



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

Plan: Plan 1 (Park 4-63-4-1724C/OH)

Created By: Seth Burstad

Project: Weld County, CO NAD 83
Site: Park 4-63-4 NE Pad
Well: Park 4-63-4-1724C
Wellbore: OH
Design: Plan 1



Azimuths to True North
Magnetic North: 8.05°

Magnetic Field
Strength: 52202.9nT
Dip Angle: 66.88°
Date: 8/23/2018
Model: HDGM

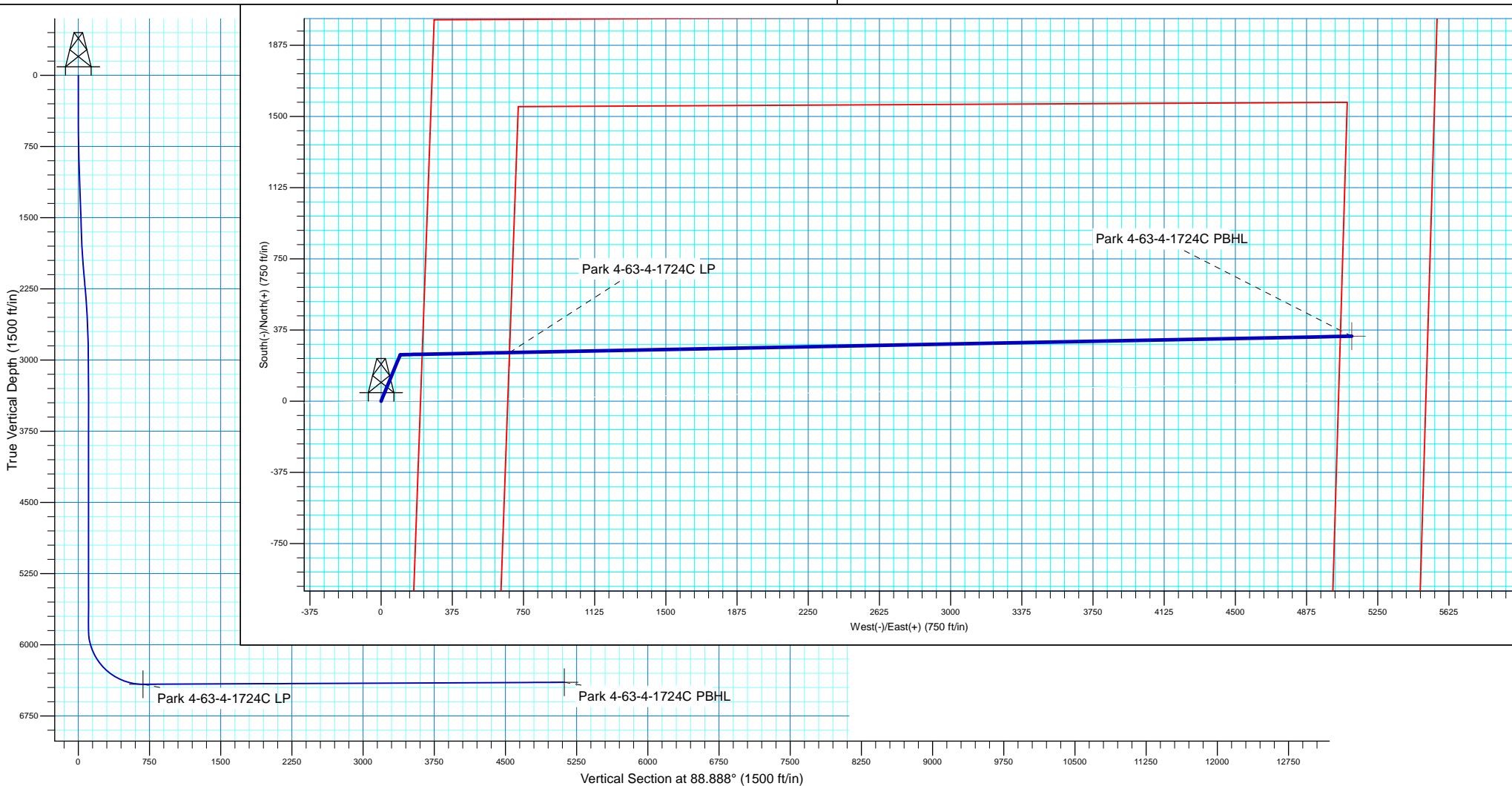


SECTION DETAILS

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
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00
1000.00	5.00	22.394	999.37	20.16	8.31	1.00	22.39	8.70
1703.31	5.00	22.394	1700.00	76.83	31.66	0.00	0.00	33.14
2093.97	12.81	22.394	2085.65	132.71	54.68	2.00	0.00	57.25
2214.20	12.81	22.394	2202.89	157.37	64.84	0.00	0.00	67.88
3068.42	0.00	0.000	3050.00	245.31	101.08	1.50	180.00	105.82
5860.47	0.00	0.000	5842.05	245.31	101.08	0.00	0.00	105.82
6763.05	90.26	88.888	6415.00	256.48	676.51	10.00	88.89	681.36
11201.19	90.26	88.888	6395.00	342.62	5113.77	0.00	0.00	5119.46

WELL DETAILS: Park 4-63-4-1724C

		GL 4560' & KB 20' @ 4580.00ft		4560.00	Longitude
+N/-S	+E/-W	Northing	Easting	Latitude	
0.00	0.00	1369653.43	3297079.28	40° 20' 35.516 N	104° 26' 3.102 W





HighPoint Resources

Weld County, CO NAD 83

Park 4-63-4 NE Pad

Park 4-63-4-1724C

OH

Plan: Plan 1

Standard Planning Report

23 August, 2018



Database:	Casper District	Local Co-ordinate Reference:	Well Park 4-63-4-1724C
Company:	HighPoint Resources	TVD Reference:	GL 4560' & KB 20' @ 4580.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4560' & KB 20' @ 4580.00ft
