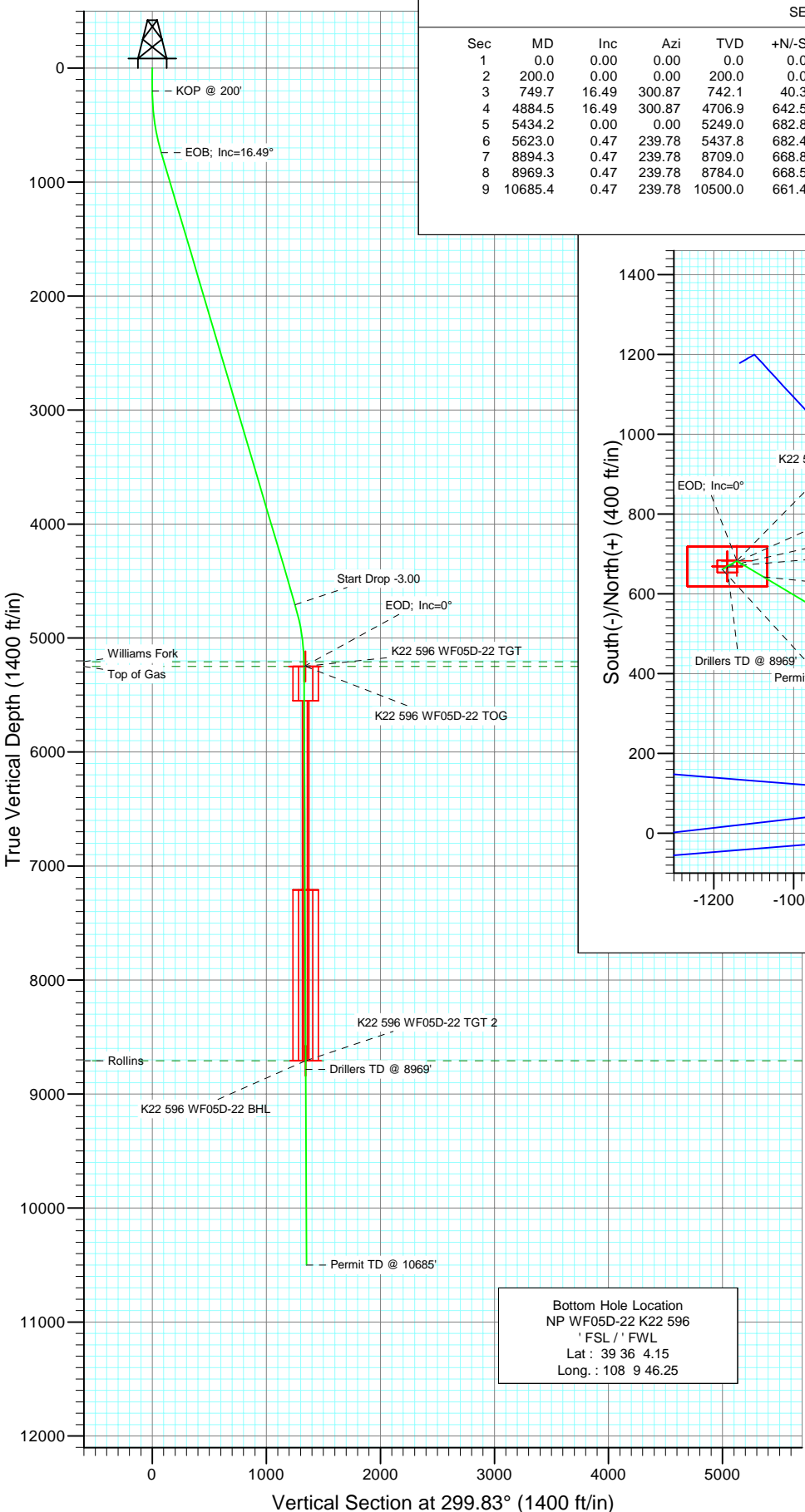
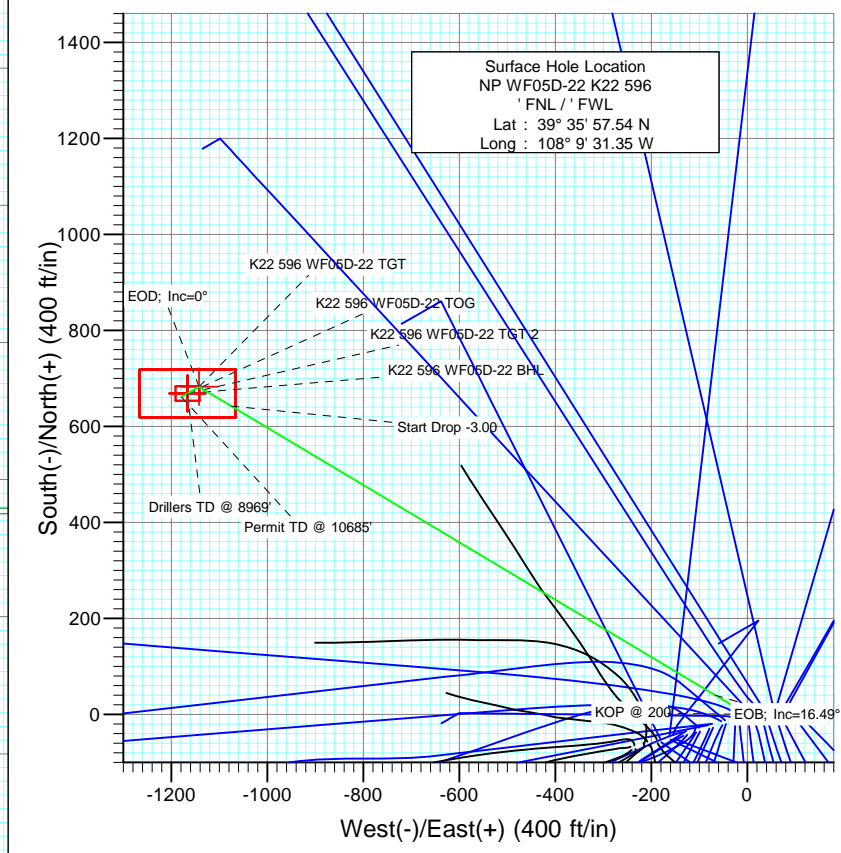




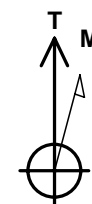
Project: North Piceance  
Site: K22 596 Pad (S22-T5S-R96W)  
Well: NP WF05D-22 K22 596  
Wellbore: DD  
Design: Plan #1



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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	749.7	16.49	300.87	742.1	40.3	-67.4	3.00	300.87	78.5	
4	4884.5	16.49	300.87	4706.9	642.5	-1074.9	0.00	0.00	1252.1	
5	5434.2	0.00	0.00	5249.0	682.8	-1142.3	3.00	180.00	1330.6	K22 596 WF05D-22 TGT
6	5623.0	0.47	239.78	5437.8	682.4	-1143.0	0.25	239.78	1331.0	
7	8894.3	0.47	239.78	8709.0	668.8	-1166.3	0.00	0.00	1344.4	K22 596 WF05D-22 BHL
8	8969.3	0.47	239.78	8784.0	668.5	-1166.8	0.00	0.00	1344.7	
9	10685.4	0.47	239.78	10500.0	661.4	-1179.0	0.00	0.00	1351.8	



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
5209.0	5394.2	Williams Fork
5249.0	5434.2	Top of Gas
8709.0	8894.3	Rollins



Azimuths to True North  
Magnetic North: 10.74°

Magnetic Field  
Strength: 52556.5nT  
Dip Angle: 65.87°  
Date: 12/17/2008  
Model: IGRF200510

DESIGN DETAILS: Plan #1				
85xxx; LR WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)				
Target	Azimuth	Origin	N/S	E/W From TVD
K22 596 WF05D-22 BHL	299.83	Slot	0.0	0.0

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 2003.21 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP WF05D-22 K22 596
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>North Reference:</b>	True
<b>Well:</b>	NP WF05D-22 K22 596	<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		K22 596 Pad (S22-T5S-R96W)			
Site Position:		Northing:	1,654,096.85 ft	Latitude:	39° 35' 57.02 N
From:	Lat/Long	Easting:	2,250,762.90 ft	Longitude:	108° 9' 33.39 W
Position Uncertainty:	0.0 ft	Slot Radius:	0.000 in	Grid Convergence:	-1.68 °

Well	NP WF05D-22 K22 596					
Well Position	+N/-S	0.0 ft	Northing:	1,654,144.84 ft	Latitude:	39° 35' 57.54 N
	+E/-W	0.0 ft	Easting:	2,250,924.06 ft	Longitude:	108° 9' 31.35 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,524.0 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	12/17/2008	10.74	65.87	52,556

<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	299.83

