

Fifth Creek Energy Company, LLC

Well Name: **Critter Creek 562-1527H**

Surface Location: Critter Creek Pad 15-11N-63W

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

Ground Elevation: 5228.0

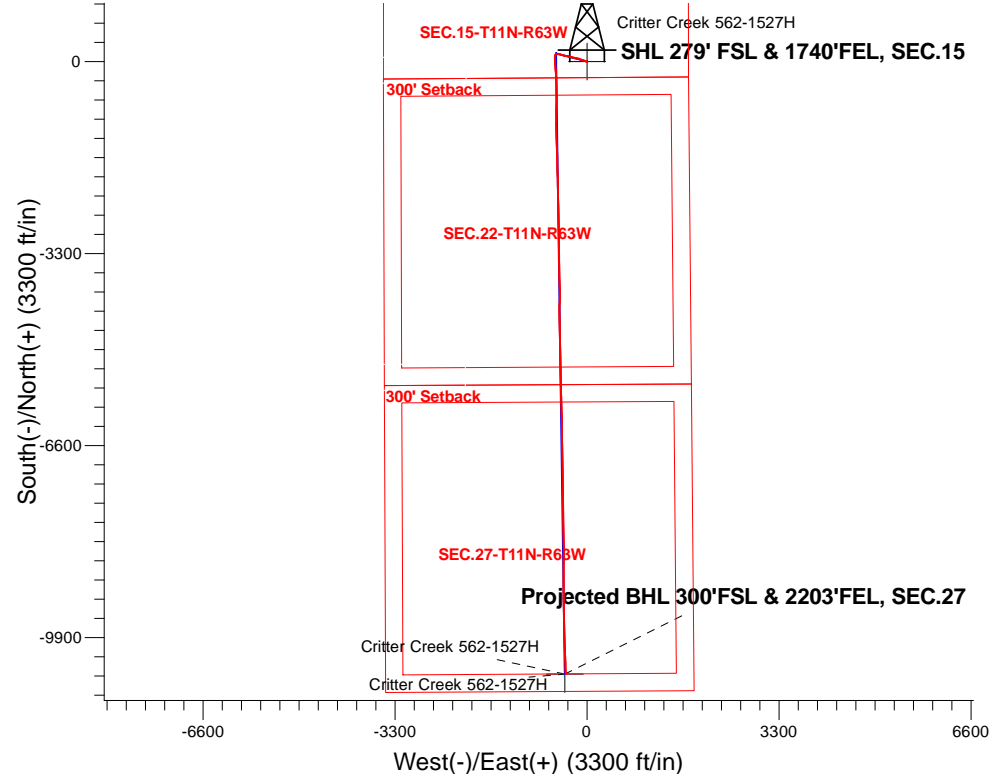
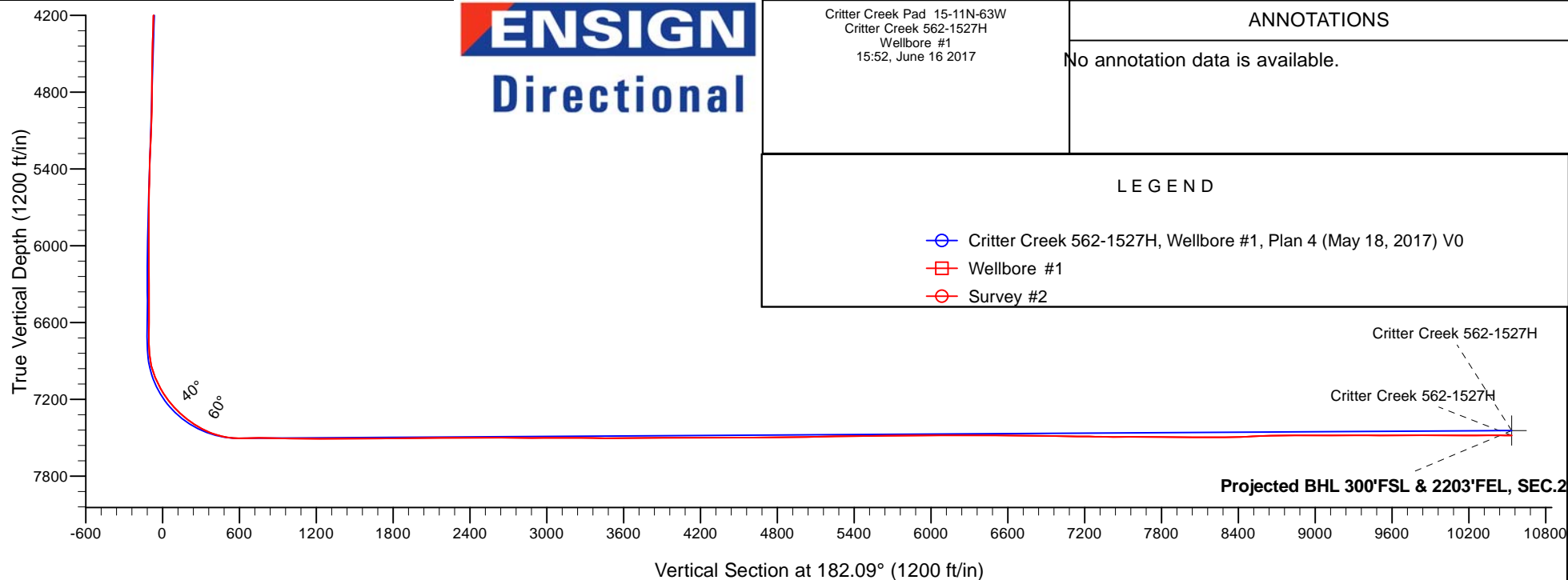
+N/-S +E/-W Northing Easting Latitude Longitude Slot