Site:	Park 4-63-4 NE Pad	North Reference:	True
Well:	Park 4-63-4-1724C	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		Park 4-63-4 NE Pad, Site Center : Park 4-63-4-0108B			
Site Position:		Northing:	1,369,698.64 usft	Latitude:	40° 20' 35.963 N
From:	Lat/Long	Easting:	3,297,080.42 usft	Longitude:	104° 26' 3.080 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.69 °

Well	Park 4-63-4-1724C, 2009' FNL 207' FEL Sec 4 T4N R63W					
Well Position	+N/-S	-45.19 ft	Northing:	1,369,653.43 usft	Latitude:	40° 20' 35.516 N
	+E/-W	-1.67 ft	Easting:	3,297,079.29 usft	Longitude:	104° 26' 3.102 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	4,560.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	8/23/2018	8.05	66.88	52,203

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	88.888

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	
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	5.00	22.394	999.37	20.16	8.31	1.00	1.00	0.00	22.39	
1,703.31	5.00	22.394	1,700.00	76.83	31.66	0.00	0.00	0.00	0.00	
2,093.97	12.81	22.394	2,085.65	132.71	54.68	2.00	2.00	0.00	0.00	
2,214.20	12.81	22.394	2,202.89	157.37	64.84	0.00	0.00	0.00	0.00	
3,068.42	0.00	0.000	3,050.00	245.31	101.08	1.50	-1.50	0.00	180.00	
5,860.47	0.00	0.000	5,842.05	245.31	101.08	0.00	0.00	0.00	0.00	
6,763.05	90.26	88.888	6,415.00	256.48	676.51	10.00	10.00	9.85	88.89	
11,201.19	90.26	88.888	6,395.00	342.62	5,113.77	0.00	0.00	0.00	0.00	Park 4-63-4-1724C PI

