



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: Fox Creek 34 NW pad
Well: Fox Creek 34-0164B
Wellbore: OH
Design: Plan 1



Azimuths to True North
Magnetic North: 8.32°

Magnetic Field
Strength: 52790.2snT
Dip Angle: 67.28°
Date: 9/21/2018
Model: HDGM



Plan: Plan 1 (Fox Creek 34-0164B/OH)

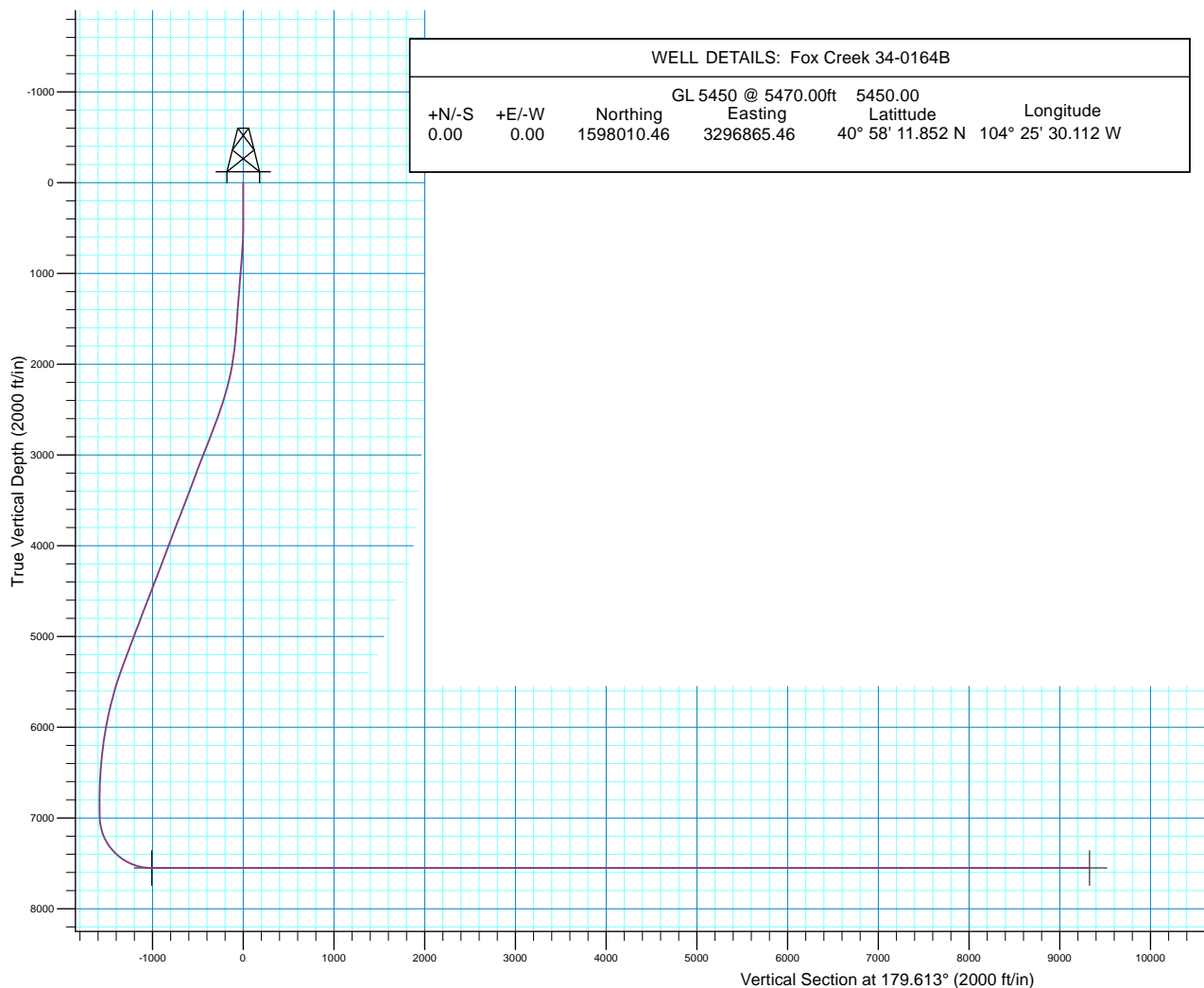
Created By: Seth Burstad

SECTION DETAILS

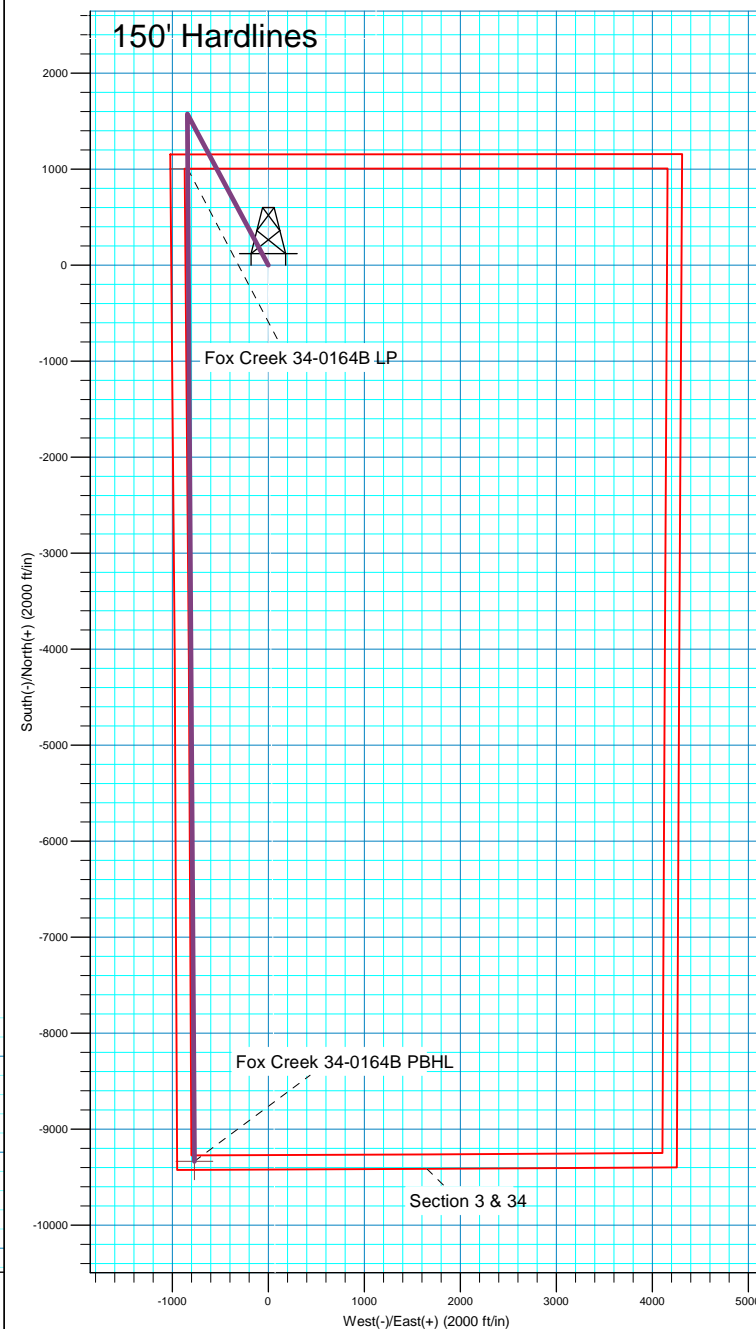
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00
750.00	5.00	331.858	749.68	9.61	-5.14	2.00	331.86	-9.65
1703.95	5.00	331.858	1700.00	82.93	-44.36	0.00	0.00	-83.22
2622.64	23.37	331.859	2586.86	280.62	-150.10	2.00	0.00	-281.63
5537.64	23.37	331.859	5262.65	1300.37	-695.55	0.00	0.00	-1305.04
7095.90	0.00	0.000	6778.04	1576.78	-843.39	1.50	180.00	-1582.44
7295.90	0.00	0.000	6978.04	1576.78	-843.39	0.00	0.00	-1582.44
8195.90	90.00	179.613	7551.00	1003.84	-839.52	10.00	179.61	-1009.48
18534.46	90.00	179.613	7551.00	-9334.49	-769.70	0.00	0.00	9329.08

WELL DETAILS: Fox Creek 34-0164B

		GL 5450 @ 5470.00ft		5450.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1598010.46	3296865.46	40° 58' 11.852 N	104° 25' 30.112 W	



150' Hardlines





HighPoint Resources

Weld County, CO NAD 83
Fox Creek 34 NW pad
Fox Creek 34-0164B

OH

Plan: Plan 1

Standard Planning Report

21 September, 2018



Database:	Casper District	Local Co-ordinate Reference:	Well Fox Creek 34-0164B
Company:	HighPoint Resources	TVD Reference:	GL 5450 @ 5470.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5450 @ 5470.00ft
Site:	Fox Creek 34 NW pad	North Reference:	True
Well:	Fox Creek 34-0164B	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		Fox Creek 34 NW pad, Site Center : Fox Creek 34-0164B			
Site Position:		Northing:	1,598,010.48 usft	Latitude:	40° 58' 11.852 N
From:	Lat/Long	Easting:	3,296,865.47 usft	Longitude:	104° 25' 30.112 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.69 °

