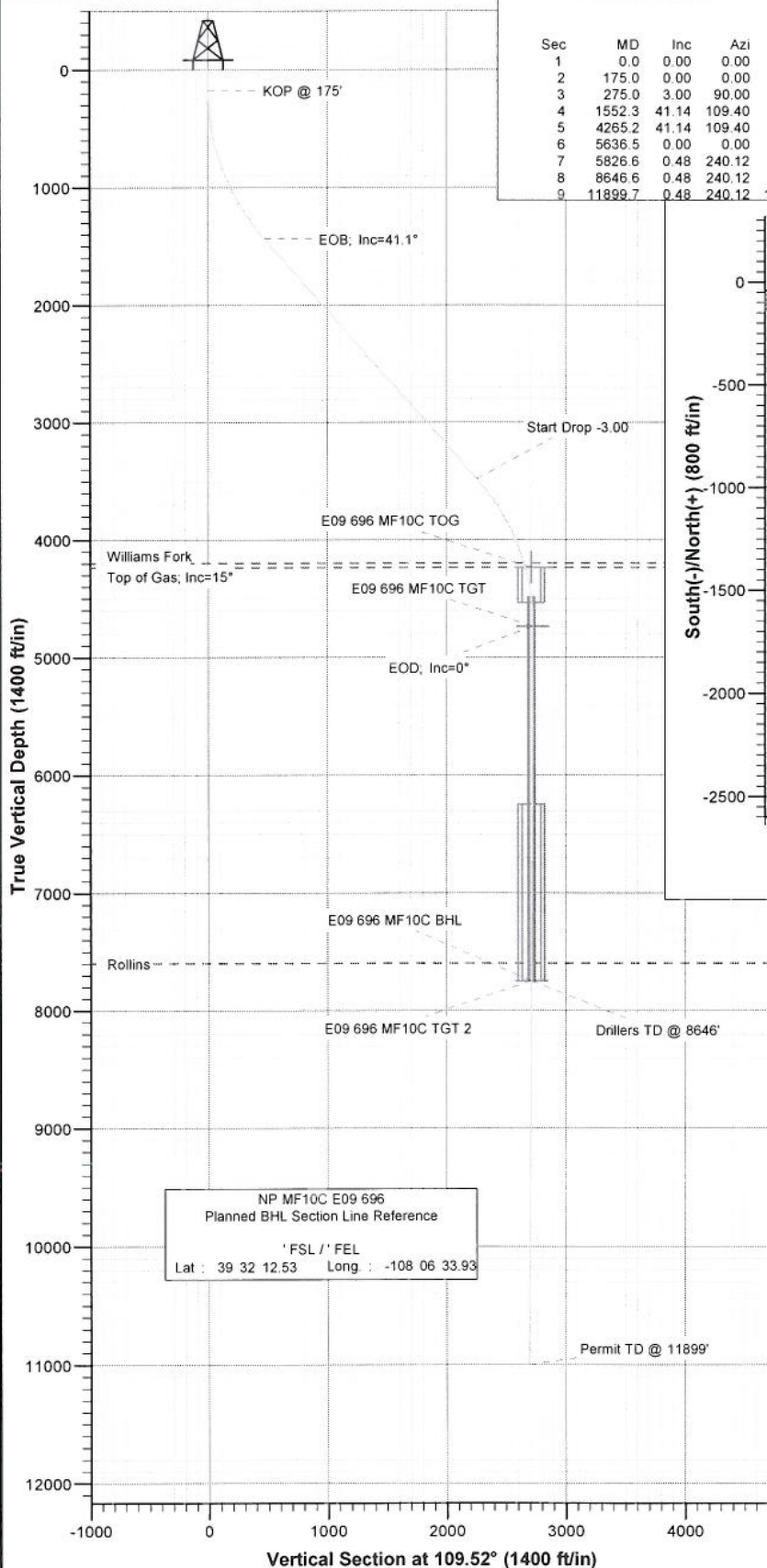
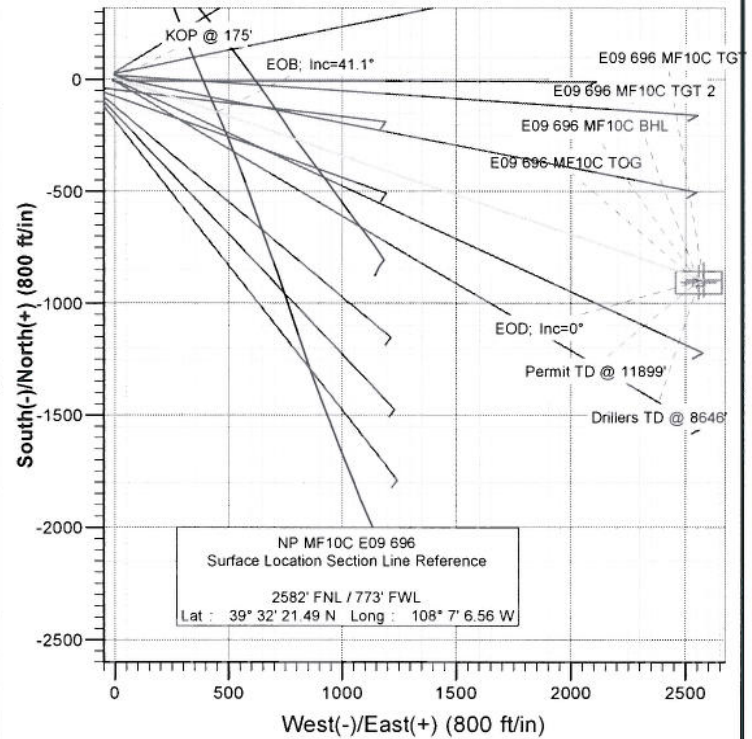




