



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 SE Pad
Well: Critter Creek 16-5906B
Wellbore: OH
Design: Plan 2



Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52777.6nT
Dip Angle: 67.20°
Date: 5/21/2018
Model: HDGM

Plan: Plan 2 (Critter Creek 16-5906B/OH)

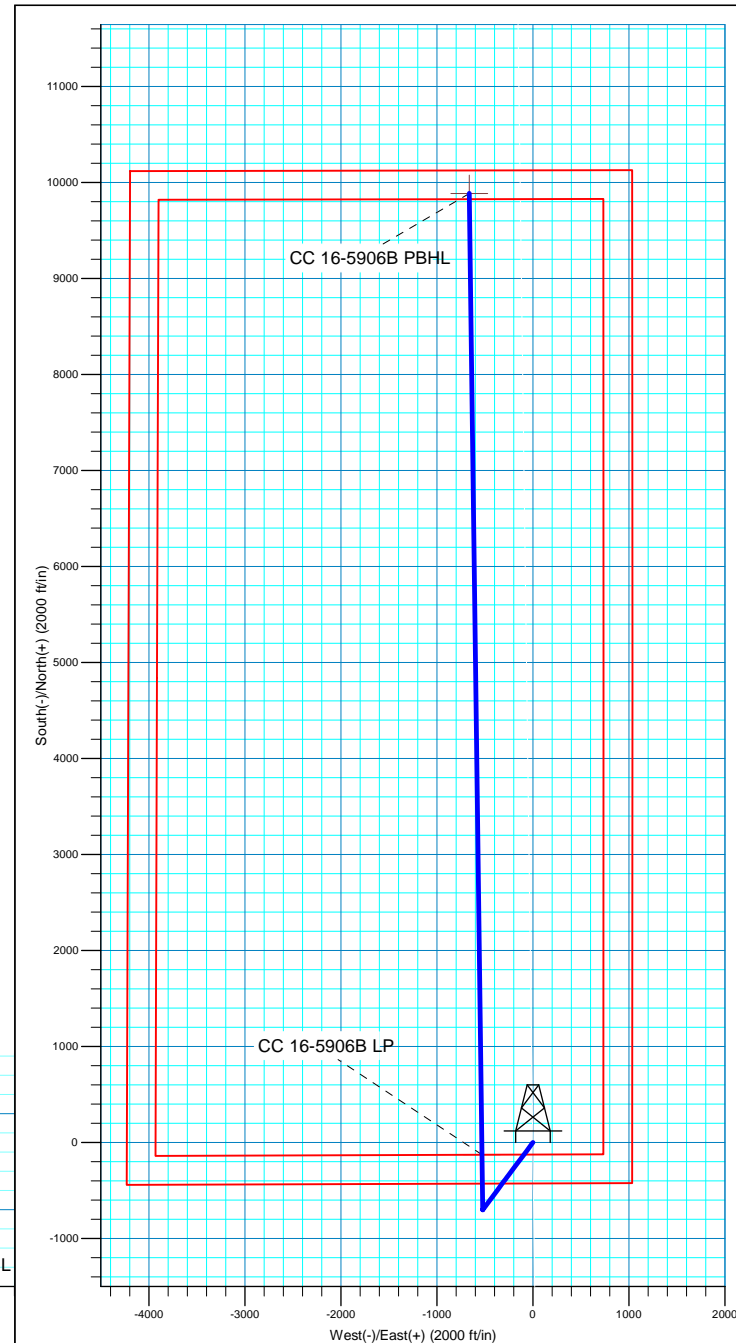
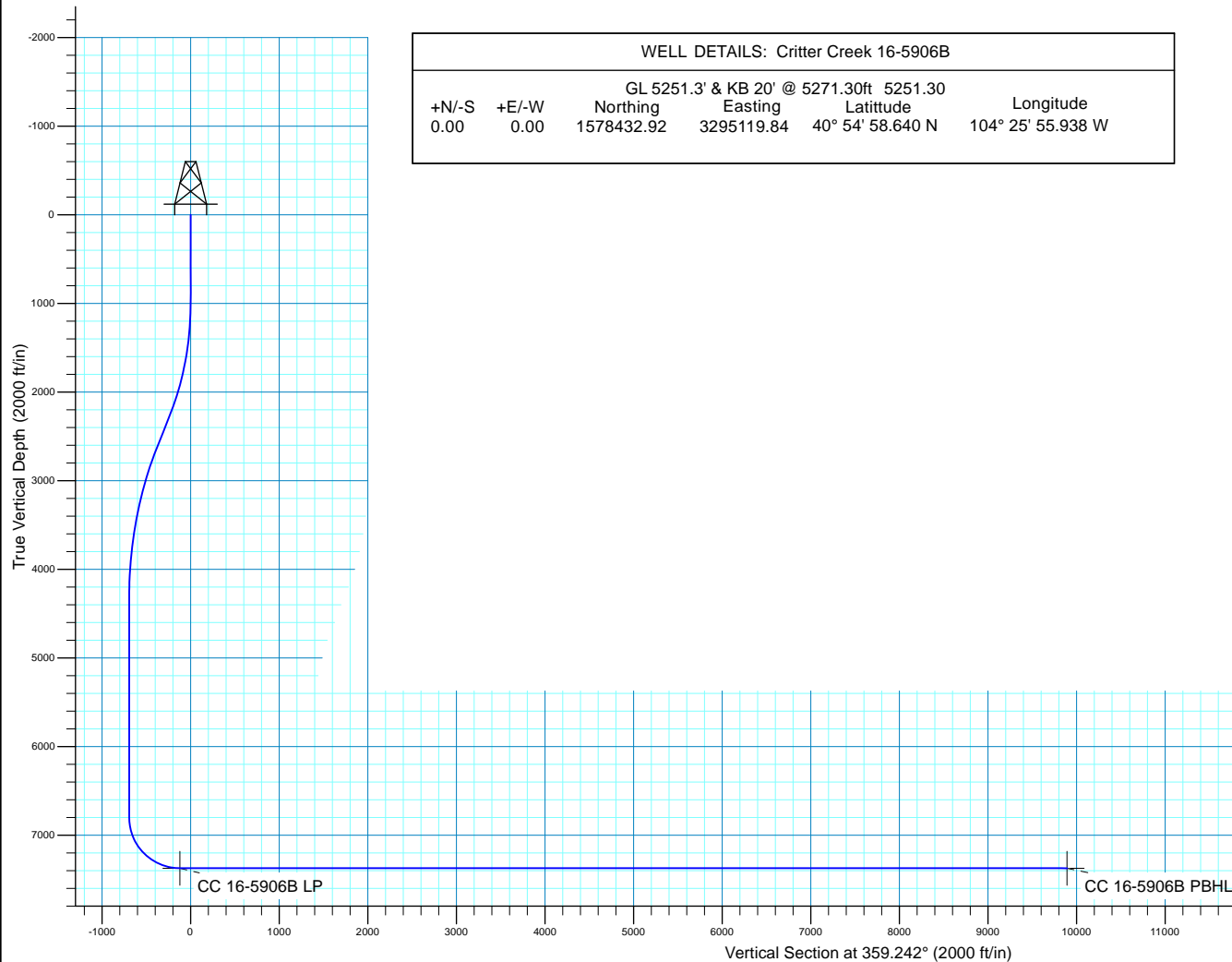
Created By: Seth Burstad

