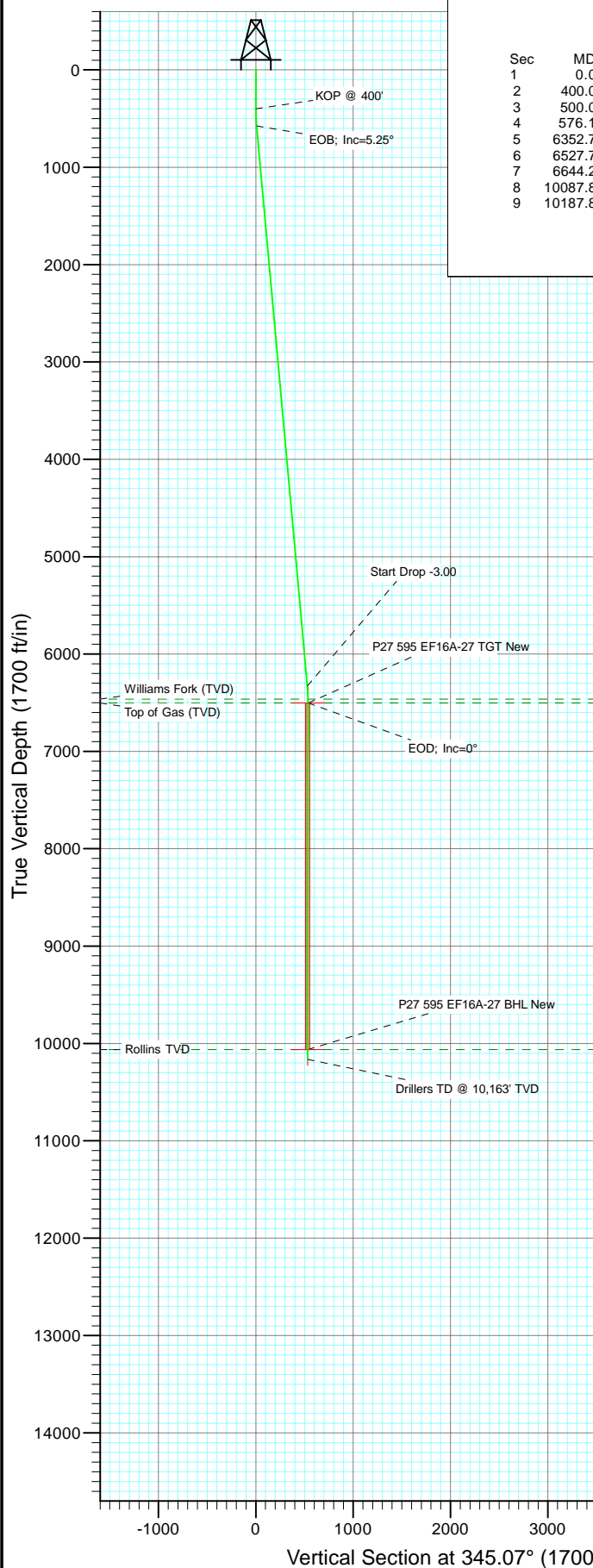


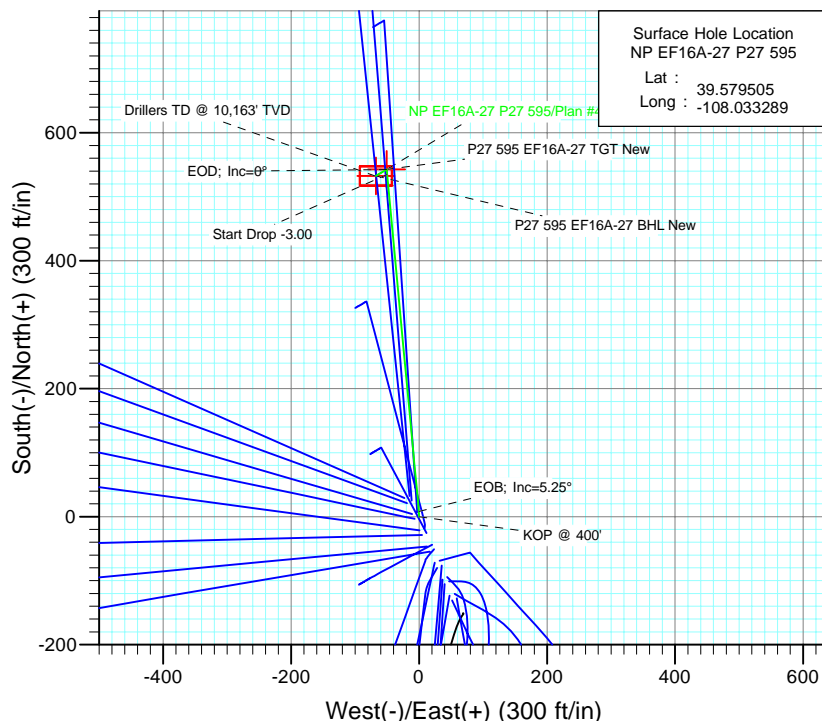


Project: North Piceance  
Site: P27 595 (S27-T5S-R95W)  
Well: NP EF16A-27 P27 595  
Wellbore: DD  
Design: Plan #4



#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	500.0	3.00	0.00	500.0	2.6	0.0	3.00	0.00	2.5	
4	576.1	5.25	354.62	575.8	8.1	-0.3	3.00	-12.45	7.9	
5	6352.7	5.25	354.62	6328.2	534.5	-49.9	0.00	0.00	529.3	
6	6527.7	0.00	0.00	6503.0	542.5	-50.7	3.00	180.00	537.2	P27 595 EF16A-27 TGT New
7	6644.2	0.32	239.61	6619.4	542.3	-51.0	0.28	239.61	537.2	
8	10087.8	0.32	239.61	10063.0	532.5	-67.7	0.00	0.00	532.0	P27 595 EF16A-27 BHL New
9	10187.8	0.32	239.61	10163.0	532.3	-68.2	0.00	0.00	531.9	



Azimuths to True North  
Magnetic North: 10.65°

Magnetic Field  
Strength: 52540.8nT  
Dip Angle: 65.87°  
Date: 3/4/2009  
Model: IGRF200510

#### FORMATION TOP DETAILS

TVDPATH	MDPATH	Formation
6463.0	6487.7	Williams Fork (TVD)
6503.0	6527.7	Top of Gas (TVD)
10063.0	10087.8	Rollins TVD

Plan #4  
NP EF16A-27 P27 595  
95xxx: LR  
EF16A-27 P27 @ 6671.0ft (Original Well Elev)  
North American Datum 1983  
Well NP EF16A-27 P27 595, True North

Type	Target	Azimuth	Origin	Type	N/S	E/W	From
Target	P27 595 EF16A-27 BHL	345.07	Slot		0.0	0.0	TVD
Name	P27 595 EF16A-27 TGT New	534.5					
	P27 595 EF16A-27 BHL New	532.3					

