	390.2	359.2	330.9	28.28	12.700 CC, ES, SF		
7,000.0	6,992.3	7,067.5	7,052.0	15.5	13.4	-125.65	309.7	381.3	359.9	331.7	28.21	12.757		
7,050.0	7,039.1	7,098.0	7,077.0	15.6	13.5	-129.03	321.8	368.7	365.7	337.7	28.01	13.055		
7,100.0	7,084.7	7,122.4	7,096.1	15.6	13.6	-131.50	332.5	358.0	378.0	350.3	27.72	13.637		
7,150.0	7,128.7	7,142.7	7,111.3	15.7	13.7	-133.16	342.1	348.5	397.0	369.6	27.36	14.509		
7,200.0	7,170.9	7,157.8	7,122.2	15.7	13.7	-133.70	349.5	341.2	422.2	395.2	26.99	15.644		
7,250.0	7,211.2	7,168.2	7,129.5	15.8	13.8	-133.06	354.8	335.9	453.1	426.4	26.69	16.977		
7,300.0	7,249.3	7,175.1	7,134.2	15.9	13.8	-131.22	358.4	332.4	488.5	462.0	26.54	18.410		
7,350.0	7,285.0	7,179.2	7,137.0	16.0	13.8	-128.04	360.5	330.3	527.7	501.0	26.65	19.803		
7,400.0	7,318.3	7,180.8	7,138.1	16.1	13.8	-123.31	361.3	329.4	569.7	542.6	27.12	21.003		
7,450.0	7,348.8	7,180.5	7,137.9	16.3	13.8	-116.76	361.2	329.6	613.8	585.8	28.02	21.906		
7,500.0	7,376.5	7,178.6	7,136.6	16.6	13.8	-108.13	360.2	330.6	659.4	630.1	29.22	22.565		
7,550.0	7,401.2	7,175.2	7,134.3	16.8	13.8	-97.46	358.4	332.4	705.9	675.6	30.34	23.269		
7,600.0	7,422.9	7,170.6	7,131.1	17.1	13.8	-85.36	356.0	334.7	753.0	722.2	30.76	24.479		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 279-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5239.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5239.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 279-1527H	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 Depths are relative to WELL @ 5239.0ft (Original Well Elev)

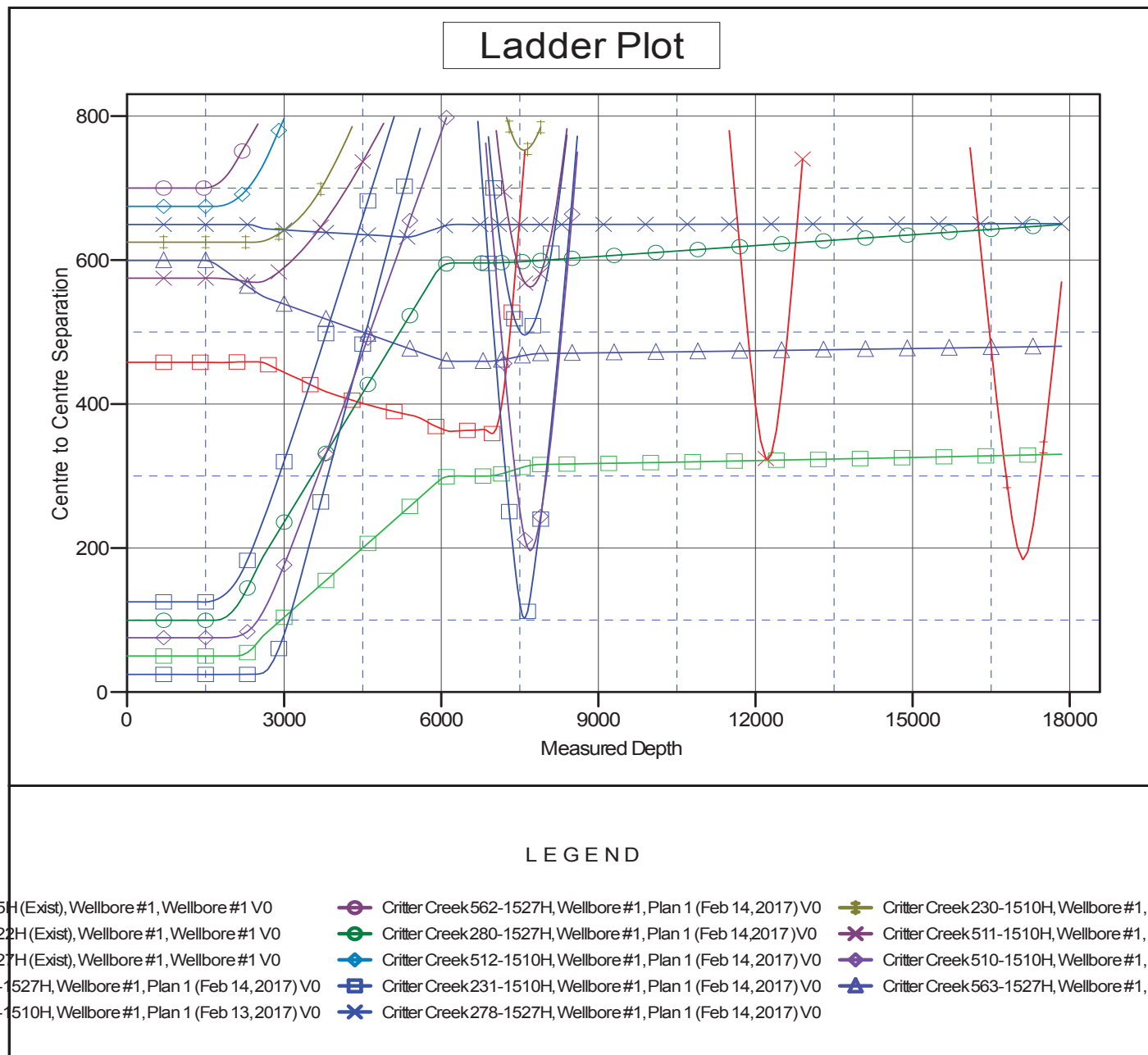
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: Critter Creek 279-1527H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.70°



Reference Depths are relative to WELL @ 5239.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Critter Creek 279-1527H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.70°

