

Fifth Creek Energy Company, LLC

Well Name: **Critter Creek 230-1510H**

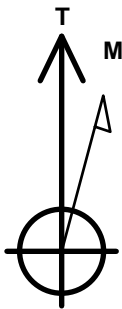
Surface Location: Critter Creek Pad 15-11N-63W
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone
Ground Elevation: 5227.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1578366.45	3299730.34	40.915953	-104.415528	

Original Well Elev WELL @ 5240.0ft (Original Well Elev)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 279'FSL & 1665'FEL, SEC.15	1.0	0.0	0.0	Point
BHL 300'FNL & 1650'FEL, SEC.10	7443.0	9970.0	-17.7	Point
LP 300'FSL & 1700'FEL, SEC.15	7483.0	21.1	-35.4	Point



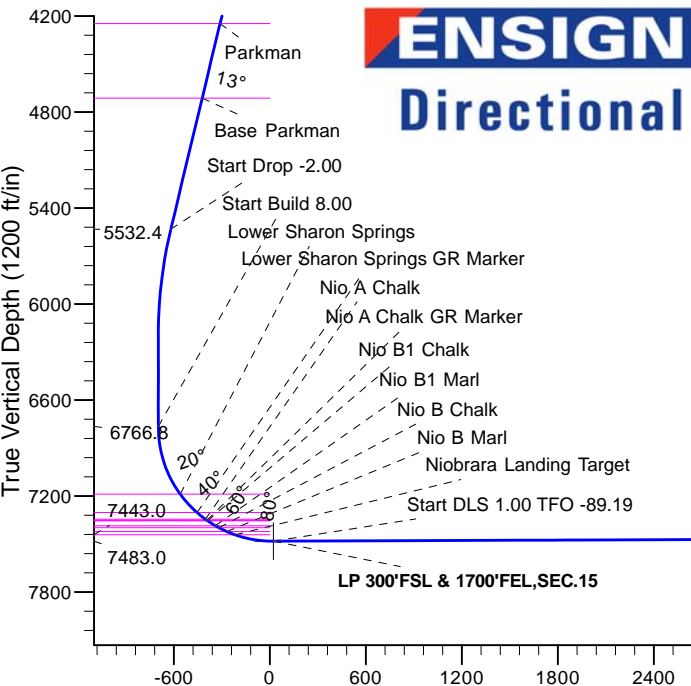
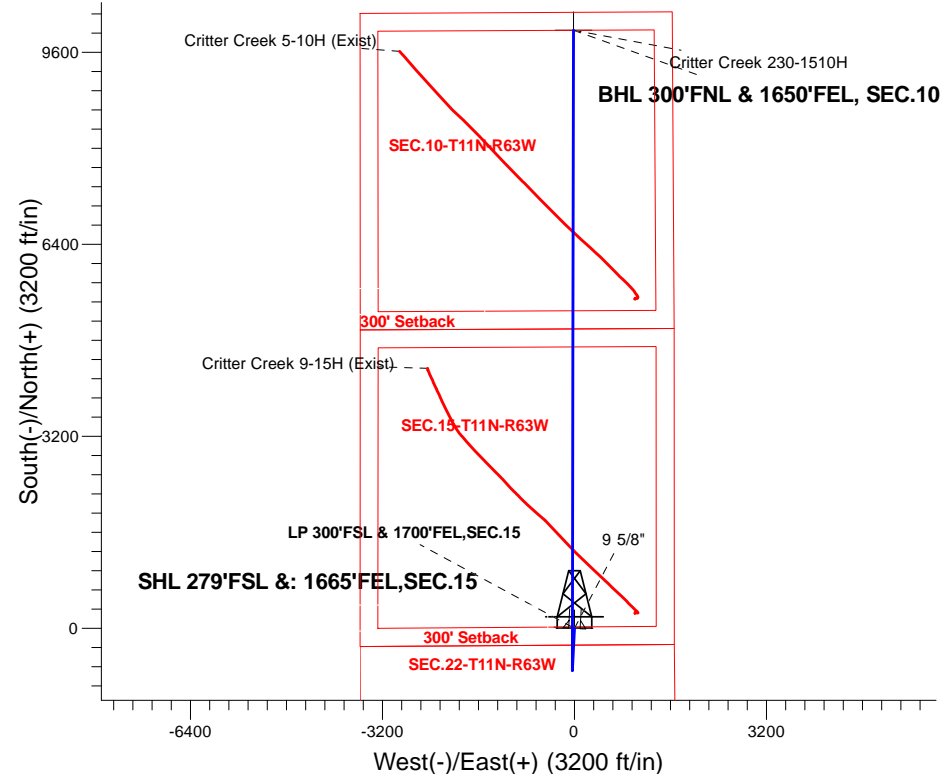
Azimuths to True North
Magnetic North: 7.94°

Magnetic Field
Strength: 52831.2snT
Dip Angle: 67.32°
Date: 2/20/2017
Model: IGRF2010

Critter Creek Pad 15-11N-63W
Critter Creek 230-1510H
Plan 1 (Feb 14, 2017)
13:58, February 21 2017

ANNOTATIONS

TVD	MD	Annotation
2300.0	2300.0	KOP - Start Build 1.05
5532.4	5599.7	Start Drop -2.00
6766.8	6840.3	Start Build 8.00
7483.0	7968.3	Start DLS 1.00 TFO -89.19
7483.0	7970.8	Start 9946.4 hold at 7970.8 MD
7443.0	17917.2	TD at 17917.2



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	2300.0	0.00	0.00	2300.0	0.0	0.0	0.00	0.00	0.0	
3	3583.4	13.48	183.03	3571.6	-150.0	-8.0	1.05	183.03	-150.0	
4	5599.7	13.48	183.03	5532.4	-619.2	-32.8	0.00	0.00	-619.2	
5	6273.5	0.00	0.00	6200.0	-698.0	-37.0	2.00	180.00	-697.9	
6	6840.3	0.00	0.00	6766.8	-698.0	-37.0	0.00	0.00	-697.9	
7	7968.2	90.23	0.13	7483.0	21.1	-35.4	8.00	0.13	21.1	
8	7968.3	90.23	0.13	7483.0	21.1	-35.4	0.00	0.00	21.2	LP 300'FSL & 1700'FEL, SEC.15
9	7970.8	90.23	0.10	7483.0	23.7	-35.4	1.00	-89.19	23.8	
10	17917.2	90.23	0.10	7443.0	9970.0	-17.7	0.00	0.00	9970.0	BHL 300'FNL & 1650'FEL, SEC.10

Vertical Section at 359.90° (1200 ft/in)



Fifth Creek Energy Company, LLC

Sec.15-T11N-R63W

Critter Creek Pad 15-11N-63W

Critter Creek 230-1510H

Wellbore #1

Plan: Plan 1 (Feb 14, 2017)

Standard Planning Report

21 February, 2017

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

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

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

Well	Critter Creek 230-1510H					
Well Position	+N/-S	-5.8 ft	Northing:	1,578,366.45 usft	Latitude:	40.915953
	+E/-W	-750.1 ft	Easting:	3,299,730.35 usft	Longitude:	-104.415528
Position Uncertainty		0.0 ft	Wellhead Elevation:	5,239.0 ft	Ground Level:	5,227.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/20/2017	7.94	67.32	52,831

Design	Plan 1 (Feb 14, 2017)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	359.90

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,583.4	13.48	183.03	3,571.6	-150.0	-8.0	1.05	1.05	0.00	183.03	
5,599.7	13.48	183.03	5,532.4	-619.2	-32.8	0.00	0.00	0.00	0.00	
6,273.5	0.00	0.00	6,200.0	-698.0	-37.0	2.00	-2.00	0.00	180.00	
6,840.3	0.00	0.00	6,766.8	-698.0	-37.0	0.00	0.00	0.00	0.00	
7,968.2	90.23	0.13	7,483.0	21.1	-35.4	8.00	8.00	0.00	0.13	
7,968.3	90.23	0.13	7,483.0	21.1	-35.4	0.00	0.00	0.00	0.00	LP 300'FSL & 1700'FI
7,970.8	90.23	0.10	7,483.0	23.7	-35.4	1.00	0.01	-1.00	-89.19	
17,917.2	90.23	0.10	7,443.0	9,970.0	-17.7	0.00	0.00	0.00	0.00	BHL 300'FNL & 1650'

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Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.05									
2,400.0	1.05	183.03	2,400.0	-0.9	0.0	-0.9	1.05	1.05	0.00
2,500.0	2.10	183.03	2,500.0	-3.7	-0.2	-3.7	1.05	1.05	0.00
2,600.0	3.15	183.03	2,599.8	-8.2	-0.4	-8.2	1.05	1.05	0.00
2,700.0	4.20	183.03	2,699.6	-14.6	-0.8	-14.6	1.05	1.05	0.00
2,800.0	5.25	183.03	2,799.3	-22.9	-1.2	-22.9	1.05	1.05	0.00
2,900.0	6.30	183.03	2,898.8	-32.9	-1.7	-32.9	1.05	1.05	0.00
3,000.0	7.35	183.03	2,998.1	-44.8	-2.4	-44.8	1.05	1.05	0.00
3,100.0	8.40	183.03	3,097.1	-58.5	-3.1	-58.5	1.05	1.05	0.00
3,200.0	9.45	183.03	3,195.9	-73.9	-3.9	-73.9	1.05	1.05	0.00
3,300.0	10.50	183.03	3,294.4	-91.2	-4.8	-91.2	1.05	1.05	0.00
3,400.0	11.55	183.03	3,392.6	-110.3	-5.8	-110.3	1.05	1.05	0.00
3,500.0	12.60	183.03	3,490.4	-131.2	-7.0	-131.2	1.05	1.05	0.00
3,583.4	13.48	183.03	3,571.6	-150.0	-8.0	-150.0	1.05	1.05	0.00
3,600.0	13.48	183.03	3,587.7	-153.9	-8.2	-153.9	0.00	0.00	0.00
3,700.0	13.48	183.03	3,685.0	-177.2	-9.4	-177.1	0.00	0.00	0.00
3,800.0	13.48	183.03	3,782.2	-200.4	-10.6	-200.4	0.00	0.00	0.00
3,900.0	13.48	183.03	3,879.5	-223.7	-11.9	-223.7	0.00	0.00	0.00
4,000.0	13.48	183.03	3,976.7	-247.0	-13.1	-246.9	0.00	0.00	0.00
4,100.0	13.48	183.03	4,074.0	-270.2	-14.3	-270.2	0.00	0.00	0.00
4,200.0	13.48	183.03	4,171.2	-293.5	-15.6	-293.5	0.00	0.00	0.00
4,277.9	13.48	183.03	4,247.0	-311.6	-16.5	-311.6	0.00	0.00	0.00
Parkman									
4,300.0	13.48	183.03	4,268.5	-316.8	-16.8	-316.7	0.00	0.00	0.00
4,400.0	13.48	183.03	4,365.7	-340.1	-18.0	-340.0	0.00	0.00	0.00
4,500.0	13.48	183.03	4,463.0	-363.3	-19.3	-363.3	0.00	0.00	0.00
4,600.0	13.48	183.03	4,560.2	-386.6	-20.5	-386.6	0.00	0.00	0.00
4,700.0	13.48	183.03	4,657.5	-409.9	-21.7	-409.8	0.00	0.00	0.00
4,758.1	13.48	183.03	4,714.0	-423.4	-22.4	-423.4	0.00	0.00	0.00

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Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 230-1510H	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	13.48	183.03	4,754.7	-433.1	-23.0	-433.1	0.00	0.00	0.00
4,900.0	13.48	183.03	4,852.0	-456.4	-24.2	-456.4	0.00	0.00	0.00
5,000.0	13.48	183.03	4,949.2	-479.7	-25.4	-479.6	0.00	0.00	0.00
5,100.0	13.48	183.03	5,046.4	-502.9	-26.7	-502.9	0.00	0.00	0.00
5,200.0	13.48	183.03	5,143.7	-526.2	-27.9	-526.2	0.00	0.00	0.00
5,300.0	13.48	183.03	5,240.9	-549.5	-29.1	-549.4	0.00	0.00	0.00
5,400.0	13.48	183.03	5,338.2	-572.8	-30.4	-572.7	0.00	0.00	0.00
5,500.0	13.48	183.03	5,435.4	-596.0	-31.6	-596.0	0.00	0.00	0.00
5,599.7	13.48	183.03	5,532.4	-619.2	-32.8	-619.2	0.00	0.00	0.00
Start Drop -2.00									
5,600.0	13.47	183.03	5,532.7	-619.3	-32.8	-619.2	1.94	-1.94	0.00
5,700.0	11.47	183.03	5,630.3	-640.9	-34.0	-640.8	2.00	-2.00	0.00
5,800.0	9.47	183.03	5,728.6	-659.0	-34.9	-658.9	2.00	-2.00	0.00
5,900.0	7.47	183.03	5,827.5	-673.7	-35.7	-673.7	2.00	-2.00	0.00
6,000.0	5.47	183.03	5,926.9	-685.0	-36.3	-684.9	2.00	-2.00	0.00
6,100.0	3.47	183.03	6,026.6	-692.8	-36.7	-692.7	2.00	-2.00	0.00
6,200.0	1.47	183.03	6,126.5	-697.1	-37.0	-697.0	2.00	-2.00	0.00
6,273.5	0.00	0.00	6,200.0	-698.0	-37.0	-697.9	2.00	-2.00	0.00
6,300.0	0.00	0.00	6,226.5	-698.0	-37.0	-697.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,326.5	-698.0	-37.0	-697.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,426.5	-698.0	-37.0	-697.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,526.5	-698.0	-37.0	-697.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,626.5	-698.0	-37.0	-697.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,726.5	-698.0	-37.0	-697.9	0.00	0.00	0.00
6,840.3	0.00	0.00	6,766.8	-698.0	-37.0	-697.9	0.00	0.00	0.00
Start Build 8.00									
6,900.0	4.77	0.13	6,826.4	-695.5	-37.0	-695.4	8.00	8.00	0.00
7,000.0	12.77	0.13	6,925.2	-680.3	-37.0	-680.2	8.00	8.00	0.00
7,100.0	20.77	0.13	7,020.8	-651.4	-36.9	-651.4	8.00	8.00	0.00
7,200.0	28.77	0.13	7,111.6	-609.6	-36.8	-609.5	8.00	8.00	0.00
7,291.8	36.12	0.13	7,189.0	-560.3	-36.7	-560.3	8.00	8.00	0.00
Lower Sharon Springs									
7,300.0	36.77	0.13	7,195.6	-555.5	-36.7	-555.4	8.00	8.00	0.00
7,400.0	44.77	0.13	7,271.2	-490.2	-36.5	-490.2	8.00	8.00	0.00
7,447.8	48.60	0.13	7,304.0	-455.5	-36.5	-455.4	8.00	8.00	0.00
Lower Sharon Springs GR Marker									
7,500.0	52.77	0.13	7,337.1	-415.1	-36.4	-415.0	8.00	8.00	0.00
7,514.9	53.97	0.13	7,346.0	-403.1	-36.3	-403.0	8.00	8.00	0.00
Nio A Chalk									
7,527.0	54.93	0.13	7,353.0	-393.3	-36.3	-393.2	8.00	8.00	0.00
Nio A Chalk GR Marker									
7,530.5	55.21	0.13	7,355.0	-390.4	-36.3	-390.4	8.00	8.00	0.00
Nio B1 Chalk									
7,588.2	59.83	0.13	7,386.0	-341.7	-36.2	-341.7	8.00	8.00	0.00
Nio B1 Marl									
7,600.0	60.77	0.13	7,391.8	-331.5	-36.2	-331.4	8.00	8.00	0.00
7,614.9	61.97	0.13	7,399.0	-318.4	-36.2	-318.3	8.00	8.00	0.00
Nio B Chalk									
7,670.1	66.38	0.13	7,423.0	-268.8	-36.0	-268.7	8.00	8.00	0.00
Nio B Marl									
7,700.0	68.77	0.13	7,434.4	-241.1	-36.0	-241.0	8.00	8.00	0.00
7,724.8	70.76	0.13	7,443.0	-217.8	-35.9	-217.8	8.00	8.00	0.00

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Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Niobrara Landing Target									
7,800.0	76.77	0.13	7,464.0	-145.7	-35.8	-145.6	8.00	8.00	0.00
7,900.0	84.77	0.13	7,480.0	-47.0	-35.6	-47.0	8.00	8.00	0.00
7,968.2	90.23	0.13	7,483.0	21.1	-35.4	21.1	8.00	8.00	0.00
7,968.3	90.23	0.13	7,483.0	21.2	-35.4	21.2	0.00	0.00	0.00
Start DLS 1.00 TFO -89.19									
7,970.8	90.23	0.10	7,483.0	23.7	-35.4	23.7	1.01	0.01	-1.01
Start 9946.4 hold at 7970.8 MD									
8,000.0	90.23	0.10	7,482.9	52.9	-35.3	52.9	0.00	0.00	0.00
8,100.0	90.23	0.10	7,482.5	152.9	-35.2	152.9	0.00	0.00	0.00
8,200.0	90.23	0.10	7,482.1	252.9	-35.0	252.9	0.00	0.00	0.00
8,300.0	90.23	0.10	7,481.7	352.9	-34.8	352.9	0.00	0.00	0.00
8,400.0	90.23	0.10	7,481.3	452.9	-34.6	452.9	0.00	0.00	0.00
8,500.0	90.23	0.10	7,480.9	552.9	-34.5	552.9	0.00	0.00	0.00
8,600.0	90.23	0.10	7,480.5	652.9	-34.3	652.9	0.00	0.00	0.00
8,700.0	90.23	0.10	7,480.1	752.9	-34.1	752.9	0.00	0.00	0.00
8,800.0	90.23	0.10	7,479.7	852.9	-33.9	852.9	0.00	0.00	0.00
8,900.0	90.23	0.10	7,479.3	952.9	-33.7	952.9	0.00	0.00	0.00
9,000.0	90.23	0.10	7,478.9	1,052.9	-33.6	1,052.9	0.00	0.00	0.00
9,100.0	90.23	0.10	7,478.4	1,152.9	-33.4	1,152.9	0.00	0.00	0.00
9,200.0	90.23	0.10	7,478.0	1,252.9	-33.2	1,252.9	0.00	0.00	0.00
9,300.0	90.23	0.10	7,477.6	1,352.9	-33.0	1,352.9	0.00	0.00	0.00
9,400.0	90.23	0.10	7,477.2	1,452.9	-32.8	1,452.9	0.00	0.00	0.00
9,500.0	90.23	0.10	7,476.8	1,552.9	-32.7	1,552.9	0.00	0.00	0.00
9,600.0	90.23	0.10	7,476.4	1,652.9	-32.5	1,652.9	0.00	0.00	0.00
9,700.0	90.23	0.10	7,476.0	1,752.9	-32.3	1,752.9	0.00	0.00	0.00
9,800.0	90.23	0.10	7,475.6	1,852.9	-32.1	1,852.9	0.00	0.00	0.00
9,900.0	90.23	0.10	7,475.2	1,952.9	-32.0	1,952.9	0.00	0.00	0.00
10,000.0	90.23	0.10	7,474.8	2,052.9	-31.8	2,052.9	0.00	0.00	0.00
10,100.0	90.23	0.10	7,474.4	2,152.9	-31.6	2,152.9	0.00	0.00	0.00
10,200.0	90.23	0.10	7,474.0	2,252.9	-31.4	2,252.9	0.00	0.00	0.00
10,300.0	90.23	0.10	7,473.6	2,352.9	-31.2	2,352.9	0.00	0.00	0.00
10,400.0	90.23	0.10	7,473.2	2,452.9	-31.1	2,452.9	0.00	0.00	0.00
10,500.0	90.23	0.10	7,472.8	2,552.9	-30.9	2,552.9	0.00	0.00	0.00
10,600.0	90.23	0.10	7,472.4	2,652.9	-30.7	2,652.9	0.00	0.00	0.00
10,700.0	90.23	0.10	7,472.0	2,752.9	-30.5	2,752.9	0.00	0.00	0.00
10,800.0	90.23	0.10	7,471.6	2,852.9	-30.4	2,852.9	0.00	0.00	0.00
10,900.0	90.23	0.10	7,471.2	2,952.9	-30.2	2,952.9	0.00	0.00	0.00
11,000.0	90.23	0.10	7,470.8	3,052.8	-30.0	3,052.9	0.00	0.00	0.00
11,100.0	90.23	0.10	7,470.4	3,152.8	-29.8	3,152.9	0.00	0.00	0.00
11,200.0	90.23	0.10	7,470.0	3,252.8	-29.6	3,252.9	0.00	0.00	0.00
11,300.0	90.23	0.10	7,469.6	3,352.8	-29.5	3,352.9	0.00	0.00	0.00
11,400.0	90.23	0.10	7,469.2	3,452.8	-29.3	3,452.9	0.00	0.00	0.00
11,500.0	90.23	0.10	7,468.8	3,552.8	-29.1	3,552.9	0.00	0.00	0.00
11,600.0	90.23	0.10	7,468.4	3,652.8	-28.9	3,652.9	0.00	0.00	0.00
11,700.0	90.23	0.10	7,468.0	3,752.8	-28.8	3,752.9	0.00	0.00	0.00
11,800.0	90.23	0.10	7,467.6	3,852.8	-28.6	3,852.9	0.00	0.00	0.00
11,900.0	90.23	0.10	7,467.2	3,952.8	-28.4	3,952.9	0.00	0.00	0.00
12,000.0	90.23	0.10	7,466.8	4,052.8	-28.2	4,052.9	0.00	0.00	0.00
12,100.0	90.23	0.10	7,466.4	4,152.8	-28.0	4,152.9	0.00	0.00	0.00
12,200.0	90.23	0.10	7,466.0	4,252.8	-27.9	4,252.9	0.00	0.00	0.00
12,300.0	90.23	0.10	7,465.6	4,352.8	-27.7	4,352.9	0.00	0.00	0.00
12,400.0	90.23	0.10	7,465.2	4,452.8	-27.5	4,452.9	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,500.0	90.23	0.10	7,464.8	4,552.8	-27.3	4,552.9	0.00	0.00	0.00
12,600.0	90.23	0.10	7,464.4	4,652.8	-27.2	4,652.9	0.00	0.00	0.00
12,700.0	90.23	0.10	7,464.0	4,752.8	-27.0	4,752.9	0.00	0.00	0.00
12,800.0	90.23	0.10	7,463.6	4,852.8	-26.8	4,852.9	0.00	0.00	0.00
12,900.0	90.23	0.10	7,463.2	4,952.8	-26.6	4,952.9	0.00	0.00	0.00
13,000.0	90.23	0.10	7,462.8	5,052.8	-26.4	5,052.9	0.00	0.00	0.00
13,100.0	90.23	0.10	7,462.4	5,152.8	-26.3	5,152.9	0.00	0.00	0.00
13,200.0	90.23	0.10	7,462.0	5,252.8	-26.1	5,252.9	0.00	0.00	0.00
13,300.0	90.23	0.10	7,461.6	5,352.8	-25.9	5,352.9	0.00	0.00	0.00
13,400.0	90.23	0.10	7,461.2	5,452.8	-25.7	5,452.9	0.00	0.00	0.00
13,500.0	90.23	0.10	7,460.8	5,552.8	-25.5	5,552.9	0.00	0.00	0.00
13,600.0	90.23	0.10	7,460.4	5,652.8	-25.4	5,652.9	0.00	0.00	0.00
13,700.0	90.23	0.10	7,460.0	5,752.8	-25.2	5,752.9	0.00	0.00	0.00
13,800.0	90.23	0.10	7,459.6	5,852.8	-25.0	5,852.9	0.00	0.00	0.00
13,900.0	90.23	0.10	7,459.2	5,952.8	-24.8	5,952.9	0.00	0.00	0.00
14,000.0	90.23	0.10	7,458.7	6,052.8	-24.7	6,052.9	0.00	0.00	0.00
14,100.0	90.23	0.10	7,458.3	6,152.8	-24.5	6,152.9	0.00	0.00	0.00
14,200.0	90.23	0.10	7,457.9	6,252.8	-24.3	6,252.9	0.00	0.00	0.00
14,300.0	90.23	0.10	7,457.5	6,352.8	-24.1	6,352.9	0.00	0.00	0.00
14,400.0	90.23	0.10	7,457.1	6,452.8	-23.9	6,452.8	0.00	0.00	0.00
14,500.0	90.23	0.10	7,456.7	6,552.8	-23.8	6,552.8	0.00	0.00	0.00
14,600.0	90.23	0.10	7,456.3	6,652.8	-23.6	6,652.8	0.00	0.00	0.00
14,700.0	90.23	0.10	7,455.9	6,752.8	-23.4	6,752.8	0.00	0.00	0.00
14,800.0	90.23	0.10	7,455.5	6,852.8	-23.2	6,852.8	0.00	0.00	0.00
14,900.0	90.23	0.10	7,455.1	6,952.8	-23.1	6,952.8	0.00	0.00	0.00
15,000.0	90.23	0.10	7,454.7	7,052.8	-22.9	7,052.8	0.00	0.00	0.00
15,100.0	90.23	0.10	7,454.3	7,152.8	-22.7	7,152.8	0.00	0.00	0.00
15,200.0	90.23	0.10	7,453.9	7,252.8	-22.5	7,252.8	0.00	0.00	0.00
15,300.0	90.23	0.10	7,453.5	7,352.8	-22.3	7,352.8	0.00	0.00	0.00
15,400.0	90.23	0.10	7,453.1	7,452.8	-22.2	7,452.8	0.00	0.00	0.00
15,500.0	90.23	0.10	7,452.7	7,552.8	-22.0	7,552.8	0.00	0.00	0.00
15,600.0	90.23	0.10	7,452.3	7,652.8	-21.8	7,652.8	0.00	0.00	0.00
15,700.0	90.23	0.10	7,451.9	7,752.8	-21.6	7,752.8	0.00	0.00	0.00
15,800.0	90.23	0.10	7,451.5	7,852.8	-21.5	7,852.8	0.00	0.00	0.00
15,900.0	90.23	0.10	7,451.1	7,952.8	-21.3	7,952.8	0.00	0.00	0.00
16,000.0	90.23	0.10	7,450.7	8,052.8	-21.1	8,052.8	0.00	0.00	0.00
16,100.0	90.23	0.10	7,450.3	8,152.8	-20.9	8,152.8	0.00	0.00	0.00
16,200.0	90.23	0.10	7,449.9	8,252.8	-20.7	8,252.8	0.00	0.00	0.00
16,300.0	90.23	0.10	7,449.5	8,352.8	-20.6	8,352.8	0.00	0.00	0.00
16,400.0	90.23	0.10	7,449.1	8,452.8	-20.4	8,452.8	0.00	0.00	0.00
16,500.0	90.23	0.10	7,448.7	8,552.8	-20.2	8,552.8	0.00	0.00	0.00
16,600.0	90.23	0.10	7,448.3	8,652.8	-20.0	8,652.8	0.00	0.00	0.00
16,700.0	90.23	0.10	7,447.9	8,752.8	-19.8	8,752.8	0.00	0.00	0.00
16,800.0	90.23	0.10	7,447.5	8,852.8	-19.7	8,852.8	0.00	0.00	0.00
16,900.0	90.23	0.10	7,447.1	8,952.8	-19.5	8,952.8	0.00	0.00	0.00
17,000.0	90.23	0.10	7,446.7	9,052.8	-19.3	9,052.8	0.00	0.00	0.00
17,100.0	90.23	0.10	7,446.3	9,152.8	-19.1	9,152.8	0.00	0.00	0.00
17,200.0	90.23	0.10	7,445.9	9,252.8	-19.0	9,252.8	0.00	0.00	0.00
17,300.0	90.23	0.10	7,445.5	9,352.8	-18.8	9,352.8	0.00	0.00	0.00
17,400.0	90.23	0.10	7,445.1	9,452.8	-18.6	9,452.8	0.00	0.00	0.00
17,500.0	90.23	0.10	7,444.7	9,552.8	-18.4	9,552.8	0.00	0.00	0.00
17,600.0	90.23	0.10	7,444.3	9,652.8	-18.2	9,652.8	0.00	0.00	0.00
17,700.0	90.23	0.10	7,443.9	9,752.8	-18.1	9,752.8	0.00	0.00	0.00
17,800.0	90.23	0.10	7,443.5	9,852.8	-17.9	9,852.8	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,900.0	90.23	0.10	7,443.1	9,952.8	-17.7	9,952.8	0.00	0.00	0.00
17,917.2	90.23	0.10	7,443.0	9,970.0	-17.7	9,970.0	0.00	0.00	0.00
TD at 17917.2									

