

Fifth Creek Energy Company, LLC

Well Name: **Critter Creek 563-1527H**

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

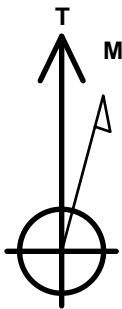
Ground Elevation: 5227.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1578367.85	3299755.76	40.915956	-104.415436	

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

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 279'FSL 1640'FEL, SEC.15	1.0	0.0	0.0	Point
BHL 300'FSL & 1460'FEL, SEC.27	7582.0	-10524.8	274.8	Point
LP 300'FNL & 1410'FEL, SEC.22	7582.0	-578.2	232.7	Point



Azimuths to True North
Magnetic North: 7.94°

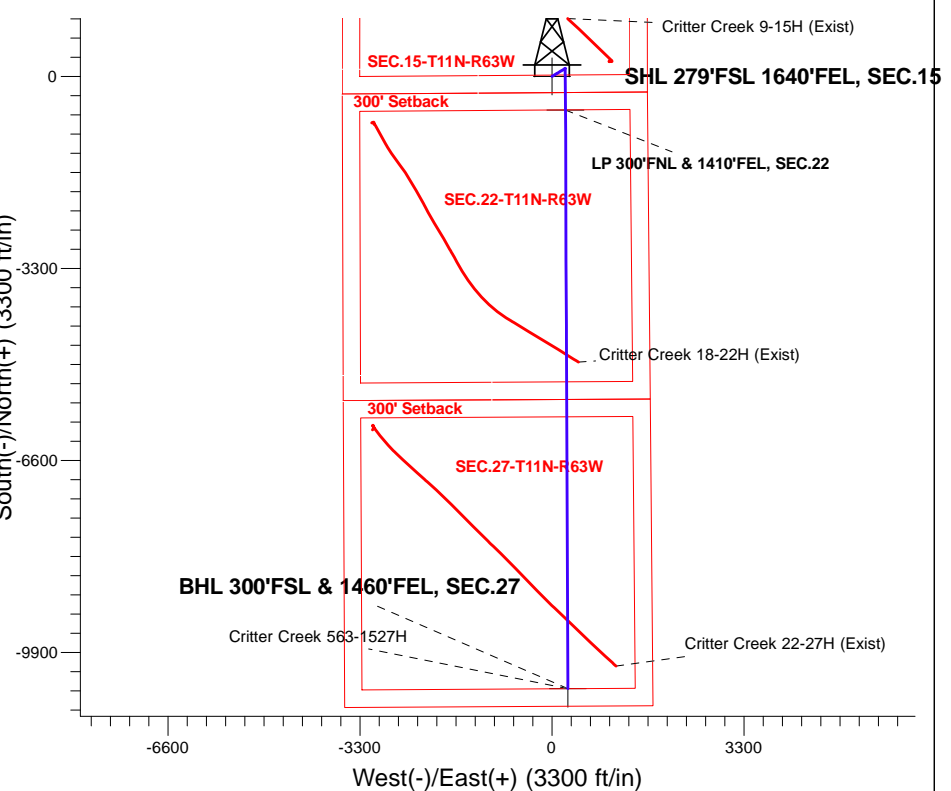
Magnetic Field
Strength: 52830.9snT
Dip Angle: 67.32°
Date: 2/21/2017
Model: IGRF2010

Critter Creek Pad 15-11N-63W
Critter Creek 563-1527H
Plan 1 (Feb 14, 2017)
15:22, February 21 2017

ANNOTATIONS

TVD	MD	Annotation
1500.0	1500.0	KOP - Start Build 1.50
6029.6	6037.4	Start Drop -2.00
6865.8	6873.7	Start Build 8.00
7582.0	7998.7	Start DLS 1.00 TFO -90.00
7582.0	8001.4	Start 9944.0 hold at 8001.4 MD
7582.0	17945.3	TD at 17945.3

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

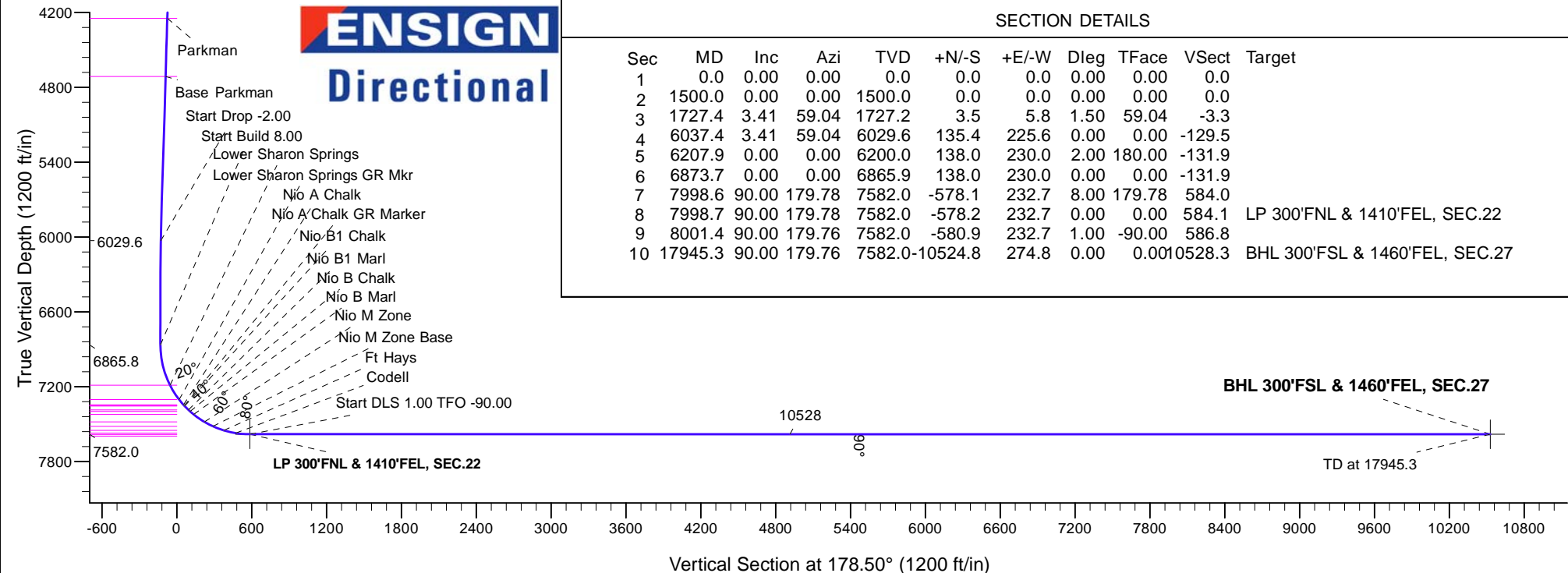


West(-)/East(+) (3300 ft/in)

ENSIGN
Directional

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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1727.4	3.41	59.04	1727.2	3.5	5.8	1.50	59.04	-3.3	
4	6037.4	3.41	59.04	6029.6	135.4	225.6	0.00	0.00	-129.5	
5	6207.9	0.00	0.00	6200.0	138.0	230.0	2.00	180.00	-131.9	
6	6873.7	0.00	0.00	6865.9	138.0	230.0	0.00	0.00	-131.9	
7	7998.6	90.00	179.78	7582.0	-578.1	232.7	8.00	179.78	584.0	
8	7998.7	90.00	179.78	7582.0	-578.2	232.7	0.00	0.00	584.1	LP 300'FNL & 1410'FEL, SEC.22
9	8001.4	90.00	179.76	7582.0	-580.9	232.7	1.00	-90.00	586.8	
10	17945.3	90.00	179.76	7582.0-10524.8	274.8	0.00	0.00	10528.3		BHL 300'FSL & 1460'FEL, SEC.27





Fifth Creek Energy Company, LLC

Sec.15-T11N-R63W

Critter Creek Pad 15-11N-63W

Critter Creek 563-1527H

Wellbore #1

Plan: Plan 1 (Feb 14, 2017)

Standard Planning Report

21 February, 2017

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

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

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

Well	Critter Creek 563-1527H					
Well Position	+N/-S	-4.7 ft	Northing:	1,578,367.85 usft	Latitude:	40.915956
	+E/-W	-724.7 ft	Easting:	3,299,755.76 usft	Longitude:	-104.415436
Position Uncertainty		0.0 ft	Wellhead Elevation:	5,239.0 ft	Ground Level:	5,227.0 ft

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

Design	Plan 1 (Feb 14, 2017)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	178.50

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,727.4	3.41	59.04	1,727.2	3.5	5.8	1.50	1.50	0.00	59.04	
6,037.4	3.41	59.04	6,029.6	135.4	225.6	0.00	0.00	0.00	0.00	
6,207.9	0.00	0.00	6,200.0	138.0	230.0	2.00	-2.00	0.00	180.00	
6,873.7	0.00	0.00	6,865.9	138.0	230.0	0.00	0.00	0.00	0.00	
7,998.6	90.00	179.78	7,582.0	-578.1	232.7	8.00	8.00	0.00	179.78	
7,998.7	90.00	179.78	7,582.0	-578.2	232.7	0.00	0.00	0.00	0.00	LP 300'FNL & 1410'FI
8,001.4	90.00	179.76	7,582.0	-580.9	232.7	1.00	0.00	-1.00	-90.00	
17,945.3	90.00	179.76	7,582.0	-10,524.8	274.8	0.00	0.00	0.00	0.00	BHL 300'FSL & 1460'FI

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Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.50									
1,600.0	1.50	59.04	1,600.0	0.7	1.1	-0.6	1.50	1.50	0.00
1,700.0	3.00	59.04	1,699.9	2.7	4.5	-2.6	1.50	1.50	0.00
1,727.4	3.41	59.04	1,727.2	3.5	5.8	-3.3	1.50	1.50	0.00
1,800.0	3.41	59.04	1,799.7	5.7	9.5	-5.5	0.00	0.00	0.00
1,900.0	3.41	59.04	1,899.6	8.8	14.6	-8.4	0.00	0.00	0.00
2,000.0	3.41	59.04	1,999.4	11.8	19.7	-11.3	0.00	0.00	0.00
2,100.0	3.41	59.04	2,099.2	14.9	24.8	-14.2	0.00	0.00	0.00
2,200.0	3.41	59.04	2,199.0	17.9	29.9	-17.2	0.00	0.00	0.00
2,300.0	3.41	59.04	2,298.9	21.0	35.0	-20.1	0.00	0.00	0.00
2,400.0	3.41	59.04	2,398.7	24.1	40.1	-23.0	0.00	0.00	0.00
2,500.0	3.41	59.04	2,498.5	27.1	45.2	-25.9	0.00	0.00	0.00
2,600.0	3.41	59.04	2,598.3	30.2	50.3	-28.9	0.00	0.00	0.00
2,700.0	3.41	59.04	2,698.1	33.2	55.4	-31.8	0.00	0.00	0.00
2,800.0	3.41	59.04	2,798.0	36.3	60.5	-34.7	0.00	0.00	0.00
2,900.0	3.41	59.04	2,897.8	39.4	65.6	-37.6	0.00	0.00	0.00
3,000.0	3.41	59.04	2,997.6	42.4	70.7	-40.6	0.00	0.00	0.00
3,100.0	3.41	59.04	3,097.4	45.5	75.8	-43.5	0.00	0.00	0.00
3,200.0	3.41	59.04	3,197.3	48.6	80.9	-46.4	0.00	0.00	0.00
3,300.0	3.41	59.04	3,297.1	51.6	86.0	-49.3	0.00	0.00	0.00
3,400.0	3.41	59.04	3,396.9	54.7	91.1	-52.3	0.00	0.00	0.00
3,500.0	3.41	59.04	3,496.7	57.7	96.2	-55.2	0.00	0.00	0.00
3,600.0	3.41	59.04	3,596.5	60.8	101.3	-58.1	0.00	0.00	0.00
3,700.0	3.41	59.04	3,696.4	63.9	106.4	-61.1	0.00	0.00	0.00
3,800.0	3.41	59.04	3,796.2	66.9	111.5	-64.0	0.00	0.00	0.00
3,900.0	3.41	59.04	3,896.0	70.0	116.6	-66.9	0.00	0.00	0.00
4,000.0	3.41	59.04	3,995.8	73.0	121.7	-69.8	0.00	0.00	0.00
4,100.0	3.41	59.04	4,095.7	76.1	126.8	-72.8	0.00	0.00	0.00
4,200.0	3.41	59.04	4,195.5	79.2	131.9	-75.7	0.00	0.00	0.00
4,251.6	3.41	59.04	4,247.0	80.7	134.6	-77.2	0.00	0.00	0.00
Parkman									
4,300.0	3.41	59.04	4,295.3	82.2	137.0	-78.6	0.00	0.00	0.00
4,400.0	3.41	59.04	4,395.1	85.3	142.1	-81.5	0.00	0.00	0.00
4,500.0	3.41	59.04	4,495.0	88.3	147.2	-84.5	0.00	0.00	0.00
4,600.0	3.41	59.04	4,594.8	91.4	152.3	-87.4	0.00	0.00	0.00
4,700.0	3.41	59.04	4,694.6	94.5	157.4	-90.3	0.00	0.00	0.00
4,719.4	3.41	59.04	4,714.0	95.1	158.4	-90.9	0.00	0.00	0.00

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Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Base Parkman									
4,800.0	3.41	59.04	4,794.4	97.5	162.5	-93.2	0.00	0.00	0.00
4,900.0	3.41	59.04	4,894.2	100.6	167.6	-96.2	0.00	0.00	0.00
5,000.0	3.41	59.04	4,994.1	103.6	172.7	-99.1	0.00	0.00	0.00
5,100.0	3.41	59.04	5,093.9	106.7	177.8	-102.0	0.00	0.00	0.00
5,200.0	3.41	59.04	5,193.7	109.8	182.9	-104.9	0.00	0.00	0.00
5,300.0	3.41	59.04	5,293.5	112.8	188.0	-107.9	0.00	0.00	0.00
5,400.0	3.41	59.04	5,393.4	115.9	193.1	-110.8	0.00	0.00	0.00
5,500.0	3.41	59.04	5,493.2	118.9	198.2	-113.7	0.00	0.00	0.00
5,600.0	3.41	59.04	5,593.0	122.0	203.3	-116.7	0.00	0.00	0.00
5,700.0	3.41	59.04	5,692.8	125.1	208.4	-119.6	0.00	0.00	0.00
5,800.0	3.41	59.04	5,792.7	128.1	213.5	-122.5	0.00	0.00	0.00
5,900.0	3.41	59.04	5,892.5	131.2	218.6	-125.4	0.00	0.00	0.00
6,000.0	3.41	59.04	5,992.3	134.2	223.7	-128.4	0.00	0.00	0.00
6,037.4	3.41	59.04	6,029.6	135.4	225.7	-129.5	0.00	0.00	0.00
Start Drop -2.00									
6,100.0	2.16	59.04	6,092.2	137.0	228.3	-130.9	2.00	-2.00	0.00
6,200.0	0.16	59.04	6,192.1	138.0	230.0	-131.9	2.00	-2.00	0.00
6,207.9	0.00	0.00	6,200.0	138.0	230.0	-131.9	2.00	-2.00	0.00
6,300.0	0.00	0.00	6,292.1	138.0	230.0	-131.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,392.1	138.0	230.0	-131.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,492.1	138.0	230.0	-131.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,592.1	138.0	230.0	-131.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,692.1	138.0	230.0	-131.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,792.1	138.0	230.0	-131.9	0.00	0.00	0.00
6,873.7	0.00	0.00	6,865.8	138.0	230.0	-131.9	0.00	0.00	0.00
Start Build 8.00									
6,900.0	2.10	179.78	6,892.1	137.5	230.0	-131.5	7.99	7.99	0.00
7,000.0	10.10	179.78	6,991.5	126.9	230.0	-120.8	8.00	8.00	0.00
7,100.0	18.10	179.78	7,088.4	102.6	230.1	-96.5	8.00	8.00	0.00
7,200.0	26.10	179.78	7,181.0	65.0	230.3	-58.9	8.00	8.00	0.00
7,209.0	26.82	179.78	7,189.0	61.0	230.3	-54.9	8.00	8.00	0.00
Lower Sharon Springs									
7,300.0	34.10	179.78	7,267.4	14.8	230.5	-8.8	8.00	8.00	0.00
7,345.2	37.72	179.78	7,304.0	-11.7	230.6	17.7	8.00	8.00	0.00
Lower Sharon Springs GR Mkr									
7,400.0	42.10	179.78	7,346.0	-46.8	230.7	52.8	8.00	8.00	0.00
Nio A Chalk									
7,409.5	42.86	179.78	7,353.0	-53.2	230.7	59.2	8.00	8.00	0.00
Nio A Chalk GR Marker									
7,412.2	43.08	179.78	7,355.0	-55.1	230.7	61.1	8.00	8.00	0.00
Nio B1 Chalk									
7,455.9	46.58	179.78	7,386.0	-85.9	230.8	91.9	8.00	8.00	0.00
Nio B1 Marl									
7,475.1	48.11	179.78	7,399.0	-100.0	230.9	106.0	8.00	8.00	0.00
Nio B Chalk									
7,500.0	50.11	179.78	7,415.3	-118.8	231.0	124.8	8.00	8.00	0.00
7,512.1	51.08	179.78	7,423.0	-128.2	231.0	134.2	8.00	8.00	0.00
Nio B Marl									
7,600.0	58.11	179.78	7,473.9	-199.8	231.3	205.7	8.00	8.00	0.00
7,617.6	59.51	179.78	7,483.0	-214.8	231.3	220.8	8.00	8.00	0.00
Nio M Zone									

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Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,693.6	65.59	179.78	7,518.0	-282.2	231.6	288.2	8.00	8.00	0.00
Nio M Zone Base									
7,700.0	66.11	179.78	7,520.6	-288.1	231.6	294.0	8.00	8.00	0.00
7,787.2	73.08	179.78	7,551.0	-369.7	231.9	375.6	8.00	8.00	0.00
Ft Hays									
7,800.0	74.11	179.78	7,554.6	-382.0	232.0	388.0	8.00	8.00	0.00
7,885.0	80.91	179.78	7,573.0	-464.9	232.3	470.9	8.00	8.00	0.00
Codell									
7,900.0	82.11	179.78	7,575.2	-479.8	232.3	485.7	8.00	8.00	0.00
7,998.6	90.00	179.78	7,582.0	-578.1	232.7	584.0	8.00	8.00	0.00
7,998.7	90.00	179.78	7,582.0	-578.2	232.7	584.1	0.00	0.00	0.00
Start DLS 1.00 TFO -90.00									
8,000.0	90.00	179.77	7,582.0	-579.5	232.7	585.4	1.00	0.00	-1.00
8,001.4	90.00	179.76	7,582.0	-580.9	232.7	586.8	0.99	0.00	-0.99
Start 9944.0 hold at 8001.4 MD									
8,100.0	90.00	179.76	7,582.0	-679.5	233.1	685.3	0.00	0.00	0.00
8,200.0	90.00	179.76	7,582.0	-779.5	233.6	785.3	0.00	0.00	0.00
8,300.0	90.00	179.76	7,582.0	-879.5	234.0	885.3	0.00	0.00	0.00
8,400.0	90.00	179.76	7,582.0	-979.5	234.4	985.3	0.00	0.00	0.00
8,500.0	90.00	179.76	7,582.0	-1,079.5	234.8	1,085.3	0.00	0.00	0.00
8,600.0	90.00	179.76	7,582.0	-1,179.5	235.2	1,185.2	0.00	0.00	0.00
8,700.0	90.00	179.76	7,582.0	-1,279.5	235.7	1,285.2	0.00	0.00	0.00
8,800.0	90.00	179.76	7,582.0	-1,379.5	236.1	1,385.2	0.00	0.00	0.00
8,900.0	90.00	179.76	7,582.0	-1,479.5	236.5	1,485.2	0.00	0.00	0.00
9,000.0	90.00	179.76	7,582.0	-1,579.5	236.9	1,585.1	0.00	0.00	0.00
9,100.0	90.00	179.76	7,582.0	-1,679.5	237.4	1,685.1	0.00	0.00	0.00
9,200.0	90.00	179.76	7,582.0	-1,779.5	237.8	1,785.1	0.00	0.00	0.00
9,300.0	90.00	179.76	7,582.0	-1,879.5	238.2	1,885.1	0.00	0.00	0.00
9,400.0	90.00	179.76	7,582.0	-1,979.5	238.6	1,985.0	0.00	0.00	0.00
9,500.0	90.00	179.76	7,582.0	-2,079.5	239.1	2,085.0	0.00	0.00	0.00
9,600.0	90.00	179.76	7,582.0	-2,179.5	239.5	2,185.0	0.00	0.00	0.00
9,700.0	90.00	179.76	7,582.0	-2,279.5	239.9	2,285.0	0.00	0.00	0.00
9,800.0	90.00	179.76	7,582.0	-2,379.5	240.3	2,384.9	0.00	0.00	0.00
9,900.0	90.00	179.76	7,582.0	-2,479.5	240.8	2,484.9	0.00	0.00	0.00
10,000.0	90.00	179.76	7,582.0	-2,579.5	241.2	2,584.9	0.00	0.00	0.00
10,100.0	90.00	179.76	7,582.0	-2,679.5	241.6	2,684.9	0.00	0.00	0.00
10,200.0	90.00	179.76	7,582.0	-2,779.5	242.0	2,784.8	0.00	0.00	0.00
10,300.0	90.00	179.76	7,582.0	-2,879.5	242.5	2,884.8	0.00	0.00	0.00
10,400.0	90.00	179.76	7,582.0	-2,979.5	242.9	2,984.8	0.00	0.00	0.00
10,500.0	90.00	179.76	7,582.0	-3,079.5	243.3	3,084.8	0.00	0.00	0.00
10,600.0	90.00	179.76	7,582.0	-3,179.5	243.7	3,184.7	0.00	0.00	0.00
10,700.0	90.00	179.76	7,582.0	-3,279.5	244.1	3,284.7	0.00	0.00	0.00
10,800.0	90.00	179.76	7,582.0	-3,379.5	244.6	3,384.7	0.00	0.00	0.00
10,900.0	90.00	179.76	7,582.0	-3,479.5	245.0	3,484.7	0.00	0.00	0.00
11,000.0	90.00	179.76	7,582.0	-3,579.5	245.4	3,584.7	0.00	0.00	0.00
11,100.0	90.00	179.76	7,582.0	-3,679.5	245.8	3,684.6	0.00	0.00	0.00
11,200.0	90.00	179.76	7,582.0	-3,779.5	246.3	3,784.6	0.00	0.00	0.00
11,300.0	90.00	179.76	7,582.0	-3,879.5	246.7	3,884.6	0.00	0.00	0.00
11,400.0	90.00	179.76	7,582.0	-3,979.5	247.1	3,984.6	0.00	0.00	0.00
11,500.0	90.00	179.76	7,582.0	-4,079.5	247.5	4,084.5	0.00	0.00	0.00
11,600.0	90.00	179.76	7,582.0	-4,179.5	248.0	4,184.5	0.00	0.00	0.00
11,700.0	90.00	179.76	7,582.0	-4,279.5	248.4	4,284.5	0.00	0.00	0.00
11,800.0	90.00	179.76	7,582.0	-4,379.5	248.8	4,384.5	0.00	0.00	0.00
11,900.0	90.00	179.76	7,582.0	-4,479.5	249.2	4,484.4	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,000.0	90.00	179.76	7,582.0	-4,579.5	249.7	4,584.4	0.00	0.00	0.00
12,100.0	90.00	179.76	7,582.0	-4,679.5	250.1	4,684.4	0.00	0.00	0.00
12,200.0	90.00	179.76	7,582.0	-4,779.5	250.5	4,784.4	0.00	0.00	0.00
12,300.0	90.00	179.76	7,582.0	-4,879.5	250.9	4,884.3	0.00	0.00	0.00
12,400.0	90.00	179.76	7,582.0	-4,979.5	251.3	4,984.3	0.00	0.00	0.00
12,500.0	90.00	179.76	7,582.0	-5,079.5	251.8	5,084.3	0.00	0.00	0.00
12,600.0	90.00	179.76	7,582.0	-5,179.5	252.2	5,184.3	0.00	0.00	0.00
12,700.0	90.00	179.76	7,582.0	-5,279.5	252.6	5,284.2	0.00	0.00	0.00
12,800.0	90.00	179.76	7,582.0	-5,379.4	253.0	5,384.2	0.00	0.00	0.00
12,900.0	90.00	179.76	7,582.0	-5,479.4	253.5	5,484.2	0.00	0.00	0.00
13,000.0	90.00	179.76	7,582.0	-5,579.4	253.9	5,584.2	0.00	0.00	0.00
13,100.0	90.00	179.76	7,582.0	-5,679.4	254.3	5,684.2	0.00	0.00	0.00
13,200.0	90.00	179.76	7,582.0	-5,779.4	254.7	5,784.1	0.00	0.00	0.00
13,300.0	90.00	179.76	7,582.0	-5,879.4	255.2	5,884.1	0.00	0.00	0.00
13,400.0	90.00	179.76	7,582.0	-5,979.4	255.6	5,984.1	0.00	0.00	0.00
13,500.0	90.00	179.76	7,582.0	-6,079.4	256.0	6,084.1	0.00	0.00	0.00
13,600.0	90.00	179.76	7,582.0	-6,179.4	256.4	6,184.0	0.00	0.00	0.00
13,700.0	90.00	179.76	7,582.0	-6,279.4	256.9	6,284.0	0.00	0.00	0.00
13,800.0	90.00	179.76	7,582.0	-6,379.4	257.3	6,384.0	0.00	0.00	0.00
13,900.0	90.00	179.76	7,582.0	-6,479.4	257.7	6,484.0	0.00	0.00	0.00
14,000.0	90.00	179.76	7,582.0	-6,579.4	258.1	6,583.9	0.00	0.00	0.00
14,100.0	90.00	179.76	7,582.0	-6,679.4	258.6	6,683.9	0.00	0.00	0.00
14,200.0	90.00	179.76	7,582.0	-6,779.4	259.0	6,783.9	0.00	0.00	0.00
14,300.0	90.00	179.76	7,582.0	-6,879.4	259.4	6,883.9	0.00	0.00	0.00
14,400.0	90.00	179.76	7,582.0	-6,979.4	259.8	6,983.8	0.00	0.00	0.00
14,500.0	90.00	179.76	7,582.0	-7,079.4	260.2	7,083.8	0.00	0.00	0.00
14,600.0	90.00	179.76	7,582.0	-7,179.4	260.7	7,183.8	0.00	0.00	0.00
14,700.0	90.00	179.76	7,582.0	-7,279.4	261.1	7,283.8	0.00	0.00	0.00
14,800.0	90.00	179.76	7,582.0	-7,379.4	261.5	7,383.7	0.00	0.00	0.00
14,900.0	90.00	179.76	7,582.0	-7,479.4	261.9	7,483.7	0.00	0.00	0.00
15,000.0	90.00	179.76	7,582.0	-7,579.4	262.4	7,583.7	0.00	0.00	0.00
15,100.0	90.00	179.76	7,582.0	-7,679.4	262.8	7,683.7	0.00	0.00	0.00
15,200.0	90.00	179.76	7,582.0	-7,779.4	263.2	7,783.6	0.00	0.00	0.00
15,300.0	90.00	179.76	7,582.0	-7,879.4	263.6	7,883.6	0.00	0.00	0.00
15,400.0	90.00	179.76	7,582.0	-7,979.4	264.1	7,983.6	0.00	0.00	0.00
15,500.0	90.00	179.76	7,582.0	-8,079.4	264.5	8,083.6	0.00	0.00	0.00
15,600.0	90.00	179.76	7,582.0	-8,179.4	264.9	8,183.6	0.00	0.00	0.00
15,700.0	90.00	179.76	7,582.0	-8,279.4	265.3	8,283.5	0.00	0.00	0.00
15,800.0	90.00	179.76	7,582.0	-8,379.4	265.8	8,383.5	0.00	0.00	0.00
15,900.0	90.00	179.76	7,582.0	-8,479.4	266.2	8,483.5	0.00	0.00	0.00
16,000.0	90.00	179.76	7,582.0	-8,579.4	266.6	8,583.5	0.00	0.00	0.00
16,100.0	90.00	179.76	7,582.0	-8,679.4	267.0	8,683.4	0.00	0.00	0.00
16,200.0	90.00	179.76	7,582.0	-8,779.4	267.4	8,783.4	0.00	0.00	0.00
16,300.0	90.00	179.76	7,582.0	-8,879.4	267.9	8,883.4	0.00	0.00	0.00
16,400.0	90.00	179.76	7,582.0	-8,979.4	268.3	8,983.4	0.00	0.00	0.00
16,500.0	90.00	179.76	7,582.0	-9,079.4	268.7	9,083.3	0.00	0.00	0.00
16,600.0	90.00	179.76	7,582.0	-9,179.4	269.1	9,183.3	0.00	0.00	0.00
16,700.0	90.00	179.76	7,582.0	-9,279.4	269.6	9,283.3	0.00	0.00	0.00
16,800.0	90.00	179.76	7,582.0	-9,379.4	270.0	9,383.3	0.00	0.00	0.00
16,900.0	90.00	179.76	7,582.0	-9,479.4	270.4	9,483.2	0.00	0.00	0.00
17,000.0	90.00	179.76	7,582.0	-9,579.4	270.8	9,583.2	0.00	0.00	0.00
17,100.0	90.00	179.76	7,582.0	-9,679.4	271.3	9,683.2	0.00	0.00	0.00
17,200.0	90.00	179.76	7,582.0	-9,779.4	271.7	9,783.2	0.00	0.00	0.00
17,300.0	90.00	179.76	7,582.0	-9,879.4	272.1	9,883.1	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
17,400.0	90.00	179.76	7,582.0	-9,979.4	272.5	9,983.1	0.00	0.00	0.00	
17,500.0	90.00	179.76	7,582.0	-10,079.4	273.0	10,083.1	0.00	0.00	0.00	
17,600.0	90.00	179.76	7,582.0	-10,179.4	273.4	10,183.1	0.00	0.00	0.00	
17,700.0	90.00	179.76	7,582.0	-10,279.4	273.8	10,283.0	0.00	0.00	0.00	
17,800.0	90.00	179.76	7,582.0	-10,379.4	274.2	10,383.0	0.00	0.00	0.00	
17,900.0	90.00	179.76	7,582.0	-10,479.4	274.7	10,483.0	0.00	0.00	0.00	
17,945.3	90.00	179.76	7,582.0	-10,524.7	274.8	10,528.3	0.00	0.00	0.00	
TD at 17945.3										