Project: North Piceance  
 Site: E09 696 (SWNW S9-T6S-R96W)  
 Well: NP MF10C E09 696  
 Wellbore: DD  
 Plan: Plan #2



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	175.0	0.00	0.00	175.0	0.0	0.0	0.00	0.00	0.0	
3	275.0	3.00	90.00	275.0	0.0	2.6	3.00	90.00	2.5	
4	1552.3	41.14	109.40	1437.4	-145.0	449.1	3.00	20.63	471.8	
5	4265.2	41.14	109.40	3480.5	-737.7	2132.6	0.00	0.00	2256.5	E09 696 MF10C TGT
6	5636.5	0.00	0.00	4737.0	-894.3	2577.3	3.00	180.00	2728.0	
7	5826.6	0.48	240.12	4927.1	-894.7	2576.6	0.25	240.12	2727.5	E09 696 MF10C BHL
8	8646.6	0.48	240.12	7747.0	-906.4	2556.4	0.00	0.00	2712.3	
9	11899.7	0.48	240.12	11000.0	-919.8	2533.0	0.00	0.00	2694.7	



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4197.0	5089.0	Williams Fork
4237.0	5130.6	Top of Gas; Inc=15°
7597.0	8496.6	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 MF10C TGT 2	109.52	Slot	0.0	0.0	0.0

# 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 MF10C E09 696  
Wellbore: DD  
Design: Plan #2

Local Co-ordinate Reference: Well NP MF10C 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

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

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 MF10C E09 696

Well Position: +N/-S 0.0 ft Northing: 1,631,964.82 ft Latitude: 39° 32' 21.49 N  
+E/-W 0.0 ft Easting: 2,261,622.60 ft Longitude: 108° 7' 6.56 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) +N/-S +E/-W Direction  
(ft) (ft) (ft) (°)  
0.0 0.0 0.0 109.52

