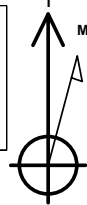




PROJECT DETAILS: Weld County, CO NAD 83

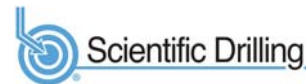
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level
Local North: True

Project: Weld County, CO NAD 83
Site: Critter Creek 15 SE Pad
Well: Critter Creek 15-5708B
Wellbore: OH
Design: Plan 1



Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52797.4nT
Dip Angle: 67.20°
Date: 4/20/2018
Model: HDGM



Plan: Plan 1 (Critter Creek 15-5708B/OH)

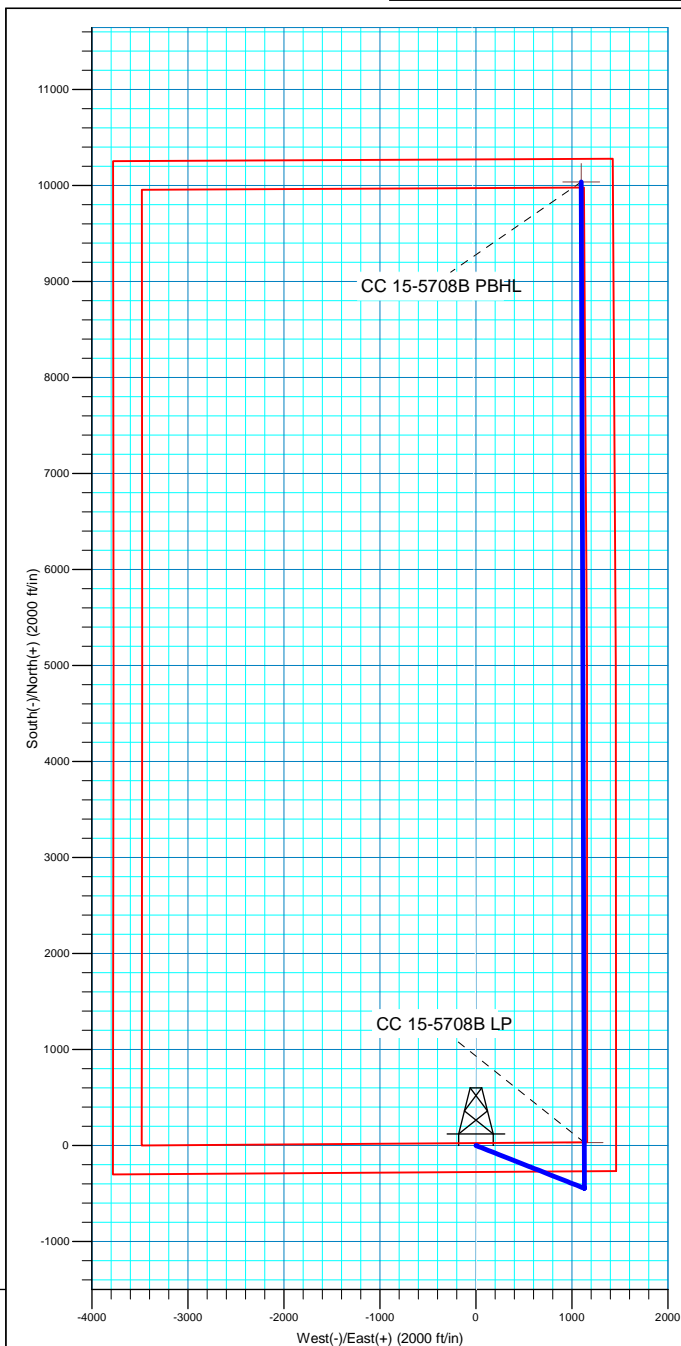
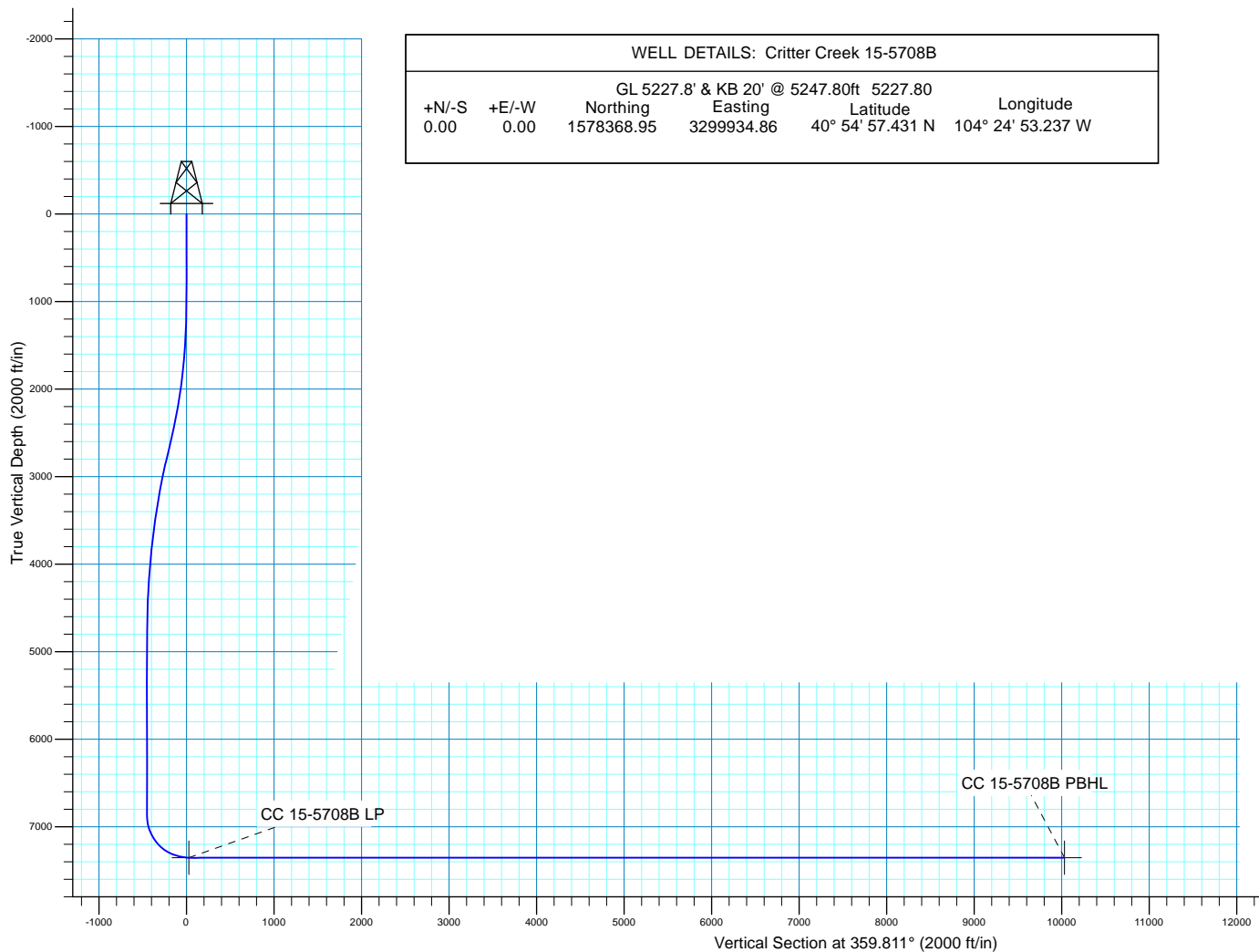
Created By: Seth Burstad

