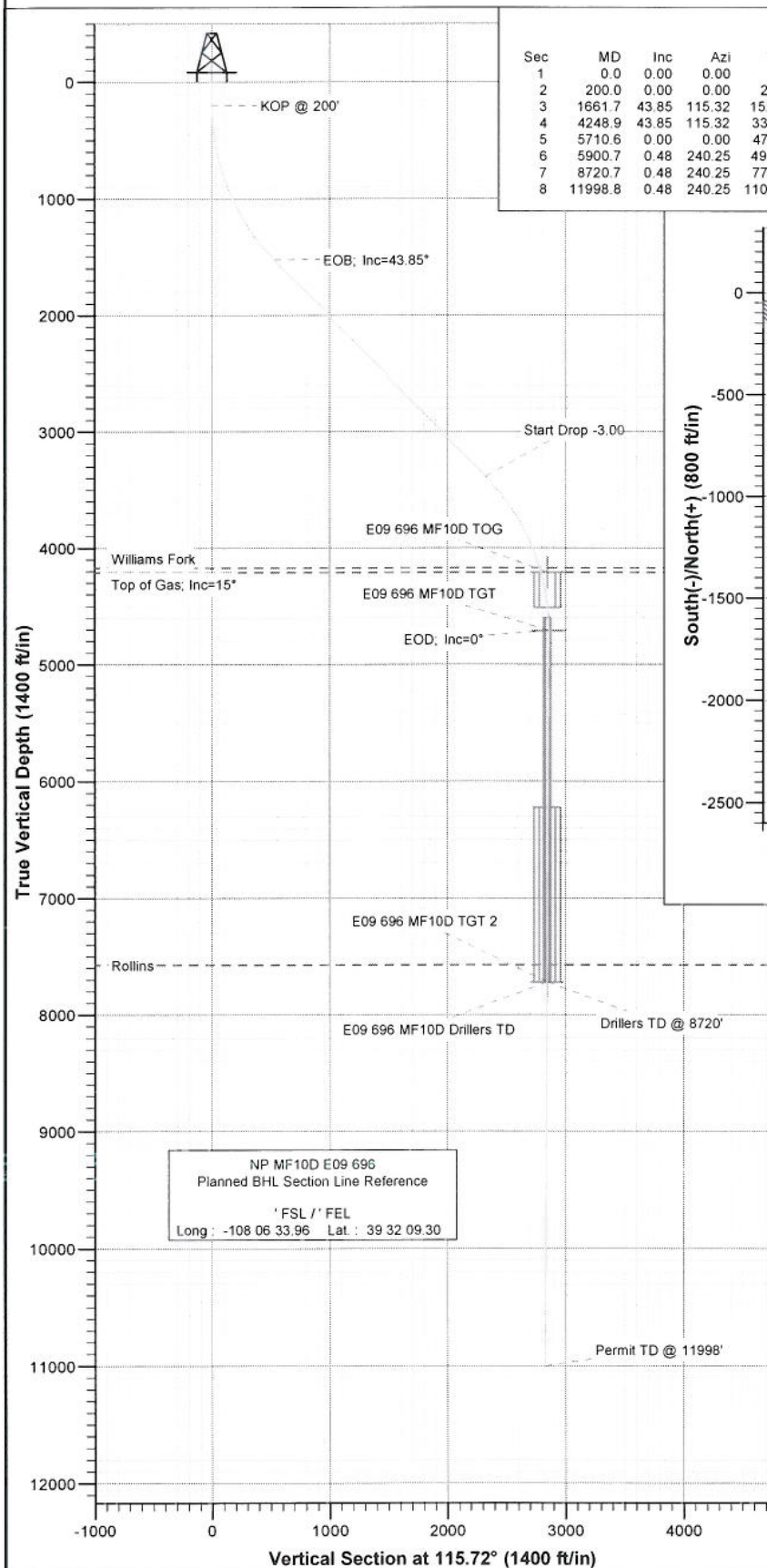
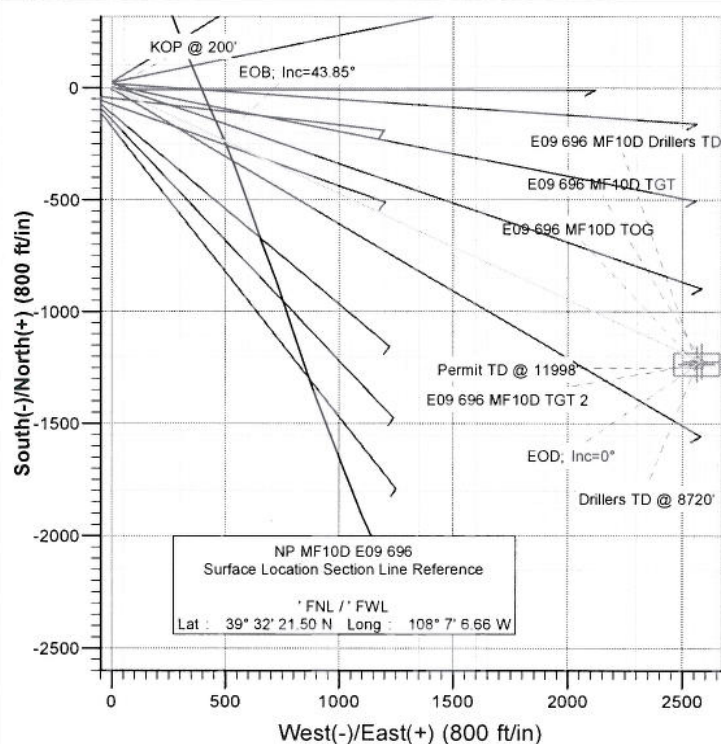