### 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	
175.0	0.00	0.00	175.0	0.0	0.0	0.00	0.00	0.00	0.00	
275.0	3.00	90.00	275.0	0.0	2.6	3.00	3.00	0.00	90.00	
1,552.3	41.14	109.40	1,437.4	-145.0	449.1	3.00	2.99	1.52	20.63	
4,265.2	41.14	109.40	3,480.5	-737.7	2,132.6	0.00	0.00	0.00	0.00	
5,636.5	0.00	0.00	4,737.0	-894.3	2,577.3	3.00	-3.00	0.00	180.00	E09 696 MF10C TGT
5,826.6	0.48	240.12	4,927.1	-894.7	2,576.6	0.25	0.25	-63.06	240.12	
8,646.6	0.48	240.12	7,747.0	-906.4	2,556.4	0.00	0.00	0.00	0.00	E09 696 MF10C BHL
11,899.7	0.48	240.12	11,000.0	-919.8	2,533.0	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well NP MF10C 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 MF10C E09 696	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

### 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	
175.0	0.00	0.00	175.0	0.0	0.0	0.0	0.00	0.00	KOP @ 175'
180.0	0.15	90.00	180.0	0.0	0.0	0.0	3.00	3.00	
210.0	1.05	90.00	210.0	0.0	0.3	0.3	3.00	3.00	
240.0	1.95	90.00	240.0	0.0	1.1	1.0	3.00	3.00	
270.0	2.85	90.00	270.0	0.0	2.4	2.2	3.00	3.00	
275.0	3.00	90.00	275.0	0.0	2.6	2.5	3.00	3.00	
300.0	3.71	94.09	299.9	-0.1	4.1	3.9	3.00	2.85	
330.0	4.58	97.30	329.8	-0.3	6.2	6.0	3.00	2.90	
360.0	5.46	99.48	359.7	-0.7	8.8	8.5	3.00	2.93	
390.0	6.35	101.06	389.6	-1.2	11.9	11.6	3.00	2.95	
420.0	7.24	102.25	419.3	-1.9	15.3	15.1	3.00	2.96	
450.0	8.13	103.19	449.1	-2.8	19.3	19.1	3.00	2.97	
480.0	9.02	103.93	478.7	-3.9	23.6	23.5	3.00	2.98	
510.0	9.91	104.55	508.3	-5.1	28.4	28.4	3.00	2.98	
540.0	10.81	105.06	537.8	-6.5	33.6	33.8	3.00	2.98	
570.0	11.71	105.50	567.3	-8.0	39.2	39.7	3.00	2.99	
600.0	12.60	105.87	596.6	-9.7	45.3	46.0	3.00	2.99	
630.0	13.50	106.20	625.8	-11.6	51.8	52.7	3.00	2.99	
660.0	14.40	106.49	654.9	-13.6	58.8	59.9	3.00	2.99	
690.0	15.29	106.74	683.9	-15.8	66.1	67.6	3.00	2.99	
720.0	16.19	106.97	712.8	-18.2	73.9	75.8	3.00	2.99	
750.0	17.09	107.17	741.5	-20.7	82.1	84.3	3.00	2.99	
780.0	17.99	107.35	770.2	-23.4	90.8	93.4	3.00	2.99	
810.0	18.89	107.52	798.6	-26.2	99.8	102.9	3.00	2.99	
840.0	19.78	107.67	826.9	-29.2	109.3	112.8	3.00	3.00	
870.0	20.68	107.81	855.1	-32.4	119.2	123.2	3.00	3.00	
900.0	21.58	107.93	883.1	-35.7	129.5	134.0	3.00	3.00	
930.0	22.48	108.05	910.9	-39.2	140.2	145.2	3.00	3.00	
960.0	23.38	108.16	938.5	-42.8	151.3	156.9	3.00	3.00	
990.0	24.28	108.26	965.9	-46.6	162.8	169.0	3.00	3.00	
1,020.0	25.18	108.36	993.2	-50.6	174.7	181.6	3.00	3.00	
1,050.0	26.08	108.45	1,020.2	-54.7	187.0	194.5	3.00	3.00	
1,080.0	26.98	108.53	1,047.1	-58.9	199.7	207.9	3.00	3.00	
1,110.0	27.88	108.61	1,073.7	-63.3	212.8	221.7	3.00	3.00	
1,140.0	28.78	108.68	1,100.1	-67.9	226.3	236.0	3.00	3.00	
1,170.0	29.67	108.75	1,126.3	-72.6	240.2	250.6	3.00	3.00	
1,200.0	30.57	108.82	1,152.2	-77.4	254.4	265.7	3.00	3.00	
1,230.0	31.47	108.88	1,177.9	-82.4	269.1	281.1	3.00	3.00	
1,260.0	32.37	108.94	1,203.4	-87.5	284.1	297.0	3.00	3.00	
1,290.0	33.27	109.00	1,228.6	-92.8	299.5	313.3	3.00	3.00	
1,320.0	34.17	109.05	1,253.6	-98.3	315.2	329.9	3.00	3.00	
1,350.0	35.07	109.10	1,278.3	-103.8	331.3	347.0	3.00	3.00	
1,380.0	35.97	109.15	1,302.7	-109.5	347.8	364.4	3.00	3.00	
1,410.0	36.87	109.20	1,326.8	-115.4	364.6	382.2	3.00	3.00	
1,440.0	37.77	109.24	1,350.7	-121.4	381.8	400.4	3.00	3.00	
1,470.0	38.67	109.29	1,374.2	-127.5	399.3	419.0	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 MF10C E09 696  
 Wellbore: DD  
 Design: Plan #2