<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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
749.7	16.49	300.87	742.1	40.3	-67.4	3.00	3.00	0.00	300.87	
4,884.5	16.49	300.87	4,706.9	642.5	-1,074.9	0.00	0.00	0.00	0.00	
5,434.2	0.00	0.00	5,249.0	682.8	-1,142.3	3.00	-3.00	0.00	180.00	K22 596 WF05D-22 T
5,623.0	0.47	239.78	5,437.8	682.4	-1,143.0	0.25	0.25	-63.69	239.78	
8,894.3	0.47	239.78	8,709.0	668.8	-1,166.3	0.00	0.00	0.00	0.00	K22 596 WF05D-22 E
8,969.3	0.47	239.78	8,784.0	668.5	-1,166.8	0.00	0.00	0.00	0.00	
10,685.4	0.47	239.78	10,500.0	661.4	-1,179.0	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 2003.21 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP WF05D-22 K22 596
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>North Reference:</b>	True
<b>Well:</b>	NP WF05D-22 K22 596	<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	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	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'
210.0	0.30	300.87	210.0	0.0	0.0	0.0	3.00	3.00	
240.0	1.20	300.87	240.0	0.2	-0.4	0.4	3.00	3.00	
270.0	2.10	300.87	270.0	0.7	-1.1	1.3	3.00	3.00	
300.0	3.00	300.87	300.0	1.3	-2.2	2.6	3.00	3.00	
330.0	3.90	300.87	329.9	2.3	-3.8	4.4	3.00	3.00	
360.0	4.80	300.87	359.8	3.4	-5.7	6.7	3.00	3.00	
390.0	5.70	300.87	389.7	4.8	-8.1	9.4	3.00	3.00	
420.0	6.60	300.87	419.5	6.5	-10.9	12.7	3.00	3.00	
450.0	7.50	300.87	449.3	8.4	-14.0	16.3	3.00	3.00	
480.0	8.40	300.87	479.0	10.5	-17.6	20.5	3.00	3.00	
510.0	9.30	300.87	508.6	12.9	-21.5	25.1	3.00	3.00	
540.0	10.20	300.87	538.2	15.5	-25.9	30.2	3.00	3.00	
570.0	11.10	300.87	567.7	18.3	-30.7	35.7	3.00	3.00	
600.0	12.00	300.87	597.1	21.4	-35.8	41.7	3.00	3.00	
630.0	12.90	300.87	626.4	24.7	-41.4	48.2	3.00	3.00	
660.0	13.80	300.87	655.6	28.3	-47.3	55.1	3.00	3.00	
690.0	14.70	300.87	684.6	32.1	-53.7	62.5	3.00	3.00	
720.0	15.60	300.87	713.6	36.1	-60.4	70.3	3.00	3.00	
749.7	16.49	300.87	742.1	40.3	-67.4	78.5	3.00	3.00	EOB; Inc=16.49°
750.0	16.49	300.87	742.4	40.4	-67.5	78.6	0.00	0.00	
780.0	16.49	300.87	771.2	44.7	-74.8	87.1	0.00	0.00	
810.0	16.49	300.87	800.0	49.1	-82.1	95.7	0.00	0.00	
840.0	16.49	300.87	828.7	53.5	-89.4	104.2	0.00	0.00	
870.0	16.49	300.87	857.5	57.8	-96.7	112.7	0.00	0.00	
900.0	16.49	300.87	886.3	62.2	-104.1	121.2	0.00	0.00	
