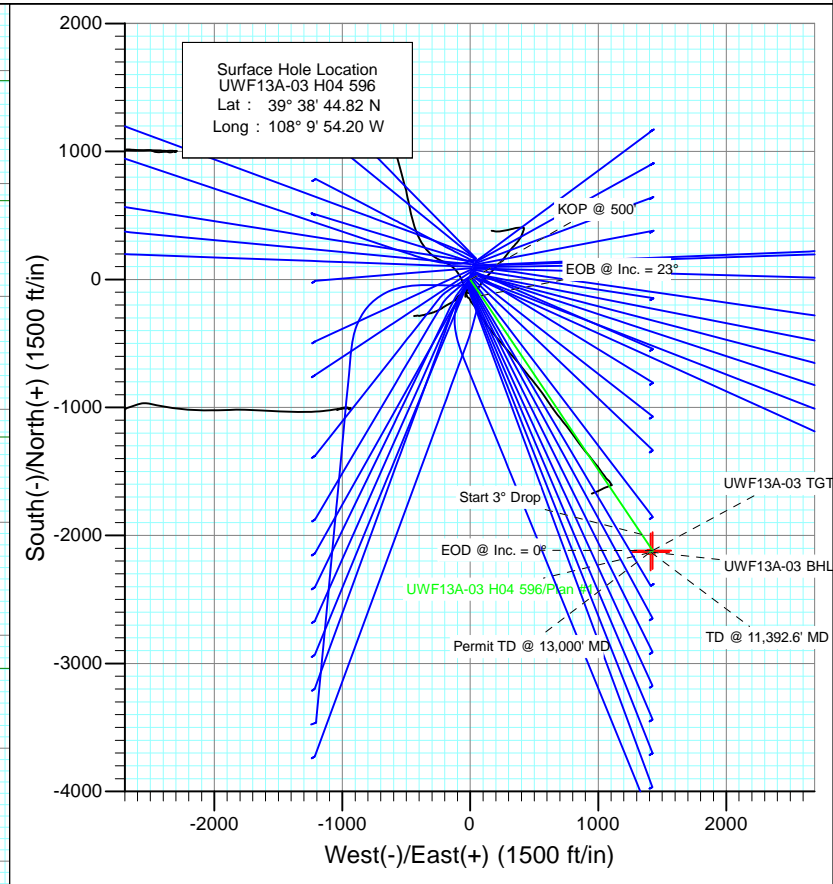


SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	1266.7	23.00	146.08	1246.3	-126.0	84.7	3.00	146.08	151.8	
4	7023.9	23.00	146.08	6545.7	-1992.8	1340.0	0.00	0.00	2401.3	UWF13A-03 TGT
5	7790.6	0.00	0.00	7292.0	-2118.8	1424.7	3.00	180.00	2553.1	UWF13A-03 BHL
6	9540.8	0.38	236.26	9042.2	-2122.0	1419.9	0.02	236.26	2553.1	
7	11392.6	0.38	236.26	10894.0	-2128.8	1409.7	0.00	0.00	2553.2	
8	13000.0	0.38	236.26	12501.4	-2134.7	1400.8	0.00	0.00	2553.3	



Azimuths to True North
 Magnetic North: 10.34°

Magnetic Field
 Strength: 52205.7nT
 Dip Angle: 65.81°
 Date: 4/19/2012
 Model: IGRF2010

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1071.0	1079.9	A GROOVE
1231.0	1250.1	B GROOVE
1271.0	1293.6	B GROOVE BASE
2089.0	2182.2	GARDEN GULCH
3151.0	3335.9	WASATCH FM
5244.0	5609.7	WASATCH G
7292.0	7790.6	WILLIAMS FORK
10894.0	11392.6	ROLLINS
11138.0	11636.6	COZZETTE
11312.0	11810.6	CORCORAN
11607.0	12105.6	UPPER SEGO