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 & 1665'FE	0.00	0.00	1.0	0.0	0.0	1,578,366.46	3,299,730.35	40.915953	-104.415528
- plan hits target center									
- Point									
BHL 300'FNL & 1650'FE	0.00	0.00	7,443.0	9,970.0	-17.7	1,588,335.70	3,299,590.74	40.943317	-104.415592
- plan hits target center									
- Point									
LP 300'FSL & 1700'FEL	0.00	0.00	7,483.0	21.1	-35.4	1,578,387.16	3,299,694.69	40.916011	-104.415656
- plan hits target center									
- Point									

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 (°)
4,277.9	4,247.0	Parkman		0.00	
4,758.1	4,714.0	Base Parkman		0.00	
7,291.8	7,189.0	Lower Sharon Springs		0.00	
7,447.8	7,304.0	Lower Sharon Springs GR Marker		0.00	
7,514.9	7,346.0	Nio A Chalk		0.00	
7,527.0	7,353.0	Nio A Chalk GR Marker		0.00	
7,530.5	7,355.0	Nio B1 Chalk		0.00	
7,588.2	7,386.0	Nio B1 Marl		0.00	
7,614.9	7,399.0	Nio B Chalk		0.00	
7,670.1	7,423.0	Nio B Marl		0.00	
7,724.8	7,443.0	Niobrara Landing Target		0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,300.0	2,300.0	0.0	0.0	KOP - Start Build 1.05	
5,599.7	5,532.4	-150.0	-8.0	Start Drop -2.00	
6,840.3	6,766.8	-619.2	-32.8	Start Build 8.00	
7,968.3	7,483.0	-698.0	-37.0	Start DLS 1.00 TFO -89.19	
7,970.8	7,483.0	-698.0	-37.0	Start 9946.4 hold at 7970.8 MD	
17,917.2	7,443.0	21.1	-35.4	TD at 17917.2	



Fifth Creek Energy Company, LLC

Sec.15-T11N-R63W

Critter Creek Pad 15-11N-63W

Critter Creek 230-1510H

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	17,917.2	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 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	3,249.3	3,254.0	648.5	634.5	46.124	CC
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	17,917.2	17,914.2	649.2	256.6	1.654	ES, SF
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	1,500.0	1,499.0	750.1	743.6	115.122	CC, ES
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	2,300.0	2,213.2	793.5	783.7	81.130	SF
Critter Creek 278-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,499.2	2,499.5	23.1	12.1	2.112	CC
Critter Creek 278-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,500.0	2,500.3	23.1	12.1	2.112	ES, SF
Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,300.0	2,299.0	624.9	614.8	61.799	CC
Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,500.0	2,499.0	625.2	614.2	57.222	ES
Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14,	7,450.0	7,737.8	771.8	735.8	21.412	SF
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	1,700.0	1,699.0	724.7	717.3	97.734	CC, ES
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	2,500.0	2,386.7	791.9	781.3	74.806	SF
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,900.0	1,899.0	700.4	692.1	84.240	CC
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,000.0	1,994.0	700.7	692.0	80.311	ES
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	3,900.0	3,853.6	797.2	778.6	43.055	SF
Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,700.0	1,699.0	50.0	42.6	6.748	CC
Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14,	17,917.2	17,994.3	235.5	-93.8	0.715	Level 1, ES, SF
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,666.3	1,667.3	49.7	42.5	6.845	CC
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,700.0	1,701.0	49.7	42.3	6.705	ES
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	17,917.2	18,019.5	586.7	203.2	1.530	SF
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,466.3	1,467.3	75.2	68.8	11.803	CC
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,501.0	75.2	68.7	11.530	ES
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,700.0	1,697.1	80.2	72.8	10.867	SF
Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,500.0	25.5	18.9	3.905	CC, ES
Critter Creek 563-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,600.0	1,599.4	26.6	19.6	3.822	SF
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,100.0	2,099.0	674.9	665.7	73.259	CC, ES
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	3,400.0	3,320.8	792.3	777.7	54.426	SF
Existing Wells Sec.15 (Fifth Creek)						
Critter Creek 5-10H (Exist) - Wellbore #1 - Wellbore #1	14,555.2	8,617.3	172.7	108.3	2.682	CC
Critter Creek 5-10H (Exist) - Wellbore #1 - Wellbore #1	14,600.0	8,647.8	175.9	107.5	2.572	ES
Critter Creek 5-10H (Exist) - Wellbore #1 - Wellbore #1	14,800.0	8,786.8	248.7	134.2	2.173	SF
Critter Creek 9-15H (Exist) - Wellbore #1 - Wellbore #1	9,268.1	8,591.4	187.6	161.9	7.295	CC, ES
Critter Creek 9-15H (Exist) - Wellbore #1 - Wellbore #1	9,500.0	8,760.6	247.7	202.5	5.471	SF

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	89.55	5.1	649.5	649.5						
100.0	100.0	99.0	99.0	0.1	0.1	89.55	5.1	649.5	649.5	649.3	0.22	2,904.271			
200.0	200.0	199.0	199.0	0.3	0.3	89.55	5.1	649.5	649.5	648.9	0.67	966.480			
300.0	300.0	299.0	299.0	0.6	0.6	89.55	5.1	649.5	649.5	648.4	1.12	579.113			
400.0	400.0	399.0	399.0	0.8	0.8	89.55	5.1	649.5	649.5	648.0	1.57	413.416			
500.0	500.0	499.0	499.0	1.0	1.0	89.55	5.1	649.5	649.5	647.5	2.02	321.443			
600.0	600.0	599.0	599.0	1.2	1.2	89.55	5.1	649.5	649.5	647.1	2.47	262.946			
700.0	700.0	699.0	699.0	1.5	1.5	89.55	5.1	649.5	649.5	646.6	2.92	222.462			
800.0	800.0	799.0	799.0	1.7	1.7	89.55	5.1	649.5	649.5	646.2	3.37	192.780			
900.0	900.0	899.0	899.0	1.9	1.9	89.55	5.1	649.5	649.5	645.7	3.82	170.087			
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.55	5.1	649.5	649.5	645.3	4.27	152.174			
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.55	5.1	649.5	649.5	644.8	4.72	137.674			
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.55	5.1	649.5	649.5	644.4	5.17	125.697			
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.55	5.1	649.5	649.5	643.9	5.62	115.637			
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.55	5.1	649.5	649.5	643.5	6.07	107.068			
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.55	5.1	649.5	649.5	643.0	6.52	99.682			
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.55	5.1	649.5	649.5	642.6	6.97	93.249			
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.55	5.1	649.5	649.5	642.1	7.42	87.595			
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.55	5.1	649.5	649.5	641.7	7.86	82.589			
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.55	5.1	649.5	649.5	641.2	8.31	78.123			
2,000.0	2,000.0	1,999.0	1,999.0	4.4	4.4	89.55	5.1	649.5	649.5	640.8	8.76	74.116			
2,100.0	2,100.0	2,099.0	2,099.0	4.6	4.6	89.55	5.1	649.5	649.5	640.3	9.21	70.500			
2,200.0	2,200.0	2,199.0	2,199.0	4.8	4.8	89.55	5.1	649.5	649.5	639.9	9.66	67.220			
2,300.0	2,300.0	2,299.0	2,299.0	5.1	5.1	89.55	5.1	649.5	649.5	639.4	10.11	64.231			
2,400.0	2,400.0	2,400.0	2,400.0	5.3	5.3	-93.45	3.8	649.4	649.5	639.0	10.50	61.831			
2,500.0	2,500.0	2,501.0	2,500.9	5.4	5.4	-93.35	-0.2	649.2	649.4	638.6	10.84	59.896			
2,600.0	2,599.8	2,601.9	2,601.6	5.6	5.6	-93.17	-6.8	648.9	649.3	638.1	11.19	58.025			
2,700.0	2,699.6	2,702.8	2,702.0	5.8	5.8	-92.92	-16.1	648.4	649.2	637.6	11.55	56.197			
2,800.0	2,799.3	2,803.5	2,802.0	6.0	6.0	-92.60	-28.0	647.8	649.0	637.1	11.93	54.392			
2,900.0	2,898.8	2,904.1	2,901.6	6.2	6.2	-92.21	-42.5	647.1	648.9	636.5	12.34	52.590			
3,000.0	2,998.1	3,004.5	3,000.5	6.4	6.4	-91.75	-59.6	646.2	648.7	635.9	12.78	50.774			
3,100.0	3,097.1	3,104.8	3,098.8	6.6	6.7	-91.22	-79.2	645.2	648.6	635.3	13.25	48.933			
3,200.0	3,195.9	3,204.8	3,196.3	6.8	7.0	-90.62	-101.4	644.0	648.5	634.7	13.78	47.066			
3,249.3	3,244.5	3,254.0	3,244.2	6.9	7.1	-90.33	-112.9	643.4	648.5	634.5	14.06	46.124 CC			
3,300.0	3,294.4	3,304.6	3,293.4	7.1	7.3	-90.07	-124.7	642.8	648.5	634.2	14.35	45.191			
3,400.0	3,392.6	3,404.5	3,390.5	7.4	7.6	-89.68	-148.1	641.6	648.6	633.6	14.96	43.341			
3,500.0	3,490.4	3,504.5	3,487.7	7.7	8.0	-89.46	-171.5	640.4	648.6	633.0	15.62	41.524			
3,583.4	3,571.6	3,587.9	3,568.8	7.9	8.3	-89.39	-191.0	639.4	648.7	632.5	16.20	40.039			
3,600.0	3,587.7	3,604.4	3,584.9	8.0	8.3	-89.39	-194.9	639.2	648.7	632.3	16.32	39.750			
3,700.0	3,685.0	3,704.4	3,682.1	8.3	8.7	-89.38	-218.2	638.0	648.7	631.7	17.05	38.045			
3,800.0	3,782.2	3,804.4	3,779.3	8.7	9.1	-89.37	-241.6	636.8	648.7	630.9	17.81	36.426			
3,900.0	3,879.5	3,904.4	3,876.6	9.1	9.5	-89.36	-265.0	635.6	648.8	630.2	18.59	34.895			
4,000.0	3,976.7	4,004.4	3,973.8	9.5	9.9	-89.35	-288.4	634.4	648.8	629.4	19.40	33.452			
4,100.0	4,074.0	4,104.4	4,071.0	9.9	10.4	-89.34	-311.8	633.2	648.9	628.6	20.22	32.094			
4,200.0	4,171.2	4,204.4	4,168.2	10.3	10.8	-89.33	-335.2	632.0	648.9	627.8	21.05	30.819			
4,300.0	4,268.5	4,304.4	4,265.4	10.7	11.2	-89.32	-358.5	630.8	648.9	627.0	21.91	29.623			
4,400.0	4,365.7	4,404.4	4,362.7	11.1	11.7	-89.31	-381.9	629.6	649.0	626.2	22.77	28.500			
4,500.0	4,463.0	4,504.4	4,459.9	11.5	12.1	-89.30	-405.3	628.4	649.0	625.4	23.65	27.446			
4,600.0	4,560.2	4,604.4	4,557.1	12.0	12.6	-89.29	-428.7	627.2	649.0	624.5	24.53	26.457			
4,700.0	4,657.5	4,704.4	4,654.3	12.4	13.0	-89.28	-452.1	626.0	649.1	623.6	25.43	25.527			
4,800.0	4,754.7	4,804.4	4,751.5	12.9	13.5	-89.27	-475.4	624.8	649.1	622.8	26.33	24.653			
4,900.0	4,852.0	4,904.4	4,848.8	13.3	13.9	-89.26	-498.8	623.6	649.1	621.9	27.24	23.831			