Local Co-ordinate Reference:  
 TVD Reference:  
 MD Reference:  
 North Reference:  
 Survey Calculation Method:

Well NP MF10C E09 696  
 WELL @ 5772.0ft (Original Well Elev)  
 WELL @ 5772.0ft (Original Well Elev)  
 True  
 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
1,500.0	39.57	109.33	1,397.5	-133.8	417.2	437.9	3.00	3.00	
1,530.0	40.47	109.37	1,420.5	-140.1	435.4	457.2	3.00	3.00	
1,552.3	41.14	109.40	1,437.4	-145.0	449.1	471.7	3.00	3.00	EOB; Inc=41.1°
1,560.0	41.14	109.40	1,443.2	-146.7	453.9	476.8	0.00	0.00	
1,590.0	41.14	109.40	1,465.8	-153.2	472.5	496.5	0.00	0.00	
1,620.0	41.14	109.40	1,488.4	-159.8	491.1	516.3	0.00	0.00	
1,650.0	41.14	109.40	1,510.9	-166.3	509.7	536.0	0.00	0.00	
1,680.0	41.14	109.40	1,533.5	-172.9	528.4	555.8	0.00	0.00	
1,710.0	41.14	109.40	1,556.1	-179.4	547.0	575.5	0.00	0.00	
1,740.0	41.14	109.40	1,578.7	-186.0	565.6	595.2	0.00	0.00	
1,770.0	41.14	109.40	1,601.3	-192.6	584.2	615.0	0.00	0.00	
1,800.0	41.14	109.40	1,623.9	-199.1	602.8	634.7	0.00	0.00	
1,830.0	41.14	109.40	1,646.5	-205.7	621.4	654.4	0.00	0.00	
1,860.0	41.14	109.40	1,669.1	-212.2	640.1	674.2	0.00	0.00	
1,890.0	41.14	109.40	1,691.7	-218.8	658.7	693.9	0.00	0.00	
1,920.0	41.14	109.40	1,714.3	-225.3	677.3	713.6	0.00	0.00	
1,950.0	41.14	109.40	1,736.9	-231.9	695.9	733.4	0.00	0.00	
1,980.0	41.14	109.40	1,759.5	-238.4	714.5	753.1	0.00	0.00	
2,010.0	41.14	109.40	1,782.1	-245.0	733.1	772.9	0.00	0.00	
2,040.0	41.14	109.40	1,804.7	-251.5	751.7	792.6	0.00	0.00	
2,070.0	41.14	109.40	1,827.3	-258.1	770.4	812.3	0.00	0.00	
2,100.0	41.14	109.40	1,849.9	-264.7	789.0	832.1	0.00	0.00	
2,130.0	41.14	109.40	1,872.4	-271.2	807.6	851.8	0.00	0.00	
2,160.0	41.14	109.40	1,895.0	-277.8	826.2	871.5	0.00	0.00	
2,190.0	41.14	109.40	1,917.6	-284.3	844.8	891.3	0.00	0.00	
2,220.0	41.14	109.40	1,940.2	-290.9	863.4	911.0	0.00	0.00	
2,250.0	41.14	109.40	1,962.8	-297.4	882.1	930.7	0.00	0.00	
2,280.0	41.14	109.40	1,985.4	-304.0	900.7	950.5	0.00	0.00	
2,310.0	41.14	109.40	2,008.0	-310.5	919.3	970.2	0.00	0.00	
2,340.0	41.14	109.40	2,030.6	-317.1	937.9	990.0	0.00	0.00	
2,370.0	41.14	109.40	2,053.2	-323.6	956.5	1,009.7	0.00	0.00	
2,400.0	41.14	109.40	2,075.8	-330.2	975.1	1,029.4	0.00	0.00	
2,430.0	41.14	109.40	2,098.4	-336.8	993.8	1,049.2	0.00	0.00	
2,460.0	41.14	109.40	2,121.0	-343.3	1,012.4	1,068.9	0.00	0.00	
2,490.0	41.14	109.40	2,143.6	-349.9	1,031.0	1,088.6	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 MF10C E09 696  
Wellbore: DD  
Design: Plan #2