Plan #1 UWF13A-03 H04 596 WELL @ 8293.0ft (Original Well Elev) North American Datum 1983 Well UWF13A-03 H04 596, True North						
Type TD	Target No Target (Freehand)	Azimuth 146.73	Origin Slot	N/S 0.0	E/W 0.0	From TVD 0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
UWF13A-03 TGT	7292.0	-2118.8	1424.7	39° 38' 23.88 N	108° 9' 35.99 W	
UWF13A-03 BHL	10894.0	-2128.8	1409.7	39° 38' 23.78 N	108° 9' 36.18 W	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well UWF13A-03 H04 596
Company: EnCana Oil & Gas (USA) Inc	TVD Reference: WELL @ 8293.0ft (Original Well Elev)
Project: North Piceance	MD Reference: WELL @ 8293.0ft (Original Well Elev)
Site: H04 Pad	North Reference: True
Well: UWF13A-03 H04 596	Survey Calculation Method: Minimum Curvature
Wellbore: DD	
Design: Plan #1	

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 H04 Pad					
Site Position:		Northing:	1,671,070.85 ft	Latitude:	39° 38' 44.37 N
From:	Lat/Long	Easting:	2,249,607.93 ft	Longitude:	108° 9' 54.50 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.68 °

Well UWF13A-03 H04 596					
Well Position	+N/-S	0.0 ft	Northing:	1,671,115.65 ft	Latitude: 39° 38' 44.82 N
	+E/-W	0.0 ft	Easting:	2,249,632.72 ft	Longitude: 108° 9' 54.20 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 8,260.0 ft

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	4/19/2012	(°)	(°)	(nT)
			10.34	65.81	52,206

