



PROJECT DETAILS: Weld County, CO NAD 83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level
Local North: True

Project: Weld County, CO NAD 83
Site: Critter Creek 16 SW Pad
Well: Critter Creek 16-6302BE
Wellbore: OH
Design: Plan 1



Azimuths to True North
Magnetic North: 8.30°

Magnetic Field
Strength: 52775.5nT
Dip Angle: 67.20°
Date: 5/8/2018
Model: HDGM

Plan: Plan 1 (Critter Creek 16-6302BE/OH)

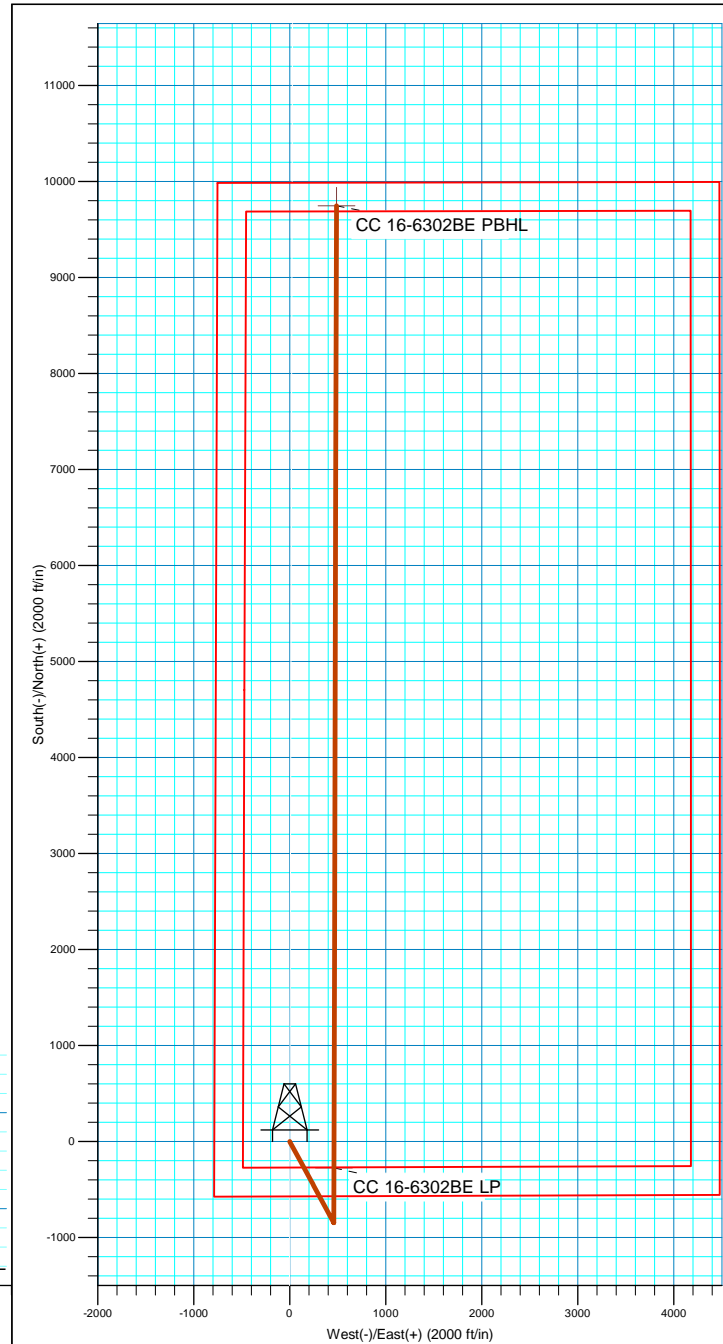
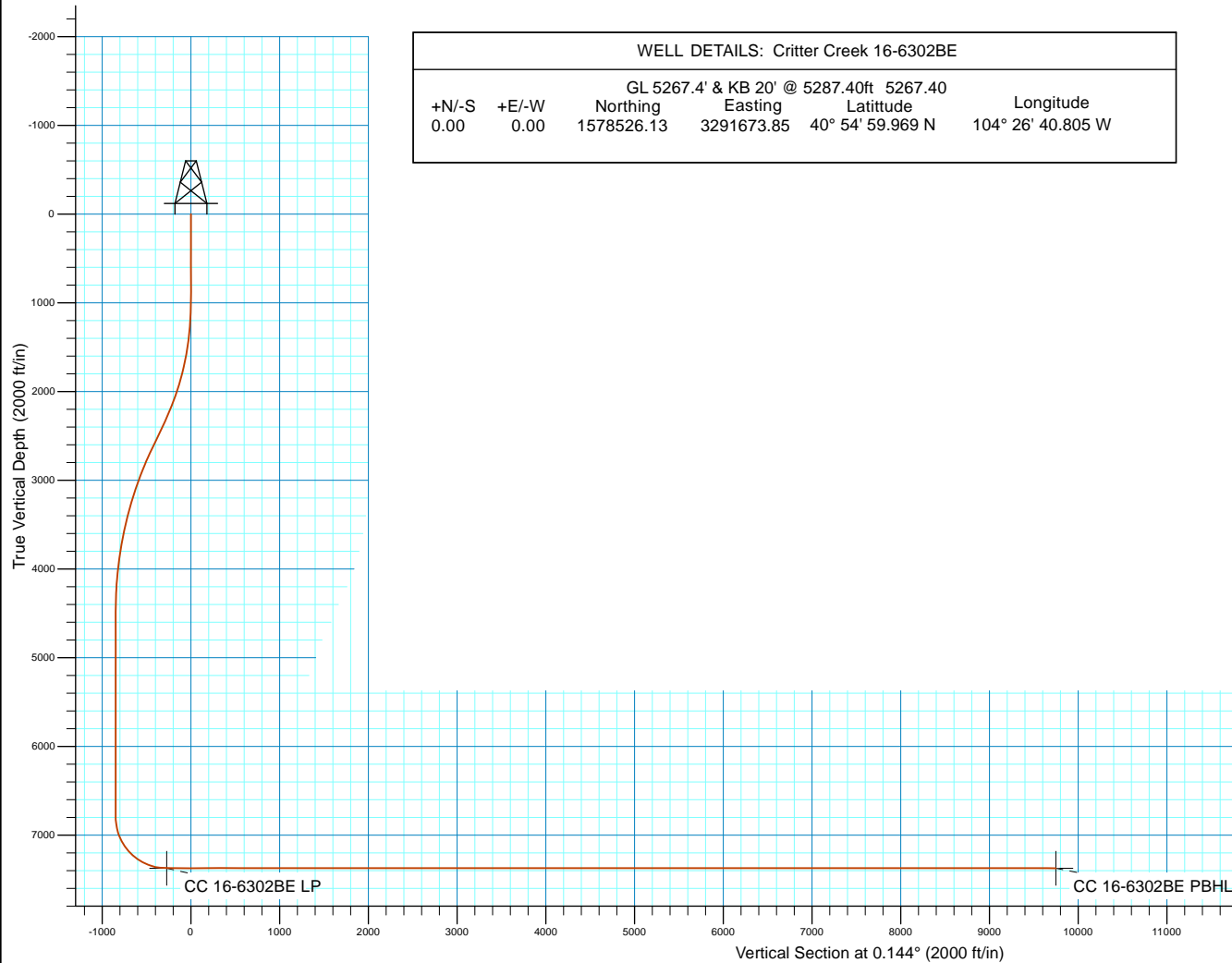
Created By: Seth Burstad

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
1000.00	0.00	0.000	1000.00	0.00	0.00	0.00	0.00	0.00
2434.09	28.68	151.535	2374.94	-309.02	167.54	2.00	151.53	-308.60
2734.21	28.68	151.535	2638.23	-435.64	236.19	0.00	0.00	-435.05
4646.33	0.00	0.000	4471.49	-847.67	459.58	1.50	180.00	-846.51
6975.88	0.00	0.000	6801.04	-847.67	459.58	0.00	0.00	-846.51
7875.88	90.00	0.144	7374.00	-274.71	461.02	10.00	0.14	-273.55
17897.88	90.00	0.144	7374.00	9747.26	486.25	0.00	0.00	9748.45