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 1640'FEL, - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,578,367.86	3,299,755.76	40.915956	-104.415436	
LP 300'FNL & 1410'FEL - plan hits target center - Point	0.00	0.00	7,582.0	-578.2	232.7	1,577,792.52	3,299,995.52	40.914369	-104.414594	
BHL 300'FSL & 1460'FE - plan hits target center - Point	0.00	0.00	7,582.0	-10,524.8	274.8	1,567,847.01	3,300,159.32	40.887069	-104.414442	

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		

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Project:	Sec.15-T11N-R63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site:	Critter Creek Pad 15-11N-63W	North Reference:	True
Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1 (Feb 14, 2017)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,251.6	4,247.0	Parkman		0.00		
4,719.4	4,714.0	Base Parkman		0.00		
7,209.0	7,189.0	Lower Sharon Springs		0.00		
7,345.2	7,304.0	Lower Sharon Springs GR Mkr		0.00		
7,400.0	7,346.0	Nio A Chalk		0.00		
7,409.5	7,353.0	Nio A Chalk GR Marker		0.00		
7,412.2	7,355.0	Nio B1 Chalk		0.00		
7,455.9	7,386.0	Nio B1 Marl		0.00		
7,475.1	7,399.0	Nio B Chalk		0.00		
7,512.1	7,423.0	Nio B Marl		0.00		
7,617.6	7,483.0	Nio M Zone		0.00		
7,693.6	7,518.0	Nio M Zone Base		0.00		
7,787.2	7,551.0	Ft Hays		0.00		
7,885.0	7,573.0	Codell		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,500.0	1,500.0	0.0	0.0	KOP - Start Build 1.50	
6,037.4	6,029.6	3.5	5.8	Start Drop -2.00	
6,873.7	6,865.9	135.4	225.6	Start Build 8.00	
7,998.7	7,582.0	138.0	230.0	Start DLS 1.00 TFO -90.00	
8,001.4	7,582.0	138.0	230.0	Start 9944.0 hold at 8001.4 MD	
17,945.3	7,582.0	-578.2	232.7	TD at 17945.3	



Fifth Creek Energy Company, LLC

**Sec.15-T11N-R63W
Crittter Creek Pad 15-11N-63W
Crittter Creek 563-1527H**

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

Anticollision Report

21 February, 2017

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date 2/21/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	17,945.3	Plan 1 (Feb 14, 2017) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Critter Creek Pad 15-11N-63W						
Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,500.0	25.5	18.9	3.905	CC, ES
Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,600.0	1,600.0	26.6	19.6	3.823	SF
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,571.7	7,767.6	358.0	323.9	10.496	CC, ES
Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,600.0	7,750.0	358.6	324.4	10.483	SF
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	1,874.0	1,836.8	720.7	712.7	90.738	CC
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	1,900.0	1,860.1	720.7	712.7	89.606	ES
Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13,	2,900.0	2,785.7	797.0	784.3	62.803	SF
Critter Creek 278-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,500.0	50.0	43.5	7.677	CC
Critter Creek 278-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,945.3	17,846.3	235.8	-105.1	0.692	Level 1, ES, SF
Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14,	6,851.6	6,846.7	459.5	429.1	15.103	CC
Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,945.3	17,845.2	480.4	86.9	1.221	Level 2, ES, SF
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	1,936.4	1,900.0	688.8	680.5	82.820	CC, ES
Critter Creek 280-1527H - Wellbore #1 - Plan 1 (Feb 14,2	3,300.0	3,193.1	796.7	782.4	55.921	SF
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	2,428.9	2,396.8	645.6	635.3	62.337	CC
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,700.0	7,728.3	656.7	621.1	18.442	ES
Critter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14,	7,850.0	7,635.5	666.9	630.1	18.152	SF
Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,836.6	1,834.9	16.5	8.5	2.071	CC, ES, SF
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,501.0	75.2	68.7	11.531	CC, ES
Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14,	1,700.0	1,700.9	79.8	72.4	10.785	SF
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,466.3	1,467.3	100.6	94.2	15.797	CC
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	1,500.0	1,500.0	100.6	94.1	15.436	ES
Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,945.3	17,972.9	759.6	351.5	1.861	SF
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	2,342.8	2,309.6	618.6	608.5	61.050	CC
Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14,	17,945.3	17,957.4	759.8	352.2	1.864	ES, SF
Existing Wells Sec.15 (Fifth Creek)						
Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1	12,189.5	12,338.5	306.0	232.5	4.165	CC, ES
Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1	12,600.0	12,570.3	460.6	340.8	3.845	SF
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	16,778.1	11,814.9	317.9	214.8	3.084	CC
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	16,900.0	11,897.8	330.1	213.3	2.827	ES
Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1	17,200.0	12,109.0	441.0	257.8	2.407	SF
Critter Creek 9-15H (Exist) - Wellbore #1 - Wellbore #1	7,050.0	7,518.6	705.1	673.0	21.944	SF
Critter Creek 9-15H (Exist) - Wellbore #1 - Wellbore #1	7,113.8	7,515.8	700.2	668.4	22.048	CC, ES

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-92.45	-1.1	-25.4	25.5					
100.0	100.0	100.0	100.0	0.1	0.1	-92.45	-1.1	-25.4	25.5	25.2	0.22	113.232		
200.0	200.0	200.0	200.0	0.3	0.3	-92.45	-1.1	-25.4	25.5	24.8	0.67	37.744		
300.0	300.0	300.0	300.0	0.6	0.6	-92.45	-1.1	-25.4	25.5	24.3	1.12	22.646		
400.0	400.0	400.0	400.0	0.8	0.8	-92.45	-1.1	-25.4	25.5	23.9	1.57	16.176		
500.0	500.0	500.0	500.0	1.0	1.0	-92.45	-1.1	-25.4	25.5	23.4	2.02	12.581		
600.0	600.0	600.0	600.0	1.2	1.2	-92.45	-1.1	-25.4	25.5	23.0	2.47	10.294		
700.0	700.0	700.0	700.0	1.5	1.5	-92.45	-1.1	-25.4	25.5	22.5	2.92	8.710		
800.0	800.0	800.0	800.0	1.7	1.7	-92.45	-1.1	-25.4	25.5	22.1	3.37	7.549		
900.0	900.0	900.0	900.0	1.9	1.9	-92.45	-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	-92.45	-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	-92.45	-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	-92.45	-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	-92.45	-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	-92.45	-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	-92.45	-1.1	-25.4	25.5	18.9	6.52	3.905 CC, ES		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-152.83	-1.1	-25.4	26.6	19.6	6.96	3.823 SF		
1,700.0	1,699.9	1,699.9	1,699.9	3.7	3.7	-156.21	-1.1	-25.4	30.2	22.8	7.39	4.079		
1,727.4	1,727.2	1,727.2	1,727.2	3.8	3.8	-157.32	-1.1	-25.4	31.6	24.0	7.51	4.202		
1,800.0	1,799.7	1,799.7	1,799.7	3.9	3.9	-160.01	-1.1	-25.4	35.6	27.8	7.83	4.546		
1,900.0	1,899.6	1,899.6	1,899.6	4.1	4.2	-162.83	-1.1	-25.4	41.2	33.0	8.27	4.987		
2,000.0	1,999.4	1,999.4	1,999.4	4.4	4.4	-164.98	-1.1	-25.4	46.9	38.2	8.71	5.392		
2,100.0	2,099.2	2,099.2	2,099.2	4.6	4.6	-166.65	-1.1	-25.4	52.7	43.6	9.15	5.763		
2,200.0	2,199.0	2,199.0	2,199.0	4.8	4.8	-168.00	-1.1	-25.4	58.5	48.9	9.59	6.102		
2,300.0	2,298.9	2,298.9	2,298.9	5.0	5.1	-169.10	-1.1	-25.4	64.4	54.3	10.03	6.414		
2,400.0	2,398.7	2,398.1	2,398.1	5.3	5.2	-170.67	-2.0	-25.5	70.6	60.1	10.45	6.754		
2,500.0	2,498.5	2,497.3	2,497.2	5.5	5.4	-173.18	-4.6	-25.6	77.6	66.8	10.84	7.165		
2,600.0	2,598.3	2,596.1	2,596.0	5.8	5.6	-176.32	-9.1	-25.9	85.7	74.5	11.23	7.635		
2,700.0	2,698.1	2,694.7	2,694.3	6.0	5.8	-179.81	-15.3	-26.2	95.0	83.4	11.63	8.172		
2,800.0	2,798.0	2,792.8	2,792.2	6.2	5.9	176.57	-23.3	-26.6	105.7	93.7	12.04	8.783		
2,900.0	2,897.8	2,890.6	2,889.4	6.5	6.1	172.96	-33.0	-27.1	117.9	105.5	12.45	9.471		
3,000.0	2,997.6	2,987.8	2,986.0	6.7	6.3	169.50	-44.3	-27.7	131.7	118.8	12.87	10.234		
3,100.0	3,097.4	3,084.5	3,081.8	6.9	6.5	166.25	-57.3	-28.4	147.2	133.9	13.30	11.071		
3,200.0	3,197.3	3,180.5	3,176.7	7.2	6.8	163.25	-71.9	-29.2	164.5	150.7	13.73	11.978		
3,300.0	3,297.1	3,276.0	3,270.8	7.4	7.0	160.50	-88.0	-30.0	183.5	169.3	14.17	12.948		
3,400.0	3,396.9	3,370.7	3,363.8	7.7	7.3	158.01	-105.6	-31.0	204.2	189.6	14.61	13.977		
3,500.0	3,496.7	3,464.6	3,455.8	7.9	7.5	155.76	-124.7	-32.0	226.7	211.7	15.06	15.059		
3,600.0	3,596.5	3,557.7	3,546.6	8.2	7.8	153.74	-145.2	-33.1	251.0	235.5	15.50	16.187		
3,700.0	3,696.4	3,653.0	3,639.3	8.4	8.2	151.90	-167.3	-34.2	276.5	260.6	15.96	17.327		
3,800.0	3,796.2	3,749.3	3,732.9	8.6	8.5	150.36	-189.7	-35.4	302.4	286.0	16.42	18.418		
3,900.0	3,896.0	3,845.6	3,826.6	8.9	8.9	149.05	-212.1	-36.6	328.5	311.6	16.88	19.456		
4,000.0	3,995.8	3,941.9	3,920.2	9.1	9.2	147.94	-234.5	-37.8	354.6	337.3	17.35	20.445		
4,100.0	4,095.7	4,038.2	4,013.9	9.4	9.6	146.98	-256.9	-39.0	380.9	363.1	17.81	21.386		
4,200.0	4,195.5	4,134.5	4,107.5	9.6	10.0	146.14	-279.4	-40.2	407.3	389.0	18.28	22.281		
4,300.0	4,295.3	4,230.8	4,201.2	9.9	10.4	145.41	-301.8	-41.4	433.7	415.0	18.75	23.133		
4,400.0	4,395.1	4,327.1	4,294.8	10.1	10.8	144.75	-324.2	-42.6	460.2	441.0	19.22	23.943		
4,500.0	4,495.0	4,423.4	4,388.5	10.4	11.2	144.17	-346.6	-43.7	486.8	467.1	19.70	24.716		
4,600.0	4,594.8	4,519.7	4,482.1	10.6	11.6	143.65	-369.0	-44.9	513.4	493.2	20.17	25.451		
4,700.0	4,694.6	4,616.0	4,575.8	10.8	12.1	143.19	-391.4	-46.1	540.0	519.4	20.65	26.153		
4,800.0	4,794.4	4,712.3	4,669.4	11.1	12.5	142.76	-413.8	-47.3	566.7	545.6	21.13	26.823		
4,900.0	4,894.2	4,808.6	4,763.0	11.3	12.9	142.37	-436.2	-48.5	593.4	571.8	21.61	27.462		
5,000.0	4,994.1	4,904.9	4,856.7	11.6	13.3	142.02	-458.6	-49.7	620.1	598.0	22.09	28.073		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 230-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,093.9	5,001.2	4,950.3	11.8	13.8	141.70	-481.0	-50.9	646.8	624.2	22.57	28.657		
5,200.0	5,193.7	5,097.5	5,044.0	12.1	14.2	141.40	-503.5	-52.1	673.6	650.5	23.05	29.216		
5,300.0	5,293.5	5,193.8	5,137.6	12.3	14.7	141.12	-525.9	-53.2	700.3	676.8	23.54	29.752		
5,400.0	5,393.4	5,290.1	5,231.3	12.6	15.1	140.87	-548.3	-54.4	727.1	703.1	24.02	30.264		
5,500.0	5,493.2	5,386.4	5,324.9	12.8	15.5	140.63	-570.7	-55.6	753.9	729.4	24.51	30.756		
5,600.0	5,593.0	5,482.7	5,418.6	13.1	16.0	140.41	-593.1	-56.8	780.7	755.7	25.00	31.228		
6,800.0	6,792.1	8,089.5	7,482.5	15.7	18.7	-89.35	141.3	-60.6	749.1	715.3	33.80	22.163		
6,873.7	6,865.9	8,089.2	7,482.5	15.8	18.7	-89.41	141.0	-60.6	681.7	647.7	33.95	20.078		
6,900.0	6,892.1	8,088.6	7,482.5	15.9	18.7	95.04	140.4	-60.6	658.0	624.0	34.02	19.341		
6,950.0	6,942.0	8,084.8	7,482.5	16.0	18.7	101.90	136.6	-60.6	613.7	579.7	34.06	18.017		
7,000.0	6,991.5	8,077.6	7,482.6	16.0	18.6	107.14	129.4	-60.6	570.7	536.6	34.02	16.777		
7,050.0	7,040.4	8,066.9	7,482.6	16.1	18.6	110.90	118.7	-60.7	529.3	495.4	33.90	15.611		
7,100.0	7,088.4	8,052.9	7,482.7	16.1	18.5	113.35	104.7	-60.7	489.9	456.2	33.74	14.519		
7,150.0	7,135.3	8,035.5	7,482.7	16.2	18.4	114.65	87.3	-60.7	453.1	419.6	33.56	13.503		
7,200.0	7,181.0	8,014.9	7,482.8	16.3	18.3	114.94	66.7	-60.7	419.3	385.9	33.36	12.567		
7,250.0	7,225.1	7,991.2	7,482.9	16.3	18.2	114.33	43.0	-60.8	388.9	355.7	33.21	11.711		
7,300.0	7,267.4	7,963.0	7,483.0	16.4	18.1	112.68	14.8	-60.8	362.4	329.3	33.15	10.931		
7,350.0	7,307.8	7,924.2	7,481.8	16.5	17.9	109.09	-24.0	-60.9	339.6	306.4	33.22	10.225		
7,400.0	7,346.0	7,887.4	7,478.8	16.5	17.8	105.25	-60.7	-61.0	320.8	287.4	33.36	9.615		
7,450.0	7,381.9	7,852.1	7,474.1	16.6	17.7	101.13	-95.7	-61.1	306.4	272.9	33.58	9.124		
7,500.0	7,415.3	7,818.0	7,467.9	16.8	17.7	96.72	-129.1	-61.2	297.0	263.2	33.85	8.774		
7,550.0	7,446.0	7,785.0	7,460.4	16.9	17.6	92.06	-161.3	-61.2	292.7	258.6	34.11	8.583		
7,566.9	7,455.8	7,774.0	7,457.6	17.0	17.6	90.43	-172.0	-61.3	292.4	258.2	34.18	8.555		
7,600.0	7,473.9	7,752.8	7,451.7	17.1	17.6	87.20	-192.3	-61.3	293.5	259.2	34.28	8.561		
7,650.0	7,498.8	7,721.3	7,441.8	17.4	17.6	82.20	-222.2	-61.4	299.0	264.7	34.33	8.710		
7,700.0	7,520.6	7,690.3	7,430.9	17.7	17.6	77.18	-251.2	-61.4	308.7	274.5	34.19	9.030		
7,750.0	7,539.3	7,659.9	7,418.9	18.0	17.6	72.22	-279.1	-61.5	321.8	288.0	33.83	9.514		
7,800.0	7,554.6	7,629.9	7,405.9	18.4	17.7	67.42	-306.2	-61.6	337.7	304.4	33.25	10.156		
7,850.0	7,566.6	7,600.0	7,391.8	18.8	17.7	62.82	-332.6	-61.6	355.6	323.1	32.47	10.952		
7,900.0	7,575.2	7,571.0	7,377.2	19.3	17.8	58.59	-357.6	-61.7	375.0	343.4	31.57	11.877		
7,950.0	7,580.3	7,542.0	7,361.5	19.8	17.9	54.66	-382.0	-61.7	395.3	364.7	30.58	12.926		
7,998.6	7,582.0	7,514.0	7,345.4	20.3	17.9	51.16	-404.9	-61.8	415.5	385.9	29.61	14.035		
7,998.7	7,582.0	7,514.0	7,345.4	20.3	17.9	51.16	-405.0	-61.8	415.6	386.0	29.61	14.036		
8,001.4	7,582.0	7,512.4	7,344.5	20.3	17.9	51.05	-406.2	-61.8	416.7	387.1	29.59	14.083		
8,100.0	7,582.0	7,459.2	7,311.5	21.4	18.1	47.39	-447.9	-61.9	462.4	433.4	29.03	15.927		
8,200.0	7,582.0	7,411.4	7,279.3	22.6	18.2	44.18	-483.2	-61.9	516.5	487.8	28.66	18.018		
8,300.0	7,582.0	7,369.0	7,248.8	24.0	18.4	41.47	-512.6	-62.0	577.3	548.8	28.45	20.292		
8,400.0	7,582.0	7,331.6	7,220.4	25.4	18.5	39.17	-537.1	-62.1	643.7	615.3	28.38	22.681		
8,500.0	7,582.0	7,300.0	7,195.6	26.9	18.6	37.33	-556.6	-62.1	714.8	686.3	28.50	25.083		
8,600.0	7,582.0	7,268.8	7,170.2	28.4	18.7	35.60	-574.7	-62.2	789.8	761.2	28.64	27.581		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.63	4.0	624.1	624.1					
100.0	100.0	99.0	99.0	0.1	0.1	89.63	4.0	624.1	624.1	623.9	0.22	2,790.543		
200.0	200.0	199.0	199.0	0.3	0.3	89.63	4.0	624.1	624.1	623.4	0.67	928.634		
300.0	300.0	299.0	299.0	0.6	0.6	89.63	4.0	624.1	624.1	623.0	1.12	556.436		
400.0	400.0	399.0	399.0	0.8	0.8	89.63	4.0	624.1	624.1	622.5	1.57	397.227		
500.0	500.0	499.0	499.0	1.0	1.0	89.63	4.0	624.1	624.1	622.1	2.02	308.856		
600.0	600.0	599.0	599.0	1.2	1.2	89.63	4.0	624.1	624.1	621.6	2.47	252.649		
700.0	700.0	699.0	699.0	1.5	1.5	89.63	4.0	624.1	624.1	621.2	2.92	213.750		
800.0	800.0	799.0	799.0	1.7	1.7	89.63	4.0	624.1	624.1	620.7	3.37	185.231		
900.0	900.0	899.0	899.0	1.9	1.9	89.63	4.0	624.1	624.1	620.3	3.82	163.426		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.63	4.0	624.1	624.1	619.8	4.27	146.215		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.63	4.0	624.1	624.1	619.4	4.72	132.283		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.63	4.0	624.1	624.1	618.9	5.17	120.775		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.63	4.0	624.1	624.1	618.5	5.62	111.109		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.63	4.0	624.1	624.1	618.0	6.07	102.876		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.63	4.0	624.1	624.1	617.6	6.52	95.778		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	30.67	4.0	624.1	623.0	616.0	6.96	89.537		
1,700.0	1,699.9	1,698.9	1,698.9	3.7	3.7	30.88	4.0	624.1	619.6	612.2	7.39	83.831		
1,727.4	1,727.2	1,726.2	1,726.2	3.8	3.8	30.96	4.0	624.1	618.3	610.8	7.51	82.336		
1,800.0	1,799.7	1,798.7	1,798.7	3.9	3.9	31.17	4.0	624.1	614.6	606.7	7.83	78.520		
1,900.0	1,899.6	1,898.6	1,898.6	4.1	4.2	31.46	4.0	624.1	609.5	601.2	8.27	73.732		
2,000.0	1,999.4	1,998.4	1,998.4	4.4	4.4	31.75	4.0	624.1	604.4	595.7	8.71	69.414		
2,100.0	2,099.2	2,098.2	2,098.2	4.6	4.6	32.05	4.0	624.1	599.4	590.2	9.15	65.503		
2,200.0	2,199.0	2,198.0	2,198.0	4.8	4.8	32.35	4.0	624.1	594.3	584.7	9.59	61.944		
2,300.0	2,298.9	2,297.9	2,297.9	5.0	5.1	32.66	4.0	624.1	589.3	579.3	10.04	58.695		
2,400.0	2,398.7	2,397.9	2,397.9	5.3	5.2	33.10	2.8	624.0	584.3	573.8	10.46	55.868		
2,500.0	2,498.5	2,497.7	2,497.6	5.5	5.4	33.80	-1.1	623.8	579.3	568.4	10.85	53.387		
2,600.0	2,598.3	2,597.0	2,596.7	5.8	5.6	34.77	-7.5	623.5	574.4	563.2	11.25	51.066		
2,700.0	2,698.1	2,695.7	2,695.0	6.0	5.8	36.01	-16.4	623.0	569.8	558.1	11.65	48.890		
2,800.0	2,798.0	2,793.8	2,792.4	6.2	6.0	37.51	-27.8	622.4	565.6	553.5	12.07	46.851		
2,900.0	2,897.8	2,891.0	2,888.6	6.5	6.2	39.26	-41.6	621.7	562.0	549.5	12.51	44.943		
3,000.0	2,997.6	2,987.3	2,983.6	6.7	6.4	41.26	-57.6	620.9	559.4	546.4	12.96	43.169		
3,100.0	3,097.4	3,082.5	3,077.1	6.9	6.6	43.50	-75.8	620.0	557.8	544.4	13.43	41.533		
3,155.3	3,152.7	3,134.8	3,128.2	7.1	6.8	44.82	-86.7	619.4	557.6	543.9	13.70	40.686		
3,200.0	3,197.3	3,176.7	3,169.0	7.2	6.9	45.94	-96.0	618.9	557.8	543.8	13.93	40.043		
3,300.0	3,297.1	3,272.1	3,261.8	7.4	7.2	48.57	-118.2	617.8	559.3	544.8	14.45	38.695		
3,400.0	3,396.9	3,368.4	3,355.4	7.7	7.5	51.22	-140.8	616.6	562.1	547.1	15.00	37.481		
3,500.0	3,496.7	3,464.7	3,449.0	7.9	7.8	53.84	-163.3	615.5	566.2	550.7	15.55	36.409		
3,600.0	3,596.5	3,560.9	3,542.6	8.2	8.2	56.42	-185.8	614.3	571.6	555.5	16.11	35.474		
3,700.0	3,696.4	3,657.2	3,636.2	8.4	8.5	58.95	-208.3	613.1	578.2	561.5	16.68	34.668		
3,800.0	3,796.2	3,753.5	3,729.8	8.6	8.9	61.42	-230.8	612.0	586.0	568.7	17.24	33.982		
3,900.0	3,896.0	3,849.8	3,823.4	8.9	9.3	63.82	-253.3	610.8	594.9	577.1	17.81	33.406		
4,000.0	3,995.8	3,946.0	3,917.0	9.1	9.7	66.16	-275.8	609.7	604.9	586.5	18.37	32.932		
4,100.0	4,095.7	4,042.3	4,010.6	9.4	10.1	68.42	-298.3	608.5	615.9	596.9	18.92	32.549		
4,200.0	4,195.5	4,138.6	4,104.2	9.6	10.5	70.60	-320.8	607.4	627.8	608.4	19.47	32.247		
4,300.0	4,295.3	4,234.8	4,197.8	9.9	10.9	72.71	-343.3	606.2	640.7	620.7	20.01	32.020		
4,400.0	4,395.1	4,331.1	4,291.4	10.1	11.3	74.73	-365.9	605.0	654.5	634.0	20.54	31.857		
4,500.0	4,495.0	4,427.4	4,385.0	10.4	11.8	76.67	-388.4	603.9	669.1	648.0	21.07	31.752		
4,600.0	4,594.8	4,523.7	4,478.6	10.6	12.2	78.53	-410.9	602.7	684.4	662.8	21.59	31.698		
4,700.0	4,694.6	4,619.9	4,572.2	10.8	12.6	80.31	-433.4	601.6	700.4	678.3	22.10	31.689		
4,800.0	4,794.4	4,716.2	4,665.8	11.1	13.1	82.01	-455.9	600.4	717.1	694.5	22.61	31.718		
4,900.0	4,894.2	4,812.5	4,759.3	11.3	13.5	83.64	-478.4	599.2	734.5	711.4	23.11	31.781		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 231-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,000.0	4,994.1	4,908.7	4,852.9	11.6	13.9	85.20	-500.9	598.1	752.4	728.8	23.60	31.874		
5,100.0	5,093.9	5,005.0	4,946.5	11.8	14.4	86.68	-523.4	596.9	770.8	746.7	24.09	31.991		
5,200.0	5,193.7	5,101.3	5,040.1	12.1	14.8	88.10	-545.9	595.8	789.7	765.1	24.58	32.130		
6,800.0	6,792.1	8,086.5	7,482.5	15.7	18.5	89.65	140.2	589.8	779.4	745.8	33.64	23.171		
6,873.7	6,865.9	8,086.2	7,482.5	15.8	18.5	89.70	139.9	589.8	714.8	681.0	33.79	21.152		
6,900.0	6,892.1	8,085.6	7,482.5	15.9	18.5	-93.52	139.3	589.8	692.2	658.5	33.79	20.484		
6,950.0	6,942.0	8,081.8	7,482.6	16.0	18.5	-99.13	135.5	589.8	650.2	616.4	33.75	19.267		
7,000.0	6,991.5	8,074.6	7,482.6	16.0	18.5	-103.50	128.3	589.7	609.6	575.9	33.66	18.110		
7,050.0	7,040.4	8,063.9	7,482.6	16.1	18.4	-106.69	117.6	589.7	570.8	537.3	33.55	17.016		
7,100.0	7,088.4	8,049.8	7,482.7	16.1	18.3	-108.81	103.5	589.7	534.4	501.0	33.42	15.990		
7,150.0	7,135.3	8,032.5	7,482.8	16.2	18.2	-109.96	86.2	589.7	500.6	467.3	33.29	15.040		
7,200.0	7,181.0	8,011.9	7,482.8	16.3	18.1	-110.25	65.6	589.6	470.0	436.8	33.16	14.174		
7,250.0	7,225.1	7,988.2	7,482.9	16.3	18.0	-109.76	41.9	589.6	442.8	409.7	33.08	13.386		
7,300.0	7,267.4	7,957.3	7,482.9	16.4	17.9	-108.07	11.0	589.5	419.3	386.3	33.08	12.675		
7,350.0	7,307.8	7,919.1	7,481.4	16.5	17.8	-105.09	-27.2	589.5	399.3	366.1	33.17	12.038		
7,400.0	7,346.0	7,882.7	7,478.0	16.5	17.7	-101.95	-63.4	589.4	382.9	349.6	33.32	11.493		
7,450.0	7,381.9	7,847.9	7,473.0	16.6	17.6	-98.59	-97.9	589.3	370.5	337.0	33.52	11.054		
7,500.0	7,415.3	7,814.2	7,466.7	16.8	17.6	-95.03	-130.9	589.3	362.3	328.5	33.76	10.731		
7,550.0	7,446.0	7,781.5	7,459.0	16.9	17.5	-91.27	-162.7	589.2	358.4	324.4	34.00	10.539		
7,571.7	7,458.4	7,767.6	7,455.3	17.0	17.5	-89.58	-176.1	589.2	358.0	323.9	34.11	10.496 CC, ES		
7,600.0	7,473.9	7,750.0	7,450.2	17.1	17.5	-87.38	-193.0	589.1	358.6	324.4	34.21	10.483 SF		
7,650.0	7,498.8	7,718.4	7,440.1	17.4	17.5	-83.28	-222.9	589.1	362.8	328.5	34.35	10.562		
7,700.0	7,520.6	7,687.7	7,429.1	17.7	17.5	-79.15	-251.5	589.0	370.5	336.1	34.39	10.775		
7,750.0	7,539.3	7,657.6	7,417.0	18.0	17.6	-75.01	-279.2	588.9	381.2	346.9	34.29	11.116		
7,800.0	7,554.6	7,627.8	7,403.9	18.4	17.6	-70.93	-305.9	588.9	394.5	360.4	34.07	11.577		
7,850.0	7,566.6	7,600.0	7,390.8	18.8	17.7	-67.11	-330.4	588.8	409.7	375.9	33.75	12.138		
7,900.0	7,575.2	7,569.3	7,375.1	19.3	17.7	-63.17	-356.8	588.8	426.4	393.1	33.28	12.811		
7,950.0	7,580.3	7,540.4	7,359.4	19.8	17.8	-59.59	-381.0	588.7	444.2	411.4	32.78	13.551		
7,998.6	7,582.0	7,512.6	7,343.3	20.3	17.9	-56.32	-403.7	588.7	462.2	429.9	32.27	14.321		
7,998.7	7,582.0	7,512.6	7,343.3	20.3	17.9	-56.32	-403.7	588.7	462.2	430.0	32.27	14.322		
8,001.4	7,582.0	7,511.1	7,342.4	20.3	17.9	-56.22	-405.0	588.7	463.2	431.0	32.27	14.355		
8,100.0	7,582.0	7,450.0	7,304.0	21.4	18.1	-52.15	-452.4	588.6	504.6	472.7	31.88	15.827		
8,200.0	7,582.0	7,410.7	7,277.2	22.6	18.2	-49.54	-481.2	588.5	554.3	522.3	31.99	17.326		
8,300.0	7,582.0	7,368.6	7,246.9	24.0	18.3	-46.82	-510.3	588.5	611.2	579.2	32.01	19.099		
8,400.0	7,582.0	7,331.4	7,218.6	25.4	18.4	-44.48	-534.5	588.4	674.3	642.2	32.12	20.996		
8,500.0	7,582.0	7,300.0	7,193.8	26.9	18.5	-42.58	-553.8	588.4	742.5	710.1	32.37	22.938		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 232-1510H - Wellbore #1 - Plan 1 (Feb 13, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.62	4.8	724.7	724.7					
100.0	100.0	99.0	99.0	0.1	0.1	89.62	4.8	724.7	724.7	724.5	0.22	3,240.394		
200.0	200.0	199.0	199.0	0.3	0.3	89.62	4.8	724.7	724.7	724.0	0.67	1,078.335		
300.0	300.0	299.0	299.0	0.6	0.6	89.62	4.8	724.7	724.7	723.6	1.12	646.137		
400.0	400.0	399.0	399.0	0.8	0.8	89.62	4.8	724.7	724.7	723.1	1.57	461.262		
500.0	500.0	499.0	499.0	1.0	1.0	89.62	4.8	724.7	724.7	722.7	2.02	358.645		
600.0	600.0	599.0	599.0	1.2	1.2	89.62	4.8	724.7	724.7	722.2	2.47	293.378		
700.0	700.0	699.0	699.0	1.5	1.5	89.62	4.8	724.7	724.7	721.8	2.92	248.208		
800.0	800.0	799.0	799.0	1.7	1.7	89.62	4.8	724.7	724.7	721.3	3.37	215.091		
900.0	900.0	899.0	899.0	1.9	1.9	89.62	4.8	724.7	724.7	720.9	3.82	189.772		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.62	4.8	724.7	724.7	720.4	4.27	169.785		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.62	4.8	724.7	724.7	720.0	4.72	153.607		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.62	4.8	724.7	724.7	719.5	5.17	140.245		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.62	4.8	724.7	724.7	719.1	5.62	129.020		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.62	4.8	724.7	724.7	718.6	6.07	119.460		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.62	4.8	724.7	724.7	718.2	6.52	111.218		
1,600.0	1,600.0	1,589.7	1,589.7	3.5	3.4	30.71	3.9	725.3	724.2	717.3	6.91	104.768		
1,700.0	1,699.9	1,680.1	1,680.0	3.7	3.6	31.07	1.2	727.0	722.8	715.5	7.28	99.254		
1,727.4	1,727.2	1,704.8	1,704.7	3.8	3.6	31.22	0.2	727.7	722.2	714.9	7.38	97.829		
1,800.0	1,799.7	1,770.2	1,770.0	3.9	3.8	31.65	-3.2	730.0	721.1	713.4	7.66	94.167		
1,874.0	1,873.6	1,836.8	1,836.4	4.1	3.9	32.16	-7.6	732.9	720.7	712.7	7.94	90.738 CC		
1,900.0	1,899.6	1,860.1	1,859.5	4.1	3.9	32.35	-9.4	734.1	720.7	712.7	8.04	89.606 ES		
2,000.0	1,999.4	1,949.5	1,948.5	4.4	4.1	33.20	-17.3	739.3	721.9	713.4	8.44	85.534		
2,100.0	2,099.2	2,038.5	2,036.7	4.6	4.3	34.16	-26.8	745.6	724.6	715.8	8.85	81.896		
2,200.0	2,199.0	2,126.9	2,124.1	4.8	4.5	35.24	-38.0	753.0	729.1	719.8	9.27	78.649		
2,300.0	2,298.9	2,214.7	2,210.5	5.0	4.8	36.42	-50.8	761.5	735.2	725.5	9.71	75.759		
2,400.0	2,398.7	2,300.0	2,294.2	5.3	5.0	37.65	-64.8	770.8	743.3	733.2	10.15	73.236		
2,500.0	2,498.5	2,395.6	2,387.5	5.5	5.4	39.11	-81.9	782.1	753.0	742.4	10.64	70.772		
2,600.0	2,598.3	2,493.1	2,482.8	5.8	5.7	40.57	-99.4	793.7	763.3	752.1	11.14	68.489		
2,700.0	2,698.1	2,590.7	2,578.0	6.0	6.1	41.98	-116.9	805.4	774.1	762.4	11.66	66.409		
2,800.0	2,798.0	2,688.2	2,673.2	6.2	6.4	43.36	-134.5	817.0	785.3	773.1	12.17	64.518		
2,900.0	2,897.8	2,785.7	2,768.5	6.5	6.8	44.70	-152.0	828.6	797.0	784.3	12.69	62.803 SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 278-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-91.26	-1.1	-50.0	50.0					
100.0	100.0	100.0	100.0	0.1	0.1	-91.26	-1.1	-50.0	50.0	49.8	0.22	222.621		
200.0	200.0	200.0	200.0	0.3	0.3	-91.26	-1.1	-50.0	50.0	49.4	0.67	74.207		
300.0	300.0	300.0	300.0	0.6	0.6	-91.26	-1.1	-50.0	50.0	48.9	1.12	44.524		
400.0	400.0	400.0	400.0	0.8	0.8	-91.26	-1.1	-50.0	50.0	48.5	1.57	31.803		
500.0	500.0	500.0	500.0	1.0	1.0	-91.26	-1.1	-50.0	50.0	48.0	2.02	24.736		
600.0	600.0	600.0	600.0	1.2	1.2	-91.26	-1.1	-50.0	50.0	47.6	2.47	20.238		
700.0	700.0	700.0	700.0	1.5	1.5	-91.26	-1.1	-50.0	50.0	47.1	2.92	17.125		
800.0	800.0	800.0	800.0	1.7	1.7	-91.26	-1.1	-50.0	50.0	46.7	3.37	14.841		
900.0	900.0	900.0	900.0	1.9	1.9	-91.26	-1.1	-50.0	50.0	46.2	3.82	13.095		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-91.26	-1.1	-50.0	50.0	45.8	4.27	11.717		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-91.26	-1.1	-50.0	50.0	45.3	4.72	10.601		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-91.26	-1.1	-50.0	50.0	44.9	5.17	9.679		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-91.26	-1.1	-50.0	50.0	44.4	5.62	8.905		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-91.26	-1.1	-50.0	50.0	44.0	6.07	8.245		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-91.26	-1.1	-50.0	50.0	43.5	6.52	7.677 CC		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-151.01	-1.1	-50.0	51.2	44.2	6.96	7.353		
1,700.0	1,699.9	1,699.9	1,699.9	3.7	3.7	-152.98	-1.1	-50.0	54.6	47.3	7.39	7.392		
1,727.4	1,727.2	1,727.2	1,727.2	3.8	3.8	-153.68	-1.1	-50.0	56.0	48.5	7.51	7.457		
1,800.0	1,799.7	1,799.7	1,799.7	3.9	3.9	-155.51	-1.1	-50.0	59.9	52.1	7.83	7.654		
1,900.0	1,899.6	1,899.6	1,899.6	4.1	4.2	-157.68	-1.1	-50.0	65.4	57.1	8.27	7.909		
2,000.0	1,999.4	1,999.4	1,999.4	4.4	4.4	-159.50	-1.1	-50.0	70.9	62.2	8.71	8.145		
2,100.0	2,099.2	2,099.2	2,099.2	4.6	4.6	-161.06	-1.1	-50.0	76.5	67.4	9.15	8.365		
2,200.0	2,199.0	2,199.0	2,199.0	4.8	4.8	-162.41	-1.1	-50.0	82.2	72.6	9.59	8.568		
2,300.0	2,298.9	2,298.9	2,298.9	5.0	5.1	-163.58	-1.1	-50.0	87.9	77.8	10.03	8.756		
2,400.0	2,398.7	2,400.5	2,400.5	5.3	5.3	-164.08	0.0	-49.3	92.6	82.1	10.48	8.839		
2,500.0	2,498.5	2,502.3	2,502.2	5.5	5.5	-163.44	3.4	-47.2	95.4	84.5	10.92	8.737		
2,600.0	2,598.3	2,602.4	2,602.2	5.8	5.7	-162.19	8.1	-44.2	97.1	85.7	11.36	8.545		
2,700.0	2,698.1	2,702.4	2,702.0	6.0	6.0	-160.98	12.8	-41.2	98.8	87.0	11.81	8.369		
2,800.0	2,798.0	2,802.4	2,801.8	6.2	6.2	-159.82	17.5	-38.2	100.6	88.3	12.25	8.207		
2,900.0	2,897.8	2,902.3	2,901.6	6.5	6.4	-158.69	22.2	-35.2	102.4	89.7	12.70	8.059		
3,000.0	2,997.6	3,002.3	3,001.4	6.7	6.6	-157.60	26.9	-32.3	104.2	91.1	13.15	7.922		
3,100.0	3,097.4	3,102.3	3,101.2	6.9	6.9	-156.56	31.6	-29.3	106.1	92.5	13.61	7.796		
3,200.0	3,197.3	3,202.2	3,201.0	7.2	7.1	-155.54	36.3	-26.3	108.0	93.9	14.06	7.680		
3,300.0	3,297.1	3,302.2	3,300.8	7.4	7.3	-154.57	41.0	-23.3	109.9	95.4	14.51	7.572		
3,400.0	3,396.9	3,402.1	3,400.7	7.7	7.6	-153.62	45.7	-20.3	111.9	96.9	14.97	7.472		
3,500.0	3,496.7	3,502.1	3,500.5	7.9	7.8	-152.71	50.5	-17.4	113.9	98.4	15.43	7.380		
3,600.0	3,596.5	3,602.1	3,600.3	8.2	8.0	-151.84	55.2	-14.4	115.9	100.0	15.89	7.293		
3,700.0	3,696.4	3,702.0	3,700.1	8.4	8.3	-150.99	59.9	-11.4	117.9	101.6	16.35	7.213		
3,800.0	3,796.2	3,802.0	3,799.9	8.6	8.5	-150.17	64.6	-8.4	120.0	103.2	16.82	7.137		
3,900.0	3,896.0	3,902.0	3,899.7	8.9	8.7	-149.38	69.3	-5.4	122.1	104.8	17.28	7.067		
4,000.0	3,995.8	4,001.9	3,999.5	9.1	9.0	-148.61	74.0	-2.5	124.2	106.5	17.75	7.001		
4,100.0	4,095.7	4,101.9	4,099.3	9.4	9.2	-147.88	78.7	0.5	126.4	108.2	18.21	6.939		
4,200.0	4,195.5	4,201.9	4,199.1	9.6	9.4	-147.16	83.4	3.5	128.5	109.9	18.68	6.881		
4,300.0	4,295.3	4,301.8	4,298.9	9.9	9.7	-146.47	88.1	6.5	130.7	111.6	19.15	6.826		
4,400.0	4,395.1	4,401.8	4,398.7	10.1	9.9	-145.81	92.8	9.5	132.9	113.3	19.62	6.775		
4,500.0	4,495.0	4,501.7	4,498.5	10.4	10.1	-145.16	97.5	12.5	135.1	115.0	20.09	6.727		
4,600.0	4,594.8	4,601.7	4,598.4	10.6	10.4	-144.54	102.2	15.4	137.4	116.8	20.56	6.681		
4,700.0	4,694.6	4,701.7	4,698.2	10.8	10.6	-143.93	106.9	18.4	139.6	118.6	21.03	6.638		
4,800.0	4,794.4	4,801.6	4,798.0	11.1	10.9	-143.35	111.6	21.4	141.9	120.4	21.51	6.597		
4,900.0	4,894.2	4,901.6	4,897.8	11.3	11.1	-142.78	116.3	24.4	144.2	122.2	21.98	6.558		
5,000.0	4,994.1	5,001.6	4,997.6	11.6	11.3	-142.23	121.0	27.4	146.5	124.0	22.46	6.521		

