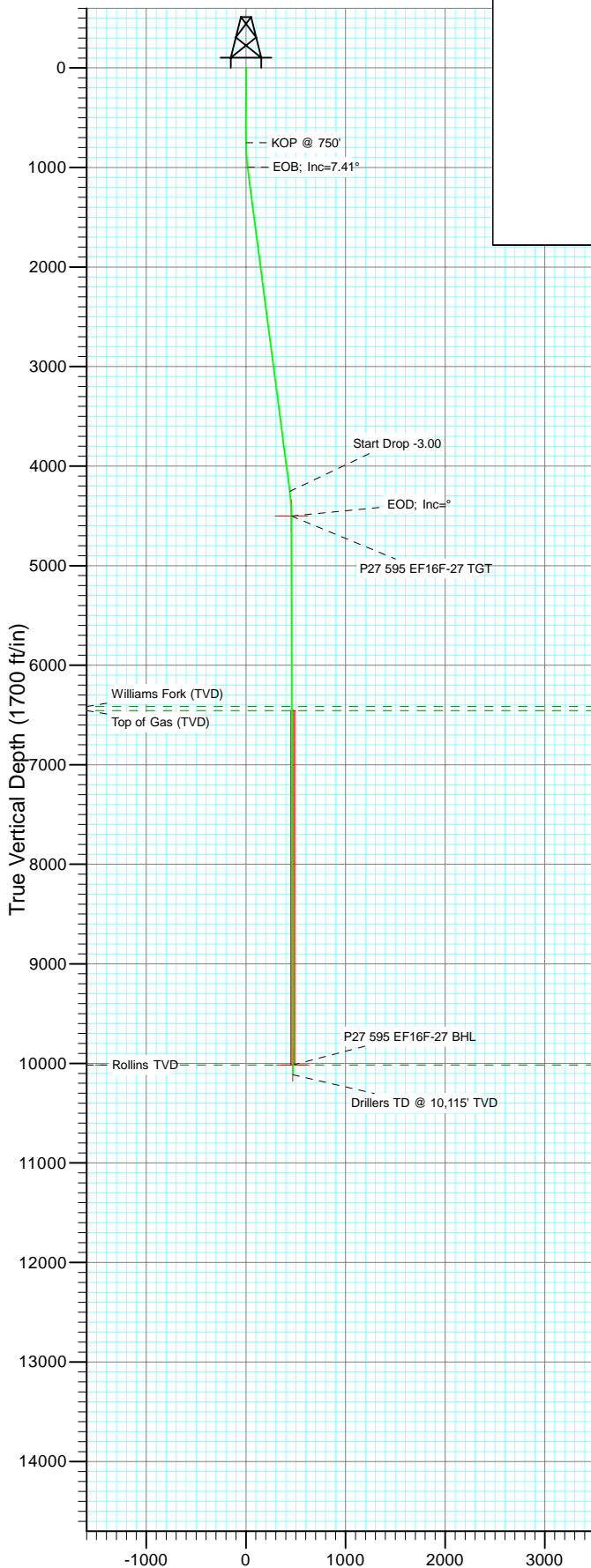
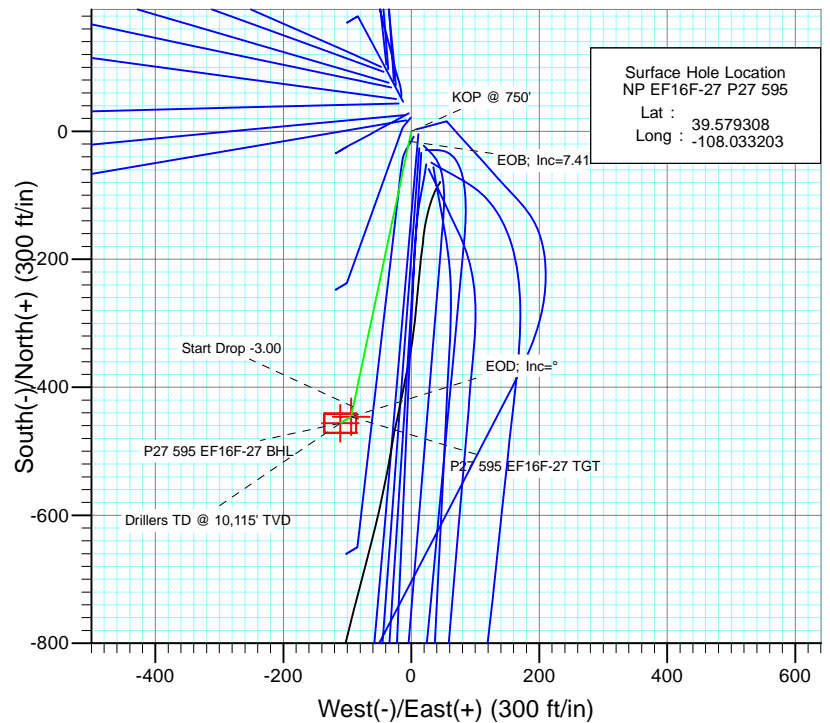