0.0 0.01578365.50 3299655.17 40.915953 -104.415800

Cade 23 RKB - 16' WELL @ 5244.0ft (Cade 23 RKB - 16')

FINAL SURVEY

Projected Bottom Hole Location
17882'MD 7483'TVD 10527'S & 367'W of SHL
89.3 degree Incl @ 176.7 degree AZM



Critter Creek Pad 15-11N-63W
Critter Creek 562-1527H
Wellbore #1
15:52, June 16 2017

ANNOTATIONS

No annotation data is available.

LEGEND

- Critter Creek 562-1527H, Wellbore #1, Plan 4 (May 18, 2017) V0
- Wellbore #1
- Survey #2



Fifth Creek Energy Company, LLC

Sec.15-T11N-R63W

Critter Creek Pad 15-11N-63W

Critter Creek 562-1527H

Wellbore #1

Survey: Survey #2

Standard Survey Report

16 June, 2017

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 562-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5244.0ft (Cade 23 RKB - 16')
Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5244.0ft (Cade 23 RKB - 16')
Well:	Critter Creek 562-1527H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	US_EDM

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

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

Well	Critter Creek 562-1527H					
Well Position	+N/-S	0.0 ft	Northing:	1,578,365.49 usft	Latitude:	40.915953
	+E/-W	0.0 ft	Easting:	3,299,655.18 usft	Longitude:	-104.415800
Position Uncertainty		0.0 ft	Wellhead Elevation:	5,244.0 ft	Ground Level:	5,228.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/3/2017	7.92	67.31	52,810

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	182.09	

Survey Program	Date	6/15/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
121.0	1,539.0	Survey #1 - Surface (Wellbore #1)	MWD	MWD - Standard	
1,572.0	17,882.0	Survey #2 (Wellbore #1)	MWD	MWD - Standard	