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
2357.98	27.16	216.739	2307.69	-253.13	-188.94	2.00	216.74	-250.61
2658.07	27.16	216.739	2574.70	-362.91	-270.88	0.00	0.00	-359.29
4468.71	0.00	0.000	4318.28	-700.42	-522.81	1.50	180.00	-693.44
6951.47	0.00	0.000	6801.04	-700.42	-522.81	0.00	0.00	-693.44
7851.47	90.00	359.242	7374.00	-127.51	-530.39	10.00	359.24	-120.48
17865.57	90.00	359.242	7374.00	9885.72	-662.79	0.00	0.00	9893.62

WELL DETAILS: Critter Creek 16-5906B

GL 5251.3' & KB 20' @ 5271.30ft 5251.30						Longitude
+N/-S	+E/-W	Northing	Easting	Latitude		
0.00	0.00	1578432.92	3295119.84	40° 54' 58.640 N		104° 25' 55.938 W



HighPoint Resources

Weld County, CO NAD 83
Crittter Creek 16 SE Pad
Crittter Creek 16-5906B

OH

Plan: Plan 2

Standard Planning Report

21 May, 2018



Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-5906B
Company:	HighPoint Resources	TVD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Site:	Critter Creek 16 SE Pad	North Reference:	True
Well:	Critter Creek 16-5906B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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 SE Pad, Site Center : Critter Creek 16-5708B			
Site Position:		Northing:	1,578,436.56 usft	Latitude:	40° 54' 58.651 N
From:	Lat/Long	Easting:	3,295,329.88 usft	Longitude:	104° 25' 53.202 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.69 °

Well	Critter Creek 16-5906B, 430' FSL 1034' FEL Sec 16 T11N R63W					
Well Position	+N/-S	-1.10 ft	Northing:	1,578,432.92 usft	Latitude:	40° 54' 58.640 N
	+E/-W	-210.06 ft	Easting:	3,295,119.85 usft	Longitude:	104° 25' 55.938 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,251.30 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/21/2018	8.28	67.20	52,778

Design	Plan 2			
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	359.242

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	
2,357.98	27.16	216.739	2,307.69	-253.13	-188.94	2.00	2.00	0.00	216.74	
2,658.07	27.16	216.739	2,574.70	-362.91	-270.88	0.00	0.00	0.00	0.00	
4,468.71	0.00	0.000	4,318.28	-700.42	-522.81	1.50	-1.50	0.00	180.00	
6,951.47	0.00	0.000	6,801.04	-700.42	-522.81	0.00	0.00	0.00	0.00	
7,851.47	90.00	359.242	7,374.00	-127.51	-530.39	10.00	10.00	-0.08	359.24	
17,865.57	90.00	359.242	7,374.00	9,885.71	-662.79	0.00	0.00	0.00	0.00	CC 16-5906B PBHL