Database:	Casper District	Local Co-ordinate Reference:	Well Park 4-63-4-1724C
Company:	HighPoint Resources	TVD Reference:	GL 4560' & KB 20' @ 4580.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4560' & KB 20' @ 4580.00ft
Site:	Park 4-63-4 NE Pad	North Reference:	True
Well:	Park 4-63-4-1724C	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
Start Build 1.00									
600.00	1.00	22.394	599.99	0.81	0.33	0.35	1.00	1.00	0.00
700.00	2.00	22.394	699.96	3.23	1.33	1.39	1.00	1.00	0.00
800.00	3.00	22.394	799.86	7.26	2.99	3.13	1.00	1.00	0.00
900.00	4.00	22.394	899.68	12.90	5.32	5.57	1.00	1.00	0.00
1,000.00	5.00	22.394	999.37	20.16	8.31	8.70	1.00	1.00	0.00
Start 703.31 hold at 1000.00 MD									
1,100.00	5.00	22.394	1,098.99	28.22	11.63	12.17	0.00	0.00	0.00
1,200.00	5.00	22.394	1,198.60	36.28	14.95	15.65	0.00	0.00	0.00
1,300.00	5.00	22.394	1,298.22	44.33	18.27	19.12	0.00	0.00	0.00
1,400.00	5.00	22.394	1,397.84	52.39	21.59	22.60	0.00	0.00	0.00
1,500.00	5.00	22.394	1,497.46	60.45	24.91	26.08	0.00	0.00	0.00
1,600.00	5.00	22.394	1,597.08	68.51	28.23	29.55	0.00	0.00	0.00
1,700.00	5.00	22.394	1,696.70	76.57	31.55	33.03	0.00	0.00	0.00
1,703.31	5.00	22.394	1,700.00	76.83	31.66	33.14	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00									
1,800.00	6.93	22.394	1,796.16	86.13	35.49	37.15	2.00	2.00	0.00
1,900.00	8.93	22.394	1,895.20	98.89	40.75	42.66	2.00	2.00	0.00
2,000.00	10.93	22.394	1,993.69	114.84	47.32	49.54	2.00	2.00	0.00
2,093.97	12.81	22.394	2,085.65	132.71	54.68	57.25	2.00	2.00	0.00
Start 120.23 hold at 2093.97 MD									
2,100.00	12.81	22.394	2,091.53	133.95	55.19	57.78	0.00	0.00	0.00
2,200.00	12.81	22.394	2,189.04	154.45	63.64	66.63	0.00	0.00	0.00
2,214.20	12.81	22.394	2,202.89	157.37	64.84	67.88	0.00	0.00	0.00
Start Drop -1.50									
2,300.00	11.53	22.394	2,286.76	174.09	71.73	75.10	1.50	-1.50	0.00
2,400.00	10.03	22.394	2,384.99	191.37	78.86	82.56	1.50	-1.50	0.00
2,500.00	8.53	22.394	2,483.68	206.28	85.00	88.98	1.50	-1.50	0.00
2,600.00	7.03	22.394	2,582.76	218.79	90.15	94.38	1.50	-1.50	0.00
2,700.00	5.53	22.394	2,682.15	228.90	94.32	98.74	1.50	-1.50	0.00
2,800.00	4.03	22.394	2,781.80	236.59	97.49	102.06	1.50	-1.50	0.00
2,900.00	2.53	22.394	2,881.64	241.88	99.67	104.34	1.50	-1.50	0.00
3,000.00	1.03	22.394	2,981.59	244.74	100.85	105.58	1.50	-1.50	0.00
3,068.42	0.00	0.000	3,050.00	245.31	101.08	105.82	1.50	-1.50	0.00
Start 2792.05 hold at 3068.42 MD									
3,100.00	0.00	0.000	3,081.58	245.31	101.08	105.82	0.00	0.00	0.00
3,200.00	0.00	0.000	3,181.58	245.31	101.08	105.82	0.00	0.00	0.00
3,300.00	0.00	0.000	3,281.58	245.31	101.08	105.82	0.00	0.00	0.00
3,400.00	0.00	0.000	3,381.58	245.31	101.08	105.82	0.00	0.00	0.00
3,500.00	0.00	0.000	3,481.58	245.31	101.08	105.82	0.00	0.00	0.00
3,600.00	0.00	0.000	3,581.58	245.31	101.08	105.82	0.00	0.00	0.00
3,700.00	0.00	0.000	3,681.58	245.31	101.08	105.82	0.00	0.00	0.00
3,800.00	0.00	0.000	3,781.58	245.31	101.08	105.82	0.00	0.00	0.00
3,900.00	0.00	0.000	3,881.58	245.31	101.08	105.82	0.00	0.00	0.00
4,000.00	0.00	0.000	3,981.58	245.31	101.08	105.82	0.00	0.00	0.00
4,100.00	0.00	0.000	4,081.58	245.31	101.08	105.82	0.00	0.00	0.00
4,200.00	0.00	0.000	4,181.58	245.31	101.08	105.82	0.00	0.00	0.00