Project: North Piceance
 Site: E09 696 (SWNW S9-T6S-R96W)
 Well: NP MF10D E09 696
 Wellbore: DD
 Plan: Plan #2



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	1661.7	43.85	115.32	1523.1	-227.8	481.4	3.00	115.32	532.6	
4	4248.9	43.85	115.32	3388.9	-994.4	2101.6	0.00	0.00	2324.9	
5	5710.6	0.00	0.00	4712.0	-1222.1	2583.0	3.00	180.00	2857.4	E09 696 MF10D TGT
6	5900.7	0.48	240.25	4902.1	-1222.5	2582.3	0.25	240.25	2857.0	
7	8720.7	0.48	240.25	7722.0	-1234.1	2562.0	0.00	0.00	2843.7	E09 696 MF10D Drillers TD
8	11998.8	0.48	240.25	11000.0	-1247.6	2538.4	0.00	0.00	2828.3	



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4172.0	5163.1	Williams Fork
4212.0	5204.7	Top of Gas; Inc=15°
7572.0	8570.7	Rollins



Azimuths to True North
 Magnetic North: 10.89°

Magnetic Field
 Strength: 52667.7nT
 Dip Angle: 65.86°
 Date: 8/8/2007
 Model: IGRF200510

DESIGN DETAILS: Plan #2

Job# 75xxx; LR
 WELL @ 5772.0ft (Original Well Elev)

Target	Azimuth	Origin	Type	N/S	E/W	From	TVD
E09 696 MF10D Drillers TD	115.72	Slot		0.0	0.0	0.0	0.0

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well NP MF10D E09 696
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5772.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	WELL @ 5772.0ft (Original Well Elev)
Site:	E09 696 (SWNW S9-T6S-R96W)	North Reference:	True
Well:	NP MF10D E09 696	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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	E09 696 (SWNW S9-T6S-R96W)				
Site Position:		Northing:	1,632,140.57 ft	Latitude:	39° 32' 23.23 N
From:	Lat/Long	Easting:	2,261,634.68 ft	Longitude:	108° 7' 6.47 W
Position Uncertainty:	0.0 ft	Slot Radius:	in	Grid Convergence:	-1.65 °

Well	NP MF10D E09 696					
Well Position	+N/-S	0.0 ft	Northing:	1,631,966.06 ft	Latitude:	39° 32' 21.50 N
	+E/-W	0.0 ft	Easting:	2,261,614.79 ft	Longitude:	108° 7' 6.66 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,756.0 ft	