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP EF16A-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16A-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #4		

<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 EF16A-27 P27 595					
Well Position	+N/-S	0.0 ft	Northing:	1,645,921.49 ft	Latitude:	39.579505
	+E/-W	0.0 ft	Easting:	2,286,050.02 ft	Longitude:	-108.033289
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>
	IGRF200510	3/4/2009	10.65	65.87	52,541

<b>Design</b>	Plan #4			
<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	345.07

<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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	3.00	0.00	500.0	2.6	0.0	3.00	3.00	0.00	0.00	
576.1	5.25	354.62	575.8	8.1	-0.3	3.00	2.96	-7.08	-12.45	
6,352.7	5.25	354.62	6,328.2	534.5	-49.9	0.00	0.00	0.00	0.00	
6,527.7	0.00	0.00	6,503.0	542.5	-50.7	3.00	-3.00	0.00	180.00	P27 595 EF16A-27 T
6,644.2	0.32	239.61	6,619.4	542.3	-51.0	0.28	0.28	-103.40	239.61	
10,087.8	0.32	239.61	10,063.0	532.5	-67.7	0.00	0.00	0.00	0.00	P27 595 EF16A-27 B
10,187.8	0.32	239.61	10,163.0	532.3	-68.2	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 EF16A-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16A-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #4		