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	4,949.2	5,004.4	4,946.0	13.8	14.4	-89.25	-522.2	622.4	649.2	621.0	28.16	23.057		
5,100.0	5,046.4	5,104.4	5,043.2	14.2	14.9	-89.24	-545.6	621.2	649.2	620.1	29.08	22.327		
5,200.0	5,143.7	5,204.4	5,140.4	14.7	15.3	-89.23	-569.0	620.0	649.3	619.3	30.01	21.637		
5,300.0	5,240.9	5,304.4	5,237.7	15.1	15.8	-89.22	-592.3	618.7	649.3	618.4	30.94	20.986		
5,400.0	5,338.2	5,404.5	5,334.9	15.6	16.3	-89.21	-615.7	617.5	649.3	617.5	31.87	20.374		
5,500.0	5,435.4	5,504.8	5,432.8	16.1	16.6	-89.38	-637.3	616.4	649.3	616.7	32.69	19.866		
5,588.9	5,521.9	5,593.7	5,520.3	16.5	16.9	-89.78	-653.5	615.6	649.3	615.9	33.39	19.448		
5,599.7	5,532.4	5,604.5	5,531.0	16.5	16.9	-89.85	-655.3	615.5	649.3	615.9	33.47	19.400		
5,700.0	5,630.3	5,704.5	5,629.9	16.9	17.2	-90.47	-669.9	614.8	649.4	615.2	34.16	19.011		
5,800.0	5,728.6	5,804.0	5,728.7	17.3	17.5	-91.09	-681.0	614.2	649.5	614.8	34.72	18.705		
5,900.0	5,827.5	5,903.3	5,827.7	17.5	17.7	-91.71	-688.7	613.8	649.7	614.5	35.22	18.446		
6,000.0	5,926.9	6,002.2	5,926.6	17.8	17.9	-92.33	-693.0	613.6	649.9	614.3	35.65	18.232		
6,100.0	6,026.6	6,101.3	6,025.6	18.0	18.0	-92.93	-693.9	613.5	650.2	614.2	36.01	18.056		
6,200.0	6,126.5	6,201.2	6,125.5	18.2	18.2	-93.31	-693.9	613.5	650.5	614.1	36.33	17.904		
6,273.5	6,200.0	6,274.7	6,199.0	18.3	18.3	-89.64	-693.9	613.5	650.5	614.0	36.55	17.798		
6,300.0	6,226.5	6,301.2	6,225.5	18.4	18.3	-89.64	-693.9	613.5	650.5	613.9	36.63	17.761		
6,400.0	6,326.5	6,401.2	6,325.5	18.5	18.4	-89.64	-693.9	613.5	650.5	613.6	36.91	17.623		
6,500.0	6,426.5	6,501.2	6,425.5	18.6	18.6	-89.64	-693.9	613.5	650.5	613.3	37.21	17.485		
6,600.0	6,526.5	6,601.2	6,525.5	18.8	18.7	-89.64	-693.9	613.5	650.5	613.0	37.50	17.348		
6,700.0	6,626.5	6,701.2	6,625.5	18.9	18.9	-89.64	-693.9	613.5	650.5	612.7	37.79	17.212		
6,800.0	6,726.5	6,801.2	6,725.5	19.1	19.0	-89.64	-693.9	613.5	650.5	612.4	38.09	17.077		
6,840.3	6,766.8	6,841.5	6,765.8	19.1	19.1	-89.64	-693.9	613.5	650.5	612.3	38.22	17.023		
6,850.0	6,776.5	6,851.1	6,775.4	19.2	19.1	-89.51	-693.8	613.5	650.5	612.3	38.25	17.009		
6,900.0	6,826.4	6,900.7	6,825.0	19.2	19.2	-89.52	-691.5	613.5	650.5	612.2	38.35	16.963		
6,950.0	6,876.1	6,950.4	6,874.3	19.2	19.2	-89.53	-685.8	613.5	650.5	612.1	38.39	16.947		
7,000.0	6,925.2	7,000.0	6,923.0	19.2	19.2	-89.54	-676.7	613.6	650.5	612.2	38.36	16.959		
7,050.0	6,973.5	7,049.7	6,971.1	19.2	19.1	-89.56	-664.1	613.6	650.5	612.3	38.27	16.999		
7,100.0	7,020.8	7,099.3	7,018.2	19.1	19.1	-89.57	-648.3	613.6	650.5	612.4	38.12	17.064		
7,150.0	7,066.9	7,149.0	7,064.1	19.0	19.0	-89.59	-629.3	613.7	650.5	612.6	37.92	17.153		
7,200.0	7,111.6	7,198.7	7,108.5	18.9	18.8	-89.61	-607.1	613.7	650.5	612.8	37.68	17.263		
7,250.0	7,154.5	7,248.4	7,151.3	18.7	18.7	-89.64	-581.9	613.8	650.5	613.1	37.41	17.390		
7,300.0	7,195.6	7,298.2	7,192.3	18.6	18.5	-89.66	-553.8	613.8	650.5	613.4	37.10	17.532		
7,350.0	7,234.5	7,347.9	7,231.3	18.4	18.4	-89.69	-522.9	613.9	650.5	613.7	36.79	17.683		
7,400.0	7,271.2	7,397.7	7,268.0	18.3	18.2	-89.71	-489.3	613.9	650.5	614.0	36.46	17.839		
7,450.0	7,305.5	7,447.5	7,302.4	18.1	18.1	-89.74	-453.2	614.0	650.5	614.3	36.15	17.994		
7,500.0	7,337.1	7,497.3	7,334.1	18.0	17.9	-89.77	-414.9	614.1	650.5	614.6	35.85	18.142		
7,550.0	7,365.9	7,547.1	7,363.1	17.8	17.8	-89.80	-374.4	614.2	650.5	614.9	35.59	18.275		
7,600.0	7,391.8	7,597.0	7,389.3	17.7	17.7	-89.84	-331.9	614.3	650.5	615.1	35.38	18.387		
7,650.0	7,414.7	7,646.9	7,412.4	17.7	17.6	-89.87	-287.8	614.4	650.4	615.2	35.21	18.471		
7,700.0	7,434.4	7,696.8	7,432.4	17.6	17.5	-89.90	-242.0	614.5	650.4	615.3	35.12	18.520		
7,750.0	7,450.9	7,746.7	7,449.2	17.6	17.5	-89.94	-195.0	614.5	650.4	615.3	35.10	18.530		
7,800.0	7,464.0	7,796.7	7,462.7	17.6	17.5	-89.97	-146.9	614.6	650.4	615.3	35.17	18.496		
7,850.0	7,473.7	7,846.7	7,472.8	17.7	17.6	-90.01	-98.0	614.7	650.4	615.1	35.32	18.416		
7,900.0	7,480.0	7,896.7	7,479.5	17.8	17.7	-90.04	-48.4	614.8	650.4	614.8	35.56	18.290		
7,950.0	7,482.8	7,946.7	7,482.7	18.0	17.9	-90.08	1.5	615.0	650.4	614.5	35.89	18.120		
7,968.2	7,483.0	7,964.9	7,483.0	18.1	18.0	-90.09	19.7	615.0	650.4	614.4	36.04	18.048		
7,968.3	7,483.0	7,965.0	7,483.0	18.1	18.0	-90.09	19.8	615.0	650.4	614.4	36.04	18.048		
7,969.2	7,483.0	7,965.9	7,483.0	18.1	18.0	-90.09	20.7	615.0	650.4	614.3	36.04	18.045		
7,970.8	7,483.0	7,967.6	7,483.0	18.1	18.0	-90.09	22.4	615.0	650.4	614.3	36.05	18.040		
8,000.0	7,482.9	7,997.0	7,482.9	18.2	18.0	-90.09	51.8	615.0	650.4	614.2	36.23	17.953		
8,100.0	7,482.5	8,097.0	7,482.5	18.8	18.6	-90.09	151.8	615.2	650.4	613.0	37.35	17.413		
8,200.0	7,482.1	8,197.0	7,482.1	19.5	19.3	-90.09	251.8	615.4	650.4	611.5	38.83	16.751		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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)						
8,300.0	7,481.7	8,297.0	7,481.7	20.4	20.2	90.09	351.8	615.5	650.4	609.7	40.61	16.013		
8,400.0	7,481.3	8,397.0	7,481.3	21.4	21.2	90.09	451.8	615.7	650.3	607.7	42.68	15.238		
8,500.0	7,480.9	8,497.0	7,480.9	22.6	22.4	90.09	551.8	615.9	650.3	605.4	44.98	14.459		
8,600.0	7,480.5	8,597.0	7,480.5	23.8	23.6	90.09	651.8	616.0	650.3	602.8	47.48	13.697		
8,700.0	7,480.1	8,697.0	7,480.1	25.2	25.0	90.09	751.8	616.2	650.3	600.2	50.15	12.967		
8,800.0	7,479.7	8,797.0	7,479.7	26.6	26.4	90.09	851.8	616.4	650.3	597.3	52.97	12.276		
8,900.0	7,479.3	8,897.0	7,479.3	28.1	27.8	90.09	951.8	616.5	650.3	594.4	55.91	11.630		
9,000.0	7,478.9	8,997.0	7,478.9	29.6	29.4	90.09	1,051.8	616.7	650.3	591.3	58.96	11.029		
9,100.0	7,478.4	9,097.0	7,478.5	31.2	30.9	90.09	1,151.8	616.9	650.3	588.2	62.10	10.471		
9,200.0	7,478.0	9,197.0	7,478.1	32.8	32.5	90.09	1,251.8	617.0	650.3	584.9	65.31	9.956		
9,300.0	7,477.6	9,297.0	7,477.7	34.4	34.2	90.09	1,351.8	617.2	650.2	581.6	68.59	9.479		
9,400.0	7,477.2	9,397.0	7,477.3	36.1	35.9	90.09	1,451.8	617.4	650.2	578.3	71.93	9.039		
9,500.0	7,476.8	9,497.0	7,476.9	37.8	37.5	90.09	1,551.8	617.5	650.2	574.9	75.32	8.633		
9,600.0	7,476.4	9,597.0	7,476.5	39.5	39.3	90.09	1,651.8	617.7	650.2	571.5	78.75	8.257		
9,700.0	7,476.0	9,697.0	7,476.1	41.2	41.0	90.09	1,751.8	617.9	650.2	568.0	82.22	7.908		
9,800.0	7,475.6	9,797.0	7,475.7	43.0	42.7	90.09	1,851.8	618.0	650.2	564.5	85.72	7.585		
9,900.0	7,475.2	9,897.0	7,475.3	44.7	44.5	90.09	1,951.8	618.2	650.2	560.9	89.25	7.285		
10,000.0	7,474.8	9,997.0	7,474.9	46.5	46.3	90.09	2,051.8	618.4	650.2	557.4	92.80	7.006		
10,100.0	7,474.4	10,097.0	7,474.5	48.3	48.1	90.09	2,151.8	618.5	650.1	553.8	96.38	6.746		
10,200.0	7,474.0	10,197.0	7,474.1	50.1	49.9	90.09	2,251.8	618.7	650.1	550.2	99.98	6.503		
10,300.0	7,473.6	10,297.0	7,473.6	51.9	51.7	90.09	2,351.8	618.9	650.1	546.5	103.60	6.275		
10,400.0	7,473.2	10,397.0	7,473.2	53.7	53.5	90.09	2,451.8	619.0	650.1	542.9	107.23	6.063		
10,500.0	7,472.8	10,497.0	7,472.8	55.6	55.3	90.09	2,551.8	619.2	650.1	539.2	110.88	5.863		
10,600.0	7,472.4	10,597.0	7,472.4	57.4	57.2	90.09	2,651.8	619.4	650.1	535.5	114.54	5.676		
10,700.0	7,472.0	10,697.0	7,472.0	59.2	59.0	90.09	2,751.8	619.5	650.1	531.9	118.22	5.499		
10,800.0	7,471.6	10,797.0	7,471.6	61.1	60.8	90.09	2,851.8	619.7	650.1	528.2	121.90	5.333		
10,900.0	7,471.2	10,897.0	7,471.2	62.9	62.7	90.09	2,951.8	619.9	650.1	524.5	125.60	5.176		
11,000.0	7,470.8	10,997.0	7,470.8	64.8	64.5	90.09	3,051.8	620.0	650.0	520.7	129.30	5.027		
11,100.0	7,470.4	11,097.0	7,470.4	66.6	66.4	90.09	3,151.8	620.2	650.0	517.0	133.02	4.887		
11,200.0	7,470.0	11,197.0	7,470.0	68.5	68.3	90.09	3,251.8	620.4	650.0	513.3	136.74	4.754		
11,300.0	7,469.6	11,297.0	7,469.6	70.3	70.1	90.09	3,351.8	620.5	650.0	509.5	140.47	4.627		
11,400.0	7,469.2	11,397.0	7,469.2	72.2	72.0	90.09	3,451.8	620.7	650.0	505.8	144.20	4.508		
11,500.0	7,468.8	11,497.0	7,468.8	74.1	73.9	90.09	3,551.8	620.9	650.0	502.0	147.94	4.393		
11,600.0	7,468.4	11,597.0	7,468.4	76.0	75.7	90.09	3,651.8	621.0	650.0	498.3	151.69	4.285		
11,700.0	7,468.0	11,697.0	7,468.0	77.8	77.6	90.09	3,751.8	621.2	650.0	494.5	155.44	4.181		
11,800.0	7,467.6	11,797.0	7,467.6	79.7	79.5	90.09	3,851.8	621.4	649.9	490.7	159.20	4.083		
11,900.0	7,467.2	11,897.0	7,467.2	81.6	81.4	90.09	3,951.8	621.5	649.9	487.0	162.96	3.988		
12,000.0	7,466.8	11,997.0	7,466.8	83.5	83.3	90.09	4,051.8	621.7	649.9	483.2	166.73	3.898		
12,100.0	7,466.4	12,097.0	7,466.4	85.4	85.1	90.09	4,151.8	621.9	649.9	479.4	170.50	3.812		
12,200.0	7,466.0	12,197.0	7,466.0	87.2	87.0	90.09	4,251.8	622.0	649.9	475.6	174.27	3.729		
12,300.0	7,465.6	12,297.0	7,465.6	89.1	88.9	90.09	4,351.8	622.2	649.9	471.8	178.05	3.650		
12,400.0	7,465.2	12,397.0	7,465.2	91.0	90.8	90.09	4,451.8	622.4	649.9	468.1	181.83	3.574		
12,500.0	7,464.8	12,497.0	7,464.8	92.9	92.7	90.09	4,551.8	622.5	649.9	464.3	185.61	3.501		
12,600.0	7,464.4	12,597.0	7,464.4	94.8	94.6	90.09	4,651.8	622.7	649.9	460.5	189.40	3.431		
12,700.0	7,464.0	12,697.0	7,464.0	96.7	96.5	90.09	4,751.8	622.9	649.8	456.7	193.18	3.364		
12,800.0	7,463.6	12,797.0	7,463.6	98.6	98.4	90.09	4,851.8	623.0	649.8	452.9	196.98	3.299		
12,900.0	7,463.2	12,897.0	7,463.2	100.5	100.3	90.09	4,951.8	623.2	649.8	449.0	200.77	3.237		
13,000.0	7,462.8	12,997.0	7,462.8	102.4	102.2	90.09	5,051.8	623.4	649.8	445.2	204.57	3.177		
13,100.0	7,462.4	13,097.0	7,462.4	104.3	104.1	90.09	5,151.8	623.5	649.8	441.4	208.36	3.119		
13,200.0	7,462.0	13,197.0	7,462.0	106.2	106.0	90.09	5,251.8	623.7	649.8	437.6	212.16	3.063		
13,300.0	7,461.6	13,297.0	7,461.6	108.1	107.9	90.09	5,351.8	623.9	649.8	433.8	215.97	3.009		
13,400.0	7,461.2	13,397.0	7,461.2	110.0	109.8	90.09	5,451.7	624.0	649.8	430.0	219.77	2.957		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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)						
13,500.0	7,460.8	13,497.0	7,460.8	111.9	111.7	90.09	5,551.7	624.2	649.7	426.2	223.58	2.906		
13,600.0	7,460.4	13,597.0	7,460.4	113.8	113.6	90.09	5,651.7	624.4	649.7	422.4	227.38	2.857		
13,700.0	7,460.0	13,697.0	7,460.0	115.7	115.5	90.09	5,751.7	624.5	649.7	418.5	231.19	2.810		
13,800.0	7,459.6	13,797.0	7,459.6	117.6	117.4	90.09	5,851.7	624.7	649.7	414.7	235.00	2.765		
13,900.0	7,459.2	13,897.0	7,459.2	119.5	119.3	90.09	5,951.7	624.9	649.7	410.9	238.81	2.721		
14,000.0	7,458.7	13,997.0	7,458.8	121.4	121.2	90.09	6,051.7	625.0	649.7	407.1	242.63	2.678		
14,100.0	7,458.3	14,097.0	7,458.4	123.3	123.1	90.09	6,151.7	625.2	649.7	403.2	246.44	2.636		
14,200.0	7,457.9	14,197.0	7,458.0	125.2	125.0	90.09	6,251.7	625.4	649.7	399.4	250.26	2.596		
14,300.0	7,457.5	14,297.0	7,457.6	127.1	126.9	90.09	6,351.7	625.5	649.7	395.6	254.07	2.557		
14,400.0	7,457.1	14,397.0	7,457.2	129.1	128.8	90.09	6,451.7	625.7	649.6	391.8	257.89	2.519		
14,500.0	7,456.7	14,497.0	7,456.8	131.0	130.7	90.09	6,551.7	625.9	649.6	387.9	261.71	2.482		
14,600.0	7,456.3	14,597.0	7,456.4	132.9	132.7	90.09	6,651.7	626.0	649.6	384.1	265.53	2.446		
14,700.0	7,455.9	14,697.0	7,456.0	134.8	134.6	90.09	6,751.7	626.2	649.6	380.3	269.35	2.412		
14,800.0	7,455.5	14,797.0	7,455.6	136.7	136.5	90.09	6,851.7	626.4	649.6	376.4	273.17	2.378		
14,900.0	7,455.1	14,897.0	7,455.1	138.6	138.4	90.09	6,951.7	626.5	649.6	372.6	277.00	2.345		
15,000.0	7,454.7	14,997.0	7,454.7	140.5	140.3	90.09	7,051.7	626.7	649.6	368.8	280.82	2.313		
15,100.0	7,454.3	15,097.0	7,454.3	142.4	142.2	90.09	7,151.7	626.9	649.6	364.9	284.65	2.282		
15,200.0	7,453.9	15,197.0	7,453.9	144.3	144.1	90.09	7,251.7	627.0	649.6	361.1	288.47	2.252		
15,300.0	7,453.5	15,297.0	7,453.5	146.3	146.0	90.09	7,351.7	627.2	649.5	357.2	292.30	2.222		
15,400.0	7,453.1	15,397.0	7,453.1	148.2	148.0	90.09	7,451.7	627.4	649.5	353.4	296.12	2.193		
15,500.0	7,452.7	15,497.0	7,452.7	150.1	149.9	90.09	7,551.7	627.5	649.5	349.6	299.95	2.165		
15,600.0	7,452.3	15,597.0	7,452.3	152.0	151.8	90.09	7,651.7	627.7	649.5	345.7	303.78	2.138		
15,700.0	7,451.9	15,697.0	7,451.9	153.9	153.7	90.09	7,751.7	627.9	649.5	341.9	307.61	2.111		
15,800.0	7,451.5	15,797.0	7,451.5	155.8	155.6	90.09	7,851.7	628.0	649.5	338.0	311.44	2.085		
15,900.0	7,451.1	15,897.0	7,451.1	157.7	157.5	90.09	7,951.7	628.2	649.5	334.2	315.27	2.060		
16,000.0	7,450.7	15,997.0	7,450.7	159.7	159.4	90.09	8,051.7	628.4	649.5	330.4	319.10	2.035		
16,100.0	7,450.3	16,097.0	7,450.3	161.6	161.4	90.09	8,151.7	628.5	649.4	326.5	322.93	2.011		
16,200.0	7,449.9	16,197.0	7,449.9	163.5	163.3	90.09	8,251.7	628.7	649.4	322.7	326.76	1.987		
16,300.0	7,449.5	16,297.0	7,449.5	165.4	165.2	90.09	8,351.7	628.9	649.4	318.8	330.59	1.964		
16,400.0	7,449.1	16,397.0	7,449.1	167.3	167.1	90.09	8,451.7	629.0	649.4	315.0	334.43	1.942		
16,500.0	7,448.7	16,497.0	7,448.7	169.2	169.0	90.09	8,551.7	629.2	649.4	311.1	338.26	1.920		
16,600.0	7,448.3	16,597.0	7,448.3	171.2	170.9	90.09	8,651.7	629.4	649.4	307.3	342.09	1.898		
16,700.0	7,447.9	16,697.0	7,447.9	173.1	172.9	90.09	8,751.7	629.5	649.4	303.4	345.93	1.877		
16,800.0	7,447.5	16,797.0	7,447.5	175.0	174.8	90.09	8,851.7	629.7	649.4	299.6	349.76	1.857		
16,900.0	7,447.1	16,897.0	7,447.1	176.9	176.7	90.09	8,951.7	629.9	649.4	295.8	353.60	1.836		
17,000.0	7,446.7	16,997.0	7,446.7	178.8	178.6	90.09	9,051.7	630.0	649.3	291.9	357.43	1.817		
17,100.0	7,446.3	17,097.0	7,446.3	180.7	180.5	90.09	9,151.7	630.2	649.3	288.1	361.27	1.797		
17,200.0	7,445.9	17,197.0	7,445.9	182.7	182.4	90.09	9,251.7	630.4	649.3	284.2	365.11	1.778		
17,300.0	7,445.5	17,297.0	7,445.5	184.6	184.4	90.09	9,351.7	630.5	649.3	280.4	368.94	1.760		
17,400.0	7,445.1	17,397.0	7,445.1	186.5	186.3	90.09	9,451.7	630.7	649.3	276.5	372.78	1.742		
17,500.0	7,444.7	17,497.0	7,444.7	188.4	188.2	90.09	9,551.7	630.9	649.3	272.7	376.62	1.724		
17,600.0	7,444.3	17,597.0	7,444.3	190.3	190.1	90.09	9,651.7	631.0	649.3	268.8	380.46	1.707		
17,700.0	7,443.9	17,697.0	7,443.9	192.3	192.0	90.09	9,751.7	631.2	649.3	265.0	384.29	1.689		
17,800.0	7,443.5	17,797.0	7,443.5	194.2	194.0	90.09	9,851.7	631.4	649.2	261.1	388.13	1.673		
17,900.0	7,443.1	17,897.0	7,443.1	196.1	195.9	90.09	9,951.7	631.5	649.2	257.3	391.97	1.656		
17,917.2	7,443.0	17,914.2	7,443.0	196.4	196.2	90.09	9,968.9	631.6	649.2	256.6	392.63	1.654 ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13, 2017)														Offset Site Error: 0.0 ft	
Survey Program: 0-MWD														Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	89.55	5.9	750.1	750.1						
100.0	100.0	99.0	99.0	0.1	0.1	89.55	5.9	750.1	750.1	749.9	0.22	3,354.122			
200.0	200.0	199.0	199.0	0.3	0.3	89.55	5.9	750.1	750.1	749.5	0.67	1,116.181			
300.0	300.0	299.0	299.0	0.6	0.6	89.55	5.9	750.1	750.1	749.0	1.12	668.814			
400.0	400.0	399.0	399.0	0.8	0.8	89.55	5.9	750.1	750.1	748.6	1.57	477.451			
500.0	500.0	499.0	499.0	1.0	1.0	89.55	5.9	750.1	750.1	748.1	2.02	371.233			
600.0	600.0	599.0	599.0	1.2	1.2	89.55	5.9	750.1	750.1	747.7	2.47	303.674			
700.0	700.0	699.0	699.0	1.5	1.5	89.55	5.9	750.1	750.1	747.2	2.92	256.919			
800.0	800.0	799.0	799.0	1.7	1.7	89.55	5.9	750.1	750.1	746.8	3.37	222.641			
900.0	900.0	899.0	899.0	1.9	1.9	89.55	5.9	750.1	750.1	746.3	3.82	196.432			
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.55	5.9	750.1	750.1	745.9	4.27	175.744			
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.55	5.9	750.1	750.1	745.4	4.72	158.999			
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.55	5.9	750.1	750.1	745.0	5.17	145.167			
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.55	5.9	750.1	750.1	744.5	5.62	133.549			
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.55	5.9	750.1	750.1	744.1	6.07	123.653			
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.55	5.9	750.1	750.1	743.6	6.52	115.122 CC, ES			
1,600.0	1,600.0	1,589.4	1,589.4	3.5	3.4	89.62	5.0	750.7	750.8	743.8	6.92	108.492			
1,700.0	1,700.0	1,679.6	1,679.5	3.7	3.6	89.82	2.3	752.4	752.7	745.4	7.31	103.024			
1,800.0	1,800.0	1,769.6	1,769.4	3.9	3.8	90.16	-2.1	755.4	755.9	748.3	7.69	98.242			
1,900.0	1,900.0	1,859.3	1,858.8	4.2	3.9	90.62	-8.2	759.4	760.5	752.5	8.09	94.003			
2,000.0	2,000.0	1,948.6	1,947.6	4.4	4.1	91.20	-16.1	764.6	766.5	758.0	8.50	90.230			
2,100.0	2,100.0	2,037.4	2,035.6	4.6	4.3	91.90	-25.6	771.0	774.0	765.1	8.91	86.859			
2,200.0	2,200.0	2,125.7	2,122.9	4.8	4.5	92.70	-36.8	778.4	782.9	773.6	9.34	83.838			
2,300.0	2,300.0	2,213.2	2,209.1	5.1	4.8	93.60	-49.5	786.8	793.5	783.7	9.78	81.130 SF			

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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 278-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)												Offset Site Error:	
Survey Program: 0-MWD														Offset Well Error:	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-90.02	0.0	-24.6	24.6						
100.0	100.0	100.0	100.0	0.1	0.1	-90.02	0.0	-24.6	24.6	24.4	0.22	109.439			
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-24.6	24.6	23.9	0.67	36.480			
300.0	300.0	300.0	300.0	0.6	0.6	-90.02	0.0	-24.6	24.6	23.5	1.12	21.888			
400.0	400.0	400.0	400.0	0.8	0.8	-90.02	0.0	-24.6	24.6	23.0	1.57	15.634			
500.0	500.0	500.0	500.0	1.0	1.0	-90.02	0.0	-24.6	24.6	22.6	2.02	12.160			
600.0	600.0	600.0	600.0	1.2	1.2	-90.02	0.0	-24.6	24.6	22.1	2.47	9.949			
700.0	700.0	700.0	700.0	1.5	1.5	-90.02	0.0	-24.6	24.6	21.7	2.92	8.418			
800.0	800.0	800.0	800.0	1.7	1.7	-90.02	0.0	-24.6	24.6	21.2	3.37	7.296			
900.0	900.0	900.0	900.0	1.9	1.9	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	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	-90.02	0.0	-24.6	24.6	14.5	10.11	2.432			
2,400.0	2,400.0	2,400.3	2,400.3	5.3	5.3	91.82	1.1	-23.9	23.9	13.4	10.53	2.272			
2,499.2	2,499.2	2,499.5	2,499.4	5.4	5.5	107.34	4.4	-21.8	23.1	12.1	10.92	2.112 CC			
2,500.0	2,500.0	2,500.3	2,500.2	5.4	5.5	107.51	4.4	-21.8	23.1	12.1	10.92	2.112 ES, SF			
2,600.0	2,599.8	2,599.8	2,599.6	5.6	5.7	130.18	9.1	-18.8	25.3	14.0	11.31	2.234			
2,700.0	2,699.6	2,699.2	2,698.8	5.8	5.9	148.85	13.8	-15.9	32.2	20.5	11.70	2.750			
2,800.0	2,799.3	2,798.3	2,797.7	6.0	6.2	161.00	18.4	-12.9	42.9	30.9	12.09	3.553			
2,900.0	2,898.8	2,897.1	2,896.4	6.2	6.4	168.49	23.1	-10.0	56.6	44.2	12.47	4.541			
3,000.0	2,998.1	2,995.7	2,994.8	6.4	6.6	173.20	27.7	-7.0	72.7	59.9	12.85	5.657			
3,100.0	3,097.1	3,093.9	3,092.9	6.6	6.8	176.27	32.3	-4.1	90.9	77.7	13.23	6.869			
3,200.0	3,195.9	3,191.8	3,190.6	6.8	7.1	178.35	36.9	-1.2	111.0	97.4	13.61	8.159			
3,300.0	3,294.4	3,289.3	3,288.0	7.1	7.3	179.79	41.5	1.7	133.1	119.1	13.99	9.516			
3,400.0	3,392.6	3,386.3	3,384.9	7.4	7.5	-179.18	46.1	4.6	157.0	142.6	14.36	10.931			
3,500.0	3,490.4	3,483.0	3,481.3	7.7	7.7	-178.43	50.6	7.5	182.7	167.9	14.73	12.400			
3,583.4	3,571.6	3,563.2	3,561.5	7.9	7.9	-177.97	54.4	9.9	205.5	190.4	15.04	13.662			
3,600.0	3,587.7	3,579.1	3,577.3	8.0	8.0	-177.89	55.2	10.4	210.1	195.0	15.11	13.906			
3,700.0	3,685.0	3,675.1	3,673.2	8.3	8.2	-177.48	59.7	13.2	238.2	222.7	15.54	15.330			
3,800.0	3,782.2	3,771.0	3,769.0	8.7	8.4	-177.16	64.2	16.1	266.3	250.3	15.97	16.674			
3,900.0	3,879.5	3,867.0	3,864.8	9.1	8.6	-176.90	68.7	19.0	294.4	278.0	16.41	17.943			
4,000.0	3,976.7	3,963.0	3,960.6	9.5	8.9	-176.68	73.2	21.8	322.5	305.6	16.85	19.142			
4,100.0	4,074.0	4,058.9	4,056.4	9.9	9.1	-176.50	77.7	24.7	350.6	333.3	17.29	20.277			
4,200.0	4,171.2	4,154.9	4,152.2	10.3	9.3	-176.35	82.2	27.5	378.7	361.0	17.74	21.351			
4,300.0	4,268.5	4,250.9	4,248.0	10.7	9.5	-176.22	86.8	30.4	406.8	388.6	18.19	22.370			
4,400.0	4,365.7	4,346.8	4,343.9	11.1	9.8	-176.10	91.3	33.3	434.9	416.3	18.64	23.336			
4,500.0	4,463.0	4,442.8	4,439.7	11.5	10.0	-176.00	95.8	36.1	463.0	443.9	19.09	24.253			
4,600.0	4,560.2	4,538.7	4,535.5	12.0	10.2	-175.91	100.3	39.0	491.1	471.6	19.55	25.125			
4,700.0	4,657.5	4,634.7	4,631.3	12.4	10.5	-175.83	104.8	41.8	519.3	499.3	20.01	25.955			
4,800.0	4,754.7	4,730.7	4,727.1	12.9	10.7	-175.76	109.3	44.7	547.4	526.9	20.47	26.745			
4,900.0	4,852.0	4,826.6	4,822.9	13.3	10.9	-175.69	113.9	47.6	575.5	554.6	20.93	27.498			