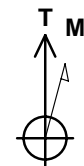
Project: North Piceance  
 Site: P27 595 (S27-T5S-R95W)  
 Well: NP EF16F-27 P27 595  
 Wellbore: DD  
 Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.0	
3	997.2	7.41	191.91	996.5	-15.6	-3.3	3.00	191.91	16.0	
4	4281.7	7.41	191.91	4253.5	-430.4	-90.8	0.00	0.00	439.6	
5	4528.8	0.00	0.00	4500.0	-446.0	-94.1	3.00	180.00	455.6	P27 595 EF16F-27 TGT
6	4611.3	0.21	239.40	4582.5	-446.1	-94.2	0.25	239.40	455.7	
7	10043.9	0.21	239.40	10015.0	-456.0	-111.1	0.00	0.00	469.4	P27 595 EF16F-27 BHL
8	10143.9	0.21	239.40	10115.0	-456.2	-111.4	0.00	0.00	469.6	



Surface Hole Location  
 NP EF16F-27 P27 595  
 Lat : 39.579308  
 Long : -108.033203



Azimuths to True North  
 Magnetic North: 10.46°

Magnetic Field  
 Strength: 52345.8nT  
 Dip Angle: 65.82°  
 Date: 11/8/2010  
 Model: IGRF2010

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
6415.0	6443.9	Williams Fork (TVD)
6455.0	6483.9	Top of Gas (TVD)
10015.0	10043.9	Rollins TVD

Plan #1						
NP EF16F-27 P27 595						
WELL @ 6675.0ft (Original Well Elev)						
North American Datum 1983						
Well NP EF16F-27 P27 595, True North						
Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	193.72	Slot	0.0	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude		Longitude
P27 595 EF16F-27 TGT	4500.0	-446.0	-94.1	39.578084		-108.033537
P27 595 EF16F-27 BHL	10015.0	-456.0	-111.1	39.578056		-108.033597

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP EF16F-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16F-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

<b>Project</b>	North Piceance		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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 EF16F-27 P27 595					
Well Position	+N/-S	0.0 ft	Northing:	1,645,849.08 ft	Latitude:	39.579308
	+E/-W	0.0 ft	Easting:	2,286,072.25 ft	Longitude:	-108.033203
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,649.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	11/8/2010	10.46	65.82	52,346