Well	Fox Creek 34-0164B, 1155' FNL 1011' FWL Sec 34 T12N R63W					
Well Position	+N/-S	-0.01 ft	Northing:	1,598,010.46 usft	Latitude:	40° 58' 11.852 N
	+E/-W	0.00 ft	Easting:	3,296,865.47 usft	Longitude:	104° 25' 30.112 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,450.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/21/2018	8.32	67.28	52,790

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	179.613

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	
750.00	5.00	331.858	749.68	9.61	-5.14	2.00	2.00	0.00	331.86	
1,703.95	5.00	331.858	1,700.00	82.93	-44.36	0.00	0.00	0.00	0.00	
2,622.64	23.37	331.859	2,586.86	280.62	-150.10	2.00	2.00	0.00	0.00	
5,537.64	23.37	331.859	5,262.65	1,300.37	-695.55	0.00	0.00	0.00	0.00	
7,095.90	0.00	0.000	6,778.04	1,576.78	-843.39	1.50	-1.50	0.00	180.00	
7,295.90	0.00	0.000	6,978.04	1,576.78	-843.39	0.00	0.00	0.00	0.00	
8,195.90	90.00	179.613	7,551.00	1,003.84	-839.52	10.00	10.00	19.96	179.61	
18,534.47	90.00	179.613	7,551.00	-9,334.50	-769.70	0.00	0.00	0.00	0.00	Fox Creek 34-0164B