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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		
5,000.0	4,949.2	4,922.6	4,918.8	13.8	11.1	-175.63	118.4	50.4	603.6	582.2	21.39	28.216		
5,100.0	5,046.4	5,018.6	5,014.6	14.2	11.4	-175.58	122.9	53.3	631.7	609.9	21.86	28.902		
5,200.0	5,143.7	5,114.5	5,110.4	14.7	11.6	-175.53	127.4	56.2	659.8	637.5	22.32	29.557		
5,300.0	5,240.9	5,210.5	5,206.2	15.1	11.8	-175.49	131.9	59.0	688.0	665.2	22.79	30.184		
5,400.0	5,338.2	5,306.5	5,302.0	15.6	12.1	-175.45	136.4	61.9	716.1	692.8	23.26	30.783		
5,500.0	5,435.4	5,420.1	5,415.6	16.1	12.3	-175.43	140.9	64.7	743.5	719.8	23.74	31.315		
5,599.7	5,532.4	5,537.0	5,532.4	16.5	12.5	-175.56	142.0	65.4	767.5	743.3	24.20	31.718		
5,700.0	5,630.3	5,634.9	5,630.3	16.9	12.7	-175.71	142.0	65.4	789.1	764.4	24.78	31.841		
6,800.0	6,726.5	8,022.8	7,482.5	19.1	21.2	91.41	-700.6	69.0	763.4	723.2	40.22	18.981		
6,840.3	6,766.8	8,022.6	7,482.5	19.1	21.2	91.32	-700.4	69.0	723.5	683.2	40.28	17.962		
6,850.0	6,776.5	8,022.5	7,482.5	19.2	21.2	96.30	-700.3	69.0	713.9	673.8	40.15	17.781		
6,900.0	6,826.4	8,019.9	7,482.5	19.2	21.2	118.09	-697.7	69.0	664.6	626.4	38.22	17.390		
6,950.0	6,876.1	8,013.8	7,482.5	19.2	21.1	131.66	-691.6	69.0	615.7	579.6	36.03	17.085		
7,000.0	6,925.2	8,004.3	7,482.6	19.2	21.0	139.68	-682.1	68.9	567.4	533.0	34.39	16.501		
7,050.0	6,973.5	7,991.3	7,482.6	19.2	20.8	144.48	-669.1	68.9	520.0	486.9	33.13	15.698		
7,100.0	7,020.8	7,975.1	7,482.7	19.1	20.6	147.34	-652.9	68.8	473.8	441.7	32.07	14.774		
7,150.0	7,066.9	7,955.5	7,482.8	19.0	20.4	148.92	-633.3	68.7	429.0	397.9	31.11	13.791		
7,200.0	7,111.6	7,932.8	7,482.9	18.9	20.2	149.56	-610.6	68.6	386.0	355.8	30.21	12.779		
7,250.0	7,154.5	7,907.1	7,483.0	18.7	19.9	149.45	-584.9	68.5	344.9	315.6	29.35	11.750		
7,300.0	7,195.6	7,864.4	7,482.3	18.6	19.5	146.86	-542.2	68.3	305.6	276.7	28.95	10.559		
7,350.0	7,234.5	7,819.4	7,478.9	18.4	19.0	143.02	-497.3	68.2	267.2	238.3	28.87	9.255		
7,400.0	7,271.2	7,777.6	7,473.2	18.3	18.6	138.43	-456.0	68.0	229.9	200.8	29.10	7.902		
7,450.0	7,305.5	7,738.3	7,465.6	18.1	18.2	132.76	-417.4	67.8	194.5	164.8	29.75	6.539		
7,500.0	7,337.1	7,701.0	7,456.5	18.0	17.9	125.62	-381.2	67.7	162.0	131.1	30.88	5.244		
7,550.0	7,365.9	7,665.2	7,446.0	17.8	17.6	116.60	-347.0	67.5	133.9	101.5	32.41	4.131		
7,600.0	7,391.8	7,630.7	7,434.3	17.7	17.3	105.47	-314.5	67.4	113.2	79.3	33.92	3.336		
7,650.0	7,414.7	7,597.2	7,421.4	17.7	17.1	92.50	-283.6	67.2	103.6	68.9	34.66	2.989		
7,660.8	7,419.2	7,590.1	7,418.5	17.6	17.1	89.55	-277.1	67.2	103.3	68.6	34.65	2.981		
7,700.0	7,434.4	7,564.6	7,407.5	17.6	16.9	78.77	-254.1	67.1	107.3	73.4	33.92	3.164		
7,750.0	7,450.9	7,532.6	7,392.6	17.6	16.7	65.80	-225.9	67.0	122.5	90.8	31.65	3.869		
7,800.0	7,464.0	7,500.0	7,376.1	17.6	16.5	54.34	-197.7	66.9	144.8	116.4	28.41	5.099		
7,850.0	7,473.7	7,470.6	7,360.1	17.7	16.4	45.74	-173.0	66.8	171.0	145.7	25.31	6.756		
7,900.0	7,480.0	7,440.2	7,342.6	17.8	16.3	38.74	-148.3	66.7	199.0	176.5	22.49	8.846		
7,950.0	7,482.8	7,410.3	7,324.3	18.0	16.2	33.28	-124.6	66.5	227.6	207.3	20.28	11.222		
7,968.2	7,483.0	7,400.0	7,317.8	18.1	16.1	31.66	-116.6	66.5	238.0	218.3	19.66	12.105		
7,968.3	7,483.0	7,400.0	7,317.8	18.1	16.1	31.66	-116.6	66.5	238.0	218.4	19.66	12.107		
7,970.8	7,483.0	7,400.0	7,317.8	18.1	16.1	31.64	-116.6	66.5	239.5	219.9	19.66	12.180		
8,000.0	7,482.9	7,381.0	7,305.4	18.2	16.1	29.82	-102.2	66.5	256.7	237.7	18.96	13.537		
8,100.0	7,482.5	7,328.0	7,269.1	18.8	15.9	25.42	-63.6	66.3	320.5	303.0	17.52	18.292		
8,200.0	7,482.1	7,281.9	7,235.2	19.5	15.9	22.28	-32.4	66.2	390.6	373.8	16.76	23.301		
8,300.0	7,481.7	7,250.0	7,210.6	20.4	15.8	20.43	-12.1	66.1	465.7	449.0	16.65	27.973		
8,400.0	7,481.3	7,200.0	7,170.3	21.4	15.7	17.96	17.5	65.9	544.4	528.0	16.33	33.335		
8,500.0	7,480.9	7,175.7	7,150.0	22.6	15.7	16.92	30.9	65.9	626.1	609.5	16.65	37.606		
8,600.0	7,480.5	7,150.0	7,128.0	23.8	15.7	15.91	44.2	65.8	710.4	693.4	17.00	41.780		
8,700.0	7,480.1	7,124.5	7,105.8	25.2	15.7	15.01	56.7	65.8	796.7	779.3	17.41	45.756		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.53	5.1	624.9	624.9					
100.0	100.0	99.0	99.0	0.1	0.1	89.53	5.1	624.9	624.9	624.7	0.22	2,794.286		
200.0	200.0	199.0	199.0	0.3	0.3	89.53	5.1	624.9	624.9	624.3	0.67	929.879		
300.0	300.0	299.0	299.0	0.6	0.6	89.53	5.1	624.9	624.9	623.8	1.12	557.182		
400.0	400.0	399.0	399.0	0.8	0.8	89.53	5.1	624.9	624.9	623.4	1.57	397.760		
500.0	500.0	499.0	499.0	1.0	1.0	89.53	5.1	624.9	624.9	622.9	2.02	309.270		
600.0	600.0	599.0	599.0	1.2	1.2	89.53	5.1	624.9	624.9	622.5	2.47	252.988		
700.0	700.0	699.0	699.0	1.5	1.5	89.53	5.1	624.9	624.9	622.0	2.92	214.037		
800.0	800.0	799.0	799.0	1.7	1.7	89.53	5.1	624.9	624.9	621.6	3.37	185.480		
900.0	900.0	899.0	899.0	1.9	1.9	89.53	5.1	624.9	624.9	621.1	3.82	163.646		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.53	5.1	624.9	624.9	620.7	4.27	146.411		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.53	5.1	624.9	624.9	620.2	4.72	132.460		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.53	5.1	624.9	624.9	619.8	5.17	120.937		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.53	5.1	624.9	624.9	619.3	5.62	111.258		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.53	5.1	624.9	624.9	618.9	6.07	103.014		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.53	5.1	624.9	624.9	618.4	6.52	95.907		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.53	5.1	624.9	624.9	618.0	6.97	89.717		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.53	5.1	624.9	624.9	617.5	7.42	84.278		
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.53	5.1	624.9	624.9	617.1	7.86	79.461		
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.53	5.1	624.9	624.9	616.6	8.31	75.165		
2,000.0	2,000.0	1,999.0	1,999.0	4.4	4.4	89.53	5.1	624.9	624.9	616.2	8.76	71.309		
2,100.0	2,100.0	2,099.0	2,099.0	4.6	4.6	89.53	5.1	624.9	624.9	615.7	9.21	67.830		
2,200.0	2,200.0	2,199.0	2,199.0	4.8	4.8	89.53	5.1	624.9	624.9	615.3	9.66	64.674		
2,300.0	2,300.0	2,299.0	2,299.0	5.1	5.1	89.53	5.1	624.9	624.9	614.8	10.11	61.799 CC		
2,400.0	2,400.0	2,399.0	2,399.0	5.3	5.3	-93.58	5.1	624.9	625.0	614.5	10.53	59.341		
2,500.0	2,500.0	2,499.0	2,499.0	5.4	5.5	-93.83	5.1	624.9	625.2	614.2	10.93	57.222 ES		
2,600.0	2,599.8	2,590.5	2,590.5	5.6	5.7	-94.29	6.0	625.5	626.1	614.8	11.30	55.405		
2,700.0	2,699.6	2,681.8	2,681.8	5.8	5.9	-95.04	8.7	627.2	628.7	617.0	11.68	53.827		
2,800.0	2,799.3	2,781.0	2,780.9	6.0	6.1	-96.09	12.7	629.8	632.2	620.1	12.08	52.324		
2,900.0	2,898.8	2,880.0	2,879.7	6.2	6.4	-97.27	16.6	632.3	636.2	623.7	12.49	50.918		
3,000.0	2,998.1	2,978.7	2,978.3	6.4	6.6	-98.60	20.5	634.8	640.8	627.8	12.92	49.602		
3,100.0	3,097.1	3,077.1	3,076.6	6.6	6.8	-100.04	24.3	637.3	646.0	632.6	13.35	48.375		
3,200.0	3,195.9	3,175.2	3,174.5	6.8	7.0	-101.61	28.2	639.8	652.1	638.3	13.80	47.236		
3,300.0	3,294.4	3,272.8	3,272.1	7.1	7.2	-103.27	32.1	642.2	659.1	644.8	14.27	46.185		
3,400.0	3,392.6	3,370.1	3,369.3	7.4	7.5	-105.03	35.9	644.7	667.2	652.4	14.75	45.225		
3,500.0	3,490.4	3,466.9	3,466.0	7.7	7.7	-106.87	39.7	647.2	676.5	661.2	15.25	44.358		
3,583.4	3,571.6	3,547.3	3,546.3	7.9	7.9	-108.45	42.9	649.2	685.3	669.6	15.68	43.708		
3,600.0	3,587.7	3,563.3	3,562.2	8.0	7.9	-108.78	43.5	649.6	687.2	671.4	15.77	43.585		
3,700.0	3,685.0	3,659.5	3,658.3	8.3	8.1	-110.77	47.3	652.0	699.0	682.7	16.30	42.888		
3,800.0	3,782.2	3,755.7	3,754.4	8.7	8.3	-112.70	51.1	654.5	711.6	694.8	16.83	42.269		
3,900.0	3,879.5	3,851.8	3,850.5	9.1	8.6	-114.56	54.9	656.9	725.0	707.7	17.38	41.725		
4,000.0	3,976.7	3,948.0	3,946.6	9.5	8.8	-116.35	58.7	659.4	739.3	721.3	17.92	41.250		
4,100.0	4,074.0	4,044.2	4,042.7	9.9	9.0	-118.08	62.5	661.8	754.2	735.7	18.47	40.841		
4,200.0	4,171.2	4,140.4	4,138.7	10.3	9.2	-119.75	66.3	664.3	769.8	750.8	19.01	40.492		
4,300.0	4,268.5	4,236.6	4,234.8	10.7	9.4	-121.35	70.1	666.7	786.1	766.5	19.55	40.198		
7,350.0	7,234.5	7,819.1	7,478.9	18.4	19.0	100.26	-494.6	717.7	793.7	756.8	36.94	21.490		
7,400.0	7,271.2	7,777.2	7,473.2	18.3	18.6	98.70	-453.1	717.5	781.8	745.3	36.47	21.435		
7,450.0	7,305.5	7,737.8	7,465.7	18.1	18.2	97.12	-414.4	717.3	771.8	735.8	36.05	21.412 SF		
7,500.0	7,337.1	7,700.3	7,456.6	18.0	17.9	95.50	-378.1	717.2	764.0	728.3	35.66	21.425		
7,550.0	7,365.9	7,664.5	7,446.0	17.8	17.6	93.82	-343.8	717.0	758.3	722.9	35.32	21.471		
7,600.0	7,391.8	7,629.9	7,434.3	17.7	17.4	92.07	-311.3	716.9	754.6	719.6	35.00	21.557		
7,650.0	7,414.7	7,596.3	7,421.4	17.7	17.1	90.26	-280.4	716.7	752.9	718.2	34.72	21.686		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,669.1	7,422.6	7,583.7	7,416.2	17.6	17.0	89.55	-268.9	716.7	752.8	718.1	34.62	21.741	
7,700.0	7,434.4	7,563.7	7,407.5	17.6	16.9	88.38	-250.8	716.6	753.1	718.6	34.47	21.851	
7,750.0	7,450.9	7,531.7	7,392.5	17.6	16.7	86.44	-222.6	716.5	755.1	720.9	34.23	22.057	
7,800.0	7,464.0	7,500.0	7,376.5	17.6	16.6	84.44	-195.2	716.4	758.7	724.7	34.02	22.305	
7,850.0	7,473.7	7,469.6	7,360.0	17.7	16.4	82.44	-169.7	716.3	763.8	730.0	33.83	22.577	
7,900.0	7,480.0	7,439.2	7,342.5	17.8	16.3	80.39	-144.9	716.2	770.3	736.6	33.66	22.884	
7,950.0	7,482.8	7,409.3	7,324.1	18.0	16.2	78.35	-121.2	716.1	777.8	744.3	33.51	23.213	
7,968.2	7,483.0	7,400.0	7,318.3	18.1	16.1	77.67	-114.0	716.0	780.8	747.4	33.47	23.329	
7,968.3	7,483.0	7,400.0	7,318.3	18.1	16.1	77.67	-114.0	716.0	780.8	747.4	33.47	23.329	
7,970.8	7,483.0	7,400.0	7,318.3	18.1	16.1	77.67	-114.0	716.0	781.3	747.8	33.48	23.338	
8,000.0	7,482.9	7,380.0	7,305.3	18.2	16.1	76.73	-98.8	716.0	786.5	753.2	33.39	23.558	

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.54	5.8	724.7	724.7								
100.0	100.0	99.0	99.0	0.1	0.1	89.54	5.8	724.7	724.7	724.5	0.22	3,240.430					
200.0	200.0	199.0	199.0	0.3	0.3	89.54	5.8	724.7	724.7	724.0	0.67	1,078.347					
300.0	300.0	299.0	299.0	0.6	0.6	89.54	5.8	724.7	724.7	723.6	1.12	646.144					
400.0	400.0	399.0	399.0	0.8	0.8	89.54	5.8	724.7	724.7	723.1	1.57	461.267					
500.0	500.0	499.0	499.0	1.0	1.0	89.54	5.8	724.7	724.7	722.7	2.02	358.649					
600.0	600.0	599.0	599.0	1.2	1.2	89.54	5.8	724.7	724.7	722.2	2.47	293.381					
700.0	700.0	699.0	699.0	1.5	1.5	89.54	5.8	724.7	724.7	721.8	2.92	248.211					
800.0	800.0	799.0	799.0	1.7	1.7	89.54	5.8	724.7	724.7	721.3	3.37	215.094					
900.0	900.0	899.0	899.0	1.9	1.9	89.54	5.8	724.7	724.7	720.9	3.82	189.774					
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.54	5.8	724.7	724.7	720.4	4.27	169.787					
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.54	5.8	724.7	724.7	720.0	4.72	153.609					
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.54	5.8	724.7	724.7	719.5	5.17	140.246					
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.54	5.8	724.7	724.7	719.1	5.62	129.022					
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.54	5.8	724.7	724.7	718.6	6.07	119.461					
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.54	5.8	724.7	724.7	718.2	6.52	111.220					
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.54	5.8	724.7	724.7	717.7	6.97	104.042					
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.54	5.8	724.7	724.7	717.3	7.42	97.734 CC, ES					
1,800.0	1,800.0	1,783.6	1,783.6	3.9	3.9	89.52	6.1	725.6	725.8	717.9	7.82	92.798					
1,900.0	1,900.0	1,867.9	1,867.8	4.2	4.1	89.47	6.7	728.3	729.0	720.7	8.22	88.679					
2,000.0	2,000.0	1,952.1	1,951.9	4.4	4.2	89.39	7.8	732.7	734.3	725.7	8.62	85.194					
2,100.0	2,100.0	2,036.0	2,035.5	4.6	4.4	89.27	9.4	739.0	741.8	732.8	9.02	82.244					
2,200.0	2,200.0	2,119.6	2,118.7	4.8	4.6	89.13	11.4	747.0	751.4	742.0	9.42	79.761					
2,300.0	2,300.0	2,200.0	2,198.6	5.1	4.8	88.96	13.7	756.4	763.2	753.3	9.82	77.738					
2,400.0	2,400.0	2,288.0	2,285.7	5.3	5.0	-94.19	16.7	768.5	777.1	766.8	10.20	76.155					
2,500.0	2,500.0	2,386.7	2,383.3	5.4	5.3	-94.47	20.2	782.8	791.9	781.3	10.59	74.806 SF					