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-5906B
Company:	HighPoint Resources	TVD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Site:	Critter Creek 16 SE Pad	North Reference:	True
Well:	Critter Creek 16-5906B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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	216.739	1,099.98	-1.40	-1.04	-1.38	2.00	2.00	0.00
1,200.00	4.00	216.739	1,199.84	-5.59	-4.17	-5.54	2.00	2.00	0.00
1,300.00	6.00	216.739	1,299.45	-12.58	-9.39	-12.45	2.00	2.00	0.00
1,400.00	8.00	216.739	1,398.70	-22.34	-16.68	-22.12	2.00	2.00	0.00
1,500.00	10.00	216.739	1,497.47	-34.88	-26.03	-34.53	2.00	2.00	0.00
1,600.00	12.00	216.739	1,595.62	-50.17	-37.45	-49.67	2.00	2.00	0.00
1,700.00	14.00	216.739	1,693.06	-68.19	-50.90	-67.51	2.00	2.00	0.00
1,800.00	16.00	216.739	1,789.64	-88.93	-66.38	-88.05	2.00	2.00	0.00
1,900.00	18.00	216.739	1,885.27	-112.36	-83.87	-111.24	2.00	2.00	0.00
2,000.00	20.00	216.739	1,979.82	-138.45	-103.34	-137.07	2.00	2.00	0.00
2,100.00	22.00	216.739	2,073.17	-167.17	-124.78	-165.50	2.00	2.00	0.00
2,200.00	24.00	216.739	2,165.21	-198.48	-148.15	-196.50	2.00	2.00	0.00
2,300.00	26.00	216.739	2,255.84	-232.35	-173.43	-230.03	2.00	2.00	0.00
2,357.98	27.16	216.739	2,307.69	-253.13	-188.94	-250.61	2.00	2.00	0.00
Start 300.10 hold at 2357.98 MD									
2,400.00	27.16	216.739	2,345.08	-268.51	-200.42	-265.83	0.00	0.00	0.00
2,500.00	27.16	216.739	2,434.05	-305.09	-227.72	-302.05	0.00	0.00	0.00
2,600.00	27.16	216.739	2,523.03	-341.67	-255.03	-338.26	0.00	0.00	0.00
2,658.07	27.16	216.739	2,574.70	-362.91	-270.88	-359.29	0.00	0.00	0.00
Start Drop -1.50									
2,700.00	26.53	216.739	2,612.10	-378.08	-282.21	-374.32	1.50	-1.50	0.00
2,800.00	25.03	216.739	2,702.15	-412.93	-308.22	-408.82	1.50	-1.50	0.00
2,900.00	23.53	216.739	2,793.30	-445.89	-332.82	-441.44	1.50	-1.50	0.00
3,000.00	22.03	216.739	2,885.50	-476.92	-355.98	-472.16	1.50	-1.50	0.00
3,100.00	20.53	216.739	2,978.68	-506.00	-377.69	-500.96	1.50	-1.50	0.00
3,200.00	19.03	216.739	3,072.77	-533.12	-397.93	-527.81	1.50	-1.50	0.00
3,300.00	17.53	216.739	3,167.72	-558.25	-416.69	-552.69	1.50	-1.50	0.00
3,400.00	16.03	216.739	3,263.46	-581.39	-433.96	-575.60	1.50	-1.50	0.00
3,500.00	14.53	216.739	3,359.92	-602.51	-449.73	-596.51	1.50	-1.50	0.00
3,600.00	13.03	216.739	3,457.04	-621.60	-463.98	-615.41	1.50	-1.50	0.00
3,700.00	11.53	216.739	3,554.75	-638.64	-476.70	-632.28	1.50	-1.50	0.00
3,800.00	10.03	216.739	3,652.98	-653.63	-487.89	-647.12	1.50	-1.50	0.00
3,900.00	8.53	216.739	3,751.67	-666.56	-497.53	-659.92	1.50	-1.50	0.00
4,000.00	7.03	216.739	3,850.75	-677.40	-505.63	-670.66	1.50	-1.50	0.00
4,100.00	5.53	216.739	3,950.15	-686.17	-512.17	-679.33	1.50	-1.50	0.00
4,200.00	4.03	216.739	4,049.80	-692.85	-517.16	-685.95	1.50	-1.50	0.00
4,300.00	2.53	216.739	4,149.63	-697.43	-520.58	-690.49	1.50	-1.50	0.00
4,400.00	1.03	216.739	4,249.58	-699.92	-522.44	-692.95	1.50	-1.50	0.00