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)	
1,539.0	0.41	190.11	1,538.9	-1.5	3.0	1.4	0.00	0.00	0.00	
1,572.0	1.10	207.60	1,571.9	-1.9	2.9	1.8	2.18	2.09	53.00	
1,667.0	1.30	215.90	1,666.9	-3.6	1.8	3.5	0.28	0.21	8.74	
1,761.0	1.70	235.70	1,760.9	-5.2	0.0	5.2	0.69	0.43	21.06	
1,856.0	2.60	272.50	1,855.8	-5.9	-3.3	6.0	1.69	0.95	38.74	
1,951.0	3.70	290.80	1,950.6	-4.7	-8.3	5.0	1.55	1.16	19.26	
2,045.0	6.10	297.40	2,044.3	-1.3	-15.6	1.9	2.62	2.55	7.02	
2,140.0	8.10	291.60	2,138.6	3.4	-26.3	-2.5	2.23	2.11	-6.11	
2,235.0	8.30	290.40	2,232.6	8.3	-38.9	-6.9	0.28	0.21	-1.26	
2,329.0	8.20	290.90	2,325.6	13.1	-51.6	-11.2	0.13	-0.11	0.53	

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Well:	Critter Creek 562-1527H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	US_EDM

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)
2,424.0	7.70	288.50	2,419.7	17.5	-63.9	-15.1	0.63	-0.53	-2.53
2,519.0	7.50	287.60	2,513.9	21.4	-75.9	-18.6	0.24	-0.21	-0.95
2,613.0	9.00	291.10	2,606.9	25.9	-88.6	-22.6	1.68	1.60	3.72
2,708.0	8.60	290.20	2,700.8	31.0	-102.2	-27.3	0.45	-0.42	-0.95
2,803.0	8.40	289.00	2,794.7	35.7	-115.4	-31.5	0.28	-0.21	-1.26
2,897.0	8.40	287.40	2,887.7	40.0	-128.4	-35.3	0.25	0.00	-1.70
2,992.0	8.20	286.40	2,981.7	44.0	-141.6	-38.8	0.26	-0.21	-1.05
3,087.0	8.10	285.70	3,075.8	47.7	-154.5	-42.1	0.15	-0.11	-0.74
3,181.0	7.80	284.60	3,168.9	51.1	-167.0	-45.0	0.36	-0.32	-1.17
3,276.0	7.70	284.80	3,263.0	54.4	-179.4	-47.8	0.11	-0.11	0.21
3,371.0	7.40	283.90	3,357.2	57.5	-191.5	-50.5	0.34	-0.32	-0.95
3,465.0	7.40	282.10	3,450.4	60.2	-203.3	-52.7	0.25	0.00	-1.91
3,560.0	7.80	281.10	3,544.6	62.7	-215.6	-54.8	0.44	0.42	-1.05
3,655.0	7.70	279.90	3,638.7	65.1	-228.2	-56.7	0.20	-0.11	-1.26
3,749.0	7.70	282.70	3,731.8	67.5	-240.6	-58.7	0.40	0.00	2.98