Database:	Casper District	Local Co-ordinate Reference:	Well Fox Creek 34-0164B
Company:	HighPoint Resources	TVD Reference:	GL 5450 @ 5470.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5450 @ 5470.00ft
Site:	Fox Creek 34 NW pad	North Reference:	True
Well:	Fox Creek 34-0164B	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 2.00									
600.00	2.00	331.858	599.98	1.54	-0.82	-1.54	2.00	2.00	0.00
700.00	4.00	331.858	699.84	6.15	-3.29	-6.18	2.00	2.00	0.00
750.00	5.00	331.858	749.68	9.61	-5.14	-9.65	2.00	2.00	0.00
Start 953.95 hold at 750.00 MD									
800.00	5.00	331.858	799.49	13.46	-7.20	-13.50	0.00	0.00	0.00
900.00	5.00	331.858	899.11	21.14	-11.31	-21.22	0.00	0.00	0.00
1,000.00	5.00	331.858	998.73	28.83	-15.42	-28.93	0.00	0.00	0.00
1,100.00	5.00	331.858	1,098.35	36.51	-19.53	-36.64	0.00	0.00	0.00
1,200.00	5.00	331.858	1,197.97	44.20	-23.64	-44.35	0.00	0.00	0.00
1,300.00	5.00	331.858	1,297.59	51.88	-27.75	-52.07	0.00	0.00	0.00
1,400.00	5.00	331.858	1,397.21	59.57	-31.86	-59.78	0.00	0.00	0.00
1,500.00	5.00	331.858	1,496.83	67.25	-35.97	-67.49	0.00	0.00	0.00
1,600.00	5.00	331.858	1,596.45	74.94	-40.08	-75.21	0.00	0.00	0.00
1,700.00	5.00	331.858	1,696.07	82.62	-44.19	-82.92	0.00	0.00	0.00
1,703.95	5.00	331.858	1,700.00	82.93	-44.36	-83.22	0.00	0.00	0.00
Start DLS 2.00 TFO 0.00									
1,800.00	6.92	331.858	1,795.53	91.72	-49.06	-92.05	2.00	2.00	0.00
1,900.00	8.92	331.858	1,894.57	103.87	-55.56	-104.24	2.00	2.00	0.00
2,000.00	10.92	331.858	1,993.07	119.06	-63.69	-119.49	2.00	2.00	0.00
2,100.00	12.92	331.858	2,090.91	137.28	-73.43	-137.77	2.00	2.00	0.00
2,200.00	14.92	331.858	2,187.97	158.49	-84.77	-159.06	2.00	2.00	0.00
2,300.00	16.92	331.858	2,284.12	182.68	-97.71	-183.33	2.00	2.00	0.00
2,400.00	18.92	331.858	2,379.27	209.81	-112.22	-210.56	2.00	2.00	0.00
2,500.00	20.92	331.859	2,473.28	239.85	-128.29	-240.71	2.00	2.00	0.00
2,600.00	22.92	331.859	2,566.04	272.77	-145.90	-273.75	2.00	2.00	0.00
2,622.64	23.37	331.859	2,586.86	280.62	-150.10	-281.63	2.00	2.00	0.00
Start 2915.00 hold at 2622.64 MD									
2,700.00	23.37	331.859	2,657.87	307.68	-164.57	-308.79	0.00	0.00	0.00
2,800.00	23.37	331.859	2,749.67	342.66	-183.29	-343.89	0.00	0.00	0.00
2,900.00	23.37	331.859	2,841.46	377.65	-202.00	-379.00	0.00	0.00	0.00
3,000.00	23.37	331.859	2,933.25	412.63	-220.71	-414.11	0.00	0.00	0.00
3,100.00	23.37	331.859	3,025.05	447.61	-239.42	-449.22	0.00	0.00	0.00
3,200.00	23.37	331.859	3,116.84	482.60	-258.13	-484.33	0.00	0.00	0.00
3,300.00	23.37	331.859	3,208.64	517.58	-276.84	-519.44	0.00	0.00	0.00
3,400.00	23.37	331.859	3,300.43	552.56	-295.56	-554.55	0.00	0.00	0.00
3,500.00	23.37	331.859	3,392.22	587.54	-314.27	-589.65	0.00	0.00	0.00
3,600.00	23.37	331.859	3,484.02	622.53	-332.98	-624.76	0.00	0.00	0.00
3,700.00	23.37	331.859	3,575.81	657.51	-351.69	-659.87	0.00	0.00	0.00
3,800.00	23.37	331.859	3,667.60	692.49	-370.40	-694.98	0.00	0.00	0.00
3,900.00	23.37	331.859	3,759.40	727.48	-389.11	-730.09	0.00	0.00	0.00