Local Co-ordinate Reference: Well NP MF10C 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	41.14	109.40	2,151.1	-352.1	1,037.2	1,095.2	0.00	0.00	
2,600.0	41.14	109.40	2,226.4	-373.9	1,099.2	1,161.0	0.00	0.00	
2,700.0	41.14	109.40	2,301.7	-395.8	1,161.3	1,226.8	0.00	0.00	
2,800.0	41.14	109.40	2,377.0	-417.6	1,223.4	1,292.6	0.00	0.00	
2,900.0	41.14	109.40	2,452.4	-439.4	1,285.4	1,358.4	0.00	0.00	
3,000.0	41.14	109.40	2,527.7	-461.3	1,347.5	1,424.2	0.00	0.00	
3,100.0	41.14	109.40	2,603.0	-483.1	1,409.5	1,489.9	0.00	0.00	
3,200.0	41.14	109.40	2,678.3	-505.0	1,471.6	1,555.7	0.00	0.00	
3,300.0	41.14	109.40	2,753.6	-526.8	1,533.6	1,621.5	0.00	0.00	
3,400.0	41.14	109.40	2,828.9	-548.7	1,595.7	1,687.3	0.00	0.00	
3,500.0	41.14	109.40	2,904.2	-570.5	1,657.7	1,753.1	0.00	0.00	
3,600.0	41.14	109.40	2,979.5	-592.4	1,719.8	1,818.9	0.00	0.00	
3,700.0	41.14	109.40	3,054.9	-614.2	1,781.8	1,884.7	0.00	0.00	
3,800.0	41.14	109.40	3,130.2	-636.1	1,843.9	1,950.5	0.00	0.00	
3,900.0	41.14	109.40	3,205.5	-657.9	1,905.9	2,016.2	0.00	0.00	
4,000.0	41.14	109.40	3,280.8	-679.8	1,968.0	2,082.0	0.00	0.00	
4,100.0	41.14	109.40	3,356.1	-701.6	2,030.1	2,147.8	0.00	0.00	
4,200.0	41.14	109.40	3,431.4	-723.5	2,092.1	2,213.6	0.00	0.00	
4,265.2	41.14	109.40	3,480.5	-737.7	2,132.6	2,256.5	0.00	0.00	Start Drop -3.00
4,300.0	40.10	109.40	3,506.9	-745.3	2,153.9	2,279.2	3.00	-3.00	
4,400.0	37.10	109.40	3,585.1	-766.0	2,212.8	2,341.5	3.00	-3.00	
4,500.0	34.10	109.40	3,666.4	-785.3	2,267.7	2,399.7	3.00	-3.00	
4,600.0	31.10	109.40	3,750.6	-803.2	2,318.5	2,453.6	3.00	-3.00	
4,700.0	28.10	109.40	3,837.6	-819.6	2,365.0	2,503.0	3.00	-3.00	
4,800.0	25.10	109.40	3,927.0	-834.5	2,407.3	2,547.7	3.00	-3.00	
4,900.0	22.10	109.40	4,018.6	-847.8	2,445.0	2,587.8	3.00	-3.00	
