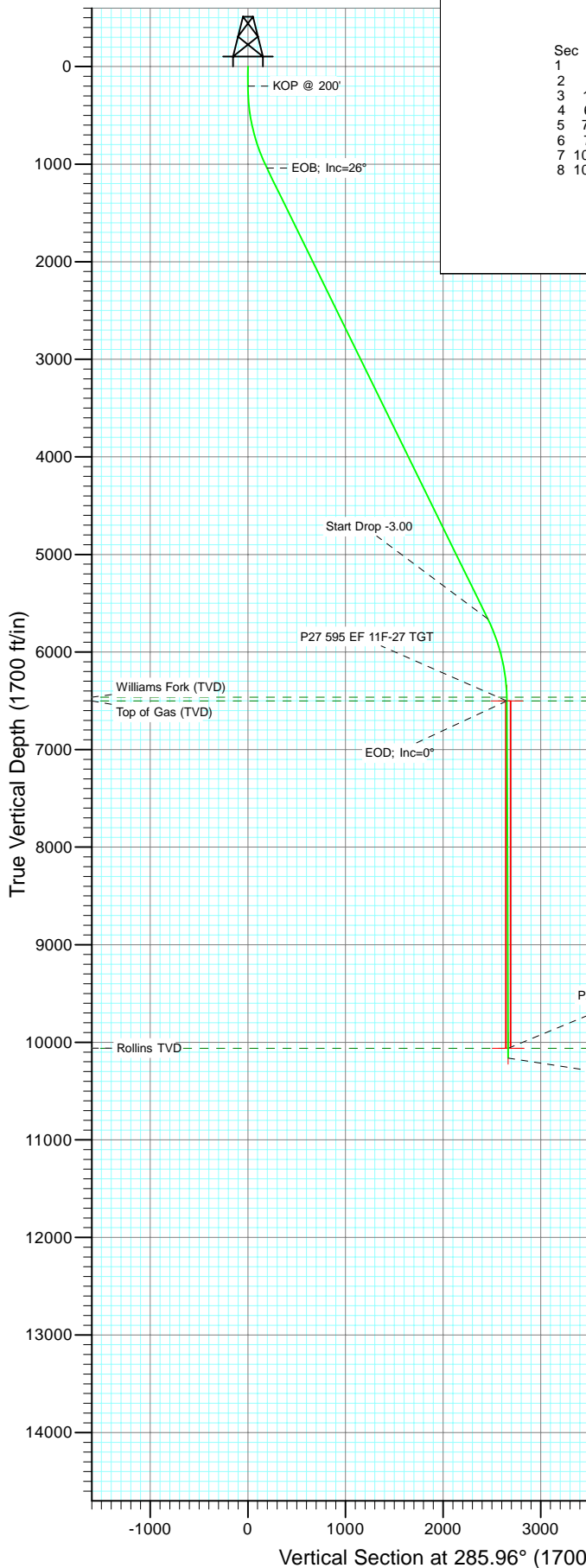


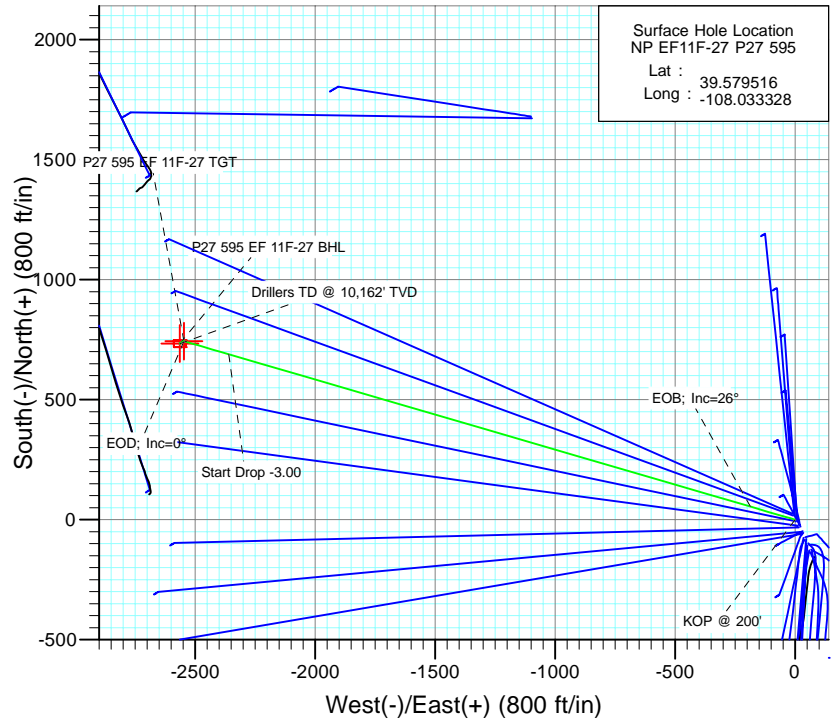


Project: North Piceance
Site: P27 595 (S27-T5S-R95W)
Well: NP EF11F-27 P27 595
Wellbore: DD
Design: Plan #1

