

Fifth Creek Energy Company, LLC

Well Name: **Critter Creek 246-2412H**

Surface Location: Critter Creek 24 NE Pad Sec.24-T11N-R63W

North American Datum 1983 , US State Plane 1983, Colorado Northern Zone

Ground Elevation: 5209.0

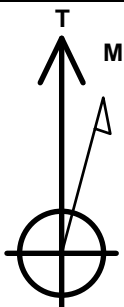
+N/-S +E/-W Northing Easting Longitude Slot

0.0 0.0 1578045.22 3310282.60 40.914711 -104.377367

Original Well Elev WELL @ 5232.0ft (Original Well Elev)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 210'FNL & 1612'FEL, Sec.24	1.0	0.0	0.0	Point
BHL 300'FNL & 1650'FEL, Sec.12	7435.0	10441.5	-92.8	Point
LP 300'FSL & 1650'FEL, Sec.13	7475.0	510.1	-40.6	Point



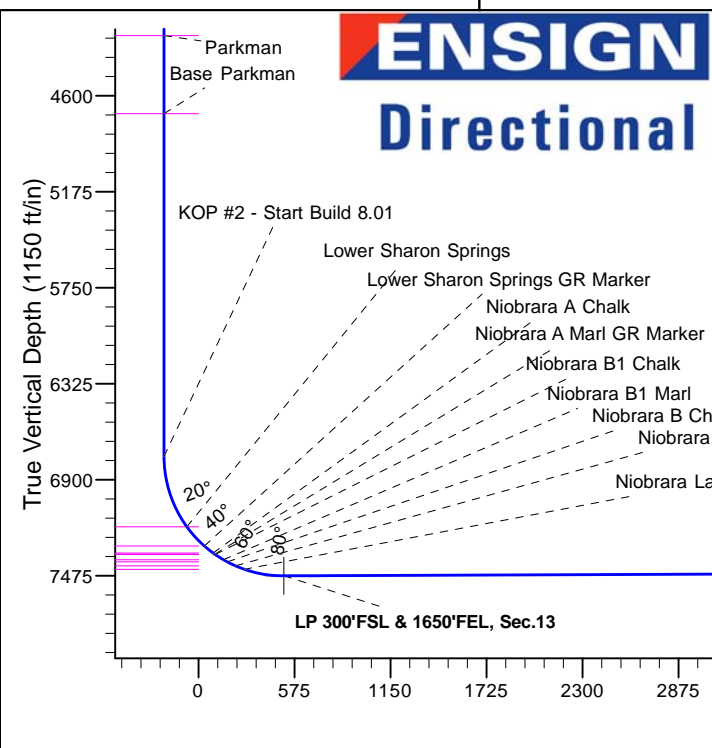
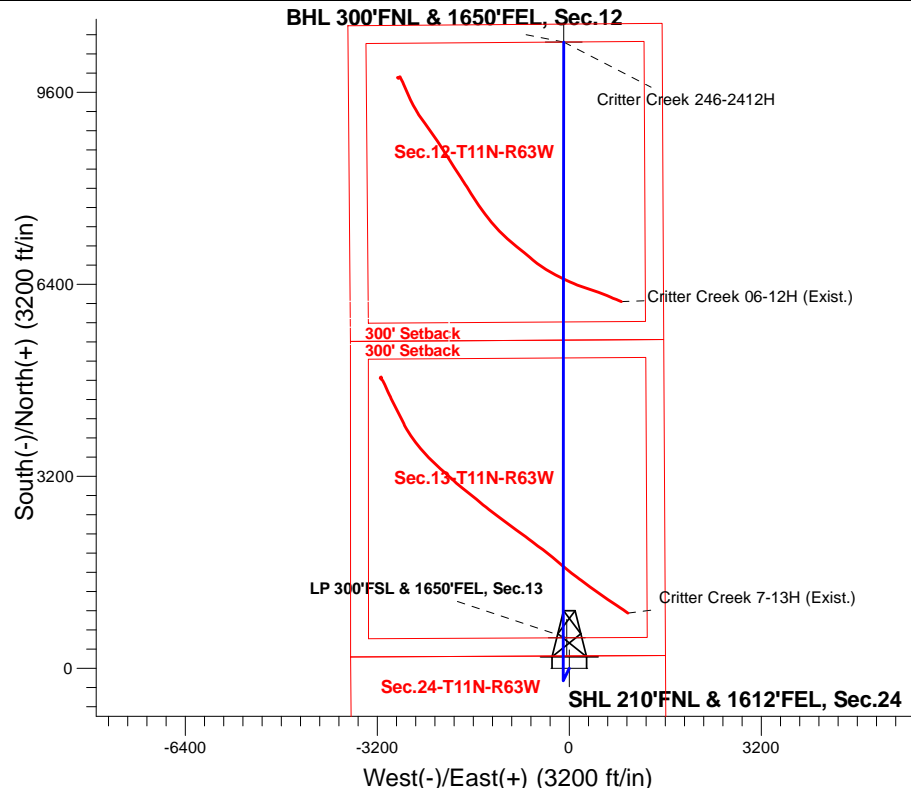
Azimuths to True North
Magnetic North: 7.91°

Magnetic Field
Strength: 52825.1snT
Dip Angle: 67.32°
Date: 3/24/2017
Model: IGRF2010

Critter Creek 24 NE Pad Sec.24-T11N-R63W
Critter Creek 246-2412H
Plan #1 (3-17-17)
16:01, March 31 2017

ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP - Start Build 1.00
3171.9	3183.4	Start Drop -2.00
6759.9	6772.1	KOP #2 - Start Build 8.01
7435.0	17829.8	TD at 17829.8



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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1657.6	6.58	205.92	1656.1	-33.9	-16.5	1.00	205.92	-33.8	
4	3183.4	6.58	205.92	3171.9	-191.1	-92.9	0.00	0.00	-190.2	
5	3512.2	0.00	0.00	3500.0	-208.0	-101.1	2.00	180.00	-207.1	
6	6772.1	0.00	0.00	6759.9	-208.0	-101.1	0.00	0.00	-207.1	
7	7898.3	90.23	0.04	7475.0	510.0	-100.6	8.01	0.04	510.8	
8	7898.4	90.23	0.04	7475.0	510.1	-100.6	0.00	0.00	511.0	
9	17829.8	90.23	0.05	7435.0	10441.5	-92.8	0.00	81.20	10441.9	BHL 300'FNL & 1650'FEL, Sec.12

BHL 300'FNL & 1650'FEL, Sec.12

TD at 17829.8



Fifth Creek Energy Company, LLC

Sec.24-T11N-R63W

Critter Creek 24 NE Pad Sec.24-T11N-R63W

Critter Creek 246-2412H

Wellbore #1

Plan: Plan #1 (3-17-17)

Standard Planning Report

31 March, 2017

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Project:	Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	North Reference:	True
Well:	Critter Creek 246-2412H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-17-17)		

Project	Sec.24-T11N-R63W, Weld County, CO		
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 24 NE Pad Sec.24-T11N-R63W			
Site Position:		Northing:	1,578,058.10 usft	Latitude:	40.914722
From:	Lat/Long	Easting:	3,310,982.05 usft	Longitude:	-104.374836
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.73

Well	Critter Creek 246-2412H					
Well Position	+N/-S	-4.0 ft	Northing:	1,578,045.21 usft	Latitude:	40.914711
	+E/-W	-699.5 ft	Easting:	3,310,282.60 usft	Longitude:	-104.377367
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	5,209.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/24/2017	7.91	67.32	52,825

Design	Plan #1 (3-17-17)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	359.49

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,657.6	6.58	205.92	1,656.1	-33.9	-16.5	1.00	1.00	0.00	205.92	
3,183.4	6.58	205.92	3,171.9	-191.1	-92.9	0.00	0.00	0.00	0.00	
3,512.2	0.00	0.00	3,500.0	-208.0	-101.1	2.00	-2.00	0.00	180.00	
6,772.1	0.00	0.00	6,759.9	-208.0	-101.1	0.00	0.00	0.00	0.00	
7,898.3	90.23	0.04	7,475.0	510.0	-100.6	8.01	8.01	0.00	0.04	
7,898.4	90.23	0.04	7,475.0	510.1	-100.6	0.00	0.00	0.00	0.00	
17,829.8	90.23	0.05	7,435.0	10,441.5	-92.8	0.00	0.00	0.00	81.20	BHL 300'FNL & 1650'

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Project:	Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	North Reference:	True
Well:	Critter Creek 246-2412H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-17-17)		

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
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 210'FNL & 1612'FEL, Sec.24									
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
KOP - Start Build 1.00									
1,100.0	1.00	205.92	1,100.0	-0.8	-0.4	-0.8	1.00	1.00	0.00
1,200.0	2.00	205.92	1,200.0	-3.1	-1.5	-3.1	1.00	1.00	0.00
1,300.0	3.00	205.92	1,299.9	-7.1	-3.4	-7.0	1.00	1.00	0.00
1,400.0	4.00	205.92	1,399.7	-12.6	-6.1	-12.5	1.00	1.00	0.00
1,481.6	4.82	205.92	1,481.0	-18.2	-8.8	-18.1	1.00	1.00	0.00
Pierre C&D Sand									
1,500.0	5.00	205.92	1,499.4	-19.6	-9.5	-19.5	1.00	1.00	0.00
1,600.0	6.00	205.92	1,598.9	-28.2	-13.7	-28.1	1.00	1.00	0.00
1,657.6	6.58	205.92	1,656.1	-33.9	-16.5	-33.8	1.00	1.00	0.00
1,700.0	6.58	205.92	1,698.3	-38.3	-18.6	-38.1	0.00	0.00	0.00
1,800.0	6.58	205.92	1,797.6	-48.6	-23.6	-48.4	0.00	0.00	0.00
1,900.0	6.58	205.92	1,897.0	-58.9	-28.6	-58.6	0.00	0.00	0.00
2,000.0	6.58	205.92	1,996.3	-69.2	-33.6	-68.9	0.00	0.00	0.00
2,100.0	6.58	205.92	2,095.6	-79.5	-38.6	-79.1	0.00	0.00	0.00
2,200.0	6.58	205.92	2,195.0	-89.8	-43.6	-89.4	0.00	0.00	0.00
2,263.4	6.58	205.92	2,258.0	-96.3	-46.8	-95.9	0.00	0.00	0.00
Base Pierre C&D Sand									
2,300.0	6.58	205.92	2,294.3	-100.1	-48.6	-99.6	0.00	0.00	0.00
2,400.0	6.58	205.92	2,393.7	-110.4	-53.6	-109.9	0.00	0.00	0.00
2,500.0	6.58	205.92	2,493.0	-120.7	-58.6	-120.1	0.00	0.00	0.00
2,600.0	6.58	205.92	2,592.4	-131.0	-63.7	-130.4	0.00	0.00	0.00
2,687.2	6.58	205.92	2,679.0	-139.9	-68.0	-139.3	0.00	0.00	0.00
Pierre B Sand									
2,700.0	6.58	205.92	2,691.7	-141.3	-68.7	-140.6	0.00	0.00	0.00
2,757.7	6.58	205.92	2,749.0	-147.2	-71.5	-146.6	0.00	0.00	0.00
Base Pierre B Sand									
2,800.0	6.58	205.92	2,791.0	-151.6	-73.7	-150.9	0.00	0.00	0.00
2,900.0	6.58	205.92	2,890.4	-161.9	-78.7	-161.2	0.00	0.00	0.00
3,000.0	6.58	205.92	2,989.7	-172.2	-83.7	-171.4	0.00	0.00	0.00
3,100.0	6.58	205.92	3,089.1	-182.5	-88.7	-181.7	0.00	0.00	0.00
3,183.4	6.58	205.92	3,171.9	-191.0	-92.9	-190.2	0.00	0.00	0.00
Start Drop -2.00									
3,200.0	6.24	205.92	3,188.4	-192.7	-93.7	-191.9	2.00	-2.00	0.00
3,300.0	4.24	205.92	3,288.0	-200.9	-97.7	-200.1	2.00	-2.00	0.00
3,400.0	2.24	205.92	3,387.8	-206.0	-100.1	-205.1	2.00	-2.00	0.00
3,499.2	0.26	205.92	3,487.0	-208.0	-101.1	-207.1	2.00	-2.00	0.00
Pierre A Sand									
3,500.0	0.24	205.92	3,487.8	-208.0	-101.1	-207.1	2.00	-2.00	0.00
3,512.2	0.00	0.00	3,500.0	-208.0	-101.1	-207.1	2.00	-2.00	0.00

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Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	North Reference:	True
Well:	Critter Creek 246-2412H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-17-17)		

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)
3,600.0	0.00	0.00	3,587.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
3,700.0	0.00	0.00	3,687.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
3,800.0	0.00	0.00	3,787.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
3,900.0	0.00	0.00	3,887.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
3,946.2	0.00	0.00	3,934.0	-208.0	-101.1	-207.1	0.00	0.00	0.00
Base Pierre A Sand									
4,000.0	0.00	0.00	3,987.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,100.0	0.00	0.00	4,087.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,200.0	0.00	0.00	4,187.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,251.2	0.00	0.00	4,239.0	-208.0	-101.1	-207.1	0.00	0.00	0.00
Parkman									
4,300.0	0.00	0.00	4,287.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,400.0	0.00	0.00	4,387.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,500.0	0.00	0.00	4,487.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,600.0	0.00	0.00	4,587.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,700.0	0.00	0.00	4,687.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,718.2	0.00	0.00	4,706.0	-208.0	-101.1	-207.1	0.00	0.00	0.00
Base Parkman									
4,800.0	0.00	0.00	4,787.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
4,900.0	0.00	0.00	4,887.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,000.0	0.00	0.00	4,987.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,100.0	0.00	0.00	5,087.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,200.0	0.00	0.00	5,187.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,300.0	0.00	0.00	5,287.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,400.0	0.00	0.00	5,387.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,500.0	0.00	0.00	5,487.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,600.0	0.00	0.00	5,587.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,700.0	0.00	0.00	5,687.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,800.0	0.00	0.00	5,787.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
5,900.0	0.00	0.00	5,887.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,987.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,100.0	0.00	0.00	6,087.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,200.0	0.00	0.00	6,187.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,300.0	0.00	0.00	6,287.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,387.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,500.0	0.00	0.00	6,487.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,587.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,700.0	0.00	0.00	6,687.8	-208.0	-101.1	-207.1	0.00	0.00	0.00
6,772.1	0.00	0.00	6,759.9	-208.0	-101.1	-207.1	0.00	0.00	0.00
KOP #2 - Start Build 8.01									
6,800.0	2.23	0.04	6,787.8	-207.5	-101.1	-206.5	8.01	8.01	0.00
6,900.0	10.25	0.04	6,887.1	-196.6	-101.1	-195.7	8.01	8.01	0.00
7,000.0	18.26	0.04	6,984.0	-172.0	-101.1	-171.1	8.01	8.01	0.00
7,100.0	26.27	0.04	7,076.4	-134.1	-101.0	-133.2	8.01	8.01	0.00
7,200.0	34.28	0.04	7,162.7	-83.8	-101.0	-82.9	8.01	8.01	0.00
7,222.4	36.08	0.04	7,181.0	-70.9	-101.0	-70.0	8.01	8.01	0.00
Lower Sharon Springs									
7,300.0	42.30	0.04	7,241.1	-21.8	-101.0	-20.9	8.01	8.01	0.00
7,378.2	48.56	0.04	7,296.0	33.8	-100.9	34.7	8.01	8.01	0.00
Lower Sharon Springs GR Marker									
7,400.0	50.31	0.04	7,310.2	50.4	-100.9	51.3	8.01	8.01	0.00
7,445.3	53.94	0.04	7,338.0	86.2	-100.9	87.1	8.01	8.01	0.00
Niobrara A Chalk									

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Well:	Critter Creek 246-2412H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-17-17)		

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)
7,457.4	54.90	0.04	7,345.0	96.0	-100.9	96.9	8.01	8.01	0.00
Niobrara A Marl GR Marker									
7,460.9	55.18	0.04	7,347.0	98.8	-100.9	99.7	8.01	8.01	0.00
Niobrara B1 Chalk									
7,500.0	58.32	0.04	7,368.5	131.6	-100.9	132.4	8.01	8.01	0.00
7,518.6	59.81	0.04	7,378.0	147.5	-100.9	148.4	8.01	8.01	0.00
Niobrara B1 Marl									
7,545.3	61.95	0.04	7,391.0	170.8	-100.8	171.7	8.01	8.01	0.00
Niobrara B Chalk									
7,600.0	66.33	0.04	7,414.9	220.0	-100.8	220.9	8.01	8.01	0.00
7,600.3	66.36	0.04	7,415.0	220.4	-100.8	221.2	8.01	8.01	0.00
Niobrara B Marl									
7,655.1	70.74	0.04	7,435.0	271.3	-100.8	272.1	8.01	8.01	0.00
Niobrara Landing Target									
7,700.0	74.35	0.04	7,448.5	314.1	-100.7	315.0	8.01	8.01	0.00
7,800.0	82.36	0.04	7,468.7	412.0	-100.7	412.9	8.01	8.01	0.00
7,898.3	90.23	0.04	7,475.0	510.0	-100.6	510.8	8.01	8.01	0.00
7,898.4	90.23	0.04	7,475.0	510.1	-100.6	511.0	0.00	0.00	0.00
LP 300'FSL & 1650'FEL, Sec.13									
7,900.0	90.23	0.04	7,475.0	511.7	-100.6	512.6	0.00	0.00	0.00
8,000.0	90.23	0.04	7,474.6	611.7	-100.5	612.6	0.00	0.00	0.00
8,100.0	90.23	0.04	7,474.2	711.7	-100.5	712.6	0.00	0.00	0.00
8,200.0	90.23	0.04	7,473.8	811.7	-100.4	812.6	0.00	0.00	0.00
8,300.0	90.23	0.04	7,473.4	911.7	-100.3	912.6	0.00	0.00	0.00
8,400.0	90.23	0.04	7,473.0	1,011.7	-100.2	1,012.6	0.00	0.00	0.00
8,500.0	90.23	0.04	7,472.6	1,111.7	-100.2	1,112.6	0.00	0.00	0.00
8,600.0	90.23	0.04	7,472.2	1,211.7	-100.1	1,212.5	0.00	0.00	0.00
8,700.0	90.23	0.04	7,471.8	1,311.7	-100.0	1,312.5	0.00	0.00	0.00
8,800.0	90.23	0.04	7,471.4	1,411.7	-100.0	1,412.5	0.00	0.00	0.00
8,900.0	90.23	0.04	7,471.0	1,511.7	-99.9	1,512.5	0.00	0.00	0.00
9,000.0	90.23	0.04	7,470.6	1,611.7	-99.8	1,612.5	0.00	0.00	0.00
9,100.0	90.23	0.04	7,470.2	1,711.7	-99.8	1,712.5	0.00	0.00	0.00
9,200.0	90.23	0.04	7,469.8	1,811.7	-99.7	1,812.5	0.00	0.00	0.00
9,300.0	90.23	0.04	7,469.4	1,911.7	-99.6	1,912.5	0.00	0.00	0.00
9,400.0	90.23	0.04	7,469.0	2,011.7	-99.5	2,012.5	0.00	0.00	0.00
9,500.0	90.23	0.04	7,468.6	2,111.7	-99.5	2,112.5	0.00	0.00	0.00
9,600.0	90.23	0.04	7,468.2	2,211.7	-99.4	2,212.5	0.00	0.00	0.00
9,700.0	90.23	0.04	7,467.8	2,311.7	-99.3	2,312.5	0.00	0.00	0.00
9,800.0	90.23	0.04	7,467.4	2,411.7	-99.2	2,412.5	0.00	0.00	0.00
9,900.0	90.23	0.04	7,467.0	2,511.7	-99.2	2,512.5	0.00	0.00	0.00
10,000.0	90.23	0.04	7,466.6	2,611.7	-99.1	2,612.5	0.00	0.00	0.00
10,100.0	90.23	0.04	7,466.2	2,711.7	-99.0	2,712.5	0.00	0.00	0.00
10,200.0	90.23	0.04	7,465.8	2,811.7	-99.0	2,812.5	0.00	0.00	0.00
10,300.0	90.23	0.04	7,465.4	2,911.7	-98.9	2,912.5	0.00	0.00	0.00
10,400.0	90.23	0.04	7,464.9	3,011.7	-98.8	3,012.5	0.00	0.00	0.00
10,500.0	90.23	0.04	7,464.5	3,111.7	-98.7	3,112.4	0.00	0.00	0.00
10,600.0	90.23	0.04	7,464.1	3,211.7	-98.7	3,212.4	0.00	0.00	0.00
10,700.0	90.23	0.04	7,463.7	3,311.7	-98.6	3,312.4	0.00	0.00	0.00
10,800.0	90.23	0.04	7,463.3	3,411.7	-98.5	3,412.4	0.00	0.00	0.00
10,900.0	90.23	0.04	7,462.9	3,511.7	-98.4	3,512.4	0.00	0.00	0.00
11,000.0	90.23	0.04	7,462.5	3,611.7	-98.4	3,612.4	0.00	0.00	0.00
11,100.0	90.23	0.04	7,462.1	3,711.7	-98.3	3,712.4	0.00	0.00	0.00
11,200.0	90.23	0.04	7,461.7	3,811.7	-98.2	3,812.4	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Project:	Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	North Reference:	True
Well:	Critter Creek 246-2412H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-17-17)		