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
2631.33	32.63	111.529	2544.59	-165.89	420.52	2.00	111.53	-167.28
2931.45	32.63	111.529	2797.35	-225.27	571.04	0.00	0.00	-227.15
5106.57	0.00	0.000	4856.80	-446.46	1131.74	1.50	180.00	-450.19
7126.31	0.00	0.000	6876.54	-446.46	1131.74	0.00	0.00	-450.19
7876.31	90.00	359.811	7354.00	31.00	1130.16	12.00	359.81	27.27
17881.93	90.00	359.811	7354.00	10036.57	1097.10	0.00	0.00	10032.90

WELL DETAILS: Critter Creek 15-5708B

GL 5227.8' & KB 20' @ 5247.80ft 5227.80
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1578368.95 3299934.86 40° 54' 57.431 N 104° 24' 53.237 W





HighPoint Resources

Weld County, CO NAD 83
Crittter Creek 15 SE Pad
Crittter Creek 15-5708B

OH

Plan: Plan 1

Standard Planning Report

20 April, 2018



Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 15-5708B
Company:	HighPoint Resources	TVD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Site:	Critter Creek 15 SE Pad	North Reference:	True
Well:	Critter Creek 15-5708B	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 15 SE Pad, Site Center : Critter Creek 278-1527H					
Site Position:				Northing:		1,578,366.16 usft		Latitude:		40° 54' 57.431 N	
From:		Lat/Long		Easting:		3,299,705.75 usft		Longitude:		104° 24' 56.221 W	
Position Uncertainty:		0.00 ft		Slot Radius:		13.200 in		Grid Convergence:		0.70	

Well	Critter Creek 15-5708B, 277' FSL 1461' FEL Sec 15 T11N R63W					
Well Position	+N/-S	-0.01 ft	Northing:	1,578,368.95 usft	Latitude:	40° 54' 57.431 N
	+E/-W	229.13 ft	Easting:	3,299,934.86 usft	Longitude:	104° 24' 53.237 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,227.80 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/20/2018	8.28	67.20	52,797

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	359.811

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	
2,631.34	32.63	111.529	2,544.59	-165.89	420.52	2.00	2.00	0.00	111.53	
2,931.45	32.63	111.529	2,797.35	-225.27	571.04	0.00	0.00	0.00	0.00	
5,106.57	0.00	0.000	4,856.80	-446.46	1,131.74	1.50	-1.50	0.00	180.00	
7,126.31	0.00	0.000	6,876.54	-446.46	1,131.74	0.00	0.00	0.00	0.00	
7,876.31	90.00	359.811	7,354.00	31.00	1,130.16	12.00	12.00	-0.03	359.81	
17,881.93	90.00	359.811	7,354.00	10,036.57	1,097.10	0.00	0.00	0.00	0.00	CC 15-5708B PBHL