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	89.58	5.1	700.4	700.4					
100.0	100.0	99.0	99.0	0.1	0.1	89.58	5.1	700.4	700.4	700.2	0.22	3,131.656		
200.0	200.0	199.0	199.0	0.3	0.3	89.58	5.1	700.4	700.4	699.7	0.67	1,042.149		
300.0	300.0	299.0	299.0	0.6	0.6	89.58	5.1	700.4	700.4	699.3	1.12	624.454		
400.0	400.0	399.0	399.0	0.8	0.8	89.58	5.1	700.4	700.4	698.8	1.57	445.783		
500.0	500.0	499.0	499.0	1.0	1.0	89.58	5.1	700.4	700.4	698.4	2.02	346.610		
600.0	600.0	599.0	599.0	1.2	1.2	89.58	5.1	700.4	700.4	697.9	2.47	283.533		
700.0	700.0	699.0	699.0	1.5	1.5	89.58	5.1	700.4	700.4	697.5	2.92	239.879		
800.0	800.0	799.0	799.0	1.7	1.7	89.58	5.1	700.4	700.4	697.0	3.37	207.874		
900.0	900.0	899.0	899.0	1.9	1.9	89.58	5.1	700.4	700.4	696.6	3.82	183.403		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.58	5.1	700.4	700.4	696.1	4.27	164.088		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.58	5.1	700.4	700.4	695.7	4.72	148.453		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.58	5.1	700.4	700.4	695.2	5.17	135.538		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.58	5.1	700.4	700.4	694.8	5.62	124.691		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.58	5.1	700.4	700.4	694.3	6.07	115.451		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.58	5.1	700.4	700.4	693.9	6.52	107.486		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.58	5.1	700.4	700.4	693.4	6.97	100.549		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.58	5.1	700.4	700.4	693.0	7.42	94.454		
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.58	5.1	700.4	700.4	692.5	7.86	89.055		
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.58	5.1	700.4	700.4	692.1	8.31	84.240 CC		
2,000.0	2,000.0	1,994.0	1,994.0	4.4	4.3	89.67	4.0	700.7	700.7	692.0	8.73	80.311 ES		
2,100.0	2,100.0	2,088.9	2,088.8	4.6	4.5	89.95	0.6	701.7	701.8	692.7	9.11	77.007		
2,200.0	2,200.0	2,183.6	2,183.3	4.8	4.7	90.40	-4.9	703.4	703.6	694.1	9.51	74.026		
2,300.0	2,300.0	2,277.9	2,277.2	5.1	4.9	91.03	-12.7	705.8	706.3	696.4	9.90	71.310		
2,400.0	2,400.0	2,371.8	2,370.6	5.3	5.0	-91.23	-22.7	708.9	709.8	699.6	10.28	69.027		
2,500.0	2,500.0	2,465.4	2,463.3	5.4	5.2	-90.43	-34.8	712.6	714.4	703.7	10.65	67.080		
2,600.0	2,599.8	2,558.7	2,555.4	5.6	5.5	-89.59	-49.0	717.0	719.9	708.8	11.03	65.244		
2,700.0	2,699.6	2,657.5	2,652.8	5.8	5.7	-88.75	-65.4	722.0	726.0	714.6	11.46	63.366		
2,800.0	2,799.3	2,757.0	2,750.7	6.0	6.0	-88.06	-81.9	727.1	732.2	720.3	11.90	61.519		
2,900.0	2,898.8	2,856.6	2,848.8	6.2	6.3	-87.53	-98.4	732.1	738.4	726.1	12.37	59.698		
3,000.0	2,998.1	2,956.3	2,947.1	6.4	6.6	-87.14	-115.0	737.2	744.6	731.7	12.86	57.902		
3,100.0	3,097.1	3,056.1	3,045.3	6.6	6.9	-86.90	-131.5	742.3	750.7	737.3	13.37	56.129		
3,200.0	3,195.9	3,155.9	3,143.6	6.8	7.2	-86.80	-148.1	747.4	756.7	742.8	13.91	54.379		
3,300.0	3,294.4	3,255.8	3,241.9	7.1	7.5	-86.84	-164.6	752.4	762.6	748.1	14.48	52.650		
3,400.0	3,392.6	3,355.5	3,340.2	7.4	7.9	-87.01	-181.2	757.5	768.4	753.3	15.08	50.944		
3,500.0	3,490.4	3,455.3	3,438.4	7.7	8.2	-87.32	-197.7	762.6	774.1	758.4	15.71	49.262		
3,583.4	3,571.6	3,538.4	3,520.3	7.9	8.5	-87.68	-211.5	766.8	778.8	762.6	16.27	47.880		
3,600.0	3,587.7	3,554.9	3,536.5	8.0	8.5	-87.76	-214.2	767.7	779.8	763.4	16.38	47.608		
3,700.0	3,685.0	3,654.4	3,634.6	8.3	8.9	-88.30	-230.7	772.7	785.5	768.4	17.07	46.013		
3,800.0	3,782.2	3,754.0	3,732.6	8.7	9.3	-88.82	-247.2	777.8	791.3	773.5	17.78	44.494		
3,900.0	3,879.5	3,853.6	3,830.7	9.1	9.6	-89.34	-263.8	782.9	797.2	778.6	18.51	43.055 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	88.75	1.1	50.0	50.0					
100.0	100.0	99.0	99.0	0.1	0.1	88.75	1.1	50.0	50.0	49.8	0.22	223.737		
200.0	200.0	199.0	199.0	0.3	0.3	88.75	1.1	50.0	50.0	49.4	0.67	74.455		
300.0	300.0	299.0	299.0	0.6	0.6	88.75	1.1	50.0	50.0	48.9	1.12	44.613		
400.0	400.0	399.0	399.0	0.8	0.8	88.75	1.1	50.0	50.0	48.5	1.57	31.848		
500.0	500.0	499.0	499.0	1.0	1.0	88.75	1.1	50.0	50.0	48.0	2.02	24.763		
600.0	600.0	599.0	599.0	1.2	1.2	88.75	1.1	50.0	50.0	47.6	2.47	20.257		
700.0	700.0	699.0	699.0	1.5	1.5	88.75	1.1	50.0	50.0	47.1	2.92	17.138		
800.0	800.0	799.0	799.0	1.7	1.7	88.75	1.1	50.0	50.0	46.7	3.37	14.851		
900.0	900.0	899.0	899.0	1.9	1.9	88.75	1.1	50.0	50.0	46.2	3.82	13.103		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	88.75	1.1	50.0	50.0	45.8	4.27	11.723		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	88.75	1.1	50.0	50.0	45.3	4.72	10.606		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	88.75	1.1	50.0	50.0	44.9	5.17	9.683		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	88.75	1.1	50.0	50.0	44.4	5.62	8.908		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	88.75	1.1	50.0	50.0	44.0	6.07	8.248		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	88.75	1.1	50.0	50.0	43.5	6.52	7.679		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	88.75	1.1	50.0	50.0	43.1	6.97	7.184		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	88.75	1.1	50.0	50.0	42.6	7.42	6.748 CC		
1,800.0	1,800.0	1,798.8	1,798.8	3.9	3.9	90.25	-0.2	50.2	50.2	42.4	7.83	6.410		
1,900.0	1,900.0	1,898.5	1,898.4	4.2	4.1	94.74	-4.2	50.8	51.0	42.8	8.23	6.196		
2,000.0	2,000.0	1,997.8	1,997.5	4.4	4.3	101.82	-10.8	51.8	52.9	44.3	8.63	6.135		
2,100.0	2,100.0	2,096.8	2,096.0	4.6	4.4	110.69	-20.1	53.2	56.9	47.9	9.04	6.296		
2,200.0	2,200.0	2,195.1	2,193.6	4.8	4.6	120.11	-31.9	54.9	63.7	54.3	9.46	6.737		
2,300.0	2,300.0	2,292.9	2,290.3	5.1	4.9	128.95	-46.1	57.1	73.9	64.0	9.89	7.473		
2,400.0	2,400.0	2,391.7	2,387.9	5.3	5.1	-47.31	-61.7	59.4	85.7	75.4	10.28	8.333		
2,500.0	2,500.0	2,490.9	2,485.8	5.4	5.4	-42.92	-77.3	61.7	97.1	86.4	10.66	9.106		
2,600.0	2,599.8	2,590.2	2,583.8	5.6	5.6	-40.09	-92.9	64.0	107.4	96.4	11.04	9.731		
2,700.0	2,699.6	2,689.7	2,682.1	5.8	5.9	-38.31	-108.5	66.4	116.6	105.2	11.43	10.199		
2,800.0	2,799.3	2,789.4	2,780.5	6.0	6.2	-37.30	-124.2	68.7	124.4	112.6	11.83	10.513		
2,900.0	2,898.8	2,889.2	2,879.0	6.2	6.5	-36.88	-139.9	71.0	130.7	118.5	12.24	10.679		
3,000.0	2,998.1	2,989.1	2,977.6	6.4	6.8	-36.98	-155.6	73.4	135.6	123.0	12.66	10.710		
3,100.0	3,097.1	3,089.0	3,076.3	6.6	7.2	-37.53	-171.3	75.7	139.1	126.0	13.10	10.614		
3,200.0	3,195.9	3,188.9	3,175.0	6.8	7.5	-38.52	-187.0	78.1	141.1	127.5	13.56	10.405		
3,300.0	3,294.4	3,288.9	3,273.6	7.1	7.8	-39.97	-202.7	80.4	141.7	127.7	14.04	10.094		
3,400.0	3,392.6	3,388.8	3,372.3	7.4	8.2	-41.89	-218.4	82.7	141.1	126.5	14.56	9.692		
3,500.0	3,490.4	3,488.6	3,470.8	7.7	8.5	-44.36	-234.1	85.1	139.3	124.2	15.12	9.214		
3,583.4	3,571.6	3,571.7	3,552.9	7.9	8.8	-46.90	-247.2	87.0	137.0	121.4	15.63	8.767		
3,600.0	3,587.7	3,588.2	3,569.2	8.0	8.8	-47.44	-249.8	87.4	136.5	120.8	15.74	8.674		
3,700.0	3,685.0	3,687.9	3,667.6	8.3	9.2	-50.83	-265.4	89.8	133.8	117.3	16.43	8.140		
3,800.0	3,782.2	3,787.5	3,766.0	8.7	9.5	-54.35	-281.1	92.1	131.5	114.3	17.17	7.658		
3,900.0	3,879.5	3,887.2	3,864.3	9.1	9.9	-57.98	-296.8	94.4	129.8	111.8	17.96	7.226		
4,000.0	3,976.7	3,986.8	3,962.7	9.5	10.2	-61.69	-312.4	96.8	128.5	109.8	18.78	6.843		
4,100.0	4,074.0	4,086.4	4,061.1	9.9	10.6	-65.45	-328.1	99.1	127.9	108.2	19.64	6.510		
4,167.9	4,140.0	4,154.1	4,127.8	10.1	10.8	-68.02	-338.7	100.7	127.8	107.5	20.24	6.311		
4,200.0	4,171.2	4,186.1	4,159.4	10.3	10.9	-69.24	-343.8	101.4	127.8	107.3	20.53	6.225		
4,300.0	4,268.5	4,285.7	4,257.8	10.7	11.3	-73.02	-359.4	103.8	128.2	106.8	21.43	5.984		
4,400.0	4,365.7	4,385.4	4,356.2	11.1	11.7	-76.75	-375.1	106.1	129.3	106.9	22.34	5.786		
4,500.0	4,463.0	4,485.0	4,454.6	11.5	12.0	-80.41	-390.8	108.4	130.8	107.6	23.25	5.627		
4,600.0	4,560.2	4,584.6	4,552.9	12.0	12.4	-83.97	-406.4	110.8	132.9	108.8	24.15	5.503		
4,700.0	4,657.5	4,684.3	4,651.3	12.4	12.8	-87.41	-422.1	113.1	135.5	110.5	25.03	5.412		
4,800.0	4,754.7	4,783.9	4,749.7	12.9	13.1	-90.70	-437.8	115.4	138.5	112.6	25.90	5.350		
4,900.0	4,852.0	4,883.6	4,848.1	13.3	13.5	-93.85	-453.4	117.8	142.0	115.3	26.74	5.312		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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		
5,000.0	4,949.2	4,983.2	4,946.4	13.8	13.8	-96.84	-469.1	120.1	145.9	118.4	27.55	5.297		
5,100.0	5,046.4	5,082.8	5,044.8	14.2	14.2	-99.67	-484.7	122.4	150.2	121.9	28.34	5.300		
5,200.0	5,143.7	5,182.5	5,143.2	14.7	14.6	-102.33	-500.4	124.8	154.8	125.7	29.11	5.320		
5,300.0	5,240.9	5,282.1	5,241.6	15.1	15.0	-104.84	-516.1	127.1	159.8	129.9	29.85	5.353		
5,400.0	5,338.2	5,381.8	5,339.9	15.6	15.3	-107.19	-531.7	129.5	165.0	134.4	30.57	5.398		
5,500.0	5,435.4	5,481.4	5,438.3	16.1	15.7	-109.39	-547.4	131.8	170.5	139.2	31.27	5.452		
5,599.7	5,532.4	5,580.8	5,536.4	16.5	16.1	-111.45	-563.0	134.1	176.2	144.3	31.96	5.514		
5,700.0	5,630.3	5,680.8	5,635.2	16.9	16.4	-112.98	-578.8	136.5	181.5	148.9	32.61	5.565		
5,800.0	5,728.6	5,780.7	5,733.8	17.3	16.8	-113.42	-594.5	138.8	185.4	152.2	33.26	5.575		
5,900.0	5,827.5	5,880.7	5,832.5	17.5	17.2	-112.84	-610.2	141.1	188.0	154.1	33.96	5.536		
6,000.0	5,926.9	5,980.5	5,931.1	17.8	17.5	-111.28	-625.9	143.5	189.3	154.6	34.70	5.457		
6,100.0	6,026.6	6,080.1	6,029.4	18.0	17.9	-108.74	-641.5	145.8	189.6	154.2	35.45	5.349		
6,200.0	6,126.5	6,179.4	6,127.5	18.2	18.3	-105.21	-657.1	148.1	189.4	153.2	36.19	5.232		
6,273.5	6,200.0	6,252.1	6,199.3	18.3	18.5	80.89	-668.1	149.8	189.2	152.5	36.64	5.163		
6,288.8	6,215.3	6,267.3	6,214.3	18.3	18.5	81.52	-670.1	150.1	189.1	152.4	36.72	5.151		
6,300.0	6,226.5	6,278.4	6,225.3	18.4	18.6	81.97	-671.6	150.3	189.2	152.4	36.78	5.143		
6,400.0	6,326.5	6,378.0	6,324.3	18.5	18.8	85.39	-682.8	152.0	189.6	152.4	37.22	5.094		
6,500.0	6,426.5	6,478.3	6,424.2	18.6	19.0	87.76	-690.6	153.1	190.3	152.7	37.58	5.063		
6,600.0	6,526.5	6,579.0	6,524.8	18.8	19.2	89.08	-694.9	153.8	190.8	152.9	37.90	5.035		
6,700.0	6,626.5	6,679.6	6,625.5	18.9	19.4	89.37	-695.9	153.9	190.9	152.7	38.20	4.998		
6,800.0	6,726.5	6,779.6	6,725.5	19.1	19.5	89.37	-695.9	153.9	190.9	152.4	38.49	4.961		
6,840.3	6,766.8	6,820.0	6,765.8	19.1	19.6	89.37	-695.9	153.9	190.9	152.3	38.61	4.946		
6,850.0	6,776.5	6,829.6	6,775.5	19.2	19.6	89.26	-695.9	153.9	190.9	152.3	38.63	4.942		
6,900.0	6,826.4	6,879.6	6,825.4	19.2	19.6	89.99	-695.9	153.9	190.9	152.2	38.75	4.928		
6,900.4	6,826.8	6,880.0	6,825.8	19.2	19.6	90.00	-695.9	153.9	190.9	152.2	38.75	4.927		
6,950.0	6,876.1	6,929.3	6,875.1	19.2	19.7	91.72	-695.8	153.9	191.0	152.2	38.80	4.923		
7,000.0	6,925.2	6,979.5	6,925.2	19.2	19.7	93.79	-693.4	153.9	191.3	152.6	38.77	4.935		
7,050.0	6,973.5	7,030.1	6,975.5	19.2	19.8	95.85	-687.4	153.9	191.9	153.3	38.66	4.965		
7,100.0	7,020.8	7,081.3	7,025.8	19.1	19.8	97.87	-677.8	154.0	192.8	154.3	38.46	5.012		
7,150.0	7,066.9	7,133.0	7,075.8	19.0	19.7	99.84	-664.4	154.0	193.8	155.6	38.18	5.076		
7,200.0	7,111.6	7,185.3	7,125.1	18.9	19.6	101.75	-647.3	154.0	195.1	157.2	37.82	5.158		
7,250.0	7,154.5	7,238.1	7,173.6	18.7	19.5	103.60	-626.4	154.0	196.5	159.1	37.38	5.256		
7,300.0	7,195.6	7,291.4	7,220.8	18.6	19.4	105.36	-601.7	154.1	198.0	161.2	36.88	5.370		
7,350.0	7,234.5	7,345.2	7,266.5	18.4	19.3	107.02	-573.3	154.1	199.7	163.4	36.33	5.497		
7,400.0	7,271.2	7,399.6	7,310.4	18.3	19.1	108.59	-541.2	154.2	201.5	165.7	35.74	5.637		
7,450.0	7,305.5	7,454.4	7,352.0	18.1	19.0	110.04	-505.6	154.2	203.2	168.1	35.13	5.785		
7,500.0	7,337.1	7,509.8	7,391.2	18.0	18.8	111.38	-466.4	154.3	205.0	170.5	34.53	5.938		
7,550.0	7,365.9	7,565.6	7,427.5	17.8	18.6	112.60	-424.0	154.4	206.8	172.8	33.95	6.091		
7,600.0	7,391.8	7,621.9	7,460.6	17.7	18.5	113.69	-378.6	154.5	208.4	175.0	33.41	6.238		
7,650.0	7,414.7	7,678.5	7,490.3	17.7	18.4	114.66	-330.4	154.5	209.9	177.0	32.95	6.372		
7,700.0	7,434.4	7,735.5	7,516.2	17.6	18.3	115.50	-279.6	154.6	211.3	178.8	32.58	6.486		
7,750.0	7,450.9	7,792.9	7,538.1	17.6	18.3	116.20	-226.6	154.7	212.5	180.2	32.33	6.574		
7,800.0	7,464.0	7,850.5	7,555.8	17.6	18.3	116.77	-171.8	154.8	213.5	181.3	32.22	6.628		
7,850.0	7,473.7	7,908.3	7,569.0	17.7	18.4	117.21	-115.5	154.9	214.3	182.1	32.26	6.644		
7,900.0	7,480.0	7,966.3	7,577.7	17.8	18.5	117.51	-58.2	155.0	214.9	182.4	32.46	6.619		
7,950.0	7,482.8	8,024.3	7,581.7	18.0	18.7	117.67	-0.3	155.1	215.1	182.3	32.82	6.556		
7,968.2	7,483.0	8,045.4	7,582.0	18.1	18.8	117.69	20.8	155.1	215.2	182.2	32.98	6.524		
7,968.3	7,483.0	8,045.5	7,582.0	18.1	18.8	117.69	20.8	155.1	215.2	182.2	32.98	6.524		
7,970.8	7,483.0	8,048.0	7,582.0	18.1	18.8	117.70	23.4	155.1	215.2	182.2	33.00	6.521		
8,000.0	7,482.9	8,077.2	7,582.0	18.2	19.0	117.72	52.6	155.2	215.2	182.0	33.22	6.479		
8,100.0	7,482.5	8,177.2	7,582.0	18.8	19.6	117.82	152.6	155.3	215.4	181.1	34.30	6.279		
8,200.0	7,482.1	8,277.2	7,582.0	19.5	20.3	117.92	252.6	155.5	215.6	179.9	35.69	6.041		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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		
8,300.0	7,481.7	8,377.2	7,582.0	20.4	21.2	118.01	352.6	155.7	215.8	178.4	37.34	5.778		
8,400.0	7,481.3	8,477.2	7,582.0	21.4	22.2	118.11	452.6	155.8	215.9	176.7	39.22	5.505		
8,500.0	7,480.9	8,577.2	7,582.0	22.6	23.4	118.20	552.6	156.0	216.1	174.8	41.31	5.231		
8,600.0	7,480.5	8,677.2	7,582.0	23.8	24.6	118.30	652.6	156.2	216.3	172.7	43.57	4.965		
8,700.0	7,480.1	8,777.2	7,582.0	25.2	25.9	118.39	752.6	156.3	216.5	170.5	45.97	4.709		
8,800.0	7,479.7	8,877.2	7,582.0	26.6	27.3	118.49	852.6	156.5	216.7	168.2	48.49	4.468		
8,900.0	7,479.3	8,977.2	7,582.0	28.1	28.8	118.58	952.6	156.7	216.8	165.7	51.12	4.242		
9,000.0	7,478.9	9,077.2	7,582.0	29.6	30.3	118.68	1,052.6	156.8	217.0	163.2	53.83	4.031		
9,100.0	7,478.4	9,177.2	7,582.0	31.2	31.9	118.77	1,152.6	157.0	217.2	160.6	56.62	3.836		
9,200.0	7,478.0	9,277.2	7,582.0	32.8	33.5	118.87	1,252.5	157.2	217.4	157.9	59.47	3.655		
9,300.0	7,477.6	9,377.2	7,582.0	34.4	35.1	118.96	1,352.5	157.3	217.6	155.2	62.37	3.488		
9,400.0	7,477.2	9,477.2	7,582.0	36.1	36.8	119.05	1,452.5	157.5	217.8	152.4	65.32	3.334		
9,500.0	7,476.8	9,577.2	7,582.0	37.8	38.4	119.15	1,552.5	157.7	217.9	149.6	68.30	3.191		
9,600.0	7,476.4	9,677.2	7,582.0	39.5	40.1	119.24	1,652.5	157.8	218.1	146.8	71.32	3.058		
9,700.0	7,476.0	9,777.2	7,582.0	41.2	41.9	119.34	1,752.5	158.0	218.3	144.0	74.37	2.936		
9,800.0	7,475.6	9,877.2	7,582.0	43.0	43.6	119.43	1,852.5	158.2	218.5	141.1	77.44	2.822		
9,900.0	7,475.2	9,977.2	7,582.0	44.7	45.4	119.52	1,952.5	158.3	218.7	138.2	80.53	2.716		
10,000.0	7,474.8	10,077.2	7,582.0	46.5	47.1	119.62	2,052.5	158.5	218.9	135.2	83.64	2.617		
10,100.0	7,474.4	10,177.2	7,582.0	48.3	48.9	119.71	2,152.5	158.7	219.1	132.3	86.76	2.525		
10,200.0	7,474.0	10,277.2	7,582.0	50.1	50.7	119.80	2,252.5	158.8	219.3	129.4	89.89	2.439		
10,300.0	7,473.6	10,377.2	7,582.0	51.9	52.5	119.89	2,352.5	159.0	219.5	126.4	93.04	2.359		
10,400.0	7,473.2	10,477.2	7,582.0	53.7	54.3	119.99	2,452.5	159.2	219.6	123.4	96.20	2.283		
10,500.0	7,472.8	10,577.2	7,582.0	55.6	56.1	120.08	2,552.5	159.3	219.8	120.5	99.36	2.212		
10,600.0	7,472.4	10,677.2	7,582.0	57.4	57.9	120.17	2,652.5	159.5	220.0	117.5	102.54	2.146		
10,700.0	7,472.0	10,777.2	7,582.0	59.2	59.8	120.26	2,752.5	159.7	220.2	114.5	105.71	2.083		
10,800.0	7,471.6	10,877.2	7,582.0	61.1	61.6	120.35	2,852.5	159.8	220.4	111.5	108.90	2.024		
10,900.0	7,471.2	10,977.2	7,582.0	62.9	63.5	120.45	2,952.5	160.0	220.6	108.5	112.08	1.968		
11,000.0	7,470.8	11,077.2	7,582.0	64.8	65.3	120.54	3,052.5	160.2	220.8	105.5	115.27	1.916		
11,100.0	7,470.4	11,177.2	7,582.0	66.6	67.2	120.63	3,152.5	160.3	221.0	102.5	118.46	1.866		
11,200.0	7,470.0	11,277.2	7,582.0	68.5	69.0	120.72	3,252.5	160.5	221.2	99.5	121.65	1.818		
11,300.0	7,469.6	11,377.2	7,582.0	70.3	70.9	120.81	3,352.5	160.7	221.4	96.5	124.85	1.773		
11,400.0	7,469.2	11,477.2	7,582.0	72.2	72.7	120.90	3,452.5	160.8	221.6	93.5	128.04	1.731		
11,500.0	7,468.8	11,577.2	7,582.0	74.1	74.6	120.99	3,552.5	161.0	221.8	90.5	131.24	1.690		
11,600.0	7,468.4	11,677.2	7,582.0	76.0	76.5	121.08	3,652.5	161.2	222.0	87.5	134.43	1.651		
11,700.0	7,468.0	11,777.2	7,582.0	77.8	78.3	121.17	3,752.5	161.3	222.2	84.5	137.63	1.614		
11,800.0	7,467.6	11,877.2	7,582.0	79.7	80.2	121.26	3,852.5	161.5	222.4	81.6	140.82	1.579		
11,900.0	7,467.2	11,977.2	7,582.0	81.6	82.1	121.35	3,952.5	161.7	222.6	78.6	144.01	1.546		
12,000.0	7,466.8	12,077.2	7,582.0	83.5	84.0	121.44	4,052.5	161.8	222.8	75.6	147.20	1.513		
12,100.0	7,466.4	12,177.2	7,582.0	85.4	85.9	121.53	4,152.5	162.0	223.0	72.6	150.39	1.483 Level 3		
12,200.0	7,466.0	12,277.2	7,582.0	87.2	87.7	121.62	4,252.5	162.2	223.2	69.6	153.58	1.453 Level 3		
12,300.0	7,465.6	12,377.2	7,582.0	89.1	89.6	121.71	4,352.5	162.3	223.4	66.6	156.76	1.425 Level 3		
12,400.0	7,465.2	12,477.2	7,582.0	91.0	91.5	121.80	4,452.5	162.5	223.6	63.6	159.95	1.398 Level 3		
12,500.0	7,464.8	12,577.2	7,582.0	92.9	93.4	121.89	4,552.5	162.7	223.8	60.7	163.13	1.372 Level 3		
12,600.0	7,464.4	12,677.2	7,582.0	94.8	95.3	121.98	4,652.5	162.8	224.0	57.7	166.30	1.347 Level 3		
12,700.0	7,464.0	12,777.2	7,582.0	96.7	97.2	122.07	4,752.5	163.0	224.2	54.7	169.48	1.323 Level 3		
12,800.0	7,463.6	12,877.2	7,582.0	98.6	99.1	122.16	4,852.5	163.2	224.4	51.7	172.65	1.300 Level 3		
12,900.0	7,463.2	12,977.2	7,582.0	100.5	101.0	122.24	4,952.5	163.3	224.6	48.8	175.82	1.277 Level 3		
13,000.0	7,462.8	13,077.2	7,582.0	102.4	102.9	122.33	5,052.5	163.5	224.8	45.8	178.98	1.256 Level 3		
13,100.0	7,462.4	13,177.2	7,582.0	104.3	104.8	122.42	5,152.5	163.7	225.0	42.9	182.14	1.235 Level 2		
13,200.0	7,462.0	13,277.2	7,582.0	106.2	106.7	122.51	5,252.5	163.8	225.2	39.9	185.30	1.215 Level 2		
13,300.0	7,461.6	13,377.2	7,582.0	108.1	108.6	122.60	5,352.5	164.0	225.4	37.0	188.45	1.196 Level 2		
13,400.0	7,461.2	13,477.2	7,582.0	110.0	110.5	122.68	5,452.5	164.2	225.6	34.0	191.60	1.178 Level 2		