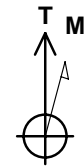


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1069.8	26.09	286.28	1040.0	54.6	-186.9	3.00	286.28	194.7	
4	6216.3	26.09	286.28	5662.0	689.1	-2359.7	0.00	0.00	2458.3	P27 595 EF 11F-27 TGT
5	7086.1	0.00	0.00	6502.0	743.7	-2546.6	3.00	180.00	2652.9	
6	7215.3	0.32	239.65	6631.3	743.5	-2546.9	0.25	239.65	2653.2	P27 595 EF 11F-27 BHL
7	10646.1	0.32	239.65	10062.0	733.7	-2563.6	0.00	0.00	2666.5	
8	10746.1	0.32	239.65	10162.0	733.5	-2564.1	0.00	0.00	2666.9	



Surface Hole Location
NP EF11F-27 P27 595
Lat : 39.579516
Long : -108.033328



Azimuths to True North
Magnetic North: 10.46°

Magnetic Field
Strength: 52346.7nT
Dip Angle: 65.82°
Date: 11/5/2010
Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
6462.0	7046.1	Williams Fork (TVD)
6502.0	7086.1	Top of Gas (TVD)
10062.0	10646.1	Rollins TVD

Plan #1
NP EF11F-27 P27 595
WELL @ 6671.0ft (Original Well Elev)
North American Datum 1983
Well NP EF11F-27 P27 595, True North

Type TD	Target	No Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
			285.96	Slot	0.0	0.0	0.0
Name							
P27 595 EF 11F-27 TGT		TVD	743.7	+N/-S	+E/-W	Latitude	Longitude
P27 595 EF 11F-27 BHL		10062.0	733.7	-2546.6	-2563.6	39.581557	-108.042363
						39.581530	-108.042423

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well NP EF11F-27 P27 595
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6671.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	WELL @ 6671.0ft (Original Well Elev)
Site:	P27 595 (S27-T5S-R95W)	North Reference:	True
Well:	NP EF11F-27 P27 595	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	North Piceance		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		P27 595 (S27-T5S-R95W)			
Site Position:		Northing:	1,645,842.89 ft	Latitude:	39.579292
From:	Lat/Long	Easting:	2,286,079.88 ft	Longitude:	-108.033175
Position Uncertainty:	0.0 ft	Slot Radius:	0.000 in	Grid Convergence:	-1.60 °

Well	NP EF11F-27 P27 595					
Well Position	+N/-S	0.0 ft	Northing:	1,645,925.80 ft	Latitude:	39.579516
	+E/-W	0.0 ft	Easting:	2,286,039.14 ft	Longitude:	-108.033328
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,649.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/5/2010	10.46	65.82	52,347