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/8/2007	10.89	65.86	52,668

Design	Plan #2				
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	115.72	

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	
1,661.7	43.85	115.32	1,523.1	-227.8	481.4	3.00	3.00	0.00	115.32	
4,248.9	43.85	115.32	3,388.9	-994.4	2,101.6	0.00	0.00	0.00	0.00	
5,710.6	0.00	0.00	4,712.0	-1,222.1	2,583.0	3.00	-3.00	0.00	180.00	E09 696 MF10D TGT
5,900.7	0.48	240.25	4,902.1	-1,222.5	2,582.3	0.25	0.25	-62.99	240.25	
8,720.7	0.48	240.25	7,722.0	-1,234.1	2,562.0	0.00	0.00	0.00	0.00	E09 696 MF10D Drille
11,998.8	0.48	240.25	11,000.0	-1,247.6	2,538.4	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: EDM 2003.21 US Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: North Piceance
 Site: E09 696 (SWNW S9-T6S-R96W)
 Well: NP MF10D E09 696
 Wellbore: DD
 Design: Plan #2

Local Co-ordinate Reference: Well NP MF10D E09 696
 TVD Reference: WELL @ 5772.0ft (Original Well Elev)
 MD Reference: WELL @ 5772.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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	115.32	210.0	0.0	0.0	0.0	3.00	3.00	
240.0	1.20	115.32	240.0	-0.2	0.4	0.4	3.00	3.00	
270.0	2.10	115.32	270.0	-0.5	1.2	1.3	3.00	3.00	
300.0	3.00	115.32	300.0	-1.1	2.4	2.6	3.00	3.00	
330.0	3.90	115.32	329.9	-1.9	4.0	4.4	3.00	3.00	
360.0	4.80	115.32	359.8	-2.9	6.1	6.7	3.00	3.00	
390.0	5.70	115.32	389.7	-4.0	8.5	9.4	3.00	3.00	
420.0	6.60	115.32	419.5	-5.4	11.4	12.7	3.00	3.00	
450.0	7.50	115.32	449.3	-7.0	14.8	16.3	3.00	3.00	
480.0	8.40	115.32	479.0	-8.8	18.5	20.5	3.00	3.00	
510.0	9.30	115.32	508.6	-10.7	22.7	25.1	3.00	3.00	
540.0	10.20	115.32	538.2	-12.9	27.3	30.2	3.00	3.00	
570.0	11.10	115.32	567.7	-15.3	32.3	35.7	3.00	3.00	
600.0	12.00	115.32	597.1	-17.8	37.7	41.7	3.00	3.00	
630.0	12.90	115.32	626.4	-20.6	43.6	48.2	3.00	3.00	
660.0	13.80	115.32	655.6	-23.6	49.8	55.1	3.00	3.00	
690.0	14.70	115.32	684.6	-26.7	56.5	62.5	3.00	3.00	
720.0	15.60	115.32	713.6	-30.1	63.6	70.4	3.00	3.00	
750.0	16.50	115.32	742.4	-33.6	71.1	78.6	3.00	3.00	
780.0	17.40	115.32	771.1	-37.4	79.0	87.4	3.00	3.00	
810.0	18.30	115.32	799.7	-41.3	87.3	96.6	3.00	3.00	
840.0	19.20	115.32	828.1	-45.4	96.0	106.2	3.00	3.00	
870.0	20.10	115.32	856.3	-49.7	105.1	116.3	3.00	3.00	
900.0	21.00	115.32	884.4	-54.3	114.7	126.8	3.00	3.00	
930.0	21.90	115.32	912.4	-58.9	124.6	137.8	3.00	3.00	
960.0	22.80	115.32	940.1	-63.8	134.9	149.2	3.00	3.00	
990.0	23.70	115.32	967.7	-68.9	145.6	161.1	3.00	3.00	
1,020.0	24.60	115.32	995.0	-74.1	156.7	173.3	3.00	3.00	
1,050.0	25.50	115.32	1,022.2	-79.6	168.2	186.0	3.00	3.00	
1,080.0	26.40	115.32	1,049.2	-85.2	180.0	199.2	3.00	3.00	
1,110.0	27.30	115.32	1,076.0	-91.0	192.3	212.7	3.00	3.00	
1,140.0	28.20	115.32	1,102.5	-97.0	204.9	226.7	3.00	3.00	
1,170.0	29.10	115.32	1,128.8	-103.1	217.9	241.1	3.00	3.00	
1,200.0	30.00	115.32	1,154.9	-109.4	231.3	255.9	3.00	3.00	
1,230.0	30.90	115.32	1,180.8	-115.9	245.0	271.1	3.00	3.00	
1,260.0	31.80	115.32	1,206.4	-122.6	259.1	286.7	3.00	3.00	
1,290.0	32.70	115.32	1,231.8	-129.5	273.6	302.7	3.00	3.00	
1,320.0	33.60	115.32	1,256.9	-136.5	288.4	319.1	3.00	3.00	
1,350.0	34.50	115.32	1,281.8	-143.7	303.6	335.9	3.00	3.00	
1,380.0	35.40	115.32	1,306.3	-151.0	319.2	353.1	3.00	3.00	
1,410.0	36.30	115.32	1,330.7	-158.5	335.0	370.6	3.00	3.00	
1,440.0	37.20	115.32	1,354.7	-166.2	351.3	388.6	3.00	3.00	
1,470.0	38.10	115.32	1,378.5	-174.0	367.8	406.9	3.00	3.00	
1,500.0	39.00	115.32	1,401.9	-182.0	384.7	425.6	3.00	3.00	