4,468.71	0.00	0.000	4,318.28	-700.42	-522.81	-693.44	1.50	-1.50	0.00
Start 2482.76 hold at 4468.71 MD									
4,500.00	0.00	0.000	4,349.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
4,600.00	0.00	0.000	4,449.57	-700.42	-522.81	-693.44	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-5906B
Company:	HighPoint Resources	TVD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Site:	Critter Creek 16 SE Pad	North Reference:	True
Well:	Critter Creek 16-5906B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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	4,549.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
4,800.00	0.00	0.000	4,649.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
4,900.00	0.00	0.000	4,749.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,000.00	0.00	0.000	4,849.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,100.00	0.00	0.000	4,949.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,200.00	0.00	0.000	5,049.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,300.00	0.00	0.000	5,149.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,400.00	0.00	0.000	5,249.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,500.00	0.00	0.000	5,349.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,600.00	0.00	0.000	5,449.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,700.00	0.00	0.000	5,549.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,800.00	0.00	0.000	5,649.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
5,900.00	0.00	0.000	5,749.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,000.00	0.00	0.000	5,849.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,100.00	0.00	0.000	5,949.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,200.00	0.00	0.000	6,049.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,300.00	0.00	0.000	6,149.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,400.00	0.00	0.000	6,249.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,500.00	0.00	0.000	6,349.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,600.00	0.00	0.000	6,449.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,700.00	0.00	0.000	6,549.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,800.00	0.00	0.000	6,649.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,900.00	0.00	0.000	6,749.57	-700.42	-522.81	-693.44	0.00	0.00	0.00
6,951.47	0.00	0.000	6,801.04	-700.42	-522.81	-693.44	0.00	0.00	0.00
Start DLS 10.00 TFO 359.24									
7,000.00	4.85	359.242	6,849.52	-698.37	-522.84	-691.39	10.00	10.00	0.00
7,100.00	14.85	359.242	6,947.92	-681.28	-523.06	-674.30	10.00	10.00	0.00
7,200.00	24.85	359.242	7,041.85	-647.36	-523.51	-640.38	10.00	10.00	0.00
7,300.00	34.85	359.242	7,128.47	-597.65	-524.17	-590.66	10.00	10.00	0.00
7,400.00	44.85	359.242	7,205.14	-533.65	-525.02	-526.66	10.00	10.00	0.00
7,500.00	54.85	359.242	7,269.54	-457.32	-526.02	-450.32	10.00	10.00	0.00
7,600.00	64.85	359.242	7,319.69	-370.96	-527.17	-363.96	10.00	10.00	0.00