WELL DETAILS: Critter Creek 16-6302BE

GL 5267.4' & KB 20' @ 5287.40ft 5267.40						Longitude	
+N/-S	+E/-W	Northing	Easting	Latitude			
0.00	0.00	1578526.13	3291673.85	40° 54' 59.969 N		104° 26' 40.805 W	



HighPoint Resources

Weld County, CO NAD 83
Crittter Creek 16 SW Pad
Crittter Creek 16-6302BE

OH

Plan: Plan 1

Standard Planning Report

08 May, 2018



Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-6302BE
Company:	HighPoint Resources	TVD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Site:	Critter Creek 16 SW Pad	North Reference:	True
Well:	Critter Creek 16-6302BE	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project	Weld County, CO NAD 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Critter Creek 16 SW Pad, Site Center : Critter Creek 16-6104B			
Site Position:		Northing:	1,578,526.67 usft	Latitude:	40° 54' 59.969 N
From:	Lat/Long	Easting:	3,291,718.90 usft	Longitude:	104° 26' 40.218 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.68 °

Well	Critter Creek 16-6302BE, 575' FSL 785' FWL Sec 16 T11N R63W					
Well Position	+N/-S	-0.01 ft	Northing:	1,578,526.12 usft	Latitude:	40° 54' 59.969 N
	+E/-W	-45.05 ft	Easting:	3,291,673.86 usft	Longitude:	104° 26' 40.805 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,267.40 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/8/2018	8.30	67.20	52,776

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	0.144

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,434.09	28.68	151.535	2,374.94	-309.02	167.54	2.00	2.00	0.00	151.53	
2,734.21	28.68	151.535	2,638.23	-435.64	236.19	0.00	0.00	0.00	0.00	
4,646.33	0.00	0.000	4,471.49	-847.67	459.58	1.50	-1.50	0.00	180.00	
6,975.88	0.00	0.000	6,801.04	-847.67	459.58	0.00	0.00	0.00	0.00	
7,875.88	90.00	0.144	7,374.00	-274.71	461.02	10.00	10.00	0.02	0.14	
17,897.88	90.00	0.144	7,374.00	9,747.26	486.25	0.00	0.00	0.00	0.00	CC 16-6302BE PBHL