930.0	16.49	300.87	915.0	66.6	-111.4	129.7	0.00	0.00	
960.0	16.49	300.87	943.8	70.9	-118.7	138.2	0.00	0.00	
990.0	16.49	300.87	972.6	75.3	-126.0	146.8	0.00	0.00	
1,020.0	16.49	300.87	1,001.3	79.7	-133.3	155.3	0.00	0.00	
1,050.0	16.49	300.87	1,030.1	84.0	-140.6	163.8	0.00	0.00	
1,080.0	16.49	300.87	1,058.9	88.4	-147.9	172.3	0.00	0.00	
1,110.0	16.49	300.87	1,087.6	92.8	-155.2	180.8	0.00	0.00	
1,140.0	16.49	300.87	1,116.4	97.2	-162.5	189.3	0.00	0.00	
1,170.0	16.49	300.87	1,145.2	101.5	-169.8	197.8	0.00	0.00	
1,200.0	16.49	300.87	1,173.9	105.9	-177.1	206.4	0.00	0.00	
1,230.0	16.49	300.87	1,202.7	110.3	-184.5	214.9	0.00	0.00	
1,260.0	16.49	300.87	1,231.5	114.6	-191.8	223.4	0.00	0.00	
1,290.0	16.49	300.87	1,260.2	119.0	-199.1	231.9	0.00	0.00	
1,320.0	16.49	300.87	1,289.0	123.4	-206.4	240.4	0.00	0.00	
1,350.0	16.49	300.87	1,317.7	127.7	-213.7	248.9	0.00	0.00	
1,380.0	16.49	300.87	1,346.5	132.1	-221.0	257.4	0.00	0.00	
1,410.0	16.49	300.87	1,375.3	136.5	-228.3	266.0	0.00	0.00	
1,440.0	16.49	300.87	1,404.0	140.8	-235.6	274.5	0.00	0.00	
1,470.0	16.49	300.87	1,432.8	145.2	-242.9	283.0	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 2003.21 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP WF05D-22 K22 596
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>North Reference:</b>	True
<b>Well:</b>	NP WF05D-22 K22 596	<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
1,500.0	16.49	300.87	1,461.6	149.6	-250.2	291.5	0.00	0.00	
1,530.0	16.49	300.87	1,490.3	153.9	-257.6	300.0	0.00	0.00	
1,560.0	16.49	300.87	1,519.1	158.3	-264.9	308.5	0.00	0.00	
1,590.0	16.49	300.87	1,547.9	162.7	-272.2	317.0	0.00	0.00	
1,620.0	16.49	300.87	1,576.6	167.1	-279.5	325.6	0.00	0.00	
1,650.0	16.49	300.87	1,605.4	171.4	-286.8	334.1	0.00	0.00	
1,680.0	16.49	300.87	1,634.2	175.8	-294.1	342.6	0.00	0.00	
1,710.0	16.49	300.87	1,662.9	180.2	-301.4	351.1	0.00	0.00	
1,740.0	16.49	300.87	1,691.7	184.5	-308.7	359.6	0.00	0.00	
1,770.0	16.49	300.87	1,720.5	188.9	-316.0	368.1	0.00	0.00	
1,800.0	16.49	300.87	1,749.2	193.3	-323.3	376.6	0.00	0.00	
1,830.0	16.49	300.87	1,778.0	197.6	-330.6	385.2	0.00	0.00	
1,860.0	16.49	300.87	1,806.8	202.0	-338.0	393.7	0.00	0.00	
1,890.0	16.49	300.87	1,835.5	206.4	-345.3	402.2	0.00	0.00	
1,920.0	16.49	300.87	1,864.3	210.7	-352.6	410.7	0.00	0.00	