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)	
11,300.0	90.23	0.04	7,461.3	3,911.7	-98.1	3,912.4	0.00	0.00	0.00	
11,400.0	90.23	0.04	7,460.9	4,011.7	-98.1	4,012.4	0.00	0.00	0.00	
11,500.0	90.23	0.04	7,460.5	4,111.7	-98.0	4,112.4	0.00	0.00	0.00	
11,600.0	90.23	0.04	7,460.1	4,211.7	-97.9	4,212.4	0.00	0.00	0.00	
11,700.0	90.23	0.04	7,459.7	4,311.7	-97.8	4,312.4	0.00	0.00	0.00	
11,800.0	90.23	0.04	7,459.3	4,411.7	-97.8	4,412.4	0.00	0.00	0.00	
11,900.0	90.23	0.04	7,458.9	4,511.7	-97.7	4,512.4	0.00	0.00	0.00	
12,000.0	90.23	0.04	7,458.5	4,611.7	-97.6	4,612.4	0.00	0.00	0.00	
12,100.0	90.23	0.04	7,458.1	4,711.7	-97.5	4,712.4	0.00	0.00	0.00	
12,200.0	90.23	0.04	7,457.7	4,811.7	-97.4	4,812.4	0.00	0.00	0.00	
12,300.0	90.23	0.04	7,457.3	4,911.7	-97.4	4,912.3	0.00	0.00	0.00	
12,400.0	90.23	0.04	7,456.9	5,011.7	-97.3	5,012.3	0.00	0.00	0.00	
12,500.0	90.23	0.04	7,456.5	5,111.7	-97.2	5,112.3	0.00	0.00	0.00	
12,600.0	90.23	0.04	7,456.1	5,211.7	-97.1	5,212.3	0.00	0.00	0.00	
12,700.0	90.23	0.04	7,455.7	5,311.7	-97.1	5,312.3	0.00	0.00	0.00	
12,800.0	90.23	0.04	7,455.3	5,411.7	-97.0	5,412.3	0.00	0.00	0.00	
12,900.0	90.23	0.04	7,454.9	5,511.7	-96.9	5,512.3	0.00	0.00	0.00	
13,000.0	90.23	0.04	7,454.5	5,611.7	-96.8	5,612.3	0.00	0.00	0.00	
13,100.0	90.23	0.05	7,454.1	5,711.7	-96.7	5,712.3	0.00	0.00	0.00	
13,200.0	90.23	0.05	7,453.7	5,811.7	-96.7	5,812.3	0.00	0.00	0.00	
13,300.0	90.23	0.05	7,453.3	5,911.7	-96.6	5,912.3	0.00	0.00	0.00	
13,400.0	90.23	0.05	7,452.9	6,011.7	-96.5	6,012.3	0.00	0.00	0.00	
13,500.0	90.23	0.05	7,452.5	6,111.7	-96.4	6,112.3	0.00	0.00	0.00	
13,600.0	90.23	0.05	7,452.1	6,211.7	-96.3	6,212.3	0.00	0.00	0.00	
13,700.0	90.23	0.05	7,451.7	6,311.7	-96.3	6,312.3	0.00	0.00	0.00	
13,800.0	90.23	0.05	7,451.3	6,411.7	-96.2	6,412.3	0.00	0.00	0.00	
13,900.0	90.23	0.05	7,450.9	6,511.7	-96.1	6,512.3	0.00	0.00	0.00	
14,000.0	90.23	0.05	7,450.5	6,611.7	-96.0	6,612.3	0.00	0.00	0.00	
14,100.0	90.23	0.05	7,450.1	6,711.7	-95.9	6,712.2	0.00	0.00	0.00	
14,200.0	90.23	0.05	7,449.7	6,811.7	-95.9	6,812.2	0.00	0.00	0.00	
14,300.0	90.23	0.05	7,449.2	6,911.7	-95.8	6,912.2	0.00	0.00	0.00	
14,400.0	90.23	0.05	7,448.8	7,011.7	-95.7	7,012.2	0.00	0.00	0.00	
14,500.0	90.23	0.05	7,448.4	7,111.7	-95.6	7,112.2	0.00	0.00	0.00	
14,600.0	90.23	0.05	7,448.0	7,211.7	-95.5	7,212.2	0.00	0.00	0.00	
14,700.0	90.23	0.05	7,447.6	7,311.7	-95.5	7,312.2	0.00	0.00	0.00	
14,800.0	90.23	0.05	7,447.2	7,411.7	-95.4	7,412.2	0.00	0.00	0.00	
14,900.0	90.23	0.05	7,446.8	7,511.7	-95.3	7,512.2	0.00	0.00	0.00	
15,000.0	90.23	0.05	7,446.4	7,611.7	-95.2	7,612.2	0.00	0.00	0.00	
15,100.0	90.23	0.05	7,446.0	7,711.7	-95.1	7,712.2	0.00	0.00	0.00	
15,200.0	90.23	0.05	7,445.6	7,811.7	-95.1	7,812.2	0.00	0.00	0.00	
15,300.0	90.23	0.05	7,445.2	7,911.7	-95.0	7,912.2	0.00	0.00	0.00	
15,400.0	90.23	0.05	7,444.8	8,011.7	-94.9	8,012.2	0.00	0.00	0.00	
15,500.0	90.23	0.05	7,444.4	8,111.6	-94.8	8,112.2	0.00	0.00	0.00	
15,600.0	90.23	0.05	7,444.0	8,211.6	-94.7	8,212.2	0.00	0.00	0.00	
15,700.0	90.23	0.05	7,443.6	8,311.6	-94.6	8,312.2	0.00	0.00	0.00	
15,800.0	90.23	0.05	7,443.2	8,411.6	-94.6	8,412.2	0.00	0.00	0.00	
15,900.0	90.23	0.05	7,442.8	8,511.6	-94.5	8,512.1	0.00	0.00	0.00	
16,000.0	90.23	0.05	7,442.4	8,611.6	-94.4	8,612.1	0.00	0.00	0.00	
16,100.0	90.23	0.05	7,442.0	8,711.6	-94.3	8,712.1	0.00	0.00	0.00	
16,200.0	90.23	0.05	7,441.6	8,811.6	-94.2	8,812.1	0.00	0.00	0.00	
16,300.0	90.23	0.05	7,441.2	8,911.6	-94.1	8,912.1	0.00	0.00	0.00	
16,400.0	90.23	0.05	7,440.8	9,011.6	-94.1	9,012.1	0.00	0.00	0.00	
16,500.0	90.23	0.05	7,440.4	9,111.6	-94.0	9,112.1	0.00	0.00	0.00	
16,600.0	90.23	0.05	7,440.0	9,211.6	-93.9	9,212.1	0.00	0.00	0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Project:	Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	North Reference:	True
Well:	Critter Creek 246-2412H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-17-17)		

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)
16,700.0	90.23	0.05	7,439.6	9,311.6	-93.8	9,312.1	0.00	0.00	0.00
16,800.0	90.23	0.05	7,439.2	9,411.6	-93.7	9,412.1	0.00	0.00	0.00
16,900.0	90.23	0.05	7,438.8	9,511.6	-93.6	9,512.1	0.00	0.00	0.00
17,000.0	90.23	0.05	7,438.4	9,611.6	-93.5	9,612.1	0.00	0.00	0.00
17,100.0	90.23	0.05	7,437.9	9,711.6	-93.5	9,712.1	0.00	0.00	0.00
17,200.0	90.23	0.05	7,437.5	9,811.6	-93.4	9,812.1	0.00	0.00	0.00
17,300.0	90.23	0.05	7,437.1	9,911.6	-93.3	9,912.1	0.00	0.00	0.00
17,400.0	90.23	0.05	7,436.7	10,011.6	-93.2	10,012.1	0.00	0.00	0.00
17,500.0	90.23	0.05	7,436.3	10,111.6	-93.1	10,112.1	0.00	0.00	0.00
17,600.0	90.23	0.05	7,435.9	10,211.6	-93.0	10,212.1	0.00	0.00	0.00
17,700.0	90.23	0.05	7,435.5	10,311.6	-92.9	10,312.0	0.00	0.00	0.00
17,800.0	90.23	0.05	7,435.1	10,411.6	-92.9	10,412.0	0.00	0.00	0.00
17,829.8	90.23	0.05	7,435.0	10,441.4	-92.8	10,441.8	0.00	0.00	0.00
TD at 17829.8 - BHL 300'FNL & 1650'FEL, Sec.12									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL 210'FNL & 1612'FE - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	1,578,045.23	3,310,282.60	40.914711	-104.377367
BHL 300'FNL & 1650'FE - plan hits target center - Point	0.00	0.00	7,435.0	10,441.5	-92.8	1,588,484.89	3,310,057.59	40.943369	-104.377703
LP 300'FSL & 1650'FEL, - plan misses target center by 60.0ft at 7898.4ft MD (7475.0 TVD, 510.1 N, -100.6 E) - Point	0.00	0.00	7,475.0	510.1	-40.6	1,578,554.76	3,310,235.52	40.916111	-104.377514

Database:	US_EDM	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Company:	Fifth Creek Energy Company, LLC	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Project:	Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	North Reference:	True
Well:	Critter Creek 246-2412H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (3-17-17)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,481.6	1,481.0	Pierre C&D Sand				
2,263.4	2,258.0	Base Pierre C&D Sand				
2,687.2	2,679.0	Pierre B Sand				
2,757.7	2,749.0	Base Pierre B Sand				
3,499.2	3,487.0	Pierre A Sand				
3,946.2	3,934.0	Base Pierre A Sand				
4,251.2	4,239.0	Parkman				
4,718.2	4,706.0	Base Parkman				
7,222.4	7,181.0	Lower Sharon Springs				
7,378.2	7,296.0	Lower Sharon Springs GR Marker				
7,445.3	7,338.0	Niobrara A Chalk				
7,457.4	7,345.0	Niobrara A Marl GR Marker				
7,460.9	7,347.0	Niobrara B1 Chalk				
7,518.6	7,378.0	Niobrara B1 Marl				
7,545.3	7,391.0	Niobrara B Chalk				
7,600.3	7,415.0	Niobrara B Marl				
7,655.1	7,435.0	Niobrara Landing Target				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.0	1,000.0	0.0	0.0	KOP - Start Build 1.00	
3,183.4	3,171.9	-33.9	-16.5	Start Drop -2.00	
6,772.1	6,759.9	-191.1	-92.9	KOP #2 - Start Build 8.01	
17,829.8	7,435.0	-208.0	-101.1	TD at 17829.8	



Fifth Creek Energy Company, LLC

Sec.24-T11N-R63W

Critter Creek 24 NE Pad Sec.24-T11N-R63W

Critter Creek 246-2412H

Wellbore #1

Plan #1 (3-17-17)

Anticollision Report

31 March, 2017

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (3-17-17)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,200.0 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	3/31/2017		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	17,829.8	Plan #1 (3-17-17) (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 24 NE Pad Sec.24-T11N-R63W						
Critter Creek 294-2425H - Wellbore #1 - Plan #1 (3-17-17)	891.0	891.0	25.1	21.3	6.648	CC
Critter Creek 294-2425H - Wellbore #1 - Plan #1 (3-17-17)	1,000.0	999.9	25.5	21.2	5.966	ES
Critter Creek 294-2425H - Wellbore #1 - Plan #1 (3-17-17)	7,589.9	7,619.8	103.0	69.1	3.034	SF
Critter Creek 571-2524H - Wellbore #1 - Plan #1 (3-20-17)	200.0	200.0	75.2	74.5	111.491	CC, ES
Critter Creek 571-2524H - Wellbore #1 - Plan #1 (3-20-17)	7,800.0	7,545.4	462.6	426.4	12.768	SF
Critter Creek 572-2425H - Wellbore #1 - Plan #1 (3-17-17)	1,000.0	1,000.0	24.6	20.4	5.766	CC, ES
Critter Creek 572-2425H - Wellbore #1 - Plan #1 (3-17-17)	1,200.0	1,200.0	26.5	21.4	5.195	SF
Critter Creek 573-2412H - Wellbore #1 - Plan #1 (3-20-17)	400.0	400.0	49.8	48.2	31.620	CC, ES
Critter Creek 573-2412H - Wellbore #1 - Plan #1 (3-20-17)	17,829.8	17,961.6	587.2	193.7	1.492	Level 3, SF
Critter Creek 574-2412H - Wellbore #1 - Plan #1 (3-17-17)	1,000.0	1,000.0	50.0	45.8	11.717	CC
Critter Creek 574-2412H - Wellbore #1 - Plan #1 (3-17-17)	17,829.8	17,926.2	235.6	-101.9	0.698	Level 1, ES, SF
Existing Wells Sec.24-T11N-R63W						
Critter Creek 06-12H (Exist.) - Wellbore #1 - Wellbore #1	13,880.2	11,484.4	236.3	156.2	2.952	CC, ES
Critter Creek 06-12H (Exist.) - Wellbore #1 - Wellbore #1	14,100.0	11,378.9	307.1	201.1	2.899	SF
Critter Creek 7-13H (Exist.) - Wellbore #1 - Wellbore #1	9,092.5	11,446.4	253.8	208.7	5.633	CC
Critter Creek 7-13H (Exist.) - Wellbore #1 - Wellbore #1	9,100.0	11,441.8	253.8	208.7	5.624	ES
Critter Creek 7-13H (Exist.) - Wellbore #1 - Wellbore #1	9,400.0	11,249.4	345.4	274.2	4.852	SF

Offset Design	Critter Creek 24 NE Pad Sec.24-T11N-R63W - Critter Creek 294-2425H - Wellbore #1 - Plan #1 (3-17-17)												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	-90.01	0.0	-25.2	25.2					
100.0	100.0	100.0	100.0	0.1	0.1	-90.01	0.0	-25.2	25.2	24.9	0.22	111.901		
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-25.2	25.2	24.5	0.67	37.300		
300.0	300.0	300.0	300.0	0.6	0.6	-90.01	0.0	-25.2	25.2	24.0	1.12	22.380		
400.0	400.0	400.0	400.0	0.8	0.8	-90.01	0.0	-25.2	25.2	23.6	1.57	15.986		
500.0	500.0	500.0	500.0	1.0	1.0	-90.01	0.0	-25.2	25.2	23.1	2.02	12.433		
600.0	600.0	600.0	600.0	1.2	1.2	-90.01	0.0	-25.2	25.2	22.7	2.47	10.173		
700.0	700.0	700.0	700.0	1.5	1.5	-90.01	0.0	-25.2	25.2	22.2	2.92	8.608		
800.0	800.0	800.0	800.0	1.7	1.7	-90.01	0.0	-25.2	25.2	21.8	3.37	7.460		
891.0	891.0	891.0	891.0	1.9	1.9	-87.54	1.1	-25.1	25.1	21.3	3.78	6.648	CC	