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

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.0	5,093.9	5,101.5	5,097.4	11.8	11.6	-141.70	125.7	30.3	148.8	125.8	22.93	6.487		
5,200.0	5,193.7	5,201.5	5,197.2	12.1	11.8	-141.18	130.4	33.3	151.1	127.7	23.41	6.454		
5,300.0	5,293.5	5,301.5	5,297.0	12.3	12.1	-140.68	135.1	36.3	153.4	129.5	23.89	6.422		
5,400.0	5,393.4	5,400.0	5,395.4	12.6	12.3	-140.38	139.3	39.0	156.0	131.6	24.34	6.407		
5,500.0	5,493.2	5,497.9	5,493.3	12.8	12.4	-141.09	140.9	40.0	159.8	135.0	24.74	6.459		
5,600.0	5,593.0	5,597.6	5,593.0	13.1	12.6	-142.39	140.9	40.0	164.5	139.3	25.14	6.541		
5,700.0	5,692.8	5,697.4	5,692.8	13.3	12.8	-143.62	140.9	40.0	169.2	143.6	25.57	6.616		
5,800.0	5,792.7	5,797.2	5,792.7	13.6	13.1	-144.78	140.9	40.0	174.0	148.0	26.01	6.692		
5,900.0	5,892.5	5,897.1	5,892.5	13.8	13.3	-145.88	140.9	40.0	178.9	152.5	26.44	6.767		
6,000.0	5,992.3	5,996.9	5,992.3	14.1	13.5	-146.92	140.9	40.0	183.9	157.0	26.87	6.842		
6,037.4	6,029.6	6,034.2	6,029.6	14.1	13.6	-147.29	140.9	40.0	185.8	158.7	27.04	6.870		
6,100.0	6,092.2	6,096.7	6,092.2	14.3	13.7	-147.82	140.9	40.0	188.3	161.0	27.30	6.898		
6,207.9	6,200.0	6,204.6	6,200.0	14.5	14.0	-89.12	140.9	40.0	190.0	162.3	27.72	6.856		
6,300.0	6,292.1	6,296.7	6,292.1	14.6	14.2	-89.12	140.9	40.0	190.0	161.9	28.10	6.763		
6,400.0	6,392.1	6,396.7	6,392.1	14.8	14.4	-89.12	140.9	40.0	190.0	161.5	28.53	6.661		
6,500.0	6,492.1	6,496.7	6,492.1	15.1	14.6	-89.12	140.9	40.0	190.0	161.1	28.96	6.561		
6,600.0	6,592.1	6,596.7	6,592.1	15.3	14.8	-89.12	140.9	40.0	190.0	160.7	29.40	6.465		
6,700.0	6,692.1	6,696.7	6,692.1	15.5	15.0	-89.12	140.9	40.0	190.0	160.2	29.83	6.371		
6,800.0	6,792.1	6,796.8	6,792.2	15.7	15.2	-89.26	140.5	40.0	190.0	159.8	30.25	6.282		
6,847.6	6,839.7	6,844.4	6,839.7	15.8	15.3	-90.25	137.2	40.0	190.0	159.6	30.41	6.248		
6,873.7	6,865.9	6,870.3	6,865.4	15.8	15.3	-91.18	134.1	40.0	190.0	159.5	30.49	6.233		
6,900.0	6,892.1	6,896.2	6,891.0	15.9	15.4	87.96	130.1	40.0	190.1	159.6	30.56	6.222		
6,950.0	6,942.0	6,945.0	6,938.7	16.0	15.4	85.93	120.0	40.1	190.5	159.8	30.66	6.212		
7,000.0	6,991.5	6,993.4	6,985.3	16.0	15.5	83.93	106.8	40.1	191.1	160.3	30.75	6.213		
7,050.0	7,040.4	7,041.4	7,030.5	16.1	15.6	81.99	90.6	40.2	191.9	161.1	30.83	6.224		
7,100.0	7,088.4	7,089.0	7,074.1	16.1	15.6	80.10	71.6	40.3	192.9	162.0	30.90	6.243		
7,150.0	7,135.3	7,136.2	7,116.0	16.2	15.7	78.29	50.0	40.4	194.1	163.1	30.95	6.270		
7,200.0	7,181.0	7,183.0	7,166.2	16.3	15.7	76.56	25.8	40.5	195.4	164.4	30.99	6.304		
7,250.0	7,225.1	7,229.5	7,194.3	16.3	15.8	74.91	-0.7	40.6	196.8	165.8	31.03	6.343		
7,300.0	7,267.4	7,275.7	7,230.5	16.4	15.8	73.36	-29.4	40.7	198.3	167.3	31.05	6.386		
7,350.0	7,307.8	7,321.6	7,264.5	16.5	15.9	71.90	-60.3	40.8	199.9	168.8	31.08	6.432		
7,400.0	7,346.0	7,367.2	7,296.3	16.5	16.0	70.54	-93.0	41.0	201.5	170.4	31.11	6.477		
7,450.0	7,381.9	7,412.6	7,325.7	16.6	16.2	69.29	-127.5	41.1	203.1	171.9	31.15	6.520		
7,500.0	7,415.3	7,457.7	7,352.8	16.8	16.3	68.14	-163.5	41.3	204.7	173.5	31.21	6.558		
7,550.0	7,446.0	7,502.7	7,377.5	16.9	16.6	67.10	-201.1	41.4	206.2	174.9	31.29	6.588		
7,600.0	7,473.9	7,550.0	7,400.9	17.1	16.8	66.11	-242.2	41.6	207.6	176.2	31.43	6.606		
7,650.0	7,498.8	7,591.9	7,419.3	17.4	17.1	65.33	-279.9	41.8	208.9	177.3	31.60	6.611		
7,700.0	7,520.6	7,636.4	7,436.3	17.7	17.4	64.60	-320.9	42.0	210.1	178.3	31.85	6.598		
7,750.0	7,539.3	7,680.6	7,450.8	18.0	17.7	63.98	-362.8	42.1	211.2	179.0	32.16	6.566		
7,800.0	7,554.6	7,724.8	7,462.6	18.4	18.1	63.46	-405.3	42.3	212.1	179.5	32.56	6.514		
7,850.0	7,566.6	7,768.9	7,471.7	18.8	18.5	63.05	-448.5	42.5	212.8	179.8	33.05	6.440		
7,900.0	7,575.2	7,812.9	7,478.1	19.3	18.9	62.74	-492.0	42.7	213.4	179.8	33.63	6.345		
7,950.0	7,580.3	7,856.9	7,481.9	19.8	19.4	62.53	-535.8	42.9	213.7	179.4	34.30	6.231		
7,998.6	7,582.0	7,899.7	7,483.0	20.3	19.8	62.43	-578.5	43.1	213.9	178.9	35.06	6.102		
7,998.7	7,582.0	7,899.7	7,483.0	20.3	19.8	62.43	-578.6	43.1	213.9	178.9	35.06	6.102		
8,001.4	7,582.0	7,902.4	7,483.0	20.3	19.9	62.43	-581.3	43.1	213.9	178.8	35.11	6.093		
8,100.0	7,582.0	8,001.0	7,482.6	21.4	20.9	62.34	-679.9	43.5	214.1	177.1	37.02	5.784		
8,200.0	7,582.0	8,101.0	7,482.2	22.6	22.2	62.24	-779.9	43.9	214.3	175.0	39.29	5.455		
8,300.0	7,582.0	8,201.0	7,481.8	24.0	23.6	62.15	-879.9	44.3	214.5	172.8	41.72	5.142		
8,400.0	7,582.0	8,301.0	7,481.4	25.4	25.0	62.05	-979.9	44.7	214.7	170.4	44.28	4.848		
8,500.0	7,582.0	8,401.0	7,481.0	26.9	26.5	61.96	-1,079.9	45.2	214.9	167.9	46.95	4.577		
8,600.0	7,582.0	8,501.0	7,480.6	28.4	28.0	61.87	-1,179.9	45.6	215.1	165.4	49.72	4.326		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittler Creek 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)				
8,700.0	7,582.0	8,601.0	7,480.2	30.0	29.6	61.77	-1,279.9	46.0	215.3	162.7	52.56	4.096			
8,800.0	7,582.0	8,701.0	7,479.8	31.6	31.3	61.68	-1,379.9	46.4	215.5	160.0	55.46	3.885			
8,900.0	7,582.0	8,801.0	7,479.4	33.2	32.9	61.59	-1,479.9	46.8	215.7	157.3	58.42	3.692			
9,000.0	7,582.0	8,901.0	7,479.0	34.9	34.6	61.50	-1,579.9	47.2	215.9	154.5	61.42	3.515			
9,100.0	7,582.0	9,001.0	7,478.6	36.6	36.3	61.40	-1,679.9	47.6	216.1	151.6	64.46	3.352			
9,200.0	7,582.0	9,101.0	7,478.2	38.3	38.1	61.31	-1,779.9	48.1	216.3	148.8	67.53	3.203			
9,300.0	7,582.0	9,201.0	7,477.8	40.1	39.8	61.22	-1,879.8	48.5	216.5	145.9	70.63	3.065			
9,400.0	7,582.0	9,301.0	7,477.4	41.9	41.6	61.13	-1,979.8	48.9	216.7	142.9	73.75	2.938			
9,500.0	7,582.0	9,401.0	7,477.0	43.6	43.4	61.03	-2,079.8	49.3	216.9	140.0	76.89	2.821			
9,600.0	7,582.0	9,501.0	7,476.6	45.4	45.2	60.94	-2,179.8	49.7	217.1	137.1	80.04	2.712			
9,700.0	7,582.0	9,601.0	7,476.2	47.2	47.0	60.85	-2,279.8	50.1	217.3	134.1	83.21	2.611			
9,800.0	7,582.0	9,701.0	7,475.8	49.0	48.8	60.76	-2,379.8	50.5	217.5	131.1	86.39	2.518			
9,900.0	7,582.0	9,801.0	7,475.4	50.8	50.6	60.67	-2,479.8	51.0	217.7	128.1	89.58	2.430			
10,000.0	7,582.0	9,901.0	7,475.0	52.7	52.5	60.58	-2,579.8	51.4	217.9	125.1	92.78	2.349			
10,100.0	7,582.0	10,001.0	7,474.6	54.5	54.3	60.49	-2,679.8	51.8	218.1	122.1	95.99	2.272			
10,200.0	7,582.0	10,101.0	7,474.1	56.3	56.1	60.40	-2,779.8	52.2	218.3	119.1	99.20	2.201			
10,300.0	7,582.0	10,201.0	7,473.7	58.2	58.0	60.31	-2,879.8	52.6	218.5	116.1	102.42	2.134			
10,400.0	7,582.0	10,301.0	7,473.3	60.0	59.8	60.22	-2,979.8	53.0	218.7	113.1	105.64	2.071			
10,500.0	7,582.0	10,401.0	7,472.9	61.9	61.7	60.13	-3,079.8	53.4	218.9	110.1	108.86	2.011			
10,600.0	7,582.0	10,501.0	7,472.5	63.7	63.6	60.04	-3,179.8	53.9	219.2	107.1	112.09	1.955			
10,700.0	7,582.0	10,601.0	7,472.1	65.6	65.4	59.95	-3,279.8	54.3	219.4	104.0	115.32	1.902			
10,800.0	7,582.0	10,701.0	7,471.7	67.5	67.3	59.86	-3,379.8	54.7	219.6	101.0	118.54	1.852			
10,900.0	7,582.0	10,801.0	7,471.3	69.3	69.2	59.77	-3,479.8	55.1	219.8	98.0	121.77	1.805			
11,000.0	7,582.0	10,901.0	7,470.9	71.2	71.0	59.68	-3,579.8	55.5	220.0	95.0	125.00	1.760			
11,100.0	7,582.0	11,001.0	7,470.5	73.1	72.9	59.59	-3,679.8	55.9	220.2	92.0	128.23	1.717			
11,200.0	7,582.0	11,101.0	7,470.1	75.0	74.8	59.50	-3,779.8	56.4	220.4	89.0	131.46	1.677			
11,300.0	7,582.0	11,201.0	7,469.7	76.8	76.7	59.41	-3,879.8	56.8	220.6	85.9	134.69	1.638			
11,400.0	7,582.0	11,301.0	7,469.3	78.7	78.6	59.32	-3,979.8	57.2	220.8	82.9	137.91	1.601			
11,500.0	7,582.0	11,401.0	7,468.9	80.6	80.5	59.23	-4,079.8	57.6	221.1	79.9	141.14	1.566			
11,600.0	7,582.0	11,501.0	7,468.5	82.5	82.4	59.14	-4,179.8	58.0	221.3	76.9	144.36	1.533			
11,700.0	7,582.0	11,601.0	7,468.1	84.4	84.3	59.06	-4,279.8	58.4	221.5	73.9	147.58	1.501			
11,800.0	7,582.0	11,701.0	7,467.7	86.3	86.1	58.97	-4,379.8	58.8	221.7	70.9	150.80	1.470 Level 3			
11,900.0	7,582.0	11,801.0	7,467.3	88.2	88.0	58.88	-4,479.8	59.3	221.9	67.9	154.01	1.441 Level 3			
12,000.0	7,582.0	11,901.0	7,466.9	90.1	89.9	58.79	-4,579.8	59.7	222.1	64.9	157.23	1.413 Level 3			
12,100.0	7,582.0	12,001.0	7,466.5	92.0	91.8	58.71	-4,679.8	60.1	222.3	61.9	160.44	1.386 Level 3			
12,200.0	7,582.0	12,101.0	7,466.1	93.9	93.7	58.62	-4,779.8	60.5	222.6	58.9	163.65	1.360 Level 3			
12,300.0	7,582.0	12,201.0	7,465.7	95.8	95.6	58.53	-4,879.8	60.9	222.8	55.9	166.85	1.335 Level 3			
12,400.0	7,582.0	12,301.0	7,465.3	97.7	97.5	58.44	-4,979.8	61.3	223.0	52.9	170.05	1.311 Level 3			
12,500.0	7,582.0	12,401.0	7,464.9	99.6	99.4	58.36	-5,079.8	61.7	223.2	50.0	173.25	1.288 Level 3			
12,600.0	7,582.0	12,501.0	7,464.5	101.5	101.3	58.27	-5,179.8	62.2	223.4	47.0	176.44	1.266 Level 3			
12,700.0	7,582.0	12,601.0	7,464.1	103.4	103.3	58.18	-5,279.8	62.6	223.6	44.0	179.63	1.245 Level 2			
12,800.0	7,582.0	12,701.0	7,463.7	105.3	105.2	58.10	-5,379.8	63.0	223.9	41.0	182.82	1.225 Level 2			
12,900.0	7,582.0	12,801.0	7,463.3	107.2	107.1	58.01	-5,479.8	63.4	224.1	38.1	186.01	1.205 Level 2			
13,000.0	7,582.0	12,901.0	7,462.9	109.1	109.0	57.93	-5,579.8	63.8	224.3	35.1	189.19	1.186 Level 2			
13,100.0	7,582.0	13,001.0	7,462.5	111.0	110.9	57.84	-5,679.8	64.2	224.5	32.2	192.36	1.167 Level 2			
13,200.0	7,582.0	13,101.0	7,462.1	112.9	112.8	57.75	-5,779.8	64.6	224.8	29.2	195.53	1.149 Level 2			
13,300.0	7,582.0	13,201.0	7,461.7	114.8	114.7	57.67	-5,879.7	65.1	225.0	26.3	198.70	1.132 Level 2			
13,400.0	7,582.0	13,300.9	7,461.3	116.7	116.6	57.58	-5,979.7	65.5	225.2	23.3	201.87	1.116 Level 2			
13,500.0	7,582.0	13,400.9	7,460.9	118.6	118.5	57.50	-6,079.7	65.9	225.4	20.4	205.03	1.099 Level 2			
13,600.0	7,582.0	13,500.9	7,460.5	120.5	120.4	57.41	-6,179.7	66.3	225.6	17.5	208.18	1.084 Level 2			
13,700.0	7,582.0	13,600.9	7,460.1	122.4	122.3	57.33	-6,279.7	66.7	225.9	14.5	211.34	1.069 Level 2			
13,800.0	7,582.0	13,700.9	7,459.7	124.3	124.3	57.24	-6,379.7	67.1	226.1	11.6	214.48	1.054 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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittler Creek 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)		(ft)	(ft)	(ft)			
13,900.0	7,582.0	13,800.9	7,459.3	126.3	126.2	57.16	-6,479.7	67.6	226.3	8.7	217.63	1.040	Level 2		
14,000.0	7,582.0	13,900.9	7,458.9	128.2	128.1	57.08	-6,579.7	68.0	226.5	5.8	220.77	1.026	Level 2		
14,100.0	7,582.0	14,000.9	7,458.5	130.1	130.0	56.99	-6,679.7	68.4	226.8	2.9	223.90	1.013	Level 2		
14,200.0	7,582.0	14,100.9	7,458.1	132.0	131.9	56.91	-6,779.7	68.8	227.0	0.0	227.03	1.000	Level 1		
14,300.0	7,582.0	14,200.9	7,457.7	133.9	133.8	56.82	-6,879.7	69.2	227.2	-2.9	230.16	0.987	Level 1		
14,400.0	7,582.0	14,300.9	7,457.3	135.8	135.7	56.74	-6,979.7	69.6	227.5	-5.8	233.28	0.975	Level 1		
14,500.0	7,582.0	14,400.9	7,456.9	137.7	137.7	56.66	-7,079.7	70.0	227.7	-8.7	236.40	0.963	Level 1		
14,600.0	7,582.0	14,500.9	7,456.5	139.7	139.6	56.57	-7,179.7	70.5	227.9	-11.6	239.51	0.952	Level 1		
14,700.0	7,582.0	14,600.9	7,456.1	141.6	141.5	56.49	-7,279.7	70.9	228.1	-14.5	242.62	0.940	Level 1		
14,800.0	7,582.0	14,700.9	7,455.7	143.5	143.4	56.41	-7,379.7	71.3	228.4	-17.4	245.72	0.929	Level 1		
14,900.0	7,582.0	14,800.9	7,455.2	145.4	145.3	56.33	-7,479.7	71.7	228.6	-20.2	248.82	0.919	Level 1		
15,000.0	7,582.0	14,900.9	7,454.8	147.3	147.2	56.24	-7,579.7	72.1	228.8	-23.1	251.92	0.908	Level 1		
15,100.0	7,582.0	15,000.9	7,454.4	149.2	149.2	56.16	-7,679.7	72.5	229.1	-25.9	255.01	0.898	Level 1		
15,200.0	7,582.0	15,100.9	7,454.0	151.2	151.1	56.08	-7,779.7	72.9	229.3	-28.8	258.09	0.888	Level 1		
15,300.0	7,582.0	15,200.9	7,453.6	153.1	153.0	56.00	-7,879.7	73.4	229.5	-31.7	261.18	0.879	Level 1		
15,400.0	7,582.0	15,300.9	7,453.2	155.0	154.9	55.91	-7,979.7	73.8	229.8	-34.5	264.25	0.869	Level 1		
15,500.0	7,582.0	15,400.9	7,452.8	156.9	156.8	55.83	-8,079.7	74.2	230.0	-37.3	267.32	0.860	Level 1		
15,600.0	7,582.0	15,500.9	7,452.4	158.8	158.7	55.75	-8,179.7	74.6	230.2	-40.2	270.39	0.851	Level 1		
15,700.0	7,582.0	15,600.9	7,452.0	160.7	160.7	55.67	-8,279.7	75.0	230.5	-43.0	273.45	0.843	Level 1		
15,800.0	7,582.0	15,700.9	7,451.6	162.7	162.6	55.59	-8,379.7	75.4	230.7	-45.8	276.51	0.834	Level 1		
15,900.0	7,582.0	15,800.9	7,451.2	164.6	164.5	55.51	-8,479.7	75.8	230.9	-48.6	279.56	0.826	Level 1		
16,000.0	7,582.0	15,900.9	7,450.8	166.5	166.4	55.43	-8,579.7	76.3	231.2	-51.5	282.61	0.818	Level 1		
16,100.0	7,582.0	16,000.9	7,450.4	168.4	168.3	55.35	-8,679.7	76.7	231.4	-54.3	285.66	0.810	Level 1		
16,200.0	7,582.0	16,100.9	7,450.0	170.3	170.3	55.27	-8,779.7	77.1	231.6	-57.1	288.70	0.802	Level 1		
16,300.0	7,582.0	16,200.9	7,449.6	172.3	172.2	55.19	-8,879.7	77.5	231.9	-59.9	291.73	0.795	Level 1		
16,400.0	7,582.0	16,300.9	7,449.2	174.2	174.1	55.10	-8,979.7	77.9	232.1	-62.7	294.76	0.787	Level 1		
16,500.0	7,582.0	16,400.9	7,448.8	176.1	176.0	55.02	-9,079.7	78.3	232.3	-65.4	297.79	0.780	Level 1		
16,600.0	7,582.0	16,500.9	7,448.4	178.0	177.9	54.94	-9,179.7	78.8	232.6	-68.2	300.81	0.773	Level 1		
16,700.0	7,582.0	16,600.9	7,448.0	179.9	179.9	54.87	-9,279.7	79.2	232.8	-71.0	303.82	0.766	Level 1		
16,800.0	7,582.0	16,700.9	7,447.6	181.9	181.8	54.79	-9,379.7	79.6	233.1	-73.8	306.83	0.760	Level 1		
16,900.0	7,582.0	16,800.9	7,447.2	183.8	183.7	54.71	-9,479.7	80.0	233.3	-76.5	309.84	0.753	Level 1		
17,000.0	7,582.0	16,900.9	7,446.8	185.7	185.6	54.63	-9,579.7	80.4	233.5	-79.3	312.84	0.747	Level 1		
17,100.0	7,582.0	17,000.9	7,446.4	187.6	187.6	54.55	-9,679.7	80.8	233.8	-82.1	315.84	0.740	Level 1		
17,200.0	7,582.0	17,100.9	7,446.0	189.5	189.5	54.47	-9,779.7	81.2	234.0	-84.8	318.83	0.734	Level 1		
17,300.0	7,582.0	17,200.9	7,445.6	191.5	191.4	54.39	-9,879.7	81.7	234.3	-87.6	321.81	0.728	Level 1		
17,400.0	7,582.0	17,300.9	7,445.2	193.4	193.3	54.31	-9,979.6	82.1	234.5	-90.3	324.80	0.722	Level 1		
17,500.0	7,582.0	17,400.9	7,444.8	195.3	195.2	54.23	-10,079.6	82.5	234.7	-93.0	327.77	0.716	Level 1		
17,600.0	7,582.0	17,500.9	7,444.4	197.2	197.2	54.15	-10,179.6	82.9	235.0	-95.8	330.75	0.710	Level 1		
17,700.0	7,582.0	17,600.9	7,444.0	199.2	199.1	54.08	-10,279.6	83.3	235.2	-98.5	333.71	0.705	Level 1		
17,800.0	7,582.0	17,700.9	7,443.6	201.1	201.0	54.00	-10,379.6	83.7	235.5	-101.2	336.68	0.699	Level 1		
17,900.0	7,582.0	17,800.9	7,443.2	203.0	202.9	53.92	-10,479.6	84.1	235.7	-103.9	339.64	0.694	Level 1		
17,945.3	7,582.0	17,846.3	7,443.0	203.9	203.8	53.89	-10,525.0	84.3	235.8	-105.1	340.98	0.692	Level 1, ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.62	4.0	599.5	599.5					
100.0	100.0	99.0	99.0	0.1	0.1	89.62	4.0	599.5	599.5	599.3	0.22	2,680.557		
200.0	200.0	199.0	199.0	0.3	0.3	89.62	4.0	599.5	599.5	598.8	0.67	892.033		
300.0	300.0	299.0	299.0	0.6	0.6	89.62	4.0	599.5	599.5	598.4	1.12	534.505		
400.0	400.0	399.0	399.0	0.8	0.8	89.62	4.0	599.5	599.5	597.9	1.57	381.571		
500.0	500.0	499.0	499.0	1.0	1.0	89.62	4.0	599.5	599.5	597.5	2.02	296.683		
600.0	600.0	599.0	599.0	1.2	1.2	89.62	4.0	599.5	599.5	597.0	2.47	242.691		
700.0	700.0	699.0	699.0	1.5	1.5	89.62	4.0	599.5	599.5	596.6	2.92	205.325		
800.0	800.0	799.0	799.0	1.7	1.7	89.62	4.0	599.5	599.5	596.1	3.37	177.931		
900.0	900.0	899.0	899.0	1.9	1.9	89.62	4.0	599.5	599.5	595.7	3.82	156.985		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.62	4.0	599.5	599.5	595.2	4.27	140.452		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.62	4.0	599.5	599.5	594.8	4.72	127.069		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.62	4.0	599.5	599.5	594.3	5.17	116.015		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.62	4.0	599.5	599.5	593.9	5.62	106.730		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.62	4.0	599.5	599.5	593.4	6.07	98.821		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.62	4.0	599.5	599.5	593.0	6.52	92.003		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	30.65	4.0	599.5	598.4	591.4	6.96	86.002		
1,700.0	1,699.9	1,698.9	1,698.9	3.7	3.7	30.87	4.0	599.5	595.0	587.6	7.39	80.503		
1,727.4	1,727.2	1,726.2	1,726.2	3.8	3.8	30.96	4.0	599.5	593.7	586.2	7.51	79.060		
1,800.0	1,799.7	1,798.7	1,798.7	3.9	3.9	31.17	4.0	599.5	590.0	582.1	7.83	75.377		
1,900.0	1,899.6	1,898.6	1,898.6	4.1	4.2	31.47	4.0	599.5	584.9	576.6	8.27	70.757		
2,000.0	1,999.4	1,998.4	1,998.4	4.4	4.4	31.78	4.0	599.5	579.8	571.1	8.71	66.590		
2,100.0	2,099.2	2,098.2	2,098.2	4.6	4.6	32.09	4.0	599.5	574.8	565.6	9.15	62.815		
2,200.0	2,199.0	2,198.0	2,198.0	4.8	4.8	32.41	4.0	599.5	569.7	560.1	9.59	59.381		
2,300.0	2,298.9	2,297.9	2,297.9	5.0	5.1	32.73	4.0	599.5	564.7	554.7	10.04	56.246		
2,400.0	2,398.7	2,397.7	2,397.7	5.3	5.3	33.06	4.0	599.5	559.7	549.2	10.49	53.373		
2,500.0	2,498.5	2,497.5	2,497.5	5.5	5.5	33.40	4.0	599.5	554.7	543.8	10.94	50.731		
2,600.0	2,598.3	2,590.8	2,590.8	5.8	5.7	33.62	4.9	600.1	550.4	539.0	11.37	48.422		
2,700.0	2,698.1	2,684.3	2,684.3	6.0	5.9	33.64	7.7	601.9	547.2	535.4	11.80	46.391		
2,800.0	2,798.0	2,784.3	2,784.1	6.2	6.1	33.56	11.7	604.4	544.6	532.4	12.24	44.493		
2,900.0	2,897.8	2,884.3	2,884.0	6.5	6.4	33.48	15.6	607.0	542.0	529.3	12.69	42.722		
3,000.0	2,997.6	2,984.2	2,983.8	6.7	6.6	33.39	19.6	609.5	539.4	526.3	13.13	41.067		
3,100.0	3,097.4	3,084.2	3,083.7	6.9	6.8	33.31	23.5	612.0	536.8	523.2	13.58	39.517		
3,200.0	3,197.3	3,184.2	3,183.5	7.2	7.0	33.23	27.5	614.6	534.2	520.2	14.03	38.064		
3,300.0	3,297.1	3,284.1	3,283.4	7.4	7.3	33.14	31.4	617.1	531.6	517.1	14.49	36.698		
3,400.0	3,396.9	3,384.1	3,383.2	7.7	7.5	33.06	35.4	619.6	529.0	514.1	14.94	35.412		
3,500.0	3,496.7	3,484.0	3,483.1	7.9	7.7	32.97	39.3	622.2	526.4	511.0	15.39	34.200		
3,600.0	3,596.5	3,584.0	3,582.9	8.2	7.9	32.88	43.3	624.7	523.8	508.0	15.85	33.056		
3,700.0	3,696.4	3,684.0	3,682.8	8.4	8.2	32.80	47.2	627.2	521.2	504.9	16.30	31.974		
3,800.0	3,796.2	3,783.9	3,782.7	8.6	8.4	32.71	51.1	629.8	518.6	501.9	16.76	30.950		
3,900.0	3,896.0	3,883.9	3,882.5	8.9	8.6	32.62	55.1	632.3	516.1	498.8	17.21	29.979		
4,000.0	3,995.8	3,983.9	3,982.4	9.1	8.9	32.53	59.0	634.9	513.5	495.8	17.67	29.057		
4,100.0	4,095.7	4,083.8	4,082.2	9.4	9.1	32.44	63.0	637.4	510.9	492.8	18.13	28.182		
4,200.0	4,195.5	4,183.8	4,182.1	9.6	9.3	32.34	66.9	639.9	508.3	489.7	18.59	27.348		
4,300.0	4,295.3	4,283.8	4,281.9	9.9	9.6	32.25	70.9	642.5	505.7	486.7	19.04	26.555		
4,400.0	4,395.1	4,383.7	4,381.8	10.1	9.8	32.16	74.8	645.0	503.1	483.6	19.50	25.798		
4,500.0	4,495.0	4,483.7	4,481.6	10.4	10.0	32.06	78.8	647.5	500.5	480.6	19.96	25.075		
4,600.0	4,594.8	4,583.6	4,581.5	10.6	10.2	31.96	82.7	650.1	498.0	477.5	20.42	24.385		
4,700.0	4,694.6	4,683.6	4,681.3	10.8	10.5	31.87	86.7	652.6	495.4	474.5	20.88	23.725		
4,800.0	4,794.4	4,783.6	4,781.2	11.1	10.7	31.77	90.6	655.1	492.8	471.5	21.34	23.093		
4,900.0	4,894.2	4,883.5	4,881.0	11.3	10.9	31.67	94.5	657.7	490.2	468.4	21.80	22.487		
5,000.0	4,994.1	4,983.5	4,980.9	11.6	11.2	31.57	98.5	660.2	487.7	465.4	22.26	21.907		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
5,100.0	5,093.9	5,083.5	5,080.7	11.8	11.4	31.47	102.4	662.8	485.1	462.4	22.72	21.350		
5,200.0	5,193.7	5,183.4	5,180.6	12.1	11.6	31.37	106.4	665.3	482.5	459.3	23.18	20.814		
5,300.0	5,293.5	5,283.4	5,280.5	12.3	11.9	31.26	110.3	667.8	479.9	456.3	23.64	20.300		
5,400.0	5,393.4	5,383.3	5,380.3	12.6	12.1	31.16	114.3	670.4	477.4	453.3	24.10	19.805		
5,500.0	5,493.2	5,483.3	5,480.2	12.8	12.4	31.05	118.2	672.9	474.8	450.2	24.56	19.329		
5,600.0	5,593.0	5,583.3	5,580.0	13.1	12.6	30.94	122.2	675.4	472.2	447.2	25.03	18.871		
5,700.0	5,692.8	5,683.2	5,679.9	13.3	12.8	30.84	126.1	678.0	469.7	444.2	25.49	18.429		
5,800.0	5,792.7	5,783.2	5,779.7	13.6	13.1	30.73	130.1	680.5	467.1	441.2	25.95	18.002		
5,900.0	5,892.5	5,883.2	5,879.6	13.8	13.3	30.62	134.0	683.0	464.6	438.2	26.41	17.591		
6,000.0	5,992.3	5,983.1	5,979.4	14.1	13.5	30.50	138.0	685.6	462.0	435.1	26.87	17.193		
6,037.4	6,029.6	6,020.5	6,016.7	14.1	13.6	30.46	139.4	686.5	461.0	434.0	27.04	17.049		
6,100.0	6,092.2	6,084.4	6,080.6	14.3	13.8	30.34	141.9	688.1	460.0	432.7	27.32	16.837		
6,205.5	6,197.7	6,200.2	6,196.3	14.5	14.0	30.21	144.0	689.5	459.5	431.8	27.71	16.584		
6,207.9	6,200.0	6,202.8	6,198.9	14.5	14.0	89.25	144.0	689.5	459.5	431.8	27.72	16.578		
6,300.0	6,292.1	6,295.0	6,291.1	14.6	14.1	89.25	144.0	689.5	459.5	431.4	28.08	16.366		
6,400.0	6,392.1	6,395.0	6,391.1	14.8	14.4	89.25	144.0	689.5	459.5	431.0	28.51	16.119		
6,500.0	6,492.1	6,495.0	6,491.1	15.1	14.6	89.25	144.0	689.5	459.5	430.6	28.94	15.879		
6,600.0	6,592.1	6,595.0	6,591.1	15.3	14.8	89.25	144.0	689.5	459.5	430.1	29.37	15.645		
6,700.0	6,692.1	6,695.0	6,691.1	15.5	15.0	89.25	144.0	689.5	459.5	429.7	29.80	15.418		