4,000.00	23.37	331.859	3,851.19	762.46	-407.83	-765.20	0.00	0.00	0.00
4,100.00	23.37	331.859	3,942.98	797.44	-426.54	-800.31	0.00	0.00	0.00
4,200.00	23.37	331.859	4,034.78	832.43	-445.25	-835.41	0.00	0.00	0.00
4,300.00	23.37	331.859	4,126.57	867.41	-463.96	-870.52	0.00	0.00	0.00
4,400.00	23.37	331.859	4,218.36	902.39	-482.67	-905.63	0.00	0.00	0.00
4,500.00	23.37	331.859	4,310.16	937.37	-501.38	-940.74	0.00	0.00	0.00
4,600.00	23.37	331.859	4,401.95	972.36	-520.10	-975.85	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Fox Creek 34-0164B
Company:	HighPoint Resources	TVD Reference:	GL 5450 @ 5470.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5450 @ 5470.00ft
Site:	Fox Creek 34 NW pad	North Reference:	True
Well:	Fox Creek 34-0164B	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	23.37	331.859	4,493.75	1,007.34	-538.81	-1,010.96	0.00	0.00	0.00
4,800.00	23.37	331.859	4,585.54	1,042.32	-557.52	-1,046.07	0.00	0.00	0.00
4,900.00	23.37	331.859	4,677.33	1,077.31	-576.23	-1,081.17	0.00	0.00	0.00
5,000.00	23.37	331.859	4,769.13	1,112.29	-594.94	-1,116.28	0.00	0.00	0.00
5,100.00	23.37	331.859	4,860.92	1,147.27	-613.66	-1,151.39	0.00	0.00	0.00
5,200.00	23.37	331.859	4,952.71	1,182.26	-632.37	-1,186.50	0.00	0.00	0.00
5,300.00	23.37	331.859	5,044.51	1,217.24	-651.08	-1,221.61	0.00	0.00	0.00
5,400.00	23.37	331.859	5,136.30	1,252.22	-669.79	-1,256.72	0.00	0.00	0.00
5,500.00	23.37	331.859	5,228.09	1,287.21	-688.50	-1,291.83	0.00	0.00	0.00
5,537.64	23.37	331.859	5,262.65	1,300.37	-695.55	-1,305.04	0.00	0.00	0.00
Start Drop -1.50									
5,600.00	22.44	331.859	5,320.09	1,321.78	-706.99	-1,326.52	1.50	-1.50	0.00
5,700.00	20.94	331.859	5,413.00	1,354.36	-724.42	-1,359.22	1.50	-1.50	0.00
5,800.00	19.44	331.859	5,506.86	1,384.79	-740.70	-1,389.76	1.50	-1.50	0.00
5,900.00	17.94	331.859	5,601.58	1,413.05	-755.81	-1,418.12	1.50	-1.50	0.00
6,000.00	16.44	331.859	5,697.11	1,439.10	-769.75	-1,444.27	1.50	-1.50	0.00
6,100.00	14.94	331.859	5,793.39	1,462.95	-782.50	-1,468.20	1.50	-1.50	0.00
6,200.00	13.44	331.859	5,890.33	1,484.56	-794.06	-1,489.89	1.50	-1.50	0.00
6,300.00	11.94	331.859	5,987.89	1,503.93	-804.42	-1,509.33	1.50	-1.50	0.00
6,400.00	10.44	331.859	6,085.98	1,521.04	-813.57	-1,526.50	1.50	-1.50	0.00
6,500.00	8.94	331.859	6,184.56	1,535.88	-821.51	-1,541.39	1.50	-1.50	0.00
6,600.00	7.44	331.859	6,283.53	1,548.43	-828.23	-1,553.99	1.50	-1.50	0.00
6,700.00	5.94	331.859	6,382.85	1,558.70	-833.72	-1,564.30	1.50	-1.50	0.00
6,800.00	4.44	331.859	6,482.44	1,566.68	-837.99	-1,572.30	1.50	-1.50	0.00
6,900.00	2.94	331.859	6,582.23	1,572.35	-841.02	-1,578.00	1.50	-1.50	0.00
7,000.00	1.44	331.859	6,682.15	1,575.72	-842.82	-1,581.38	1.50	-1.50	0.00
7,095.90	0.00	0.000	6,778.04	1,576.78	-843.39	-1,582.44	1.50	-1.50	0.00
Start 200.00 hold at 7095.90 MD									
7,100.00	0.00	0.000	6,782.14	1,576.78	-843.39	-1,582.44	0.00	0.00	0.00
7,200.00	0.00	0.000	6,882.14	1,576.78	-843.39	-1,582.44	0.00	0.00	0.00