3,844.0	7.40	282.10	3,826.0	70.2	-252.8	-60.9	0.33	-0.32	-0.63
3,939.0	6.80	281.80	3,920.3	72.6	-264.3	-63.0	0.63	-0.63	-0.32
4,033.0	6.20	295.00	4,013.7	75.9	-274.3	-65.9	1.71	-0.64	14.04
4,128.0	6.80	286.20	4,108.1	79.7	-284.4	-69.2	1.22	0.63	-9.26
4,223.0	6.50	283.70	4,202.4	82.5	-295.0	-71.7	0.44	-0.32	-2.63
4,318.0	8.40	284.80	4,296.6	85.5	-306.9	-74.3	2.01	2.00	1.16
4,412.0	8.60	280.90	4,389.6	88.6	-320.5	-76.9	0.65	0.21	-4.15
4,507.0	8.40	281.60	4,483.6	91.4	-334.2	-79.1	0.24	-0.21	0.74
4,602.0	9.00	277.60	4,577.5	93.7	-348.4	-81.0	0.90	0.63	-4.21
4,696.0	8.60	275.60	4,670.4	95.4	-362.7	-82.1	0.54	-0.43	-2.13
4,791.0	8.30	277.00	4,764.3	96.9	-376.5	-83.1	0.38	-0.32	1.47
4,886.0	7.70	270.90	4,858.4	97.9	-389.7	-83.6	1.09	-0.63	-6.42
4,980.0	6.90	286.40	4,951.7	99.6	-401.4	-84.9	2.25	-0.85	16.49
5,075.0	6.00	287.90	5,046.1	102.7	-411.6	-87.6	0.96	-0.95	1.58
5,170.0	5.50	296.00	5,140.6	106.2	-420.4	-90.8	1.00	-0.53	8.53
5,264.0	7.50	294.60	5,234.0	110.7	-430.1	-95.0	2.13	2.13	-1.49
5,359.0	8.40	284.60	5,328.1	115.1	-442.4	-98.9	1.73	0.95	-10.53
5,454.0	7.70	282.30	5,422.1	118.2	-455.4	-101.5	0.81	-0.74	-2.42
5,549.0	8.00	284.60	5,516.2	121.2	-468.0	-104.1	0.46	0.32	2.42
5,644.0	6.60	280.60	5,610.5	123.9	-479.7	-106.3	1.57	-1.47	-4.21
5,740.0	5.20	279.90	5,705.9	125.6	-489.4	-107.7	1.46	-1.46	-0.73
5,835.0	3.90	271.20	5,800.6	126.4	-496.9	-108.2	1.55	-1.37	-9.16
5,930.0	4.70	265.60	5,895.4	126.2	-504.0	-107.8	0.95	0.84	-5.89
6,025.0	4.00	263.50	5,990.1	125.5	-511.2	-106.8	0.76	-0.74	-2.21
6,120.0	3.40	268.60	6,084.9	125.1	-517.3	-106.2	0.72	-0.63	5.37
6,215.0	3.30	269.50	6,179.7	125.0	-522.9	-105.9	0.12	-0.11	0.95
6,311.0	2.00	251.20	6,275.6	124.4	-527.2	-105.1	1.60	-1.35	-19.06
6,407.0	1.70	304.10	6,371.6	124.7	-530.0	-105.3	1.74	-0.31	55.10