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-6302BE
Company:	HighPoint Resources	TVD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Site:	Critter Creek 16 SW Pad	North Reference:	True
Well:	Critter Creek 16-6302BE	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.000	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.000	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.000	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.000	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.000	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,100.00	2.00	151.535	1,099.98	-1.53	0.83	-1.53	2.00	2.00	0.00
1,200.00	4.00	151.535	1,199.84	-6.13	3.33	-6.13	2.00	2.00	0.00
1,300.00	6.00	151.535	1,299.45	-13.80	7.48	-13.78	2.00	2.00	0.00
1,400.00	8.00	151.535	1,398.70	-24.51	13.29	-24.48	2.00	2.00	0.00
1,500.00	10.00	151.535	1,497.47	-38.26	20.74	-38.21	2.00	2.00	0.00
1,600.00	12.00	151.535	1,595.62	-55.03	29.84	-54.96	2.00	2.00	0.00
1,700.00	14.00	151.535	1,693.06	-74.81	40.56	-74.71	2.00	2.00	0.00
1,800.00	16.00	151.535	1,789.64	-97.56	52.89	-97.43	2.00	2.00	0.00
1,900.00	18.00	151.535	1,885.27	-123.26	66.83	-123.09	2.00	2.00	0.00
2,000.00	20.00	151.535	1,979.82	-151.88	82.35	-151.67	2.00	2.00	0.00
2,100.00	22.00	151.535	2,073.17	-183.38	99.43	-183.13	2.00	2.00	0.00
2,200.00	24.00	151.535	2,165.21	-217.73	118.05	-217.43	2.00	2.00	0.00
2,300.00	26.00	151.535	2,255.84	-254.88	138.19	-254.53	2.00	2.00	0.00
2,400.00	28.00	151.535	2,344.94	-294.79	159.83	-294.39	2.00	2.00	0.00
2,434.09	28.68	151.535	2,374.94	-309.02	167.54	-308.60	2.00	2.00	0.00
Start 300.11 hold at 2434.09 MD									
2,500.00	28.68	151.535	2,432.76	-336.83	182.62	-336.37	0.00	0.00	0.00
2,600.00	28.68	151.535	2,520.49	-379.02	205.49	-378.50	0.00	0.00	0.00
2,700.00	28.68	151.535	2,608.22	-421.21	228.37	-420.64	0.00	0.00	0.00
2,734.21	28.68	151.535	2,638.23	-435.64	236.19	-435.05	0.00	0.00	0.00
Start Drop -1.50									
2,800.00	27.69	151.535	2,696.22	-462.97	251.01	-462.33	1.50	-1.50	0.00
2,900.00	26.19	151.535	2,785.36	-502.80	272.60	-502.11	1.50	-1.50	0.00
3,000.00	24.69	151.535	2,875.66	-540.57	293.08	-539.83	1.50	-1.50	0.00
3,100.00	23.19	151.535	2,967.05	-576.25	312.42	-575.46	1.50	-1.50	0.00
3,200.00	21.69	151.535	3,059.47	-609.81	330.62	-608.98	1.50	-1.50	0.00
3,300.00	20.19	151.535	3,152.86	-641.24	347.66	-640.36	1.50	-1.50	0.00
3,400.00	18.69	151.535	3,247.16	-670.50	363.52	-669.58	1.50	-1.50	0.00
3,500.00	17.19	151.535	3,342.29	-697.58	378.21	-696.63	1.50	-1.50	0.00
3,600.00	15.69	151.535	3,438.20	-722.47	391.70	-721.48	1.50	-1.50	0.00
3,700.00	14.19	151.535	3,534.81	-745.14	403.99	-744.12	1.50	-1.50	0.00
3,800.00	12.69	151.535	3,632.07	-765.58	415.07	-764.54	1.50	-1.50	0.00
3,900.00	11.19	151.535	3,729.90	-783.78	424.94	-782.71	1.50	-1.50	0.00
4,000.00	9.69	151.535	3,828.24	-799.71	433.58	-798.62	1.50	-1.50	0.00
4,100.00	8.19	151.535	3,927.02	-813.38	440.99	-812.27	1.50	-1.50	0.00
4,200.00	6.69	151.535	4,026.17	-824.77	447.17	-823.65	1.50	-1.50	0.00
4,300.00	5.19	151.535	4,125.63	-833.88	452.10	-832.74	1.50	-1.50	0.00
4,400.00	3.69	151.535	4,225.33	-840.69	455.80	-839.54	1.50	-1.50	0.00
4,500.00	2.19	151.535	4,325.20	-845.21	458.24	-844.05	1.50	-1.50	0.00
4,600.00	0.69	151.535	4,425.16	-847.42	459.45	-846.27	1.50	-1.50	0.00
4,646.33	0.00	0.000	4,471.49	-847.67	459.58	-846.51	1.50	-1.50	0.00
Start 2329.55 hold at 4646.33 MD									