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 15-5708B
Company:	HighPoint Resources	TVD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Site:	Critter Creek 15 SE Pad	North Reference:	True
Well:	Critter Creek 15-5708B	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	111.529	1,099.98	-0.64	1.62	-0.65	2.00	2.00	0.00
1,200.00	4.00	111.529	1,199.84	-2.56	6.49	-2.58	2.00	2.00	0.00
1,300.00	6.00	111.529	1,299.45	-5.76	14.60	-5.81	2.00	2.00	0.00
1,400.00	8.00	111.529	1,398.70	-10.23	25.93	-10.32	2.00	2.00	0.00
1,500.00	10.00	111.529	1,497.47	-15.97	40.49	-16.10	2.00	2.00	0.00
1,522.90	10.46	111.529	1,520.00	-17.46	44.27	-17.61	2.00	2.00	0.00
Fox Hills-Pierre contact									
1,600.00	12.00	111.529	1,595.62	-22.97	58.23	-23.17	2.00	2.00	0.00
1,700.00	14.00	111.529	1,693.06	-31.23	79.16	-31.49	2.00	2.00	0.00
1,800.00	16.00	111.529	1,789.64	-40.73	103.23	-41.07	2.00	2.00	0.00
1,900.00	18.00	111.529	1,885.27	-51.45	130.43	-51.88	2.00	2.00	0.00
2,000.00	20.00	111.529	1,979.82	-63.40	160.71	-63.93	2.00	2.00	0.00
2,100.00	22.00	111.529	2,073.17	-76.55	194.05	-77.19	2.00	2.00	0.00
2,200.00	24.00	111.529	2,165.21	-90.89	230.39	-91.65	2.00	2.00	0.00
2,300.00	26.00	111.529	2,255.84	-106.40	269.71	-107.29	2.00	2.00	0.00
2,400.00	28.00	111.529	2,344.94	-123.06	311.94	-124.08	2.00	2.00	0.00
2,500.00	30.00	111.529	2,432.39	-140.85	357.03	-142.02	2.00	2.00	0.00
2,600.00	32.00	111.529	2,518.11	-159.74	404.94	-161.08	2.00	2.00	0.00
2,631.34	32.63	111.529	2,544.59	-165.89	420.52	-167.28	2.00	2.00	0.00
Start 300.12 hold at 2631.33 MD									
2,700.00	32.63	111.529	2,602.42	-179.48	454.96	-180.98	0.00	0.00	0.00
2,800.00	32.63	111.529	2,686.64	-199.26	505.12	-200.93	0.00	0.00	0.00
2,900.00	32.63	111.529	2,770.86	-219.05	555.27	-220.88	0.00	0.00	0.00
2,931.45	32.63	111.529	2,797.35	-225.27	571.04	-227.15	0.00	0.00	0.00
Start Drop -1.50									
3,000.00	31.60	111.529	2,855.41	-238.64	604.94	-240.64	1.50	-1.50	0.00
3,100.00	30.10	111.529	2,941.26	-257.46	652.64	-259.61	1.50	-1.50	0.00
3,200.00	28.60	111.529	3,028.42	-275.44	698.23	-277.75	1.50	-1.50	0.00
3,300.00	27.10	111.529	3,116.84	-292.59	741.68	-295.03	1.50	-1.50	0.00
3,400.00	25.60	111.529	3,206.45	-308.87	782.97	-311.45	1.50	-1.50	0.00
3,418.34	25.32	111.529	3,223.00	-311.77	790.30	-314.37	1.50	-1.50	0.00
Pierre A									
3,500.00	24.10	111.529	3,297.19	-324.29	822.06	-327.00	1.50	-1.50	0.00
3,600.00	22.60	111.529	3,388.99	-338.84	858.92	-341.67	1.50	-1.50	0.00
3,700.00	21.10	111.529	3,481.81	-352.49	893.54	-355.44	1.50	-1.50	0.00
3,800.00	19.60	111.529	3,575.57	-365.25	925.89	-368.31	1.50	-1.50	0.00
3,900.00	18.10	111.529	3,670.20	-377.11	955.94	-380.26	1.50	-1.50	0.00
4,000.00	16.60	111.529	3,765.65	-388.05	983.68	-391.29	1.50	-1.50	0.00
4,100.00	15.10	111.529	3,861.84	-398.07	1,009.08	-401.40	1.50	-1.50	0.00
4,200.00	13.60	111.529	3,958.72	-407.17	1,032.13	-410.57	1.50	-1.50	0.00
4,300.00	12.10	111.529	4,056.22	-415.33	1,052.82	-418.80	1.50	-1.50	0.00
4,400.00	10.60	111.529	4,154.26	-422.55	1,071.12	-426.08	1.50	-1.50	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 15-5708B
Company:	HighPoint Resources	TVD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Site:	Critter Creek 15 SE Pad	North Reference:	True
Well:	Critter Creek 15-5708B	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)
4,420.08	10.30	111.529	4,174.00	-423.88	1,074.51	-427.43	1.50	-1.50	0.00