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6,502.0	1.00	281.60	6,466.6	125.7	-532.0	-106.2	0.91	-0.74	-23.68
6,597.0	1.10	276.30	6,561.6	125.9	-533.7	-106.4	0.15	0.11	-5.58
6,692.0	1.00	287.40	6,656.5	126.3	-535.4	-106.7	0.24	-0.11	11.68
6,787.0	2.30	273.90	6,751.5	126.7	-538.1	-107.0	1.42	1.37	-14.21
6,881.0	5.90	202.30	6,845.3	122.3	-541.8	-102.5	5.97	3.83	-76.17
6,976.0	13.00	201.10	6,938.9	107.8	-547.5	-87.8	7.48	7.47	-1.26
7,071.0	23.80	187.00	7,029.0	78.7	-553.7	-58.5	12.22	11.37	-14.84
7,166.0	29.30	178.10	7,114.0	36.4	-555.3	-16.1	7.13	5.79	-9.37
7,260.0	35.50	176.00	7,193.3	-13.9	-552.6	34.0	6.70	6.60	-2.23
7,355.0	43.20	174.60	7,266.7	-73.8	-547.6	93.8	8.16	8.11	-1.47
7,450.0	50.20	174.90	7,331.8	-142.7	-541.3	162.3	7.37	7.37	0.32
7,544.0	56.50	178.30	7,387.9	-217.9	-536.9	237.3	7.30	6.70	3.62
7,639.0	61.70	177.00	7,436.7	-299.3	-533.5	318.6	5.60	5.47	-1.37
7,734.0	73.10	177.40	7,473.1	-386.8	-529.3	405.8	12.01	12.00	0.42
7,828.0	78.80	177.40	7,495.9	-477.8	-525.1	496.6	6.06	6.06	0.00
7,897.0	88.30	180.90	7,503.7	-546.3	-524.1	565.0	14.66	13.77	5.07
7,944.0	89.90	180.90	7,504.4	-593.3	-524.9	612.0	3.40	3.40	0.00
8,038.0	91.20	181.40	7,503.5	-687.2	-526.8	706.0	1.48	1.38	0.53
8,133.0	89.30	182.30	7,503.1	-782.2	-529.8	801.0	2.21	-2.00	0.95
8,228.0	88.80	181.20	7,504.7	-877.1	-532.7	896.0	1.27	-0.53	-1.16
8,323.0	89.30	179.50	7,506.3	-972.1	-533.3	990.9	1.87	0.53	-1.79
8,417.0	89.70	179.30	7,507.1	-1,066.1	-532.3	1,084.8	0.48	0.43	-0.21
8,512.0	89.20	178.60	7,508.0	-1,161.1	-530.6	1,179.6	0.91	-0.53	-0.74
8,607.0	90.50	178.80	7,508.2	-1,256.0	-528.4	1,274.5	1.38	1.37	0.21
8,701.0	90.30	178.40	7,507.6	-1,350.0	-526.1	1,368.3	0.48	-0.21	-0.43
8,796.0	89.80	177.50	7,507.5	-1,445.0	-522.7	1,463.1	1.08	-0.53	-0.95
8,891.0	90.20	177.50	7,507.5	-1,539.9	-518.6	1,557.7	0.42	0.42	0.00
8,985.0	90.90	178.80	7,506.6	-1,633.8	-515.6	1,651.5	1.57	0.74	1.38
9,080.0	90.50	178.60	7,505.4	-1,728.8	-513.4	1,746.3	0.47	-0.42	-0.21
9,175.0	90.20	178.40	7,504.9	-1,823.7	-510.9	1,841.2	0.38	-0.32	-0.21
9,269.0	90.20	179.10	7,504.5	-1,917.7	-508.9	1,935.0	0.74	0.00	0.74
9,364.0	90.20	178.60	7,504.2	-2,012.7	-507.0	2,029.8	0.53	0.00	-0.53
9,459.0	91.30	179.00	7,503.0	-2,107.7	-505.0	2,124.7	1.23	1.16	0.42
9,554.0	91.10	179.10	7,501.0	-2,202.6	-503.4	2,219.5	0.24	-0.21	0.11
9,649.0	89.80	178.10	7,500.2	-2,297.6	-501.1	2,314.3	1.73	-1.37	-1.05
9,743.0	91.00	178.30	7,499.6	-2,391.6	-498.1	2,408.1	1.29	1.28	0.21
9,839.0	89.90	178.10	7,498.8	-2,487.5	-495.1	2,503.9	1.16	-1.15	-0.21
9,934.0	89.40	178.80	7,499.4	-2,582.5	-492.5	2,598.7	0.91	-0.53	0.74
10,029.0	89.40	179.80	7,500.4	-2,677.4	-491.4	2,693.6	1.05	0.00	1.05
10,124.0	89.20	179.00	7,501.5	-2,772.4	-490.4	2,788.5	0.87	-0.21	-0.84
10,219.0	89.30	178.30	7,502.8	-2,867.4	-488.2	2,883.3	0.74	0.11	-0.74
10,314.0	91.40	179.30	7,502.2	-2,962.4	-486.2	2,978.1	2.45	2.21	1.05
10,410.0	89.70	180.00	7,501.3	-3,058.4	-485.6	3,074.0	1.92	-1.77	0.73