### 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	KOP @ 400'
500.0	3.00	0.00	500.0	2.6	0.0	2.5	3.00	3.00	
576.1	5.25	354.62	575.9	8.1	-0.3	7.9	3.00	2.96	EOB; Inc=5.25°
600.0	5.25	354.62	599.7	10.3	-0.5	10.0	0.00	0.00	
700.0	5.25	354.62	699.2	19.4	-1.4	19.1	0.00	0.00	
800.0	5.25	354.62	798.8	28.5	-2.3	28.1	0.00	0.00	
900.0	5.25	354.62	898.4	37.6	-3.1	37.1	0.00	0.00	
1,000.0	5.25	354.62	998.0	46.7	-4.0	46.2	0.00	0.00	
1,100.0	5.25	354.62	1,097.6	55.8	-4.8	55.2	0.00	0.00	
1,200.0	5.25	354.62	1,197.1	64.9	-5.7	64.2	0.00	0.00	
1,300.0	5.25	354.62	1,296.7	74.0	-6.5	73.2	0.00	0.00	
1,400.0	5.25	354.62	1,396.3	83.2	-7.4	82.3	0.00	0.00	
1,500.0	5.25	354.62	1,495.9	92.3	-8.3	91.3	0.00	0.00	
1,600.0	5.25	354.62	1,595.5	101.4	-9.1	100.3	0.00	0.00	
1,700.0	5.25	354.62	1,695.0	110.5	-10.0	109.3	0.00	0.00	
1,800.0	5.25	354.62	1,794.6	119.6	-10.8	118.4	0.00	0.00	
1,900.0	5.25	354.62	1,894.2	128.7	-11.7	127.4	0.00	0.00	
2,000.0	5.25	354.62	1,993.8	137.8	-12.6	136.4	0.00	0.00	
2,100.0	5.25	354.62	2,093.4	147.0	-13.4	145.5	0.00	0.00	
2,200.0	5.25	354.62	2,192.9	156.1	-14.3	154.5	0.00	0.00	
2,300.0	5.25	354.62	2,292.5	165.2	-15.1	163.5	0.00	0.00	
2,400.0	5.25	354.62	2,392.1	174.3	-16.0	172.5	0.00	0.00	
2,500.0	5.25	354.62	2,491.7	183.4	-16.9	181.6	0.00	0.00	
2,600.0	5.25	354.62	2,591.3	192.5	-17.7	190.6	0.00	0.00	
2,700.0	5.25	354.62	2,690.8	201.6	-18.6	199.6	0.00	0.00	
2,800.0	5.25	354.62	2,790.4	210.7	-19.4	208.6	0.00	0.00	
2,900.0	5.25	354.62	2,890.0	219.9	-20.3	217.7	0.00	0.00	
3,000.0	5.25	354.62	2,989.6	229.0	-21.1	226.7	0.00	0.00	
3,100.0	5.25	354.62	3,089.2	238.1	-22.0	235.7	0.00	0.00	
3,200.0	5.25	354.62	3,188.7	247.2	-22.9	244.7	0.00	0.00	
3,300.0	5.25	354.62	3,288.3	256.3	-23.7	253.8	0.00	0.00	
3,400.0	5.25	354.62	3,387.9	265.4	-24.6	262.8	0.00	0.00	
3,500.0	5.25	354.62	3,487.5	274.5	-25.4	271.8	0.00	0.00	
3,600.0	5.25	354.62	3,587.1	283.7	-26.3	280.9	0.00	0.00	
3,700.0	5.25	354.62	3,686.6	292.8	-27.2	289.9	0.00	0.00	
3,800.0	5.25	354.62	3,786.2	301.9	-28.0	298.9	0.00	0.00	
3,900.0	5.25	354.62	3,885.8	311.0	-28.9	307.9	0.00	0.00	
4,000.0	5.25	354.62	3,985.4	320.1	-29.7	317.0	0.00	0.00	
4,100.0	5.25	354.62	4,085.0	329.2	-30.6	326.0	0.00	0.00	
4,200.0	5.25	354.62	4,184.5	338.3	-31.5	335.0	0.00	0.00	
4,300.0	5.25	354.62	4,284.1	347.4	-32.3	344.0	0.00	0.00	
4,400.0	5.25	354.62	4,383.7	356.6	-33.2	353.1	0.00	0.00	
4,500.0	5.25	354.62	4,483.3	365.7	-34.0	362.1	0.00	0.00	
4,600.0	5.25	354.62	4,582.9	374.8	-34.9	371.1	0.00	0.00	
4,700.0	5.25	354.62	4,682.4	383.9	-35.8	380.2	0.00	0.00	
4,800.0	5.25	354.62	4,782.0	393.0	-36.6	389.2	0.00	0.00	
4,900.0	5.25	354.62	4,881.6	402.1	-37.5	398.2	0.00	0.00	
5,000.0	5.25	354.62	4,981.2	411.2	-38.3	407.2	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 EF16A-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16A-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #4		