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
900.0	900.0	900.0	900.0	1.9	1.9	-87.03	1.3	-25.1	25.1	21.3	3.82	6.577		
1,000.0	1,000.0	999.9	999.8	2.1	2.1	-78.17	5.2	-24.9	25.5	21.2	4.27	5.966 ES		
1,100.0	1,100.0	1,099.4	1,099.1	2.3	2.4	91.30	11.7	-24.6	27.3	22.6	4.69	5.818		
1,200.0	1,200.0	1,198.3	1,197.6	2.5	2.6	110.32	20.7	-24.3	33.0	27.9	5.11	6.473		
1,300.0	1,299.9	1,296.3	1,294.9	2.7	2.8	126.36	32.2	-23.8	44.5	38.9	5.53	8.045		
1,400.0	1,399.7	1,394.0	1,391.7	2.9	3.1	137.24	45.5	-23.2	61.0	55.1	5.95	10.253		
1,500.0	1,499.4	1,491.8	1,488.5	3.1	3.4	144.11	58.9	-22.6	80.3	74.0	6.37	12.608		
1,600.0	1,598.9	1,589.2	1,585.0	3.3	3.7	148.78	72.3	-22.0	101.8	95.0	6.80	14.986		
1,700.0	1,698.3	1,686.2	1,681.1	3.6	4.0	152.17	85.7	-21.5	125.1	117.9	7.22	17.323		
1,800.0	1,797.6	1,783.1	1,777.1	3.8	4.3	154.59	99.0	-20.9	149.0	141.3	7.66	19.455		
1,900.0	1,897.0	1,880.1	1,873.1	4.1	4.6	156.35	112.3	-20.3	173.0	164.9	8.10	21.368		
2,000.0	1,996.3	1,977.0	1,969.2	4.4	4.9	157.67	125.6	-19.7	197.2	188.6	8.54	23.085		
2,100.0	2,095.6	2,074.0	2,065.2	4.6	5.2	158.71	139.0	-19.2	221.4	212.4	8.99	24.633		
2,200.0	2,195.0	2,170.9	2,161.2	4.9	5.5	159.54	152.3	-18.6	245.7	236.3	9.44	26.031		
2,300.0	2,294.3	2,267.9	2,257.3	5.2	5.8	160.22	165.6	-18.0	270.0	260.1	9.89	27.299		
2,400.0	2,393.7	2,364.8	2,353.3	5.5	6.1	160.79	179.0	-17.5	294.4	284.0	10.35	28.453		
2,500.0	2,493.0	2,461.8	2,449.3	5.8	6.4	161.27	192.3	-16.9	318.8	308.0	10.80	29.506		
2,600.0	2,592.4	2,558.7	2,545.3	6.1	6.7	161.69	205.6	-16.3	343.2	331.9	11.26	30.471		
2,700.0	2,691.7	2,655.7	2,641.4	6.4	7.0	162.05	219.0	-15.7	367.6	355.8	11.72	31.357		
2,800.0	2,791.0	2,752.6	2,737.4	6.7	7.4	162.36	232.3	-15.2	392.0	379.8	12.18	32.174		
2,900.0	2,890.4	2,849.6	2,833.4	7.0	7.7	162.64	245.6	-14.6	416.4	403.8	12.65	32.929		
3,000.0	2,989.7	2,946.5	2,929.5	7.3	8.0	162.88	259.0	-14.0	440.9	427.7	13.11	33.628		
3,100.0	3,089.1	3,043.5	3,025.5	7.6	8.3	163.10	272.3	-13.4	465.3	451.7	13.57	34.278		
3,200.0	3,188.4	3,140.5	3,121.5	7.9	8.6	163.33	285.6	-12.9	489.7	475.7	14.05	34.865		
3,300.0	3,288.0	3,237.9	3,218.1	8.1	9.0	163.56	299.0	-12.3	512.0	497.5	14.53	35.246		
3,400.0	3,387.8	3,336.1	3,315.3	8.3	9.3	163.66	312.5	-11.7	531.0	516.0	14.99	35.416		
3,500.0	3,487.8	3,434.8	3,413.1	8.5	9.6	163.63	326.1	-11.1	546.7	531.3	15.44	35.400		
3,600.0	3,587.8	3,533.9	3,511.2	8.7	9.9	9.39	339.7	-10.5	560.4	544.5	15.89	35.277		
3,700.0	3,687.8	3,632.9	3,609.3	8.8	10.3	9.22	353.4	-10.0	574.1	557.8	16.32	35.170		
3,800.0	3,787.8	3,732.0	3,707.4	9.0	10.6	9.06	367.0	-9.4	587.8	571.0	16.76	35.066		
3,900.0	3,887.8	3,831.0	3,805.5	9.2	10.9	8.91	380.6	-8.8	601.4	584.2	17.20	34.965		
4,000.0	3,987.8	3,930.1	3,903.6	9.4	11.3	8.77	394.2	-8.2	615.1	597.5	17.64	34.866		
4,100.0	4,087.8	4,029.1	4,001.7	9.5	11.6	8.63	407.8	-7.6	628.8	610.7	18.08	34.771		
4,200.0	4,187.8	4,128.2	4,099.8	9.7	11.9	8.50	421.5	-7.0	642.5	624.0	18.53	34.678		
4,300.0	4,287.8	4,227.2	4,198.0	9.9	12.2	8.37	435.1	-6.4	656.2	637.2	18.97	34.588		
4,400.0	4,387.8	4,326.3	4,296.1	10.1	12.6	8.25	448.7	-5.8	669.9	650.5	19.42	34.501		
4,500.0	4,487.8	4,425.3	4,394.2	10.3	12.9	8.14	462.3	-5.3	683.6	663.7	19.86	34.416		
4,600.0	4,587.8	4,524.4	4,492.3	10.5	13.2	8.02	475.9	-4.7	697.3	677.0	20.31	34.334		
4,700.0	4,687.8	4,623.4	4,590.4	10.7	13.6	7.92	489.6	-4.1	711.0	690.2	20.76	34.254		
4,800.0	4,787.8	4,722.5	4,688.5	10.9	13.9	7.81	503.2	-3.5	724.7	703.5	21.20	34.176		
4,900.0	4,887.8	4,821.5	4,786.6	11.1	14.2	7.71	516.8	-2.9	738.4	716.7	21.65	34.100		
5,000.0	4,987.8	4,920.6	4,884.7	11.2	14.6	7.62	530.4	-2.3	752.1	730.0	22.10	34.027		
5,100.0	5,087.8	5,019.6	4,982.8	11.4	14.9	7.53	544.0	-1.7	765.8	743.3	22.55	33.956		
5,200.0	5,187.8	5,118.7	5,080.9	11.6	15.2	7.44	557.7	-1.2	779.5	756.5	23.00	33.887		
5,300.0	5,287.8	5,217.7	5,179.0	11.8	15.6	7.35	571.3	-0.6	793.2	769.8	23.45	33.820		
5,400.0	5,387.8	5,316.8	5,277.1	12.0	15.9	7.27	584.9	0.0	807.0	783.0	23.91	33.754		
5,500.0	5,487.8	5,415.8	5,375.2	12.2	16.2	7.19	598.5	0.6	820.7	796.3	24.36	33.691		
5,600.0	5,587.8	5,542.8	5,501.2	12.4	16.6	7.10	614.4	1.3	833.2	808.4	24.84	33.549		
5,700.0	5,687.8	5,683.4	5,641.4	12.6	16.9	7.03	625.6	1.8	841.2	815.9	25.30	33.253		
5,800.0	5,787.8	5,824.9	5,782.7	12.8	17.1	7.01	629.9	1.9	844.3	818.5	25.75	32.791		
5,900.0	5,887.8	5,929.9	5,887.8	13.0	17.3	7.01	630.0	1.9	844.3	818.1	26.16	32.276		
6,000.0	5,987.8	6,029.9	5,987.8	13.2	17.4	7.01	630.0	1.9	844.3	817.7	26.58	31.760		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
6,100.0	6,087.8	6,129.9	6,087.8	13.5	17.6	7.01	630.0	1.9	844.3	817.3	27.01	31.260		
6,200.0	6,187.8	6,229.9	6,187.8	13.7	17.8	7.01	630.0	1.9	844.3	816.9	27.44	30.774		
6,300.0	6,287.8	6,329.9	6,287.8	13.9	17.9	7.01	630.0	1.9	844.3	816.4	27.86	30.303		
6,400.0	6,387.8	6,429.9	6,387.8	14.1	18.1	7.01	630.0	1.9	844.3	816.0	28.29	29.845		
6,500.0	6,487.8	6,529.9	6,487.8	14.3	18.3	7.01	630.0	1.9	844.3	815.6	28.72	29.400		
6,600.0	6,587.8	6,629.9	6,587.8	14.5	18.4	7.01	630.0	1.9	844.3	815.2	29.15	28.967		
6,700.0	6,687.8	8,050.9	7,474.5	14.7	19.0	91.71	-211.1	2.5	793.5	760.0	33.52	23.670		
6,800.0	6,787.8	8,050.0	7,474.5	14.9	18.9	105.83	-210.1	2.5	694.5	660.9	33.59	20.676		
6,900.0	6,887.1	8,038.7	7,474.6	15.1	18.9	135.83	-198.9	2.5	596.5	564.2	32.34	18.444		
7,000.0	6,984.0	8,013.7	7,474.7	15.2	18.7	146.33	-173.9	2.5	501.5	470.2	31.28	16.034		
7,100.0	7,076.4	7,975.5	7,474.8	15.3	18.4	149.77	-135.7	2.5	411.6	381.5	30.13	13.661		
7,200.0	7,162.7	7,921.7	7,475.0	15.4	18.1	149.31	-81.9	2.4	329.0	300.1	28.85	11.402		
7,300.0	7,241.1	7,831.0	7,468.7	15.5	17.8	141.65	8.6	2.4	251.8	223.5	28.33	8.889		
7,400.0	7,310.2	7,752.0	7,454.0	15.6	17.6	130.40	86.1	2.3	180.6	151.5	29.09	6.209		
7,500.0	7,368.5	7,680.3	7,433.3	16.0	17.5	112.61	154.8	2.3	124.0	92.2	31.82	3.898		
7,589.9	7,410.7	7,619.8	7,410.6	16.5	17.5	89.90	210.8	2.2	103.0	69.1	33.96	3.034 SF		
7,600.0	7,414.9	7,613.2	7,407.8	16.5	17.5	87.11	216.8	2.2	103.3	69.4	33.98	3.041		
7,700.0	7,448.5	7,550.0	7,378.6	17.2	17.5	61.40	272.8	2.2	131.1	100.1	31.02	4.226		
7,800.0	7,468.7	7,487.7	7,345.1	18.1	17.6	42.83	325.3	2.2	182.7	157.5	25.20	7.250		
7,900.0	7,475.0	7,427.7	7,308.6	19.1	17.8	31.63	372.9	2.1	239.8	219.4	20.44	11.733		
8,000.0	7,474.6	7,372.5	7,271.6	20.2	17.9	26.76	413.9	2.1	301.4	282.7	18.77	16.064		
8,100.0	7,474.2	7,324.4	7,236.9	21.3	18.1	23.32	447.1	2.1	369.9	352.1	17.76	20.830		
8,200.0	7,473.8	7,282.6	7,205.0	22.5	18.2	20.81	474.1	2.1	443.5	426.3	17.24	25.720		
8,300.0	7,473.4	7,250.0	7,179.0	23.8	18.3	19.13	493.8	2.0	521.3	504.1	17.17	30.365		
8,400.0	7,473.0	7,214.0	7,149.4	25.2	18.4	17.49	514.2	2.0	602.2	585.1	17.14	35.146		
8,500.0	7,472.6	7,185.8	7,125.5	26.6	18.4	16.36	529.1	2.0	685.8	668.5	17.36	39.501		
8,600.0	7,472.2	7,150.0	7,094.2	28.1	18.5	15.08	546.7	2.0	771.7	754.2	17.53	44.035		
8,700.0	7,471.8	7,150.0	7,094.2	29.7	18.5	15.08	546.7	2.0	859.2	840.9	18.32	46.904		
8,800.0	7,471.4	7,119.0	7,066.5	31.3	18.6	14.10	560.6	2.0	948.0	929.4	18.63	50.885		
8,900.0	7,471.0	7,100.0	7,049.3	32.9	18.6	13.55	568.5	2.0	1,038.2	1,019.0	19.15	54.199		
9,000.0	7,470.6	7,100.0	7,049.3	34.6	18.6	13.55	568.5	2.0	1,129.6	1,109.7	19.95	56.612		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
0.0	0.0	0.0	0.0	0.0	0.0	-90.01	0.0	-75.2	75.2					
100.0	100.0	100.0	100.0	0.1	0.1	-90.01	0.0	-75.2	75.2	75.0	0.22	334.472		
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-75.2	75.2	74.5	0.67	111.491 CC, ES		
300.0	300.0	298.8	298.8	0.6	0.6	-89.25	1.0	-76.0	76.0	74.9	1.12	67.905		
400.0	400.0	397.4	397.4	0.8	0.8	-87.06	4.0	-78.3	78.4	76.9	1.57	50.074		
500.0	500.0	495.8	495.5	1.0	1.0	-83.72	9.0	-82.2	82.8	80.8	2.02	40.896		
600.0	600.0	593.8	593.1	1.2	1.3	-79.62	16.0	-87.6	89.3	86.8	2.50	35.769		
700.0	700.0	691.3	690.0	1.5	1.5	-75.20	25.0	-94.5	98.2	95.2	2.98	32.914		
800.0	800.0	788.8	786.5	1.7	1.8	-70.82	35.8	-102.8	109.7	106.2	3.49	31.454		
900.0	900.0	887.7	884.3	1.9	2.2	-67.06	47.3	-111.7	122.3	118.3	4.00	30.597		
1,000.0	1,000.0	986.6	982.1	2.1	2.5	-64.02	58.8	-120.6	135.3	130.8	4.50	30.044		
1,100.0	1,100.0	1,085.5	1,079.9	2.3	2.8	92.77	70.3	-129.5	148.7	143.9	4.80	30.963		
1,200.0	1,200.0	1,184.2	1,177.6	2.5	3.2	95.62	81.8	-138.3	162.6	157.3	5.21	31.175		
1,300.0	1,299.9	1,282.7	1,275.0	2.7	3.5	98.54	93.2	-147.2	177.0	171.4	5.63	31.440		
1,400.0	1,399.7	1,381.0	1,372.3	2.9	3.9	101.50	104.7	-156.0	192.3	186.2	6.05	31.761		
1,500.0	1,499.4	1,479.1	1,469.3	3.1	4.2	104.46	116.1	-164.8	208.4	201.9	6.49	32.134		
1,600.0	1,598.9	1,577.0	1,566.1	3.3	4.5	107.38	127.4	-173.6	225.6	218.6	6.93	32.552		
1,700.0	1,698.3	1,674.5	1,662.6	3.6	4.9	110.27	138.8	-182.4	243.8	236.4	7.39	33.002		
1,800.0	1,797.6	1,772.0	1,759.0	3.8	5.2	112.90	150.1	-191.1	262.8	254.9	7.86	33.429		
1,900.0	1,897.0	1,869.5	1,855.5	4.1	5.6	115.19	161.5	-199.9	282.2	273.8	8.34	33.822		
2,000.0	1,996.3	1,967.1	1,951.9	4.4	5.9	117.17	172.8	-208.7	301.9	293.1	8.83	34.184		
2,100.0	2,095.6	2,064.6	2,048.4	4.6	6.3	118.92	184.2	-217.4	322.0	312.7	9.33	34.517		
2,200.0	2,195.0	2,162.1	2,144.9	4.9	6.6	120.46	195.5	-226.2	342.4	332.5	9.83	34.825		
2,300.0	2,294.3	2,259.6	2,241.3	5.2	7.0	121.82	206.9	-234.9	362.9	352.6	10.34	35.109		
2,400.0	2,393.7	2,357.1	2,337.8	5.5	7.3	123.04	218.2	-243.7	383.7	372.8	10.85	35.371		
2,500.0	2,493.0	2,454.6	2,434.2	5.8	7.6	124.14	229.5	-252.5	404.5	393.2	11.36	35.615		
2,600.0	2,592.4	2,552.2	2,530.7	6.1	8.0	125.13	240.9	-261.2	425.6	413.7	11.87	35.841		
2,700.0	2,691.7	2,649.7	2,627.1	6.4	8.3	126.02	252.2	-270.0	446.7	434.3	12.39	36.052		
2,800.0	2,791.0	2,747.2	2,723.6	6.7	8.7	126.84	263.6	-278.7	467.9	455.0	12.91	36.248		
2,900.0	2,890.4	2,844.7	2,820.1	7.0	9.0	127.58	274.9	-287.5	489.2	475.8	13.43	36.432		
3,000.0	2,889.7	2,942.2	2,916.5	7.3	9.4	128.27	286.3	-296.3	510.6	496.6	13.95	36.603		
3,100.0	3,089.1	3,039.7	3,013.0	7.6	9.7	128.89	297.6	-305.0	532.0	517.5	14.47	36.765		
3,200.0	3,188.4	3,137.3	3,109.4	7.9	10.1	129.52	308.9	-313.8	553.5	538.5	15.00	36.910		
3,300.0	3,288.0	3,235.1	3,206.3	8.1	10.4	130.19	320.3	-322.6	573.6	558.1	15.50	37.013		
3,400.0	3,387.8	3,333.5	3,303.6	8.3	10.8	130.54	331.8	-331.4	591.4	575.5	15.98	37.018		
3,500.0	3,487.8	3,432.3	3,401.2	8.5	11.1	130.59	343.3	-340.3	607.1	590.7	16.43	36.939		
3,600.0	3,587.8	3,531.2	3,499.1	8.7	11.5	-23.79	354.8	-349.2	621.4	604.5	16.87	36.832		
3,700.0	3,687.8	3,630.1	3,596.9	8.8	11.8	-24.11	366.3	-358.1	635.7	618.4	17.30	36.743		
3,800.0	3,787.8	3,729.0	3,694.8	9.0	12.2	-24.41	377.8	-366.9	650.0	632.2	17.73	36.657		
3,900.0	3,887.8	3,827.9	3,792.6	9.2	12.5	-24.70	389.3	-375.8	664.3	646.1	18.16	36.573		
4,000.0	3,987.8	3,926.8	3,890.4	9.4	12.9	-24.98	400.8	-384.7	678.6	660.0	18.60	36.491		
4,100.0	4,087.8	4,025.8	3,988.3	9.5	13.2	-25.25	412.3	-393.6	693.0	673.9	19.03	36.411		
4,200.0	4,187.8	4,124.7	4,086.1	9.7	13.6	-25.50	423.8	-402.5	707.3	687.9	19.47	36.334		
4,300.0	4,287.8	4,223.6	4,184.0	9.9	13.9	-25.75	435.3	-411.4	721.7	701.8	19.91	36.258		
4,400.0	4,387.8	4,322.5	4,281.8	10.1	14.3	-25.98	446.8	-420.3	736.1	715.8	20.34	36.185		
4,500.0	4,487.8	4,421.4	4,379.6	10.3	14.6	-26.21	458.3	-429.1	750.5	729.7	20.78	36.113		
4,600.0	4,587.8	4,520.3	4,477.5	10.5	15.0	-26.43	469.8	-438.0	764.9	743.7	21.22	36.043		
4,700.0	4,687.8	4,619.2	4,575.3	10.7	15.3	-26.64	481.3	-446.9	779.4	757.7	21.66	35.975		
4,800.0	4,787.8	4,718.2	4,673.2	10.9	15.7	-26.84	492.8	-455.8	793.8	771.7	22.11	35.909		
4,900.0	4,887.8	4,817.1	4,771.0	11.1	16.0	-27.04	504.3	-464.7	808.2	785.7	22.55	35.844		
5,000.0	4,987.8	4,916.0	4,868.8	11.2	16.4	-27.23	515.9	-473.6	822.7	799.7	22.99	35.781		
5,100.0	5,087.8	5,014.9	4,966.7	11.4	16.7	-27.41	527.4	-482.5	837.2	813.7	23.44	35.720		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
5,200.0	5,187.8	5,113.8	5,064.5	11.6	17.1	-27.59	538.9	-491.3	851.6	827.8	23.88	35.660		
5,300.0	5,287.8	5,212.7	5,162.4	11.8	17.4	-27.76	550.4	-500.2	866.1	841.8	24.33	35.602		
5,400.0	5,387.8	5,311.6	5,260.2	12.0	17.8	-27.92	561.9	-509.1	880.6	855.8	24.77	35.545		
5,500.0	5,487.8	5,410.6	5,358.0	12.2	18.1	-28.08	573.4	-518.0	895.1	869.9	25.22	35.489		
5,600.0	5,587.8	5,509.5	5,455.9	12.4	18.5	-28.24	584.9	-526.9	909.6	883.9	25.67	35.435		
5,700.0	5,687.8	5,608.4	5,553.7	12.6	18.8	-28.39	596.4	-535.8	924.1	898.0	26.12	35.382		
5,800.0	5,787.8	5,742.4	5,686.5	12.8	19.2	-28.56	610.4	-546.6	937.2	910.6	26.60	35.231		
5,900.0	5,887.8	5,889.9	5,833.5	13.0	19.5	-28.68	620.2	-554.1	945.5	918.5	27.07	34.934		
6,000.0	5,987.8	6,038.3	5,981.9	13.2	19.8	-28.72	623.9	-557.0	948.7	921.2	27.51	34.480		
6,100.0	6,087.8	6,144.3	6,087.8	13.5	19.9	-28.73	624.0	-557.1	948.7	920.8	27.92	33.983		
6,200.0	6,187.8	6,244.3	6,187.8	13.7	20.1	-28.73	624.0	-557.1	948.7	920.4	28.33	33.494		
6,300.0	6,287.8	6,344.3	6,287.8	13.9	20.2	-28.73	624.0	-557.1	948.7	920.0	28.74	33.016		
6,400.0	6,387.8	6,444.3	6,387.8	14.1	20.4	-28.73	624.0	-557.1	948.7	919.6	29.15	32.551		
6,500.0	6,487.8	6,544.3	6,487.8	14.3	20.5	-28.73	624.0	-557.1	948.7	919.2	29.56	32.098		
6,600.0	6,587.8	6,644.3	6,587.8	14.5	20.7	-28.73	624.0	-557.1	948.7	918.8	29.97	31.656		
6,700.0	6,687.8	6,744.3	6,687.8	14.7	20.8	-28.73	624.0	-557.1	948.7	918.4	30.38	31.225		
6,800.0	6,787.8	8,155.4	7,575.0	14.9	19.3	-93.87	-207.3	-557.3	909.8	876.0	33.86	26.870		
6,900.0	6,887.1	8,144.5	7,575.0	15.1	19.2	-105.04	-196.5	-557.3	825.4	791.7	33.67	24.513		
7,000.0	6,984.0	8,119.9	7,575.0	15.2	19.1	-112.11	-171.9	-557.3	746.6	713.3	33.35	22.385		
7,100.0	7,076.4	8,082.1	7,575.0	15.3	18.8	-115.83	-134.0	-557.3	675.8	642.9	32.91	20.533		
7,200.0	7,162.7	8,020.1	7,574.7	15.4	18.8	-116.01	-72.1	-557.3	614.9	582.4	32.46	18.939		
7,300.0	7,241.1	7,909.7	7,563.1	15.5	19.1	-110.76	37.6	-557.2	561.6	529.1	32.53	17.263		
7,400.0	7,310.2	7,820.9	7,541.7	15.6	19.3	-106.08	123.7	-557.2	516.9	484.0	32.86	15.730		
7,500.0	7,368.5	7,743.8	7,514.5	16.0	19.5	-101.24	195.8	-557.2	483.4	450.0	33.48	14.440		
7,600.0	7,414.9	7,673.7	7,483.2	16.5	19.7	-95.91	258.6	-557.2	463.1	428.7	34.35	13.482		
7,699.7	7,448.4	7,608.2	7,448.6	17.2	19.9	-90.03	314.1	-557.2	456.4	421.1	35.32	12.922		
7,700.0	7,448.5	7,608.0	7,448.5	17.2	19.9	-90.01	314.3	-557.2	456.4	421.1	35.32	12.921		
7,800.0	7,468.7	7,545.4	7,410.7	18.1	20.1	-83.62	364.2	-557.1	462.6	426.4	36.23	12.768 SF		
7,900.0	7,475.0	7,484.9	7,370.3	19.1	20.3	-77.03	409.2	-557.1	479.5	442.6	36.92	12.986		
8,000.0	7,474.6	7,430.0	7,330.3	20.2	20.5	-72.39	446.9	-557.1	506.4	469.0	37.43	13.529		
8,100.0	7,474.2	7,383.1	7,294.1	21.3	20.6	-68.37	476.5	-557.1	544.3	506.5	37.82	14.391		
8,200.0	7,473.8	7,350.0	7,267.3	22.5	20.7	-65.53	496.1	-557.1	592.3	554.0	38.37	15.437		
8,300.0	7,473.4	7,300.0	7,225.3	23.8	20.8	-61.33	523.1	-557.1	649.0	610.5	38.50	16.857		
8,400.0	7,473.0	7,278.9	7,207.0	25.2	20.9	-59.59	533.7	-557.1	712.7	673.5	39.23	18.168		
8,500.0	7,472.6	7,250.0	7,181.5	26.6	20.9	-57.27	547.2	-557.1	782.4	742.7	39.75	19.683		
8,600.0	7,472.2	7,230.2	7,163.7	28.1	21.0	-55.72	555.9	-557.1	856.8	816.3	40.50	21.155		
8,700.0	7,471.8	7,200.0	7,136.1	29.7	21.0	-53.43	568.1	-557.1	935.1	894.2	40.92	22.851		
8,800.0	7,471.4	7,200.0	7,136.1	31.3	21.0	-53.43	568.1	-557.1	1,016.4	974.1	42.28	24.041		
8,900.0	7,471.0	7,176.4	7,114.2	32.9	21.0	-51.70	576.9	-557.1	1,100.1	1,057.2	42.87	25.662		
9,000.0	7,470.6	7,150.0	7,089.4	34.6	21.1	-49.83	585.9	-557.1	1,186.1	1,142.7	43.34	27.369		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
0.0	0.0	0.0	0.0	0.0	0.0	87.46	1.1	24.6	24.6					
100.0	100.0	100.0	100.0	0.1	0.1	87.46	1.1	24.6	24.6	24.4	0.22	109.548		
200.0	200.0	200.0	200.0	0.3	0.3	87.46	1.1	24.6	24.6	23.9	0.67	36.516		
300.0	300.0	300.0	300.0	0.6	0.6	87.46	1.1	24.6	24.6	23.5	1.12	21.910		
400.0	400.0	400.0	400.0	0.8	0.8	87.46	1.1	24.6	24.6	23.0	1.57	15.650		
500.0	500.0	500.0	500.0	1.0	1.0	87.46	1.1	24.6	24.6	22.6	2.02	12.172		
600.0	600.0	600.0	600.0	1.2	1.2	87.46	1.1	24.6	24.6	22.2	2.47	9.959		
700.0	700.0	700.0	700.0	1.5	1.5	87.46	1.1	24.6	24.6	21.7	2.92	8.427		
800.0	800.0	800.0	800.0	1.7	1.7	87.46	1.1	24.6	24.6	21.3	3.37	7.303		
900.0	900.0	900.0	900.0	1.9	1.9	87.46	1.1	24.6	24.6	20.8	3.82	6.444		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	87.46	1.1	24.6	24.6	20.4	4.27	5.766 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.4	-120.21	1.1	24.6	25.1	20.4	4.69	5.338		
1,200.0	1,200.0	1,200.0	1,200.0	2.5	2.6	-125.10	1.1	24.6	26.5	21.4	5.09	5.195 SF		
1,300.0	1,299.9	1,299.4	1,299.4	2.7	2.8	-134.17	2.3	25.0	29.9	24.4	5.50	5.435		
1,400.0	1,399.7	1,398.4	1,398.3	2.9	3.0	-145.85	6.0	26.0	37.1	31.2	5.92	6.276		
1,500.0	1,499.4	1,496.5	1,496.2	3.1	3.3	-156.14	12.1	27.8	49.1	42.7	6.34	7.747		
1,600.0	1,598.9	1,593.5	1,592.8	3.3	3.5	-163.72	20.6	30.2	65.9	59.1	6.76	9.754		
1,700.0	1,698.3	1,689.2	1,687.9	3.6	3.7	-168.99	31.2	33.2	87.2	80.1	7.18	12.154		
1,800.0	1,797.6	1,783.9	1,781.6	3.8	4.0	-172.60	43.9	36.8	111.6	104.0	7.61	14.675		
1,900.0	1,897.0	1,880.4	1,877.1	4.1	4.2	-175.07	57.8	40.8	137.2	129.2	8.04	17.074		
2,000.0	1,996.3	1,977.0	1,972.5	4.4	4.5	-176.77	71.7	44.7	163.0	154.5	8.47	19.245		
2,100.0	2,095.6	2,073.5	2,068.0	4.6	4.8	-178.00	85.6	48.7	188.8	179.9	8.90	21.204		
2,200.0	2,195.0	2,170.0	2,163.4	4.9	5.1	-178.93	99.5	52.7	214.7	205.4	9.34	22.981		
2,300.0	2,294.3	2,266.6	2,258.8	5.2	5.4	-179.67	113.4	56.6	240.7	230.9	9.79	24.595		
2,400.0	2,393.7	2,363.1	2,354.3	5.5	5.7	179.74	127.3	60.6	266.7	256.4	10.23	26.065		
2,500.0	2,493.0	2,459.6	2,449.7	5.8	6.0	179.25	141.3	64.6	292.7	282.0	10.68	27.408		
2,600.0	2,592.4	2,556.2	2,545.2	6.1	6.3	178.85	155.2	68.5	318.7	307.6	11.13	28.640		
2,700.0	2,691.7	2,652.7	2,640.6	6.4	6.6	178.50	169.1	72.5	344.7	333.2	11.58	29.772		
2,800.0	2,791.0	2,749.2	2,736.1	6.7	6.9	178.20	183.0	76.5	370.8	358.7	12.03	30.816		
2,900.0	2,890.4	2,845.8	2,831.5	7.0	7.2	177.95	196.9	80.4	396.8	384.3	12.49	31.781		
3,000.0	2,889.7	2,942.3	2,926.9	7.3	7.6	177.72	210.8	84.4	422.9	409.9	12.94	32.676		
3,100.0	3,089.1	3,038.8	3,022.4	7.6	7.9	177.52	224.7	88.4	449.0	435.6	13.40	33.507		
3,200.0	3,188.4	3,135.4	3,117.8	7.9	8.2	177.35	238.6	92.3	475.0	461.1	13.86	34.263		
3,300.0	3,288.0	3,232.5	3,213.9	8.1	8.5	177.20	252.6	96.3	498.8	484.5	14.34	34.786		
3,400.0	3,387.8	3,330.3	3,310.6	8.3	8.9	177.04	266.7	100.3	519.2	504.4	14.80	35.078		
3,500.0	3,487.8	3,428.9	3,408.0	8.5	9.2	176.87	280.9	104.4	536.2	521.0	15.25	35.164		
3,600.0	3,587.8	3,527.7	3,505.8	8.7	9.5	22.61	295.1	108.4	551.1	535.5	15.69	35.123		
3,700.0	3,687.8	3,626.6	3,603.5	8.8	9.9	22.43	309.4	112.5	566.0	549.9	16.13	35.092		
3,800.0	3,787.8	3,725.5	3,701.3	9.0	10.2	22.27	323.6	116.6	580.9	564.3	16.57	35.060		
3,900.0	3,887.8	3,824.3	3,799.1	9.2	10.6	22.11	337.9	120.6	595.8	578.8	17.01	35.027		
4,000.0	3,987.8	3,923.2	3,896.8	9.4	10.9	21.96	352.1	124.7	610.7	593.3	17.45	34.993		
4,100.0	4,087.8	4,022.1	3,994.6	9.5	11.2	21.81	366.3	128.7	625.6	607.7	17.90	34.958		
4,200.0	4,187.8	4,121.0	4,092.3	9.7	11.6	21.67	380.6	132.8	640.5	622.2	18.34	34.924		
4,300.0	4,287.8	4,219.8	4,190.1	9.9	11.9	21.54	394.8	136.9	655.4	636.6	18.79	34.888		
4,400.0	4,387.8	4,318.7	4,287.8	10.1	12.3	21.42	409.1	140.9	670.3	651.1	19.23	34.853		
4,500.0	4,487.8	4,417.6	4,385.6	10.3	12.6	21.30	423.3	145.0	685.2	665.6	19.68	34.818		
4,600.0	4,587.8	4,516.5	4,483.3	10.5	13.0	21.18	437.6	149.1	700.2	680.0	20.13	34.783		
4,700.0	4,687.8	4,615.3	4,581.1	10.7	13.3	21.07	451.8	153.1	715.1	694.5	20.58	34.748		
4,800.0	4,787.8	4,714.2	4,678.9	10.9	13.6	20.97	466.0	157.2	730.0	709.0	21.03	34.714		
4,900.0	4,887.8	4,813.1	4,776.6	11.1	14.0	20.86	480.3	161.2	744.9	723.4	21.48	34.680		
5,000.0	4,987.8	4,911.9	4,874.4	11.2	14.3	20.77	494.5	165.3	759.9	737.9	21.93	34.646		
5,100.0	5,087.8	5,010.8	4,972.1	11.4	14.7	20.67	508.8	169.4	774.8	752.4	22.38	34.613		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
5,200.0	5,187.8	5,109.7	5,069.9	11.6	15.0	20.58	523.0	173.4	789.7	766.9	22.84	34.580		
5,300.0	5,287.8	5,208.6	5,167.6	11.8	15.4	20.50	537.3	177.5	804.6	781.4	23.29	34.547		
5,400.0	5,387.8	5,307.4	5,265.4	12.0	15.7	20.41	551.5	181.5	819.6	795.8	23.75	34.515		
5,500.0	5,487.8	5,406.3	5,363.2	12.2	16.1	20.33	565.7	185.6	834.5	810.3	24.20	34.484		
5,600.0	5,587.8	5,505.2	5,460.9	12.4	16.4	20.25	580.0	189.7	849.4	824.8	24.66	34.453		
5,700.0	5,687.8	5,604.0	5,558.7	12.6	16.8	20.18	594.2	193.7	864.4	839.3	25.11	34.423		
5,800.0	5,787.8	5,741.0	5,694.5	12.8	17.1	20.09	611.4	198.6	877.5	851.8	25.61	34.264		
5,900.0	5,887.8	5,884.8	5,837.8	13.0	17.5	20.04	622.7	201.8	885.6	859.5	26.08	33.959		
6,000.0	5,987.8	6,029.5	5,982.3	13.2	17.7	20.02	627.0	203.1	888.7	862.2	26.54	33.491		
6,100.0	6,087.8	6,134.9	6,087.8	13.5	17.9	20.02	627.1	203.1	888.8	861.8	26.95	32.975		
6,200.0	6,187.8	6,234.9	6,187.8	13.7	18.0	20.02	627.1	203.1	888.8	861.4	27.38	32.463		
6,300.0	6,287.8	6,334.9	6,287.8	13.9	18.2	20.02	627.1	203.1	888.8	861.0	27.80	31.965		
6,400.0	6,387.8	6,434.9	6,387.8	14.1	18.3	20.02	627.1	203.1	888.8	860.5	28.23	31.481		
6,500.0	6,487.8	6,534.9	6,487.8	14.3	18.5	20.02	627.1	203.1	888.8	860.1	28.66	31.011		
6,600.0	6,587.8	6,634.9	6,587.8	14.5	18.7	20.02	627.1	203.1	888.8	859.7	29.09	30.554		
6,700.0	6,687.8	6,734.9	6,687.8	14.7	18.8	20.02	627.1	203.1	888.8	859.3	29.52	30.110		
6,800.0	6,787.8	8,151.5	7,575.0	14.9	19.0	95.75	-207.6	202.7	843.8	810.1	33.75	25.004		
6,900.0	6,887.1	8,140.6	7,575.0	15.1	18.9	111.92	-196.7	202.8	752.0	718.5	33.51	22.440		
7,000.0	6,984.0	8,116.0	7,575.0	15.2	18.8	121.35	-172.1	202.8	664.6	631.6	32.96	20.164		
7,100.0	7,076.4	8,078.2	7,575.0	15.3	18.6	125.98	-134.3	202.8	583.9	551.6	32.24	18.110		
7,200.0	7,162.7	7,200.0	7,575.0	15.4	25.9	127.77	-8.8	202.8	512.1	474.3	37.87	13.526		
7,300.0	7,241.1	7,907.4	7,565.2	15.5	17.9	120.08	34.9	202.9	447.8	416.4	31.44	14.245		
7,400.0	7,310.2	7,817.1	7,544.1	15.6	17.8	113.76	122.6	202.9	390.1	358.3	31.85	12.250		
7,500.0	7,368.5	7,739.1	7,517.0	16.0	17.8	106.95	195.8	202.9	344.2	311.5	32.72	10.519		
7,600.0	7,414.9	7,668.2	7,485.6	16.5	17.9	99.16	259.3	202.9	314.3	280.4	33.91	9.270		
7,700.0	7,448.5	7,602.0	7,450.8	17.2	18.0	90.34	315.6	203.0	303.7	268.7	35.03	8.671		
7,703.8	7,449.5	7,599.5	7,449.4	17.3	18.0	89.98	317.6	203.0	303.7	268.6	35.07	8.661		
7,800.0	7,468.7	7,538.9	7,412.9	18.1	18.2	80.81	366.0	203.0	312.1	276.5	35.60	8.768		
7,900.0	7,475.0	7,478.0	7,372.3	19.1	18.3	71.25	411.3	203.0	335.9	300.5	35.35	9.502		
8,000.0	7,474.6	7,422.8	7,332.2	20.2	18.5	64.78	449.3	203.0	372.5	337.6	34.97	10.652		
8,100.0	7,474.2	7,375.7	7,295.9	21.3	18.6	59.44	479.2	203.0	421.9	387.4	34.50	12.228		
8,200.0	7,473.8	7,335.5	7,263.3	22.5	18.7	55.11	502.7	203.0	481.5	447.4	34.13	14.107		
8,300.0	7,473.4	7,300.0	7,233.4	23.8	18.8	51.50	522.0	203.1	549.1	515.2	33.89	16.203		
8,400.0	7,473.0	7,271.0	7,208.4	25.2	18.9	48.73	536.6	203.1	622.7	588.8	33.87	18.382		
8,500.0	7,472.6	7,250.0	7,189.9	26.6	19.0	46.82	546.6	203.1	700.9	666.7	34.18	20.504		
8,600.0	7,472.2	7,222.2	7,165.0	28.1	19.0	44.42	558.9	203.1	782.6	748.4	34.21	22.874		
8,700.0	7,471.8	7,200.0	7,144.8	29.7	19.1	42.62	568.0	203.1	867.1	832.6	34.48	25.148		
8,800.0	7,471.4	7,184.2	7,130.2	31.3	19.1	41.39	574.2	203.1	953.8	918.8	35.01	27.244		
8,900.0	7,471.0	7,168.2	7,115.4	32.9	19.1	40.20	580.0	203.1	1,042.3	1,006.7	35.54	29.329		
9,000.0	7,470.6	7,150.0	7,098.2	34.6	19.1	38.89	586.3	203.1	1,132.2	1,096.2	35.97	31.479		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
0.0	0.0	0.0	0.0	0.0	0.0	-90.01	0.0	-49.8	49.8					
100.0	100.0	100.0	100.0	0.1	0.1	-90.01	0.0	-49.8	49.8	49.5	0.22	221.342		
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-49.8	49.8	49.1	0.67	73.781		
300.0	300.0	300.0	300.0	0.6	0.6	-90.01	0.0	-49.8	49.8	48.6	1.12	44.268		
400.0	400.0	400.0	400.0	0.8	0.8	-90.01	0.0	-49.8	49.8	48.2	1.57	31.620 CC, ES		
500.0	500.0	498.8	498.7	1.0	1.0	-90.48	-0.4	-51.0	51.0	49.0	2.00	25.441		
600.0	600.0	597.4	597.3	1.2	1.2	-91.74	-1.7	-54.6	54.7	52.2	2.43	22.504		
700.0	700.0	695.8	695.5	1.5	1.4	-93.50	-3.7	-60.6	60.9	58.0	2.86	21.250		
800.0	800.0	793.7	793.0	1.7	1.7	-95.43	-6.6	-68.9	69.6	66.3	3.31	21.052		
900.0	900.0	891.2	889.8	1.9	1.9	-97.29	-10.2	-79.6	80.9	77.1	3.75	21.546		
1,000.0	1,000.0	988.0	985.7	2.1	2.2	-98.96	-14.6	-92.5	94.7	90.5	4.21	22.504		
1,100.0	1,100.0	1,086.6	1,083.1	2.3	2.5	53.98	-19.5	-107.1	109.6	105.0	4.63	23.670		
1,200.0	1,200.0	1,185.6	1,180.9	2.5	2.9	53.75	-24.5	-121.7	123.6	118.5	5.04	24.514		
1,300.0	1,299.9	1,284.8	1,278.8	2.7	3.2	54.14	-29.5	-136.4	136.5	131.0	5.46	24.981		
1,400.0	1,399.7	1,384.0	1,376.8	2.9	3.6	55.01	-34.5	-151.1	148.4	142.5	5.90	25.147		
1,500.0	1,499.4	1,483.3	1,474.9	3.1	3.9	56.26	-39.6	-165.8	159.4	153.0	6.36	25.075		
1,600.0	1,598.9	1,582.7	1,573.1	3.3	4.3	57.84	-44.6	-180.5	169.5	162.7	6.83	24.811		
1,700.0	1,698.3	1,682.1	1,671.3	3.6	4.7	59.71	-49.6	-195.2	179.0	171.7	7.33	24.409		
1,800.0	1,797.6	1,781.5	1,769.4	3.8	5.0	61.51	-54.6	-209.9	188.5	180.6	7.85	24.004		
1,900.0	1,897.0	1,880.9	1,867.6	4.1	5.4	63.13	-59.6	-224.6	198.2	189.8	8.39	23.627		
2,000.0	1,996.3	1,980.2	1,965.7	4.4	5.8	64.61	-64.6	-239.3	208.0	199.0	8.94	23.277		
2,100.0	2,095.6	2,079.6	2,063.9	4.6	6.1	65.95	-69.6	-254.0	217.9	208.4	9.49	22.953		
2,200.0	2,195.0	2,179.0	2,162.0	4.9	6.5	67.17	-74.6	-268.7	228.0	217.9	10.06	22.653		
2,300.0	2,294.3	2,278.4	2,260.2	5.2	6.9	68.29	-79.6	-283.4	238.1	227.5	10.64	22.377		
2,400.0	2,393.7	2,377.8	2,358.4	5.5	7.3	69.32	-84.7	-298.1	248.3	237.1	11.23	22.123		
2,500.0	2,493.0	2,477.1	2,456.5	5.8	7.6	70.27	-89.7	-312.8	258.6	246.8	11.82	21.888		
2,600.0	2,592.4	2,576.5	2,554.7	6.1	8.0	71.14	-94.7	-327.5	269.0	256.6	12.41	21.671		
2,700.0	2,691.7	2,675.9	2,652.8	6.4	8.4	71.95	-99.7	-342.2	279.4	266.4	13.01	21.471		
2,800.0	2,791.0	2,775.3	2,751.0	6.7	8.7	72.70	-104.7	-356.9	289.9	276.3	13.62	21.285		
2,900.0	2,890.4	2,874.7	2,849.2	7.0	9.1	73.40	-109.7	-371.6	300.4	286.2	14.23	21.114		
3,000.0	2,889.7	2,874.1	2,847.3	7.3	9.5	74.05	-114.7	-386.3	311.0	296.1	14.84	20.954		
3,100.0	3,089.1	3,073.4	3,045.5	7.6	9.9	74.66	-119.7	-401.0	321.5	306.1	15.45	20.806		
3,200.0	3,188.4	3,172.8	3,143.6	7.9	10.2	75.26	-124.7	-415.7	332.2	316.1	16.07	20.676		
3,300.0	3,288.0	3,272.2	3,241.8	8.1	10.6	75.63	-129.8	-430.4	343.4	326.8	16.59	20.698		
3,400.0	3,387.8	3,371.4	3,339.8	8.3	11.0	75.46	-134.8	-445.1	355.5	338.5	17.07	20.833		
3,500.0	3,487.8	3,470.4	3,437.6	8.5	11.4	74.82	-139.7	-459.8	368.5	351.1	17.48	21.078		
3,600.0	3,587.8	3,569.2	3,535.1	8.7	11.7	-80.38	-144.7	-474.4	382.2	364.4	17.87	21.389		
3,700.0	3,687.8	3,667.9	3,632.7	8.8	12.1	-81.45	-149.7	-489.0	396.1	377.8	18.25	21.698		
3,800.0	3,787.8	3,766.7	3,730.2	9.0	12.5	-82.45	-154.7	-503.6	410.1	391.4	18.64	21.998		
3,900.0	3,887.8	3,865.5	3,827.8	9.2	12.9	-83.39	-159.7	-518.2	424.2	405.1	19.03	22.287		
4,000.0	3,987.8	3,964.2	3,925.3	9.4	13.2	-84.27	-164.6	-532.8	438.4	418.9	19.43	22.566		
4,100.0	4,087.8	4,063.0	4,022.9	9.5	13.6	-85.09	-169.6	-547.4	452.7	432.8	19.82	22.835		
4,200.0	4,187.8	4,161.8	4,120.5	9.7	14.0	-85.86	-174.6	-562.0	467.0	446.8	20.22	23.093		
4,300.0	4,287.8	4,260.6	4,218.0	9.9	14.4	-86.58	-179.6	-576.7	481.5	460.9	20.63	23.342		
4,400.0	4,387.8	4,359.3	4,315.6	10.1	14.7	-87.26	-184.6	-591.3	496.0	475.0	21.03	23.582		
4,500.0	4,487.8	4,458.1	4,413.1	10.3	15.1	-87.91	-189.6	-605.9	510.6	489.2	21.44	23.812		
4,600.0	4,587.8	4,556.9	4,510.7	10.5	15.5	-88.51	-194.5	-620.5	525.3	503.4	21.86	24.034		
4,700.0	4,687.8	4,667.9	4,620.5	10.7	15.8	-89.13	-199.9	-636.1	539.3	517.1	22.25	24.238		
4,800.0	4,787.8	4,789.0	4,740.8	10.9	16.1	-89.60	-204.2	-648.9	549.9	527.2	22.64	24.288		
4,900.0	4,887.8	4,911.0	4,862.5	11.1	16.3	-89.89	-206.9	-656.9	556.4	533.4	23.03	24.163		
5,000.0	4,987.8	5,033.6	4,985.0	11.2	16.5	-90.00	-208.0	-660.0	558.9	535.5	23.42	23.867		
5,100.0	5,087.8	5,136.3	5,087.8	11.4	16.6	-90.00	-208.0	-660.1	559.0	535.2	23.79	23.492		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
5,200.0	5,187.8	5,236.3	5,187.8	11.6	16.8	-90.00	-208.0	-660.1	559.0	534.8	24.16	23.133		
5,300.0	5,287.8	5,336.3	5,287.8	11.8	16.9	-90.00	-208.0	-660.1	559.0	534.4	24.54	22.782		
5,400.0	5,387.8	5,436.3	5,387.8	12.0	17.0	-90.00	-208.0	-660.1	559.0	534.0	24.91	22.439		
5,500.0	5,487.8	5,536.3	5,487.8	12.2	17.2	-90.00	-208.0	-660.1	559.0	533.7	25.29	22.104		
5,600.0	5,587.8	5,636.3	5,587.8	12.4	17.3	-90.00	-208.0	-660.1	559.0	533.3	25.67	21.777		
5,700.0	5,687.8	5,736.3	5,687.8	12.6	17.5	-90.00	-208.0	-660.1	559.0	532.9	26.05	21.458		
5,800.0	5,787.8	5,836.3	5,787.8	12.8	17.6	-90.00	-208.0	-660.1	559.0	532.5	26.43	21.147		
5,900.0	5,887.8	5,936.3	5,887.8	13.0	17.8	-90.00	-208.0	-660.1	559.0	532.1	26.82	20.843		
6,000.0	5,987.8	6,036.3	5,987.8	13.2	17.9	-90.00	-208.0	-660.1	559.0	531.7	27.21	20.546		
6,100.0	6,087.8	6,136.3	6,087.8	13.5	18.1	-90.00	-208.0	-660.1	559.0	531.4	27.59	20.256		
6,200.0	6,187.8	6,236.3	6,187.8	13.7	18.2	-90.00	-208.0	-660.1	559.0	531.0	27.99	19.973		
6,300.0	6,287.8	6,336.3	6,287.8	13.9	18.4	-90.00	-208.0	-660.1	559.0	530.6	28.38	19.696		
6,400.0	6,387.8	6,436.3	6,387.8	14.1	18.5	-90.00	-208.0	-660.1	559.0	530.2	28.77	19.426		
6,500.0	6,487.8	6,536.3	6,487.8	14.3	18.7	-90.00	-208.0	-660.1	559.0	529.8	29.17	19.162		
6,600.0	6,587.8	6,636.3	6,587.8	14.5	18.8	-90.00	-208.0	-660.1	559.0	529.4	29.57	18.904		
6,700.0	6,687.8	6,736.3	6,687.8	14.7	19.0	-90.00	-208.0	-660.1	559.0	529.0	29.97	18.653		
6,758.4	6,746.2	6,794.7	6,746.2	14.8	19.1	-90.11	-208.0	-660.1	559.0	528.8	30.20	18.510		
6,800.0	6,787.8	6,836.3	6,787.8	14.9	19.1	-90.10	-208.0	-660.1	559.0	528.6	30.36	18.409		
6,900.0	6,887.1	6,936.1	6,887.5	15.1	19.3	-91.14	-207.4	-660.1	559.1	528.4	30.65	18.237		
7,000.0	6,984.0	7,037.6	6,988.4	15.2	19.4	-92.53	-196.2	-660.1	559.5	528.7	30.84	18.141		
7,100.0	7,076.4	7,141.3	7,088.6	15.3	19.5	-93.89	-170.2	-660.1	560.3	529.3	30.97	18.093		
7,200.0	7,162.7	7,247.0	7,185.8	15.4	19.6	-95.18	-129.0	-660.1	561.4	530.3	31.09	18.059		
7,300.0	7,241.1	7,354.8	7,277.7	15.5	19.6	-96.38	-72.7	-660.1	562.6	531.4	31.27	17.995		
7,400.0	7,310.2	7,464.7	7,361.6	15.6	19.7	-97.46	-1.9	-660.1	564.0	532.4	31.59	17.850		
7,500.0	7,368.5	7,576.4	7,434.7	16.0	19.7	-98.38	82.4	-660.1	565.3	533.2	32.15	17.582		
7,600.0	7,414.9	7,689.8	7,494.6	16.5	19.9	-99.13	178.5	-660.2	566.5	533.5	33.02	17.156		
7,700.0	7,448.5	7,804.5	7,539.1	17.2	20.2	-99.68	284.1	-660.2	567.5	533.3	34.25	16.570		
7,800.0	7,468.7	7,920.1	7,566.2	18.1	20.8	-100.02	396.4	-660.2	568.2	532.4	35.86	15.847		
7,900.0	7,475.0	8,035.7	7,575.0	19.1	21.6	-100.13	511.6	-660.2	568.5	530.7	37.80	15.042		
8,000.0	7,474.6	8,135.7	7,575.0	20.2	22.5	-100.17	611.6	-660.3	568.7	528.8	39.90	14.253		
8,100.0	7,474.2	8,235.7	7,575.0	21.3	23.6	-100.21	711.6	-660.3	568.8	526.7	42.15	13.496		
8,200.0	7,473.8	8,335.7	7,575.0	22.5	24.8	-100.25	811.6	-660.3	569.0	524.4	44.61	12.755		
8,300.0	7,473.4	8,435.7	7,575.0	23.8	26.1	-100.28	911.6	-660.4	569.2	521.9	47.25	12.046		
8,400.0	7,473.0	8,535.7	7,575.0	25.2	27.5	-100.32	1,011.6	-660.4	569.4	519.3	50.04	11.378		
8,500.0	7,472.6	8,635.7	7,575.0	26.6	28.9	-100.36	1,111.6	-660.4	569.5	516.6	52.96	10.755		
8,600.0	7,472.2	8,735.7	7,575.0	28.1	30.4	-100.40	1,211.6	-660.4	569.7	513.7	55.98	10.177		
8,700.0	7,471.8	8,835.7	7,575.0	29.7	32.0	-100.44	1,311.6	-660.5	569.9	510.8	59.09	9.644		
8,800.0	7,471.4	8,935.7	7,575.0	31.3	33.6	-100.47	1,411.6	-660.5	570.0	507.8	62.27	9.154		
8,900.0	7,471.0	9,035.7	7,575.0	32.9	35.2	-100.51	1,511.6	-660.5	570.2	504.7	65.52	8.702		
9,000.0	7,470.6	9,135.7	7,575.0	34.6	36.8	-100.55	1,611.5	-660.6	570.4	501.5	68.83	8.287		
9,100.0	7,470.2	9,235.7	7,575.0	36.3	38.5	-100.59	1,711.5	-660.6	570.5	498.4	72.19	7.904		
9,200.0	7,469.8	9,335.7	7,575.0	38.0	40.2	-100.62	1,811.5	-660.6	570.7	495.1	75.58	7.551		
9,300.0	7,469.4	9,435.7	7,575.0	39.7	41.9	-100.66	1,911.5	-660.6	570.9	491.9	79.01	7.225		
9,400.0	7,469.0	9,535.7	7,575.0	41.5	43.6	-100.70	2,011.5	-660.7	571.1	488.6	82.48	6.924		
9,500.0	7,468.6	9,635.7	7,575.0	43.3	45.4	-100.74	2,111.5	-660.7	571.2	485.3	85.97	6.645		
9,600.0	7,468.2	9,735.7	7,575.0	45.0	47.1	-100.78	2,211.5	-660.7	571.4	481.9	89.48	6.386		
9,700.0	7,467.8	9,835.7	7,575.0	46.8	48.9	-100.81	2,311.5	-660.7	571.6	478.6	93.01	6.145		
9,800.0	7,467.4	9,935.7	7,575.0	48.6	50.7	-100.85	2,411.5	-660.8	571.8	475.2	96.57	5.921		
9,900.0	7,467.0	10,035.7	7,575.0	50.4	52.5	-100.89	2,511.5	-660.8	571.9	471.8	100.14	5.711		
10,000.0	7,466.6	10,135.7	7,575.0	52.3	54.3	-100.93	2,611.5	-660.8	572.1	468.4	103.72	5.516		
10,100.0	7,466.2	10,235.7	7,575.0	54.1	56.1	-100.96	2,711.5	-660.9	572.3	465.0	107.32	5.332		
10,200.0	7,465.8	10,335.7	7,575.0	55.9	57.9	-101.00	2,811.5	-660.9	572.5	461.5	110.93	5.160		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
10,300.0	7,465.4	10,435.7	7,575.0	57.8	59.8	-101.04	2,911.5	-660.9	572.6	458.1	114.55	4.999		
10,400.0	7,464.9	10,535.7	7,575.0	59.6	61.6	-101.08	3,011.5	-660.9	572.8	454.6	118.18	4.847		
10,500.0	7,464.5	10,635.7	7,575.0	61.5	63.4	-101.11	3,111.5	-661.0	573.0	451.2	121.82	4.703		
10,600.0	7,464.1	10,735.7	7,575.0	63.3	65.3	-101.15	3,211.5	-661.0	573.2	447.7	125.47	4.568		
10,700.0	7,463.7	10,835.7	7,575.0	65.2	67.1	-101.19	3,311.5	-661.0	573.3	444.2	129.12	4.440		
10,800.0	7,463.3	10,935.7	7,575.0	67.1	69.0	-101.23	3,411.5	-661.1	573.5	440.7	132.79	4.319		
10,900.0	7,462.9	11,035.7	7,575.0	68.9	70.8	-101.26	3,511.5	-661.1	573.7	437.2	136.45	4.204		
11,000.0	7,462.5	11,135.7	7,575.0	70.8	72.7	-101.30	3,611.5	-661.1	573.9	433.8	140.12	4.096		
11,100.0	7,462.1	11,235.7	7,575.0	72.7	74.6	-101.34	3,711.5	-661.1	574.1	430.3	143.80	3.992		
11,200.0	7,461.7	11,335.7	7,575.0	74.6	76.4	-101.38	3,811.5	-661.2	574.2	426.8	147.48	3.894		
11,300.0	7,461.3	11,435.7	7,575.0	76.5	78.3	-101.41	3,911.5	-661.2	574.4	423.3	151.17	3.800		
11,400.0	7,460.9	11,535.7	7,575.0	78.3	80.2	-101.45	4,011.5	-661.2	574.6	419.7	154.85	3.711		
11,500.0	7,460.5	11,635.7	7,575.0	80.2	82.0	-101.49	4,111.5	-661.2	574.8	416.2	158.55	3.625		
11,600.0	7,460.1	11,735.7	7,575.0	82.1	83.9	-101.52	4,211.5	-661.3	575.0	412.7	162.24	3.544		
11,700.0	7,459.7	11,835.7	7,575.0	84.0	85.8	-101.56	4,311.5	-661.3	575.1	409.2	165.94	3.466		
11,800.0	7,459.3	11,935.7	7,575.0	85.9	87.7	-101.60	4,411.5	-661.3	575.3	405.7	169.64	3.392		
11,900.0	7,458.9	12,035.7	7,575.0	87.8	89.6	-101.64	4,511.5	-661.4	575.5	402.2	173.34	3.320		
12,000.0	7,458.5	12,135.7	7,575.0	89.7	91.4	-101.67	4,611.5	-661.4	575.7	398.7	177.04	3.252		
12,100.0	7,458.1	12,235.7	7,575.0	91.6	93.3	-101.71	4,711.5	-661.4	575.9	395.1	180.75	3.186		
12,200.0	7,457.7	12,335.7	7,575.0	93.5	95.2	-101.75	4,811.5	-661.4	576.1	391.6	184.46	3.123		
12,300.0	7,457.3	12,435.7	7,575.0	95.4	97.1	-101.78	4,911.5	-661.5	576.3	388.1	188.17	3.062		
12,400.0	7,456.9	12,535.7	7,575.0	97.3	99.0	-101.82	5,011.5	-661.5	576.4	384.6	191.88	3.004		
12,500.0	7,456.5	12,635.7	7,575.0	99.2	100.9	-101.86	5,111.5	-661.5	576.6	381.0	195.59	2.948		
12,600.0	7,456.1	12,735.7	7,575.0	101.1	102.8	-101.90	5,211.5	-661.6	576.8	377.5	199.31	2.894		
12,700.0	7,455.7	12,835.7	7,575.0	103.0	104.7	-101.93	5,311.5	-661.6	577.0	374.0	203.02	2.842		
12,800.0	7,455.3	12,935.7	7,575.0	104.9	106.6	-101.97	5,411.5	-661.6	577.2	370.4	206.74	2.792		
12,900.0	7,454.9	13,035.7	7,575.0	106.8	108.5	-102.01	5,511.5	-661.6	577.4	366.9	210.45	2.743		
13,000.0	7,454.5	13,135.7	7,575.0	108.7	110.4	-102.04	5,611.5	-661.7	577.6	363.4	214.17	2.697		
13,100.0	7,454.1	13,235.7	7,575.0	110.6	112.3	-102.08	5,711.5	-661.7	577.7	359.9	217.89	2.652		
13,200.0	7,453.7	13,335.7	7,575.0	112.5	114.2	-102.12	5,811.5	-661.7	577.9	356.3	221.61	2.608		
13,300.0	7,453.3	13,435.7	7,575.0	114.5	116.1	-102.15	5,911.5	-661.7	578.1	352.8	225.32	2.566		
13,400.0	7,452.9	13,535.7	7,575.0	116.4	118.0	-102.19	6,011.5	-661.8	578.3	349.3	229.04	2.525		
13,500.0	7,452.5	13,635.7	7,575.0	118.3	119.9	-102.23	6,111.5	-661.8	578.5	345.7	232.76	2.485		
13,600.0	7,452.1	13,735.7	7,575.0	120.2	121.8	-102.26	6,211.5	-661.8	578.7	342.2	236.48	2.447		
13,700.0	7,451.7	13,835.7	7,575.0	122.1	123.7	-102.30	6,311.5	-661.9	578.9	338.7	240.20	2.410		
13,800.0	7,451.3	13,935.7	7,575.0	124.0	125.6	-102.34	6,411.5	-661.9	579.1	335.1	243.92	2.374		
13,900.0	7,450.9	14,035.7	7,575.0	125.9	127.5	-102.37	6,511.5	-661.9	579.3	331.6	247.64	2.339		
14,000.0	7,450.5	14,135.7	7,575.0	127.8	129.4	-102.41	6,611.5	-661.9	579.5	328.1	251.36	2.305		
14,100.0	7,450.1	14,235.7	7,575.0	129.8	131.3	-102.45	6,711.5	-662.0	579.6	324.6	255.08	2.272		
14,200.0	7,449.7	14,335.7	7,575.0	131.7	133.2	-102.48	6,811.5	-662.0	579.8	321.0	258.80	2.240		
14,300.0	7,449.2	14,435.7	7,575.0	133.6	135.1	-102.52	6,911.5	-662.0	580.0	317.5	262.52	2.209		
14,400.0	7,448.8	14,535.7	7,575.0	135.5	137.0	-102.56	7,011.5	-662.1	580.2	314.0	266.24	2.179		
14,500.0	7,448.4	14,635.7	7,575.0	137.4	139.0	-102.59	7,111.5	-662.1	580.4	310.5	269.96	2.150		
14,600.0	7,448.0	14,735.7	7,575.0	139.3	140.9	-102.63	7,211.5	-662.1	580.6	306.9	273.68	2.121		
14,700.0	7,447.6	14,835.7	7,575.0	141.3	142.8	-102.67	7,311.5	-662.1	580.8	303.4	277.40	2.094		
14,800.0	7,447.2	14,935.7	7,575.0	143.2	144.7	-102.70	7,411.5	-662.2	581.0	299.9	281.12	2.067		
14,900.0	7,446.8	15,035.7	7,575.0	145.1	146.6	-102.74	7,511.5	-662.2	581.2	296.4	284.84	2.040		
15,000.0	7,446.4	15,135.7	7,575.0	147.0	148.5	-102.78	7,611.5	-662.2	581.4	292.8	288.56	2.015		
15,100.0	7,446.0	15,235.7	7,575.0	148.9	150.4	-102.81	7,711.5	-662.2	581.6	289.3	292.28	1.990		
15,200.0	7,445.6	15,335.7	7,575.0	150.9	152.3	-102.85	7,811.5	-662.3	581.8	285.8	296.00	1.966		
15,300.0	7,445.2	15,435.7	7,575.0	152.8	154.2	-102.89	7,911.5	-662.3	582.0	282.3	299.71	1.942		
15,400.0	7,444.8	15,535.7	7,575.0	154.7	156.2	-102.92	8,011.5	-662.3	582.2	278.8	303.43	1.919		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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	
15,500.0	7,444.4	15,635.7	7,575.0	156.6	158.1	-102.96	8,111.5	-662.4	582.4	275.2	307.15	1.896	
15,600.0	7,444.0	15,735.7	7,575.0	158.5	160.0	-102.99	8,211.5	-662.4	582.6	271.7	310.86	1.874	
15,700.0	7,443.6	15,835.6	7,575.0	160.5	161.9	-103.03	8,311.5	-662.4	582.8	268.2	314.58	1.853	
15,800.0	7,443.2	15,935.6	7,575.0	162.4	163.8	-103.07	8,411.5	-662.4	583.0	264.7	318.29	1.832	
15,900.0	7,442.8	16,035.6	7,575.0	164.3	165.7	-103.10	8,511.5	-662.5	583.2	261.2	322.01	1.811	
16,000.0	7,442.4	16,135.6	7,575.0	166.2	167.6	-103.14	8,611.5	-662.5	583.4	257.7	325.72	1.791	
16,100.0	7,442.0	16,235.6	7,575.0	168.2	169.6	-103.17	8,711.5	-662.5	583.6	254.1	329.44	1.771	
16,200.0	7,441.6	16,335.6	7,575.0	170.1	171.5	-103.21	8,811.5	-662.6	583.8	250.6	333.15	1.752	
16,300.0	7,441.2	16,435.6	7,575.0	172.0	173.4	-103.25	8,911.5	-662.6	584.0	247.1	336.86	1.734	
16,400.0	7,440.8	16,535.6	7,575.0	173.9	175.3	-103.28	9,011.5	-662.6	584.2	243.6	340.57	1.715	
16,500.0	7,440.4	16,635.6	7,575.0	175.8	177.2	-103.32	9,111.5	-662.6	584.4	240.1	344.28	1.697	
16,600.0	7,440.0	16,735.6	7,575.0	177.8	179.1	-103.35	9,211.5	-662.7	584.6	236.6	347.99	1.680	
16,700.0	7,439.6	16,835.6	7,575.0	179.7	181.1	-103.39	9,311.5	-662.7	584.8	233.1	351.70	1.663	
16,800.0	7,439.2	16,935.6	7,575.0	181.6	183.0	-103.43	9,411.5	-662.7	585.0	229.6	355.41	1.646	
16,900.0	7,438.8	17,035.6	7,575.0	183.5	184.9	-103.46	9,511.5	-662.7	585.2	226.1	359.12	1.630	
17,000.0	7,438.4	17,135.6	7,575.0	185.5	186.8	-103.50	9,611.5	-662.8	585.4	222.6	362.83	1.613	
17,100.0	7,437.9	17,235.6	7,575.0	187.4	188.7	-103.53	9,711.5	-662.8	585.6	219.1	366.53	1.598	
17,200.0	7,437.5	17,335.6	7,575.0	189.3	190.6	-103.57	9,811.5	-662.8	585.8	215.6	370.24	1.582	
17,300.0	7,437.1	17,435.6	7,575.0	191.2	192.6	-103.61	9,911.5	-662.9	586.0	212.1	373.95	1.567	
17,400.0	7,436.7	17,535.6	7,575.0	193.2	194.5	-103.64	10,011.5	-662.9	586.2	208.6	377.65	1.552	
17,500.0	7,436.3	17,635.6	7,575.0	195.1	196.4	-103.68	10,111.5	-662.9	586.4	205.1	381.35	1.538	
17,600.0	7,435.9	17,735.6	7,575.0	197.0	198.3	-103.71	10,211.5	-662.9	586.6	201.6	385.06	1.524	
17,700.0	7,435.5	17,835.6	7,575.0	198.9	200.2	-103.75	10,311.5	-663.0	586.8	198.1	388.76	1.510	
17,800.0	7,435.1	17,935.2	7,575.0	200.9	202.2	-103.78	10,411.0	-663.0	587.1	194.6	392.45	1.496 Level 3	
17,829.8	7,435.0	17,961.6	7,575.0	201.4	202.7	-103.79	10,437.5	-663.1	587.2	193.7	393.47	1.492 Level 3, SF	