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10,505.0	89.70	179.80	7,501.8	-3,153.4	-485.4	3,169.0	0.21	0.00	-0.21
10,601.0	89.70	179.30	7,502.3	-3,249.4	-484.7	3,264.9	0.52	0.00	-0.52
10,697.0	89.30	178.80	7,503.1	-3,345.3	-483.1	3,360.7	0.67	-0.42	-0.52
10,791.0	89.60	179.30	7,504.0	-3,439.3	-481.5	3,454.6	0.62	0.32	0.53
10,886.0	90.20	179.10	7,504.2	-3,534.3	-480.2	3,549.5	0.67	0.63	-0.21
10,981.0	90.90	178.60	7,503.3	-3,629.3	-478.3	3,644.3	0.91	0.74	-0.53
11,076.0	90.00	178.60	7,502.5	-3,724.3	-476.0	3,739.1	0.95	-0.95	0.00
11,170.0	91.00	177.90	7,501.7	-3,818.2	-473.1	3,832.9	1.30	1.06	-0.74
11,265.0	90.10	178.40	7,500.8	-3,913.1	-470.0	3,927.7	1.08	-0.95	0.53
11,359.0	89.50	180.90	7,501.1	-4,007.1	-469.4	4,021.6	2.74	-0.64	2.66
11,454.0	90.40	182.60	7,501.2	-4,102.1	-472.3	4,116.6	2.02	0.95	1.79
11,549.0	90.60	181.40	7,500.4	-4,197.0	-475.7	4,211.6	1.28	0.21	-1.26
11,643.0	91.00	180.00	7,499.1	-4,291.0	-476.8	4,305.5	1.55	0.43	-1.49
11,738.0	89.40	179.50	7,498.7	-4,386.0	-476.4	4,400.5	1.76	-1.68	-0.53
11,833.0	88.90	178.80	7,500.2	-4,481.0	-475.0	4,495.3	0.91	-0.53	-0.74
11,927.0	90.70	179.30	7,500.5	-4,575.0	-473.4	4,589.2	1.99	1.91	0.53
12,022.0	91.90	178.30	7,498.3	-4,669.9	-471.4	4,684.0	1.64	1.26	-1.05
12,117.0	89.90	177.90	7,496.8	-4,764.8	-468.3	4,778.8	2.15	-2.11	-0.42
12,211.0	90.60	177.50	7,496.4	-4,858.8	-464.5	4,872.5	0.86	0.74	-0.43
12,306.0	90.40	179.10	7,495.6	-4,953.7	-461.7	4,967.3	1.70	-0.21	1.68
12,401.0	91.50	178.40	7,494.0	-5,048.7	-459.6	5,062.1	1.37	1.16	-0.74
12,495.0	91.30	179.70	7,491.7	-5,142.6	-458.1	5,155.9	1.40	-0.21	1.38
12,590.0	90.30	179.70	7,490.4	-5,237.6	-457.6	5,250.8	1.05	-1.05	0.00
12,684.0	91.30	179.70	7,489.1	-5,331.6	-457.1	5,344.7	1.06	1.06	0.00
12,779.0	90.50	178.80	7,487.6	-5,426.6	-455.8	5,439.6	1.27	-0.84	-0.95
12,873.0	91.50	178.80	7,486.0	-5,520.6	-453.9	5,533.4	1.06	1.06	0.00
12,968.0	90.40	178.10	7,484.4	-5,615.5	-451.3	5,628.2	1.37	-1.16	-0.74
13,063.0	89.30	178.80	7,484.6	-5,710.5	-448.7	5,723.0	1.37	-1.16	0.74
13,157.0	90.00	178.10	7,485.2	-5,804.4	-446.2	5,816.8	1.05	0.74	-0.74
13,252.0	91.30	177.40	7,484.1	-5,899.4	-442.5	5,911.6	1.55	1.37	-0.74
13,346.0	90.80	177.90	7,482.4	-5,993.3	-438.6	6,005.3	0.75	-0.53	0.53
13,441.0	89.80	177.70	7,481.9	-6,088.2	-435.0	6,100.0	1.07	-1.05	-0.21
13,536.0	90.50	180.00	7,481.7	-6,183.2	-433.0	6,194.8	2.53	0.74	2.42
13,630.0	89.40	180.40	7,481.7	-6,277.2	-433.4	6,288.8	1.25	-1.17	0.43
13,725.0	90.50	179.80	7,481.8	-6,372.2	-433.5	6,383.7	1.32	1.16	-0.63
13,822.0	89.90	178.80	7,481.5	-6,469.1	-432.4	6,480.6	1.20	-0.62	-1.03
13,916.0	89.70	177.90	7,481.8	-6,563.1	-429.6	6,574.4	0.98	-0.21	-0.96
14,011.0	89.40	179.00	7,482.6	-6,658.1	-427.1	6,669.2	1.20	-0.32	1.16
14,105.0	88.70	178.40	7,484.1	-6,752.0	-424.9	6,763.0	0.98	-0.74	-0.64
14,200.0	88.70	180.00	7,486.3	-6,847.0	-423.6	6,857.9	1.68	0.00	1.68
14,294.0	88.70	179.10	7,488.4	-6,941.0	-422.9	6,951.8	0.96	0.00	-0.96
14,389.0	89.30	177.50	7,490.1	-7,035.9	-420.1	7,046.5	1.80	0.63	-1.68
14,483.0	89.50	179.00	7,491.0	-7,129.8	-417.2	7,140.3	1.61	0.21	1.60
14,578.0	89.90	180.90	7,491.5	-7,224.8	-417.1	7,235.2	2.04	0.42	2.00