6,800.0	6,792.1	6,795.1	6,791.3	15.7	15.2	89.30	143.6	689.5	459.5	429.3	30.23	15.201		
6,851.6	6,843.7	6,846.7	6,842.7	15.8	15.3	89.75	140.0	689.5	459.5	429.1	30.42	15.103 CC		
6,873.7	6,865.9	6,868.7	6,864.5	15.8	15.3	90.08	137.3	689.5	459.5	429.0	30.50	15.063		
6,900.0	6,892.1	6,894.5	6,890.1	15.9	15.4	-89.26	133.3	689.5	459.5	428.9	30.59	15.022		
6,950.0	6,942.0	6,943.4	6,937.9	16.0	15.4	-88.43	123.3	689.6	459.7	428.9	30.74	14.955		
7,000.0	6,991.5	6,991.8	6,984.5	16.0	15.5	-87.60	110.2	689.6	459.9	429.1	30.87	14.900		
7,050.0	7,040.4	7,039.9	7,029.7	16.1	15.6	-86.80	94.0	689.7	460.3	429.3	30.99	14.854		
7,100.0	7,088.4	7,087.5	7,073.4	16.1	15.6	-86.01	75.1	689.8	460.7	429.6	31.09	14.816		
7,150.0	7,135.3	7,134.8	7,115.5	16.2	15.7	-85.24	53.5	689.9	461.2	430.0	31.20	14.783		
7,200.0	7,181.0	7,181.7	7,155.6	16.3	15.7	-84.50	29.3	690.0	461.7	430.4	31.30	14.751		
7,250.0	7,225.1	7,228.2	7,193.9	16.3	15.8	-83.79	2.8	690.1	462.3	430.9	31.42	14.717		
7,300.0	7,267.4	7,274.5	7,230.1	16.4	15.9	-83.11	-26.0	690.2	463.0	431.4	31.55	14.677		
7,350.0	7,307.8	7,320.4	7,264.2	16.5	15.9	-82.46	-56.8	690.3	463.7	432.0	31.70	14.626		
7,400.0	7,346.0	7,366.1	7,296.0	16.5	16.0	-81.85	-89.5	690.5	464.4	432.5	31.89	14.562		
7,450.0	7,381.9	7,411.5	7,325.5	16.6	16.2	-81.28	-124.0	690.6	465.1	433.0	32.12	14.479		
7,500.0	7,415.3	7,456.7	7,352.7	16.8	16.4	-80.75	-160.2	690.8	465.8	433.4	32.40	14.375		
7,550.0	7,446.0	7,500.0	7,376.5	16.9	16.6	-80.27	-196.3	690.9	466.5	433.7	32.74	14.249		
7,600.0	7,473.9	7,546.5	7,399.6	17.1	16.8	-79.81	-236.6	691.1	467.1	434.0	33.16	14.088		
7,650.0	7,498.8	7,591.1	7,419.3	17.4	17.1	-79.41	-276.7	691.3	467.7	434.1	33.64	13.903		
7,700.0	7,520.6	7,635.6	7,436.3	17.7	17.4	-79.06	-317.7	691.5	468.3	434.1	34.21	13.689		
7,750.0	7,539.3	7,679.9	7,450.8	18.0	17.7	-78.75	-359.6	691.7	468.8	433.9	34.86	13.450		
7,800.0	7,554.6	7,724.2	7,462.6	18.4	18.1	-78.50	-402.3	691.8	469.2	433.7	35.58	13.187		
7,850.0	7,566.6	7,768.3	7,471.7	18.8	18.5	-78.29	-445.4	692.0	469.6	433.2	36.39	12.904		
7,900.0	7,575.2	7,812.4	7,478.2	19.3	18.9	-78.13	-489.0	692.2	469.9	432.6	37.28	12.605		
7,950.0	7,580.3	7,856.4	7,481.9	19.8	19.4	-78.03	-532.9	692.4	470.1	431.9	38.24	12.294		
7,998.6	7,582.0	7,899.3	7,483.0	20.3	19.9	-77.97	-575.8	692.6	470.2	431.0	39.24	11.984		
7,998.7	7,582.0	7,899.4	7,483.0	20.3	19.9	-77.97	-575.8	692.6	470.2	431.0	39.24	11.984		
8,001.4	7,582.0	7,902.1	7,483.0	20.3	19.9	-77.97	-578.5	692.6	470.2	430.9	39.30	11.966		
8,100.0	7,582.0	8,000.7	7,482.6	21.4	21.1	-77.92	-677.1	693.0	470.3	428.8	41.48	11.337		
8,200.0	7,582.0	8,100.7	7,482.2	22.6	22.3	-77.87	-777.1	693.5	470.4	426.4	43.98	10.696		
8,300.0	7,582.0	8,200.7	7,481.8	24.0	23.7	-77.83	-877.1	693.9	470.5	423.8	46.64	10.087		
8,400.0	7,582.0	8,300.7	7,481.4	25.4	25.1	-77.78	-977.1	694.3	470.6	421.1	49.45	9.515		
8,500.0	7,582.0	8,400.7	7,481.0	26.9	26.6	-77.73	-1,077.1	694.7	470.7	418.3	52.39	8.984		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
8,600.0	7,582.0	8,500.7	7,480.6	28.4	28.2	-77.68	-1,177.1	695.2	470.8	415.3	55.42	8.494		
8,700.0	7,582.0	8,600.7	7,480.2	30.0	29.8	-77.64	-1,277.1	695.6	470.8	412.3	58.54	8.043		
8,800.0	7,582.0	8,700.7	7,479.8	31.6	31.4	-77.59	-1,377.1	696.0	470.9	409.2	61.73	7.629		
8,900.0	7,582.0	8,800.7	7,479.4	33.2	33.1	-77.54	-1,477.1	696.4	471.0	406.0	64.98	7.248		
9,000.0	7,582.0	8,900.7	7,479.0	34.9	34.8	-77.49	-1,577.1	696.9	471.1	402.8	68.29	6.899		
9,100.0	7,582.0	9,000.7	7,478.6	36.6	36.5	-77.44	-1,677.1	697.3	471.2	399.6	71.64	6.577		
9,200.0	7,582.0	9,100.7	7,478.2	38.3	38.2	-77.40	-1,777.1	697.7	471.3	396.3	75.03	6.281		
9,300.0	7,582.0	9,200.7	7,477.8	40.1	40.0	-77.35	-1,877.1	698.1	471.4	392.9	78.45	6.008		
9,400.0	7,582.0	9,300.7	7,477.4	41.9	41.8	-77.30	-1,977.1	698.6	471.5	389.6	81.90	5.756		
9,500.0	7,582.0	9,400.7	7,477.0	43.6	43.5	-77.25	-2,077.1	699.0	471.6	386.2	85.38	5.523		
9,600.0	7,582.0	9,500.7	7,476.6	45.4	45.3	-77.21	-2,177.1	699.4	471.6	382.8	88.88	5.306		
9,700.0	7,582.0	9,600.7	7,476.2	47.2	47.1	-77.16	-2,277.1	699.8	471.7	379.3	92.40	5.105		
9,800.0	7,582.0	9,700.7	7,475.8	49.0	49.0	-77.11	-2,377.1	700.3	471.8	375.9	95.94	4.918		
9,900.0	7,582.0	9,800.7	7,475.4	50.8	50.8	-77.06	-2,477.1	700.7	471.9	372.4	99.49	4.743		
10,000.0	7,582.0	9,900.7	7,474.9	52.7	52.6	-77.02	-2,577.1	701.1	472.0	369.0	103.06	4.580		
10,100.0	7,582.0	10,000.7	7,474.5	54.5	54.5	-76.97	-2,677.1	701.5	472.1	365.5	106.63	4.427		
10,200.0	7,582.0	10,100.7	7,474.1	56.3	56.3	-76.92	-2,777.1	702.0	472.2	362.0	110.22	4.284		
10,300.0	7,582.0	10,200.7	7,473.7	58.2	58.2	-76.87	-2,877.1	702.4	472.3	358.5	113.82	4.149		
10,400.0	7,582.0	10,300.7	7,473.3	60.0	60.0	-76.83	-2,977.1	702.8	472.4	355.0	117.43	4.023		
10,500.0	7,582.0	10,400.7	7,472.9	61.9	61.9	-76.78	-3,077.1	703.2	472.5	351.4	121.04	3.903		
10,600.0	7,582.0	10,500.7	7,472.5	63.7	63.7	-76.73	-3,177.1	703.7	472.6	347.9	124.67	3.791		
10,700.0	7,582.0	10,600.7	7,472.1	65.6	65.6	-76.68	-3,277.1	704.1	472.7	344.4	128.29	3.684		
10,800.0	7,582.0	10,700.7	7,471.7	67.5	67.5	-76.64	-3,377.1	704.5	472.8	340.8	131.93	3.583		
10,900.0	7,582.0	10,800.7	7,471.3	69.3	69.3	-76.59	-3,477.1	704.9	472.9	337.3	135.57	3.488		
11,000.0	7,582.0	10,900.7	7,470.9	71.2	71.2	-76.54	-3,577.1	705.4	473.0	333.7	139.21	3.397		
11,100.0	7,582.0	11,000.7	7,470.5	73.1	73.1	-76.49	-3,677.1	705.8	473.0	330.2	142.86	3.311		
11,200.0	7,582.0	11,100.7	7,470.1	75.0	75.0	-76.45	-3,777.1	706.2	473.1	326.6	146.51	3.229		
11,300.0	7,582.0	11,200.7	7,469.7	76.8	76.9	-76.40	-3,877.1	706.7	473.2	323.1	150.16	3.152		
11,400.0	7,582.0	11,300.7	7,469.3	78.7	78.8	-76.35	-3,977.1	707.1	473.3	319.5	153.82	3.077		
11,500.0	7,582.0	11,400.7	7,468.9	80.6	80.6	-76.31	-4,077.1	707.5	473.4	316.0	157.48	3.006		
11,600.0	7,582.0	11,500.6	7,468.5	82.5	82.5	-76.26	-4,177.0	707.9	473.5	312.4	161.14	2.939		
11,700.0	7,582.0	11,600.6	7,468.1	84.4	84.4	-76.21	-4,277.0	708.4	473.6	308.8	164.81	2.874		
11,800.0	7,582.0	11,700.6	7,467.7	86.3	86.3	-76.16	-4,377.0	708.8	473.7	305.3	168.47	2.812		
11,900.0	7,582.0	11,800.6	7,467.3	88.2	88.2	-76.12	-4,477.0	709.2	473.8	301.7	172.14	2.753		
12,000.0	7,582.0	11,900.6	7,466.9	90.1	90.1	-76.07	-4,577.0	709.6	473.9	298.1	175.81	2.696		
12,100.0	7,582.0	12,000.6	7,466.5	92.0	92.0	-76.02	-4,677.0	710.1	474.0	294.5	179.48	2.641		
12,200.0	7,582.0	12,100.6	7,466.1	93.9	93.9	-75.98	-4,777.0	710.5	474.1	291.0	183.15	2.589		
12,300.0	7,582.0	12,200.6	7,465.7	95.8	95.8	-75.93	-4,877.0	710.9	474.2	287.4	186.83	2.538		
12,400.0	7,582.0	12,300.6	7,465.3	97.7	97.7	-75.88	-4,977.0	711.3	474.3	283.8	190.50	2.490		
12,500.0	7,582.0	12,400.6	7,464.9	99.6	99.6	-75.83	-5,077.0	711.8	474.4	280.3	194.17	2.443		
12,600.0	7,582.0	12,500.6	7,464.5	101.5	101.5	-75.79	-5,177.0	712.2	474.5	276.7	197.85	2.398		
12,700.0	7,582.0	12,600.6	7,464.1	103.4	103.4	-75.74	-5,277.0	712.6	474.6	273.1	201.52	2.355		
12,800.0	7,582.0	12,700.6	7,463.7	105.3	105.3	-75.69	-5,377.0	713.0	474.7	269.5	205.20	2.313		
12,900.0	7,582.0	12,800.6	7,463.3	107.2	107.2	-75.65	-5,477.0	713.5	474.8	266.0	208.87	2.273		
13,000.0	7,582.0	12,900.6	7,462.9	109.1	109.1	-75.60	-5,577.0	713.9	474.9	262.4	212.55	2.234		
13,100.0	7,582.0	13,000.6	7,462.5	111.0	111.0	-75.55	-5,677.0	714.3	475.0	258.8	216.23	2.197		
13,200.0	7,582.0	13,100.6	7,462.1	112.9	113.0	-75.51	-5,777.0	714.7	475.1	255.2	219.90	2.161		
13,300.0	7,582.0	13,200.6	7,461.7	114.8	114.9	-75.46	-5,877.0	715.2	475.2	251.7	223.58	2.126		
13,400.0	7,582.0	13,300.6	7,461.3	116.7	116.8	-75.41	-5,977.0	715.6	475.3	248.1	227.25	2.092		
13,500.0	7,582.0	13,400.6	7,460.9	118.6	118.7	-75.36	-6,077.0	716.0	475.4	244.5	230.93	2.059		
13,600.0	7,582.0	13,500.6	7,460.5	120.5	120.6	-75.32	-6,177.0	716.4	475.5	240.9	234.61	2.027		
13,700.0	7,582.0	13,600.6	7,460.1	122.4	122.5	-75.27	-6,277.0	716.9	475.7	237.4	238.28	1.996		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 279-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
13,800.0	7,582.0	13,700.6	7,459.7	124.3	124.4	-75.22	-6,377.0	717.3	475.8	233.8	241.95	1.966		
13,900.0	7,582.0	13,800.6	7,459.3	126.3	126.3	-75.18	-6,477.0	717.7	475.9	230.2	245.63	1.937		
14,000.0	7,582.0	13,900.6	7,458.9	128.2	128.2	-75.13	-6,577.0	718.1	476.0	226.7	249.30	1.909		
14,100.0	7,582.0	14,000.6	7,458.5	130.1	130.2	-75.08	-6,677.0	718.6	476.1	223.1	252.98	1.882		
14,200.0	7,582.0	14,100.6	7,458.1	132.0	132.1	-75.04	-6,777.0	719.0	476.2	219.5	256.65	1.855		
14,300.0	7,582.0	14,200.6	7,457.7	133.9	134.0	-74.99	-6,877.0	719.4	476.3	216.0	260.32	1.830		
14,400.0	7,582.0	14,300.6	7,457.3	135.8	135.9	-74.94	-6,977.0	719.9	476.4	212.4	263.99	1.805		
14,500.0	7,582.0	14,400.6	7,456.9	137.7	137.8	-74.90	-7,077.0	720.3	476.5	208.8	267.66	1.780		
14,600.0	7,582.0	14,500.6	7,456.4	139.7	139.7	-74.85	-7,177.0	720.7	476.6	205.3	271.33	1.757		
14,700.0	7,582.0	14,600.6	7,456.0	141.6	141.7	-74.80	-7,277.0	721.1	476.7	201.7	275.00	1.734		
14,800.0	7,582.0	14,700.6	7,455.6	143.5	143.6	-74.76	-7,377.0	721.6	476.8	198.2	278.67	1.711		
14,900.0	7,582.0	14,800.6	7,455.2	145.4	145.5	-74.71	-7,477.0	722.0	476.9	194.6	282.33	1.689		
15,000.0	7,582.0	14,900.6	7,454.8	147.3	147.4	-74.66	-7,577.0	722.4	477.0	191.0	286.00	1.668		
15,100.0	7,582.0	15,000.6	7,454.4	149.2	149.3	-74.62	-7,677.0	722.8	477.1	187.5	289.66	1.647		
15,200.0	7,582.0	15,100.6	7,454.0	151.2	151.2	-74.57	-7,777.0	723.3	477.3	183.9	293.33	1.627		
15,300.0	7,582.0	15,200.6	7,453.6	153.1	153.2	-74.53	-7,877.0	723.7	477.4	180.4	296.99	1.607		
15,400.0	7,582.0	15,300.6	7,453.2	155.0	155.1	-74.48	-7,977.0	724.1	477.5	176.8	300.65	1.588		
15,500.0	7,582.0	15,400.6	7,452.8	156.9	157.0	-74.43	-8,077.0	724.5	477.6	173.3	304.32	1.569		
15,600.0	7,582.0	15,500.6	7,452.4	158.8	158.9	-74.39	-8,176.9	725.0	477.7	169.7	307.98	1.551		
15,700.0	7,582.0	15,600.6	7,452.0	160.7	160.8	-74.34	-8,276.9	725.4	477.8	166.2	311.63	1.533		
15,800.0	7,582.0	15,700.6	7,451.6	162.7	162.7	-74.29	-8,376.9	725.8	477.9	162.6	315.29	1.516		
15,900.0	7,582.0	15,800.6	7,451.2	164.6	164.7	-74.25	-8,476.9	726.2	478.0	159.1	318.95	1.499 Level 3		
16,000.0	7,582.0	15,900.6	7,450.8	166.5	166.6	-74.20	-8,576.9	726.7	478.1	155.5	322.60	1.482 Level 3		
16,100.0	7,582.0	16,000.6	7,450.4	168.4	168.5	-74.15	-8,676.9	727.1	478.2	152.0	326.26	1.466 Level 3		
16,200.0	7,582.0	16,100.6	7,450.0	170.3	170.4	-74.11	-8,776.9	727.5	478.4	148.4	329.91	1.450 Level 3		
16,300.0	7,582.0	16,200.6	7,449.6	172.3	172.4	-74.06	-8,876.9	727.9	478.5	144.9	333.56	1.434 Level 3		
16,400.0	7,582.0	16,300.6	7,449.2	174.2	174.3	-74.02	-8,976.9	728.4	478.6	141.4	337.22	1.419 Level 3		
16,500.0	7,582.0	16,400.6	7,448.8	176.1	176.2	-73.97	-9,076.9	728.8	478.7	137.8	340.86	1.404 Level 3		
16,600.0	7,582.0	16,500.6	7,448.4	178.0	178.1	-73.92	-9,176.9	729.2	478.8	134.3	344.51	1.390 Level 3		
16,700.0	7,582.0	16,600.6	7,448.0	179.9	180.0	-73.88	-9,276.9	729.6	478.9	130.8	348.16	1.376 Level 3		
16,800.0	7,582.0	16,700.6	7,447.6	181.9	182.0	-73.83	-9,376.9	730.1	479.0	127.2	351.81	1.362 Level 3		
16,900.0	7,582.0	16,800.6	7,447.2	183.8	183.9	-73.78	-9,476.9	730.5	479.1	123.7	355.45	1.348 Level 3		
17,000.0	7,582.0	16,900.6	7,446.8	185.7	185.8	-73.74	-9,576.9	730.9	479.3	120.2	359.09	1.335 Level 3		
17,100.0	7,582.0	17,000.6	7,446.4	187.6	187.7	-73.69	-9,676.9	731.3	479.4	116.6	362.74	1.322 Level 3		
17,200.0	7,582.0	17,100.6	7,446.0	189.5	189.6	-73.65	-9,776.9	731.8	479.5	113.1	366.38	1.309 Level 3		
17,300.0	7,582.0	17,200.6	7,445.6	191.5	191.6	-73.60	-9,876.9	732.2	479.6	109.6	370.02	1.296 Level 3		
17,400.0	7,582.0	17,300.6	7,445.2	193.4	193.5	-73.55	-9,976.9	732.6	479.7	106.1	373.65	1.284 Level 3		
17,500.0	7,582.0	17,400.6	7,444.8	195.3	195.4	-73.51	-10,076.9	733.1	479.8	102.6	377.29	1.272 Level 3		
17,600.0	7,582.0	17,500.6	7,444.4	197.2	197.3	-73.46	-10,176.9	733.5	480.0	99.0	380.92	1.260 Level 3		
17,700.0	7,582.0	17,600.6	7,444.0	199.2	199.3	-73.42	-10,276.9	733.9	480.1	95.5	384.56	1.248 Level 2		
17,800.0	7,582.0	17,700.6	7,443.6	201.1	201.2	-73.37	-10,376.9	734.3	480.2	92.0	388.19	1.237 Level 2		
17,900.0	7,582.0	17,800.6	7,443.2	203.0	203.1	-73.33	-10,476.9	734.8	480.3	88.5	391.82	1.226 Level 2		
17,945.3	7,582.0	17,845.2	7,443.0	203.9	204.0	-73.30	-10,521.5	734.9	480.4	86.9	393.45	1.221 Level 2, ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittter Creek 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	89.61	4.8	699.3	699.3						
100.0	100.0	99.0	99.0	0.1	0.1	89.61	4.8	699.3	699.3	699.0	0.22	3,126.701			
200.0	200.0	199.0	199.0	0.3	0.3	89.61	4.8	699.3	699.3	698.6	0.67	1,040.500			
300.0	300.0	299.0	299.0	0.6	0.6	89.61	4.8	699.3	699.3	698.1	1.12	623.466			
400.0	400.0	399.0	399.0	0.8	0.8	89.61	4.8	699.3	699.3	697.7	1.57	445.078			
500.0	500.0	499.0	499.0	1.0	1.0	89.61	4.8	699.3	699.3	697.2	2.02	346.062			
600.0	600.0	599.0	599.0	1.2	1.2	89.61	4.8	699.3	699.3	696.8	2.47	283.084			
700.0	700.0	699.0	699.0	1.5	1.5	89.61	4.8	699.3	699.3	696.3	2.92	239.499			
800.0	800.0	799.0	799.0	1.7	1.7	89.61	4.8	699.3	699.3	695.9	3.37	207.545			
900.0	900.0	899.0	899.0	1.9	1.9	89.61	4.8	699.3	699.3	695.4	3.82	183.113			
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.61	4.8	699.3	699.3	695.0	4.27	163.828			
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.61	4.8	699.3	699.3	694.6	4.72	148.218			
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.61	4.8	699.3	699.3	694.1	5.17	135.324			
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.61	4.8	699.3	699.3	693.7	5.62	124.494			
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.61	4.8	699.3	699.3	693.2	6.07	115.268			
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.61	4.8	699.3	699.3	692.8	6.52	107.316			
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	30.64	4.8	699.3	698.1	691.2	6.96	100.343			
1,700.0	1,699.9	1,698.9	1,698.9	3.7	3.7	30.83	4.8	699.3	694.8	687.4	7.39	94.003			
1,727.4	1,727.2	1,722.3	1,722.3	3.8	3.8	30.89	4.8	699.3	693.5	686.0	7.50	92.496			
1,800.0	1,799.7	1,784.0	1,784.0	3.9	3.9	31.03	5.0	700.1	690.8	683.0	7.78	88.743			
1,900.0	1,899.6	1,869.1	1,869.0	4.1	4.1	31.19	5.7	702.9	688.9	680.7	8.17	84.279			
1,936.4	1,935.9	1,900.0	1,899.9	4.2	4.1	31.24	6.0	704.3	688.8	680.5	8.32	82.820	CC, ES		
2,000.0	1,999.4	1,954.2	1,954.0	4.4	4.2	31.31	6.8	707.5	689.2	680.6	8.57	80.453			
2,100.0	2,099.2	2,039.2	2,038.8	4.6	4.4	31.40	8.4	713.9	691.6	682.7	8.96	77.172			
2,200.0	2,199.0	2,124.2	2,123.3	4.8	4.6	31.44	10.4	722.1	696.2	686.9	9.36	74.372			
2,300.0	2,298.9	2,208.9	2,207.4	5.0	4.8	31.45	12.9	732.1	703.0	693.2	9.76	71.999			
2,400.0	2,398.7	2,297.1	2,294.7	5.3	5.1	31.41	15.9	744.4	711.8	701.6	10.18	69.935			
2,500.0	2,498.5	2,396.7	2,393.1	5.5	5.3	31.36	19.5	758.8	721.2	710.6	10.62	67.923			
2,600.0	2,598.3	2,496.2	2,491.6	5.8	5.6	31.31	23.1	773.3	730.7	719.6	11.06	66.050			
2,700.0	2,698.1	2,595.8	2,590.0	6.0	5.9	31.27	26.6	787.7	740.1	728.6	11.51	64.301			
2,800.0	2,798.0	2,695.3	2,688.5	6.2	6.2	31.22	30.2	802.1	749.5	737.6	11.96	62.668			
2,900.0	2,897.8	2,794.9	2,786.9	6.5	6.5	31.18	33.8	816.6	759.0	746.5	12.41	61.141			
3,000.0	2,997.6	2,894.4	2,885.3	6.7	6.8	31.13	37.3	831.0	768.4	755.5	12.87	59.710			
3,100.0	3,097.4	2,994.0	2,983.8	6.9	7.1	31.09	40.9	845.4	777.8	764.5	13.33	58.368			
3,200.0	3,197.3	3,093.5	3,082.2	7.2	7.4	31.05	44.5	859.9	787.3	773.5	13.79	57.107			
3,300.0	3,297.1	3,193.1	3,180.6	7.4	7.7	31.01	48.1	874.3	796.7	782.4	14.25	55.921	SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design													Critic 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			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)						
0.0	0.0	0.0	0.0	0.0	0.0	89.66	4.0	674.9	674.9								
100.0	100.0	99.0	99.0	0.1	0.1	89.66	4.0	674.9	674.9	674.7	0.22	3,017.930					
200.0	200.0	199.0	199.0	0.3	0.3	89.66	4.0	674.9	674.9	674.3	0.67	1,004.303					
300.0	300.0	299.0	299.0	0.6	0.6	89.66	4.0	674.9	674.9	673.8	1.12	601.777					
400.0	400.0	399.0	399.0	0.8	0.8	89.66	4.0	674.9	674.9	673.4	1.57	429.595					
500.0	500.0	499.0	499.0	1.0	1.0	89.66	4.0	674.9	674.9	672.9	2.02	334.023					
600.0	600.0	599.0	599.0	1.2	1.2	89.66	4.0	674.9	674.9	672.5	2.47	273.236					
700.0	700.0	699.0	699.0	1.5	1.5	89.66	4.0	674.9	674.9	672.0	2.92	231.168					
800.0	800.0	799.0	799.0	1.7	1.7	89.66	4.0	674.9	674.9	671.6	3.37	200.325					
900.0	900.0	899.0	899.0	1.9	1.9	89.66	4.0	674.9	674.9	671.1	3.82	176.743					
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.66	4.0	674.9	674.9	670.7	4.27	158.129					
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.66	4.0	674.9	674.9	670.2	4.72	143.062					
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.66	4.0	674.9	674.9	669.8	5.17	130.616					
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.66	4.0	674.9	674.9	669.3	5.62	120.163					
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.66	4.0	674.9	674.9	668.9	6.07	111.259					
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.66	4.0	674.9	674.9	668.4	6.52	103.583					
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	30.69	4.0	674.9	673.8	666.9	6.96	96.846					
1,700.0	1,699.9	1,698.9	1,698.9	3.7	3.7	30.88	4.0	674.9	670.4	663.1	7.39	90.712					
1,727.4	1,727.2	1,726.2	1,726.2	3.8	3.8	30.96	4.0	674.9	669.1	661.6	7.51	89.108					
1,800.0	1,799.7	1,798.7	1,798.7	3.9	3.9	31.15	4.0	674.9	665.4	657.6	7.83	85.018					
1,900.0	1,899.6	1,898.6	1,898.6	4.1	4.2	31.42	4.0	674.9	660.3	652.1	8.27	79.884					
2,000.0	1,999.4	1,993.5	1,993.5	4.4	4.3	31.77	2.9	675.3	655.6	647.0	8.67	75.629					
2,100.0	2,099.2	2,088.1	2,088.1	4.6	4.5	32.33	-0.4	676.3	651.7	642.7	9.05	72.009					
2,200.0	2,199.0	2,182.5	2,182.3	4.8	4.7	33.08	-6.0	678.0	648.7	639.3	9.44	68.740					
2,300.0	2,298.9	2,276.5	2,275.9	5.0	4.8	34.02	-13.7	680.4	646.7	636.8	9.83	65.768					
2,400.0	2,398.7	2,369.9	2,368.7	5.3	5.0	35.16	-23.6	683.4	645.7	635.5	10.24	63.064					
2,428.9	2,427.6	2,396.8	2,395.4	5.3	5.1	35.52	-26.8	684.4	645.6	635.3	10.36	62.337 CC					
2,500.0	2,498.5	2,462.7	2,460.7	5.5	5.2	36.47	-35.5	687.1	646.0	635.3	10.66	60.604					
2,600.0	2,598.3	2,554.8	2,551.6	5.8	5.4	37.95	-49.5	691.4	647.6	636.5	11.09	58.384					
2,700.0	2,698.1	2,652.1	2,647.4	6.0	5.7	39.62	-65.6	696.3	650.4	638.8	11.56	56.272					
2,800.0	2,798.0	2,750.1	2,744.0	6.2	6.0	41.28	-81.9	701.3	653.7	641.7	12.04	54.312					
2,900.0	2,897.8	2,848.2	2,840.5	6.5	6.2	42.93	-98.1	706.3	657.7	645.1	12.53	52.504					
3,000.0	2,997.6	2,946.3	2,937.1	6.7	6.5	44.56	-114.4	711.3	662.1	649.1	13.02	50.844					
3,100.0	3,097.4	3,044.3	3,033.7	6.9	6.8	46.16	-130.7	716.3	667.2	653.6	13.53	49.324					
3,200.0	3,197.3	3,142.4	3,130.3	7.2	7.2	47.74	-146.9	721.2	672.7	658.7	14.03	47.936					
3,300.0	3,297.1	3,240.4	3,226.8	7.4	7.5	49.30	-163.2	726.2	678.8	664.3	14.54	46.671					
3,400.0	3,396.9	3,338.5	3,323.4	7.7	7.8	50.82	-179.4	731.2	685.4	670.4	15.06	45.521					
3,500.0	3,496.7	3,436.6	3,420.0	7.9	8.1	52.32	-195.7	736.2	692.5	676.9	15.57	44.475					
3,600.0	3,596.5	3,534.6	3,516.6	8.2	8.5	53.79	-212.0	741.2	700.1	684.0	16.08	43.525					
3,700.0	3,696.4	3,632.7	3,613.1	8.4	8.8	55.22	-228.2	746.2	708.1	691.5	16.60	42.664					
3,800.0	3,796.2	3,730.7	3,709.7	8.6	9.2	56.63	-244.5	751.2	716.5	699.4	17.11	41.883					
3,900.0	3,896.0	3,828.8	3,806.3	8.9	9.5	58.00	-260.7	756.2	725.4	707.8	17.62	41.176					
4,000.0	3,995.8	3,926.9	3,902.9	9.1	9.9	59.34	-277.0	761.2	734.7	716.6	18.13	40.535					
4,100.0	4,095.7	4,024.9	3,999.4	9.4	10.2	60.64	-293.3	766.1	744.5	725.8	18.63	39.956					
4,200.0	4,195.5	4,123.0	4,096.0	9.6	10.6	61.91	-309.5	771.1	754.6	735.4	19.14	39.431					
4,300.0	4,295.3	4,221.1	4,192.6	9.9	11.0	63.15	-325.8	776.1	765.0	745.4	19.64	38.957					
4,400.0	4,395.1	4,319.1	4,289.2	10.1	11.3	64.36	-342.0	781.1	775.8	755.7	20.14	38.528					
4,500.0	4,495.0	4,417.2	4,385.8	10.4	11.7	65.53	-358.3	786.1	787.0	766.4	20.63	38.141					
4,600.0	4,594.8	4,515.2	4,482.3	10.6	12.1	66.67	-374.6	791.1	798.5	777.3	21.13	37.791					
7,150.0	7,135.3	8,108.2	7,582.0	16.2	19.0	-104.07	84.2	888.9	796.5	762.1	34.34	23.196					
7,200.0	7,181.0	8,087.8	7,582.0	16.3	19.0	-104.77	63.8	888.9	771.6	737.4	34.24	22.534					
7,250.0	7,225.1	8,064.2	7,582.0	16.3	18.9	-105.00	40.3	888.9	749.5	715.3	34.18	21.930					