7,700.00	74.85	359.242	7,354.09	-277.21	-528.41	-270.19	10.00	10.00	0.00
7,800.00	84.85	359.242	7,371.69	-178.90	-529.71	-171.88	10.00	10.00	0.00
7,851.47	90.00	359.242	7,374.00	-127.51	-530.39	-120.48	10.00	10.00	0.00
Start 10014.10 hold at 7851.47 MD									
7,900.00	90.00	359.242	7,374.00	-78.98	-531.03	-71.95	0.00	0.00	0.00
8,000.00	90.00	359.242	7,374.00	21.01	-532.35	28.05	0.00	0.00	0.00
8,100.00	90.00	359.242	7,374.00	121.00	-533.67	128.05	0.00	0.00	0.00
8,200.00	90.00	359.242	7,374.00	220.99	-534.99	228.05	0.00	0.00	0.00
8,300.00	90.00	359.242	7,374.00	320.98	-536.32	328.05	0.00	0.00	0.00
8,400.00	90.00	359.242	7,374.00	420.97	-537.64	428.05	0.00	0.00	0.00
8,500.00	90.00	359.242	7,374.00	520.96	-538.96	528.05	0.00	0.00	0.00
8,600.00	90.00	359.242	7,374.00	620.96	-540.28	628.05	0.00	0.00	0.00
8,700.00	90.00	359.242	7,374.00	720.95	-541.60	728.05	0.00	0.00	0.00
8,800.00	90.00	359.242	7,374.00	820.94	-542.93	828.05	0.00	0.00	0.00
8,900.00	90.00	359.242	7,374.00	920.93	-544.25	928.05	0.00	0.00	0.00
9,000.00	90.00	359.242	7,374.00	1,020.92	-545.57	1,028.05	0.00	0.00	0.00
9,100.00	90.00	359.242	7,374.00	1,120.91	-546.89	1,128.05	0.00	0.00	0.00
9,200.00	90.00	359.242	7,374.00	1,220.90	-548.22	1,228.05	0.00	0.00	0.00
9,300.00	90.00	359.242	7,374.00	1,320.89	-549.54	1,328.05	0.00	0.00	0.00
9,400.00	90.00	359.242	7,374.00	1,420.89	-550.86	1,428.05	0.00	0.00	0.00
9,500.00	90.00	359.242	7,374.00	1,520.88	-552.18	1,528.05	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-5906B
Company:	HighPoint Resources	TVD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Site:	Critter Creek 16 SE Pad	North Reference:	True
Well:	Critter Creek 16-5906B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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	359.242	7,374.00	1,620.87	-553.50	1,628.05	0.00	0.00	0.00	
9,700.00	90.00	359.242	7,374.00	1,720.86	-554.83	1,728.05	0.00	0.00	0.00	
9,800.00	90.00	359.242	7,374.00	1,820.85	-556.15	1,828.05	0.00	0.00	0.00	
9,900.00	90.00	359.242	7,374.00	1,920.84	-557.47	1,928.05	0.00	0.00	0.00	
10,000.00	90.00	359.242	7,374.00	2,020.83	-558.79	2,028.05	0.00	0.00	0.00	
10,100.00	90.00	359.242	7,374.00	2,120.83	-560.12	2,128.05	0.00	0.00	0.00	
10,200.00	90.00	359.242	7,374.00	2,220.82	-561.44	2,228.05	0.00	0.00	0.00	
10,300.00	90.00	359.242	7,374.00	2,320.81	-562.76	2,328.05	0.00	0.00	0.00	
10,400.00	90.00	359.242	7,374.00	2,420.80	-564.08	2,428.05	0.00	0.00	0.00	
10,500.00	90.00	359.242	7,374.00	2,520.79	-565.40	2,528.05	0.00	0.00	0.00	
10,600.00	90.00	359.242	7,374.00	2,620.78	-566.73	2,628.05	0.00	0.00	0.00	
10,700.00	90.00	359.242	7,374.00	2,720.77	-568.05	2,728.05	0.00	0.00	0.00	
10,800.00	90.00	359.242	7,374.00	2,820.76	-569.37	2,828.05	0.00	0.00	0.00	
10,900.00	90.00	359.242	7,374.00	2,920.76	-570.69	2,928.05	0.00	0.00	0.00	
11,000.00	90.00	359.242	7,374.00	3,020.75	-572.02	3,028.05	0.00	0.00	0.00	