Cathedral Energy Services

Planning Report

Database: EDM 2003.21 US Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: North Piceance
 Site: E09 696 (SWNW S9-T6S-R96W)
 Well: NP MF10D E09 696
 Wellbore: DD
 Design: Plan #2

Local Co-ordinate Reference: Well NP MF10D E09 696
 TVD Reference: WELL @ 5772.0ft (Original Well Elev)
 MD Reference: WELL @ 5772.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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
1,530.0	39.90	115.32	1,425.1	-190.2	402.0	444.7	3.00	3.00	
1,560.0	40.80	115.32	1,447.9	-198.5	419.5	464.1	3.00	3.00	
1,590.0	41.70	115.32	1,470.5	-207.0	437.4	483.9	3.00	3.00	
1,620.0	42.60	115.32	1,492.7	-215.6	455.6	504.0	3.00	3.00	
1,650.0	43.50	115.32	1,514.7	-224.3	474.1	524.5	3.00	3.00	
1,661.7	43.85	115.32	1,523.1	-227.8	481.4	532.6	3.00	3.00	EOB; Inc=43.85°
1,680.0	43.85	115.32	1,536.3	-233.2	492.9	545.2	0.00	0.00	
1,710.0	43.85	115.32	1,558.0	-242.1	511.7	566.0	0.00	0.00	
1,740.0	43.85	115.32	1,579.6	-251.0	530.4	586.8	0.00	0.00	
1,770.0	43.85	115.32	1,601.2	-259.9	549.2	607.6	0.00	0.00	
1,800.0	43.85	115.32	1,622.9	-268.8	568.0	628.4	0.00	0.00	
1,830.0	43.85	115.32	1,644.5	-277.6	586.8	649.2	0.00	0.00	
1,860.0	43.85	115.32	1,666.1	-286.5	605.6	669.9	0.00	0.00	
1,890.0	43.85	115.32	1,687.8	-295.4	624.4	690.7	0.00	0.00	
1,920.0	43.85	115.32	1,709.4	-304.3	643.2	711.5	0.00	0.00	
1,950.0	43.85	115.32	1,731.0	-313.2	661.9	732.3	0.00	0.00	
1,980.0	43.85	115.32	1,752.7	-322.1	680.7	753.1	0.00	0.00	
2,010.0	43.85	115.32	1,774.3	-331.0	699.5	773.9	0.00	0.00	
2,040.0	43.85	115.32	1,795.9	-339.9	718.3	794.6	0.00	0.00	
2,070.0	43.85	115.32	1,817.6	-348.8	737.1	815.4	0.00	0.00	
2,100.0	43.85	115.32	1,839.2	-357.6	755.9	836.2	0.00	0.00	
2,130.0	43.85	115.32	1,860.8	-366.5	774.7	857.0	0.00	0.00	
2,160.0	43.85	115.32	1,882.5	-375.4	793.5	877.8	0.00	0.00	
2,190.0	43.85	115.32	1,904.1	-384.3	812.2	898.5	0.00	0.00	
2,220.0	43.85	115.32	1,925.7	-393.2	831.0	919.3	0.00	0.00	
2,250.0	43.85	115.32	1,947.4	-402.1	849.8	940.1	0.00	0.00	
2,280.0	43.85	115.32	1,969.0	-411.0	868.6	960.9	0.00	0.00	
2,310.0	43.85	115.32	1,990.6	-419.9	887.4	981.7	0.00	0.00	
2,340.0	43.85	115.32	2,012.3	-428.8	906.2	1,002.5	0.00	0.00	
2,370.0	43.85	115.32	2,033.9	-437.6	925.0	1,023.2	0.00	0.00	
2,400.0	43.85	115.32	2,055.5	-446.5	943.7	1,044.0	0.00	0.00	
2,430.0	43.85	115.32	2,077.2	-455.4	962.5	1,064.8	0.00	0.00	
2,460.0	43.85	115.32	2,098.8	-464.3	981.3	1,085.6	0.00	0.00	
2,490.0	43.85	115.32	2,120.5	-473.2	1,000.1	1,106.4	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: EDM 2003.21 US Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: North Piceance
Site: E09 696 (SWNW S9-T6S-R96W)
Well: NP MF10D E09 696
Wellbore: DD
Design: Plan #2