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	285.96

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,069.8	26.09	286.28	1,040.0	54.6	-186.9	3.00	3.00	0.00	286.28	
6,216.3	26.09	286.28	5,662.0	689.1	-2,359.7	0.00	0.00	0.00	0.00	
7,086.1	0.00	0.00	6,502.0	743.7	-2,546.6	3.00	-3.00	0.00	180.00	P27 595 EF 11F-27 T
7,215.3	0.32	239.65	6,631.3	743.5	-2,546.9	0.25	0.25	-93.11	239.65	
10,646.1	0.32	239.65	10,062.0	733.7	-2,563.6	0.00	0.00	0.00	0.00	P27 595 EF 11F-27 B
10,746.1	0.32	239.65	10,162.0	733.5	-2,564.1	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well NP EF11F-27 P27 595
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6671.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	WELL @ 6671.0ft (Original Well Elev)
Site:	P27 595 (S27-T5S-R95W)	North Reference:	True
Well:	NP EF11F-27 P27 595	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	3.00	286.28	300.0	0.7	-2.5	2.6	3.00	3.00	
400.0	6.00	286.28	399.6	2.9	-10.0	10.5	3.00	3.00	
500.0	9.00	286.28	498.8	6.6	-22.6	23.5	3.00	3.00	
600.0	12.00	286.28	597.1	11.7	-40.1	41.7	3.00	3.00	
700.0	15.00	286.28	694.3	18.2	-62.5	65.1	3.00	3.00	
800.0	18.00	286.28	790.2	26.2	-89.7	93.5	3.00	3.00	
900.0	21.00	286.28	884.4	35.6	-121.8	126.9	3.00	3.00	
1,000.0	24.00	286.28	976.8	46.3	-158.5	165.1	3.00	3.00	
1,069.8	26.09	286.28	1,040.0	54.6	-186.9	194.7	3.00	3.00	EOB; Inc=26°
1,100.0	26.09	286.28	1,067.2	58.3	-199.6	207.9	0.00	0.00	
1,200.0	26.09	286.28	1,157.0	70.6	-241.8	251.9	0.00	0.00	
1,300.0	26.09	286.28	1,246.8	83.0	-284.1	295.9	0.00	0.00	
1,400.0	26.09	286.28	1,336.6	95.3	-326.3	339.9	0.00	0.00	
1,500.0	26.09	286.28	1,426.4	107.6	-368.5	383.9	0.00	0.00	
1,600.0	26.09	286.28	1,516.2	119.9	-410.7	427.9	0.00	0.00	
1,700.0	26.09	286.28	1,606.0	132.3	-452.9	471.8	0.00	0.00	
1,800.0	26.09	286.28	1,695.8	144.6	-495.2	515.8	0.00	0.00	
1,900.0	26.09	286.28	1,785.6	156.9	-537.4	559.8	0.00	0.00	
2,000.0	26.09	286.28	1,875.4	169.3	-579.6	603.8	0.00	0.00	
2,100.0	26.09	286.28	1,965.2	181.6	-621.8	647.8	0.00	0.00	
2,200.0	26.09	286.28	2,055.0	193.9	-664.0	691.8	0.00	0.00	
2,300.0	26.09	286.28	2,144.9	206.3	-706.3	735.7	0.00	0.00	
2,400.0	26.09	286.28	2,234.7	218.6	-748.5	779.7	0.00	0.00	
2,500.0	26.09	286.28	2,324.5	230.9	-790.7	823.7	0.00	0.00	
2,600.0	26.09	286.28	2,414.3	243.2	-832.9	867.7	0.00	0.00	
2,700.0	26.09	286.28	2,504.1	255.6	-875.1	911.7	0.00	0.00	
2,800.0	26.09	286.28	2,593.9	267.9	-917.4	955.7	0.00	0.00	
2,900.0	26.09	286.28	2,683.7	280.2	-959.6	999.7	0.00	0.00	
3,000.0	26.09	286.28	2,773.5	292.6	-1,001.8	1,043.6	0.00	0.00	
3,100.0	26.09	286.28	2,863.3	304.9	-1,044.0	1,087.6	0.00	0.00	
3,200.0	26.09	286.28	2,953.1	317.2	-1,086.2	1,131.6	0.00	0.00	
3,300.0	26.09	286.28	3,042.9	329.6	-1,128.5	1,175.6	0.00	0.00	
3,400.0	26.09	286.28	3,132.7	341.9	-1,170.7	1,219.6	0.00	0.00	
3,500.0	26.09	286.28	3,222.5	354.2	-1,212.9	1,263.6	0.00	0.00	
3,600.0	26.09	286.28	3,312.4	366.5	-1,255.1	1,307.5	0.00	0.00	
3,700.0	26.09	286.28	3,402.2	378.9	-1,297.4	1,351.5	0.00	0.00	
3,800.0	26.09	286.28	3,492.0	391.2	-1,339.6	1,395.5	0.00	0.00	
3,900.0	26.09	286.28	3,581.8	403.5	-1,381.8	1,439.5	0.00	0.00	
4,000.0	26.09	286.28	3,671.6	415.9	-1,424.0	1,483.5	0.00	0.00	