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-6302BE
Company:	HighPoint Resources	TVD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Site:	Critter Creek 16 SW Pad	North Reference:	True
Well:	Critter Creek 16-6302BE	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	0.00	0.000	4,525.16	-847.67	459.58	-846.51	0.00	0.00	0.00
4,800.00	0.00	0.000	4,625.16	-847.67	459.58	-846.51	0.00	0.00	0.00
4,900.00	0.00	0.000	4,725.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,000.00	0.00	0.000	4,825.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,100.00	0.00	0.000	4,925.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,200.00	0.00	0.000	5,025.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,300.00	0.00	0.000	5,125.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,400.00	0.00	0.000	5,225.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,500.00	0.00	0.000	5,325.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,600.00	0.00	0.000	5,425.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,700.00	0.00	0.000	5,525.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,800.00	0.00	0.000	5,625.16	-847.67	459.58	-846.51	0.00	0.00	0.00
5,900.00	0.00	0.000	5,725.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,000.00	0.00	0.000	5,825.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,100.00	0.00	0.000	5,925.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,200.00	0.00	0.000	6,025.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,300.00	0.00	0.000	6,125.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,400.00	0.00	0.000	6,225.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,500.00	0.00	0.000	6,325.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,600.00	0.00	0.000	6,425.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,700.00	0.00	0.000	6,525.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,800.00	0.00	0.000	6,625.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,900.00	0.00	0.000	6,725.16	-847.67	459.58	-846.51	0.00	0.00	0.00
6,975.88	0.00	0.000	6,801.04	-847.67	459.58	-846.51	0.00	0.00	0.00
Start DLS 10.00 TFO 0.14									
7,000.00	2.41	0.144	6,825.15	-847.16	459.58	-846.00	10.00	10.00	0.00
7,100.00	12.41	0.144	6,924.19	-834.28	459.61	-833.12	10.00	10.00	0.00
7,200.00	22.41	0.144	7,019.49	-804.39	459.69	-803.23	10.00	10.00	0.00
7,300.00	32.41	0.144	7,108.15	-758.41	459.80	-757.25	10.00	10.00	0.00
7,400.00	42.41	0.144	7,187.48	-697.74	459.96	-696.58	10.00	10.00	0.00
7,500.00	52.41	0.144	7,255.06	-624.21	460.14	-623.05	10.00	10.00	0.00
7,600.00	62.41	0.144	7,308.85	-540.06	460.35	-538.90	10.00	10.00	0.00
7,700.00	72.41	0.144	7,347.21	-447.84	460.59	-446.69	10.00	10.00	0.00
7,800.00	82.41	0.144	7,368.98	-350.37	460.83	-349.21	10.00	10.00	0.00
7,875.88	90.00	0.144	7,374.00	-274.71	461.02	-273.55	10.00	10.00	0.00
Start 10022.00 hold at 7875.88 MD									