Parkman									
4,500.00	9.10	111.529	4,252.78	-428.82	1,087.03	-432.41	1.50	-1.50	0.00
4,600.00	7.60	111.529	4,351.72	-434.15	1,100.54	-437.78	1.50	-1.50	0.00
4,700.00	6.10	111.529	4,451.00	-438.53	1,111.63	-442.19	1.50	-1.50	0.00
4,800.00	4.60	111.529	4,550.56	-441.95	1,120.30	-445.64	1.50	-1.50	0.00
4,900.00	3.10	111.529	4,650.34	-444.41	1,126.55	-448.12	1.50	-1.50	0.00
5,000.00	1.60	111.529	4,750.25	-445.91	1,130.36	-449.64	1.50	-1.50	0.00
5,100.00	0.10	111.529	4,850.23	-446.46	1,131.73	-450.19	1.50	-1.50	0.00
5,106.57	0.00	0.000	4,856.80	-446.46	1,131.74	-450.19	1.50	-1.50	0.00
Start 2019.74 hold at 5106.57 MD									
5,200.00	0.00	0.000	4,950.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
5,300.00	0.00	0.000	5,050.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
5,400.00	0.00	0.000	5,150.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
5,500.00	0.00	0.000	5,250.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
5,600.00	0.00	0.000	5,350.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
5,700.00	0.00	0.000	5,450.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
5,800.00	0.00	0.000	5,550.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
5,900.00	0.00	0.000	5,650.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,000.00	0.00	0.000	5,750.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,100.00	0.00	0.000	5,850.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,200.00	0.00	0.000	5,950.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,300.00	0.00	0.000	6,050.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,400.00	0.00	0.000	6,150.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,500.00	0.00	0.000	6,250.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,600.00	0.00	0.000	6,350.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,700.00	0.00	0.000	6,450.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,800.00	0.00	0.000	6,550.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
6,900.00	0.00	0.000	6,650.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
7,000.00	0.00	0.000	6,750.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
7,100.00	0.00	0.000	6,850.23	-446.46	1,131.74	-450.19	0.00	0.00	0.00
7,126.31	0.00	0.000	6,876.54	-446.46	1,131.74	-450.19	0.00	0.00	0.00
Start DLS 12.00 TFO 359.81									
7,200.00	8.84	359.811	6,949.94	-440.78	1,131.72	-444.51	12.00	12.00	0.00
7,300.00	20.84	359.811	7,046.43	-415.21	1,131.64	-418.94	12.00	12.00	0.00
7,400.00	32.84	359.811	7,135.49	-370.14	1,131.49	-373.87	12.00	12.00	0.00
7,494.06	44.13	359.811	7,209.00	-311.70	1,131.29	-315.43	12.00	12.00	0.00
Sharon Springs									
7,500.00	44.84	359.811	7,213.23	-307.54	1,131.28	-311.27	12.00	12.00	0.00
7,533.29	48.84	359.811	7,236.00	-283.26	1,131.20	-286.99	12.00	12.00	0.00
Niobrara A Chalk									
7,571.55	53.43	359.811	7,260.00	-253.48	1,131.10	-257.21	12.00	12.00	0.00
Niobrara A Marl									
7,576.62	54.04	359.811	7,263.00	-249.39	1,131.09	-253.12	12.00	12.00	0.00
Nio B1 Chalk									
7,600.00	56.84	359.811	7,276.26	-230.14	1,131.03	-233.87	12.00	12.00	0.00
7,634.35	60.97	359.811	7,294.00	-200.73	1,130.93	-204.46	12.00	12.00	0.00
Nio B1 Marl									
7,674.53	65.79	359.811	7,312.00	-164.82	1,130.81	-168.55	12.00	12.00	0.00
Niobrara B Chalk									
7,700.00	68.84	359.811	7,321.82	-141.32	1,130.73	-145.05	12.00	12.00	0.00