7,295.90	0.00	0.000	6,978.04	1,576.78	-843.39	-1,582.44	0.00	0.00	0.00
Start DLS 10.00 TFO 179.61									
7,300.00	0.41	179.613	6,982.14	1,576.77	-843.39	-1,582.43	10.00	10.00	0.00
7,400.00	10.41	179.613	7,081.57	1,567.35	-843.33	-1,573.01	10.00	10.00	0.00
7,500.00	20.41	179.613	7,177.85	1,540.81	-843.15	-1,546.47	10.00	10.00	0.00
7,600.00	30.41	179.613	7,268.06	1,497.96	-842.86	-1,503.62	10.00	10.00	0.00
7,700.00	40.41	179.613	7,349.46	1,440.09	-842.47	-1,445.75	10.00	10.00	0.00
7,800.00	50.41	179.613	7,419.58	1,368.97	-841.99	-1,374.62	10.00	10.00	0.00
7,900.00	60.41	179.613	7,476.27	1,286.75	-841.43	-1,292.40	10.00	10.00	0.00
8,000.00	70.41	179.613	7,517.83	1,195.94	-840.82	-1,201.59	10.00	10.00	0.00
8,100.00	80.41	179.613	7,542.99	1,099.28	-840.17	-1,104.93	10.00	10.00	0.00
8,195.90	90.00	179.613	7,551.00	1,003.84	-839.52	-1,009.48	10.00	10.00	0.00
Start 10338.57 hold at 8195.90 MD									
8,200.00	90.00	179.613	7,551.00	999.73	-839.49	-1,005.38	0.00	0.00	0.00
8,300.00	90.00	179.613	7,551.00	899.74	-838.82	-905.38	0.00	0.00	0.00
8,400.00	90.00	179.613	7,551.00	799.74	-838.14	-805.38	0.00	0.00	0.00
8,500.00	90.00	179.613	7,551.00	699.74	-837.47	-705.38	0.00	0.00	0.00
8,600.00	90.00	179.613	7,551.00	599.74	-836.79	-605.38	0.00	0.00	0.00
8,700.00	90.00	179.613	7,551.00	499.75	-836.12	-505.38	0.00	0.00	0.00
8,800.00	90.00	179.613	7,551.00	399.75	-835.44	-405.38	0.00	0.00	0.00
8,900.00	90.00	179.613	7,551.00	299.75	-834.77	-305.38	0.00	0.00	0.00
9,000.00	90.00	179.613	7,551.00	199.75	-834.09	-205.38	0.00	0.00	0.00
9,100.00	90.00	179.613	7,551.00	99.75	-833.41	-105.38	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Fox Creek 34-0164B
Company:	HighPoint Resources	TVD Reference:	GL 5450 @ 5470.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5450 @ 5470.00ft
Site:	Fox Creek 34 NW pad	North Reference:	True
Well:	Fox Creek 34-0164B	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)
9,200.00	90.00	179.613	7,551.00	-0.24	-832.74	-5.38	0.00	0.00	0.00
9,300.00	90.00	179.613	7,551.00	-100.24	-832.06	94.62	0.00	0.00	0.00
9,400.00	90.00	179.613	7,551.00	-200.24	-831.39	194.62	0.00	0.00	0.00
9,500.00	90.00	179.613	7,551.00	-300.24	-830.71	294.62	0.00	0.00	0.00
9,600.00	90.00	179.613	7,551.00	-400.23	-830.04	394.62	0.00	0.00	0.00
9,700.00	90.00	179.613	7,551.00	-500.23	-829.36	494.62	0.00	0.00	0.00
9,800.00	90.00	179.613	7,551.00	-600.23	-828.69	594.62	0.00	0.00	0.00
9,900.00	90.00	179.613	7,551.00	-700.23	-828.01	694.62	0.00	0.00	0.00
10,000.00	90.00	179.613	7,551.00	-800.22	-827.34	794.62	0.00	0.00	0.00
10,100.00	90.00	179.613	7,551.00	-900.22	-826.66	894.62	0.00	0.00	0.00
10,200.00	90.00	179.613	7,551.00	-1,000.22	-825.99	994.62	0.00	0.00	0.00
10,300.00	90.00	179.613	7,551.00	-1,100.22	-825.31	1,094.62	0.00	0.00	0.00
10,400.00	90.00	179.613	7,551.00	-1,200.22	-824.64	1,194.62	0.00	0.00	0.00
10,500.00	90.00	179.613	7,551.00	-1,300.21	-823.96	1,294.62	0.00	0.00	0.00
10,600.00	90.00	179.613	7,551.00	-1,400.21	-823.28	1,394.62	0.00	0.00	0.00