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittter Creek 510-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)										Offset Site Error:		0.0 ft
Survey Program:		0-MWD										Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
7,300.0	7,267.4	8,027.0	7,581.6	16.4	18.8	-104.06	3.0	888.8	730.0	695.9	34.13	21.390		
7,350.0	7,307.8	7,981.6	7,578.6	16.5	18.6	-102.35	-42.3	888.7	712.6	678.5	34.12	20.885		
7,400.0	7,346.0	7,939.7	7,573.3	16.5	18.5	-100.66	-83.8	888.6	697.4	663.2	34.17	20.409		
7,450.0	7,381.9	7,900.5	7,566.2	16.6	18.5	-98.95	-122.3	888.6	684.5	650.3	34.28	19.969		
7,500.0	7,415.3	7,863.4	7,557.5	16.8	18.5	-97.19	-158.4	888.5	674.1	639.7	34.45	19.566		
7,550.0	7,446.0	7,827.9	7,547.5	16.9	18.5	-95.35	-192.5	888.4	666.1	631.5	34.68	19.210		
7,600.0	7,473.9	7,793.7	7,536.2	17.1	18.5	-93.42	-224.7	888.4	660.6	625.7	34.95	18.904		
7,650.0	7,498.8	7,760.6	7,523.9	17.4	18.5	-91.40	-255.5	888.3	657.5	622.3	35.26	18.646		
7,692.4	7,517.5	7,733.2	7,512.6	17.6	18.6	-89.62	-280.4	888.3	656.7	621.2	35.56	18.469		
7,700.0	7,520.6	7,728.3	7,510.5	17.7	18.6	-89.30	-284.8	888.3	656.7	621.1	35.61	18.442 ES		
7,750.0	7,539.3	7,696.8	7,496.1	18.0	18.6	-87.11	-312.9	888.2	658.1	622.2	35.98	18.294		
7,800.0	7,554.6	7,665.9	7,480.8	18.4	18.7	-84.85	-339.8	888.2	661.6	625.2	36.36	18.197		
7,850.0	7,566.6	7,635.5	7,464.7	18.8	18.7	-82.55	-365.5	888.1	666.9	630.1	36.74	18.152 SF		
7,900.0	7,575.2	7,605.5	7,447.8	19.3	18.8	-80.20	-390.3	888.1	673.8	636.7	37.11	18.155		
7,950.0	7,580.3	7,575.9	7,430.0	19.8	18.9	-77.84	-413.9	888.0	682.2	644.7	37.48	18.201		
7,998.6	7,582.0	7,550.0	7,413.7	20.3	19.0	-75.69	-434.1	888.0	691.5	653.7	37.83	18.278		
7,998.7	7,582.0	7,550.0	7,413.7	20.3	19.0	-75.69	-434.1	888.0	691.5	653.7	37.83	18.278		
8,001.4	7,582.0	7,550.0	7,413.7	20.3	19.0	-75.69	-434.1	888.0	692.1	654.2	37.86	18.279		
8,100.0	7,582.0	7,492.4	7,374.8	21.4	19.1	-72.54	-476.6	887.9	715.8	677.3	38.56	18.564		
8,200.0	7,582.0	7,450.0	7,344.2	22.6	19.3	-70.13	-505.8	887.9	747.7	708.3	39.42	18.969		
8,300.0	7,582.0	7,400.0	7,305.8	24.0	19.4	-67.22	-537.9	887.8	787.4	747.2	40.16	19.604		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)											Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	89.99	0.0	24.6	24.6					
100.0	100.0	99.0	99.0	0.1	0.1	89.99	0.0	24.6	24.6	24.4	0.22	109.988		
200.0	200.0	199.0	199.0	0.3	0.3	89.99	0.0	24.6	24.6	23.9	0.67	36.602		
300.0	300.0	299.0	299.0	0.6	0.6	89.99	0.0	24.6	24.6	23.5	1.12	21.932		
400.0	400.0	399.0	399.0	0.8	0.8	89.99	0.0	24.6	24.6	23.0	1.57	15.657		
500.0	500.0	499.0	499.0	1.0	1.0	89.99	0.0	24.6	24.6	22.6	2.02	12.173		
600.0	600.0	599.0	599.0	1.2	1.2	89.99	0.0	24.6	24.6	22.1	2.47	9.958		
700.0	700.0	699.0	699.0	1.5	1.5	89.99	0.0	24.6	24.6	21.7	2.92	8.425		
800.0	800.0	799.0	799.0	1.7	1.7	89.99	0.0	24.6	24.6	21.2	3.37	7.301		
900.0	900.0	899.0	899.0	1.9	1.9	89.99	0.0	24.6	24.6	20.8	3.82	6.441		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.99	0.0	24.6	24.6	20.3	4.27	5.763		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.99	0.0	24.6	24.6	19.9	4.72	5.214		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.99	0.0	24.6	24.6	19.4	5.17	4.760		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.99	0.0	24.6	24.6	19.0	5.62	4.379		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.99	0.0	24.6	24.6	18.5	6.07	4.055		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.99	0.0	24.6	24.6	18.1	6.52	3.775		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	32.61	0.0	24.6	23.5	16.5	6.96	3.375		
1,700.0	1,699.9	1,698.9	1,698.9	3.7	3.7	38.62	0.0	24.6	20.3	12.9	7.39	2.745		
1,727.4	1,727.2	1,726.2	1,726.2	3.8	3.8	41.75	-0.1	24.6	19.1	11.6	7.50	2.552		
1,800.0	1,799.7	1,798.5	1,798.5	3.9	3.9	55.59	-1.3	24.8	16.8	9.0	7.80	2.155		
1,836.6	1,836.2	1,834.9	1,834.8	4.0	4.0	65.21	-2.4	25.0	16.5	8.5	7.95	2.071	CC, ES, SF	
1,900.0	1,899.6	1,897.8	1,897.7	4.1	4.1	83.28	-5.3	25.4	17.7	9.5	8.20	2.159		
2,000.0	1,999.4	1,996.7	1,996.4	4.4	4.3	104.97	-11.8	26.4	24.7	16.1	8.61	2.865		
2,100.0	2,099.2	2,095.1	2,094.3	4.6	4.4	115.94	-21.0	27.7	36.2	27.2	9.02	4.016		
2,200.0	2,199.0	2,192.8	2,191.3	4.8	4.6	121.03	-32.6	29.5	51.0	41.6	9.43	5.413		
2,300.0	2,298.9	2,289.7	2,287.1	5.0	4.9	123.38	-46.7	31.6	68.6	58.8	9.85	6.971		
2,400.0	2,398.7	2,387.9	2,384.1	5.3	5.1	124.62	-62.2	33.9	87.5	77.2	10.27	8.519		
2,500.0	2,498.5	2,486.1	2,481.0	5.5	5.3	125.42	-77.6	36.2	106.4	95.7	10.70	9.943		
2,600.0	2,598.3	2,584.3	2,578.0	5.8	5.6	125.98	-93.0	38.5	125.3	114.1	11.13	11.252		
2,700.0	2,698.1	2,682.4	2,674.9	6.0	5.9	126.39	-108.5	40.8	144.2	132.6	11.57	12.457		
2,800.0	2,798.0	2,780.6	2,771.9	6.2	6.2	126.70	-123.9	43.1	163.1	151.1	12.02	13.570		
2,900.0	2,897.8	2,878.8	2,868.8	6.5	6.5	126.95	-139.3	45.4	182.0	169.5	12.47	14.599		
3,000.0	2,997.6	2,977.0	2,965.8	6.7	6.8	127.16	-154.8	47.7	200.9	188.0	12.92	15.553		
3,100.0	3,097.4	3,075.2	3,062.7	6.9	7.1	127.33	-170.2	50.0	219.8	206.5	13.37	16.438		
3,200.0	3,197.3	3,173.4	3,159.6	7.2	7.4	127.47	-185.6	52.3	238.8	224.9	13.83	17.261		
3,300.0	3,297.1	3,271.6	3,256.6	7.4	7.8	127.59	-201.1	54.6	257.7	243.4	14.29	18.027		
3,400.0	3,396.9	3,369.8	3,353.5	7.7	8.1	127.69	-216.5	56.9	276.6	261.9	14.76	18.743		
3,500.0	3,496.7	3,468.0	3,450.5	7.9	8.4	127.78	-232.0	59.2	295.5	280.3	15.22	19.413		
3,600.0	3,596.5	3,566.2	3,547.4	8.2	8.8	127.86	-247.4	61.5	314.5	298.8	15.69	20.040		
3,700.0	3,696.4	3,664.4	3,644.4	8.4	9.1	127.93	-262.8	63.8	333.4	317.2	16.16	20.629		
3,800.0	3,796.2	3,762.6	3,741.3	8.6	9.4	128.00	-278.3	66.1	352.3	335.7	16.63	21.182		
3,900.0	3,896.0	3,860.8	3,838.3	8.9	9.8	128.06	-293.7	68.4	371.2	354.1	17.11	21.703		
4,000.0	3,995.8	3,958.9	3,935.2	9.1	10.1	128.11	-309.1	70.7	390.2	372.6	17.58	22.194		
4,100.0	4,095.7	4,057.1	4,032.1	9.4	10.5	128.15	-324.6	73.0	409.1	391.0	18.06	22.657		
4,200.0	4,195.5	4,155.3	4,129.1	9.6	10.8	128.20	-340.0	75.3	428.0	409.5	18.53	23.096		
4,300.0	4,295.3	4,253.5	4,226.0	9.9	11.2	128.23	-355.5	77.6	446.9	427.9	19.01	23.510		
4,400.0	4,395.1	4,351.7	4,323.0	10.1	11.5	128.27	-370.9	79.9	465.9	446.4	19.49	23.904		
4,500.0	4,495.0	4,449.9	4,419.9	10.4	11.9	128.30	-386.3	82.2	484.8	464.8	19.97	24.277		
4,600.0	4,594.8	4,548.1	4,516.9	10.6	12.3	128.33	-401.8	84.5	503.7	483.3	20.45	24.632		
4,700.0	4,694.6	4,646.3	4,613.8	10.8	12.6	128.36	-417.2	86.8	522.6	501.7	20.93	24.969		
4,800.0	4,794.4	4,744.5	4,710.7	11.1	13.0	128.39	-432.6	89.1	541.6	520.2	21.41	25.290		
4,900.0	4,894.2	4,842.7	4,807.7	11.3	13.3	128.41	-448.1	91.4	560.5	538.6	21.90	25.597		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 511-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,994.1	4,940.9	4,904.6	11.6	13.7	128.44	-463.5	93.7	579.4	557.0	22.38	25.889		
5,100.0	5,093.9	5,039.1	5,001.6	11.8	14.1	128.46	-479.0	96.0	598.4	575.5	22.87	26.168		
5,200.0	5,193.7	5,137.3	5,098.5	12.1	14.4	128.48	-494.4	98.3	617.3	593.9	23.35	26.435		
5,300.0	5,293.5	5,235.4	5,195.5	12.3	14.8	128.50	-509.8	100.6	636.2	612.4	23.84	26.691		
5,400.0	5,393.4	5,333.6	5,292.4	12.6	15.1	128.51	-525.3	102.9	655.1	630.8	24.32	26.935		
5,500.0	5,493.2	5,431.8	5,389.4	12.8	15.5	128.53	-540.7	105.2	674.1	649.3	24.81	27.170		
5,600.0	5,593.0	5,530.0	5,486.3	13.1	15.9	128.55	-556.1	107.5	693.0	667.7	25.30	27.395		
5,700.0	5,692.8	5,628.2	5,583.2	13.3	16.2	128.56	-571.6	109.8	711.9	686.1	25.78	27.611		
5,800.0	5,792.7	5,726.4	5,680.2	13.6	16.6	128.58	-587.0	112.1	730.8	704.6	26.27	27.819		
5,900.0	5,892.5	5,824.6	5,777.1	13.8	17.0	128.59	-602.5	114.4	749.8	723.0	26.76	28.018		
6,000.0	5,992.3	5,922.8	5,874.1	14.1	17.3	128.60	-617.9	116.7	768.7	741.5	27.25	28.210		
6,037.4	6,029.6	5,959.5	5,910.3	14.1	17.5	128.61	-623.7	117.6	775.8	748.3	27.43	28.280		
6,100.0	6,092.2	6,021.1	5,971.1	14.3	17.7	128.76	-633.3	119.0	787.2	759.5	27.75	28.369		
6,800.0	6,792.1	8,163.9	7,582.0	15.7	19.5	-89.90	138.2	129.9	797.2	762.6	34.58	23.054		
6,873.7	6,865.9	8,163.9	7,582.0	15.8	19.5	-89.90	138.2	129.9	724.1	689.3	34.74	20.845		
6,900.0	6,892.1	8,163.4	7,582.0	15.9	19.5	104.49	137.7	129.9	698.1	663.4	34.72	20.103		
6,950.0	6,942.0	8,159.9	7,582.0	16.0	19.5	124.44	134.1	129.9	648.8	614.6	34.16	18.992		
7,000.0	6,991.5	8,152.8	7,582.0	16.0	19.4	136.15	127.1	129.9	599.9	566.4	33.54	17.889		
7,050.0	7,040.4	8,142.3	7,582.0	16.1	19.3	142.95	116.6	129.9	551.8	518.8	32.99	16.729		
7,100.0	7,088.4	8,128.5	7,582.0	16.1	19.3	146.96	102.7	129.8	504.7	472.2	32.44	15.555		
7,150.0	7,135.3	8,111.3	7,582.0	16.2	19.2	149.28	85.5	129.8	458.8	426.9	31.87	14.397		
7,200.0	7,181.0	8,090.9	7,582.0	16.3	19.0	150.46	65.1	129.8	414.4	383.2	31.24	13.267		
7,250.0	7,225.1	8,067.3	7,582.0	16.3	18.9	150.79	41.6	129.7	371.8	341.3	30.56	12.166		
7,300.0	7,267.4	8,037.5	7,582.0	16.4	18.8	150.01	11.7	129.7	331.3	301.4	29.90	11.081		
7,350.0	7,307.8	7,990.4	7,579.9	16.5	18.6	146.48	-35.3	129.6	291.9	262.4	29.50	9.897		
7,400.0	7,346.0	7,947.1	7,575.3	16.5	18.5	142.36	-78.3	129.5	253.5	224.2	29.31	8.650		
7,450.0	7,381.9	7,906.8	7,568.7	16.6	18.4	137.37	-118.1	129.5	216.5	187.0	29.47	7.348		
7,500.0	7,415.3	7,868.6	7,560.4	16.8	18.4	131.15	-155.4	129.4	181.6	151.5	30.12	6.030		
7,550.0	7,446.0	7,832.2	7,550.6	16.9	18.3	123.30	-190.4	129.3	150.2	118.8	31.37	4.787		
7,600.0	7,473.9	7,797.2	7,539.6	17.1	18.3	113.42	-223.6	129.3	124.2	91.1	33.09	3.753		
7,650.0	7,498.8	7,763.4	7,527.4	17.4	18.3	101.41	-255.2	129.2	107.1	72.3	34.78	3.078		
7,691.0	7,516.9	7,736.3	7,516.5	17.6	18.3	90.37	-280.0	129.2	102.4	66.8	35.54	2.881		
7,700.0	7,520.6	7,730.5	7,514.1	17.7	18.3	87.87	-285.3	129.2	102.6	67.0	35.57	2.885		
7,750.0	7,539.3	7,698.3	7,499.7	18.0	18.4	74.14	-314.0	129.1	111.5	76.8	34.76	3.209		
7,800.0	7,554.6	7,666.9	7,484.5	18.4	18.4	61.71	-341.6	129.1	130.4	97.9	32.46	4.016		
7,850.0	7,566.6	7,636.0	7,468.4	18.8	18.5	51.38	-367.9	129.0	155.0	125.6	29.38	5.274		
7,900.0	7,575.2	7,605.6	7,451.4	19.3	18.6	43.19	-393.1	129.0	182.4	156.2	26.19	6.965		
7,950.0	7,580.3	7,575.5	7,433.6	19.8	18.6	36.82	-417.3	129.0	211.1	187.8	23.28	9.068		
7,998.6	7,582.0	7,550.0	7,417.7	20.3	18.7	32.30	-437.3	128.9	239.3	218.3	21.04	11.373		
7,998.7	7,582.0	7,550.0	7,417.7	20.3	18.7	32.30	-437.3	128.9	239.4	218.3	21.05	11.374		
8,001.4	7,582.0	7,550.0	7,417.7	20.3	18.7	32.28	-437.3	128.9	241.0	219.9	21.06	11.444		
8,100.0	7,582.0	7,490.9	7,378.2	21.4	18.9	27.02	-481.2	128.9	302.2	283.1	19.05	15.860		
8,200.0	7,582.0	7,450.0	7,348.8	22.6	19.0	24.04	-509.6	128.8	371.1	352.8	18.26	20.321		
8,300.0	7,582.0	7,400.0	7,310.7	24.0	19.1	21.01	-542.0	128.8	445.0	427.5	17.45	25.504		
8,400.0	7,582.0	7,365.1	7,282.8	25.4	19.2	19.21	-563.0	128.7	523.0	505.7	17.30	30.229		
8,500.0	7,582.0	7,333.3	7,256.6	26.9	19.3	17.78	-581.0	128.7	604.2	586.8	17.35	34.826		
8,600.0	7,582.0	7,300.0	7,228.3	28.4	19.4	16.45	-598.5	128.7	688.0	670.5	17.46	39.404		
8,700.0	7,582.0	7,280.5	7,211.3	30.0	19.4	15.74	-608.1	128.6	773.8	755.9	17.90	43.237		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.84	-1.1	-75.2	75.2	75.2	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	-90.84	-1.1	-75.2	75.2	75.0	0.23	331.190		
200.0	200.0	201.0	201.0	0.3	0.3	-90.84	-1.1	-75.2	75.2	74.5	0.68	111.130		
300.0	300.0	301.0	301.0	0.6	0.6	-90.84	-1.1	-75.2	75.2	74.1	1.13	66.767		
400.0	400.0	401.0	401.0	0.8	0.8	-90.84	-1.1	-75.2	75.2	73.6	1.58	47.718		
500.0	500.0	501.0	501.0	1.0	1.0	-90.84	-1.1	-75.2	75.2	73.2	2.03	37.126		
600.0	600.0	601.0	601.0	1.2	1.2	-90.84	-1.1	-75.2	75.2	72.7	2.47	30.382		
700.0	700.0	701.0	701.0	1.5	1.5	-90.84	-1.1	-75.2	75.2	72.3	2.92	25.711		
800.0	800.0	801.0	801.0	1.7	1.7	-90.84	-1.1	-75.2	75.2	71.8	3.37	22.285		
900.0	900.0	901.0	901.0	1.9	1.9	-90.84	-1.1	-75.2	75.2	71.4	3.82	19.665		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.84	-1.1	-75.2	75.2	70.9	4.27	17.596		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.84	-1.1	-75.2	75.2	70.5	4.72	15.921		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.84	-1.1	-75.2	75.2	70.0	5.17	14.537		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.84	-1.1	-75.2	75.2	69.6	5.62	13.375		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.84	-1.1	-75.2	75.2	69.1	6.07	12.384		
1,500.0	1,500.0	1,501.0	1,501.0	3.3	3.3	-90.84	-1.1	-75.2	75.2	68.7	6.52	11.531 CC, ES		
1,600.0	1,600.0	1,601.0	1,601.0	3.5	3.5	-150.36	-1.1	-75.2	76.3	69.4	6.96	10.962		
1,700.0	1,699.9	1,700.9	1,700.9	3.7	3.7	-151.73	-1.1	-75.2	79.8	72.4	7.39	10.785 SF		
1,727.4	1,727.2	1,727.9	1,727.9	3.8	3.8	-152.28	-1.2	-75.2	81.2	73.7	7.51	10.815		
1,800.0	1,799.7	1,800.0	1,800.0	3.9	3.9	-154.27	-2.2	-75.9	85.8	78.0	7.80	10.991		
1,900.0	1,899.6	1,897.4	1,897.4	4.1	4.1	-157.65	-5.4	-77.9	93.7	85.5	8.19	11.440		
2,000.0	1,999.4	1,995.0	1,994.7	4.4	4.3	-161.50	-10.7	-81.3	103.7	95.1	8.58	12.082		
2,100.0	2,099.2	2,091.9	2,091.2	4.6	4.4	-165.47	-18.0	-86.0	116.0	107.0	8.98	12.914		
2,200.0	2,199.0	2,188.0	2,186.7	4.8	4.6	-169.31	-27.3	-92.0	130.7	121.3	9.39	13.927		
2,300.0	2,298.9	2,283.2	2,281.0	5.0	4.9	-172.88	-38.5	-99.2	148.0	138.2	9.80	15.106		
2,400.0	2,398.7	2,377.5	2,374.0	5.3	5.1	-176.10	-51.5	-107.6	167.9	157.7	10.22	16.434		
2,500.0	2,498.5	2,471.3	2,466.1	5.5	5.4	-178.96	-66.4	-117.1	190.3	179.7	10.64	17.888		
2,600.0	2,598.3	2,568.1	2,561.0	5.8	5.6	-178.59	-82.4	-127.4	213.9	202.8	11.07	19.319		
2,700.0	2,698.1	2,664.9	2,655.9	6.0	6.0	-176.63	-98.5	-137.7	237.8	226.2	11.50	20.668		
2,800.0	2,798.0	2,761.7	2,750.8	6.2	6.3	-175.03	-114.5	-148.1	261.8	249.9	11.94	21.930		
2,900.0	2,897.8	2,858.5	2,845.7	6.5	6.6	-173.70	-130.5	-158.4	286.1	273.7	12.38	23.109		
3,000.0	2,997.6	2,955.4	2,940.7	6.7	7.0	-172.57	-146.6	-168.7	310.5	297.7	12.82	24.212		
3,100.0	3,097.4	3,052.2	3,035.6	6.9	7.3	-171.61	-162.6	-179.0	335.0	321.7	13.27	25.243		
3,200.0	3,197.3	3,149.0	3,130.5	7.2	7.7	-170.78	-178.7	-189.3	359.5	345.8	13.72	26.208		
3,300.0	3,297.1	3,245.8	3,225.4	7.4	8.0	-170.06	-194.7	-199.6	384.1	370.0	14.17	27.111		
3,400.0	3,396.9	3,342.6	3,320.3	7.7	8.4	-169.42	-210.8	-209.9	408.8	394.2	14.62	27.959		
3,500.0	3,496.7	3,439.4	3,415.2	7.9	8.8	-168.86	-226.8	-220.2	433.5	418.4	15.08	28.755		
3,600.0	3,596.5	3,536.3	3,510.2	8.2	9.2	-168.35	-242.9	-230.5	458.2	442.7	15.53	29.503		
3,700.0	3,696.4	3,633.1	3,605.1	8.4	9.6	-167.90	-258.9	-240.9	483.0	467.0	15.99	30.208		
3,800.0	3,796.2	3,729.9	3,700.0	8.6	10.0	-167.49	-275.0	-251.2	507.8	491.4	16.45	30.872		
3,900.0	3,896.0	3,826.7	3,794.9	8.9	10.4	-167.12	-291.0	-261.5	532.6	515.7	16.91	31.498		
4,000.0	3,995.8	3,923.5	3,889.8	9.1	10.8	-166.78	-307.0	-271.8	557.5	540.1	17.37	32.090		
4,100.0	4,095.7	4,020.3	3,984.8	9.4	11.2	-166.48	-323.1	-282.1	582.3	564.5	17.83	32.650		
4,200.0	4,195.5	4,117.2	4,079.7	9.6	11.6	-166.19	-339.1	-292.4	607.2	588.9	18.30	33.181		
4,300.0	4,295.3	4,214.0	4,174.6	9.9	12.0	-165.93	-355.2	-302.7	632.1	613.3	18.76	33.684		
4,400.0	4,395.1	4,310.8	4,269.5	10.1	12.4	-165.69	-371.2	-313.0	657.0	637.7	19.23	34.162		
4,500.0	4,495.0	4,407.6	4,364.4	10.4	12.8	-165.47	-387.3	-323.3	681.9	662.2	19.70	34.617		
4,600.0	4,594.8	4,504.4	4,459.4	10.6	13.2	-165.26	-403.3	-333.7	706.8	686.6	20.17	35.049		
4,700.0	4,694.6	4,601.2	4,554.3	10.8	13.6	-165.06	-419.4	-344.0	731.7	711.1	20.63	35.460		
4,800.0	4,794.4	4,698.1	4,649.2	11.1	14.0	-164.88	-435.4	-354.3	756.6	735.5	21.10	35.853		
4,900.0	4,894.2	4,794.9	4,744.1	11.3	14.4	-164.71	-451.5	-364.6	781.6	760.0	21.57	36.228		
7,400.0	7,346.0	7,967.4	7,575.7	16.5	19.2	99.42	-86.2	-529.6	794.9	760.5	34.36	23.134		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 512-1510H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,450.0	7,381.9	7,927.6	7,568.9	16.6	19.3	97.90	-125.5	-529.2	783.7	749.3	34.44	22.756		
7,500.0	7,415.3	7,889.8	7,560.4	16.8	19.4	96.35	-162.3	-528.9	774.7	740.1	34.58	22.402		
7,550.0	7,446.0	7,853.8	7,550.6	16.9	19.5	94.73	-197.0	-528.6	767.7	733.0	34.78	22.074		
7,600.0	7,473.9	7,819.1	7,539.5	17.1	19.6	93.05	-229.8	-528.3	763.0	727.9	35.04	21.773		
7,650.0	7,498.8	7,785.6	7,527.2	17.4	19.7	91.30	-261.0	-528.1	760.2	724.9	35.35	21.507		
7,694.4	7,518.3	7,756.6	7,515.5	17.6	19.8	89.68	-287.5	-527.9	759.5	723.8	35.65	21.301		
7,700.0	7,520.6	7,752.9	7,513.9	17.7	19.8	89.47	-290.8	-527.8	759.5	723.8	35.69	21.279		
7,750.0	7,539.3	7,721.0	7,499.6	18.0	19.9	87.58	-319.3	-527.6	760.6	724.5	36.07	21.087		
7,800.0	7,554.6	7,689.8	7,484.4	18.4	20.0	85.63	-346.6	-527.4	763.5	727.0	36.46	20.938		
7,850.0	7,566.6	7,659.1	7,468.3	18.8	20.1	83.63	-372.7	-527.1	767.9	731.1	36.87	20.830		
7,900.0	7,575.2	7,628.8	7,451.3	19.3	20.2	81.60	-397.8	-526.9	773.8	736.6	37.27	20.764		
7,950.0	7,580.3	7,600.0	7,434.2	19.8	20.3	79.60	-421.0	-526.7	781.0	743.3	37.66	20.737		
7,998.6	7,582.0	7,570.3	7,415.6	20.3	20.4	77.56	-444.1	-526.5	788.9	750.9	38.03	20.747		
7,998.7	7,582.0	7,570.3	7,415.5	20.3	20.4	77.55	-444.2	-526.5	789.0	750.9	38.03	20.747		
8,001.4	7,582.0	7,568.7	7,414.5	20.3	20.4	77.48	-445.4	-526.5	789.4	751.4	38.05	20.748		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.63	-1.1	-100.6	100.6	100.6	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	-90.63	-1.1	-100.6	100.6	100.4	0.23	443.189		
200.0	200.0	201.0	201.0	0.3	0.3	-90.63	-1.1	-100.6	100.6	99.9	0.68	148.711		
300.0	300.0	301.0	301.0	0.6	0.6	-90.63	-1.1	-100.6	100.6	99.5	1.13	89.346		
400.0	400.0	401.0	401.0	0.8	0.8	-90.63	-1.1	-100.6	100.6	99.0	1.58	63.855		
500.0	500.0	501.0	501.0	1.0	1.0	-90.63	-1.1	-100.6	100.6	98.6	2.03	49.680		
600.0	600.0	601.0	601.0	1.2	1.2	-90.63	-1.1	-100.6	100.6	98.1	2.47	40.656		
700.0	700.0	701.0	701.0	1.5	1.5	-90.63	-1.1	-100.6	100.6	97.7	2.92	34.406		
800.0	800.0	801.0	801.0	1.7	1.7	-90.63	-1.1	-100.6	100.6	97.2	3.37	29.822		
900.0	900.0	901.0	901.0	1.9	1.9	-90.63	-1.1	-100.6	100.6	96.8	3.82	26.315		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.63	-1.1	-100.6	100.6	96.3	4.27	23.547		
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-90.63	-1.1	-100.6	100.6	95.9	4.72	21.305		
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-90.63	-1.1	-100.6	100.6	95.4	5.17	19.453		
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-90.63	-1.1	-100.6	100.6	95.0	5.62	17.898		
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-90.63	-1.1	-100.6	100.6	94.5	6.07	16.572		
1,466.3	1,466.3	1,467.3	1,467.3	3.2	3.2	-90.63	-1.1	-100.6	100.6	94.2	6.37	15.797 CC		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-90.63	-1.1	-100.6	100.6	94.1	6.52	15.436 ES		
1,600.0	1,600.0	1,598.4	1,598.4	3.5	3.5	-149.83	-0.8	-101.8	103.0	96.1	6.95	14.828		
1,700.0	1,699.9	1,695.6	1,695.5	3.7	3.7	-150.27	0.1	-105.5	110.1	102.8	7.36	14.967		
1,727.4	1,727.2	1,722.0	1,721.9	3.8	3.7	-150.43	0.5	-106.9	112.9	105.4	7.47	15.112		
1,800.0	1,799.7	1,792.1	1,791.8	3.9	3.9	-150.81	1.6	-111.4	121.3	113.6	7.77	15.613		
1,900.0	1,899.6	1,888.1	1,887.4	4.1	4.1	-150.99	3.7	-119.7	135.1	126.9	8.19	16.490		
2,000.0	1,999.4	1,983.3	1,982.1	4.4	4.3	-150.88	6.3	-130.2	151.1	142.5	8.61	17.552		
2,100.0	2,099.2	2,081.4	2,079.3	4.6	4.6	-150.66	9.4	-142.5	168.6	159.6	9.04	18.653		
2,200.0	2,199.0	2,179.9	2,177.0	4.8	4.8	-150.47	12.5	-154.7	186.2	176.7	9.47	19.651		
2,300.0	2,298.9	2,278.3	2,274.6	5.0	5.1	-150.32	15.6	-167.0	203.7	193.8	9.91	20.554		
2,400.0	2,398.7	2,376.8	2,372.2	5.3	5.4	-150.19	18.7	-179.3	221.2	210.8	10.35	21.375		
2,500.0	2,498.5	2,475.2	2,469.9	5.5	5.6	-150.08	21.8	-191.6	238.7	227.9	10.79	22.123		
2,600.0	2,598.3	2,573.7	2,567.5	5.8	5.9	-149.98	24.9	-203.9	256.2	245.0	11.23	22.808		
2,700.0	2,698.1	2,672.2	2,665.1	6.0	6.2	-149.90	27.9	-216.2	273.7	262.1	11.68	23.436		
2,800.0	2,798.0	2,770.6	2,762.8	6.2	6.5	-149.82	31.0	-228.4	291.3	279.1	12.13	24.014		
2,900.0	2,897.8	2,869.1	2,860.4	6.5	6.8	-149.76	34.1	-240.7	308.8	296.2	12.58	24.547		
3,000.0	2,997.6	2,967.5	2,958.0	6.7	7.1	-149.70	37.2	-253.0	326.3	313.3	13.03	25.040		
3,100.0	3,097.4	3,066.0	3,055.7	6.9	7.4	-149.65	40.3	-265.3	343.8	330.3	13.48	25.498		
3,200.0	3,197.3	3,164.4	3,153.3	7.2	7.7	-149.60	43.4	-277.6	361.3	347.4	13.94	25.923		
3,300.0	3,297.1	3,262.9	3,251.0	7.4	8.0	-149.56	46.5	-289.9	378.9	364.5	14.39	26.320		
3,400.0	3,396.9	3,361.3	3,348.6	7.7	8.3	-149.52	49.6	-302.1	396.4	381.5	14.85	26.690		
3,500.0	3,496.7	3,459.8	3,446.2	7.9	8.6	-149.48	52.6	-314.4	413.9	398.6	15.31	27.037		
3,600.0	3,596.5	3,558.2	3,543.9	8.2	8.9	-149.45	55.7	-326.7	431.4	415.6	15.77	27.362		
3,700.0	3,696.4	3,656.7	3,641.5	8.4	9.2	-149.42	58.8	-339.0	448.9	432.7	16.23	27.667		
3,800.0	3,796.2	3,755.1	3,739.1	8.6	9.6	-149.39	61.9	-351.3	466.5	449.8	16.69	27.954		
3,900.0	3,896.0	3,853.6	3,836.8	8.9	9.9	-149.37	65.0	-363.6	484.0	466.8	17.15	28.225		
4,000.0	3,995.8	3,952.0	3,934.4	9.1	10.2	-149.34	68.1	-375.8	501.5	483.9	17.61	28.480		
4,100.0	4,095.7	4,050.5	4,032.0	9.4	10.5	-149.32	71.2	-388.1	519.0	500.9	18.07	28.721		
4,200.0	4,195.5	4,148.9	4,129.7	9.6	10.8	-149.30	74.3	-400.4	536.5	518.0	18.53	28.950		
4,300.0	4,295.3	4,247.4	4,227.3	9.9	11.1	-149.28	77.4	-412.7	554.1	535.1	19.00	29.167		
4,400.0	4,395.1	4,345.9	4,324.9	10.1	11.4	-149.26	80.4	-425.0	571.6	552.1	19.46	29.373		
4,500.0	4,495.0	4,444.3	4,422.6	10.4	11.8	-149.24	83.5	-437.3	589.1	569.2	19.92	29.568		
4,600.0	4,594.8	4,542.8	4,520.2	10.6	12.1	-149.23	86.6	-449.5	606.6	586.2	20.39	29.754		
4,700.0	4,694.6	4,641.2	4,617.8	10.8	12.4	-149.21	89.7	-461.8	624.1	603.3	20.85	29.931		
4,800.0	4,794.4	4,739.7	4,715.5	11.1	12.7	-149.20	92.8	-474.1	641.7	620.3	21.32	30.100		
4,900.0	4,894.2	4,838.1	4,813.1	11.3	13.0	-149.18	95.9	-486.4	659.2	637.4	21.78	30.262		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Critter Creek Pad 15-11N-63W - Critter Creek 562-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)											Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation			
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Separation (ft)	Factor			
5,000.0	4,994.1	4,936.6	4,910.7	11.6	13.4	-149.17	99.0	-498.7	676.7	654.5	22.25	30.416			
5,100.0	5,093.9	5,035.0	5,008.4	11.8	13.7	-149.16	102.1	-511.0	694.2	671.5	22.71	30.563			
5,200.0	5,193.7	5,133.5	5,106.0	12.1	14.0	-149.15	105.1	-523.2	711.7	688.6	23.18	30.704			
5,300.0	5,293.5	5,231.9	5,203.6	12.3	14.3	-149.13	108.2	-535.5	729.3	705.6	23.65	30.840			
5,400.0	5,393.4	5,330.4	5,301.3	12.6	14.6	-149.12	111.3	-547.8	746.8	722.7	24.11	30.969			
5,500.0	5,493.2	5,428.8	5,398.9	12.8	15.0	-149.11	114.4	-560.1	764.3	739.7	24.58	31.094			
5,600.0	5,593.0	5,527.3	5,496.6	13.1	15.3	-149.10	117.5	-572.4	781.8	756.8	25.05	31.213			
5,700.0	5,692.8	5,625.7	5,594.2	13.3	15.6	-149.09	120.6	-584.7	799.4	773.8	25.52	31.328			
14,000.0	7,582.0	14,034.7	7,582.0	128.2	128.7	89.93	-6,590.9	-541.2	799.4	542.8	256.65	3.115			
14,100.0	7,582.0	14,134.7	7,582.0	130.1	130.6	89.93	-6,690.9	-539.8	798.4	537.9	260.48	3.065			
14,200.0	7,582.0	14,234.7	7,582.0	132.0	132.6	89.93	-6,790.9	-538.3	797.4	533.1	264.31	3.017			
14,300.0	7,582.0	14,334.7	7,582.0	133.9	134.5	89.93	-6,890.9	-536.9	796.4	528.2	268.14	2.970			
14,400.0	7,582.0	14,434.6	7,582.0	135.8	136.4	89.93	-6,990.8	-535.5	795.4	523.4	271.98	2.924			
14,500.0	7,582.0	14,534.6	7,582.0	137.7	138.3	89.93	-7,090.8	-534.0	794.4	518.6	275.81	2.880			
14,600.0	7,582.0	14,634.6	7,582.0	139.7	140.2	89.93	-7,190.8	-532.6	793.4	513.7	279.64	2.837			
14,700.0	7,582.0	14,734.6	7,582.0	141.6	142.1	89.93	-7,290.8	-531.2	792.3	508.9	283.48	2.795			
14,800.0	7,582.0	14,834.6	7,582.0	143.5	144.0	89.93	-7,390.8	-529.7	791.3	504.0	287.31	2.754			
14,900.0	7,582.0	14,934.6	7,582.0	145.4	146.0	89.93	-7,490.8	-528.3	790.3	499.2	291.15	2.714			
15,000.0	7,582.0	15,034.6	7,582.0	147.3	147.9	89.93	-7,590.8	-526.9	789.3	494.3	294.99	2.676			
15,100.0	7,582.0	15,134.6	7,582.0	149.2	149.8	89.93	-7,690.7	-525.4	788.3	489.5	298.83	2.638			
15,200.0	7,582.0	15,234.6	7,582.0	151.2	151.7	89.93	-7,790.7	-524.0	787.3	484.6	302.66	2.601			
15,300.0	7,582.0	15,334.6	7,582.0	153.1	153.6	89.93	-7,890.7	-522.6	786.3	479.8	306.50	2.565			
15,400.0	7,582.0	15,434.6	7,582.0	155.0	155.6	89.93	-7,990.7	-521.1	785.3	474.9	310.34	2.530			
15,500.0	7,582.0	15,534.6	7,582.0	156.9	157.5	89.93	-8,090.7	-519.7	784.3	470.1	314.18	2.496			
15,600.0	7,582.0	15,634.6	7,582.0	158.8	159.4	89.93	-8,190.7	-518.3	783.2	465.2	318.02	2.463			
15,700.0	7,582.0	15,734.6	7,582.0	160.7	161.3	89.93	-8,290.6	-516.8	782.2	460.4	321.86	2.430			
15,800.0	7,582.0	15,834.6	7,582.0	162.7	163.2	89.93	-8,390.6	-515.4	781.2	455.5	325.71	2.399			
15,900.0	7,582.0	15,934.6	7,582.0	164.6	165.1	89.93	-8,490.6	-514.0	780.2	450.7	329.55	2.368			
16,000.0	7,582.0	16,034.6	7,582.0	166.5	167.1	89.93	-8,590.6	-512.5	779.2	445.8	333.39	2.337			
16,100.0	7,582.0	16,134.6	7,582.0	168.4	169.0	89.93	-8,690.6	-511.1	778.2	441.0	337.23	2.308			
16,200.0	7,582.0	16,234.6	7,582.0	170.3	170.9	89.93	-8,790.6	-509.6	777.2	436.1	341.08	2.279			
16,300.0	7,582.0	16,334.6	7,582.0	172.3	172.8	89.93	-8,890.6	-508.2	776.2	431.2	344.92	2.250			
16,400.0	7,582.0	16,434.5	7,582.0	174.2	174.8	89.93	-8,990.5	-506.8	775.2	426.4	348.76	2.223			
16,500.0	7,582.0	16,534.5	7,582.0	176.1	176.7	89.93	-9,090.5	-505.3	774.1	421.5	352.61	2.195			
16,600.0	7,582.0	16,634.5	7,582.0	178.0	178.6	89.93	-9,190.5	-503.9	773.1	416.7	356.45	2.169			
16,700.0	7,582.0	16,734.5	7,582.0	179.9	180.5	89.93	-9,290.5	-502.5	772.1	411.8	360.30	2.143			
16,800.0	7,582.0	16,834.5	7,582.0	181.9	182.4	89.93	-9,390.5	-501.0	771.1	407.0	364.14	2.118			
16,900.0	7,582.0	16,934.5	7,582.0	183.8	184.4	89.93	-9,490.5	-499.6	770.1	402.1	367.99	2.093			
17,000.0	7,582.0	17,034.5	7,582.0	185.7	186.3	89.93	-9,590.4	-498.2	769.1	397.3	371.84	2.068			
17,100.0	7,582.0	17,134.5	7,582.0	187.6	188.2	89.93	-9,690.4	-496.7	768.1	392.4	375.68	2.044			
17,200.0	7,582.0	17,234.5	7,582.0	189.5	190.1	89.93	-9,790.4	-495.3	767.1	387.5	379.53	2.021			
17,300.0	7,582.0	17,334.5	7,582.0	191.5	192.1	89.93	-9,890.4	-493.9	766.1	382.7	383.38	1.998			
17,400.0	7,582.0	17,434.5	7,582.0	193.4	194.0	89.93	-9,990.4	-492.4	765.0	377.8	387.22	1.976			
17,500.0	7,582.0	17,534.5	7,582.0	195.3	195.9	89.93	-10,090.4	-491.0	764.0	373.0	391.07	1.954			
17,600.0	7,582.0	17,634.5	7,582.0	197.2	197.8	89.92	-10,190.4	-489.6	763.0	368.1	394.92	1.932			
17,700.0	7,582.0	17,734.5	7,582.0	199.2	199.8	89.92	-10,290.3	-488.1	762.0	363.2	398.77	1.911			
17,800.0	7,582.0	17,834.5	7,582.0	201.1	201.7	89.92	-10,390.3	-486.7	761.0	358.4	402.62	1.890			
17,900.0	7,582.0	17,934.5	7,582.0	203.0	203.6	89.92	-10,490.3	-485.3	760.0	353.5	406.47	1.870			
17,945.3	7,582.0	17,972.9	7,582.0	203.9	204.3	89.92	-10,528.8	-484.7	759.6	351.5	408.08	1.861 SF			