1,950.0	16.49	300.87	1,893.1	215.1	-359.9	419.2	0.00	0.00	
1,980.0	16.49	300.87	1,921.8	219.5	-367.2	427.7	0.00	0.00	
2,010.0	16.49	300.87	1,950.6	223.9	-374.5	436.2	0.00	0.00	
2,040.0	16.49	300.87	1,979.4	228.2	-381.8	444.8	0.00	0.00	
2,070.0	16.49	300.87	2,008.1	232.6	-389.1	453.3	0.00	0.00	
2,100.0	16.49	300.87	2,036.9	237.0	-396.4	461.8	0.00	0.00	
2,130.0	16.49	300.87	2,065.7	241.3	-403.7	470.3	0.00	0.00	
2,160.0	16.49	300.87	2,094.4	245.7	-411.1	478.8	0.00	0.00	
2,190.0	16.49	300.87	2,123.2	250.1	-418.4	487.3	0.00	0.00	
2,220.0	16.49	300.87	2,152.0	254.4	-425.7	495.8	0.00	0.00	
2,250.0	16.49	300.87	2,180.7	258.8	-433.0	504.4	0.00	0.00	
2,280.0	16.49	300.87	2,209.5	263.2	-440.3	512.9	0.00	0.00	
2,310.0	16.49	300.87	2,238.3	267.5	-447.6	521.4	0.00	0.00	
2,340.0	16.49	300.87	2,267.0	271.9	-454.9	529.9	0.00	0.00	
2,370.0	16.49	300.87	2,295.8	276.3	-462.2	538.4	0.00	0.00	
2,400.0	16.49	300.87	2,324.6	280.7	-469.5	546.9	0.00	0.00	
2,430.0	16.49	300.87	2,353.3	285.0	-476.8	555.4	0.00	0.00	
2,460.0	16.49	300.87	2,382.1	289.4	-484.1	564.0	0.00	0.00	
2,490.0	16.49	300.87	2,410.9	293.8	-491.5	572.5	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 2003.21 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP WF05D-22 K22 596
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>North Reference:</b>	True
<b>Well:</b>	NP WF05D-22 K22 596	<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
2,500.0	16.49	300.87	2,420.4	295.2	-493.9	575.3	0.00	0.00	
2,600.0	16.49	300.87	2,516.3	309.8	-518.3	603.7	0.00	0.00	
2,700.0	16.49	300.87	2,612.2	324.3	-542.6	632.1	0.00	0.00	
2,800.0	16.49	300.87	2,708.1	338.9	-567.0	660.4	0.00	0.00	
2,900.0	16.49	300.87	2,804.0	353.5	-591.3	688.8	0.00	0.00	
3,000.0	16.49	300.87	2,899.9	368.0	-615.7	717.2	0.00	0.00	
3,100.0	16.49	300.87	2,995.8	382.6	-640.1	745.6	0.00	0.00	
3,200.0	16.49	300.87	3,091.7	397.2	-664.4	774.0	0.00	0.00	
3,300.0	16.49	300.87	3,187.5	411.7	-688.8	802.4	0.00	0.00	
3,400.0	16.49	300.87	3,283.4	426.3	-713.2	830.7	0.00	0.00	
3,500.0	16.49	300.87	3,379.3	440.9	-737.5	859.1	0.00	0.00	
3,600.0	16.49	300.87	3,475.2	455.4	-761.9	887.5	0.00	0.00	
3,700.0	16.49	300.87	3,571.1	470.0	-786.3	915.9	0.00	0.00	
3,800.0	16.49	300.87	3,667.0	484.5	-810.6	944.3	0.00	0.00	