10,700.00	90.00	179.613	7,551.00	-1,500.21	-822.61	1,494.62	0.00	0.00	0.00
10,800.00	90.00	179.613	7,551.00	-1,600.21	-821.93	1,594.62	0.00	0.00	0.00
10,900.00	90.00	179.613	7,551.00	-1,700.20	-821.26	1,694.62	0.00	0.00	0.00
11,000.00	90.00	179.613	7,551.00	-1,800.20	-820.58	1,794.62	0.00	0.00	0.00
11,100.00	90.00	179.613	7,551.00	-1,900.20	-819.91	1,894.62	0.00	0.00	0.00
11,200.00	90.00	179.613	7,551.00	-2,000.20	-819.23	1,994.62	0.00	0.00	0.00
11,300.00	90.00	179.613	7,551.00	-2,100.20	-818.56	2,094.62	0.00	0.00	0.00
11,400.00	90.00	179.613	7,551.00	-2,200.19	-817.88	2,194.62	0.00	0.00	0.00
11,500.00	90.00	179.613	7,551.00	-2,300.19	-817.21	2,294.62	0.00	0.00	0.00
11,600.00	90.00	179.613	7,551.00	-2,400.19	-816.53	2,394.62	0.00	0.00	0.00
11,700.00	90.00	179.613	7,551.00	-2,500.19	-815.86	2,494.62	0.00	0.00	0.00
11,800.00	90.00	179.613	7,551.00	-2,600.18	-815.18	2,594.62	0.00	0.00	0.00
11,900.00	90.00	179.613	7,551.00	-2,700.18	-814.51	2,694.62	0.00	0.00	0.00
12,000.00	90.00	179.613	7,551.00	-2,800.18	-813.83	2,794.62	0.00	0.00	0.00
12,100.00	90.00	179.613	7,551.00	-2,900.18	-813.15	2,894.62	0.00	0.00	0.00
12,200.00	90.00	179.613	7,551.00	-3,000.17	-812.48	2,994.62	0.00	0.00	0.00
12,300.00	90.00	179.613	7,551.00	-3,100.17	-811.80	3,094.62	0.00	0.00	0.00
12,400.00	90.00	179.613	7,551.00	-3,200.17	-811.13	3,194.62	0.00	0.00	0.00
12,500.00	90.00	179.613	7,551.00	-3,300.17	-810.45	3,294.62	0.00	0.00	0.00
12,600.00	90.00	179.613	7,551.00	-3,400.17	-809.78	3,394.62	0.00	0.00	0.00
12,700.00	90.00	179.613	7,551.00	-3,500.16	-809.10	3,494.62	0.00	0.00	0.00
12,800.00	90.00	179.613	7,551.00	-3,600.16	-808.43	3,594.62	0.00	0.00	0.00
12,900.00	90.00	179.613	7,551.00	-3,700.16	-807.75	3,694.62	0.00	0.00	0.00
13,000.00	90.00	179.613	7,551.00	-3,800.16	-807.08	3,794.62	0.00	0.00	0.00
13,100.00	90.00	179.613	7,551.00	-3,900.15	-806.40	3,894.62	0.00	0.00	0.00
13,200.00	90.00	179.613	7,551.00	-4,000.15	-805.73	3,994.62	0.00	0.00	0.00
13,300.00	90.00	179.613	7,551.00	-4,100.15	-805.05	4,094.62	0.00	0.00	0.00
13,400.00	90.00	179.613	7,551.00	-4,200.15	-804.38	4,194.62	0.00	0.00	0.00
13,500.00	90.00	179.613	7,551.00	-4,300.14	-803.70	4,294.62	0.00	0.00	0.00
13,600.00	90.00	179.613	7,551.00	-4,400.14	-803.02	4,394.62	0.00	0.00	0.00
13,700.00	90.00	179.613	7,551.00	-4,500.14	-802.35	4,494.62	0.00	0.00	0.00
13,800.00	90.00	179.613	7,551.00	-4,600.14	-801.67	4,594.62	0.00	0.00	0.00
13,900.00	90.00	179.613	7,551.00	-4,700.14	-801.00	4,694.62	0.00	0.00	0.00
14,000.00	90.00	179.613	7,551.00	-4,800.13	-800.32	4,794.62	0.00	0.00	0.00
14,100.00	90.00	179.613	7,551.00	-4,900.13	-799.65	4,894.62	0.00	0.00	0.00
14,200.00	90.00	179.613	7,551.00	-5,000.13	-798.97	4,994.62	0.00	0.00	0.00
14,300.00	90.00	179.613	7,551.00	-5,100.13	-798.30	5,094.62	0.00	0.00	0.00
14,400.00	90.00	179.613	7,551.00	-5,200.12	-797.62	5,194.62	0.00	0.00	0.00
14,500.00	90.00	179.613	7,551.00	-5,300.12	-796.95	5,294.62	0.00	0.00	0.00