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.65	4.0	649.5	649.5					
100.0	100.0	99.0	99.0	0.1	0.1	89.65	4.0	649.5	649.5	649.3	0.22	2,904.237		
200.0	200.0	199.0	199.0	0.3	0.3	89.65	4.0	649.5	649.5	648.8	0.67	966.469		
300.0	300.0	299.0	299.0	0.6	0.6	89.65	4.0	649.5	649.5	648.4	1.12	579.106		
400.0	400.0	399.0	399.0	0.8	0.8	89.65	4.0	649.5	649.5	647.9	1.57	413.411		
500.0	500.0	499.0	499.0	1.0	1.0	89.65	4.0	649.5	649.5	647.5	2.02	321.440		
600.0	600.0	599.0	599.0	1.2	1.2	89.65	4.0	649.5	649.5	647.0	2.47	262.943		
700.0	700.0	699.0	699.0	1.5	1.5	89.65	4.0	649.5	649.5	646.6	2.92	222.459		
800.0	800.0	799.0	799.0	1.7	1.7	89.65	4.0	649.5	649.5	646.1	3.37	192.778		
900.0	900.0	899.0	899.0	1.9	1.9	89.65	4.0	649.5	649.5	645.7	3.82	170.085		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	89.65	4.0	649.5	649.5	645.2	4.27	152.172		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	89.65	4.0	649.5	649.5	644.8	4.72	137.672		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	89.65	4.0	649.5	649.5	644.3	5.17	125.696		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	89.65	4.0	649.5	649.5	643.9	5.62	115.636		
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	89.65	4.0	649.5	649.5	643.4	6.07	107.067		
1,500.0	1,500.0	1,499.0	1,499.0	3.3	3.3	89.65	4.0	649.5	649.5	643.0	6.52	99.681		
1,600.0	1,600.0	1,599.0	1,599.0	3.5	3.5	30.68	4.0	649.5	648.4	641.4	6.96	93.192		
1,700.0	1,699.9	1,698.9	1,698.9	3.7	3.7	30.88	4.0	649.5	645.0	637.6	7.39	87.271		
1,727.4	1,727.2	1,726.2	1,726.2	3.8	3.8	30.96	4.0	649.5	643.7	636.2	7.51	85.722		
1,800.0	1,799.7	1,798.7	1,798.7	3.9	3.9	31.16	4.0	649.5	640.0	632.2	7.83	81.769		
1,900.0	1,899.6	1,898.6	1,898.6	4.1	4.2	31.44	4.0	649.5	634.9	626.6	8.27	76.808		
2,000.0	1,999.4	1,998.4	1,998.4	4.4	4.4	31.72	4.0	649.5	629.8	621.1	8.71	72.334		
2,100.0	2,099.2	2,098.2	2,098.2	4.6	4.6	32.01	4.0	649.5	624.8	615.6	9.15	68.281		
2,200.0	2,199.0	2,185.3	2,185.3	4.8	4.8	32.22	4.4	650.4	620.8	611.2	9.56	64.947		
2,300.0	2,298.9	2,272.3	2,272.3	5.0	5.0	32.37	5.5	653.1	618.8	608.9	9.96	62.126		
2,342.8	2,341.6	2,309.6	2,309.6	5.1	5.1	32.41	6.2	654.8	618.6	608.5	10.13	61.050 CC		
2,400.0	2,398.7	2,359.4	2,359.2	5.3	5.2	32.45	7.4	657.7	619.0	608.6	10.36	59.719		
2,500.0	2,498.5	2,446.5	2,446.0	5.5	5.4	32.45	10.0	664.0	621.2	610.4	10.77	57.673		
2,600.0	2,598.3	2,542.8	2,541.9	5.8	5.6	32.39	13.5	672.6	625.0	613.8	11.20	55.801		
2,700.0	2,698.1	2,642.7	2,641.4	6.0	5.8	32.32	17.1	681.6	628.8	617.2	11.64	54.028		
2,800.0	2,798.0	2,742.7	2,740.8	6.2	6.0	32.26	20.8	690.5	632.7	620.6	12.08	52.375		
2,900.0	2,897.8	2,842.6	2,840.3	6.5	6.3	32.20	24.5	699.5	636.5	624.0	12.52	50.825		
3,000.0	2,997.6	2,942.5	2,939.7	6.7	6.5	32.13	28.1	708.4	640.4	627.4	12.97	49.374		
3,100.0	3,097.4	3,042.4	3,039.2	6.9	6.8	32.07	31.8	717.4	644.3	630.8	13.42	48.013		
3,200.0	3,197.3	3,142.4	3,138.6	7.2	7.0	32.01	35.4	726.3	648.1	634.3	13.87	46.734		
3,300.0	3,297.1	3,242.3	3,238.1	7.4	7.3	31.95	39.1	735.3	652.0	637.7	14.32	45.530		
3,400.0	3,396.9	3,342.2	3,337.5	7.7	7.5	31.89	42.8	744.3	655.8	641.1	14.77	44.396		
3,500.0	3,496.7	3,442.1	3,437.0	7.9	7.8	31.83	46.4	753.2	659.7	644.5	15.23	43.326		
3,600.0	3,596.5	3,542.1	3,536.4	8.2	8.0	31.78	50.1	762.2	663.6	647.9	15.68	42.314		
3,700.0	3,696.4	3,642.0	3,635.9	8.4	8.3	31.72	53.7	771.1	667.4	651.3	16.14	41.357		
3,800.0	3,796.2	3,741.9	3,735.3	8.6	8.6	31.66	57.4	780.1	671.3	654.7	16.60	40.451		
3,900.0	3,896.0	3,841.8	3,834.8	8.9	8.8	31.61	61.1	789.0	675.2	658.1	17.05	39.591		
4,000.0	3,995.8	3,941.7	3,934.2	9.1	9.1	31.55	64.7	798.0	679.0	661.5	17.51	38.774		
4,100.0	4,095.7	4,041.7	4,033.7	9.4	9.4	31.50	68.4	806.9	682.9	664.9	17.97	37.997		
4,200.0	4,195.5	4,141.6	4,133.2	9.6	9.6	31.44	72.1	815.9	686.8	668.3	18.43	37.258		
4,300.0	4,295.3	4,241.5	4,232.6	9.9	9.9	31.39	75.7	824.9	690.6	671.7	18.89	36.554		
4,400.0	4,395.1	4,341.4	4,332.1	10.1	10.2	31.34	79.4	833.8	694.5	675.1	19.35	35.882		
4,500.0	4,495.0	4,441.4	4,431.5	10.4	10.5	31.29	83.0	842.8	698.4	678.5	19.82	35.241		
4,600.0	4,594.8	4,541.3	4,531.0	10.6	10.7	31.23	86.7	851.7	702.2	681.9	20.28	34.628		
4,700.0	4,694.6	4,641.2	4,630.4	10.8	11.0	31.18	90.4	860.7	706.1	685.3	20.74	34.041		
4,800.0	4,794.4	4,741.1	4,729.9	11.1	11.3	31.13	94.0	869.6	710.0	688.8	21.21	33.480		
4,900.0	4,894.2	4,841.1	4,829.3	11.3	11.5	31.08	97.7	878.6	713.8	692.2	21.67	32.942		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek Pad 15-11N-63W - Crittter Creek 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)			
5,000.0	4,994.1	4,941.0	4,928.8	11.6	11.8	31.03	101.3	887.5	717.7	695.6	22.13	32.426		
5,100.0	5,093.9	5,040.9	5,028.2	11.8	12.1	30.99	105.0	896.5	721.6	699.0	22.60	31.931		
5,200.0	5,193.7	5,140.8	5,127.7	12.1	12.4	30.94	108.7	905.5	725.4	702.4	23.06	31.456		
5,300.0	5,293.5	5,240.7	5,227.1	12.3	12.7	30.89	112.3	914.4	729.3	705.8	23.53	30.999		
5,400.0	5,393.4	5,340.7	5,326.6	12.6	12.9	30.84	116.0	923.4	733.2	709.2	23.99	30.559		
5,500.0	5,493.2	5,440.6	5,426.1	12.8	13.2	30.80	119.7	932.3	737.1	712.6	24.46	30.136		
5,600.0	5,593.0	5,540.5	5,525.5	13.1	13.5	30.75	123.3	941.3	740.9	716.0	24.92	29.728		
5,700.0	5,692.8	5,640.4	5,625.0	13.3	13.8	30.70	127.0	950.2	744.8	719.4	25.39	29.335		
5,800.0	5,792.7	5,740.4	5,724.4	13.6	14.0	30.66	130.6	959.2	748.7	722.8	25.86	28.956		
5,900.0	5,892.5	5,840.3	5,823.9	13.8	14.3	30.61	134.3	968.1	752.6	726.2	26.32	28.591		
6,000.0	5,992.3	5,940.4	5,923.6	14.1	14.6	30.57	138.0	977.1	756.4	729.6	26.79	28.237		
6,037.4	6,029.6	5,989.9	5,972.8	14.1	14.7	30.56	139.6	981.1	757.6	730.6	26.98	28.079		
6,100.0	6,092.2	6,072.9	6,055.7	14.3	14.9	30.57	141.7	986.1	758.7	731.5	27.26	27.828		
6,207.9	6,200.0	6,216.0	6,198.7	14.5	15.2	89.62	143.0	989.5	759.5	731.8	27.70	27.424		
6,300.0	6,292.1	6,308.4	6,291.1	14.6	15.3	89.62	143.0	989.5	759.5	731.5	28.06	27.072		
6,400.0	6,392.1	6,408.4	6,391.1	14.8	15.5	89.62	143.0	989.5	759.5	731.0	28.48	26.670		
6,500.0	6,492.1	6,508.4	6,491.1	15.1	15.7	89.62	143.0	989.5	759.5	730.6	28.90	26.280		
6,600.0	6,592.1	6,608.4	6,591.1	15.3	15.9	89.62	143.0	989.5	759.5	730.2	29.33	25.900		
6,700.0	6,692.1	6,708.4	6,691.1	15.5	16.1	89.62	143.0	989.5	759.5	729.8	29.75	25.530		
6,800.0	6,792.1	6,808.4	6,791.1	15.7	16.3	89.62	143.0	989.5	759.5	729.3	30.18	25.170		
6,873.7	6,865.9	6,882.2	6,864.9	15.8	16.5	89.62	143.0	989.5	759.5	729.0	30.49	24.910		
6,900.0	6,892.1	6,908.5	6,891.2	15.9	16.5	-90.17	142.6	989.5	759.5	728.9	30.58	24.835		
6,950.0	6,942.0	6,958.6	6,941.2	16.0	16.6	-90.18	139.2	989.5	759.5	728.8	30.74	24.707		
7,000.0	6,991.5	7,008.7	6,990.8	16.0	16.6	-90.19	132.2	989.5	759.5	728.6	30.88	24.596		
7,050.0	7,040.4	7,058.9	7,039.8	16.1	16.7	-90.20	121.8	989.6	759.5	728.5	31.00	24.498		
7,100.0	7,088.4	7,109.0	7,088.0	16.1	16.8	-90.20	108.0	989.7	759.5	728.4	31.12	24.409		
7,150.0	7,135.3	7,159.2	7,135.1	16.2	16.8	-90.21	90.9	989.7	759.6	728.3	31.23	24.325		
7,200.0	7,181.0	7,209.3	7,180.9	16.3	16.9	-90.21	70.5	989.8	759.6	728.2	31.34	24.240		
7,250.0	7,225.1	7,259.5	7,225.2	16.3	16.9	-90.22	46.9	989.9	759.6	728.1	31.46	24.147		
7,300.0	7,267.4	7,309.6	7,267.7	16.4	17.0	-90.22	20.3	990.1	759.6	728.0	31.60	24.040		
7,350.0	7,307.8	7,359.8	7,308.3	16.5	17.0	-90.22	-9.2	990.2	759.7	727.9	31.77	23.911		
7,400.0	7,346.0	7,410.0	7,346.7	16.5	17.1	-90.22	-41.5	990.4	759.7	727.7	31.98	23.753		
7,450.0	7,381.9	7,460.2	7,382.7	16.6	17.2	-90.22	-76.4	990.5	759.7	727.5	32.24	23.562		
7,500.0	7,415.3	7,510.3	7,416.2	16.8	17.3	-90.22	-113.7	990.7	759.7	727.2	32.56	23.330		
7,550.0	7,446.0	7,560.5	7,447.0	16.9	17.5	-90.22	-153.3	990.9	759.8	726.8	32.95	23.056		
7,600.0	7,473.9	7,610.7	7,475.0	17.1	17.6	-90.21	-194.9	991.1	759.8	726.4	33.42	22.738		
7,650.0	7,498.8	7,660.9	7,500.0	17.4	17.8	-90.21	-238.4	991.3	759.8	725.9	33.96	22.376		
7,700.0	7,520.6	7,711.0	7,521.9	17.7	18.1	-90.20	-283.6	991.5	759.9	725.3	34.58	21.973		
7,750.0	7,539.3	7,761.2	7,540.5	18.0	18.4	-90.20	-330.1	991.7	759.9	724.6	35.29	21.533		
7,800.0	7,554.6	7,811.4	7,555.9	18.4	18.8	-90.19	-377.9	991.9	760.0	723.9	36.08	21.061		
7,850.0	7,566.6	7,861.5	7,567.9	18.8	19.2	-90.18	-426.6	992.1	760.0	723.1	36.96	20.565		
7,900.0	7,575.2	7,911.7	7,576.4	19.3	19.6	-90.17	-476.0	992.4	760.1	722.1	37.90	20.052		
7,950.0	7,580.3	7,961.8	7,581.4	19.8	20.1	-90.16	-525.9	992.6	760.1	721.2	38.92	19.530		
7,998.6	7,582.0	8,011.8	7,582.0	20.3	20.6	-90.08	-574.8	992.8	760.1	720.2	39.98	19.015		
7,998.7	7,582.0	8,011.9	7,582.0	20.3	20.6	-90.08	-574.9	992.8	760.1	720.2	39.98	19.014		
8,001.4	7,582.0	8,014.7	7,582.0	20.3	20.7	-90.08	-577.7	992.8	760.1	720.1	40.04	18.986		
8,100.0	7,582.0	8,113.3	7,582.0	21.4	21.7	-90.08	-676.3	993.3	760.1	718.0	42.18	18.022		
8,200.0	7,582.0	8,213.3	7,582.0	22.6	22.9	-90.08	-776.3	993.7	760.1	715.4	44.70	17.004		
8,300.0	7,582.0	8,313.3	7,582.0	24.0	24.3	-90.08	-876.3	994.1	760.1	712.7	47.41	16.034		
8,400.0	7,582.0	8,413.3	7,582.0	25.4	25.7	-90.08	-976.3	994.5	760.1	709.9	50.26	15.123		
8,500.0	7,582.0	8,513.3	7,582.0	26.9	27.1	-90.08	-1,076.3	994.9	760.1	706.9	53.25	14.276		
8,600.0	7,582.0	8,613.3	7,582.0	28.4	28.7	-90.08	-1,176.3	995.4	760.1	703.8	56.33	13.493		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
8,700.0	7,582.0	8,713.3	7,582.0	30.0	30.2	-90.08	-1,276.3	995.8	760.1	700.6	59.51	12.772		
8,800.0	7,582.0	8,813.3	7,582.0	31.6	31.8	-90.08	-1,376.3	996.2	760.1	697.3	62.77	12.110		
8,900.0	7,582.0	8,913.3	7,582.0	33.2	33.5	-90.08	-1,476.3	996.6	760.1	694.0	66.09	11.502		
9,000.0	7,582.0	9,013.3	7,582.0	34.9	35.1	-90.08	-1,576.3	997.0	760.1	690.6	69.46	10.943		
9,100.0	7,582.0	9,113.3	7,582.0	36.6	36.8	-90.08	-1,676.3	997.5	760.1	687.2	72.89	10.429		
9,200.0	7,582.0	9,213.3	7,582.0	38.3	38.5	-90.08	-1,776.3	997.9	760.1	683.7	76.35	9.955		
9,300.0	7,582.0	9,313.3	7,582.0	40.1	40.3	-90.08	-1,876.3	998.3	760.1	680.2	79.85	9.519		
9,400.0	7,582.0	9,413.3	7,582.0	41.9	42.0	-90.08	-1,976.3	998.7	760.1	676.7	83.39	9.115		
9,500.0	7,582.0	9,513.3	7,582.0	43.6	43.8	-90.08	-2,076.3	999.1	760.1	673.1	86.95	8.742		
9,600.0	7,582.0	9,613.3	7,582.0	45.4	45.6	-90.08	-2,176.3	999.6	760.1	669.6	90.53	8.396		
9,700.0	7,582.0	9,713.3	7,582.0	47.2	47.4	-90.08	-2,276.3	1,000.0	760.1	665.9	94.14	8.074		
9,800.0	7,582.0	9,813.3	7,582.0	49.0	49.2	-90.08	-2,376.3	1,000.4	760.1	662.3	97.76	7.775		
9,900.0	7,582.0	9,913.3	7,582.0	50.8	51.0	-90.08	-2,476.3	1,000.8	760.1	658.7	101.41	7.495		
10,000.0	7,582.0	10,013.3	7,582.0	52.7	52.8	-90.08	-2,576.3	1,001.2	760.1	655.0	105.06	7.234		
10,100.0	7,582.0	10,113.3	7,582.0	54.5	54.6	-90.08	-2,676.3	1,001.7	760.1	651.3	108.74	6.990		
10,200.0	7,582.0	10,213.3	7,582.0	56.3	56.5	-90.08	-2,776.3	1,002.1	760.1	647.6	112.42	6.761		
10,300.0	7,582.0	10,313.3	7,582.0	58.2	58.3	-90.08	-2,876.3	1,002.5	760.1	644.0	116.12	6.546		
10,400.0	7,582.0	10,413.3	7,582.0	60.0	60.2	-90.08	-2,976.3	1,002.9	760.1	640.2	119.82	6.343		
10,500.0	7,582.0	10,513.3	7,582.0	61.9	62.0	-90.08	-3,076.3	1,003.4	760.1	636.5	123.54	6.152		
10,600.0	7,582.0	10,613.3	7,582.0	63.7	63.9	-90.08	-3,176.3	1,003.8	760.1	632.8	127.26	5.972		
10,700.0	7,582.0	10,713.3	7,582.0	65.6	65.7	-90.08	-3,276.3	1,004.2	760.1	629.1	130.99	5.802		
10,800.0	7,582.0	10,813.3	7,582.0	67.5	67.6	-90.08	-3,376.3	1,004.6	760.1	625.3	134.73	5.641		
10,900.0	7,582.0	10,913.3	7,582.0	69.3	69.5	-90.08	-3,476.3	1,005.0	760.0	621.6	138.48	5.489		
11,000.0	7,582.0	11,013.3	7,582.0	71.2	71.3	-90.08	-3,576.3	1,005.5	760.0	617.8	142.23	5.344		
11,100.0	7,582.0	11,113.3	7,582.0	73.1	73.2	-90.08	-3,676.3	1,005.9	760.0	614.1	145.99	5.206		
11,200.0	7,582.0	11,213.3	7,582.0	75.0	75.1	-90.08	-3,776.3	1,006.3	760.0	610.3	149.75	5.075		
11,300.0	7,582.0	11,313.3	7,582.0	76.8	77.0	-90.08	-3,876.3	1,006.7	760.0	606.5	153.52	4.951		
11,400.0	7,582.0	11,413.3	7,582.0	78.7	78.8	-90.08	-3,976.3	1,007.1	760.0	602.7	157.29	4.832		
11,500.0	7,582.0	11,513.3	7,582.0	80.6	80.7	-90.08	-4,076.3	1,007.6	760.0	599.0	161.06	4.719		
11,600.0	7,582.0	11,613.3	7,582.0	82.5	82.6	-90.08	-4,176.3	1,008.0	760.0	595.2	164.84	4.611		
11,700.0	7,582.0	11,713.3	7,582.0	84.4	84.5	-90.08	-4,276.3	1,008.4	760.0	591.4	168.62	4.507		
11,800.0	7,582.0	11,813.3	7,582.0	86.3	86.4	-90.08	-4,376.3	1,008.8	760.0	587.6	172.41	4.408		
11,900.0	7,582.0	11,913.3	7,582.0	88.2	88.3	-90.08	-4,476.3	1,009.2	760.0	583.8	176.20	4.313		
12,000.0	7,582.0	12,013.3	7,582.0	90.1	90.2	-90.08	-4,576.3	1,009.7	760.0	580.0	179.99	4.222		
12,100.0	7,582.0	12,113.3	7,582.0	92.0	92.1	-90.08	-4,676.3	1,010.1	760.0	576.2	183.79	4.135		
12,200.0	7,582.0	12,213.3	7,582.0	93.9	94.0	-90.08	-4,776.3	1,010.5	760.0	572.4	187.59	4.052		
12,300.0	7,582.0	12,313.3	7,582.0	95.8	95.9	-90.08	-4,876.3	1,010.9	760.0	568.6	191.39	3.971		
12,400.0	7,582.0	12,413.3	7,582.0	97.7	97.8	-90.08	-4,976.3	1,011.3	760.0	564.8	195.19	3.894		
12,500.0	7,582.0	12,513.3	7,582.0	99.6	99.6	-90.08	-5,076.3	1,011.8	760.0	561.0	198.99	3.819		
12,600.0	7,582.0	12,613.3	7,582.0	101.5	101.6	-90.08	-5,176.3	1,012.2	760.0	557.2	202.80	3.748		
12,700.0	7,582.0	12,713.3	7,582.0	103.4	103.5	-90.08	-5,276.3	1,012.6	760.0	553.4	206.61	3.678		
12,800.0	7,582.0	12,813.3	7,582.0	105.3	105.4	-90.08	-5,376.3	1,013.0	760.0	549.6	210.42	3.612		
12,900.0	7,582.0	12,913.3	7,582.0	107.2	107.3	-90.08	-5,476.3	1,013.5	760.0	545.8	214.23	3.548		
13,000.0	7,582.0	13,013.3	7,582.0	109.1	109.2	-90.08	-5,576.2	1,013.9	760.0	541.9	218.04	3.485		
13,100.0	7,582.0	13,113.3	7,582.0	111.0	111.1	-90.08	-5,676.2	1,014.3	760.0	538.1	221.86	3.426		
13,200.0	7,582.0	13,213.3	7,582.0	112.9	113.0	-90.08	-5,776.2	1,014.7	760.0	534.3	225.68	3.368		
13,300.0	7,582.0	13,313.3	7,582.0	114.8	114.9	-90.08	-5,876.2	1,015.1	760.0	530.5	229.49	3.312		
13,400.0	7,582.0	13,413.3	7,582.0	116.7	116.8	-90.08	-5,976.2	1,015.6	760.0	526.7	233.31	3.257		
13,500.0	7,582.0	13,513.3	7,582.0	118.6	118.7	-90.08	-6,076.2	1,016.0	760.0	522.8	237.13	3.205		
13,600.0	7,582.0	13,613.3	7,582.0	120.5	120.6	-90.08	-6,176.2	1,016.4	760.0	519.0	240.95	3.154		
13,700.0	7,582.0	13,713.3	7,582.0	122.4	122.5	-90.08	-6,276.2	1,016.8	760.0	515.2	244.78	3.105		
13,800.0	7,582.0	13,813.3	7,582.0	124.3	124.4	-90.08	-6,376.2	1,017.2	760.0	511.4	248.60	3.057		