Local Co-ordinate Reference: Well NP MF10D E09 696
TVD Reference: WELL @ 5772.0ft (Original Well Elev)
MD Reference: WELL @ 5772.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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	43.85	115.32	2,127.7	-476.2	1,006.4	1,113.3	0.00	0.00	
2,600.0	43.85	115.32	2,199.8	-505.8	1,069.0	1,182.6	0.00	0.00	
2,700.0	43.85	115.32	2,271.9	-535.4	1,131.6	1,251.9	0.00	0.00	
2,800.0	43.85	115.32	2,344.0	-565.1	1,194.2	1,321.1	0.00	0.00	
2,900.0	43.85	115.32	2,416.1	-594.7	1,256.9	1,390.4	0.00	0.00	
3,000.0	43.85	115.32	2,488.2	-624.3	1,319.5	1,459.7	0.00	0.00	
3,100.0	43.85	115.32	2,560.4	-653.9	1,382.1	1,529.0	0.00	0.00	
3,200.0	43.85	115.32	2,632.5	-683.6	1,444.7	1,598.2	0.00	0.00	
3,300.0	43.85	115.32	2,704.6	-713.2	1,507.3	1,667.5	0.00	0.00	
3,400.0	43.85	115.32	2,776.7	-742.8	1,570.0	1,736.8	0.00	0.00	
3,500.0	43.85	115.32	2,848.8	-772.5	1,632.6	1,806.1	0.00	0.00	
3,600.0	43.85	115.32	2,920.9	-802.1	1,695.2	1,875.3	0.00	0.00	
3,700.0	43.85	115.32	2,993.0	-831.7	1,757.8	1,944.6	0.00	0.00	
3,800.0	43.85	115.32	3,065.2	-861.3	1,820.5	2,013.9	0.00	0.00	
3,900.0	43.85	115.32	3,137.3	-891.0	1,883.1	2,083.2	0.00	0.00	
4,000.0	43.85	115.32	3,209.4	-920.6	1,945.7	2,152.4	0.00	0.00	
4,100.0	43.85	115.32	3,281.5	-950.2	2,008.3	2,221.7	0.00	0.00	
4,200.0	43.85	115.32	3,353.6	-979.9	2,070.9	2,291.0	0.00	0.00	
4,248.9	43.85	115.32	3,388.9	-994.4	2,101.6	2,324.9	0.00	0.00	Start Drop -3.00
4,300.0	42.32	115.32	3,426.2	-1,009.3	2,133.1	2,359.8	3.00	-3.00	
4,400.0	39.32	115.32	3,501.9	-1,037.2	2,192.2	2,425.1	3.00	-3.00	
4,500.0	36.32	115.32	3,580.9	-1,063.5	2,247.6	2,486.4	3.00	-3.00	
4,600.0	33.32	115.32	3,663.0	-1,087.9	2,299.2	2,543.5	3.00	-3.00	
4,700.0	30.32	115.32	3,747.9	-1,110.4	2,346.9	2,596.2	3.00	-3.00	
4,800.0	27.32	115.32	3,835.5	-1,131.0	2,390.4	2,644.4	3.00	-3.00	
4,900.0	24.32	115.32	3,925.5	-1,149.7	2,429.8	2,688.0	3.00	-3.00	
5,000.0	21.32	115.32	4,017.7	-1,166.2	2,464.8	2,726.8	3.00	-3.00	