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

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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													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		
13,500.0	7,460.8	13,577.2	7,582.0	111.9	112.4	122.77	5,552.5	164.3	225.8	31.1	194.75	1.160	Level 2	
13,600.0	7,460.4	13,677.2	7,582.0	113.8	114.3	122.86	5,652.5	164.5	226.0	28.1	197.89	1.142	Level 2	
13,700.0	7,460.0	13,777.2	7,582.0	115.7	116.2	122.95	5,752.5	164.7	226.2	25.2	201.03	1.125	Level 2	
13,800.0	7,459.6	13,877.2	7,582.0	117.6	118.1	123.03	5,852.5	164.8	226.5	22.3	204.17	1.109	Level 2	
13,900.0	7,459.2	13,977.2	7,582.0	119.5	120.0	123.12	5,952.5	165.0	226.7	19.4	207.30	1.093	Level 2	
14,000.0	7,458.7	14,077.2	7,582.0	121.4	121.9	123.21	6,052.5	165.2	226.9	16.5	210.43	1.078	Level 2	
14,100.0	7,458.3	14,177.2	7,582.0	123.3	123.8	123.29	6,152.5	165.3	227.1	13.5	213.55	1.063	Level 2	
14,200.0	7,457.9	14,277.2	7,582.0	125.2	125.7	123.38	6,252.5	165.5	227.3	10.6	216.67	1.049	Level 2	
14,300.0	7,457.5	14,377.2	7,582.0	127.1	127.6	123.46	6,352.5	165.7	227.5	7.7	219.78	1.035	Level 2	
14,400.0	7,457.1	14,477.2	7,582.0	129.1	129.5	123.55	6,452.5	165.8	227.7	4.8	222.89	1.022	Level 2	
14,500.0	7,456.7	14,577.2	7,582.0	131.0	131.4	123.64	6,552.5	166.0	227.9	1.9	226.00	1.009	Level 2	
14,600.0	7,456.3	14,677.2	7,582.0	132.9	133.3	123.72	6,652.5	166.2	228.2	-0.9	229.10	0.996	Level 1	
14,700.0	7,455.9	14,777.2	7,582.0	134.8	135.2	123.81	6,752.5	166.3	228.4	-3.8	232.20	0.984	Level 1	
14,800.0	7,455.5	14,877.2	7,582.0	136.7	137.1	123.89	6,852.5	166.5	228.6	-6.7	235.29	0.971	Level 1	
14,900.0	7,455.1	14,977.2	7,582.0	138.6	139.1	123.98	6,952.5	166.7	228.8	-9.6	238.38	0.960	Level 1	
15,000.0	7,454.7	15,077.2	7,582.0	140.5	141.0	124.06	7,052.5	166.8	229.0	-12.4	241.46	0.948	Level 1	
15,100.0	7,454.3	15,177.2	7,582.0	142.4	142.9	124.15	7,152.5	167.0	229.2	-15.3	244.54	0.937	Level 1	
15,200.0	7,453.9	15,277.2	7,582.0	144.3	144.8	124.23	7,252.5	167.2	229.4	-18.2	247.61	0.927	Level 1	
15,300.0	7,453.5	15,377.2	7,582.0	146.3	146.7	124.32	7,352.5	167.3	229.7	-21.0	250.68	0.916	Level 1	
15,400.0	7,453.1	15,477.2	7,582.0	148.2	148.6	124.40	7,452.5	167.5	229.9	-23.9	253.75	0.906	Level 1	
15,500.0	7,452.7	15,577.2	7,582.0	150.1	150.5	124.49	7,552.5	167.7	230.1	-26.7	256.81	0.896	Level 1	
15,600.0	7,452.3	15,677.2	7,582.0	152.0	152.4	124.57	7,652.5	167.8	230.3	-29.5	259.86	0.886	Level 1	
15,700.0	7,451.9	15,777.2	7,582.0	153.9	154.3	124.65	7,752.5	168.0	230.5	-32.4	262.91	0.877	Level 1	
15,800.0	7,451.5	15,877.2	7,582.0	155.8	156.3	124.74	7,852.5	168.2	230.8	-35.2	265.96	0.868	Level 1	
15,900.0	7,451.1	15,977.2	7,582.0	157.7	158.2	124.82	7,952.5	168.3	231.0	-38.0	269.00	0.859	Level 1	
16,000.0	7,450.7	16,077.2	7,582.0	159.7	160.1	124.90	8,052.5	168.5	231.2	-40.8	272.03	0.850	Level 1	
16,100.0	7,450.3	16,177.2	7,582.0	161.6	162.0	124.99	8,152.5	168.7	231.4	-43.7	275.07	0.841	Level 1	
16,200.0	7,449.9	16,277.2	7,582.0	163.5	163.9	125.07	8,252.5	168.8	231.6	-46.5	278.09	0.833	Level 1	
16,300.0	7,449.5	16,377.1	7,582.0	165.4	165.8	125.15	8,352.5	169.0	231.9	-49.3	281.12	0.825	Level 1	
16,400.0	7,449.1	16,477.1	7,582.0	167.3	167.7	125.24	8,452.5	169.2	232.1	-52.1	284.13	0.817	Level 1	
16,500.0	7,448.7	16,577.1	7,582.0	169.2	169.7	125.32	8,552.5	169.3	232.3	-54.8	287.15	0.809	Level 1	
16,600.0	7,448.3	16,677.1	7,582.0	171.2	171.6	125.40	8,652.5	169.5	232.5	-57.6	290.15	0.801	Level 1	
16,700.0	7,447.9	16,777.1	7,582.0	173.1	173.5	125.48	8,752.5	169.7	232.7	-60.4	293.16	0.794	Level 1	
16,800.0	7,447.5	16,877.1	7,582.0	175.0	175.4	125.57	8,852.5	169.8	233.0	-63.2	296.15	0.787	Level 1	
16,900.0	7,447.1	16,977.1	7,582.0	176.9	177.3	125.65	8,952.5	170.0	233.2	-65.9	299.15	0.780	Level 1	
17,000.0	7,446.7	17,077.1	7,582.0	178.8	179.2	125.73	9,052.5	170.2	233.4	-68.7	302.13	0.773	Level 1	
17,100.0	7,446.3	17,177.1	7,582.0	180.7	181.2	125.81	9,152.5	170.3	233.6	-71.5	305.12	0.766	Level 1	
17,200.0	7,445.9	17,277.1	7,582.0	182.7	183.1	125.89	9,252.5	170.5	233.9	-74.2	308.10	0.759	Level 1	
17,300.0	7,445.5	17,377.1	7,582.0	184.6	185.0	125.97	9,352.5	170.7	234.1	-77.0	311.07	0.753	Level 1	
17,400.0	7,445.1	17,477.1	7,582.0	186.5	186.9	126.06	9,452.5	170.8	234.3	-79.7	314.04	0.746	Level 1	
17,500.0	7,444.7	17,577.1	7,582.0	188.4	188.8	126.14	9,552.5	171.0	234.6	-82.4	317.00	0.740	Level 1	
17,600.0	7,444.3	17,677.1	7,582.0	190.3	190.8	126.22	9,652.5	171.2	234.8	-85.2	319.96	0.734	Level 1	
17,700.0	7,443.9	17,777.1	7,582.0	192.3	192.7	126.30	9,752.5	171.3	235.0	-87.9	322.91	0.728	Level 1	
17,800.0	7,443.5	17,877.1	7,582.0	194.2	194.6	126.38	9,852.5	171.5	235.2	-90.6	325.86	0.722	Level 1	
17,900.0	7,443.1	17,977.1	7,582.0	196.1	196.5	126.46	9,952.5	171.7	235.5	-93.3	328.81	0.716	Level 1	
17,917.2	7,443.0	17,994.3	7,582.0	196.4	196.8	126.47	9,969.7	171.7	235.5	-93.8	329.31	0.715	Level 1, ES, SF	

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.01	0.0	-49.7	49.7	49.7	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	-90.01	0.0	-49.7	49.7	49.5	0.23	219.146		
200.0	200.0	201.0	201.0	0.3	0.3	-90.01	0.0	-49.7	49.7	49.1	0.68	73.534		
300.0	300.0	301.0	301.0	0.6	0.6	-90.01	0.0	-49.7	49.7	48.6	1.13	44.179		
400.0	400.0	401.0	401.0	0.8	0.8	-90.01	0.0	-49.7	49.7	48.2	1.58	31.575		
500.0	500.0	501.0	501.0	1.0	1.0	-90.01	0.0	-49.7	49.7	47.7	2.03	24.566		
600.0	600.0	601.0	601.0	1.2	1.2	-90.01	0.0	-49.7	49.7	47.3	2.47	20.103		
700.0	700.0	701.0	701.0	1.5	1.5	-90.01	0.0	-49.7	49.7	46.8	2.92	17.013		
800.0	800.0	801.0	801.0	1.7	1.7	-90.01	0.0	-49.7	49.7	46.4	3.37	14.746		
900.0	900.0	901.0	901.0	1.9	1.9	-90.01	0.0	-49.7	49.7	45.9	3.82	13.012		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.01	0.0	-49.7	49.7	45.5	4.27	11.643		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.01	0.0	-49.7	49.7	45.0	4.72	10.535		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.01	0.0	-49.7	49.7	44.6	5.17	9.619		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.01	0.0	-49.7	49.7	44.1	5.62	8.850		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.01	0.0	-49.7	49.7	43.7	6.07	8.195		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	-90.01	0.0	-49.7	49.7	43.2	6.52	7.630		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	-90.01	0.0	-49.7	49.7	42.8	6.97	7.138		
1,666.3	1,666.3	1,667.3	1,667.3	3.6	3.6	-90.01	0.0	-49.7	49.7	42.5	7.27	6.845 CC		
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	-90.01	0.0	-49.7	49.7	42.3	7.42	6.705 ES		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	-91.26	-1.1	-50.5	50.5	42.6	7.84	6.439		
1,900.0	1,900.0	1,899.4	1,899.3	4.2	4.1	-94.77	-4.4	-52.6	52.8	44.5	8.24	6.406		
2,000.0	2,000.0	1,998.3	1,998.0	4.4	4.3	-99.92	-9.8	-56.0	57.0	48.3	8.64	6.592		
2,100.0	2,100.0	2,096.8	2,096.0	4.6	4.5	-105.89	-17.3	-60.9	63.5	54.4	9.05	7.014		
2,200.0	2,200.0	2,194.7	2,193.3	4.8	4.7	-111.88	-26.9	-67.0	72.7	63.2	9.47	7.674		
2,300.0	2,300.0	2,292.0	2,289.6	5.1	4.9	-117.35	-38.5	-74.5	84.6	74.8	9.89	8.561		
2,400.0	2,400.0	2,388.7	2,384.9	5.3	5.1	-55.22	-52.1	-83.2	99.0	88.7	10.28	9.624		
2,500.0	2,500.0	2,485.5	2,480.0	5.4	5.4	52.15	-67.6	-93.2	114.8	104.2	10.66	10.774		
2,600.0	2,599.8	2,584.3	2,576.8	5.6	5.7	50.29	-84.0	-103.7	130.3	119.3	11.04	11.805		
2,700.0	2,699.6	2,683.2	2,673.8	5.8	6.0	49.36	-100.4	-114.3	144.8	133.3	11.43	12.660		
2,800.0	2,799.3	2,782.3	2,771.0	6.0	6.3	49.09	-116.8	-124.8	158.0	146.2	11.84	13.345		
2,900.0	2,898.8	2,881.6	2,868.3	6.2	6.7	49.33	-133.3	-135.4	170.1	157.8	12.26	13.871		
3,000.0	2,998.1	2,981.0	2,965.7	6.4	7.1	49.97	-149.7	-146.0	181.0	168.3	12.70	14.250		
3,100.0	3,097.1	3,080.4	3,063.2	6.6	7.4	50.97	-166.2	-156.6	190.7	177.6	13.16	14.495		
3,200.0	3,195.9	3,179.9	3,160.8	6.8	7.8	52.29	-182.7	-167.2	199.5	185.8	13.65	14.617		
3,300.0	3,294.4	3,279.4	3,258.4	7.1	8.2	53.90	-199.2	-177.8	207.2	193.0	14.16	14.629		
3,400.0	3,392.6	3,378.9	3,355.9	7.4	8.6	55.80	-215.7	-188.4	214.1	199.4	14.72	14.542		
3,500.0	3,490.4	3,478.4	3,453.4	7.7	9.0	57.98	-232.2	-199.0	220.2	204.9	15.33	14.369		
3,583.4	3,571.6	3,561.3	3,534.7	7.9	9.3	60.01	-245.9	-207.8	224.9	209.0	15.87	14.169		
3,600.0	3,587.7	3,577.8	3,550.8	8.0	9.4	60.44	-248.7	-209.5	225.8	209.8	15.99	14.123		
3,700.0	3,685.0	3,677.1	3,648.2	8.3	9.8	62.95	-265.1	-220.1	231.4	214.7	16.70	13.862		
3,800.0	3,782.2	3,776.4	3,745.6	8.7	10.2	65.34	-281.6	-230.7	237.6	220.1	17.44	13.622		
3,900.0	3,879.5	3,875.7	3,843.0	9.1	10.6	67.61	-298.0	-241.3	244.1	225.8	18.21	13.401		
4,000.0	3,976.7	3,975.1	3,940.4	9.5	11.0	69.76	-314.5	-251.9	250.9	231.9	19.01	13.199		
4,100.0	4,074.0	4,074.4	4,037.8	9.9	11.4	71.80	-331.0	-262.4	258.1	238.3	19.83	13.016		
4,200.0	4,171.2	4,173.7	4,135.1	10.3	11.8	73.72	-347.4	-273.0	265.6	245.0	20.67	12.851		
4,300.0	4,268.5	4,273.1	4,232.5	10.7	12.2	75.53	-363.9	-283.6	273.4	251.9	21.53	12.702		
4,400.0	4,365.7	4,372.4	4,329.9	11.1	12.6	77.25	-380.3	-294.2	281.5	259.1	22.39	12.569		
4,500.0	4,463.0	4,471.7	4,427.3	11.5	13.1	78.87	-396.8	-304.7	289.8	266.5	23.27	12.450		
4,600.0	4,560.2	4,571.0	4,524.7	12.0	13.5	80.39	-413.3	-315.3	298.3	274.1	24.16	12.345		
4,700.0	4,657.5	4,670.4	4,622.1	12.4	13.9	81.83	-429.7	-325.9	307.0	281.9	25.06	12.251		
4,800.0	4,754.7	4,769.7	4,719.4	12.9	14.3	83.20	-446.2	-336.5	315.9	289.9	25.96	12.168		
4,900.0	4,852.0	4,869.0	4,816.8	13.3	14.7	84.48	-462.7	-347.1	324.9	298.1	26.87	12.094		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,949.2	4,968.4	4,914.2	13.8	15.2	85.70	-479.1	-357.6	334.2	306.4	27.78	12.030		
5,100.0	5,046.4	5,067.7	5,011.6	14.2	15.6	86.85	-495.6	-368.2	343.5	314.8	28.69	11.973		
5,200.0	5,143.7	5,167.0	5,109.0	14.7	16.0	87.94	-512.0	-378.8	353.0	323.4	29.61	11.923		
5,300.0	5,240.9	5,266.4	5,206.4	15.1	16.5	88.98	-528.5	-389.4	362.6	332.1	30.52	11.880		
5,400.0	5,338.2	5,365.7	5,303.7	15.6	16.9	89.95	-545.0	-400.0	372.3	340.9	31.44	11.842		
5,500.0	5,435.4	5,465.0	5,401.1	16.1	17.3	90.88	-561.4	-410.5	382.2	349.8	32.36	11.810		
5,599.7	5,532.4	5,564.0	5,498.2	16.5	17.7	91.77	-577.8	-421.1	392.0	358.8	33.28	11.782		
5,700.0	5,630.3	5,663.8	5,596.0	16.9	18.2	92.56	-594.4	-431.7	402.0	367.9	34.13	11.780		
5,800.0	5,728.6	5,763.3	5,693.5	17.3	18.6	92.83	-610.9	-442.3	411.8	376.9	34.86	11.813		
5,900.0	5,827.5	5,862.8	5,791.1	17.5	19.0	92.62	-627.3	-452.9	421.4	385.9	35.54	11.859		
6,000.0	5,926.9	5,962.1	5,888.5	17.8	19.5	91.96	-643.8	-463.5	431.0	394.8	36.15	11.923		
6,100.0	6,026.6	6,065.3	5,989.7	18.0	19.9	90.88	-660.5	-474.2	440.3	403.6	36.66	12.008		
6,200.0	6,126.5	6,172.7	6,095.8	18.2	20.2	89.70	-674.9	-483.5	448.2	411.1	37.06	12.095		
6,273.5	6,200.0	6,252.0	6,174.5	18.3	20.4	-88.15	-683.4	-488.9	452.9	415.7	37.27	12.152		
6,300.0	6,226.5	6,280.7	6,203.0	18.4	20.5	-88.49	-686.0	-490.6	454.4	417.1	37.35	12.168		
6,400.0	6,326.5	6,389.5	6,311.4	18.5	20.7	-89.47	-693.8	-495.6	458.9	421.3	37.62	12.199		
6,500.0	6,426.5	6,498.9	6,420.6	18.6	20.9	-90.01	-698.1	-498.4	461.4	423.5	37.90	12.175		
6,600.0	6,526.5	6,605.8	6,527.5	18.8	21.0	-90.13	-699.0	-499.0	462.0	423.8	38.20	12.094		
6,700.0	6,626.5	6,705.8	6,627.5	18.9	21.2	-90.13	-699.0	-499.0	462.0	423.5	38.48	12.005		
6,800.0	6,726.5	6,805.8	6,727.5	19.1	21.3	-90.13	-699.0	-499.0	462.0	423.2	38.77	11.916		
6,840.3	6,766.8	6,846.1	6,767.8	19.1	21.3	-90.13	-699.0	-499.0	462.0	423.1	38.88	11.881		
6,850.0	6,776.5	6,855.8	6,777.5	19.2	21.4	-90.26	-699.0	-499.0	462.0	423.0	38.92	11.869		
6,900.0	6,826.4	6,905.7	6,827.4	19.2	21.4	-90.56	-699.0	-499.0	462.0	423.0	39.01	11.841		
6,950.0	6,876.1	6,955.4	6,877.1	19.2	21.5	-91.27	-698.9	-499.0	462.1	423.0	39.03	11.839		
7,000.0	6,925.2	7,005.6	6,927.2	19.2	21.5	-92.11	-696.5	-499.0	462.3	423.3	38.97	11.862		
7,050.0	6,973.5	7,056.2	6,977.5	19.2	21.5	-92.94	-690.4	-499.0	462.7	423.8	38.86	11.907		
7,100.0	7,020.8	7,107.4	7,027.7	19.1	21.5	-93.76	-680.7	-499.1	463.2	424.5	38.68	11.975		
7,150.0	7,066.9	7,159.0	7,077.6	19.0	21.5	-94.57	-667.3	-499.2	463.8	425.4	38.44	12.065		
7,200.0	7,111.6	7,211.2	7,126.9	18.9	21.4	-95.35	-650.1	-499.4	464.6	426.4	38.16	12.174		
7,250.0	7,154.5	7,263.9	7,175.2	18.7	21.3	-96.11	-629.2	-499.5	465.4	427.6	37.83	12.302		
7,300.0	7,195.6	7,317.2	7,222.4	18.6	21.2	-96.84	-604.5	-499.7	466.4	428.9	37.47	12.445		
7,350.0	7,234.5	7,371.0	7,268.0	18.4	21.0	-97.54	-576.1	-500.0	467.4	430.3	37.09	12.602		
7,400.0	7,271.2	7,425.2	7,311.8	18.3	20.9	-98.20	-544.0	-500.3	468.5	431.8	36.70	12.767		
7,450.0	7,305.5	7,480.0	7,353.4	18.1	20.7	-98.81	-508.4	-500.6	469.6	433.3	36.31	12.936		
7,500.0	7,337.1	7,535.3	7,392.4	18.0	20.5	-99.38	-469.3	-500.9	470.8	434.9	35.93	13.104		
7,550.0	7,365.9	7,591.0	7,428.7	17.8	20.3	-99.90	-427.0	-501.2	472.0	436.4	35.59	13.264		
7,600.0	7,391.8	7,647.2	7,461.7	17.7	20.1	-100.36	-381.6	-501.6	473.2	437.9	35.29	13.409		
7,650.0	7,414.7	7,703.7	7,491.3	17.7	19.9	-100.77	-333.4	-502.0	474.3	439.3	35.05	13.532		
7,700.0	7,434.4	7,760.7	7,517.2	17.6	19.7	-101.12	-282.7	-502.5	475.4	440.5	34.89	13.625		
7,750.0	7,450.9	7,817.9	7,539.1	17.6	19.6	-101.41	-229.9	-502.9	476.5	441.6	34.83	13.681		
7,800.0	7,464.0	7,875.4	7,556.7	17.6	19.4	-101.63	-175.2	-503.4	477.4	442.6	34.86	13.697		
7,850.0	7,473.7	7,933.1	7,569.9	17.7	19.3	-101.79	-119.0	-503.8	478.3	443.3	34.99	13.669		
7,900.0	7,480.0	7,991.0	7,578.6	17.8	19.2	-101.88	-61.8	-504.3	479.1	443.8	35.24	13.596		
7,950.0	7,482.8	8,048.9	7,582.7	18.0	19.1	-101.91	-4.0	-504.8	479.7	444.1	35.59	13.478		
7,963.5	7,483.0	8,070.7	7,581.9	18.1	19.1	-101.78	17.7	-505.0	479.7	443.9	35.75	13.418		
7,968.2	7,483.0	8,071.0	7,582.0	18.1	19.1	-101.79	17.1	-505.0	479.7	444.0	35.77	13.411		
7,968.3	7,483.0	8,071.1	7,582.0	18.1	19.1	-101.79	17.2	-505.0	479.7	444.0	35.77	13.411		
7,970.8	7,483.0	8,073.7	7,582.0	18.1	19.1	-101.79	19.8	-505.0	479.8	444.0	35.78	13.407		
8,000.0	7,482.9	8,102.9	7,582.0	18.2	19.1	-101.79	49.0	-505.3	480.1	444.1	35.95	13.354		
8,100.0	7,482.5	8,202.9	7,582.0	18.8	19.4	-101.81	149.0	-506.1	481.1	444.1	37.03	12.993		
8,200.0	7,482.1	8,302.9	7,582.0	19.5	20.1	-101.84	248.9	-506.9	482.2	443.8	38.45	12.540		
8,300.0	7,481.7	8,402.9	7,582.0	20.4	21.0	-101.86	348.9	-507.8	483.3	443.1	40.19	12.026		