3,900.0	16.49	300.87	3,762.9	499.1	-835.0	972.6	0.00	0.00	
4,000.0	16.49	300.87	3,858.7	513.7	-859.4	1,001.0	0.00	0.00	
4,100.0	16.49	300.87	3,954.6	528.2	-883.7	1,029.4	0.00	0.00	
4,200.0	16.49	300.87	4,050.5	542.8	-908.1	1,057.8	0.00	0.00	
4,300.0	16.49	300.87	4,146.4	557.4	-932.5	1,086.2	0.00	0.00	
4,400.0	16.49	300.87	4,242.3	571.9	-956.8	1,114.5	0.00	0.00	
4,500.0	16.49	300.87	4,338.2	586.5	-981.2	1,142.9	0.00	0.00	
4,600.0	16.49	300.87	4,434.1	601.1	-1,005.5	1,171.3	0.00	0.00	
4,700.0	16.49	300.87	4,530.0	615.6	-1,029.9	1,199.7	0.00	0.00	
4,800.0	16.49	300.87	4,625.8	630.2	-1,054.3	1,228.1	0.00	0.00	
4,884.5	16.49	300.87	4,706.9	642.5	-1,074.9	1,252.1	0.00	0.00	Start Drop -3.00
4,900.0	16.03	300.87	4,721.7	644.7	-1,078.6	1,256.4	3.00	-3.00	
5,000.0	13.03	300.87	4,818.5	657.6	-1,100.1	1,281.5	3.00	-3.00	
5,100.0	10.03	300.87	4,916.5	667.8	-1,117.3	1,301.4	3.00	-3.00	
5,200.0	7.03	300.87	5,015.4	675.4	-1,130.0	1,316.3	3.00	-3.00	
5,300.0	4.03	300.87	5,114.9	680.4	-1,138.3	1,325.9	3.00	-3.00	
5,394.2	1.20	300.87	5,209.0	682.6	-1,141.9	1,330.2	3.00	-3.00	Williams Fork
5,400.0	1.03	300.87	5,214.8	682.6	-1,142.0	1,330.3	3.00	-3.00	
5,434.2	0.00	300.87	5,249.0	682.8	-1,142.3	1,330.6	3.00	-3.00	EOD; Inc=0° - Top of Gas - K22 596 WF05D-22
5,500.0	0.16	239.78	5,314.8	682.8	-1,142.4	1,330.6	0.25	0.25	
5,600.0	0.41	239.78	5,414.8	682.5	-1,142.8	1,330.9	0.25	0.25	
5,623.0	0.47	239.78	5,437.8	682.4	-1,143.0	1,331.0	0.25	0.25	
5,700.0	0.47	239.78	5,514.8	682.1	-1,143.5	1,331.3	0.00	0.00	
5,800.0	0.47	239.78	5,614.8	681.7	-1,144.2	1,331.7	0.00	0.00	
5,900.0	0.47	239.78	5,714.8	681.3	-1,144.9	1,332.1	0.00	0.00	
6,000.0	0.47	239.78	5,814.8	680.8	-1,145.7	1,332.5	0.00	0.00	
6,100.0	0.47	239.78	5,914.8	680.4	-1,146.4	1,332.9	0.00	0.00	
6,200.0	0.47	239.78	6,014.8	680.0	-1,147.1	1,333.4	0.00	0.00	
6,300.0	0.47	239.78	6,114.8	679.6	-1,147.8	1,333.8	0.00	0.00	
6,400.0	0.47	239.78	6,214.8	679.2	-1,148.5	1,334.2	0.00	0.00	
6,500.0	0.47	239.78	6,314.8	678.8	-1,149.2	1,334.6	0.00	0.00	
6,600.0	0.47	239.78	6,414.8	678.4	-1,149.9	1,335.0	0.00	0.00	
6,700.0	0.47	239.78	6,514.8	677.9	-1,150.6	1,335.4	0.00	0.00	
6,800.0	0.47	239.78	6,614.8	677.5	-1,151.3	1,335.8	0.00	0.00	
6,900.0	0.47	239.78	6,714.8	677.1	-1,152.1	1,336.2	0.00	0.00	