5,000.0	19.10	109.40	4,112.2	-859.4	2,478.2	2,622.9	3.00	-3.00	
5,089.0	16.42	109.40	4,197.0	-868.5	2,503.8	2,650.1	3.00	-3.00	Williams Fork
5,100.0	16.10	109.40	4,207.5	-869.5	2,506.7	2,653.2	3.00	-3.00	
5,130.6	15.18	109.40	4,237.0	-872.2	2,514.5	2,661.4	3.00	-3.00	Top of Gas; Inc=15"
5,143.0	14.80	109.40	4,249.0	-873.3	2,517.5	2,664.6	3.00	-3.00	E09 696 MF10C TOG
5,200.0	13.10	109.40	4,304.3	-877.8	2,530.5	2,678.4	3.00	-3.00	
5,300.0	10.10	109.40	4,402.2	-884.5	2,549.4	2,698.5	3.00	-3.00	
5,400.0	7.10	109.40	4,501.1	-889.5	2,563.5	2,713.4	3.00	-3.00	
5,500.0	4.10	109.40	4,600.6	-892.7	2,572.7	2,723.1	3.00	-3.00	
5,600.0	1.10	109.40	4,700.5	-894.2	2,577.0	2,727.7	3.00	-3.00	
5,636.5	0.00	109.40	4,737.0	-894.3	2,577.3	2,728.0	3.00	-3.00	EOD; Inc=0° - E09 696 MF10C TGT
5,700.0	0.16	240.12	4,800.5	-894.4	2,577.2	2,728.0	0.25	0.25	
5,800.0	0.41	240.12	4,900.5	-894.6	2,576.8	2,727.6	0.25	0.25	
5,826.6	0.48	240.12	4,927.1	-894.7	2,576.6	2,727.5	0.25	0.25	
5,900.0	0.48	240.12	5,000.5	-895.0	2,576.1	2,727.1	0.00	0.00	
6,000.0	0.48	240.12	5,100.5	-895.4	2,575.4	2,726.6	0.00	0.00	
6,100.0	0.48	240.12	5,200.5	-895.9	2,574.7	2,726.0	0.00	0.00	
6,200.0	0.48	240.12	5,300.5	-896.3	2,574.0	2,725.5	0.00	0.00	
6,300.0	0.48	240.12	5,400.5	-896.7	2,573.2	2,725.0	0.00	0.00	
6,400.0	0.48	240.12	5,500.5	-897.1	2,572.5	2,724.4	0.00	0.00	
6,500.0	0.48	240.12	5,600.5	-897.5	2,571.8	2,723.9	0.00	0.00	
6,600.0	0.48	240.12	5,700.5	-897.9	2,571.1	2,723.3	0.00	0.00	
6,700.0	0.48	240.12	5,800.5	-898.3	2,570.4	2,722.8	0.00	0.00	
6,800.0	0.48	240.12	5,900.5	-898.8	2,569.6	2,722.3	0.00	0.00	
6,900.0	0.48	240.12	6,000.4	-899.2	2,568.9	2,721.7	0.00	0.00	
7,000.0	0.48	240.12	6,100.4	-899.6	2,568.2	2,721.2	0.00	0.00	