5,100.0	18.32	115.32	4,111.8	-1,180.7	2,495.5	2,760.7	3.00	-3.00	
5,163.1	16.42	115.32	4,172.0	-1,188.8	2,512.5	2,779.5	3.00	-3.00	Williams Fork
5,200.0	15.32	115.32	4,207.5	-1,193.1	2,521.6	2,789.6	3.00	-3.00	
5,204.7	15.18	115.32	4,212.0	-1,193.6	2,522.7	2,790.8	3.00	-3.00	Top of Gas; Inc=15°
5,217.2	14.80	115.32	4,224.1	-1,195.0	2,525.7	2,794.1	3.00	-3.00	E09 696 MF10D TOG
5,300.0	12.32	115.32	4,304.6	-1,203.3	2,543.2	2,813.5	3.00	-3.00	
5,400.0	9.32	115.32	4,402.8	-1,211.4	2,560.2	2,832.2	3.00	-3.00	
5,500.0	6.32	115.32	4,501.8	-1,217.2	2,572.5	2,845.8	3.00	-3.00	
5,600.0	3.32	115.32	4,601.5	-1,220.8	2,580.1	2,854.2	3.00	-3.00	
5,700.0	0.32	115.32	4,701.4	-1,222.1	2,582.9	2,857.4	3.00	-3.00	
5,710.6	0.00	0.00	4,712.0	-1,222.1	2,583.0	2,857.4	3.00	-3.00	EOD; Inc=0° - E09 696 MF10D TGT
5,800.0	0.22	240.25	4,801.4	-1,222.2	2,582.8	2,857.3	0.25	0.25	
5,900.0	0.47	240.25	4,901.4	-1,222.5	2,582.3	2,857.0	0.25	0.25	
5,900.7	0.48	240.25	4,902.1	-1,222.5	2,582.3	2,857.0	0.25	0.25	
6,000.0	0.48	240.25	5,001.4	-1,222.9	2,581.6	2,856.5	0.00	0.00	
6,100.0	0.48	240.25	5,101.4	-1,223.3	2,580.8	2,856.0	0.00	0.00	
6,200.0	0.48	240.25	5,201.4	-1,223.8	2,580.1	2,855.6	0.00	0.00	
6,300.0	0.48	240.25	5,301.4	-1,224.2	2,579.4	2,855.1	0.00	0.00	
6,400.0	0.48	240.25	5,401.4	-1,224.6	2,578.7	2,854.6	0.00	0.00	
6,500.0	0.48	240.25	5,501.4	-1,225.0	2,578.0	2,854.2	0.00	0.00	
6,600.0	0.48	240.25	5,601.4	-1,225.4	2,577.2	2,853.7	0.00	0.00	
6,700.0	0.48	240.25	5,701.4	-1,225.8	2,576.5	2,853.2	0.00	0.00	
6,800.0	0.48	240.25	5,801.4	-1,226.2	2,575.8	2,852.8	0.00	0.00	
6,900.0	0.48	240.25	5,901.4	-1,226.6	2,575.1	2,852.3	0.00	0.00	
7,000.0	0.48	240.25	6,001.4	-1,227.0	2,574.4	2,851.8	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: EDM 2003.21 US Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: North Piceance
 Site: E09 696 (SWNW S9-T6S-R96W)
 Well: NP MF10D E09 696
 Wellbore: DD
 Design: Plan #2