### 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	5.25	354.62	5,080.8	420.4	-39.2	416.3	0.00	0.00	
5,200.0	5.25	354.62	5,180.3	429.5	-40.0	425.3	0.00	0.00	
5,300.0	5.25	354.62	5,279.9	438.6	-40.9	434.3	0.00	0.00	
5,400.0	5.25	354.62	5,379.5	447.7	-41.8	443.3	0.00	0.00	
5,500.0	5.25	354.62	5,479.1	456.8	-42.6	452.4	0.00	0.00	
5,600.0	5.25	354.62	5,578.7	465.9	-43.5	461.4	0.00	0.00	
5,700.0	5.25	354.62	5,678.2	475.0	-44.3	470.4	0.00	0.00	
5,800.0	5.25	354.62	5,777.8	484.1	-45.2	479.4	0.00	0.00	
5,900.0	5.25	354.62	5,877.4	493.3	-46.1	488.5	0.00	0.00	
6,000.0	5.25	354.62	5,977.0	502.4	-46.9	497.5	0.00	0.00	
6,100.0	5.25	354.62	6,076.6	511.5	-47.8	506.5	0.00	0.00	
6,200.0	5.25	354.62	6,176.1	520.6	-48.6	515.6	0.00	0.00	
6,300.0	5.25	354.62	6,275.7	529.7	-49.5	524.6	0.00	0.00	
6,352.7	5.25	354.62	6,328.2	534.5	-49.9	529.3	0.00	0.00	Start Drop -3.00
6,400.0	3.83	354.62	6,375.4	538.2	-50.3	533.0	3.00	-3.00	
6,487.7	1.20	354.62	6,463.0	542.1	-50.7	536.8	3.00	-3.00	Williams Fork (TVD)
6,500.0	0.83	354.62	6,475.3	542.3	-50.7	537.0	3.00	-3.00	
6,527.7	0.00	0.00	6,503.0	542.5	-50.7	537.2	3.00	-3.00	EOD; Inc=0° - Top of Gas (TVD) - P27 595 EF1
6,530.9	0.01	239.61	6,506.2	542.5	-50.7	537.2	0.28	0.28	P27 595 EF16A-27 TGT
6,600.0	0.20	239.61	6,575.3	542.4	-50.8	537.2	0.28	0.28	
6,644.2	0.32	239.61	6,619.4	542.3	-51.0	537.2	0.28	0.28	
6,700.0	0.32	239.61	6,675.3	542.2	-51.3	537.1	0.00	0.00	
6,800.0	0.32	239.61	6,775.3	541.9	-51.7	536.9	0.00	0.00	
6,900.0	0.32	239.61	6,875.3	541.6	-52.2	536.8	0.00	0.00	
7,000.0	0.32	239.61	6,975.2	541.3	-52.7	536.6	0.00	0.00	
7,100.0	0.32	239.61	7,075.2	541.0	-53.2	536.5	0.00	0.00	
7,200.0	0.32	239.61	7,175.2	540.8	-53.7	536.3	0.00	0.00	
7,300.0	0.32	239.61	7,275.2	540.5	-54.2	536.2	0.00	0.00	
7,400.0	0.32	239.61	7,375.2	540.2	-54.6	536.0	0.00	0.00	
7,500.0	0.32	239.61	7,475.2	539.9	-55.1	535.9	0.00	0.00	
7,600.0	0.32	239.61	7,575.2	539.6	-55.6	535.7	0.00	0.00	
7,700.0	0.32	239.61	7,675.2	539.3	-56.1	535.6	0.00	0.00	
7,800.0	0.32	239.61	7,775.2	539.0	-56.6	535.4	0.00	0.00	
7,900.0	0.32	239.61	7,875.2	538.8	-57.1	535.3	0.00	0.00	
8,000.0	0.32	239.61	7,975.2	538.5	-57.6	535.1	0.00	0.00	
8,100.0	0.32	239.61	8,075.2	538.2	-58.0	535.0	0.00	0.00	
8,200.0	0.32	239.61	8,175.2	537.9	-58.5	534.8	0.00	0.00	
8,300.0	0.32	239.61	8,275.2	537.6	-59.0	534.7	0.00	0.00	
8,400.0	0.32	239.61	8,375.2	537.3	-59.5	534.5	0.00	0.00	
8,500.0	0.32	239.61	8,475.2	537.1	-60.0	534.4	0.00	0.00	
8,600.0	0.32	239.61	8,575.2	536.8	-60.5	534.2	0.00	0.00	
8,700.0	0.32	239.61	8,675.2	536.5	-60.9	534.1	0.00	0.00	
8,800.0	0.32	239.61	8,775.2	536.2	-61.4	533.9	0.00	0.00	
8,900.0	0.32	239.61	8,875.2	535.9	-61.9	533.8	0.00	0.00	
9,000.0	0.32	239.61	8,975.2	535.6	-62.4	533.6	0.00	0.00	
9,100.0	0.32	239.61	9,075.2	535.4	-62.9	533.5	0.00	0.00	
9,200.0	0.32	239.61	9,175.2	535.1	-63.4	533.3	0.00	0.00	
9,300.0	0.32	239.61	9,275.2	534.8	-63.9	533.2	0.00	0.00	
9,400.0	0.32	239.61	9,375.2	534.5	-64.3	533.0	0.00	0.00	
9,500.0	0.32	239.61	9,475.2	534.2	-64.8	532.9	0.00	0.00	
9,600.0	0.32	239.61	9,575.2	533.9	-65.3	532.7	0.00	0.00	
9,700.0	0.32	239.61	9,675.2	533.6	-65.8	532.6	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 EF16A-27 P27 595
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	EF16A-27 P27 @ 6671.0ft (Original Well Elev)
<b>Site:</b>	P27 595 (S27-T5S-R95W)	<b>North Reference:</b>	True
<b>Well:</b>	NP EF16A-27 P27 595	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #4		