# Cathedral Energy Services

## Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well NP MF10C 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 MF10C E09 696	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

### 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	240.12	6,200.4	-900.0	2,567.5	2,720.6	0.00	0.00	
7,200.0	0.48	240.12	6,300.4	-900.4	2,566.8	2,720.1	0.00	0.00	
7,300.0	0.48	240.12	6,400.4	-900.8	2,566.0	2,719.6	0.00	0.00	
7,400.0	0.48	240.12	6,500.4	-901.2	2,565.3	2,719.0	0.00	0.00	
7,500.0	0.48	240.12	6,600.4	-901.6	2,564.6	2,718.5	0.00	0.00	
7,600.0	0.48	240.12	6,700.4	-902.1	2,563.9	2,717.9	0.00	0.00	
7,700.0	0.48	240.12	6,800.4	-902.5	2,563.2	2,717.4	0.00	0.00	
7,800.0	0.48	240.12	6,900.4	-902.9	2,562.4	2,716.9	0.00	0.00	
7,900.0	0.48	240.12	7,000.4	-903.3	2,561.7	2,716.3	0.00	0.00	
8,000.0	0.48	240.12	7,100.4	-903.7	2,561.0	2,715.8	0.00	0.00	
8,100.0	0.48	240.12	7,200.4	-904.1	2,560.3	2,715.2	0.00	0.00	
8,200.0	0.48	240.12	7,300.4	-904.5	2,559.6	2,714.7	0.00	0.00	
8,300.0	0.48	240.12	7,400.4	-905.0	2,558.8	2,714.2	0.00	0.00	
8,400.0	0.48	240.12	7,500.4	-905.4	2,558.1	2,713.6	0.00	0.00	
8,496.6	0.48	240.12	7,597.0	-905.8	2,557.4	2,713.1	0.00	0.00	Rollins
8,500.0	0.48	240.12	7,600.4	-905.8	2,557.4	2,713.1	0.00	0.00	
8,600.0	0.48	240.12	7,700.4	-906.2	2,556.7	2,712.5	0.00	0.00	
8,646.6	0.48	240.12	7,747.0	-906.4	2,556.4	2,712.3	0.00	0.00	Drillers TD @ 8646' - E09 696 MF10C BHL - EC
8,700.0	0.48	240.12	7,800.4	-906.6	2,556.0	2,712.0	0.00	0.00	
8,800.0	0.48	240.12	7,900.4	-907.0	2,555.3	2,711.5	0.00	0.00	
8,900.0	0.48	240.12	8,000.4	-907.4	2,554.5	2,710.9	0.00	0.00	
9,000.0	0.48	240.12	8,100.4	-907.8	2,553.8	2,710.4	0.00	0.00	
9,100.0	0.48	240.12	8,200.4	-908.3	2,553.1	2,709.8	0.00	0.00	
9,200.0	0.48	240.12	8,300.4	-908.7	2,552.4	2,709.3	0.00	0.00	
9,300.0	0.48	240.12	8,400.4	-909.1	2,551.7	2,708.8	0.00	0.00	
9,400.0	0.48	240.12	8,500.4	-909.5	2,550.9	2,708.2	0.00	0.00	
9,500.0	0.48	240.12	8,600.4	-909.9	2,550.2	2,707.7	0.00	0.00	
9,600.0	0.48	240.12	8,700.4	-910.3	2,549.5	2,707.1	0.00	0.00	
9,700.0	0.48	240.12	8,800.4	-910.7	2,548.8	2,706.6	0.00	0.00	
9,800.0	0.48	240.12	8,900.3	-911.2	2,548.1	2,706.1	0.00	0.00	
9,900.0	0.48	240.12	9,000.3	-911.6	2,547.3	2,705.5	0.00	0.00	
10,000.0	0.48	240.12	9,100.3	-912.0	2,546.6	2,705.0	0.00	0.00	
10,100.0	0.48	240.12	9,200.3	-912.4	2,545.9	2,704.4	0.00	0.00	
10,200.0	0.48	240.12	9,300.3	-912.8	2,545.2	2,703.9	0.00	0.00	
10,300.0	0.48	240.12	9,400.3	-913.2	2,544.5	2,703.4	0.00	0.00	
10,400.0	0.48	240.12	9,500.3	-913.6	2,543.7	2,702.8	0.00	0.00	
10,500.0	0.48	240.12	9,600.3	-914.0	2,543.0	2,702.3	0.00	0.00	
10,600.0	0.48	240.12	9,700.3	-914.5	2,542.3	2,701.7	0.00	0.00	
10,700.0	0.48	240.12	9,800.3	-914.9	2,541.6	2,701.2	0.00	0.00	
10,800.0	0.48	240.12	9,900.3	-915.3	2,540.9	2,700.7	0.00	0.00	
10,900.0	0.48	240.12	10,000.3	-915.7	2,540.1	2,700.1	0.00	0.00	
11,000.0	0.48	240.12	10,100.3	-916.1	2,539.4	2,699.6	0.00	0.00	
11,100.0	0.48	240.12	10,200.3	-916.5	2,538.7	2,699.0	0.00	0.00	
11,200.0	0.48	240.12	10,300.3	-916.9	2,538.0	2,698.5	0.00	0.00	
11,300.0	0.48	240.12	10,400.3	-917.4	2,537.3	2,698.0	0.00	0.00	
11,400.0	0.48	240.12	10,500.3	-917.8	2,536.6	2,697.4	0.00	0.00	
11,500.0	0.48	240.12	10,600.3	-918.2	2,535.8	2,696.9	0.00	0.00	
11,600.0	0.48	240.12	10,700.3	-918.6	2,535.1	2,696.3	0.00	0.00	
11,700.0	0.48	240.12	10,800.3	-919.0	2,534.4	2,695.8	0.00	0.00	
11,800.0	0.48	240.12	10,900.3	-919.4	2,533.7	2,695.3	0.00	0.00	
11,899.7	0.48	240.12	11,000.0	-919.8	2,533.0	2,694.7	0.00	0.00	Permit TD @ 11899'