7,900.00	90.00	0.144	7,374.00	-250.59	461.08	-249.44	0.00	0.00	0.00
8,000.00	90.00	0.144	7,374.00	-150.59	461.33	-149.44	0.00	0.00	0.00
8,100.00	90.00	0.144	7,374.00	-50.60	461.59	-49.44	0.00	0.00	0.00
8,200.00	90.00	0.144	7,374.00	49.40	461.84	50.57	0.00	0.00	0.00
8,300.00	90.00	0.144	7,374.00	149.40	462.09	150.57	0.00	0.00	0.00
8,400.00	90.00	0.144	7,374.00	249.40	462.34	250.57	0.00	0.00	0.00
8,500.00	90.00	0.144	7,374.00	349.40	462.59	350.57	0.00	0.00	0.00
8,600.00	90.00	0.144	7,374.00	449.40	462.85	450.57	0.00	0.00	0.00
8,700.00	90.00	0.144	7,374.00	549.40	463.10	550.57	0.00	0.00	0.00
8,800.00	90.00	0.144	7,374.00	649.40	463.35	650.57	0.00	0.00	0.00
8,900.00	90.00	0.144	7,374.00	749.40	463.60	750.57	0.00	0.00	0.00
9,000.00	90.00	0.144	7,374.00	849.40	463.85	850.57	0.00	0.00	0.00
9,100.00	90.00	0.144	7,374.00	949.40	464.10	950.57	0.00	0.00	0.00
9,200.00	90.00	0.144	7,374.00	1,049.40	464.36	1,050.57	0.00	0.00	0.00
9,300.00	90.00	0.144	7,374.00	1,149.40	464.61	1,150.57	0.00	0.00	0.00
9,400.00	90.00	0.144	7,374.00	1,249.40	464.86	1,250.57	0.00	0.00	0.00
9,500.00	90.00	0.144	7,374.00	1,349.40	465.11	1,350.57	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-6302BE
Company:	HighPoint Resources	TVD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Site:	Critter Creek 16 SW Pad	North Reference:	True
Well:	Critter Creek 16-6302BE	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,600.00	90.00	0.144	7,374.00	1,449.40	465.36	1,450.57	0.00	0.00	0.00
9,700.00	90.00	0.144	7,374.00	1,549.40	465.61	1,550.57	0.00	0.00	0.00
9,800.00	90.00	0.144	7,374.00	1,649.40	465.87	1,650.57	0.00	0.00	0.00
9,900.00	90.00	0.144	7,374.00	1,749.40	466.12	1,750.57	0.00	0.00	0.00
10,000.00	90.00	0.144	7,374.00	1,849.40	466.37	1,850.57	0.00	0.00	0.00
10,100.00	90.00	0.144	7,374.00	1,949.40	466.62	1,950.57	0.00	0.00	0.00
10,200.00	90.00	0.144	7,374.00	2,049.40	466.87	2,050.57	0.00	0.00	0.00
10,300.00	90.00	0.144	7,374.00	2,149.40	467.12	2,150.57	0.00	0.00	0.00
10,400.00	90.00	0.144	7,374.00	2,249.40	467.38	2,250.57	0.00	0.00	0.00
10,500.00	90.00	0.144	7,374.00	2,349.40	467.63	2,350.57	0.00	0.00	0.00
10,600.00	90.00	0.144	7,374.00	2,449.40	467.88	2,450.57	0.00	0.00	0.00
10,700.00	90.00	0.144	7,374.00	2,549.40	468.13	2,550.57	0.00	0.00	0.00
10,800.00	90.00	0.144	7,374.00	2,649.40	468.38	2,650.57	0.00	0.00	0.00
10,900.00	90.00	0.144	7,374.00	2,749.40	468.63	2,750.57	0.00	0.00	0.00
11,000.00	90.00	0.144	7,374.00	2,849.40	468.89	2,850.57	0.00	0.00	0.00
11,100.00	90.00	0.144	7,374.00	2,949.40	469.14	2,950.57	0.00	0.00	0.00
11,200.00	90.00	0.144	7,374.00	3,049.39	469.39	3,050.57	0.00	0.00	0.00
11,300.00	90.00	0.144	7,374.00	3,149.39	469.64	3,150.57	0.00	0.00	0.00
11,400.00	90.00	0.144	7,374.00	3,249.39	469.89	3,250.57	0.00	0.00	0.00
11,500.00	90.00	0.144	7,374.00	3,349.39	470.14	3,350.57	0.00	0.00	0.00
11,600.00	90.00	0.144	7,374.00	3,449.39	470.40	3,450.57	0.00	0.00	0.00