Database:	Casper District	Local Co-ordinate Reference:	Well Fox Creek 34-0164B
Company:	HighPoint Resources	TVD Reference:	GL 5450 @ 5470.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5450 @ 5470.00ft
Site:	Fox Creek 34 NW pad	North Reference:	True
Well:	Fox Creek 34-0164B	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)
14,600.00	90.00	179.613	7,551.00	-5,400.12	-796.27	5,394.62	0.00	0.00	0.00
14,700.00	90.00	179.613	7,551.00	-5,500.12	-795.60	5,494.62	0.00	0.00	0.00
14,800.00	90.00	179.613	7,551.00	-5,600.12	-794.92	5,594.62	0.00	0.00	0.00
14,900.00	90.00	179.613	7,551.00	-5,700.11	-794.25	5,694.62	0.00	0.00	0.00
15,000.00	90.00	179.613	7,551.00	-5,800.11	-793.57	5,794.62	0.00	0.00	0.00
15,100.00	90.00	179.613	7,551.00	-5,900.11	-792.89	5,894.62	0.00	0.00	0.00
15,200.00	90.00	179.613	7,551.00	-6,000.11	-792.22	5,994.62	0.00	0.00	0.00
15,300.00	90.00	179.613	7,551.00	-6,100.10	-791.54	6,094.62	0.00	0.00	0.00
15,400.00	90.00	179.613	7,551.00	-6,200.10	-790.87	6,194.62	0.00	0.00	0.00
15,500.00	90.00	179.613	7,551.00	-6,300.10	-790.19	6,294.62	0.00	0.00	0.00
15,600.00	90.00	179.613	7,551.00	-6,400.10	-789.52	6,394.62	0.00	0.00	0.00
15,700.00	90.00	179.613	7,551.00	-6,500.09	-788.84	6,494.62	0.00	0.00	0.00
15,800.00	90.00	179.613	7,551.00	-6,600.09	-788.17	6,594.62	0.00	0.00	0.00
15,900.00	90.00	179.613	7,551.00	-6,700.09	-787.49	6,694.62	0.00	0.00	0.00
16,000.00	90.00	179.613	7,551.00	-6,800.09	-786.82	6,794.62	0.00	0.00	0.00
16,100.00	90.00	179.613	7,551.00	-6,900.09	-786.14	6,894.62	0.00	0.00	0.00
16,200.00	90.00	179.613	7,551.00	-7,000.08	-785.47	6,994.62	0.00	0.00	0.00
16,300.00	90.00	179.613	7,551.00	-7,100.08	-784.79	7,094.62	0.00	0.00	0.00
16,400.00	90.00	179.613	7,551.00	-7,200.08	-784.12	7,194.62	0.00	0.00	0.00
16,500.00	90.00	179.613	7,551.00	-7,300.08	-783.44	7,294.62	0.00	0.00	0.00
16,600.00	90.00	179.613	7,551.00	-7,400.07	-782.76	7,394.62	0.00	0.00	0.00
16,700.00	90.00	179.613	7,551.00	-7,500.07	-782.09	7,494.62	0.00	0.00	0.00
16,800.00	90.00	179.613	7,551.00	-7,600.07	-781.41	7,594.62	0.00	0.00	0.00
16,900.00	90.00	179.613	7,551.00	-7,700.07	-780.74	7,694.62	0.00	0.00	0.00
17,000.00	90.00	179.613	7,551.00	-7,800.07	-780.06	7,794.62	0.00	0.00	0.00
17,100.00	90.00	179.613	7,551.00	-7,900.06	-779.39	7,894.62	0.00	0.00	0.00
17,200.00	90.00	179.613	7,551.00	-8,000.06	-778.71	7,994.62	0.00	0.00	0.00
17,300.00	90.00	179.613	7,551.00	-8,100.06	-778.04	8,094.62	0.00	0.00	0.00
17,400.00	90.00	179.613	7,551.00	-8,200.06	-777.36	8,194.62	0.00	0.00	0.00
17,500.00	90.00	179.613	7,551.00	-8,300.05	-776.69	8,294.62	0.00	0.00	0.00
17,600.00	90.00	179.613	7,551.00	-8,400.05	-776.01	8,394.62	0.00	0.00	0.00
17,700.00	90.00	179.613	7,551.00	-8,500.05	-775.34	8,494.62	0.00	0.00	0.00
17,800.00	90.00	179.613	7,551.00	-8,600.05	-774.66	8,594.62	0.00	0.00	0.00
17,900.00	90.00	179.613	7,551.00	-8,700.04	-773.99	8,694.62	0.00	0.00	0.00
18,000.00	90.00	179.613	7,551.00	-8,800.04	-773.31	8,794.62	0.00	0.00	0.00
18,100.00	90.00	179.613	7,551.00	-8,900.04	-772.63	8,894.62	0.00	0.00	0.00
18,200.00	90.00	179.613	7,551.00	-9,000.04	-771.96	8,994.62	0.00	0.00	0.00
18,300.00	90.00	179.613	7,551.00	-9,100.04	-771.28	9,094.62	0.00	0.00	0.00
18,400.00	90.00	179.613	7,551.00	-9,200.03	-770.61	9,194.62	0.00	0.00	0.00
18,500.00	90.00	179.613	7,551.00	-9,300.03	-769.93	9,294.62	0.00	0.00	0.00
18,534.47	90.00	179.613	7,551.00	-9,334.50	-769.70	9,329.09	0.00	0.00	0.00
TD at 18534.47									