7,000.0	0.47	239.78	6,814.8	676.7	-1,152.8	1,336.6	0.00	0.00	
7,100.0	0.47	239.78	6,914.8	676.3	-1,153.5	1,337.1	0.00	0.00	
7,200.0	0.47	239.78	7,014.8	675.9	-1,154.2	1,337.5	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 2003.21 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP WF05D-22 K22 596
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>North Reference:</b>	True
<b>Well:</b>	NP WF05D-22 K22 596	<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
7,300.0	0.47	239.78	7,114.7	675.5	-1,154.9	1,337.9	0.00	0.00	
7,400.0	0.47	239.78	7,214.7	675.0	-1,155.6	1,338.3	0.00	0.00	
7,500.0	0.47	239.78	7,314.7	674.6	-1,156.3	1,338.7	0.00	0.00	
7,600.0	0.47	239.78	7,414.7	674.2	-1,157.0	1,339.1	0.00	0.00	
7,700.0	0.47	239.78	7,514.7	673.8	-1,157.8	1,339.5	0.00	0.00	
7,800.0	0.47	239.78	7,614.7	673.4	-1,158.5	1,339.9	0.00	0.00	
7,900.0	0.47	239.78	7,714.7	673.0	-1,159.2	1,340.3	0.00	0.00	
8,000.0	0.47	239.78	7,814.7	672.6	-1,159.9	1,340.8	0.00	0.00	
8,100.0	0.47	239.78	7,914.7	672.1	-1,160.6	1,341.2	0.00	0.00	
8,200.0	0.47	239.78	8,014.7	671.7	-1,161.3	1,341.6	0.00	0.00	
8,300.0	0.47	239.78	8,114.7	671.3	-1,162.0	1,342.0	0.00	0.00	
8,400.0	0.47	239.78	8,214.7	670.9	-1,162.7	1,342.4	0.00	0.00	
8,500.0	0.47	239.78	8,314.7	670.5	-1,163.4	1,342.8	0.00	0.00	
8,600.0	0.47	239.78	8,414.7	670.1	-1,164.2	1,343.2	0.00	0.00	
8,700.0	0.47	239.78	8,514.7	669.7	-1,164.9	1,343.6	0.00	0.00	
8,800.0	0.47	239.78	8,614.7	669.2	-1,165.6	1,344.0	0.00	0.00	
8,894.3	0.47	239.78	8,709.0	668.8	-1,166.3	1,344.4	0.00	0.00	Rollins - K22 596 WF05D-22 BHL - K22 596 WI
8,900.0	0.47	239.78	8,714.7	668.8	-1,166.3	1,344.5	0.00	0.00	
8,969.3	0.47	239.78	8,784.0	668.5	-1,166.8	1,344.7	0.00	0.00	Drillers TD @ 8969'
9,000.0	0.47	239.78	8,814.7	668.4	-1,167.0	1,344.9	0.00	0.00	
9,100.0	0.47	239.78	8,914.7	668.0	-1,167.7	1,345.3	0.00	0.00	
9,200.0	0.47	239.78	9,014.7	667.6	-1,168.4	1,345.7	0.00	0.00	
9,300.0	0.47	239.78	9,114.7	667.2	-1,169.1	1,346.1	0.00	0.00	
9,400.0	0.47	239.78	9,214.7	666.8	-1,169.9	1,346.5	0.00	0.00	
9,500.0	0.47	239.78	9,314.7	666.3	-1,170.6	1,346.9	0.00	0.00	
9,600.0	0.47	239.78	9,414.7	665.9	-1,171.3	1,347.3	0.00	0.00	
9,700.0	0.47	239.78	9,514.7	665.5	-1,172.0	1,347.7	0.00	0.00	