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
0.0	0.0	0.0	0.0	0.0	0.0	88.74	1.1	50.0	50.0					
100.0	100.0	100.0	100.0	0.1	0.1	88.74	1.1	50.0	50.0	49.8	0.22	222.625		
200.0	200.0	200.0	200.0	0.3	0.3	88.74	1.1	50.0	50.0	49.4	0.67	74.208		
300.0	300.0	300.0	300.0	0.6	0.6	88.74	1.1	50.0	50.0	48.9	1.12	44.525		
400.0	400.0	400.0	400.0	0.8	0.8	88.74	1.1	50.0	50.0	48.5	1.57	31.804		
500.0	500.0	500.0	500.0	1.0	1.0	88.74	1.1	50.0	50.0	48.0	2.02	24.736		
600.0	600.0	600.0	600.0	1.2	1.2	88.74	1.1	50.0	50.0	47.6	2.47	20.239		
700.0	700.0	700.0	700.0	1.5	1.5	88.74	1.1	50.0	50.0	47.1	2.92	17.125		
800.0	800.0	800.0	800.0	1.7	1.7	88.74	1.1	50.0	50.0	46.7	3.37	14.842		
900.0	900.0	900.0	900.0	1.9	1.9	88.74	1.1	50.0	50.0	46.2	3.82	13.096		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	88.74	1.1	50.0	50.0	45.8	4.27	11.717 CC		
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.4	-118.06	1.1	50.0	50.4	45.8	4.69	10.749		
1,200.0	1,200.0	1,200.0	1,200.0	2.5	2.6	-120.60	1.1	50.0	51.7	46.6	5.09	10.154		
1,300.0	1,299.9	1,299.9	1,299.9	2.7	2.8	-124.56	1.1	50.0	54.1	48.6	5.50	9.825		
1,400.0	1,399.7	1,399.7	1,399.7	2.9	3.0	-129.52	1.1	50.0	57.8	51.8	5.92	9.755		
1,500.0	1,499.4	1,499.4	1,499.4	3.1	3.3	-134.98	1.1	50.0	63.1	56.7	6.35	9.937		
1,600.0	1,598.9	1,599.1	1,599.1	3.3	3.5	-139.79	0.3	50.2	70.0	63.3	6.75	10.378		
1,700.0	1,698.3	1,699.0	1,698.9	3.6	3.6	-143.18	-2.3	50.8	78.2	71.1	7.13	10.972		
1,800.0	1,797.6	1,799.0	1,798.8	3.8	3.8	-144.94	-6.5	51.9	86.4	78.9	7.53	11.480		
1,900.0	1,897.0	1,899.1	1,898.8	4.1	4.0	-145.38	-12.4	53.3	94.2	86.3	7.94	11.860		
2,000.0	1,996.3	1,999.3	1,998.6	4.4	4.2	-144.80	-20.0	55.2	101.5	93.1	8.37	12.121		
2,100.0	2,095.6	2,099.4	2,098.3	4.6	4.4	-143.40	-29.3	57.4	108.4	99.5	8.83	12.279		
2,200.0	2,195.0	2,199.1	2,197.5	4.9	4.6	-141.85	-39.3	59.8	115.2	105.9	9.30	12.387		
2,300.0	2,294.3	2,298.9	2,296.7	5.2	4.8	-140.47	-49.2	62.2	122.0	112.2	9.78	12.475		
2,400.0	2,393.7	2,398.6	2,395.9	5.5	5.1	-139.24	-59.1	64.6	128.9	118.7	10.28	12.546		
2,500.0	2,493.0	2,498.3	2,495.1	5.8	5.3	-138.13	-69.0	67.1	135.9	125.1	10.78	12.602		
2,600.0	2,592.4	2,598.0	2,594.3	6.1	5.6	-137.13	-79.0	69.5	142.9	131.6	11.30	12.647		
2,700.0	2,691.7	2,697.8	2,693.5	6.4	5.8	-136.23	-88.9	71.9	150.0	138.2	11.83	12.683		
2,800.0	2,791.0	2,797.5	2,792.7	6.7	6.1	-135.40	-98.8	74.3	157.1	144.7	12.36	12.710		
2,900.0	2,890.4	2,897.2	2,891.9	7.0	6.3	-134.65	-108.7	76.7	164.2	151.3	12.90	12.732		
3,000.0	2,989.7	2,996.9	2,991.1	7.3	6.6	-133.96	-118.7	79.1	171.3	157.9	13.44	12.748		
3,100.0	3,089.1	3,096.7	3,090.3	7.6	6.9	-133.33	-128.6	81.5	178.5	164.5	13.99	12.761		
3,200.0	3,188.4	3,196.4	3,189.5	7.9	7.1	-132.75	-138.5	83.9	185.7	171.1	14.54	12.769		
3,300.0	3,288.0	3,296.2	3,288.8	8.1	7.4	-131.78	-148.5	86.3	191.3	176.3	15.06	12.707		
3,400.0	3,387.8	3,395.9	3,388.0	8.3	7.7	-130.06	-158.4	88.7	194.8	179.2	15.57	12.511		
3,500.0	3,487.8	3,495.5	3,487.1	8.5	8.0	-127.58	-168.3	91.1	196.3	180.2	16.07	12.212		
3,600.0	3,587.8	3,595.0	3,586.1	8.7	8.2	81.30	-178.2	93.5	196.9	180.3	16.58	11.876		
3,700.0	3,687.8	3,694.5	3,685.0	8.8	8.5	84.23	-188.1	95.9	198.1	181.0	17.08	11.599		
3,800.0	3,787.8	3,795.0	3,785.1	9.0	8.8	86.86	-197.1	98.1	199.5	182.0	17.54	11.374		
3,900.0	3,887.8	3,896.2	3,886.1	9.2	9.0	88.49	-202.7	99.5	200.7	182.7	17.95	11.177		
4,000.0	3,987.8	3,997.7	3,987.6	9.4	9.2	89.11	-204.9	100.0	201.1	182.8	18.34	10.969		
4,100.0	4,087.8	4,097.9	4,087.8	9.5	9.4	89.12	-204.9	100.0	201.2	182.4	18.71	10.750		
4,200.0	4,187.8	4,197.9	4,187.8	9.7	9.6	89.12	-204.9	100.0	201.2	182.1	19.08	10.541		
4,300.0	4,287.8	4,297.9	4,287.8	9.9	9.8	89.12	-204.9	100.0	201.2	181.7	19.46	10.338		
4,400.0	4,387.8	4,397.9	4,387.8	10.1	9.9	89.12	-204.9	100.0	201.2	181.3	19.83	10.142		
4,500.0	4,487.8	4,497.9	4,487.8	10.3	10.1	89.12	-204.9	100.0	201.2	180.9	20.21	9.951		
4,600.0	4,587.8	4,597.9	4,587.8	10.5	10.3	89.12	-204.9	100.0	201.2	180.6	20.60	9.766		
4,700.0	4,687.8	4,697.9	4,687.8	10.7	10.5	89.12	-204.9	100.0	201.2	180.2	20.98	9.587		
4,800.0	4,787.8	4,797.9	4,787.8	10.9	10.7	89.12	-204.9	100.0	201.2	179.8	21.37	9.413		
4,900.0	4,887.8	4,897.9	4,887.8	11.1	10.9	89.12	-204.9	100.0	201.2	179.4	21.76	9.244		
5,000.0	4,987.8	4,997.9	4,987.8	11.2	11.1	89.12	-204.9	100.0	201.2	179.0	22.15	9.080		
5,100.0	5,087.8	5,097.9	5,087.8	11.4	11.3	89.12	-204.9	100.0	201.2	178.6	22.55	8.921		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	Offset TVD Reference:	Offset Datum