4,100.0	26.09	286.28	3,761.4	428.2	-1,466.2	1,527.5	0.00	0.00	
4,200.0	26.09	286.28	3,851.2	440.5	-1,508.5	1,571.4	0.00	0.00	
4,300.0	26.09	286.28	3,941.0	452.9	-1,550.7	1,615.4	0.00	0.00	
4,400.0	26.09	286.28	4,030.8	465.2	-1,592.9	1,659.4	0.00	0.00	
4,500.0	26.09	286.28	4,120.6	477.5	-1,635.1	1,703.4	0.00	0.00	
4,600.0	26.09	286.28	4,210.4	489.8	-1,677.3	1,747.4	0.00	0.00	
4,700.0	26.09	286.28	4,300.2	502.2	-1,719.6	1,791.4	0.00	0.00	
4,800.0	26.09	286.28	4,390.0	514.5	-1,761.8	1,835.3	0.00	0.00	
4,900.0	26.09	286.28	4,479.8	526.8	-1,804.0	1,879.3	0.00	0.00	
5,000.0	26.09	286.28	4,569.7	539.2	-1,846.2	1,923.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well NP EF11F-27 P27 595
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6671.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	WELL @ 6671.0ft (Original Well Elev)
Site:	P27 595 (S27-T5S-R95W)	North Reference:	True
Well:	NP EF11F-27 P27 595	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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)	Comments / Formations
5,100.0	26.09	286.28	4,659.5	551.5	-1,888.4	1,967.3	0.00	0.00	
5,200.0	26.09	286.28	4,749.3	563.8	-1,930.7	2,011.3	0.00	0.00	
5,300.0	26.09	286.28	4,839.1	576.2	-1,972.9	2,055.3	0.00	0.00	
5,400.0	26.09	286.28	4,928.9	588.5	-2,015.1	2,099.2	0.00	0.00	
5,500.0	26.09	286.28	5,018.7	600.8	-2,057.3	2,143.2	0.00	0.00	
5,600.0	26.09	286.28	5,108.5	613.1	-2,099.5	2,187.2	0.00	0.00	
5,700.0	26.09	286.28	5,198.3	625.5	-2,141.8	2,231.2	0.00	0.00	
5,800.0	26.09	286.28	5,288.1	637.8	-2,184.0	2,275.2	0.00	0.00	
5,900.0	26.09	286.28	5,377.9	650.1	-2,226.2	2,319.2	0.00	0.00	
6,000.0	26.09	286.28	5,467.7	662.5	-2,268.4	2,363.1	0.00	0.00	
6,100.0	26.09	286.28	5,557.5	674.8	-2,310.6	2,407.1	0.00	0.00	
6,200.0	26.09	286.28	5,647.3	687.1	-2,352.9	2,451.1	0.00	0.00	
6,216.3	26.09	286.28	5,662.0	689.1	-2,359.7	2,458.3	0.00	0.00	Start Drop -3.00
6,300.0	23.58	286.28	5,737.9	699.0	-2,393.5	2,493.4	3.00	-3.00	
6,400.0	20.58	286.28	5,830.6	709.5	-2,429.6	2,531.0	3.00	-3.00	
6,500.0	17.58	286.28	5,925.1	718.7	-2,461.0	2,563.7	3.00	-3.00	
6,600.0	14.58	286.28	6,021.2	726.5	-2,487.5	2,591.4	3.00	-3.00	
6,700.0	11.58	286.28	6,118.6	732.8	-2,509.3	2,614.0	3.00	-3.00	
6,800.0	8.58	286.28	6,217.0	737.7	-2,526.1	2,631.5	3.00	-3.00	
6,900.0	5.58	286.28	6,316.2	741.2	-2,537.9	2,643.9	3.00	-3.00	
7,000.0	2.58	286.28	6,416.0	743.2	-2,544.7	2,651.0	3.00	-3.00	
7,046.1	1.20	286.28	6,462.0	743.6	-2,546.2	2,652.5	3.00	-3.00	Williams Fork (TVD)
7,086.1	0.00	0.00	6,502.0	743.7	-2,546.6	2,652.9	3.00	-3.00	EOD; Inc=0° - Top of Gas (TVD) - P27 595 EF
7,100.0	0.03	239.65	6,515.9	743.7	-2,546.6	2,652.9	0.25	0.25	
7,200.0	0.28	239.65	6,615.9	743.6	-2,546.8	2,653.1	0.25	0.25	
7,215.3	0.32	239.65	6,631.3	743.5	-2,546.9	2,653.2	0.25	0.25	
7,300.0	0.32	239.65	6,715.9	743.3	-2,547.3	2,653.5	0.00	0.00	
7,400.0	0.32	239.65	6,815.9	743.0	-2,547.8	2,653.9	0.00	0.00	
7,500.0	0.32	239.65	6,915.9	742.7	-2,548.3	2,654.3	0.00	0.00	
7,600.0	0.32	239.65	7,015.9	742.4	-2,548.8	2,654.7	0.00	0.00	
7,700.0	0.32	239.65	7,115.9	742.1	-2,549.3	2,655.1	0.00	0.00	
7,800.0	0.32	239.65	7,215.9	741.8	-2,549.8	2,655.5	0.00	0.00	