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	193.72

<b>Plan Sections</b>										
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	
750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.00	0.00	
997.2	7.41	191.91	996.5	-15.6	-3.3	3.00	3.00	0.00	191.91	
4,281.7	7.41	191.91	4,253.5	-430.4	-90.8	0.00	0.00	0.00	0.00	
4,528.8	0.00	0.00	4,500.0	-446.0	-94.1	3.00	-3.00	0.00	180.00	P27 595 EF16F-27 T
4,611.3	0.21	239.40	4,582.5	-446.1	-94.2	0.25	0.25	-146.21	239.40	
10,043.9	0.21	239.40	10,015.0	-456.0	-111.1	0.00	0.00	0.00	0.00	P27 595 EF16F-27 BI
10,143.9	0.21	239.40	10,115.0	-456.2	-111.4	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP EF16F-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16F-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
750.0	0.00	0.00	750.0	0.0	0.0	0.0	0.00	0.00	KOP @ 750'
800.0	1.50	191.91	800.0	-0.6	-0.1	0.7	3.00	3.00	
900.0	4.50	191.91	899.8	-5.8	-1.2	5.9	3.00	3.00	
997.2	7.41	191.91	996.5	-15.6	-3.3	16.0	3.00	3.00	EOB; Inc=7.41°
1,000.0	7.41	191.91	999.3	-16.0	-3.4	16.3	0.00	0.00	
1,100.0	7.41	191.91	1,098.5	-28.6	-6.0	29.2	0.00	0.00	
1,200.0	7.41	191.91	1,197.6	-41.2	-8.7	42.1	0.00	0.00	
1,300.0	7.41	191.91	1,296.8	-53.9	-11.4	55.0	0.00	0.00	
1,400.0	7.41	191.91	1,395.9	-66.5	-14.0	67.9	0.00	0.00	
1,500.0	7.41	191.91	1,495.1	-79.1	-16.7	80.8	0.00	0.00	
1,600.0	7.41	191.91	1,594.3	-91.7	-19.4	93.7	0.00	0.00	
1,700.0	7.41	191.91	1,693.4	-104.4	-22.0	106.6	0.00	0.00	
1,800.0	7.41	191.91	1,792.6	-117.0	-24.7	119.5	0.00	0.00	
1,900.0	7.41	191.91	1,891.8	-129.6	-27.4	132.4	0.00	0.00	
2,000.0	7.41	191.91	1,990.9	-142.3	-30.0	145.3	0.00	0.00	
2,100.0	7.41	191.91	2,090.1	-154.9	-32.7	158.2	0.00	0.00	
2,200.0	7.41	191.91	2,189.3	-167.5	-35.3	171.1	0.00	0.00	
2,300.0	7.41	191.91	2,288.4	-180.1	-38.0	184.0	0.00	0.00	
2,400.0	7.41	191.91	2,387.6	-192.8	-40.7	196.9	0.00	0.00	
2,500.0	7.41	191.91	2,486.7	-205.4	-43.3	209.8	0.00	0.00	
2,600.0	7.41	191.91	2,585.9	-218.0	-46.0	222.7	0.00	0.00	
2,700.0	7.41	191.91	2,685.1	-230.6	-48.7	235.6	0.00	0.00	
2,800.0	7.41	191.91	2,784.2	-243.3	-51.3	248.5	0.00	0.00	
2,900.0	7.41	191.91	2,883.4	-255.9	-54.0	261.4	0.00	0.00	
3,000.0	7.41	191.91	2,982.6	-268.5	-56.7	274.3	0.00	0.00	
3,100.0	7.41	191.91	3,081.7	-281.2	-59.3	287.2	0.00	0.00	
3,200.0	7.41	191.91	3,180.9	-293.8	-62.0	300.1	0.00	0.00	
3,300.0	7.41	191.91	3,280.1	-306.4	-64.6	313.0	0.00	0.00	
3,400.0	7.41	191.91	3,379.2	-319.0	-67.3	325.9	0.00	0.00	
3,500.0	7.41	191.91	3,478.4	-331.7	-70.0	338.8	0.00	0.00	
3,600.0	7.41	191.91	3,577.5	-344.3	-72.6	351.7	0.00	0.00	
3,700.0	7.41	191.91	3,676.7	-356.9	-75.3	364.6	0.00	0.00	
3,800.0	7.41	191.91	3,775.9	-369.5	-78.0	377.5	0.00	0.00	