Offset Design		Crittter Creek 24 NE Pad Sec.24-T11N-R63W - Crittter Creek 574-2412H - Wellbore #1 - Plan #1 (3-17-1)											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)				
5,200.0	5,187.8	5,197.9	5,187.8	11.6	11.5	89.12	-204.9	100.0	201.2	178.2	22.94	8.767			
5,300.0	5,287.8	5,297.9	5,287.8	11.8	11.7	89.12	-204.9	100.0	201.2	177.8	23.34	8.617			
5,400.0	5,387.8	5,397.9	5,387.8	12.0	11.9	89.12	-204.9	100.0	201.2	177.4	23.74	8.472			
5,500.0	5,487.8	5,497.9	5,487.8	12.2	12.1	89.12	-204.9	100.0	201.2	177.0	24.15	8.331			
5,600.0	5,587.8	5,597.9	5,587.8	12.4	12.3	89.12	-204.9	100.0	201.2	176.6	24.55	8.194			
5,700.0	5,687.8	5,697.9	5,687.8	12.6	12.5	89.12	-204.9	100.0	201.2	176.2	24.95	8.061			
5,800.0	5,787.8	5,797.9	5,787.8	12.8	12.7	89.12	-204.9	100.0	201.2	175.8	25.36	7.931			
5,900.0	5,887.8	5,897.9	5,887.8	13.0	12.9	89.12	-204.9	100.0	201.2	175.4	25.77	7.806			
6,000.0	5,987.8	5,997.9	5,987.8	13.2	13.1	89.12	-204.9	100.0	201.2	175.0	26.18	7.683			
6,100.0	6,087.8	6,097.9	6,087.8	13.5	13.3	89.12	-204.9	100.0	201.2	174.6	26.59	7.565			
6,200.0	6,187.8	6,197.9	6,187.8	13.7	13.5	89.12	-204.9	100.0	201.2	174.1	27.00	7.449			
6,300.0	6,287.8	6,297.9	6,287.8	13.9	13.7	89.12	-204.9	100.0	201.2	173.7	27.42	7.337			
6,400.0	6,387.8	6,397.9	6,387.8	14.1	13.9	89.12	-204.9	100.0	201.2	173.3	27.83	7.228			
6,500.0	6,487.8	6,497.9	6,487.8	14.3	14.1	89.12	-204.9	100.0	201.2	172.9	28.25	7.121			
6,600.0	6,587.8	6,597.9	6,587.8	14.5	14.3	89.12	-204.9	100.0	201.2	172.5	28.66	7.018			
6,700.0	6,687.8	6,697.9	6,687.8	14.7	14.6	89.12	-204.9	100.0	201.2	172.1	29.08	6.917			
6,800.0	6,787.8	6,797.9	6,787.8	14.9	14.8	89.23	-204.9	100.0	201.1	171.6	29.50	6.819			
6,840.2	6,827.9	6,838.0	6,827.9	15.0	14.8	90.00	-204.9	100.0	201.1	171.5	29.65	6.783			
6,900.0	6,887.1	6,897.5	6,887.4	15.1	15.0	92.16	-204.4	100.0	201.3	171.4	29.88	6.736			
7,000.0	6,984.0	6,998.7	6,987.9	15.2	15.1	96.07	-193.4	100.0	202.3	172.1	30.16	6.707			
7,100.0	7,076.4	7,101.9	7,087.7	15.3	15.3	99.86	-167.7	100.0	204.2	173.9	30.30	6.737			
7,200.0	7,162.7	7,207.2	7,184.8	15.4	15.4	103.43	-127.0	100.0	206.8	176.5	30.34	6.817			
7,300.0	7,241.1	7,314.7	7,276.5	15.5	15.5	106.68	-71.2	100.0	209.9	179.7	30.29	6.931			
7,400.0	7,310.2	7,424.2	7,360.4	15.6	15.7	109.55	-1.0	100.0	213.3	183.1	30.26	7.050			
7,500.0	7,368.5	7,535.7	7,433.8	16.0	16.0	111.98	82.9	99.9	216.7	186.3	30.36	7.137			
7,600.0	7,414.9	7,648.9	7,494.1	16.5	16.5	113.94	178.6	99.9	219.7	189.0	30.74	7.149			
7,700.0	7,448.5	7,763.6	7,539.0	17.2	17.2	115.40	283.9	99.9	222.2	190.6	31.53	7.045			
7,800.0	7,468.7	7,879.3	7,566.7	18.1	18.1	116.33	396.1	99.9	223.8	190.9	32.83	6.816			
7,900.0	7,475.0	7,996.4	7,575.0	19.1	19.3	116.52	511.8	99.8	224.0	189.3	34.72	6.451			
8,000.0	7,474.6	8,096.4	7,575.0	20.2	20.4	116.62	611.8	99.8	224.1	187.4	36.71	6.105			
8,100.0	7,474.2	8,196.4	7,575.0	21.3	21.6	116.72	711.8	99.8	224.2	185.4	38.75	5.786			
8,200.0	7,473.8	8,296.4	7,575.0	22.5	22.8	116.83	811.8	99.7	224.3	183.3	40.97	5.474			
8,300.0	7,473.4	8,396.4	7,575.0	23.8	24.2	116.93	911.8	99.7	224.4	180.9	43.42	5.168			
8,400.0	7,473.0	8,496.4	7,575.0	25.2	25.7	117.03	1,011.8	99.7	224.5	178.5	46.00	4.880			
8,500.0	7,472.6	8,596.4	7,575.0	26.6	27.2	117.14	1,111.8	99.7	224.5	175.9	48.68	4.612			
8,600.0	7,472.2	8,696.4	7,575.0	28.1	28.8	117.24	1,211.8	99.6	224.6	173.2	51.46	4.365			
8,700.0	7,471.8	8,796.4	7,575.0	29.7	30.4	117.34	1,311.8	99.6	224.7	170.4	54.31	4.138			
8,800.0	7,471.4	8,896.4	7,575.0	31.3	32.1	117.44	1,411.8	99.6	224.8	167.6	57.23	3.929			
8,900.0	7,471.0	8,996.4	7,575.0	32.9	33.8	117.55	1,511.8	99.5	224.9	164.7	60.20	3.737			
9,000.0	7,470.6	9,096.4	7,575.0	34.6	35.5	117.65	1,611.8	99.5	225.0	161.8	63.21	3.560			
9,100.0	7,470.2	9,196.4	7,575.0	36.3	37.2	117.75	1,711.8	99.5	225.1	158.9	66.26	3.398			
9,200.0	7,469.8	9,296.4	7,575.0	38.0	38.9	117.85	1,811.8	99.5	225.2	155.9	69.34	3.248			
9,300.0	7,469.4	9,396.4	7,575.0	39.7	40.7	117.96	1,911.8	99.4	225.3	152.9	72.45	3.110			
9,400.0	7,469.0	9,496.4	7,575.0	41.5	42.5	118.06	2,011.8	99.4	225.4	149.8	75.58	2.983			
9,500.0	7,468.6	9,596.4	7,575.0	43.3	44.3	118.16	2,111.8	99.4	225.5	146.8	78.73	2.864			
9,600.0	7,468.2	9,696.4	7,575.0	45.0	46.1	118.26	2,211.8	99.3	225.6	143.7	81.90	2.755			
9,700.0	7,467.8	9,796.4	7,575.0	46.8	47.9	118.36	2,311.8	99.3	225.7	140.6	85.08	2.653			
9,800.0	7,467.4	9,896.4	7,575.0	48.6	49.7	118.47	2,411.8	99.3	225.8	137.6	88.27	2.558			
9,900.0	7,467.0	9,996.4	7,575.0	50.4	51.5	118.57	2,511.8	99.2	225.9	134.5	91.47	2.470			
10,000.0	7,466.6	10,096.4	7,575.0	52.3	53.4	118.67	2,611.8	99.2	226.0	131.3	94.68	2.387			
10,100.0	7,466.2	10,196.4	7,575.0	54.1	55.2	118.77	2,711.8	99.2	226.1	128.2	97.90	2.310			
10,200.0	7,465.8	10,296.4	7,575.0	55.9	57.0	118.87	2,811.8	99.2	226.2	125.1	101.12	2.237			