9,800.0	0.47	239.78	9,614.7	665.1	-1,172.7	1,348.2	0.00	0.00	
9,900.0	0.47	239.78	9,714.7	664.7	-1,173.4	1,348.6	0.00	0.00	
10,000.0	0.47	239.78	9,814.7	664.3	-1,174.1	1,349.0	0.00	0.00	
10,100.0	0.47	239.78	9,914.7	663.8	-1,174.8	1,349.4	0.00	0.00	
10,200.0	0.47	239.78	10,014.6	663.4	-1,175.5	1,349.8	0.00	0.00	
10,300.0	0.47	239.78	10,114.6	663.0	-1,176.3	1,350.2	0.00	0.00	
10,400.0	0.47	239.78	10,214.6	662.6	-1,177.0	1,350.6	0.00	0.00	
10,500.0	0.47	239.78	10,314.6	662.2	-1,177.7	1,351.0	0.00	0.00	
10,600.0	0.47	239.78	10,414.6	661.8	-1,178.4	1,351.4	0.00	0.00	
10,685.4	0.47	239.78	10,500.0	661.4	-1,179.0	1,351.8	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 2003.21 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well NP WF05D-22 K22 596
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Project:</b>	North Piceance	<b>MD Reference:</b>	WF05D-22 K22 596 @ 6546.0ft (Original Well Elev)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>North Reference:</b>	True
<b>Well:</b>	NP WF05D-22 K22 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
K22 596 WF05D-22 BHL - plan hits target center - Rectangle (sides W300.0 H500.0 D0.0)	0.00	0.00	8,709.0	668.8	-1,166.3	1,654,847.52	2,249,777.87	39° 36' 4.15 N	108° 9' 46.25 W
K22 596 WF05D-22 TG <sup>1</sup> - plan hits target center - Rectangle (sides W100.0 H200.0 D0.0)	0.00	0.00	8,709.0	668.8	-1,166.3	1,654,847.52	2,249,777.87	39° 36' 4.15 N	108° 9' 46.25 W
K22 596 WF05D-22 TOC - plan misses target center by 27.7ft at 5434.2ft MD (5249.0 TVD, 682.8 N, -1142.3 E) - Rectangle (sides W100.0 H200.0 D300.0)	0.00	0.00	5,249.0	668.8	-1,166.3	1,654,847.52	2,249,777.87	39° 36' 4.15 N	108° 9' 46.25 W
K22 596 WF05D-22 TG <sup>1</sup> - plan hits target center - Point	0.00	0.00	5,249.0	682.8	-1,142.3	1,654,860.77	2,249,802.23	39° 36' 4.29 N	108° 9' 45.94 W

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
5,394.2	5,209.0	Williams Fork		0.00	
5,434.2	5,249.0	Top of Gas		0.00	
8,894.3	8,709.0	Rollins		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
749.7	742.1	40.3	-67.4	EOB; Inc=16.49°
4,884.5	4,706.9	642.5	-1,074.9	Start Drop -3.00
5,434.2	5,249.0	682.8	-1,142.3	EOD; Inc=0°
8,969.3	8,784.0	682.4	-1,143.0	Drillers TD @ 8969'
10,685.4	10,500.0	668.8	-1,166.3	Permit TD @ 10685'