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Company:	HighPoint Resources	TVD Reference:	GL 4560' & KB 20' @ 4580.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4560' & KB 20' @ 4580.00ft
Site:	Park 4-63-4 NE Pad	North Reference:	True
Well:	Park 4-63-4-1724C	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)
4,300.00	0.00	0.000	4,281.58	245.31	101.08	105.82	0.00	0.00	0.00
4,400.00	0.00	0.000	4,381.58	245.31	101.08	105.82	0.00	0.00	0.00
4,500.00	0.00	0.000	4,481.58	245.31	101.08	105.82	0.00	0.00	0.00
4,600.00	0.00	0.000	4,581.58	245.31	101.08	105.82	0.00	0.00	0.00
4,700.00	0.00	0.000	4,681.58	245.31	101.08	105.82	0.00	0.00	0.00
4,800.00	0.00	0.000	4,781.58	245.31	101.08	105.82	0.00	0.00	0.00
4,900.00	0.00	0.000	4,881.58	245.31	101.08	105.82	0.00	0.00	0.00
5,000.00	0.00	0.000	4,981.58	245.31	101.08	105.82	0.00	0.00	0.00
5,100.00	0.00	0.000	5,081.58	245.31	101.08	105.82	0.00	0.00	0.00
5,200.00	0.00	0.000	5,181.58	245.31	101.08	105.82	0.00	0.00	0.00
5,300.00	0.00	0.000	5,281.58	245.31	101.08	105.82	0.00	0.00	0.00
5,400.00	0.00	0.000	5,381.58	245.31	101.08	105.82	0.00	0.00	0.00
5,500.00	0.00	0.000	5,481.58	245.31	101.08	105.82	0.00	0.00	0.00
5,600.00	0.00	0.000	5,581.58	245.31	101.08	105.82	0.00	0.00	0.00
5,700.00	0.00	0.000	5,681.58	245.31	101.08	105.82	0.00	0.00	0.00
5,800.00	0.00	0.000	5,781.58	245.31	101.08	105.82	0.00	0.00	0.00
5,860.47	0.00	0.000	5,842.05	245.31	101.08	105.82	0.00	0.00	0.00
Start DLS 10.00 TFO 88.89									
5,900.00	3.95	88.888	5,881.55	245.34	102.44	107.18	10.00	10.00	0.00
6,000.00	13.95	88.888	5,980.21	245.64	117.98	122.73	10.00	10.00	0.00
6,100.00	23.95	88.888	6,074.67	246.27	150.42	155.17	10.00	10.00	0.00
6,200.00	33.95	88.888	6,162.06	247.21	198.76	203.52	10.00	10.00	0.00
6,300.00	43.95	88.888	6,239.72	248.42	261.53	266.30	10.00	10.00	0.00
6,400.00	53.95	88.888	6,305.31	249.89	336.84	341.63	10.00	10.00	0.00
6,500.00	63.95	88.888	6,356.82	251.55	422.39	427.19	10.00	10.00	0.00
6,600.00	73.95	88.888	6,392.68	253.36	515.58	520.40	10.00	10.00	0.00
6,700.00	83.95	88.888	6,411.82	255.26	613.59	618.43	10.00	10.00	0.00
6,763.05	90.26	88.888	6,415.00	256.48	676.51	681.36	10.00	10.00	0.00
Start 4438.14 hold at 6763.05 MD									
6,800.00	90.26	88.888	6,414.84	257.20	713.46	718.31	0.00	0.00	0.00
6,900.00	90.26	88.888	6,414.38	259.14	813.44	818.31	0.00	0.00	0.00
7,000.00	90.26	88.888	6,413.93	261.08	913.42	918.31	0.00	0.00	0.00
7,100.00	90.26	88.888	6,413.48	263.02	1,013.40	1,018.31	0.00	0.00	0.00
7,200.00	90.26	88.888	6,413.03	264.96	1,113.38	1,118.31	0.00	0.00	0.00
7,300.00	90.26	88.888	6,412.58	266.90	1,213.36	1,218.31	0.00	0.00	0.00
7,400.00	90.26	88.888	6,412.13	268.84	1,313.34	1,318.31	0.00	0.00	0.00
7,500.00	90.26	88.888	6,411.68	270.78	1,413.32	1,418.31	0.00	0.00	0.00
7,600.00	90.26	88.888	6,411.23	272.72	1,513.30	1,518.30	0.00	0.00	0.00
7,700.00	90.26	88.888	6,410.78	274.66	1,613.28	1,618.30	0.00	0.00	0.00