7,778.39	78.25	359.811	7,344.00	-66.23	1,130.48	-69.96	12.00	12.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 15-5708B
Company:	HighPoint Resources	TVD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Site:	Critter Creek 15 SE Pad	North Reference:	True
Well:	Critter Creek 15-5708B	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)
Niobrara B Marl									
7,800.00	80.84	359.811	7,347.92	-44.98	1,130.41	-48.71	12.00	12.00	0.00
7,874.16	89.74	359.811	7,354.00	28.85	1,130.17	25.13	12.00	12.00	0.00
Niobrara B Landing Target - TD									
7,876.31	90.00	359.811	7,354.00	31.00	1,130.16	27.27	12.00	12.00	0.00
Start 10005.62 hold at 7876.31 MD									
7,900.00	90.00	359.811	7,354.00	54.70	1,130.08	50.97	0.00	0.00	0.00
8,000.00	90.00	359.811	7,354.00	154.70	1,129.75	150.97	0.00	0.00	0.00
8,100.00	90.00	359.811	7,354.00	254.70	1,129.42	250.97	0.00	0.00	0.00
8,200.00	90.00	359.811	7,354.00	354.70	1,129.09	350.97	0.00	0.00	0.00
8,300.00	90.00	359.811	7,354.00	454.69	1,128.76	450.97	0.00	0.00	0.00
8,400.00	90.00	359.811	7,354.00	554.69	1,128.43	550.97	0.00	0.00	0.00
8,500.00	90.00	359.811	7,354.00	654.69	1,128.10	650.97	0.00	0.00	0.00
8,600.00	90.00	359.811	7,354.00	754.69	1,127.77	750.97	0.00	0.00	0.00
8,700.00	90.00	359.811	7,354.00	854.69	1,127.44	850.97	0.00	0.00	0.00
8,800.00	90.00	359.811	7,354.00	954.69	1,127.11	950.97	0.00	0.00	0.00
8,900.00	90.00	359.811	7,354.00	1,054.69	1,126.78	1,050.97	0.00	0.00	0.00
9,000.00	90.00	359.811	7,354.00	1,154.69	1,126.45	1,150.97	0.00	0.00	0.00
9,100.00	90.00	359.811	7,354.00	1,254.69	1,126.12	1,250.97	0.00	0.00	0.00
9,200.00	90.00	359.811	7,354.00	1,354.69	1,125.79	1,350.97	0.00	0.00	0.00
9,300.00	90.00	359.811	7,354.00	1,454.69	1,125.46	1,450.97	0.00	0.00	0.00
9,400.00	90.00	359.811	7,354.00	1,554.69	1,125.13	1,550.97	0.00	0.00	0.00
9,500.00	90.00	359.811	7,354.00	1,654.69	1,124.80	1,650.97	0.00	0.00	0.00
9,600.00	90.00	359.811	7,354.00	1,754.69	1,124.47	1,750.97	0.00	0.00	0.00
9,700.00	90.00	359.811	7,354.00	1,854.69	1,124.14	1,850.97	0.00	0.00	0.00
9,800.00	90.00	359.811	7,354.00	1,954.69	1,123.81	1,950.97	0.00	0.00	0.00
9,900.00	90.00	359.811	7,354.00	2,054.69	1,123.48	2,050.97	0.00	0.00	0.00
10,000.00	90.00	359.811	7,354.00	2,154.69	1,123.14	2,150.97	0.00	0.00	0.00
10,100.00	90.00	359.811	7,354.00	2,254.68	1,122.81	2,250.97	0.00	0.00	0.00
10,200.00	90.00	359.811	7,354.00	2,354.68	1,122.48	2,350.97	0.00	0.00	0.00
10,300.00	90.00	359.811	7,354.00	2,454.68	1,122.15	2,450.97	0.00	0.00	0.00
10,400.00	90.00	359.811	7,354.00	2,554.68	1,121.82	2,550.97	0.00	0.00	0.00
10,500.00	90.00	359.811	7,354.00	2,654.68	1,121.49	2,650.97	0.00	0.00	0.00
10,600.00	90.00	359.811	7,354.00	2,754.68	1,121.16	2,750.97	0.00	0.00	0.00
10,700.00	90.00	359.811	7,354.00	2,854.68	1,120.83	2,850.97	0.00	0.00	0.00
10,800.00	90.00	359.811	7,354.00	2,954.68	1,120.50	2,950.97	0.00	0.00	0.00
10,900.00	90.00	359.811	7,354.00	3,054.68	1,120.17	3,050.97	0.00	0.00	0.00
11,000.00	90.00	359.811	7,354.00	3,154.68	1,119.84	3,150.97	0.00	0.00	0.00
11,100.00	90.00	359.811	7,354.00	3,254.68	1,119.51	3,250.97	0.00	0.00	0.00
11,200.00	90.00	359.811	7,354.00	3,354.68	1,119.18	3,350.97	0.00	0.00	0.00
11,300.00	90.00	359.811	7,354.00	3,454.68	1,118.85	3,450.97	0.00	0.00	0.00
11,400.00	90.00	359.811	7,354.00	3,554.68	1,118.52	3,550.97	0.00	0.00	0.00