Local Co-ordinate Reference: Well NP MF10D E09 696
 TVD Reference: WELL @ 5772.0ft (Original Well Elev)
 MD Reference: WELL @ 5772.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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
7,100.0	0.48	240.25	6,101.4	-1,227.5	2,573.6	2,851.3	0.00	0.00	
7,200.0	0.48	240.25	6,201.4	-1,227.9	2,572.9	2,850.9	0.00	0.00	
7,300.0	0.48	240.25	6,301.4	-1,228.3	2,572.2	2,850.4	0.00	0.00	
7,400.0	0.48	240.25	6,401.4	-1,228.7	2,571.5	2,849.9	0.00	0.00	
7,500.0	0.48	240.25	6,501.4	-1,229.1	2,570.8	2,849.5	0.00	0.00	
7,600.0	0.48	240.25	6,601.4	-1,229.5	2,570.0	2,849.0	0.00	0.00	
7,700.0	0.48	240.25	6,701.3	-1,229.9	2,569.3	2,848.5	0.00	0.00	
7,800.0	0.48	240.25	6,801.3	-1,230.3	2,568.6	2,848.0	0.00	0.00	
7,900.0	0.48	240.25	6,901.3	-1,230.7	2,567.9	2,847.6	0.00	0.00	
8,000.0	0.48	240.25	7,001.3	-1,231.2	2,567.2	2,847.1	0.00	0.00	
8,100.0	0.48	240.25	7,101.3	-1,231.6	2,566.4	2,846.6	0.00	0.00	
8,200.0	0.48	240.25	7,201.3	-1,232.0	2,565.7	2,846.2	0.00	0.00	
8,300.0	0.48	240.25	7,301.3	-1,232.4	2,565.0	2,845.7	0.00	0.00	
8,400.0	0.48	240.25	7,401.3	-1,232.8	2,564.3	2,845.2	0.00	0.00	
8,500.0	0.48	240.25	7,501.3	-1,233.2	2,563.6	2,844.8	0.00	0.00	
8,570.7	0.48	240.25	7,572.0	-1,233.5	2,563.0	2,844.4	0.00	0.00	Rollins
8,600.0	0.48	240.25	7,601.3	-1,233.6	2,562.8	2,844.3	0.00	0.00	
8,700.0	0.48	240.25	7,701.3	-1,234.0	2,562.1	2,843.8	0.00	0.00	
8,720.7	0.48	240.25	7,722.0	-1,234.1	2,562.0	2,843.7	0.00	0.00	Drillers TD @ 8720' - E09 696 MF10D TGT 2 - I
8,800.0	0.48	240.25	7,801.3	-1,234.5	2,561.4	2,843.3	0.00	0.00	
8,900.0	0.48	240.25	7,901.3	-1,234.9	2,560.7	2,842.9	0.00	0.00	
9,000.0	0.48	240.25	8,001.3	-1,235.3	2,560.0	2,842.4	0.00	0.00	
9,100.0	0.48	240.25	8,101.3	-1,235.7	2,559.2	2,841.9	0.00	0.00	
9,200.0	0.48	240.25	8,201.3	-1,236.1	2,558.5	2,841.5	0.00	0.00	
9,300.0	0.48	240.25	8,301.3	-1,236.5	2,557.8	2,841.0	0.00	0.00	
9,400.0	0.48	240.25	8,401.3	-1,236.9	2,557.1	2,840.5	0.00	0.00	
9,500.0	0.48	240.25	8,501.3	-1,237.3	2,556.4	2,840.1	0.00	0.00	
9,600.0	0.48	240.25	8,601.3	-1,237.7	2,555.6	2,839.6	0.00	0.00	
9,700.0	0.48	240.25	8,701.3	-1,238.2	2,554.9	2,839.1	0.00	0.00	
9,800.0	0.48	240.25	8,801.3	-1,238.6	2,554.2	2,838.6	0.00	0.00	
9,900.0	0.48	240.25	8,901.3	-1,239.0	2,553.5	2,838.2	0.00	0.00	
10,000.0	0.48	240.25	9,001.3	-1,239.4	2,552.8	2,837.7	0.00	0.00	
10,100.0	0.48	240.25	9,101.3	-1,239.8	2,552.0	2,837.2	0.00	0.00	
10,200.0	0.48	240.25	9,201.3	-1,240.2	2,551.3	2,836.8	0.00	0.00	
10,300.0	0.48	240.25	9,301.3	-1,240.6	2,550.6	2,836.3	0.00	0.00	
10,400.0	0.48	240.25	9,401.3	-1,241.0	2,549.9	2,835.8	0.00	0.00	
10,500.0	0.48	240.25	9,501.3	-1,241.5	2,549.2	2,835.4	0.00	0.00	
10,600.0	0.48	240.25	9,601.2	-1,241.9	2,548.4	2,834.9	0.00	0.00	
10,700.0	0.48	240.25	9,701.2	-1,242.3	2,547.7	2,834.4	0.00	0.00	
10,800.0	0.48	240.25	9,801.2	-1,242.7	2,547.0	2,833.9	0.00	0.00	
10,900.0	0.48	240.25	9,901.2	-1,243.1	2,546.3	2,833.5	0.00	0.00	
11,000.0	0.48	240.25	10,001.2	-1,243.5	2,545.6	2,833.0	0.00	0.00	
11,100.0	0.48	240.25	10,101.2	-1,243.9	2,544.8	2,832.5	0.00	0.00	
11,200.0	0.48	240.25	10,201.2	-1,244.3	2,544.1	2,832.1	0.00	0.00	
11,300.0	0.48	240.25	10,301.2	-1,244.7	2,543.4	2,831.6	0.00	0.00	
11,400.0	0.48	240.25	10,401.2	-1,245.2	2,542.7	2,831.1	0.00	0.00	
11,500.0	0.48	240.25	10,501.2	-1,245.6	2,542.0	2,830.7	0.00	0.00	
11,600.0	0.48	240.25	10,601.2	-1,246.0	2,541.2	2,830.2	0.00	0.00	
11,700.0	0.48	240.25	10,701.2	-1,246.4	2,540.5	2,829.7	0.00	0.00	
11,800.0	0.48	240.25	10,801.2	-1,246.8	2,539.8	2,829.2	0.00	0.00	
11,900.0	0.48	240.25	10,901.2	-1,247.2	2,539.1	2,828.8	0.00	0.00	
11,998.8	0.48	240.25	11,000.0	-1,247.6	2,538.4	2,828.3	0.00	0.00	Permit TD @ 11998'