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

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Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
8,400.0	7,481.3	8,502.9	7,582.0	21.4	22.1	-101.88	448.9	-508.6	484.4	442.2	42.19	11.481		
8,500.0	7,480.9	8,602.9	7,582.0	22.6	23.3	-101.90	548.9	-509.4	485.4	441.0	44.42	10.928		
8,600.0	7,480.5	8,702.9	7,582.0	23.8	24.5	-101.92	648.9	-510.3	486.5	439.7	46.85	10.383		
8,700.0	7,480.1	8,802.9	7,582.0	25.2	25.9	-101.95	748.9	-511.1	487.6	438.1	49.46	9.859		
8,800.0	7,479.7	8,902.9	7,582.0	26.6	27.3	-101.97	848.9	-511.9	488.7	436.4	52.20	9.360		
8,900.0	7,479.3	9,002.9	7,582.0	28.1	28.8	-101.99	948.9	-512.8	489.7	434.6	55.07	8.892		
9,000.0	7,478.9	9,102.8	7,582.0	29.6	30.3	-102.01	1,048.9	-513.6	490.8	432.7	58.05	8.455		
9,100.0	7,478.4	9,202.8	7,582.0	31.2	31.8	-102.03	1,148.9	-514.4	491.9	430.8	61.11	8.049		
9,200.0	7,478.0	9,302.8	7,582.0	32.8	33.4	-102.05	1,248.9	-515.3	492.9	428.7	64.25	7.672		
9,300.0	7,477.6	9,402.8	7,582.0	34.4	35.0	-102.07	1,348.8	-516.1	494.0	426.6	67.46	7.323		
9,400.0	7,477.2	9,502.8	7,582.0	36.1	36.7	-102.10	1,448.8	-516.9	495.1	424.4	70.72	7.001		
9,500.0	7,476.8	9,602.8	7,582.0	37.8	38.4	-102.12	1,548.8	-517.8	496.2	422.1	74.03	6.702		
9,600.0	7,476.4	9,702.8	7,582.0	39.5	40.1	-102.14	1,648.8	-518.6	497.2	419.9	77.38	6.426		
9,700.0	7,476.0	9,802.8	7,582.0	41.2	41.8	-102.16	1,748.8	-519.4	498.3	417.5	80.77	6.169		
9,800.0	7,475.6	9,902.8	7,582.0	43.0	43.5	-102.18	1,848.8	-520.3	499.4	415.2	84.20	5.931		
9,900.0	7,475.2	10,002.8	7,582.0	44.7	45.3	-102.20	1,948.8	-521.1	500.5	412.8	87.65	5.710		
10,000.0	7,474.8	10,102.8	7,582.0	46.5	47.0	-102.22	2,048.8	-521.9	501.5	410.4	91.13	5.504		
10,100.0	7,474.4	10,202.8	7,582.0	48.3	48.8	-102.24	2,148.8	-522.8	502.6	408.0	94.63	5.311		
10,200.0	7,474.0	10,302.8	7,582.0	50.1	50.6	-102.26	2,248.8	-523.6	503.7	405.5	98.15	5.132		
10,300.0	7,473.6	10,402.8	7,582.0	51.9	52.4	-102.28	2,348.7	-524.4	504.7	403.1	101.69	4.964		
10,400.0	7,473.2	10,502.8	7,582.0	53.7	54.2	-102.30	2,448.7	-525.3	505.8	400.6	105.24	4.806		
10,500.0	7,472.8	10,602.8	7,582.0	55.6	56.0	-102.32	2,548.7	-526.1	506.9	398.1	108.81	4.659		
10,600.0	7,472.4	10,702.8	7,582.0	57.4	57.9	-102.34	2,648.7	-526.9	508.0	395.6	112.39	4.520		
10,700.0	7,472.0	10,802.7	7,582.0	59.2	59.7	-102.36	2,748.7	-527.8	509.0	393.1	115.99	4.389		
10,800.0	7,471.6	10,902.7	7,582.0	61.1	61.5	-102.38	2,848.7	-528.6	510.1	390.5	119.59	4.266		
10,900.0	7,471.2	11,002.7	7,582.0	62.9	63.4	-102.40	2,948.7	-529.4	511.2	388.0	123.20	4.149		
11,000.0	7,470.8	11,102.7	7,582.0	64.8	65.2	-102.42	3,048.7	-530.3	512.3	385.4	126.83	4.039		
11,100.0	7,470.4	11,202.7	7,582.0	66.6	67.0	-102.44	3,148.7	-531.1	513.3	382.9	130.46	3.935		
11,200.0	7,470.0	11,302.7	7,582.0	68.5	68.9	-102.46	3,248.7	-531.9	514.4	380.3	134.10	3.836		
11,300.0	7,469.6	11,402.7	7,582.0	70.3	70.8	-102.48	3,348.7	-532.8	515.5	377.7	137.74	3.742		
11,400.0	7,469.2	11,502.7	7,582.0	72.2	72.6	-102.50	3,448.6	-533.6	516.6	375.2	141.39	3.653		
11,500.0	7,468.8	11,602.7	7,582.0	74.1	74.5	-102.52	3,548.6	-534.4	517.6	372.6	145.05	3.569		
11,600.0	7,468.4	11,702.7	7,582.0	76.0	76.4	-102.54	3,648.6	-535.3	518.7	370.0	148.71	3.488		
11,700.0	7,468.0	11,802.7	7,582.0	77.8	78.2	-102.55	3,748.6	-536.1	519.8	367.4	152.38	3.411		
11,800.0	7,467.6	11,902.7	7,582.0	79.7	80.1	-102.57	3,848.6	-536.9	520.9	364.8	156.05	3.338		
11,900.0	7,467.2	12,002.7	7,582.0	81.6	82.0	-102.59	3,948.6	-537.8	521.9	362.2	159.73	3.268		
12,000.0	7,466.8	12,102.7	7,582.0	83.5	83.9	-102.61	4,048.6	-538.6	523.0	359.6	163.41	3.201		
12,100.0	7,466.4	12,202.7	7,582.0	85.4	85.7	-102.63	4,148.6	-539.4	524.1	357.0	167.09	3.136		
12,200.0	7,466.0	12,302.7	7,582.0	87.2	87.6	-102.65	4,248.6	-540.3	525.2	354.4	170.78	3.075		
12,300.0	7,465.6	12,402.7	7,582.0	89.1	89.5	-102.67	4,348.6	-541.1	526.2	351.8	174.47	3.016		
12,400.0	7,465.2	12,502.6	7,582.0	91.0	91.4	-102.69	4,448.6	-541.9	527.3	349.1	178.16	2.960		
12,500.0	7,464.8	12,602.6	7,582.0	92.9	93.3	-102.70	4,548.5	-542.8	528.4	346.5	181.86	2.906		
12,600.0	7,464.4	12,702.6	7,582.0	94.8	95.2	-102.72	4,648.5	-543.6	529.5	343.9	185.55	2.853		
12,700.0	7,464.0	12,802.6	7,582.0	96.7	97.1	-102.74	4,748.5	-544.4	530.5	341.3	189.25	2.803		
12,800.0	7,463.6	12,902.6	7,582.0	98.6	99.0	-102.76	4,848.5	-545.3	531.6	338.7	192.96	2.755		
12,900.0	7,463.2	13,002.6	7,582.0	100.5	100.9	-102.78	4,948.5	-546.1	532.7	336.0	196.66	2.709		
13,000.0	7,462.8	13,102.6	7,582.0	102.4	102.7	-102.80	5,048.5	-546.9	533.8	333.4	200.37	2.664		
13,100.0	7,462.4	13,202.6	7,582.0	104.3	104.6	-102.81	5,148.5	-547.8	534.8	330.8	204.07	2.621		
13,200.0	7,462.0	13,302.6	7,582.0	106.2	106.5	-102.83	5,248.5	-548.6	535.9	328.1	207.78	2.579		
13,300.0	7,461.6	13,402.6	7,582.0	108.1	108.4	-102.85	5,348.5	-549.4	537.0	325.5	211.49	2.539		
13,400.0	7,461.2	13,502.6	7,582.0	110.0	110.3	-102.87	5,448.5	-550.3	538.1	322.9	215.20	2.500		
13,500.0	7,460.8	13,602.6	7,582.0	111.9	112.2	-102.89	5,548.4	-551.1	539.1	320.2	218.92	2.463		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
13,600.0	7,460.4	13,702.6	7,582.0	113.8	114.1	-102.90	5,648.4	-551.9	540.2	317.6	222.63	2.426		
13,700.0	7,460.0	13,802.6	7,582.0	115.7	116.1	-102.92	5,748.4	-552.8	541.3	314.9	226.35	2.391		
13,800.0	7,459.6	13,902.6	7,582.0	117.6	118.0	-102.94	5,848.4	-553.6	542.4	312.3	230.07	2.357		
13,900.0	7,459.2	14,002.6	7,582.0	119.5	119.9	-102.96	5,948.4	-554.4	543.4	309.7	233.78	2.325		
14,000.0	7,458.7	14,102.6	7,582.0	121.4	121.8	-102.97	6,048.4	-555.3	544.5	307.0	237.50	2.293		
14,100.0	7,458.3	14,202.5	7,582.0	123.3	123.7	-102.99	6,148.4	-556.1	545.6	304.4	241.22	2.262		
14,200.0	7,457.9	14,302.5	7,582.0	125.2	125.6	-103.01	6,248.4	-556.9	546.7	301.7	244.94	2.232		
14,300.0	7,457.5	14,402.5	7,582.0	127.1	127.5	-103.02	6,348.4	-557.7	547.7	299.1	248.66	2.203		
14,400.0	7,457.1	14,502.5	7,582.0	129.1	129.4	-103.04	6,448.4	-558.6	548.8	296.4	252.39	2.175		
14,500.0	7,456.7	14,602.5	7,582.0	131.0	131.3	-103.06	6,548.4	-559.4	549.9	293.8	256.11	2.147		
14,600.0	7,456.3	14,702.5	7,582.0	132.9	133.2	-103.08	6,648.3	-560.2	551.0	291.1	259.83	2.120		
14,700.0	7,455.9	14,802.5	7,582.0	134.8	135.1	-103.09	6,748.3	-561.1	552.0	288.5	263.56	2.095		
14,800.0	7,455.5	14,902.5	7,582.0	136.7	137.0	-103.11	6,848.3	-561.9	553.1	285.8	267.28	2.069		
14,900.0	7,455.1	15,002.5	7,582.0	138.6	139.0	-103.13	6,948.3	-562.7	554.2	283.2	271.01	2.045		
15,000.0	7,454.7	15,102.5	7,582.0	140.5	140.9	-103.14	7,048.3	-563.6	555.3	280.5	274.73	2.021		
15,100.0	7,454.3	15,202.5	7,582.0	142.4	142.8	-103.16	7,148.3	-564.4	556.3	277.9	278.46	1.998		
15,200.0	7,453.9	15,302.5	7,582.0	144.3	144.7	-103.18	7,248.3	-565.2	557.4	275.2	282.18	1.975		
15,300.0	7,453.5	15,402.5	7,582.0	146.3	146.6	-103.19	7,348.3	-566.1	558.5	272.6	285.91	1.953		
15,400.0	7,453.1	15,502.5	7,582.0	148.2	148.5	-103.21	7,448.3	-566.9	559.6	269.9	289.64	1.932		
15,500.0	7,452.7	15,602.5	7,582.0	150.1	150.4	-103.23	7,548.3	-567.7	560.7	267.3	293.36	1.911		
15,600.0	7,452.3	15,702.5	7,582.0	152.0	152.3	-103.24	7,648.2	-568.6	561.7	264.6	297.09	1.891		
15,700.0	7,451.9	15,802.5	7,582.0	153.9	154.3	-103.26	7,748.2	-569.4	562.8	262.0	300.82	1.871		
15,800.0	7,451.5	15,902.4	7,582.0	155.8	156.2	-103.27	7,848.2	-570.2	563.9	259.3	304.55	1.852		
15,900.0	7,451.1	16,002.4	7,582.0	157.7	158.1	-103.29	7,948.2	-571.1	565.0	256.7	308.28	1.833		
16,000.0	7,450.7	16,102.4	7,582.0	159.7	160.0	-103.31	8,048.2	-571.9	566.0	254.0	312.01	1.814		
16,100.0	7,450.3	16,202.4	7,582.0	161.6	161.9	-103.32	8,148.2	-572.7	567.1	251.4	315.73	1.796		
16,200.0	7,449.9	16,302.4	7,582.0	163.5	163.8	-103.34	8,248.2	-573.6	568.2	248.7	319.46	1.779		
16,300.0	7,449.5	16,402.4	7,582.0	165.4	165.8	-103.35	8,348.2	-574.4	569.3	246.1	323.19	1.761		
16,400.0	7,449.1	16,502.4	7,582.0	167.3	167.7	-103.37	8,448.2	-575.2	570.3	243.4	326.92	1.745		
16,500.0	7,448.7	16,602.4	7,582.0	169.2	169.6	-103.39	8,548.2	-576.1	571.4	240.8	330.65	1.728		
16,600.0	7,448.3	16,702.4	7,582.0	171.2	171.5	-103.40	8,648.2	-576.9	572.5	238.1	334.38	1.712		
16,700.0	7,447.9	16,802.4	7,582.0	173.1	173.4	-103.42	8,748.1	-577.7	573.6	235.5	338.11	1.696		
16,800.0	7,447.5	16,902.4	7,582.0	175.0	175.4	-103.43	8,848.1	-578.6	574.7	232.8	341.84	1.681		
16,900.0	7,447.1	17,002.4	7,582.0	176.9	177.3	-103.45	8,948.1	-579.4	575.7	230.2	345.57	1.666		
17,000.0	7,446.7	17,102.4	7,582.0	178.8	179.2	-103.46	9,048.1	-580.2	576.8	227.5	349.30	1.651		
17,100.0	7,446.3	17,202.4	7,582.0	180.7	181.1	-103.48	9,148.1	-581.1	577.9	224.9	353.03	1.637		
17,200.0	7,445.9	17,302.4	7,582.0	182.7	183.0	-103.49	9,248.1	-581.9	579.0	222.2	356.76	1.623		
17,300.0	7,445.5	17,402.4	7,582.0	184.6	184.9	-103.51	9,348.1	-582.7	580.0	219.5	360.49	1.609		
17,400.0	7,445.1	17,502.4	7,582.0	186.5	186.9	-103.52	9,448.1	-583.6	581.1	216.9	364.22	1.596		
17,500.0	7,444.7	17,602.3	7,582.0	188.4	188.8	-103.54	9,548.1	-584.4	582.2	214.2	367.95	1.582		
17,600.0	7,444.3	17,702.3	7,582.0	190.3	190.7	-103.56	9,648.1	-585.2	583.3	211.6	371.68	1.569		
17,700.0	7,443.9	17,802.3	7,582.0	192.3	192.6	-103.57	9,748.1	-586.1	584.3	208.9	375.41	1.557		
17,800.0	7,443.5	17,902.3	7,582.0	194.2	194.6	-103.59	9,848.0	-586.9	585.4	206.3	379.14	1.544		
17,900.0	7,443.1	18,002.3	7,582.0	196.1	196.5	-103.60	9,948.0	-587.7	586.5	203.6	382.87	1.532		
17,917.2	7,443.0	18,019.5	7,582.0	196.4	196.8	-103.60	9,965.2	-587.9	586.7	203.2	383.51	1.530 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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													Critic 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	1.0	1.0	0.0	0.0	-90.01	0.0	-75.2	75.2	75.2	0.00	N/A						
100.0	100.0	101.0	101.0	0.1	0.1	-90.01	0.0	-75.2	75.2	74.9	0.23	331.154						
200.0	200.0	201.0	201.0	0.3	0.3	-90.01	0.0	-75.2	75.2	74.5	0.68	111.118						
300.0	300.0	301.0	301.0	0.6	0.6	-90.01	0.0	-75.2	75.2	74.1	1.13	66.760						
400.0	400.0	401.0	401.0	0.8	0.8	-90.01	0.0	-75.2	75.2	73.6	1.58	47.713						
500.0	500.0	501.0	501.0	1.0	1.0	-90.01	0.0	-75.2	75.2	73.2	2.03	37.122						
600.0	600.0	601.0	601.0	1.2	1.2	-90.01	0.0	-75.2	75.2	72.7	2.47	30.378						
700.0	700.0	701.0	701.0	1.5	1.5	-90.01	0.0	-75.2	75.2	72.3	2.92	25.708						
800.0	800.0	801.0	801.0	1.7	1.7	-90.01	0.0	-75.2	75.2	71.8	3.37	22.283						
900.0	900.0	901.0	901.0	1.9	1.9	-90.01	0.0	-75.2	75.2	71.4	3.82	19.663						
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.01	0.0	-75.2	75.2	70.9	4.27	17.594						
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.01	0.0	-75.2	75.2	70.5	4.72	15.919						
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.01	0.0	-75.2	75.2	70.0	5.17	14.536						
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.01	0.0	-75.2	75.2	69.6	5.62	13.373						
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.01	0.0	-75.2	75.2	69.1	6.07	12.383						
1,466.3	1,466.3	1,467.3	1,467.3	3.2	3.2	-90.01	0.0	-75.2	75.2	68.8	6.37	11.803 CC						
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	-90.01	0.0	-75.2	75.2	68.7	6.52	11.530 ES						
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-89.77	0.3	-76.4	76.5	69.5	6.96	10.989						
1,700.0	1,700.0	1,697.1	1,697.0	3.7	3.7	-89.12	1.2	-80.1	80.2	72.8	7.38	10.867 SF						
1,800.0	1,800.0	1,794.8	1,794.5	3.9	3.9	-88.17	2.8	-86.2	86.5	78.7	7.81	11.073						
1,900.0	1,900.0	1,892.1	1,891.4	4.2	4.1	-87.05	4.9	-94.7	95.3	87.0	8.24	11.561						
2,000.0	2,000.0	1,988.9	1,987.6	4.4	4.3	-85.88	7.6	-105.5	106.6	97.9	8.67	12.289						
2,100.0	2,100.0	2,088.0	2,085.8	4.6	4.6	-84.81	10.7	-117.8	119.3	110.2	9.11	13.090						
2,200.0	2,200.0	2,187.2	2,184.2	4.8	4.8	-83.94	13.8	-130.2	132.0	122.5	9.55	13.820						
2,300.0	2,300.0	2,286.3	2,282.5	5.1	5.1	-83.23	16.9	-142.6	144.8	134.8	9.99	14.485						
2,400.0	2,400.0	2,385.5	2,380.8	5.3	5.4	94.53	20.0	-155.0	157.6	147.2	10.41	15.146						
2,500.0	2,500.0	2,484.5	2,479.1	5.4	5.7	95.80	23.1	-167.3	170.7	159.9	10.79	15.812						
2,600.0	2,599.8	2,583.5	2,577.2	5.6	6.0	97.44	26.3	-179.7	184.0	172.9	11.19	16.452						
2,700.0	2,699.6	2,682.3	2,675.2	5.8	6.2	99.36	29.4	-192.0	197.9	186.3	11.59	17.077						
2,800.0	2,799.3	2,780.9	2,773.0	6.0	6.5	101.48	32.4	-204.3	212.2	200.2	11.99	17.697						
2,900.0	2,898.8	2,879.3	2,870.6	6.2	6.8	103.76	35.5	-216.6	227.4	214.9	12.41	18.319						
3,000.0	2,998.1	2,977.5	2,968.0	6.4	7.1	106.14	38.6	-228.8	243.3	230.5	12.84	18.950						
3,100.0	3,097.1	3,075.4	3,065.0	6.6	7.4	108.58	41.7	-241.0	260.3	247.0	13.28	19.594						
3,200.0	3,195.9	3,173.0	3,161.8	6.8	7.7	111.03	44.7	-253.2	278.3	264.6	13.74	20.256						
3,300.0	3,294.4	3,270.2	3,258.2	7.1	8.0	113.48	47.8	-265.3	297.6	283.4	14.21	20.940						
3,400.0	3,392.6	3,367.1	3,354.3	7.4	8.3	115.89	50.8	-277.4	318.2	303.5	14.70	21.647						
3,500.0	3,490.4	3,463.5	3,450.0	7.7	8.6	118.24	53.9	-289.5	340.3	325.1	15.20	22.381						
3,583.4	3,571.6	3,543.7	3,529.4	7.9	8.9	120.14	56.4	-299.5	359.8	344.2	15.63	23.014						
3,600.0	3,587.7	3,559.6	3,545.2	8.0	8.9	120.55	56.9	-301.4	363.8	348.1	15.72	23.136						
3,700.0	3,685.0	3,655.4	3,640.2	8.3	9.2	122.82	59.9	-313.4	388.2	371.9	16.27	23.860						
3,800.0	3,782.2	3,751.3	3,735.3	8.7	9.5	124.82	62.9	-325.4	413.1	396.3	16.83	24.555						
3,900.0	3,879.5	3,847.2	3,830.4	9.1	9.8	126.60	65.9	-337.3	438.5	421.1	17.39	25.219						
4,000.0	3,976.7	3,943.0	3,925.4	9.5	10.2	128.19	68.9	-349.3	464.3	446.3	17.96	25.853						
4,100.0	4,074.0	4,038.9	4,020.5	9.9	10.5	129.61	71.9	-361.2	490.3	471.8	18.53	26.458						
4,200.0	4,171.2	4,134.7	4,115.6	10.3	10.8	130.89	74.9	-373.2	516.6	497.5	19.11	27.034						
4,300.0	4,268.5	4,230.6	4,210.6	10.7	11.1	132.05	77.9	-385.2	543.1	523.4	19.69	27.584						
4,400.0	4,365.7	4,326.5	4,305.7	11.1	11.4	133.10	80.9	-397.1	569.8	549.5	20.27	28.106						
4,500.0	4,463.0	4,422.3	4,400.8	11.5	11.7	134.05	83.9	-409.1	596.7	575.8	20.86	28.604						
4,600.0	4,460.2	4,518.2	4,495.8	12.0	12.0	134.93	86.9	-421.1	623.7	602.2	21.45	29.079						
4,700.0	4,657.5	4,614.1	4,590.9	12.4	12.3	135.73	89.9	-433.0	650.8	628.8	22.04	29.531						
4,800.0	4,754.7	4,709.9	4,686.0	12.9	12.6	136.47	93.0	-445.0	678.0	655.4	22.63	29.963						
4,900.0	4,852.0	4,805.8	4,781.0	13.3	12.9	137.15	96.0	-456.9	705.4	682.1	23.22	30.374						