11,500.00	90.00	359.811	7,354.00	3,654.68	1,118.19	3,650.97	0.00	0.00	0.00
11,600.00	90.00	359.811	7,354.00	3,754.68	1,117.86	3,750.97	0.00	0.00	0.00
11,700.00	90.00	359.811	7,354.00	3,854.68	1,117.53	3,850.97	0.00	0.00	0.00
11,800.00	90.00	359.811	7,354.00	3,954.68	1,117.20	3,950.97	0.00	0.00	0.00
11,900.00	90.00	359.811	7,354.00	4,054.68	1,116.87	4,050.97	0.00	0.00	0.00
12,000.00	90.00	359.811	7,354.00	4,154.67	1,116.54	4,150.97	0.00	0.00	0.00
12,100.00	90.00	359.811	7,354.00	4,254.67	1,116.21	4,250.97	0.00	0.00	0.00
12,200.00	90.00	359.811	7,354.00	4,354.67	1,115.88	4,350.97	0.00	0.00	0.00
12,300.00	90.00	359.811	7,354.00	4,454.67	1,115.54	4,450.97	0.00	0.00	0.00
12,400.00	90.00	359.811	7,354.00	4,554.67	1,115.21	4,550.97	0.00	0.00	0.00
12,500.00	90.00	359.811	7,354.00	4,654.67	1,114.88	4,650.97	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 15-5708B
Company:	HighPoint Resources	TVD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Site:	Critter Creek 15 SE Pad	North Reference:	True
Well:	Critter Creek 15-5708B	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)
12,600.00	90.00	359.811	7,354.00	4,754.67	1,114.55	4,750.97	0.00	0.00	0.00
12,700.00	90.00	359.811	7,354.00	4,854.67	1,114.22	4,850.97	0.00	0.00	0.00
12,800.00	90.00	359.811	7,354.00	4,954.67	1,113.89	4,950.97	0.00	0.00	0.00
12,900.00	90.00	359.811	7,354.00	5,054.67	1,113.56	5,050.97	0.00	0.00	0.00
13,000.00	90.00	359.811	7,354.00	5,154.67	1,113.23	5,150.97	0.00	0.00	0.00
13,100.00	90.00	359.811	7,354.00	5,254.67	1,112.90	5,250.97	0.00	0.00	0.00
13,200.00	90.00	359.811	7,354.00	5,354.67	1,112.57	5,350.97	0.00	0.00	0.00
13,300.00	90.00	359.811	7,354.00	5,454.67	1,112.24	5,450.97	0.00	0.00	0.00
13,400.00	90.00	359.811	7,354.00	5,554.67	1,111.91	5,550.97	0.00	0.00	0.00
13,500.00	90.00	359.811	7,354.00	5,654.67	1,111.58	5,650.97	0.00	0.00	0.00
13,600.00	90.00	359.811	7,354.00	5,754.67	1,111.25	5,750.97	0.00	0.00	0.00
13,700.00	90.00	359.811	7,354.00	5,854.67	1,110.92	5,850.97	0.00	0.00	0.00
13,800.00	90.00	359.811	7,354.00	5,954.66	1,110.59	5,950.97	0.00	0.00	0.00
13,900.00	90.00	359.811	7,354.00	6,054.66	1,110.26	6,050.97	0.00	0.00	0.00
14,000.00	90.00	359.811	7,354.00	6,154.66	1,109.93	6,150.97	0.00	0.00	0.00
14,100.00	90.00	359.811	7,354.00	6,254.66	1,109.60	6,250.97	0.00	0.00	0.00
14,200.00	90.00	359.811	7,354.00	6,354.66	1,109.27	6,350.97	0.00	0.00	0.00
14,300.00	90.00	359.811	7,354.00	6,454.66	1,108.94	6,450.97	0.00	0.00	0.00
14,400.00	90.00	359.811	7,354.00	6,554.66	1,108.61	6,550.97	0.00	0.00	0.00
14,500.00	90.00	359.811	7,354.00	6,654.66	1,108.27	6,650.97	0.00	0.00	0.00
14,600.00	90.00	359.811	7,354.00	6,754.66	1,107.94	6,750.97	0.00	0.00	0.00
14,700.00	90.00	359.811	7,354.00	6,854.66	1,107.61	6,850.97	0.00	0.00	0.00
14,800.00	90.00	359.811	7,354.00	6,954.66	1,107.28	6,950.97	0.00	0.00	0.00
14,900.00	90.00	359.811	7,354.00	7,054.66	1,106.95	7,050.97	0.00	0.00	0.00
15,000.00	90.00	359.811	7,354.00	7,154.66	1,106.62	7,150.97	0.00	0.00	0.00
15,100.00	90.00	359.811	7,354.00	7,254.66	1,106.29	7,250.97	0.00	0.00	0.00
15,200.00	90.00	359.811	7,354.00	7,354.66	1,105.96	7,350.97	0.00	0.00	0.00
15,300.00	90.00	359.811	7,354.00	7,454.66	1,105.63	7,450.97	0.00	0.00	0.00
15,400.00	90.00	359.811	7,354.00	7,554.66	1,105.30	7,550.97	0.00	0.00	0.00
15,500.00	90.00	359.811	7,354.00	7,654.66	1,104.97	7,650.97	0.00	0.00	0.00