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 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Critter Creek Pad 15-11N-63W - Critter Creek 564-1527H - Wellbore #1 - Plan 1 (Feb 14, 2017)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
13,900.0	7,582.0	13,913.3	7,582.0	126.3	126.3	-90.08	-6,476.2	1,017.7	760.0	507.5	252.43	3.011		
14,000.0	7,582.0	14,013.3	7,582.0	128.2	128.2	-90.08	-6,576.2	1,018.1	760.0	503.7	256.25	2.966		
14,100.0	7,582.0	14,113.3	7,582.0	130.1	130.2	-90.08	-6,676.2	1,018.5	760.0	499.9	260.08	2.922		
14,200.0	7,582.0	14,213.3	7,582.0	132.0	132.1	-90.08	-6,776.2	1,018.9	760.0	496.0	263.91	2.880		
14,300.0	7,582.0	14,313.3	7,582.0	133.9	134.0	-90.08	-6,876.2	1,019.3	759.9	492.2	267.74	2.838		
14,400.0	7,582.0	14,413.3	7,582.0	135.8	135.9	-90.08	-6,976.2	1,019.8	759.9	488.4	271.57	2.798		
14,500.0	7,582.0	14,513.3	7,582.0	137.7	137.8	-90.08	-7,076.2	1,020.2	759.9	484.5	275.40	2.759		
14,600.0	7,582.0	14,613.3	7,582.0	139.7	139.7	-90.08	-7,176.2	1,020.6	759.9	480.7	279.23	2.722		
14,700.0	7,582.0	14,713.3	7,582.0	141.6	141.6	-90.08	-7,276.2	1,021.0	759.9	476.9	283.06	2.685		
14,800.0	7,582.0	14,813.3	7,582.0	143.5	143.6	-90.08	-7,376.2	1,021.4	759.9	473.0	286.89	2.649		
14,900.0	7,582.0	14,913.3	7,582.0	145.4	145.5	-90.08	-7,476.2	1,021.9	759.9	469.2	290.73	2.614		
15,000.0	7,582.0	15,013.3	7,582.0	147.3	147.4	-90.08	-7,576.2	1,022.3	759.9	465.4	294.56	2.580		
15,100.0	7,582.0	15,113.3	7,582.0	149.2	149.3	-90.08	-7,676.2	1,022.7	759.9	461.5	298.39	2.547		
15,200.0	7,582.0	15,213.3	7,582.0	151.2	151.2	-90.08	-7,776.2	1,023.1	759.9	457.7	302.23	2.514		
15,300.0	7,582.0	15,313.3	7,582.0	153.1	153.1	-90.08	-7,876.2	1,023.5	759.9	453.9	306.07	2.483		
15,400.0	7,582.0	15,413.3	7,582.0	155.0	155.1	-90.08	-7,976.2	1,024.0	759.9	450.0	309.90	2.452		
15,500.0	7,582.0	15,513.3	7,582.0	156.9	157.0	-90.08	-8,076.2	1,024.4	759.9	446.2	313.74	2.422		
15,600.0	7,582.0	15,613.3	7,582.0	158.8	158.9	-90.08	-8,176.2	1,024.8	759.9	442.3	317.58	2.393		
15,700.0	7,582.0	15,713.3	7,582.0	160.7	160.8	-90.08	-8,276.2	1,025.2	759.9	438.5	321.41	2.364		
15,800.0	7,582.0	15,813.3	7,582.0	162.7	162.7	-90.08	-8,376.2	1,025.7	759.9	434.7	325.25	2.336		
15,900.0	7,582.0	15,913.3	7,582.0	164.6	164.6	-90.08	-8,476.2	1,026.1	759.9	430.8	329.09	2.309		
16,000.0	7,582.0	16,013.3	7,582.0	166.5	166.6	-90.08	-8,576.2	1,026.5	759.9	427.0	332.93	2.282		
16,100.0	7,582.0	16,113.3	7,582.0	168.4	168.5	-90.08	-8,676.2	1,026.9	759.9	423.1	336.77	2.256		
16,200.0	7,582.0	16,213.3	7,582.0	170.3	170.4	-90.08	-8,776.2	1,027.3	759.9	419.3	340.61	2.231		
16,300.0	7,582.0	16,313.3	7,582.0	172.3	172.3	-90.08	-8,876.2	1,027.8	759.9	415.4	344.45	2.206		
16,400.0	7,582.0	16,413.3	7,582.0	174.2	174.2	-90.08	-8,976.2	1,028.2	759.9	411.6	348.29	2.182		
16,500.0	7,582.0	16,513.3	7,582.0	176.1	176.2	-90.08	-9,076.2	1,028.6	759.9	407.8	352.13	2.158		
16,600.0	7,582.0	16,613.3	7,582.0	178.0	178.1	-90.08	-9,176.2	1,029.0	759.9	403.9	355.98	2.135		
16,700.0	7,582.0	16,713.3	7,582.0	179.9	180.0	-90.08	-9,276.2	1,029.4	759.9	400.1	359.82	2.112		
16,800.0	7,582.0	16,813.3	7,582.0	181.9	181.9	-90.08	-9,376.2	1,029.9	759.9	396.2	363.66	2.090		
16,900.0	7,582.0	16,913.3	7,582.0	183.8	183.8	-90.08	-9,476.2	1,030.3	759.9	392.4	367.50	2.068		
17,000.0	7,582.0	17,013.3	7,582.0	185.7	185.8	-90.08	-9,576.2	1,030.7	759.9	388.5	371.35	2.046		
17,100.0	7,582.0	17,113.3	7,582.0	187.6	187.7	-90.08	-9,676.2	1,031.1	759.9	384.7	375.19	2.025		
17,200.0	7,582.0	17,213.3	7,582.0	189.5	189.6	-90.08	-9,776.2	1,031.5	759.9	380.8	379.03	2.005		
17,300.0	7,582.0	17,313.3	7,582.0	191.5	191.5	-90.08	-9,876.2	1,032.0	759.9	377.0	382.88	1.985		
17,400.0	7,582.0	17,413.3	7,582.0	193.4	193.4	-90.08	-9,976.2	1,032.4	759.9	373.1	386.72	1.965		
17,500.0	7,582.0	17,513.3	7,582.0	195.3	195.4	-90.08	-10,076.2	1,032.8	759.9	369.3	390.57	1.946		
17,600.0	7,582.0	17,613.3	7,582.0	197.2	197.3	-90.08	-10,176.2	1,033.2	759.9	365.4	394.41	1.927		
17,700.0	7,582.0	17,713.3	7,582.0	199.2	199.2	-90.08	-10,276.2	1,033.6	759.8	361.6	398.26	1.908		
17,800.0	7,582.0	17,813.3	7,582.0	201.1	201.1	-90.08	-10,376.2	1,034.1	759.8	357.7	402.10	1.890		
17,900.0	7,582.0	17,913.3	7,582.0	203.0	203.1	-90.08	-10,476.2	1,034.5	759.8	353.9	405.95	1.872		
17,935.3	7,582.0	17,948.6	7,582.0	203.7	203.7	-90.08	-10,511.5	1,034.6	759.8	352.5	407.30	1.866		
17,945.3	7,582.0	17,957.4	7,582.0	203.9	203.9	-90.08	-10,520.4	1,034.7	759.8	352.2	407.67	1.864 ES, SF		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.15 (Fifth Creek) - Critter Creek 18-22H (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1365-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							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		
11,400.0	7,582.0	11,945.5	7,305.3	78.7	113.5	49.69	-4,565.4	-104.8	746.7	613.4	133.30	5.602		
11,500.0	7,582.0	11,986.6	7,305.0	80.6	114.5	46.69	-4,586.8	-69.7	669.8	539.3	130.48	5.133		
11,600.0	7,582.0	12,043.5	7,303.5	82.5	115.9	41.83	-4,616.1	-21.0	595.4	471.2	124.22	4.793		
11,700.0	7,582.0	12,102.9	7,303.2	84.4	117.4	36.00	-4,646.7	30.0	523.7	408.2	115.52	4.533		
11,800.0	7,582.0	12,152.7	7,303.8	86.3	118.7	30.43	-4,672.7	72.5	456.5	349.8	106.71	4.278		
11,900.0	7,582.0	12,204.4	7,304.0	88.2	120.0	23.85	-4,699.5	116.7	396.5	300.6	95.90	4.134		
12,000.0	7,582.0	12,251.7	7,303.7	90.1	121.2	17.13	-4,724.0	157.1	347.6	261.9	85.66	4.058		
12,100.0	7,582.0	12,299.0	7,302.5	92.0	122.4	9.87	-4,748.5	197.6	315.7	238.6	77.09	4.095		
12,189.5	7,582.0	12,338.5	7,300.7	93.7	123.4	3.61	-4,769.1	231.2	306.0	232.5	73.46	4.165 CC, ES		
12,200.0	7,582.0	12,343.3	7,300.4	93.9	123.5	2.84	-4,771.6	235.3	306.1	232.8	73.32	4.175		
12,300.0	7,582.0	12,400.9	7,297.3	95.8	124.9	-6.25	-4,801.6	284.4	320.1	243.1	76.99	4.158		
12,400.0	7,582.0	12,461.5	7,295.2	97.7	126.5	-15.30	-4,833.6	335.8	353.6	263.9	89.63	3.945		
12,500.0	7,582.0	12,510.5	7,293.9	99.6	127.7	-22.05	-4,859.7	377.3	401.8	298.7	103.15	3.896		
12,600.0	7,582.0	12,570.3	7,292.2	101.5	129.2	-29.40	-4,891.6	427.8	460.6	340.8	119.78	3.845 SF		
12,700.0	7,582.0	12,605.0	7,291.6	103.4	130.1	-33.23	-4,910.2	457.1	526.3	396.9	129.44	4.066		
12,800.0	7,582.0	12,605.0	7,291.6	105.3	130.1	-33.23	-4,910.2	457.1	600.6	469.9	130.65	4.597		
12,900.0	7,582.0	12,605.0	7,291.6	107.2	130.1	-33.23	-4,910.2	457.1	681.5	549.6	131.86	5.168		
13,000.0	7,582.0	12,605.0	7,291.6	109.1	130.1	-33.23	-4,910.2	457.1	766.9	633.8	133.07	5.763		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design													Existing Wells Sec.15 (Fifth Creek) - Critter Creek 22-27H (Exist) - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 ft
Survey Program:													1339-MWD	Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
15,800.0	7,582.0	11,116.9	7,265.0	162.7	100.6	56.86	-8,870.4	-223.8	764.0	562.4	201.59	3.790					
15,900.0	7,582.0	11,195.7	7,265.4	164.6	102.5	53.67	-8,925.9	-167.8	700.3	502.1	198.19	3.533					
16,000.0	7,582.0	11,268.7	7,266.5	166.5	104.4	50.23	-8,976.8	-115.5	637.2	443.6	193.57	3.292					
16,100.0	7,582.0	11,331.1	7,266.9	168.4	105.9	46.77	-9,020.5	-71.0	576.6	388.5	188.11	3.065					
16,200.0	7,582.0	11,406.1	7,267.2	170.3	107.8	41.95	-9,073.5	-17.8	519.1	340.3	178.83	2.903					
16,300.0	7,582.0	11,475.3	7,267.4	172.3	109.5	36.70	-9,122.0	31.4	465.1	297.6	167.48	2.777					
16,400.0	7,582.0	11,546.3	7,267.6	174.2	111.3	30.42	-9,171.8	82.1	416.0	263.3	152.66	2.725					
16,500.0	7,582.0	11,615.0	7,267.7	176.1	113.0	23.45	-9,219.7	131.3	374.0	238.1	135.88	2.752					
16,600.0	7,582.0	11,683.7	7,267.2	178.0	114.7	15.56	-9,267.4	180.7	342.3	223.7	118.58	2.887					
16,700.0	7,582.0	11,761.2	7,267.3	179.9	116.6	5.85	-9,320.6	237.1	323.0	218.4	104.54	3.090					
16,778.1	7,582.0	11,814.9	7,268.1	181.4	118.0	-1.11	-9,357.5	276.0	317.9	214.8	103.09	3.084	CC				
16,800.0	7,582.0	11,830.2	7,268.3	181.9	118.4	-3.11	-9,368.0	287.2	318.3	214.1	104.24	3.054					
16,900.0	7,582.0	11,897.8	7,269.2	183.8	120.1	-11.81	-9,414.4	336.4	330.1	213.3	116.76	2.827	ES				
17,000.0	7,582.0	11,966.4	7,270.0	185.7	121.8	-20.16	-9,461.4	386.4	356.5	219.1	137.44	2.594					
17,100.0	7,582.0	12,036.5	7,270.7	187.6	123.5	-27.88	-9,509.5	437.3	394.8	234.1	160.71	2.466					
17,200.0	7,582.0	12,109.0	7,271.7	189.5	125.4	-34.84	-9,559.8	489.6	441.0	257.8	183.20	2.407	SF				
17,300.0	7,582.0	12,172.6	7,271.3	191.5	127.0	-40.01	-9,604.2	535.1	493.9	293.5	200.41	2.465					
17,400.0	7,582.0	12,243.1	7,270.2	193.4	128.7	-44.86	-9,653.6	585.5	551.2	334.8	216.47	2.547					
17,500.0	7,582.0	12,311.8	7,269.2	195.3	130.4	-48.91	-9,701.5	634.6	611.6	381.7	229.85	2.661					
17,600.0	7,582.0	12,379.7	7,268.1	197.2	132.1	-52.33	-9,748.9	683.2	674.0	432.9	241.17	2.795					
17,700.0	7,582.0	12,430.5	7,267.0	199.2	133.4	-54.57	-9,783.9	720.0	739.2	490.2	249.03	2.968					