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	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		
10,300.0	7,465.4	10,396.4	7,575.0	57.8	58.9	118.98	2,911.8	99.1	226.3	122.0	104.35	2.169		
10,400.0	7,464.9	10,496.4	7,575.0	59.6	60.8	119.08	3,011.8	99.1	226.4	118.9	107.58	2.105		
10,500.0	7,464.5	10,596.4	7,575.0	61.5	62.6	119.18	3,111.8	99.1	226.5	115.7	110.81	2.045		
10,600.0	7,464.1	10,696.4	7,575.0	63.3	64.5	119.28	3,211.8	99.0	226.7	112.6	114.04	1.987		
10,700.0	7,463.7	10,796.4	7,575.0	65.2	66.3	119.38	3,311.7	99.0	226.8	109.5	117.28	1.934		
10,800.0	7,463.3	10,896.4	7,575.0	67.1	68.2	119.48	3,411.7	99.0	226.9	106.4	120.51	1.883		
10,900.0	7,462.9	10,996.4	7,575.0	68.9	70.1	119.59	3,511.7	99.0	227.0	103.2	123.75	1.834		
11,000.0	7,462.5	11,096.4	7,575.0	70.8	72.0	119.69	3,611.7	98.9	227.1	100.1	126.99	1.788		
11,100.0	7,462.1	11,196.4	7,575.0	72.7	73.9	119.79	3,711.7	98.9	227.2	97.0	130.22	1.745		
11,200.0	7,461.7	11,296.4	7,575.0	74.6	75.7	119.89	3,811.7	98.9	227.3	93.8	133.45	1.703		
11,300.0	7,461.3	11,396.4	7,575.0	76.5	77.6	119.99	3,911.7	98.8	227.4	90.7	136.69	1.664		
11,400.0	7,460.9	11,496.4	7,575.0	78.3	79.5	120.09	4,011.7	98.8	227.5	87.6	139.92	1.626		
11,500.0	7,460.5	11,596.4	7,575.0	80.2	81.4	120.19	4,111.7	98.8	227.6	84.5	143.14	1.590		
11,600.0	7,460.1	11,696.4	7,575.0	82.1	83.3	120.29	4,211.7	98.7	227.7	81.4	146.37	1.556		
11,700.0	7,459.7	11,796.4	7,575.0	84.0	85.2	120.39	4,311.7	98.7	227.8	78.3	149.59	1.523		
11,800.0	7,459.3	11,896.4	7,575.0	85.9	87.1	120.50	4,411.7	98.7	228.0	75.1	152.81	1.492 Level 3		
11,900.0	7,458.9	11,996.4	7,575.0	87.8	89.0	120.60	4,511.7	98.6	228.1	72.0	156.03	1.462 Level 3		
12,000.0	7,458.5	12,096.4	7,575.0	89.7	90.9	120.70	4,611.7	98.6	228.2	68.9	159.24	1.433 Level 3		
12,100.0	7,458.1	12,196.4	7,575.0	91.6	92.8	120.80	4,711.7	98.6	228.3	65.8	162.45	1.405 Level 3		
12,200.0	7,457.7	12,296.4	7,575.0	93.5	94.7	120.90	4,811.7	98.6	228.4	62.8	165.66	1.379 Level 3		
12,300.0	7,457.3	12,396.4	7,575.0	95.4	96.6	121.00	4,911.7	98.5	228.5	59.7	168.86	1.353 Level 3		
12,400.0	7,456.9	12,496.4	7,575.0	97.3	98.5	121.10	5,011.7	98.5	228.6	56.6	172.05	1.329 Level 3		
12,500.0	7,456.5	12,596.4	7,575.0	99.2	100.4	121.20	5,111.7	98.5	228.8	53.5	175.25	1.305 Level 3		
12,600.0	7,456.1	12,696.4	7,575.0	101.1	102.3	121.30	5,211.7	98.4	228.9	50.4	178.44	1.283 Level 3		
12,700.0	7,455.7	12,796.4	7,575.0	103.0	104.2	121.40	5,311.7	98.4	229.0	47.4	181.62	1.261 Level 3		
12,800.0	7,455.3	12,896.4	7,575.0	104.9	106.1	121.50	5,411.7	98.4	229.1	44.3	184.80	1.240 Level 2		
12,900.0	7,454.9	12,996.4	7,575.0	106.8	108.0	121.60	5,511.7	98.3	229.2	41.2	187.98	1.219 Level 2		
13,000.0	7,454.5	13,096.4	7,575.0	108.7	109.9	121.70	5,611.7	98.3	229.3	38.2	191.15	1.200 Level 2		
13,100.0	7,454.1	13,196.4	7,575.0	110.6	111.8	121.80	5,711.7	98.3	229.5	35.1	194.31	1.181 Level 2		
13,200.0	7,453.7	13,296.4	7,575.0	112.5	113.7	121.90	5,811.7	98.2	229.6	32.1	197.47	1.163 Level 2		
13,300.0	7,453.3	13,396.4	7,575.0	114.5	115.6	122.00	5,911.7	98.2	229.7	29.1	200.63	1.145 Level 2		
13,400.0	7,452.9	13,496.4	7,575.0	116.4	117.5	122.10	6,011.7	98.2	229.8	26.0	203.78	1.128 Level 2		
13,500.0	7,452.5	13,596.4	7,575.0	118.3	119.4	122.20	6,111.7	98.1	229.9	23.0	206.93	1.111 Level 2		
13,600.0	7,452.1	13,696.4	7,575.0	120.2	121.3	122.30	6,211.7	98.1	230.1	20.0	210.07	1.095 Level 2		
13,700.0	7,451.7	13,796.4	7,575.0	122.1	123.3	122.40	6,311.7	98.1	230.2	17.0	213.20	1.080 Level 2		
13,800.0	7,451.3	13,896.4	7,575.0	124.0	125.2	122.50	6,411.7	98.0	230.3	14.0	216.33	1.065 Level 2		
13,900.0	7,450.9	13,996.4	7,575.0	125.9	127.1	122.60	6,511.7	98.0	230.4	11.0	219.46	1.050 Level 2		
14,000.0	7,450.5	14,096.4	7,575.0	127.8	129.0	122.70	6,611.7	98.0	230.5	8.0	222.58	1.036 Level 2		
14,100.0	7,450.1	14,196.4	7,575.0	129.8	130.9	122.80	6,711.7	98.0	230.7	5.0	225.69	1.022 Level 2		
14,200.0	7,449.7	14,296.4	7,575.0	131.7	132.8	122.90	6,811.7	97.9	230.8	2.0	228.80	1.009 Level 2		
14,300.0	7,449.2	14,396.4	7,575.0	133.6	134.7	123.00	6,911.7	97.9	230.9	-1.0	231.90	0.996 Level 1		
14,400.0	7,448.8	14,496.4	7,575.0	135.5	136.6	123.10	7,011.7	97.9	231.0	-4.0	235.00	0.983 Level 1		
14,500.0	7,448.4	14,596.4	7,575.0	137.4	138.6	123.19	7,111.7	97.8	231.2	-6.9	238.09	0.971 Level 1		
14,600.0	7,448.0	14,696.4	7,575.0	139.3	140.5	123.29	7,211.7	97.8	231.3	-9.9	241.17	0.959 Level 1		
14,700.0	7,447.6	14,796.4	7,575.0	141.3	142.4	123.39	7,311.7	97.8	231.4	-12.8	244.25	0.947 Level 1		
14,800.0	7,447.2	14,896.4	7,575.0	143.2	144.3	123.49	7,411.7	97.7	231.5	-15.8	247.33	0.936 Level 1		
14,900.0	7,446.8	14,996.4	7,575.0	145.1	146.2	123.59	7,511.7	97.7	231.7	-18.7	250.39	0.925 Level 1		
15,000.0	7,446.4	15,096.4	7,575.0	147.0	148.1	123.69	7,611.7	97.7	231.8	-21.7	253.46	0.915 Level 1		
15,100.0	7,446.0	15,196.4	7,575.0	148.9	150.1	123.79	7,711.7	97.6	231.9	-24.6	256.51	0.904 Level 1		
15,200.0	7,445.6	15,296.4	7,575.0	150.9	152.0	123.89	7,811.7	97.6	232.1	-27.5	259.56	0.894 Level 1		
15,300.0	7,445.2	15,396.4	7,575.0	152.8	153.9	123.98	7,911.7	97.6	232.2	-30.4	262.61	0.884 Level 1		
15,400.0	7,444.8	15,496.4	7,575.0	154.7	155.8	124.08	8,011.7	97.5	232.3	-33.3	265.64	0.875 Level 1		