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,949.2	4,901.6	4,876.1	13.8	13.2	137.78	99.0	-468.9	732.8	709.0	23.82	30.767		
5,100.0	5,046.4	4,997.5	4,971.2	14.2	13.6	138.37	102.0	-480.9	760.3	735.9	24.41	31.142		
5,200.0	5,143.7	5,093.4	5,066.2	14.7	13.9	138.91	105.0	-492.8	787.9	762.8	25.01	31.501		
7,100.0	7,020.8	8,103.8	7,582.0	19.1	22.5	-110.19	-659.5	-600.9	794.9	757.6	37.36	21.280		
7,150.0	7,066.9	8,084.4	7,582.0	19.0	22.3	-111.64	-640.2	-601.1	763.4	726.6	36.76	20.766		
7,200.0	7,111.6	8,061.9	7,582.0	18.9	22.1	-112.53	-617.7	-601.5	734.4	698.1	36.21	20.282		
7,250.0	7,154.5	8,036.3	7,582.0	18.7	21.9	-112.90	-592.1	-601.8	708.0	672.3	35.69	19.836		
7,300.0	7,195.6	7,987.3	7,581.0	18.6	21.4	-111.35	-543.0	-602.5	684.2	648.8	35.37	19.346		
7,350.0	7,234.5	7,931.2	7,575.8	18.4	20.9	-109.00	-487.2	-603.3	662.0	626.9	35.14	18.842		
7,400.0	7,271.2	7,881.3	7,567.6	18.3	20.5	-106.85	-438.1	-604.0	641.9	606.9	34.93	18.375		
7,450.0	7,305.5	7,836.0	7,557.1	18.1	20.2	-104.78	-394.0	-604.7	623.9	589.1	34.76	17.951		
7,500.0	7,337.1	7,794.1	7,545.0	18.0	20.0	-102.73	-353.9	-605.2	608.4	573.8	34.62	17.575		
7,550.0	7,365.9	7,754.8	7,531.5	17.8	19.7	-100.64	-317.0	-605.7	595.5	561.0	34.52	17.253		
7,600.0	7,391.8	7,717.5	7,516.9	17.7	19.6	-98.48	-282.7	-606.2	585.4	551.0	34.46	16.990		
7,650.0	7,414.7	7,681.9	7,501.2	17.7	19.4	-96.24	-250.7	-606.7	578.1	543.7	34.42	16.797		
7,700.0	7,434.4	7,647.5	7,484.6	17.6	19.3	-93.89	-220.6	-607.1	573.6	539.2	34.39	16.677		
7,750.0	7,450.9	7,614.1	7,467.1	17.6	19.2	-91.45	-192.2	-607.5	571.8	537.5	34.38	16.631		
7,758.3	7,453.3	7,608.7	7,464.1	17.6	19.2	-91.03	-187.6	-607.6	571.8	537.4	34.38	16.630		
7,800.0	7,464.0	7,581.6	7,448.9	17.6	19.1	-88.91	-165.3	-607.9	572.7	538.3	34.37	16.664		
7,850.0	7,473.7	7,550.0	7,429.9	17.7	19.1	-86.30	-140.0	-608.3	576.0	541.7	34.33	16.776		
7,900.0	7,480.0	7,518.8	7,410.2	17.8	19.0	-83.61	-115.8	-608.6	581.5	547.2	34.29	16.959		
7,950.0	7,482.8	7,488.1	7,389.8	18.0	18.9	-80.89	-92.9	-608.9	589.0	554.8	34.22	17.213		
7,968.2	7,483.0	7,477.1	7,382.2	18.1	18.9	-79.89	-84.9	-609.0	592.2	558.0	34.19	17.320		
7,968.3	7,483.0	7,477.1	7,382.2	18.1	18.9	-79.89	-84.9	-609.0	592.2	558.0	34.19	17.320		
7,970.8	7,483.0	7,475.5	7,381.1	18.1	18.9	-79.79	-83.8	-609.1	592.6	558.5	34.19	17.336		
8,000.0	7,482.9	7,458.4	7,369.0	18.2	18.9	-78.63	-71.6	-609.2	598.4	564.2	34.13	17.531		
8,100.0	7,482.5	7,400.0	7,325.9	18.8	18.8	-74.59	-32.3	-609.8	624.0	589.8	34.14	18.279		
8,200.0	7,482.1	7,360.1	7,294.6	19.5	18.8	-71.75	-7.5	-610.1	658.9	624.5	34.40	19.154		
8,300.0	7,481.7	7,321.3	7,262.9	20.4	18.7	-68.97	14.8	-610.5	702.8	668.1	34.75	20.226		
8,400.0	7,481.3	7,287.9	7,234.7	21.4	18.7	-66.58	32.7	-610.7	754.8	719.6	35.23	21.427		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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 563-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)											Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	87.55	1.1	25.4	25.5					
100.0	100.0	100.0	100.0	0.1	0.1	87.55	1.1	25.4	25.5	25.2	0.22	113.232		
200.0	200.0	200.0	200.0	0.3	0.3	87.55	1.1	25.4	25.5	24.8	0.67	37.744		
300.0	300.0	300.0	300.0	0.6	0.6	87.55	1.1	25.4	25.5	24.3	1.12	22.646		
400.0	400.0	400.0	400.0	0.8	0.8	87.55	1.1	25.4	25.5	23.9	1.57	16.176		
500.0	500.0	500.0	500.0	1.0	1.0	87.55	1.1	25.4	25.5	23.4	2.02	12.581		
600.0	600.0	600.0	600.0	1.2	1.2	87.55	1.1	25.4	25.5	23.0	2.47	10.294		
700.0	700.0	700.0	700.0	1.5	1.5	87.55	1.1	25.4	25.5	22.5	2.92	8.710		
800.0	800.0	800.0	800.0	1.7	1.7	87.55	1.1	25.4	25.5	22.1	3.37	7.549		
900.0	900.0	900.0	900.0	1.9	1.9	87.55	1.1	25.4	25.5	21.6	3.82	6.661		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	87.55	1.1	25.4	25.5	21.2	4.27	5.960		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	87.55	1.1	25.4	25.5	20.7	4.72	5.392		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	87.55	1.1	25.4	25.5	20.3	5.17	4.923		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	87.55	1.1	25.4	25.5	19.8	5.62	4.529		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	87.55	1.1	25.4	25.5	19.4	6.07	4.194		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	87.55	1.1	25.4	25.5	18.9	6.52	3.905 CC, ES		
1,600.0	1,600.0	1,599.4	1,599.4	3.5	3.5	86.22	1.8	26.5	26.6	19.6	6.96	3.822 SF		
1,700.0	1,700.0	1,698.7	1,698.6	3.7	3.7	82.85	3.7	29.9	30.1	22.7	7.40	4.073		
1,800.0	1,800.0	1,798.3	1,798.0	3.9	3.9	79.05	6.7	34.8	35.5	27.7	7.83	4.538		
1,900.0	1,900.0	1,898.1	1,897.7	4.2	4.1	76.22	9.8	39.9	41.2	32.9	8.27	4.979		
2,000.0	2,000.0	1,997.9	1,997.3	4.4	4.4	74.07	12.9	45.0	46.9	38.2	8.71	5.383		
2,100.0	2,100.0	2,097.7	2,097.0	4.6	4.6	72.39	15.9	50.1	52.7	43.5	9.15	5.754		
2,200.0	2,200.0	2,197.6	2,196.6	4.8	4.8	71.05	19.0	55.2	58.5	48.9	9.60	6.093		
2,300.0	2,300.0	2,297.4	2,296.2	5.1	5.0	69.94	22.0	60.3	64.3	54.3	10.04	6.405		
2,400.0	2,400.0	2,397.2	2,395.9	5.3	5.3	-114.63	25.1	65.4	70.5	60.1	10.45	6.747		
2,500.0	2,500.0	2,496.9	2,495.4	5.4	5.5	-117.12	28.1	70.5	77.6	66.8	10.84	7.160		
2,600.0	2,599.8	2,596.4	2,594.8	5.6	5.7	-120.24	31.2	75.6	85.8	74.5	11.23	7.634		
2,700.0	2,699.6	2,695.8	2,694.0	5.8	6.0	-123.72	34.2	80.6	95.1	83.5	11.63	8.179		
2,800.0	2,799.3	2,795.0	2,793.0	6.0	6.2	-127.34	37.2	85.7	105.8	93.8	12.03	8.802		
2,900.0	2,898.8	2,894.0	2,891.8	6.2	6.4	-130.94	40.3	90.7	118.1	105.7	12.43	9.507		
3,000.0	2,998.1	2,992.7	2,990.4	6.4	6.7	-134.39	43.3	95.8	132.1	119.3	12.83	10.294		
3,100.0	3,097.1	3,091.2	3,088.6	6.6	6.9	-137.64	46.3	100.8	147.8	134.6	13.24	11.164		
3,200.0	3,195.9	3,189.3	3,186.5	6.8	7.2	-140.64	49.3	105.8	165.3	151.6	13.64	12.114		
3,300.0	3,294.4	3,287.0	3,284.1	7.1	7.4	-143.37	52.3	110.8	184.6	170.6	14.05	13.138		
3,400.0	3,392.6	3,384.3	3,381.3	7.4	7.6	-145.85	55.3	115.7	205.8	191.3	14.46	14.233		
3,500.0	3,490.4	3,481.3	3,478.0	7.7	7.9	-148.08	58.2	120.7	228.8	213.9	14.86	15.393		
3,583.4	3,571.6	3,561.8	3,558.4	7.9	8.1	-149.78	60.7	124.8	249.4	234.2	15.20	16.408		
3,600.0	3,587.7	3,577.7	3,574.3	8.0	8.1	-150.11	61.2	125.6	253.6	238.4	15.27	16.606		
3,700.0	3,685.0	3,674.0	3,670.4	8.3	8.3	-151.94	64.1	130.5	279.3	263.6	15.72	17.763		
3,800.0	3,782.2	3,770.3	3,766.6	8.7	8.6	-153.46	67.1	135.4	305.2	289.0	16.18	18.864		
3,900.0	3,879.5	3,866.6	3,862.7	9.1	8.8	-154.74	70.0	140.3	331.3	314.6	16.64	19.910		
4,000.0	3,976.7	3,962.9	3,958.8	9.5	9.0	-155.84	73.0	145.3	357.4	340.3	17.10	20.904		
4,100.0	4,074.0	4,059.2	4,055.0	9.9	9.3	-156.78	75.9	150.2	383.7	366.2	17.57	21.847		
4,200.0	4,171.2	4,155.5	4,151.1	10.3	9.5	-157.61	78.9	155.1	410.1	392.1	18.03	22.743		
4,300.0	4,268.5	4,251.8	4,247.2	10.7	9.7	-158.33	81.8	160.0	436.6	418.1	18.50	23.594		
4,400.0	4,365.7	4,348.1	4,343.3	11.1	10.0	-158.97	84.8	164.9	463.1	444.1	18.98	24.403		
4,500.0	4,463.0	4,444.4	4,439.5	11.5	10.2	-159.55	87.7	169.8	489.6	470.2	19.45	25.172		
4,600.0	4,560.2	4,540.7	4,535.6	12.0	10.5	-160.06	90.7	174.7	516.2	496.3	19.93	25.904		
4,700.0	4,657.5	4,637.0	4,631.7	12.4	10.7	-160.53	93.6	179.6	542.9	522.5	20.41	26.600		
4,800.0	4,754.7	4,733.3	4,727.9	12.9	10.9	-160.95	96.6	184.6	569.5	548.6	20.89	27.264		
4,900.0	4,852.0	4,829.6	4,824.0	13.3	11.2	-161.33	99.5	189.5	596.2	574.9	21.37	27.898		
5,000.0	4,949.2	4,925.9	4,920.1	13.8	11.4	-161.68	102.5	194.4	622.9	601.1	21.86	28.502		

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 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	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	5,046.4	5,022.2	5,016.2	14.2	11.6	-162.00	105.4	199.3	649.7	627.3	22.34	29.079		
5,200.0	5,143.7	5,118.5	5,112.4	14.7	11.9	-162.30	108.4	204.2	676.4	653.6	22.83	29.631		
5,300.0	5,240.9	5,214.8	5,208.5	15.1	12.1	-162.57	111.3	209.1	703.2	679.9	23.32	30.159		
5,400.0	5,338.2	5,311.1	5,304.6	15.6	12.3	-162.82	114.3	214.0	730.0	706.2	23.80	30.664		
5,500.0	5,435.4	5,407.4	5,400.8	16.1	12.6	-163.06	117.2	218.9	756.8	732.5	24.30	31.148		
5,599.7	5,532.4	5,503.4	5,496.6	16.5	12.8	-163.28	120.1	223.8	783.5	758.7	24.78	31.611		
6,950.0	6,876.1	8,110.0	7,582.0	19.2	21.5	109.69	-688.4	258.6	765.3	726.5	38.82	19.712		
7,000.0	6,925.2	8,100.6	7,582.0	19.2	21.4	115.88	-679.0	258.6	720.2	682.4	37.82	19.046		
7,050.0	6,973.5	8,087.9	7,582.0	19.2	21.3	120.47	-666.3	258.5	676.4	639.6	36.85	18.356		
7,100.0	7,020.8	8,071.8	7,582.0	19.1	21.1	123.74	-650.2	258.4	634.1	598.2	35.95	17.641		
7,150.0	7,066.9	8,052.4	7,582.0	19.0	20.9	125.95	-630.8	258.4	593.7	558.6	35.10	16.912		
7,200.0	7,111.6	8,029.9	7,582.0	18.9	20.6	127.30	-608.3	258.3	555.3	521.0	34.32	16.178		
7,250.0	7,154.5	8,004.3	7,582.0	18.7	20.4	127.93	-582.7	258.2	519.3	485.7	33.61	15.452		
7,300.0	7,195.6	7,949.5	7,580.3	18.6	19.8	125.19	-527.9	257.9	485.4	452.0	33.40	14.532		
7,350.0	7,234.5	7,894.5	7,574.4	18.4	19.2	121.87	-473.3	257.7	452.5	419.2	33.33	13.577		
7,400.0	7,271.2	7,845.7	7,565.7	18.3	18.8	118.68	-425.2	257.6	421.2	387.9	33.29	12.652		
7,450.0	7,305.5	7,801.2	7,555.0	18.1	18.4	115.48	-382.1	257.4	392.1	358.8	33.31	11.769		
7,500.0	7,337.1	7,760.0	7,542.6	18.0	18.1	112.17	-342.8	257.2	365.6	332.2	33.41	10.944		
7,550.0	7,365.9	7,721.3	7,529.0	17.8	17.8	108.66	-306.6	257.1	342.4	308.8	33.56	10.202		
7,600.0	7,391.8	7,684.6	7,514.2	17.7	17.6	104.89	-273.0	257.0	323.0	289.3	33.76	9.570		
7,650.0	7,414.7	7,649.4	7,498.5	17.7	17.4	100.85	-241.5	256.9	308.1	274.1	33.96	9.073		
7,700.0	7,434.4	7,615.4	7,481.9	17.6	17.2	96.52	-211.8	256.8	298.0	263.9	34.12	8.733		
7,750.0	7,450.9	7,582.4	7,464.4	17.6	17.0	91.92	-183.9	256.6	293.0	258.8	34.19	8.569		
7,774.0	7,457.6	7,566.9	7,455.8	17.6	17.0	89.63	-171.0	256.6	292.4	258.2	34.18	8.555		
7,800.0	7,464.0	7,550.0	7,446.0	17.6	16.9	87.06	-157.2	256.5	293.1	259.0	34.11	8.592		
7,850.0	7,473.7	7,518.9	7,427.2	17.7	16.8	82.15	-132.4	256.5	297.9	264.1	33.86	8.798		
7,900.0	7,480.0	7,488.0	7,407.5	17.8	16.7	77.15	-108.6	256.4	307.0	273.6	33.42	9.187		
7,950.0	7,482.8	7,457.7	7,387.2	18.0	16.6	72.20	-86.1	256.3	319.6	286.8	32.80	9.743		
7,968.2	7,483.0	7,450.0	7,381.9	18.1	16.6	70.83	-80.5	256.3	325.0	292.3	32.62	9.961		
7,968.3	7,483.0	7,450.0	7,381.9	18.1	16.6	70.83	-80.5	256.3	325.0	292.4	32.62	9.961		
7,970.8	7,483.0	7,445.2	7,378.6	18.1	16.6	70.24	-77.1	256.2	325.7	293.2	32.52	10.018		
8,000.0	7,482.9	7,428.1	7,366.5	18.2	16.6	68.18	-65.0	256.2	335.3	303.1	32.17	10.422		
8,100.0	7,482.5	7,375.5	7,327.6	18.8	16.5	61.91	-29.6	256.1	377.0	345.8	31.20	12.081		
8,200.0	7,482.1	7,330.7	7,292.4	19.5	16.4	56.80	-1.8	256.0	430.7	400.2	30.43	14.153		
8,300.0	7,481.7	7,300.0	7,267.4	20.4	16.4	53.49	15.9	255.9	493.9	463.7	30.18	16.366		
8,400.0	7,481.3	7,250.0	7,225.1	21.4	16.3	48.47	42.5	255.8	564.3	535.0	29.30	19.258		
8,500.0	7,480.9	7,230.4	7,208.0	22.6	16.3	46.64	52.1	255.8	639.9	610.3	29.57	21.643		
8,600.0	7,480.5	7,200.0	7,181.0	23.8	16.3	43.95	66.0	255.7	719.8	690.3	29.50	24.405		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	89.57	5.1	674.9	675.0					
100.0	100.0	99.0	99.0	0.1	0.1	89.57	5.1	674.9	674.9	674.7	0.22	3,017.963		
200.0	200.0	199.0	199.0	0.3	0.3	89.57	5.1	674.9	674.9	674.3	0.67	1,004.314		
300.0	300.0	299.0	299.0	0.6	0.6	89.57	5.1	674.9	674.9	673.8	1.12	601.784		
400.0	400.0	399.0	399.0	0.8	0.8	89.57	5.1	674.9	674.9	673.4	1.57	429.599		
500.0	500.0	499.0	499.0	1.0	1.0	89.57	5.1	674.9	674.9	672.9	2.02	334.027		
600.0	600.0	599.0	599.0	1.2	1.2	89.57	5.1	674.9	674.9	672.5	2.47	273.239		
700.0	700.0	699.0	699.0	1.5	1.5	89.57	5.1	674.9	674.9	672.0	2.92	231.170		
800.0	800.0	799.0	799.0	1.7	1.7	89.57	5.1	674.9	674.9	671.6	3.37	200.327		
900.0	900.0	899.0	899.0	1.9	1.9	89.57	5.1	674.9	674.9	671.1	3.82	176.745		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.57	5.1	674.9	674.9	670.7	4.27	158.131		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.57	5.1	674.9	674.9	670.2	4.72	143.063		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.57	5.1	674.9	674.9	669.8	5.17	130.618		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.57	5.1	674.9	674.9	669.3	5.62	120.164		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.57	5.1	674.9	674.9	668.9	6.07	111.260		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.57	5.1	674.9	674.9	668.4	6.52	103.584		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	89.57	5.1	674.9	674.9	668.0	6.97	96.899		
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	89.57	5.1	674.9	674.9	667.5	7.42	91.025		
1,800.0	1,800.0	1,799.0	1,799.0	3.9	3.9	89.57	5.1	674.9	674.9	667.1	7.86	85.822		
1,900.0	1,900.0	1,899.0	1,899.0	4.2	4.2	89.57	5.1	674.9	674.9	666.6	8.31	81.181		
2,000.0	2,000.0	1,999.0	1,999.0	4.4	4.4	89.57	5.1	674.9	674.9	666.2	8.76	77.017		
2,100.0	2,100.0	2,099.0	2,099.0	4.6	4.6	89.57	5.1	674.9	674.9	665.7	9.21	73.259	CC, ES	
2,200.0	2,200.0	2,185.0	2,185.0	4.8	4.8	89.54	5.5	675.8	676.0	666.3	9.62	70.241		
2,300.0	2,300.0	2,270.8	2,270.8	5.1	5.0	89.45	6.6	678.5	679.1	669.1	10.03	67.718		
2,400.0	2,400.0	2,356.4	2,356.3	5.3	5.2	-93.75	8.4	682.9	684.3	673.9	10.40	65.786		
2,500.0	2,500.0	2,441.7	2,441.2	5.4	5.3	-94.07	10.9	689.1	691.8	681.1	10.75	64.350		
2,600.0	2,599.8	2,536.1	2,535.2	5.6	5.6	-94.59	14.3	697.4	701.1	690.0	11.12	63.027		
2,700.0	2,699.6	2,635.1	2,633.8	5.8	5.8	-95.27	17.9	706.3	710.8	699.3	11.51	61.739		
2,800.0	2,799.3	2,734.0	2,732.2	6.0	6.0	-96.07	21.6	715.2	720.8	708.9	11.91	60.520		
2,900.0	2,898.8	2,832.6	2,830.3	6.2	6.3	-96.99	25.2	724.0	731.2	718.9	12.32	59.365		
3,000.0	2,998.1	2,930.9	2,928.2	6.4	6.5	-98.00	28.8	732.8	742.1	729.3	12.74	58.269		
3,100.0	3,097.1	3,028.9	3,025.7	6.6	6.7	-99.11	32.4	741.6	753.5	740.3	13.17	57.229		
3,200.0	3,195.9	3,126.6	3,123.0	6.8	7.0	-100.30	36.0	750.4	765.6	752.0	13.61	56.242		
3,300.0	3,294.4	3,223.9	3,219.8	7.1	7.2	-101.57	39.5	759.1	778.5	764.4	14.08	55.308		
3,400.0	3,392.6	3,320.8	3,316.3	7.4	7.5	-102.90	43.1	767.8	792.3	777.7	14.56	54.426	SF	

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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 5-10H (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1377-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		
13,500.0	7,460.8	7,890.8	7,310.4	111.9	23.6	71.43	6,115.0	508.7	796.4	670.5	125.93	6.324		
13,600.0	7,460.4	7,961.6	7,312.4	113.8	25.1	69.85	6,164.0	457.6	725.7	598.1	127.58	5.688		
13,700.0	7,460.0	8,030.1	7,313.6	115.7	26.5	67.91	6,211.4	408.1	655.3	526.5	128.83	5.087		
13,800.0	7,459.6	8,107.2	7,314.8	117.6	28.2	65.15	6,263.9	351.7	584.7	455.3	129.33	4.521		
13,900.0	7,459.2	8,172.0	7,314.9	119.5	29.6	62.11	6,308.0	304.2	514.9	385.8	129.09	3.989		
14,000.0	7,458.7	8,240.4	7,314.3	121.4	31.2	57.93	6,354.3	253.9	446.4	319.2	127.29	3.507		
14,100.0	7,458.3	8,309.0	7,313.3	123.3	32.7	52.38	6,400.4	203.1	379.6	256.6	123.08	3.084		
14,200.0	7,457.9	8,380.3	7,313.6	125.2	34.4	44.98	6,448.5	150.5	315.6	200.4	115.19	2.740		
14,300.0	7,457.5	8,443.0	7,313.8	127.1	35.8	36.33	6,490.8	104.2	256.9	153.1	103.80	2.475		
14,400.0	7,457.1	8,515.3	7,313.5	129.1	37.5	23.10	6,539.4	50.6	208.7	124.5	84.19	2.479		
14,500.0	7,456.7	8,581.6	7,314.5	131.0	39.1	8.19	6,583.5	1.2	177.7	110.7	66.94	2.654		
14,555.2	7,456.5	8,617.3	7,314.8	132.0	39.9	-0.59	6,607.3	-25.4	172.7	108.3	64.41	2.682 CC		
14,600.0	7,456.3	8,647.8	7,315.0	132.9	40.6	-8.05	6,627.8	-48.0	175.9	107.5	68.40	2.572 ES		
14,700.0	7,455.9	8,716.7	7,315.4	134.8	42.3	-23.55	6,674.7	-98.5	202.9	112.5	90.32	2.246		
14,800.0	7,455.5	8,786.8	7,315.9	136.7	43.9	-36.34	6,723.0	-149.3	248.7	134.2	114.47	2.173 SF		
14,900.0	7,455.1	8,858.2	7,316.6	138.6	45.6	-46.16	6,772.6	-200.7	304.6	171.1	133.50	2.282		
15,000.0	7,454.7	8,931.0	7,317.3	140.5	47.3	-53.55	6,823.5	-252.6	365.7	218.2	147.48	2.479		
15,100.0	7,454.3	9,005.0	7,318.1	142.4	49.1	-59.15	6,875.9	-305.0	429.3	271.4	157.91	2.719		
15,200.0	7,453.9	9,080.5	7,319.1	144.3	50.9	-63.46	6,929.7	-357.8	494.3	328.2	166.04	2.977		
15,300.0	7,453.5	9,157.3	7,320.1	146.3	52.7	-66.86	6,985.1	-411.1	559.8	387.1	172.69	3.242		
15,400.0	7,453.1	9,240.4	7,320.7	148.2	54.7	-69.65	7,045.8	-467.8	625.3	446.7	178.56	3.502		
15,500.0	7,452.7	9,295.5	7,321.2	150.1	56.0	-71.19	7,085.9	-505.5	691.5	508.8	182.67	3.785		
15,600.0	7,452.3	9,365.3	7,323.5	152.0	57.7	-73.06	7,135.9	-554.3	759.1	571.9	187.23	4.054		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 230-1510H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 230-1510H	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							
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)			
8,200.0	7,482.1	7,861.9	7,288.9	19.5	23.3	68.94	814.5	490.1	795.5	759.2	36.31	21.911		
8,300.0	7,481.7	7,937.8	7,289.3	20.4	24.9	66.74	866.1	434.5	724.6	687.1	37.52	19.312		
8,400.0	7,481.3	8,014.1	7,291.6	21.4	26.5	64.28	918.3	378.9	654.2	615.4	38.74	16.887		
8,500.0	7,480.9	8,082.1	7,296.4	22.6	27.9	61.91	964.8	329.4	583.3	543.4	39.91	14.617		
8,600.0	7,480.5	8,134.0	7,299.8	23.8	29.1	59.70	1,000.4	291.9	513.7	472.7	40.95	12.545		
8,700.0	7,480.1	8,199.0	7,301.6	25.2	30.5	55.99	1,045.9	245.4	447.1	405.5	41.56	10.758		
8,800.0	7,479.7	8,269.5	7,301.0	26.6	32.1	50.33	1,094.2	194.1	382.4	341.2	41.17	9.288		
8,900.0	7,479.3	8,339.7	7,300.6	28.1	33.7	42.97	1,141.8	142.6	320.6	281.1	39.45	8.126		
9,000.0	7,478.9	8,401.0	7,300.7	29.6	35.1	35.00	1,184.7	98.8	265.9	229.2	36.71	7.243		
9,100.0	7,478.4	8,470.9	7,300.8	31.2	36.7	23.91	1,235.1	50.2	222.1	190.3	31.81	6.982		
9,200.0	7,478.0	8,542.0	7,301.1	32.8	38.4	9.99	1,285.3	-0.1	193.6	167.1	26.48	7.311		
9,268.1	7,477.8	8,591.4	7,301.2	33.9	39.5	-0.58	1,320.3	-35.0	187.6	161.9	25.72	7.295 CC, ES		
9,300.0	7,477.6	8,614.4	7,301.3	34.4	40.1	-5.50	1,336.7	-51.1	188.9	162.1	26.84	7.039		
9,400.0	7,477.2	8,684.6	7,301.5	36.1	41.7	-19.76	1,386.8	-100.1	209.2	174.5	34.67	6.033		
9,500.0	7,476.8	8,760.6	7,301.9	37.8	43.5	-32.75	1,441.6	-152.8	247.7	202.5	45.28	5.471 SF		
9,600.0	7,476.4	8,833.2	7,302.1	39.5	45.2	-42.36	1,494.7	-202.4	297.0	242.8	54.24	5.476		
9,700.0	7,476.0	8,905.7	7,302.3	41.2	46.9	-49.76	1,547.6	-251.9	352.8	291.2	61.62	5.725		
9,800.0	7,475.6	8,977.9	7,302.6	43.0	48.6	-55.45	1,600.2	-301.4	412.5	344.8	67.73	6.091		
9,900.0	7,475.2	9,049.9	7,302.8	44.7	50.3	-59.88	1,652.6	-350.8	474.8	401.8	72.95	6.509		
10,000.0	7,474.8	9,121.7	7,303.0	46.5	52.0	-63.39	1,704.8	-400.1	538.7	461.2	77.56	6.946		
10,100.0	7,474.4	9,193.3	7,303.3	48.3	53.7	-66.22	1,756.7	-449.4	603.9	522.1	81.76	7.386		
10,200.0	7,474.0	9,255.8	7,303.5	50.1	55.2	-68.28	1,802.0	-492.5	670.0	584.6	85.40	7.845		
10,300.0	7,473.6	9,291.7	7,303.8	51.9	56.1	-69.38	1,826.9	-518.4	739.3	651.2	88.18	8.384		

Reference Depths are relative to WELL @ 5240.0ft (Original Well Elev)	Coordinates are relative to: Critter Creek 230-1510H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000	Grid Convergence at Surface is: 0.70°



Reference Depths are relative to WELL @ 5240.0ft (Original Well Elev)	Coordinates are relative to: Critter Creek 230-1510H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000	Grid Convergence at Surface is: 0.70°