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 563-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5240.0ft (Original Well Elev)
Reference Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5240.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 563-1527H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan 1 (Feb 14, 2017)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.15 (Fifth Creek) - Critter Creek 9-15H (Exist) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1367-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	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)			
6,873.7	6,865.9	7,470.3	7,268.8	15.8	16.5	51.83	544.8	747.5	766.1	734.4	31.67	24.192		
6,900.0	6,892.1	7,486.7	7,272.5	15.9	16.7	-130.25	555.7	735.9	753.2	721.2	31.95	23.576		
6,950.0	6,942.0	7,510.4	7,277.2	16.0	17.1	-133.64	571.7	718.9	731.9	699.6	32.29	22.664		
7,000.0	6,991.5	7,517.1	7,278.3	16.0	17.2	-135.18	576.2	714.1	715.7	683.4	32.29	22.162		
7,050.0	7,040.4	7,518.6	7,278.6	16.1	17.2	-135.92	577.2	713.0	705.1	673.0	32.13	21.944 SF		
7,100.0	7,088.4	7,516.8	7,278.3	16.1	17.2	-136.03	575.9	714.3	700.4	668.5	31.85	21.991		
7,113.8	7,101.5	7,515.8	7,278.1	16.2	17.2	-135.97	575.3	715.0	700.2	668.4	31.76	22.048 CC, ES		
7,150.0	7,135.3	7,512.6	7,277.5	16.2	17.1	-135.61	573.1	717.4	701.7	670.3	31.48	22.290		
7,200.0	7,181.0	7,505.1	7,276.2	16.3	17.0	-134.58	568.1	722.8	709.1	678.0	31.05	22.832		
7,250.0	7,225.1	7,495.3	7,274.3	16.3	16.9	-133.00	561.5	729.8	722.1	691.4	30.62	23.584		
7,300.0	7,267.4	7,484.2	7,271.9	16.4	16.7	-130.91	554.1	737.7	740.3	710.1	30.22	24.497		
7,350.0	7,307.8	7,473.2	7,269.5	16.5	16.6	-128.40	546.7	745.5	763.3	733.4	29.93	25.507		
7,400.0	7,346.0	7,462.1	7,266.8	16.5	16.4	-125.40	539.4	753.2	790.4	760.7	29.77	26.551		

Reference Depths are relative to WELL @ 5240.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Critter Creek 563-1527H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.70°



Reference Depths are relative to WELL @ 5240.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Critter Creek 563-1527H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.70°