7,800.00	90.26	88.888	6,410.33	276.61	1,713.26	1,718.30	0.00	0.00	0.00
7,900.00	90.26	88.888	6,409.88	278.55	1,813.24	1,818.30	0.00	0.00	0.00
8,000.00	90.26	88.888	6,409.43	280.49	1,913.22	1,918.30	0.00	0.00	0.00
8,100.00	90.26	88.888	6,408.98	282.43	2,013.20	2,018.30	0.00	0.00	0.00
8,200.00	90.26	88.888	6,408.53	284.37	2,113.18	2,118.30	0.00	0.00	0.00
8,300.00	90.26	88.888	6,408.08	286.31	2,213.16	2,218.30	0.00	0.00	0.00
8,400.00	90.26	88.888	6,407.62	288.25	2,313.14	2,318.30	0.00	0.00	0.00
8,500.00	90.26	88.888	6,407.17	290.19	2,413.12	2,418.30	0.00	0.00	0.00
8,600.00	90.26	88.888	6,406.72	292.13	2,513.10	2,518.29	0.00	0.00	0.00
8,700.00	90.26	88.888	6,406.27	294.07	2,613.08	2,618.29	0.00	0.00	0.00
8,800.00	90.26	88.888	6,405.82	296.01	2,713.06	2,718.29	0.00	0.00	0.00
8,900.00	90.26	88.888	6,405.37	297.95	2,813.04	2,818.29	0.00	0.00	0.00
9,000.00	90.26	88.888	6,404.92	299.90	2,913.02	2,918.29	0.00	0.00	0.00
9,100.00	90.26	88.888	6,404.47	301.84	3,013.00	3,018.29	0.00	0.00	0.00
9,200.00	90.26	88.888	6,404.02	303.78	3,112.98	3,118.29	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Park 4-63-4-1724C
Company:	HighPoint Resources	TVD Reference:	GL 4560' & KB 20' @ 4580.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 4560' & KB 20' @ 4580.00ft
Site:	Park 4-63-4 NE Pad	North Reference:	True
Well:	Park 4-63-4-1724C	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)	
9,300.00	90.26	88.888	6,403.57	305.72	3,212.96	3,218.29	0.00	0.00	0.00	
9,400.00	90.26	88.888	6,403.12	307.66	3,312.94	3,318.29	0.00	0.00	0.00	
9,500.00	90.26	88.888	6,402.67	309.60	3,412.92	3,418.29	0.00	0.00	0.00	
9,600.00	90.26	88.888	6,402.22	311.54	3,512.90	3,518.28	0.00	0.00	0.00	
9,700.00	90.26	88.888	6,401.77	313.48	3,612.88	3,618.28	0.00	0.00	0.00	
9,800.00	90.26	88.888	6,401.32	315.42	3,712.86	3,718.28	0.00	0.00	0.00	
9,900.00	90.26	88.888	6,400.86	317.36	3,812.84	3,818.28	0.00	0.00	0.00	
10,000.00	90.26	88.888	6,400.41	319.30	3,912.82	3,918.28	0.00	0.00	0.00	
10,100.00	90.26	88.888	6,399.96	321.24	4,012.80	4,018.28	0.00	0.00	0.00	
10,200.00	90.26	88.888	6,399.51	323.19	4,112.78	4,118.28	0.00	0.00	0.00	
10,300.00	90.26	88.888	6,399.06	325.13	4,212.76	4,218.28	0.00	0.00	0.00	
10,400.00	90.26	88.888	6,398.61	327.07	4,312.74	4,318.28	0.00	0.00	0.00	
10,500.00	90.26	88.888	6,398.16	329.01	4,412.72	4,418.27	0.00	0.00	0.00	
10,600.00	90.26	88.888	6,397.71	330.95	4,512.70	4,518.27	0.00	0.00	0.00	
10,700.00	90.26	88.888	6,397.26	332.89	4,612.68	4,618.27	0.00	0.00	0.00	
10,800.00	90.26	88.888	6,396.81	334.83	4,712.66	4,718.27	0.00	0.00	0.00	
10,900.00	90.26	88.888	6,396.36	336.77	4,812.64	4,818.27	0.00	0.00	0.00	
11,000.00	90.26	88.888	6,395.91	338.71	4,912.62	4,918.27	0.00	0.00	0.00	
11,100.00	90.26	88.888	6,395.46	340.65	5,012.60	5,018.27	0.00	0.00	0.00	
11,200.00	90.26	88.888	6,395.01	342.59	5,112.58	5,118.27	0.00	0.00	0.00	
11,201.19	90.26	88.888	6,395.00	342.62	5,113.77	5,119.46	0.00	0.00	0.00	
TD at 11201.19										