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 562-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5244.0ft (Cade 23 RKB - 16')
Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5244.0ft (Cade 23 RKB - 16')
Well:	Critter Creek 562-1527H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	US_EDM

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)
14,672.0	88.80	180.50	7,492.6	-7,318.8	-418.3	7,329.2	1.25	-1.17	-0.43
14,767.0	89.40	179.80	7,494.1	-7,413.8	-418.5	7,424.1	0.97	0.63	-0.74
14,861.0	89.30	179.30	7,495.2	-7,507.8	-417.8	7,518.0	0.54	-0.11	-0.53
14,957.0	90.60	179.10	7,495.2	-7,603.8	-416.4	7,613.9	1.37	1.35	-0.21
15,051.0	90.90	178.80	7,494.0	-7,697.8	-414.7	7,707.8	0.45	0.32	-0.32
15,146.0	88.90	178.80	7,494.2	-7,792.7	-412.7	7,802.6	2.11	-2.11	0.00
15,241.0	90.60	179.30	7,494.6	-7,887.7	-411.1	7,897.5	1.87	1.79	0.53
15,336.0	87.20	177.20	7,496.4	-7,982.6	-408.2	7,992.2	4.21	-3.58	-2.21
15,430.0	90.10	178.40	7,498.6	-8,076.5	-404.6	8,085.9	3.34	3.09	1.28
15,525.0	91.60	179.80	7,497.2	-8,171.5	-403.1	8,180.8	2.16	1.58	1.47
15,620.0	88.60	178.80	7,497.1	-8,266.5	-402.0	8,275.7	3.33	-3.16	-1.05
15,667.0	90.30	179.10	7,497.5	-8,313.5	-401.1	8,322.6	3.67	3.62	0.64
15,716.0	91.50	179.10	7,496.7	-8,362.5	-400.4	8,371.5	2.45	2.45	0.00
15,763.0	92.90	179.80	7,494.9	-8,409.4	-399.9	8,418.4	3.33	2.98	1.49
15,811.0	93.10	179.80	7,492.4	-8,457.4	-399.7	8,466.3	0.42	0.42	0.00
15,858.0	92.90	181.20	7,490.0	-8,504.3	-400.1	8,513.2	3.00	-0.43	2.98
15,905.0	93.00	181.20	7,487.5	-8,551.2	-401.1	8,560.2	0.21	0.21	0.00
15,999.0	91.70	180.90	7,483.7	-8,645.1	-402.9	8,654.1	1.42	-1.38	-0.32
16,093.0	90.30	180.70	7,482.1	-8,739.1	-404.2	8,748.0	1.50	-1.49	-0.21
16,187.0	89.50	180.50	7,482.2	-8,833.1	-405.1	8,842.0	0.88	-0.85	-0.21
16,282.0	90.50	179.70	7,482.2	-8,928.1	-405.3	8,936.9	1.35	1.05	-0.84
16,376.0	89.60	180.20	7,482.1	-9,022.1	-405.2	9,030.9	1.10	-0.96	0.53
16,471.0	90.70	179.80	7,481.9	-9,117.1	-405.2	9,125.8	1.23	1.16	-0.42