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 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	Offset TVD Reference:	Offset Datum

Offset Design													Crittter Creek 24 NE Pad Sec.24-T11N-R63W - Crittter Creek 574-2412H - Wellbore #1 - Plan #1 (3-17-1)		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)						
15,500.0	7,444.4	15,596.4	7,575.0	156.6	157.7	124.18	8,111.7	97.5	232.4	-36.2	268.68	0.865	Level 1				
15,600.0	7,444.0	15,696.4	7,575.0	158.5	159.6	124.28	8,211.7	97.5	232.6	-39.1	271.70	0.856	Level 1				
15,700.0	7,443.6	15,796.4	7,575.0	160.5	161.6	124.38	8,311.7	97.4	232.7	-42.0	274.72	0.847	Level 1				
15,800.0	7,443.2	15,896.4	7,575.0	162.4	163.5	124.48	8,411.7	97.4	232.8	-44.9	277.73	0.838	Level 1				
15,900.0	7,442.8	15,996.4	7,575.0	164.3	165.4	124.57	8,511.7	97.4	233.0	-47.8	280.74	0.830	Level 1				
16,000.0	7,442.4	16,096.4	7,575.0	166.2	167.3	124.67	8,611.7	97.3	233.1	-50.6	283.74	0.822	Level 1				
16,100.0	7,442.0	16,196.4	7,575.0	168.2	169.2	124.77	8,711.7	97.3	233.2	-53.5	286.74	0.813	Level 1				
16,200.0	7,441.6	16,296.4	7,575.0	170.1	171.2	124.87	8,811.7	97.3	233.4	-56.4	289.73	0.805	Level 1				
16,300.0	7,441.2	16,396.4	7,575.0	172.0	173.1	124.97	8,911.7	97.2	233.5	-59.2	292.71	0.798	Level 1				
16,400.0	7,440.8	16,496.4	7,575.0	173.9	175.0	125.06	9,011.7	97.2	233.6	-62.0	295.69	0.790	Level 1				
16,500.0	7,440.4	16,596.4	7,575.0	175.8	176.9	125.16	9,111.7	97.2	233.8	-64.9	298.65	0.783	Level 1				
16,600.0	7,440.0	16,696.4	7,575.0	177.8	178.8	125.26	9,211.7	97.1	233.9	-67.7	301.62	0.776	Level 1				
16,700.0	7,439.6	16,796.4	7,575.0	179.7	180.8	125.36	9,311.7	97.1	234.1	-70.5	304.58	0.768	Level 1				
16,800.0	7,439.2	16,896.4	7,575.0	181.6	182.7	125.45	9,411.7	97.1	234.2	-73.3	307.53	0.762	Level 1				
16,900.0	7,438.8	16,996.4	7,575.0	183.5	184.6	125.55	9,511.7	97.0	234.3	-76.1	310.47	0.755	Level 1				
17,000.0	7,438.4	17,096.4	7,575.0	185.5	186.5	125.65	9,611.7	97.0	234.5	-78.9	313.41	0.748	Level 1				
17,100.0	7,437.9	17,196.4	7,575.0	187.4	188.4	125.75	9,711.7	96.9	234.6	-81.7	316.34	0.742	Level 1				
17,200.0	7,437.5	17,296.4	7,575.0	189.3	190.4	125.84	9,811.7	96.9	234.7	-84.5	319.26	0.735	Level 1				
17,300.0	7,437.1	17,396.4	7,575.0	191.2	192.3	125.94	9,911.7	96.9	234.9	-87.3	322.18	0.729	Level 1				
17,400.0	7,436.7	17,496.4	7,575.0	193.2	194.2	126.04	10,011.7	96.8	235.0	-90.1	325.10	0.723	Level 1				
17,500.0	7,436.3	17,596.4	7,575.0	195.1	196.1	126.13	10,111.7	96.8	235.2	-92.8	328.00	0.717	Level 1				
17,600.0	7,435.9	17,696.4	7,575.0	197.0	198.0	126.23	10,211.7	96.8	235.3	-95.6	330.90	0.711	Level 1				
17,700.0	7,435.5	17,796.4	7,575.0	198.9	200.0	126.33	10,311.7	96.7	235.4	-98.4	333.79	0.705	Level 1				
17,800.0	7,435.1	17,896.4	7,575.0	200.9	201.9	126.42	10,411.7	96.7	235.6	-101.1	336.68	0.700	Level 1				
17,829.8	7,435.0	17,926.2	7,575.0	201.4	202.5	126.45	10,441.5	96.7	235.6	-101.9	337.51	0.698	Level 1, ES, SF				