7,900.0	0.32	239.65	7,315.9	741.6	-2,550.2	2,655.9	0.00	0.00	
8,000.0	0.32	239.65	7,415.9	741.3	-2,550.7	2,656.2	0.00	0.00	
8,100.0	0.32	239.65	7,515.9	741.0	-2,551.2	2,656.6	0.00	0.00	
8,200.0	0.32	239.65	7,615.9	740.7	-2,551.7	2,657.0	0.00	0.00	
8,300.0	0.32	239.65	7,715.9	740.4	-2,552.2	2,657.4	0.00	0.00	
8,400.0	0.32	239.65	7,815.9	740.1	-2,552.7	2,657.8	0.00	0.00	
8,500.0	0.32	239.65	7,915.9	739.9	-2,553.2	2,658.2	0.00	0.00	
8,600.0	0.32	239.65	8,015.9	739.6	-2,553.7	2,658.6	0.00	0.00	
8,700.0	0.32	239.65	8,115.9	739.3	-2,554.1	2,659.0	0.00	0.00	
8,800.0	0.32	239.65	8,215.9	739.0	-2,554.6	2,659.4	0.00	0.00	
8,900.0	0.32	239.65	8,315.9	738.7	-2,555.1	2,659.7	0.00	0.00	
9,000.0	0.32	239.65	8,415.9	738.4	-2,555.6	2,660.1	0.00	0.00	
9,100.0	0.32	239.65	8,515.9	738.1	-2,556.1	2,660.5	0.00	0.00	
9,200.0	0.32	239.65	8,615.9	737.9	-2,556.6	2,660.9	0.00	0.00	
9,300.0	0.32	239.65	8,715.9	737.6	-2,557.1	2,661.3	0.00	0.00	
9,400.0	0.32	239.65	8,815.9	737.3	-2,557.5	2,661.7	0.00	0.00	
9,500.0	0.32	239.65	8,915.9	737.0	-2,558.0	2,662.1	0.00	0.00	
9,600.0	0.32	239.65	9,015.9	736.7	-2,558.5	2,662.5	0.00	0.00	
9,700.0	0.32	239.65	9,115.9	736.4	-2,559.0	2,662.9	0.00	0.00	
9,800.0	0.32	239.65	9,215.9	736.2	-2,559.5	2,663.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well NP EF11F-27 P27 595
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 6671.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	WELL @ 6671.0ft (Original Well Elev)
Site:	P27 595 (S27-T5S-R95W)	North Reference:	True
Well:	NP EF11F-27 P27 595	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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)	Comments / Formations
9,900.0	0.32	239.65	9,315.9	735.9	-2,560.0	2,663.6	0.00	0.00	
10,000.0	0.32	239.65	9,415.9	735.6	-2,560.5	2,664.0	0.00	0.00	
10,100.0	0.32	239.65	9,515.9	735.3	-2,561.0	2,664.4	0.00	0.00	
10,200.0	0.32	239.65	9,615.9	735.0	-2,561.4	2,664.8	0.00	0.00	
10,300.0	0.32	239.65	9,715.9	734.7	-2,561.9	2,665.2	0.00	0.00	
10,400.0	0.32	239.65	9,815.9	734.4	-2,562.4	2,665.6	0.00	0.00	
10,500.0	0.32	239.65	9,915.9	734.2	-2,562.9	2,666.0	0.00	0.00	
10,600.0	0.32	239.65	10,015.9	733.9	-2,563.4	2,666.4	0.00	0.00	
10,646.1	0.32	239.65	10,062.0	733.7	-2,563.6	2,666.5	0.00	0.00	Rollins TVD - P27 595 EF 11F-27 BHL
10,700.0	0.32	239.65	10,115.9	733.6	-2,563.9	2,666.8	0.00	0.00	
10,746.1	0.32	239.65	10,162.0	733.5	-2,564.1	2,666.9	0.00	0.00	Drillers TD @ 10,162' TVD

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
P27 595 EF 11F-27 TG1 - plan hits target center - Point	0.00	0.00	6,502.0	743.7	-2,546.6	1,646,740.22	2,283,514.26	39.581557	-108.042363
P27 595 EF 11F-27 BHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,062.0	733.7	-2,563.6	1,646,730.73	2,283,496.98	39.581530	-108.042423

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,046.1	6,462.0	Williams Fork (TVD)			
7,086.1	6,502.0	Top of Gas (TVD)			
10,646.1	10,062.0	Rollins TVD			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
1,069.8	1,040.0	54.6	-186.9	EOB; Inc=26°
6,216.3	5,662.0	689.1	-2,359.7	Start Drop -3.00
7,086.1	6,502.0	743.7	-2,546.6	EOD; Inc=0°
10,746.1	10,162.0	743.5	-2,546.9	Drillers TD @ 10,162' TVD