11,100.00	90.00	359.242	7,374.00	3,120.74	-573.34	3,128.05	0.00	0.00	0.00	
11,200.00	90.00	359.242	7,374.00	3,220.73	-574.66	3,228.05	0.00	0.00	0.00	
11,300.00	90.00	359.242	7,374.00	3,320.72	-575.98	3,328.05	0.00	0.00	0.00	
11,400.00	90.00	359.242	7,374.00	3,420.71	-577.30	3,428.05	0.00	0.00	0.00	
11,500.00	90.00	359.242	7,374.00	3,520.70	-578.63	3,528.05	0.00	0.00	0.00	
11,600.00	90.00	359.242	7,374.00	3,620.69	-579.95	3,628.05	0.00	0.00	0.00	
11,700.00	90.00	359.242	7,374.00	3,720.69	-581.27	3,728.05	0.00	0.00	0.00	
11,800.00	90.00	359.242	7,374.00	3,820.68	-582.59	3,828.05	0.00	0.00	0.00	
11,900.00	90.00	359.242	7,374.00	3,920.67	-583.92	3,928.05	0.00	0.00	0.00	
12,000.00	90.00	359.242	7,374.00	4,020.66	-585.24	4,028.05	0.00	0.00	0.00	
12,100.00	90.00	359.242	7,374.00	4,120.65	-586.56	4,128.05	0.00	0.00	0.00	
12,200.00	90.00	359.242	7,374.00	4,220.64	-587.88	4,228.05	0.00	0.00	0.00	
12,300.00	90.00	359.242	7,374.00	4,320.63	-589.20	4,328.05	0.00	0.00	0.00	
12,400.00	90.00	359.242	7,374.00	4,420.62	-590.53	4,428.05	0.00	0.00	0.00	
12,500.00	90.00	359.242	7,374.00	4,520.62	-591.85	4,528.05	0.00	0.00	0.00	
12,600.00	90.00	359.242	7,374.00	4,620.61	-593.17	4,628.05	0.00	0.00	0.00	
12,700.00	90.00	359.242	7,374.00	4,720.60	-594.49	4,728.05	0.00	0.00	0.00	
12,800.00	90.00	359.242	7,374.00	4,820.59	-595.81	4,828.05	0.00	0.00	0.00	
12,900.00	90.00	359.242	7,374.00	4,920.58	-597.14	4,928.05	0.00	0.00	0.00	
13,000.00	90.00	359.242	7,374.00	5,020.57	-598.46	5,028.05	0.00	0.00	0.00	
13,100.00	90.00	359.242	7,374.00	5,120.56	-599.78	5,128.05	0.00	0.00	0.00	
13,200.00	90.00	359.242	7,374.00	5,220.55	-601.10	5,228.05	0.00	0.00	0.00	
13,300.00	90.00	359.242	7,374.00	5,320.55	-602.43	5,328.05	0.00	0.00	0.00	
13,400.00	90.00	359.242	7,374.00	5,420.54	-603.75	5,428.05	0.00	0.00	0.00	
13,500.00	90.00	359.242	7,374.00	5,520.53	-605.07	5,528.05	0.00	0.00	0.00	
13,600.00	90.00	359.242	7,374.00	5,620.52	-606.39	5,628.05	0.00	0.00	0.00	
13,700.00	90.00	359.242	7,374.00	5,720.51	-607.71	5,728.05	0.00	0.00	0.00	
13,800.00	90.00	359.242	7,374.00	5,820.50	-609.04	5,828.05	0.00	0.00	0.00	
13,900.00	90.00	359.242	7,374.00	5,920.49	-610.36	5,928.05	0.00	0.00	0.00	
14,000.00	90.00	359.242	7,374.00	6,020.48	-611.68	6,028.05	0.00	0.00	0.00	
14,100.00	90.00	359.242	7,374.00	6,120.48	-613.00	6,128.05	0.00	0.00	0.00	
14,200.00	90.00	359.242	7,374.00	6,220.47	-614.33	6,228.05	0.00	0.00	0.00	
14,300.00	90.00	359.242	7,374.00	6,320.46	-615.65	6,328.05	0.00	0.00	0.00	
14,400.00	90.00	359.242	7,374.00	6,420.45	-616.97	6,428.05	0.00	0.00	0.00	
14,500.00	90.00	359.242	7,374.00	6,520.44	-618.29	6,528.05	0.00	0.00	0.00	
14,600.00	90.00	359.242	7,374.00	6,620.43	-619.61	6,628.05	0.00	0.00	0.00	
14,700.00	90.00	359.242	7,374.00	6,720.42	-620.94	6,728.05	0.00	0.00	0.00	
14,800.00	90.00	359.242	7,374.00	6,820.41	-622.26	6,828.05	0.00	0.00	0.00	
14,900.00	90.00	359.242	7,374.00	6,920.41	-623.58	6,928.05	0.00	0.00	0.00	