3,900.0	7.41	191.91	3,875.0	-382.2	-80.6	390.4	0.00	0.00	
4,000.0	7.41	191.91	3,974.2	-394.8	-83.3	403.3	0.00	0.00	
4,100.0	7.41	191.91	4,073.4	-407.4	-86.0	416.2	0.00	0.00	
4,200.0	7.41	191.91	4,172.5	-420.1	-88.6	429.1	0.00	0.00	
4,281.7	7.41	191.91	4,253.5	-430.4	-90.8	439.6	0.00	0.00	Start Drop -3.00
4,300.0	6.87	191.91	4,271.7	-432.6	-91.3	441.9	3.00	-3.00	
4,400.0	3.87	191.91	4,371.3	-441.7	-93.2	451.3	3.00	-3.00	
4,500.0	0.87	191.91	4,471.2	-445.8	-94.1	455.4	3.00	-3.00	
4,528.8	0.00	0.00	4,500.0	-446.0	-94.1	455.6	3.00	-3.00	EOD; Inc=° - P27 595 EF16F-27 TGT
4,600.0	0.18	239.40	4,571.2	-446.1	-94.2	455.7	0.25	0.25	
4,611.3	0.21	239.40	4,582.5	-446.1	-94.2	455.7	0.25	0.25	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP EF16F-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16F-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
4,700.0	0.21	239.40	4,671.2	-446.2	-94.5	455.9	0.00	0.00	
4,800.0	0.21	239.40	4,771.2	-446.4	-94.8	456.2	0.00	0.00	
4,900.0	0.21	239.40	4,871.2	-446.6	-95.1	456.4	0.00	0.00	
5,000.0	0.21	239.40	4,971.2	-446.8	-95.4	456.7	0.00	0.00	
5,100.0	0.21	239.40	5,071.2	-447.0	-95.7	456.9	0.00	0.00	
5,200.0	0.21	239.40	5,171.2	-447.2	-96.1	457.2	0.00	0.00	
5,300.0	0.21	239.40	5,271.2	-447.3	-96.4	457.4	0.00	0.00	
5,400.0	0.21	239.40	5,371.1	-447.5	-96.7	457.7	0.00	0.00	
5,500.0	0.21	239.40	5,471.1	-447.7	-97.0	457.9	0.00	0.00	
5,600.0	0.21	239.40	5,571.1	-447.9	-97.3	458.2	0.00	0.00	
5,700.0	0.21	239.40	5,671.1	-448.1	-97.6	458.4	0.00	0.00	
5,800.0	0.21	239.40	5,771.1	-448.3	-97.9	458.7	0.00	0.00	
5,900.0	0.21	239.40	5,871.1	-448.4	-98.2	458.9	0.00	0.00	
6,000.0	0.21	239.40	5,971.1	-448.6	-98.5	459.2	0.00	0.00	
6,100.0	0.21	239.40	6,071.1	-448.8	-98.8	459.4	0.00	0.00	
6,200.0	0.21	239.40	6,171.1	-449.0	-99.1	459.7	0.00	0.00	
6,300.0	0.21	239.40	6,271.1	-449.2	-99.5	459.9	0.00	0.00	
6,400.0	0.21	239.40	6,371.1	-449.4	-99.8	460.2	0.00	0.00	
6,443.9	0.21	239.40	6,415.0	-449.4	-99.9	460.3	0.00	0.00	Williams Fork (TVD)
6,483.9	0.21	239.40	6,455.0	-449.5	-100.0	460.4	0.00	0.00	Top of Gas (TVD)
6,500.0	0.21	239.40	6,471.1	-449.5	-100.1	460.4	0.00	0.00	
6,600.0	0.21	239.40	6,571.1	-449.7	-100.4	460.7	0.00	0.00	
6,700.0	0.21	239.40	6,671.1	-449.9	-100.7	460.9	0.00	0.00	
6,800.0	0.21	239.40	6,771.1	-450.1	-101.0	461.2	0.00	0.00	
6,900.0	0.21	239.40	6,871.1	-450.3	-101.3	461.5	0.00	0.00	
7,000.0	0.21	239.40	6,971.1	-450.5	-101.6	461.7	0.00	0.00	
7,100.0	0.21	239.40	7,071.1	-450.6	-101.9	462.0	0.00	0.00	
7,200.0	0.21	239.40	7,171.1	-450.8	-102.2	462.2	0.00	0.00	
7,300.0	0.21	239.40	7,271.1	-451.0	-102.6	462.5	0.00	0.00	
7,400.0	0.21	239.40	7,371.1	-451.2	-102.9	462.7	0.00	0.00	
7,500.0	0.21	239.40	7,471.1	-451.4	-103.2	463.0	0.00	0.00	