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.24-T11N-R63W - Critter Creek 06-12H (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1465-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		
12,700.0	7,455.7	11,833.6	7,266.4	103.0	112.1	53.11	6,354.8	229.0	1,120.7	965.3	155.45	7.210		
12,800.0	7,455.3	11,815.0	7,266.2	104.9	111.7	51.53	6,360.4	211.2	1,027.9	873.6	154.35	6.660		
12,900.0	7,454.9	11,797.0	7,266.4	106.8	111.3	49.95	6,366.1	194.1	936.0	782.9	153.10	6.113		
13,000.0	7,454.5	11,773.9	7,266.9	108.7	110.7	47.80	6,373.8	172.4	845.1	694.4	150.70	5.608		
13,100.0	7,454.1	11,750.1	7,267.9	110.6	110.1	45.45	6,382.2	150.1	755.4	607.7	147.68	5.115		
13,200.0	7,453.7	11,724.0	7,269.3	112.5	109.5	42.66	6,391.9	125.9	667.4	523.8	143.59	4.648		
13,300.0	7,453.3	11,694.8	7,270.9	114.5	108.8	39.19	6,403.1	99.0	581.4	443.6	137.83	4.218		
13,400.0	7,452.9	11,663.6	7,272.4	116.4	108.0	35.00	6,415.5	70.4	498.3	368.1	130.23	3.826		
13,500.0	7,452.5	11,630.6	7,273.5	118.3	107.2	29.96	6,428.9	40.3	419.5	298.9	120.56	3.480		
13,600.0	7,452.1	11,595.2	7,274.0	120.2	106.3	23.82	6,443.6	8.1	347.7	239.1	108.57	3.202		
13,700.0	7,451.7	11,556.2	7,274.2	122.1	105.4	16.27	6,460.0	-27.3	287.5	192.6	94.87	3.031		
13,800.0	7,451.3	11,516.8	7,274.1	124.0	104.4	8.01	6,476.8	-62.9	247.2	163.4	83.82	2.950		
13,880.2	7,450.9	11,484.4	7,273.7	125.6	103.6	0.96	6,490.9	-92.1	236.3	156.2	80.03	2.952 CC, ES		
13,900.0	7,450.9	11,475.7	7,273.6	125.9	103.4	-0.92	6,494.7	-99.9	236.9	156.8	80.10	2.958		
14,000.0	7,450.5	11,429.7	7,273.0	127.8	102.2	-10.79	6,514.9	-141.3	259.5	171.5	87.98	2.949		
14,100.0	7,450.1	11,378.9	7,272.8	129.8	101.0	-20.93	6,537.7	-186.7	307.1	201.1	105.92	2.899 SF		
14,200.0	7,449.7	11,326.2	7,273.4	131.7	99.7	-30.16	6,562.2	-233.4	369.5	243.1	126.41	2.923		
14,300.0	7,449.2	11,285.3	7,273.5	133.6	98.7	-36.29	6,581.4	-269.4	440.9	299.9	141.00	3.127		
14,400.0	7,448.8	11,216.0	7,274.4	135.5	97.0	-44.88	6,614.9	-330.1	516.5	356.3	160.27	3.223		
14,500.0	7,448.4	11,141.8	7,276.2	137.4	95.1	-51.92	6,653.3	-393.5	593.6	418.7	174.88	3.394		
14,600.0	7,448.0	11,068.6	7,278.2	139.3	93.3	-57.23	6,693.5	-454.7	670.7	485.7	184.99	3.626		
14,700.0	7,447.6	10,981.5	7,279.9	141.3	91.1	-61.94	6,744.0	-525.6	747.4	554.5	192.90	3.875		
14,800.0	7,447.2	10,883.3	7,282.4	143.2	88.7	-65.94	6,804.8	-602.8	822.1	623.4	198.74	4.137		
14,900.0	7,446.8	10,803.1	7,285.7	145.1	86.7	-68.59	6,856.2	-664.2	895.4	692.8	202.55	4.420		
15,000.0	7,446.4	10,751.0	7,286.9	147.0	85.4	-69.99	6,889.9	-703.9	969.1	764.0	205.13	4.724		
15,100.0	7,446.0	10,692.8	7,286.8	148.9	84.0	-71.27	6,927.4	-748.5	1,043.8	836.4	207.41	5.033		
15,200.0	7,445.6	10,642.5	7,285.7	150.9	82.8	-72.17	6,959.5	-787.1	1,119.4	910.0	209.39	5.346		
15,300.0	7,445.2	10,589.0	7,283.9	152.8	81.5	-73.01	6,993.2	-828.6	1,195.9	984.7	211.22	5.662		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.24-T11N-R63W - Critter Creek 7-13H (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 1357-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		
7,700.0	7,448.5	12,249.4	7,238.3	17.2	128.4	53.51	1,220.3	539.4	1,134.6	1,031.1	103.44	10.968		
7,800.0	7,468.7	12,182.1	7,237.2	18.1	126.6	57.74	1,258.7	484.1	1,061.0	962.0	98.98	10.720		
7,900.0	7,475.0	12,143.0	7,237.3	19.1	125.6	64.65	1,281.0	452.1	983.6	885.5	98.11	10.025		
8,000.0	7,474.6	12,096.2	7,237.3	20.2	124.4	63.05	1,308.4	414.1	905.6	808.3	97.32	9.305		
8,100.0	7,474.2	12,035.3	7,237.4	21.3	122.8	60.69	1,344.8	365.3	829.0	733.3	95.75	8.658		
8,200.0	7,473.8	11,961.5	7,237.6	22.5	120.9	57.24	1,388.0	305.4	752.4	659.3	93.10	8.082		
8,300.0	7,473.4	11,921.0	7,238.3	23.8	119.9	55.09	1,411.9	272.7	676.8	584.9	91.86	7.367		
8,400.0	7,473.0	11,857.7	7,240.0	25.2	118.2	51.30	1,450.2	222.4	603.3	514.6	88.74	6.799		
8,500.0	7,472.6	11,795.0	7,241.8	26.6	116.6	46.72	1,487.8	172.2	531.1	446.5	84.59	6.278		
8,600.0	7,472.2	11,741.9	7,242.9	28.1	115.2	42.01	1,519.6	129.8	461.9	381.7	80.12	5.765		
8,700.0	7,471.8	11,679.5	7,243.6	29.7	113.6	35.29	1,557.3	80.0	397.3	324.3	72.97	5.444		
8,800.0	7,471.4	11,627.2	7,244.0	31.3	112.3	28.58	1,588.9	38.4	339.5	273.8	65.70	5.167		
8,900.0	7,471.0	11,570.3	7,243.7	32.9	110.8	20.26	1,624.4	-6.1	293.6	236.7	56.86	5.163		
9,000.0	7,470.6	11,506.4	7,243.2	34.6	109.2	9.85	1,664.8	-55.7	263.6	215.5	48.08	5.482		
9,092.5	7,470.2	11,446.4	7,243.4	36.2	107.7	-0.45	1,703.2	-101.7	253.8	208.7	45.05	5.633 CC		
9,100.0	7,470.2	11,441.8	7,243.5	36.3	107.5	-1.25	1,706.2	-105.3	253.8	208.7	45.13	5.624 ES		
9,200.0	7,469.8	11,377.4	7,243.5	38.0	105.9	-12.26	1,747.2	-154.8	267.1	216.6	50.53	5.286		
9,300.0	7,469.4	11,309.9	7,243.6	39.7	104.2	-22.72	1,791.6	-205.7	299.3	238.2	61.07	4.901		
9,400.0	7,469.0	11,249.4	7,243.8	41.5	102.6	-30.98	1,831.2	-251.5	345.4	274.2	71.19	4.852 SF		
9,500.0	7,468.6	11,189.7	7,244.1	43.3	101.1	-38.13	1,868.8	-297.8	402.0	321.6	80.33	5.004		
9,600.0	7,468.2	11,130.9	7,244.7	45.0	99.6	-44.12	1,905.5	-343.7	464.9	377.0	87.92	5.288		
9,700.0	7,467.8	11,073.4	7,245.1	46.8	98.2	-49.06	1,940.8	-389.1	532.8	438.7	94.06	5.664		
9,800.0	7,467.4	11,017.5	7,245.8	48.6	96.7	-53.14	1,975.0	-433.4	603.5	504.4	99.04	6.093		
9,900.0	7,467.0	10,971.0	7,246.1	50.4	95.6	-56.05	2,002.5	-470.8	677.4	574.6	102.80	6.589		
10,000.0	7,466.6	10,900.1	7,246.6	52.3	93.7	-59.81	2,044.5	-528.0	752.8	645.9	106.85	7.046		
10,100.0	7,466.2	10,838.6	7,247.3	54.1	92.2	-62.52	2,081.4	-577.1	828.4	718.6	109.89	7.539		
10,200.0	7,465.8	10,772.8	7,248.0	55.9	90.5	-64.97	2,121.2	-629.6	904.6	792.1	112.53	8.039		
10,300.0	7,465.4	10,700.8	7,248.9	57.8	88.6	-67.22	2,165.4	-686.4	980.5	865.7	114.81	8.540		
10,400.0	7,464.9	10,652.0	7,249.4	59.6	87.4	-68.55	2,195.1	-725.1	1,057.4	940.6	116.73	9.058		
10,500.0	7,464.5	10,601.3	7,249.9	61.5	86.1	-69.80	2,225.4	-765.7	1,135.2	1,016.7	118.55	9.576		

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 246-2412H
Project:	Sec.24-T11N-R63W	TVD Reference:	WELL @ 5232.0ft (Original Well Elev)
Reference Site:	Critter Creek 24 NE Pad Sec.24-T11N-R63W	MD Reference:	WELL @ 5232.0ft (Original Well Elev)
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Critter Creek 246-2412H	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 (3-17-17)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5232.0ft (Original Well Elev)

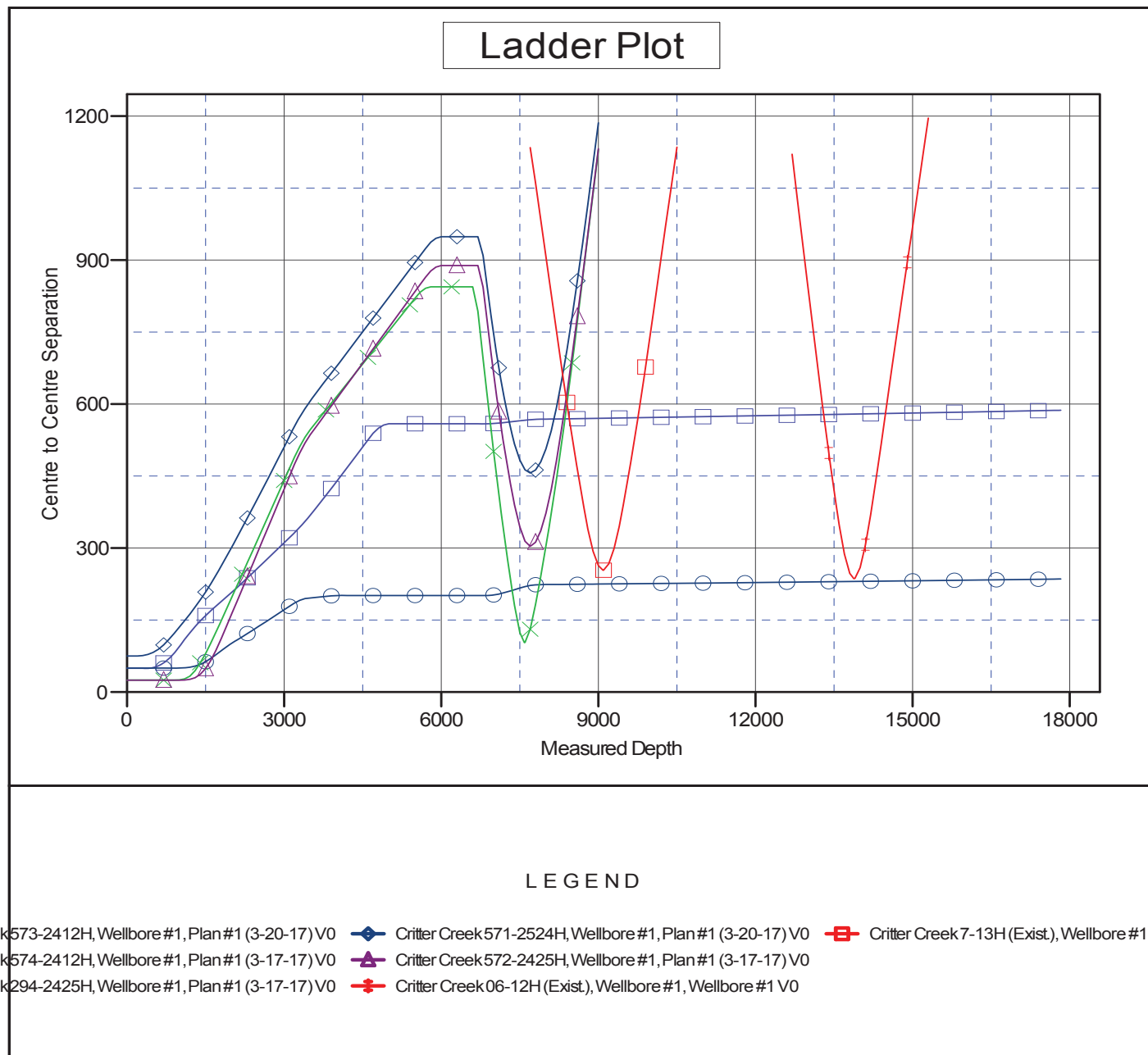
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: Critter Creek 246-2412H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.73°



Company: Fifth Creek Energy Company, LLC
Project: Sec.24-T11N-R63W
Reference Site: Critter Creek 24 NE Pad Sec.24-T11N-R63W
Site Error: 0.0 ft
Reference Well: Critter Creek 246-2412H
Well Error: 0.0 ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (3-17-17)

Local Co-ordinate Reference: Well Critter Creek 246-2412H
TVD Reference: WELL @ 5232.0ft (Original Well Elev)
MD Reference: WELL @ 5232.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: US_EDM
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 5232.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

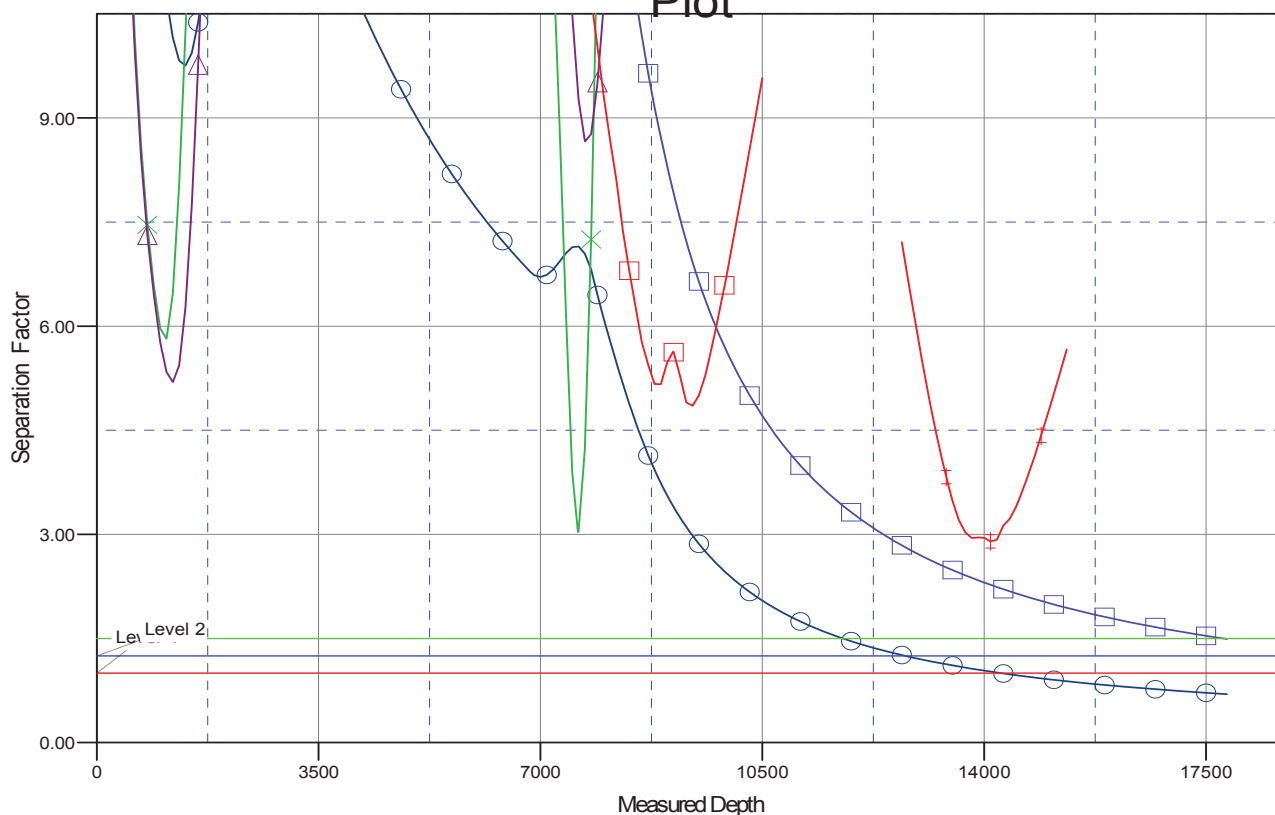
Central Meridian is -105.500000

Coordinates are relative to: Critter Creek 246-2412H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.73°

Separation Factor Plot



LEGEND

ek573-2412H, Wellbore #1, Plan #1 (3-20-17) V0 Critter Creek 571-2524H, Wellbore #1, Plan #1 (3-20-17) V0 Critter Creek 7-13H (Exist), Wellbore #1, V0
 ek574-2412H, Wellbore #1, Plan #1 (3-17-17) V0 Critter Creek 572-2425H, Wellbore #1, Plan #1 (3-17-17) V0
 ek294-2425H, Wellbore #1, Plan #1 (3-17-17) V0 Critter Creek 06-12H (Exist), Wellbore #1, Wellbore #1 V0