15,600.00	90.00	359.811	7,354.00	7,754.65	1,104.64	7,750.97	0.00	0.00	0.00
15,700.00	90.00	359.811	7,354.00	7,854.65	1,104.31	7,850.97	0.00	0.00	0.00
15,800.00	90.00	359.811	7,354.00	7,954.65	1,103.98	7,950.97	0.00	0.00	0.00
15,900.00	90.00	359.811	7,354.00	8,054.65	1,103.65	8,050.97	0.00	0.00	0.00
16,000.00	90.00	359.811	7,354.00	8,154.65	1,103.32	8,150.97	0.00	0.00	0.00
16,100.00	90.00	359.811	7,354.00	8,254.65	1,102.99	8,250.97	0.00	0.00	0.00
16,200.00	90.00	359.811	7,354.00	8,354.65	1,102.66	8,350.97	0.00	0.00	0.00
16,300.00	90.00	359.811	7,354.00	8,454.65	1,102.33	8,450.97	0.00	0.00	0.00
16,400.00	90.00	359.811	7,354.00	8,554.65	1,102.00	8,550.97	0.00	0.00	0.00
16,500.00	90.00	359.811	7,354.00	8,654.65	1,101.67	8,650.97	0.00	0.00	0.00
16,600.00	90.00	359.811	7,354.00	8,754.65	1,101.34	8,750.97	0.00	0.00	0.00
16,700.00	90.00	359.811	7,354.00	8,854.65	1,101.01	8,850.97	0.00	0.00	0.00
16,800.00	90.00	359.811	7,354.00	8,954.65	1,100.67	8,950.97	0.00	0.00	0.00
16,900.00	90.00	359.811	7,354.00	9,054.65	1,100.34	9,050.97	0.00	0.00	0.00
17,000.00	90.00	359.811	7,354.00	9,154.65	1,100.01	9,150.97	0.00	0.00	0.00
17,100.00	90.00	359.811	7,354.00	9,254.65	1,099.68	9,250.97	0.00	0.00	0.00
17,200.00	90.00	359.811	7,354.00	9,354.65	1,099.35	9,350.97	0.00	0.00	0.00
17,300.00	90.00	359.811	7,354.00	9,454.65	1,099.02	9,450.97	0.00	0.00	0.00
17,400.00	90.00	359.811	7,354.00	9,554.65	1,098.69	9,550.97	0.00	0.00	0.00
17,500.00	90.00	359.811	7,354.00	9,654.64	1,098.36	9,650.97	0.00	0.00	0.00
17,600.00	90.00	359.811	7,354.00	9,754.64	1,098.03	9,750.97	0.00	0.00	0.00
17,700.00	90.00	359.811	7,354.00	9,854.64	1,097.70	9,850.97	0.00	0.00	0.00
17,800.00	90.00	359.811	7,354.00	9,954.64	1,097.37	9,950.97	0.00	0.00	0.00
17,881.93	90.00	359.811	7,354.00	10,036.57	1,097.10	10,032.90	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Critter Creek 15-5708B
Company:	HighPoint Resources	TVD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5227.8' & KB 20' @ 5247.80ft
Site:	Critter Creek 15 SE Pad	North Reference:	True
Well:	Critter Creek 15-5708B	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)
TD at 17881.93									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
CC 15-5708B PBHL	0.00	0.000	7,354.00	10,036.57	1,097.10	1,588,418.17	3,300,909.05	40° 56' 36.596 N	104° 24' 38.941 W
- plan hits target center									
- Point									
CC 15-5708B LP	0.00	0.000	7,354.00	31.01	1,130.16	1,578,413.78	3,301,064.56	40° 54' 57.737 N	104° 24' 38.516 W
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,522.90	1,520.00	Fox Hills-Pierre contact				
3,418.34	3,223.00	Pierre A				
4,420.08	4,174.00	Parkman				
7,494.06	7,209.00	Sharon Springs				
7,533.29	7,236.00	Niobrara A Chalk				
7,571.55	7,260.00	Niobrara A Marl				
7,576.62	7,263.00	Nio B1 Chalk				
7,634.35	7,294.00	Nio B1 Marl				
7,674.53	7,312.00	Niobrara B Chalk				
7,778.39	7,344.00	Niobrara B Marl				
7,874.16	7,354.00	Niobrara B Landing Target				
7,874.16	7,354.00	TD				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
2,631.34	2,544.59	-165.89	420.52	Start 300.12 hold at 2631.33 MD	
2,931.45	2,797.35	-225.27	571.04	Start Drop -1.50	
5,106.57	4,856.80	-446.46	1,131.74	Start 2019.74 hold at 5106.57 MD	
7,126.31	6,876.54	-446.46	1,131.74	Start DLS 12.00 TFO 359.81	
7,876.31	7,354.00	31.00	1,130.16	Start 10005.62 hold at 7876.31 MD	
17,881.93	7,354.00	10,036.57	1,097.10	TD at 17881.93	