Database:	Casper District	Local Co-ordinate Reference:	Well Fox Creek 34-0164B
Company:	HighPoint Resources	TVD Reference:	GL 5450 @ 5470.00ft
Project:	Weld County, CO NAD 83	MD Reference:	GL 5450 @ 5470.00ft
Site:	Fox Creek 34 NW pad	North Reference:	True
Well:	Fox Creek 34-0164B	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
Fox Creek 34-0164B LP	0.00	0.000	7,551.00	1,003.84	-839.52	1,599,004.05	3,296,013.84	40° 58' 21.770 N	104° 25' 41.056 W
- plan hits target center									
- Point									
Fox Creek 34-0164B PB	0.00	0.000	7,551.00	-9,334.50	-769.70	1,588,667.34	3,296,208.98	40° 56' 39.624 N	104° 25' 40.141 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
500.00	500.00	0.00	0.00	Start Build 2.00
750.00	749.68	9.61	-5.14	Start 953.95 hold at 750.00 MD
1,703.95	1,700.00	82.93	-44.36	Start DLS 2.00 TFO 0.00
2,622.64	2,586.86	280.62	-150.10	Start 2915.00 hold at 2622.64 MD
5,537.64	5,262.65	1,300.37	-695.55	Start Drop -1.50
7,095.90	6,778.04	1,576.78	-843.39	Start 200.00 hold at 7095.90 MD
7,295.90	6,978.04	1,576.78	-843.39	Start DLS 10.00 TFO 179.61
8,195.90	7,551.00	1,003.84	-839.52	Start 10338.57 hold at 8195.90 MD
18,534.47	7,551.00	-9,334.50	-769.70	TD at 18534.47