11,700.00	90.00	0.144	7,374.00	3,549.39	470.65	3,550.57	0.00	0.00	0.00
11,800.00	90.00	0.144	7,374.00	3,649.39	470.90	3,650.57	0.00	0.00	0.00
11,900.00	90.00	0.144	7,374.00	3,749.39	471.15	3,750.57	0.00	0.00	0.00
12,000.00	90.00	0.144	7,374.00	3,849.39	471.40	3,850.57	0.00	0.00	0.00
12,100.00	90.00	0.144	7,374.00	3,949.39	471.66	3,950.57	0.00	0.00	0.00
12,200.00	90.00	0.144	7,374.00	4,049.39	471.91	4,050.57	0.00	0.00	0.00
12,300.00	90.00	0.144	7,374.00	4,149.39	472.16	4,150.57	0.00	0.00	0.00
12,400.00	90.00	0.144	7,374.00	4,249.39	472.41	4,250.57	0.00	0.00	0.00
12,500.00	90.00	0.144	7,374.00	4,349.39	472.66	4,350.57	0.00	0.00	0.00
12,600.00	90.00	0.144	7,374.00	4,449.39	472.91	4,450.57	0.00	0.00	0.00
12,700.00	90.00	0.144	7,374.00	4,549.39	473.17	4,550.57	0.00	0.00	0.00
12,800.00	90.00	0.144	7,374.00	4,649.39	473.42	4,650.57	0.00	0.00	0.00
12,900.00	90.00	0.144	7,374.00	4,749.39	473.67	4,750.57	0.00	0.00	0.00
13,000.00	90.00	0.144	7,374.00	4,849.39	473.92	4,850.57	0.00	0.00	0.00
13,100.00	90.00	0.144	7,374.00	4,949.39	474.17	4,950.57	0.00	0.00	0.00
13,200.00	90.00	0.144	7,374.00	5,049.39	474.42	5,050.57	0.00	0.00	0.00
13,300.00	90.00	0.144	7,374.00	5,149.39	474.68	5,150.57	0.00	0.00	0.00
13,400.00	90.00	0.144	7,374.00	5,249.39	474.93	5,250.57	0.00	0.00	0.00
13,500.00	90.00	0.144	7,374.00	5,349.39	475.18	5,350.57	0.00	0.00	0.00
13,600.00	90.00	0.144	7,374.00	5,449.39	475.43	5,450.57	0.00	0.00	0.00
13,700.00	90.00	0.144	7,374.00	5,549.39	475.68	5,550.57	0.00	0.00	0.00
13,800.00	90.00	0.144	7,374.00	5,649.39	475.93	5,650.57	0.00	0.00	0.00
13,900.00	90.00	0.144	7,374.00	5,749.39	476.19	5,750.57	0.00	0.00	0.00
14,000.00	90.00	0.144	7,374.00	5,849.39	476.44	5,850.57	0.00	0.00	0.00
14,100.00	90.00	0.144	7,374.00	5,949.39	476.69	5,950.57	0.00	0.00	0.00
14,200.00	90.00	0.144	7,374.00	6,049.39	476.94	6,050.57	0.00	0.00	0.00
14,300.00	90.00	0.144	7,374.00	6,149.39	477.19	6,150.57	0.00	0.00	0.00
14,400.00	90.00	0.144	7,374.00	6,249.38	477.44	6,250.57	0.00	0.00	0.00
14,500.00	90.00	0.144	7,374.00	6,349.38	477.70	6,350.57	0.00	0.00	0.00
14,600.00	90.00	0.144	7,374.00	6,449.38	477.95	6,450.57	0.00	0.00	0.00
14,700.00	90.00	0.144	7,374.00	6,549.38	478.20	6,550.57	0.00	0.00	0.00
14,800.00	90.00	0.144	7,374.00	6,649.38	478.45	6,650.57	0.00	0.00	0.00
14,900.00	90.00	0.144	7,374.00	6,749.38	478.70	6,750.57	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-6302BE
Company:	HighPoint Resources	TVD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Site:	Critter Creek 16 SW Pad	North Reference:	True
Well:	Critter Creek 16-6302BE	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,000.00	90.00	0.144	7,374.00	6,849.38	478.96	6,850.57	0.00	0.00	0.00
15,100.00	90.00	0.144	7,374.00	6,949.38	479.21	6,950.57	0.00	0.00	0.00
15,200.00	90.00	0.144	7,374.00	7,049.38	479.46	7,050.57	0.00	0.00	0.00
15,300.00	90.00	0.144	7,374.00	7,149.38	479.71	7,150.57	0.00	0.00	0.00