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										
Park 4-63-4-1724C PBH	0.00	0.000	6,395.00	342.62	5,113.77	1,370,057.48	3,302,188.56	40° 20' 38.897 N	104° 24' 57.056 W	
- plan hits target center										
- Point										
Park 4-63-4-1724C LP	0.00	0.000	6,415.00	256.49	676.51	1,369,918.03	3,297,752.66	40° 20' 38.051 N	104° 25' 54.365 W	
- plan misses target center by 0.01ft at 6763.04ft MD (6415.00 TVD, 256.48 N, 676.51 E)										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
500.00	500.00	0.00	0.00	Start Build 1.00	
1,000.00	999.37	20.16	8.31	Start 703.31 hold at 1000.00 MD	
1,703.31	1,700.00	76.83	31.66	Start DLS 2.00 TFO 0.00	
2,093.97	2,085.65	132.71	54.68	Start 120.23 hold at 2093.97 MD	
2,214.20	2,202.89	157.37	64.84	Start Drop -1.50	
3,068.42	3,050.00	245.31	101.08	Start 2792.05 hold at 3068.42 MD	
5,860.47	5,842.05	245.31	101.08	Start DLS 10.00 TFO 88.89	
6,763.05	6,415.00	256.48	676.51	Start 4438.14 hold at 6763.05 MD	
11,201.19	6,395.00	342.62	5,113.77	TD at 11201.19	