# 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 MF10C E09 696  
 Wellbore: DD  
 Design: Plan #2

Local Co-ordinate Reference: Well NP MF10C 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 - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
E09 696 MF10C TOG - plan misses target center by 52.4ft at 5143.0ft MD (4249.0 TVD, -873.3 N, 2517.5 E) - Rectangle (sides W100.0 H200.0 D300.0)	0.00	0.00	4,237.0	-906.4	2,556.4	1,630,985.14	2,264,151.77	39° 32' 12.53 N	108° 6' 33.93 W
E09 696 MF10C BHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	7,747.0	-906.4	2,556.4	1,630,985.14	2,264,151.77	39° 32' 12.53 N	108° 6' 33.93 W
E09 696 MF10C TGT 2 - plan hits target center - Rectangle (sides W100.0 H200.0 D0.0)	0.00	0.00	7,747.0	-906.4	2,556.4	1,630,985.14	2,264,151.77	39° 32' 12.53 N	108° 6' 33.93 W
E09 696 MF10C TGT - plan hits target center - Point	0.00	0.00	4,737.0	-894.3	2,577.3	1,630,996.58	2,264,173.07	39° 32' 12.65 N	108° 6' 33.66 W

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,089.0	4,197.0	Williams Fork		0.00	
5,130.6	4,237.0	Top of Gas; Inc=15°		0.00	
8,496.6	7,597.0	Rollins		0.00	

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
175.0	175.0	0.0	0.0	KOP @ 175'
1,552.3	1,437.4	-145.0	449.1	EOB; Inc=41.1°
4,265.2	3,480.5	-737.7	2,132.6	Start Drop -3.00
5,636.5	4,737.0	-894.3	2,577.3	EOD; Inc=0°
8,646.6	7,747.0	-906.4	2,556.4	Drillers TD @ 8646'
11,899.7	11,000.0	-919.8	2,533.0	Permit TD @ 11899'