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-5906B
Company:	HighPoint Resources	TVD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Site:	Critter Creek 16 SE Pad	North Reference:	True
Well:	Critter Creek 16-5906B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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	359.242	7,374.00	7,020.40	-624.90	7,028.05	0.00	0.00	0.00
15,100.00	90.00	359.242	7,374.00	7,120.39	-626.23	7,128.05	0.00	0.00	0.00
15,200.00	90.00	359.242	7,374.00	7,220.38	-627.55	7,228.05	0.00	0.00	0.00
15,300.00	90.00	359.242	7,374.00	7,320.37	-628.87	7,328.05	0.00	0.00	0.00
15,400.00	90.00	359.242	7,374.00	7,420.36	-630.19	7,428.05	0.00	0.00	0.00
15,500.00	90.00	359.242	7,374.00	7,520.35	-631.51	7,528.05	0.00	0.00	0.00
15,600.00	90.00	359.242	7,374.00	7,620.34	-632.84	7,628.05	0.00	0.00	0.00
15,700.00	90.00	359.242	7,374.00	7,720.34	-634.16	7,728.05	0.00	0.00	0.00
15,800.00	90.00	359.242	7,374.00	7,820.33	-635.48	7,828.05	0.00	0.00	0.00
15,900.00	90.00	359.242	7,374.00	7,920.32	-636.80	7,928.05	0.00	0.00	0.00
16,000.00	90.00	359.242	7,374.00	8,020.31	-638.13	8,028.05	0.00	0.00	0.00
16,100.00	90.00	359.242	7,374.00	8,120.30	-639.45	8,128.05	0.00	0.00	0.00
16,200.00	90.00	359.242	7,374.00	8,220.29	-640.77	8,228.05	0.00	0.00	0.00
16,300.00	90.00	359.242	7,374.00	8,320.28	-642.09	8,328.05	0.00	0.00	0.00
16,400.00	90.00	359.242	7,374.00	8,420.27	-643.41	8,428.05	0.00	0.00	0.00
16,500.00	90.00	359.242	7,374.00	8,520.27	-644.74	8,528.05	0.00	0.00	0.00
16,600.00	90.00	359.242	7,374.00	8,620.26	-646.06	8,628.05	0.00	0.00	0.00
16,700.00	90.00	359.242	7,374.00	8,720.25	-647.38	8,728.05	0.00	0.00	0.00
16,800.00	90.00	359.242	7,374.00	8,820.24	-648.70	8,828.05	0.00	0.00	0.00
16,900.00	90.00	359.242	7,374.00	8,920.23	-650.02	8,928.05	0.00	0.00	0.00
17,000.00	90.00	359.242	7,374.00	9,020.22	-651.35	9,028.05	0.00	0.00	0.00
17,100.00	90.00	359.242	7,374.00	9,120.21	-652.67	9,128.05	0.00	0.00	0.00
17,200.00	90.00	359.242	7,374.00	9,220.20	-653.99	9,228.05	0.00	0.00	0.00
17,300.00	90.00	359.242	7,374.00	9,320.20	-655.31	9,328.05	0.00	0.00	0.00
17,400.00	90.00	359.242	7,374.00	9,420.19	-656.64	9,428.05	0.00	0.00	0.00
17,500.00	90.00	359.242	7,374.00	9,520.18	-657.96	9,528.05	0.00	0.00	0.00
17,600.00	90.00	359.242	7,374.00	9,620.17	-659.28	9,628.05	0.00	0.00	0.00
17,700.00	90.00	359.242	7,374.00	9,720.16	-660.60	9,728.05	0.00	0.00	0.00
17,800.00	90.00	359.242	7,374.00	9,820.15	-661.92	9,828.05	0.00	0.00	0.00
17,865.56	90.00	359.242	7,374.00	9,885.71	-662.79	9,893.61	0.00	0.00	0.00
TD at 17865.56									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
CC 16-5906B LP	0.00	0.000	7,374.00	-127.51	-530.39	1,578,299.04	3,294,591.03	40° 54' 57.380 N	104° 26' 2.846 W
- hit/miss target									
- plan misses target center by 0.01ft at 7851.47ft MD (7374.00 TVD, -127.51 N, -530.39 E)									
- Point									
CC 16-5906B PBHL	0.00	0.000	7,374.00	9,885.71	-662.79	1,588,309.92	3,294,338.07	40° 56' 36.316 N	104° 26' 4.574 W
- plan hits target center									
- Point									

Scientific Drilling, Intl

Planning Report

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 16-5906B
Company:	HighPoint Resources	TVD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5251.3' & KB 20' @ 5271.30ft
Site:	Critter Creek 16 SE Pad	North Reference:	True
Well:	Critter Creek 16-5906B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

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
2,357.98	2,307.69	-253.13	-188.94	Start 300.10 hold at 2357.98 MD
2,658.07	2,574.70	-362.91	-270.88	Start Drop -1.50
4,468.71	4,318.28	-700.42	-522.81	Start 2482.76 hold at 4468.71 MD
6,951.47	6,801.04	-700.42	-522.81	Start DLS 10.00 TFO 359.24
7,851.47	7,374.00	-127.51	-530.39	Start 10014.10 hold at 7851.47 MD
17,865.56	7,374.00	9,885.71	-662.79	TD at 17865.56