Cathedral Energy Services

Planning Report

Database: EDM 2003.21 US Multi Users DB
 Company: EnCana Oil & Gas (USA) Inc
 Project: North Piceance
 Site: E09 696 (SWNW S9-T6S-R96W)
 Well: NP MF10D E09 696
 Wellbore: DD
 Design: Plan #2

Local Co-ordinate Reference: Well NP MF10D E09 696
 TVD Reference: WELL @ 5772.0ft (Original Well Elev)
 MD Reference: WELL @ 5772.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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									
E09 696 MF10D TGT 2	0.00	0.00	7,722.0	-1,234.1	2,562.0	1,630,658.61	2,264,140.13	39° 32' 9.30 N	108° 6' 33.96 W
- plan hits target center									
- Rectangle (sides W100.0 H200.0 D0.0)									
E09 696 MF10D TOG	0.00	0.00	4,212.0	-1,234.1	2,562.0	1,630,658.61	2,264,140.13	39° 32' 9.30 N	108° 6' 33.96 W
- plan misses target center by 54.7ft at 5217.2ft MD (4224.1 TVD, -1195.0 N, 2525.7 E)									
- Rectangle (sides W100.0 H200.0 D300.0)									
E09 696 MF10D TGT	0.00	0.00	4,712.0	-1,222.1	2,583.0	1,630,670.00	2,264,161.46	39° 32' 9.42 N	108° 6' 33.69 W
- plan hits target center									
- Point									
E09 696 MF10D Drillers	0.00	0.00	7,722.0	-1,234.1	2,562.0	1,630,658.61	2,264,140.13	39° 32' 9.30 N	108° 6' 33.96 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,163.1	4,172.0	Williams Fork		0.00	
5,204.7	4,212.0	Top of Gas; Inc=15°		0.00	
8,570.7	7,572.0	Rollins		0.00	

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'
1,661.7	1,523.1	-227.8	481.4	EOB; Inc=43.85°
4,248.9	3,388.9	-994.4	2,101.6	Start Drop -3.00
5,710.6	4,712.0	-1,222.1	2,583.0	EOD; Inc=0°
8,720.7	7,722.0	-1,222.5	2,582.3	Drillers TD @ 8720'
11,998.8	11,000.0	-1,234.1	2,562.0	Permit TD @ 11998'