### 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
9,800.0	0.32	239.61	9,775.2	533.4	-66.3	532.4	0.00	0.00	
9,900.0	0.32	239.61	9,875.2	533.1	-66.8	532.3	0.00	0.00	
10,000.0	0.32	239.61	9,975.2	532.8	-67.2	532.1	0.00	0.00	
10,087.8	0.32	239.61	10,063.0	532.5	-67.7	532.0	0.00	0.00	Rollins TVD - P27 595 EF16A-27 BHL New
10,091.5	0.32	239.61	10,066.7	532.5	-67.7	532.0	0.00	0.00	P27 595 EF16A-27 BHL
10,100.0	0.32	239.61	10,075.2	532.5	-67.7	532.0	0.00	0.00	
10,187.8	0.32	239.61	10,163.0	532.3	-68.2	531.9	0.00	0.00	Drillers TD @ 10,163' 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 EF16A-27 BHL - plan misses target center by 204.5ft at 10091.5ft MD (10066.7 TVD, 532.5 N, -67.7 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,066.0	329.0	-87.7	1,646,252.82	2,285,971.48	39.580408	-108.033600
P27 595 EF16A-27 TGT - plan hits target center - Point	0.00	0.00	6,503.0	542.5	-50.7	1,646,465.19	2,286,014.46	39.580994	-108.033469
P27 595 EF16A-27 TGT - plan misses target center by 204.0ft at 6530.8ft MD (6506.0 TVD, 542.5 N, -50.7 E) - Point	0.00	0.00	6,506.0	339.0	-63.8	1,646,262.10	2,285,995.74	39.580436	-108.033515
P27 595 EF16A-27 BHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,063.0	532.5	-67.7	1,646,455.71	2,285,997.22	39.580967	-108.033529

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,487.7	6,463.0	Williams Fork (TVD)			
6,527.7	6,503.0	Top of Gas (TVD)			
10,087.8	10,063.0	Rollins TVD			

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
400.0	400.0	0.0	0.0	KOP @ 400'
576.1	575.8	2.6	0.0	EOB; Inc=5.25°
6,352.7	6,328.2	8.1	-0.3	Start Drop -3.00
6,527.7	6,503.0	534.5	-49.9	EOD; Inc=0°
10,187.8	10,163.0	542.5	-50.7	Drillers TD @ 10,163' TVD