16,566.0	89.50	179.50	7,481.7	-9,212.1	-404.7	9,220.7	1.30	-1.26	-0.32
16,660.0	90.70	179.10	7,481.6	-9,306.1	-403.5	9,314.6	1.35	1.28	-0.43
16,755.0	89.50	179.10	7,481.4	-9,401.1	-402.0	9,409.5	1.26	-1.26	0.00
16,851.0	89.70	179.00	7,482.1	-9,497.0	-400.4	9,505.3	0.23	0.21	-0.10
16,946.0	90.70	178.30	7,481.7	-9,592.0	-398.2	9,600.2	1.28	1.05	-0.74
17,040.0	90.20	178.80	7,481.0	-9,686.0	-395.8	9,694.0	0.75	-0.53	0.53
17,135.0	89.70	178.30	7,481.1	-9,781.0	-393.4	9,788.8	0.74	-0.53	-0.53
17,230.0	90.40	177.90	7,481.0	-9,875.9	-390.2	9,883.6	0.85	0.74	-0.42
17,323.0	89.00	177.90	7,481.5	-9,968.8	-386.8	9,976.3	1.51	-1.51	0.00
17,418.0	89.80	176.50	7,482.5	-10,063.7	-382.2	10,071.0	1.70	0.84	-1.47
17,511.0	89.90	178.30	7,482.7	-10,156.6	-378.0	10,163.6	1.94	0.11	1.94
17,606.0	90.40	178.80	7,482.5	-10,251.6	-375.6	10,258.5	0.74	0.53	0.53
17,699.0	90.30	179.70	7,481.9	-10,344.6	-374.4	10,351.3	0.97	-0.11	0.97
17,793.0	89.70	177.50	7,481.9	-10,438.5	-372.1	10,445.2	2.43	-0.64	-2.34
17,827.0	89.30	176.70	7,482.2	-10,472.5	-370.3	10,479.0	2.63	-1.18	-2.35
17,882.0	89.30	176.70	7,482.9	-10,527.4	-367.2	10,533.8	0.00	0.00	0.00

Company:	Fifth Creek Energy Company, LLC	Local Co-ordinate Reference:	Well Critter Creek 562-1527H
Project:	Sec.15-T11N-R63W	TVD Reference:	WELL @ 5244.0ft (Cade 23 RKB - 16')
Site:	Critter Creek Pad 15-11N-63W	MD Reference:	WELL @ 5244.0ft (Cade 23 RKB - 16')
Well:	Critter Creek 562-1527H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	US_EDM

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL 279' FSL & 1740'FE - survey misses target center by 1537.9ft at 1539.0ft MD (1538.9 TVD, -1.5 N, 3.0 E) - Point	0.00	0.00	1.0	0.0	0.0	1,578,365.54	3,299,655.18	40.915953	-104.415800
BHL 300'FSL & 2220'FE - survey misses target center by 42.4ft at 17880.8ft MD (7482.9 TVD, -10526.2 N, -367.2 E) - Point	0.00	0.00	7,444.0	-10,527.6	-384.1	1,567,833.71	3,299,399.85	40.887058	-104.417189

Checked By: _____	Approved By: _____	Date: _____
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