15,400.00	90.00	0.144	7,374.00	7,249.38	479.96	7,250.57	0.00	0.00	0.00
15,500.00	90.00	0.144	7,374.00	7,349.38	480.21	7,350.57	0.00	0.00	0.00
15,600.00	90.00	0.144	7,374.00	7,449.38	480.47	7,450.57	0.00	0.00	0.00
15,700.00	90.00	0.144	7,374.00	7,549.38	480.72	7,550.57	0.00	0.00	0.00
15,800.00	90.00	0.144	7,374.00	7,649.38	480.97	7,650.57	0.00	0.00	0.00
15,900.00	90.00	0.144	7,374.00	7,749.38	481.22	7,750.57	0.00	0.00	0.00
16,000.00	90.00	0.144	7,374.00	7,849.38	481.47	7,850.57	0.00	0.00	0.00
16,100.00	90.00	0.144	7,374.00	7,949.38	481.72	7,950.57	0.00	0.00	0.00
16,200.00	90.00	0.144	7,374.00	8,049.38	481.98	8,050.57	0.00	0.00	0.00
16,300.00	90.00	0.144	7,374.00	8,149.38	482.23	8,150.57	0.00	0.00	0.00
16,400.00	90.00	0.144	7,374.00	8,249.38	482.48	8,250.57	0.00	0.00	0.00
16,500.00	90.00	0.144	7,374.00	8,349.38	482.73	8,350.57	0.00	0.00	0.00
16,600.00	90.00	0.144	7,374.00	8,449.38	482.98	8,450.57	0.00	0.00	0.00
16,700.00	90.00	0.144	7,374.00	8,549.38	483.23	8,550.57	0.00	0.00	0.00
16,800.00	90.00	0.144	7,374.00	8,649.38	483.49	8,650.57	0.00	0.00	0.00
16,900.00	90.00	0.144	7,374.00	8,749.38	483.74	8,750.57	0.00	0.00	0.00
17,000.00	90.00	0.144	7,374.00	8,849.38	483.99	8,850.57	0.00	0.00	0.00
17,100.00	90.00	0.144	7,374.00	8,949.38	484.24	8,950.57	0.00	0.00	0.00
17,200.00	90.00	0.144	7,374.00	9,049.38	484.49	9,050.57	0.00	0.00	0.00
17,300.00	90.00	0.144	7,374.00	9,149.38	484.74	9,150.57	0.00	0.00	0.00
17,400.00	90.00	0.144	7,374.00	9,249.38	485.00	9,250.57	0.00	0.00	0.00
17,500.00	90.00	0.144	7,374.00	9,349.38	485.25	9,350.57	0.00	0.00	0.00
17,600.00	90.00	0.144	7,374.00	9,449.37	485.50	9,450.57	0.00	0.00	0.00
17,700.00	90.00	0.144	7,374.00	9,549.37	485.75	9,550.57	0.00	0.00	0.00
17,800.00	90.00	0.144	7,374.00	9,649.37	486.00	9,650.57	0.00	0.00	0.00
17,897.88	90.00	0.144	7,374.00	9,747.25	486.25	9,748.44	0.00	0.00	0.00
TD at 17897.88									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
CC 16-6302BE PBHL - hit/miss target - Shape - Point	0.00	0.000	7,374.00	9,747.26	486.25	1,588,278.46	3,292,044.07	40° 56' 36.276 N	104° 26' 34.469 W
CC 16-6302BE LP - plan hits target center - Point	0.00	0.000	7,374.00	-274.71	461.02	1,578,256.92	3,292,138.11	40° 54' 57.254 N	104° 26' 34.800 W

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-6302BE
Company:	HighPoint Resources	TVD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5267.4' & KB 20' @ 5287.40ft
Site:	Critter Creek 16 SW Pad	North Reference:	True
Well:	Critter Creek 16-6302BE	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00
2,434.09	2,374.94	-309.02	167.54	Start 300.11 hold at 2434.09 MD
2,734.21	2,638.23	-435.64	236.19	Start Drop -1.50
4,646.33	4,471.49	-847.67	459.58	Start 2329.55 hold at 4646.33 MD
6,975.88	6,801.04	-847.67	459.58	Start DLS 10.00 TFO 0.14
7,875.88	7,374.00	-274.71	461.02	Start 10022.00 hold at 7875.88 MD
17,897.88	7,374.00	9,747.25	486.25	TD at 17897.88