7,600.0	0.21	239.40	7,571.1	-451.6	-103.5	463.2	0.00	0.00	
7,700.0	0.21	239.40	7,671.1	-451.7	-103.8	463.5	0.00	0.00	
7,800.0	0.21	239.40	7,771.1	-451.9	-104.1	463.7	0.00	0.00	
7,900.0	0.21	239.40	7,871.1	-452.1	-104.4	464.0	0.00	0.00	
8,000.0	0.21	239.40	7,971.1	-452.3	-104.7	464.2	0.00	0.00	
8,100.0	0.21	239.40	8,071.1	-452.5	-105.0	464.5	0.00	0.00	
8,200.0	0.21	239.40	8,171.1	-452.6	-105.3	464.7	0.00	0.00	
8,300.0	0.21	239.40	8,271.1	-452.8	-105.7	465.0	0.00	0.00	
8,400.0	0.21	239.40	8,371.1	-453.0	-106.0	465.2	0.00	0.00	
8,500.0	0.21	239.40	8,471.1	-453.2	-106.3	465.5	0.00	0.00	
8,600.0	0.21	239.40	8,571.1	-453.4	-106.6	465.7	0.00	0.00	
8,700.0	0.21	239.40	8,671.1	-453.6	-106.9	466.0	0.00	0.00	
8,800.0	0.21	239.40	8,771.1	-453.7	-107.2	466.2	0.00	0.00	
8,900.0	0.21	239.40	8,871.1	-453.9	-107.5	466.5	0.00	0.00	
9,000.0	0.21	239.40	8,971.1	-454.1	-107.8	466.7	0.00	0.00	
9,100.0	0.21	239.40	9,071.1	-454.3	-108.1	467.0	0.00	0.00	
9,200.0	0.21	239.40	9,171.1	-454.5	-108.4	467.2	0.00	0.00	
9,300.0	0.21	239.40	9,271.1	-454.7	-108.8	467.5	0.00	0.00	
9,400.0	0.21	239.40	9,371.1	-454.8	-109.1	467.7	0.00	0.00	
9,500.0	0.21	239.40	9,471.1	-455.0	-109.4	468.0	0.00	0.00	
9,600.0	0.21	239.40	9,571.1	-455.2	-109.7	468.2	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP EF16F-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WELL @ 6675.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16F-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
9,700.0	0.21	239.40	9,671.1	-455.4	-110.0	468.5	0.00	0.00	
9,800.0	0.21	239.40	9,771.1	-455.6	-110.3	468.7	0.00	0.00	
9,900.0	0.21	239.40	9,871.1	-455.8	-110.6	469.0	0.00	0.00	
10,000.0	0.21	239.40	9,971.1	-455.9	-110.9	469.2	0.00	0.00	
10,043.9	0.21	239.40	10,015.0	-456.0	-111.1	469.4	0.00	0.00	Rollins TVD - P27 595 EF16F-27 BHL
10,100.0	0.21	239.40	10,071.1	-456.1	-111.2	469.5	0.00	0.00	
10,143.9	0.21	239.40	10,115.0	-456.2	-111.4	469.6	0.00	0.00	

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
P27 595 EF16F-27 TGT	0.00	0.00	4,500.0	-446.0	-94.1	1,645,405.88	2,285,965.75	39.578084	-108.033537
- plan hits target center									
- Point									
P27 595 EF16F-27 BHL	0.00	0.00	10,015.0	-456.0	-111.1	1,645,396.33	2,285,948.52	39.578056	-108.033597
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,443.9	6,415.0	Williams Fork (TVD)				
6,483.9	6,455.0	Top of Gas (TVD)				
10,043.9	10,015.0	Rollins TVD				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
750.0	750.0	0.0	0.0	KOP @ 750'
997.2	996.5	-15.6	-3.3	EOB; Inc=7.41°
4,281.7	4,253.5	-430.4	-90.8	Start Drop -3.00
4,528.8	4,500.0	-446.0	-94.1	EOD; Inc=°
10,143.9	10,115.0	-446.1	-94.2	Drillers TD @ 10,115' TVD