Design Plan #1				
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	146.73

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,266.7	23.00	146.08	1,246.3	-126.0	84.7	3.00	3.00	0.00	146.08	
7,023.9	23.00	146.08	6,545.7	-1,992.8	1,340.0	0.00	0.00	0.00	0.00	
7,790.6	0.00	0.00	7,292.0	-2,118.8	1,424.7	3.00	-3.00	0.00	180.00	UWF13A-03 TGT
9,540.8	0.38	236.26	9,042.2	-2,122.0	1,419.9	0.02	0.02	-7.07	236.26	
11,392.6	0.38	236.26	10,894.0	-2,128.8	1,409.7	0.00	0.00	0.00	0.00	UWF13A-03 BHL
13,000.0	0.38	236.26	12,501.4	-2,134.7	1,400.8	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: North Piceance
Site: H04 Pad
Well: UWF13A-03 H04 596
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well UWF13A-03 H04 596
TVD Reference: WELL @ 8293.0ft (Original Well Elev)
MD Reference: WELL @ 8293.0ft (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	
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	KOP @ 500'
600.0	3.00	146.08	600.0	-2.2	1.5	2.6	3.00	3.00	
700.0	6.00	146.08	699.6	-8.7	5.8	10.5	3.00	3.00	
800.0	9.00	146.08	798.8	-19.5	13.1	23.5	3.00	3.00	
900.0	12.00	146.08	897.1	-34.6	23.3	41.7	3.00	3.00	
1,000.0	15.00	146.08	994.3	-54.0	36.3	65.1	3.00	3.00	
1,079.9	17.40	146.08	1,071.0	-72.5	48.7	87.3	3.00	3.00	A GROOVE
1,100.0	18.00	146.08	1,090.2	-77.6	52.2	93.5	3.00	3.00	
1,200.0	21.00	146.08	1,184.4	-105.3	70.8	126.8	3.00	3.00	
1,250.1	22.50	146.08	1,231.0	-120.7	81.2	145.4	3.00	3.00	B GROOVE
1,266.7	23.00	146.08	1,246.3	-126.0	84.7	151.8	3.00	3.00	EOB @ Inc. = 23°
1,293.6	23.00	146.08	1,271.0	-134.7	90.6	162.3	0.00	0.00	B GROOVE BASE
1,300.0	23.00	146.08	1,276.9	-136.8	92.0	164.8	0.00	0.00	
1,400.0	23.00	146.08	1,369.0	-169.2	113.8	203.9	0.00	0.00	
1,500.0	23.00	146.08	1,461.0	-201.7	135.6	243.0	0.00	0.00	
1,600.0	23.00	146.08	1,553.1	-234.1	157.4	282.1	0.00	0.00	
1,700.0	23.00	146.08	1,645.1	-266.5	179.2	321.1	0.00	0.00	
1,800.0	23.00	146.08	1,737.2	-298.9	201.0	360.2	0.00	0.00	
1,900.0	23.00	146.08	1,829.2	-331.4	222.8	399.3	0.00	0.00	
2,000.0	23.00	146.08	1,921.3	-363.8	244.6	438.3	0.00	0.00	
2,100.0	23.00	146.08	2,013.3	-396.2	266.4	477.4	0.00	0.00	
2,182.2	23.00	146.08	2,089.0	-422.9	284.3	509.5	0.00	0.00	GARDEN GULCH
2,200.0	23.00	146.08	2,105.4	-428.6	288.2	516.5	0.00	0.00	
2,300.0	23.00	146.08	2,197.4	-461.1	310.0	555.6	0.00	0.00	
2,400.0	23.00	146.08	2,289.5	-493.5	331.8	594.6	0.00	0.00	
2,500.0	23.00	146.08	2,381.5	-525.9	353.6	633.7	0.00	0.00	
2,600.0	23.00	146.08	2,473.6	-558.3	375.4	672.8	0.00	0.00	
2,700.0	23.00	146.08	2,565.6	-590.8	397.2	711.8	0.00	0.00	
2,800.0	23.00	146.08	2,657.7	-623.2	419.0	750.9	0.00	0.00	
2,900.0	23.00	146.08	2,749.7	-655.6	440.8	790.0	0.00	0.00	
3,000.0	23.00	146.08	2,841.8	-688.0	462.6	829.1	0.00	0.00	
3,100.0	23.00	146.08	2,933.8	-720.5	484.4	868.1	0.00	0.00	
3,200.0	23.00	146.08	3,025.9	-752.9	506.2	907.2	0.00	0.00	
3,300.0	23.00	146.08	3,117.9	-785.3	528.1	946.3	0.00	0.00	
3,335.9	23.00	146.08	3,151.0	-797.0	535.9	960.3	0.00	0.00	WASATCH FM
3,400.0	23.00	146.08	3,210.0	-817.7	549.9	985.3	0.00	0.00	
3,500.0	23.00	146.08	3,302.0	-850.2	571.7	1,024.4	0.00	0.00	
3,600.0	23.00	146.08	3,394.1	-882.6	593.5	1,063.5	0.00	0.00	
3,700.0	23.00	146.08	3,486.1	-915.0	615.3	1,102.6	0.00	0.00	
3,800.0	23.00	146.08	3,578.2	-947.4	637.1	1,141.6	0.00	0.00	
3,900.0	23.00	146.08	3,670.2	-979.9	658.9	1,180.7	0.00	0.00	
4,000.0	23.00	146.08	3,762.3	-1,012.3	680.7	1,219.8	0.00	0.00	
4,100.0	23.00	146.08	3,854.3	-1,044.7	702.5	1,258.9	0.00	0.00	
4,200.0	23.00	146.08	3,946.4	-1,077.1	724.3	1,297.9	0.00	0.00	
4,300.0	23.00	146.08	4,038.4	-1,109.6	746.1	1,337.0	0.00	0.00	
4,400.0	23.00	146.08	4,130.5	-1,142.0	767.9	1,376.1	0.00	0.00	
4,500.0	23.00	146.08	4,222.5	-1,174.4	789.7	1,415.1	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well UWF13A-03 H04 596
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8293.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	WELL @ 8293.0ft (Original Well Elev)
Site:	H04 Pad	North Reference:	True
Well:	UWF13A-03 H04 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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
4,600.0	23.00	146.08	4,314.6	-1,206.8	811.5	1,454.2	0.00	0.00	
4,700.0	23.00	146.08	4,406.6	-1,239.3	833.3	1,493.3	0.00	0.00	
4,800.0	23.00	146.08	4,498.7	-1,271.7	855.1	1,532.4	0.00	0.00	
4,900.0	23.00	146.08	4,590.7	-1,304.1	876.9	1,571.4	0.00	0.00	
5,000.0	23.00	146.08	4,682.8	-1,336.5	898.7	1,610.5	0.00	0.00	
5,100.0	23.00	146.08	4,774.8	-1,369.0	920.5	1,649.6	0.00	0.00	
5,200.0	23.00	146.08	4,866.9	-1,401.4	942.3	1,688.6	0.00	0.00	
5,300.0	23.00	146.08	4,958.9	-1,433.8	964.1	1,727.7	0.00	0.00	
5,400.0	23.00	146.08	5,051.0	-1,466.2	985.9	1,766.8	0.00	0.00	
5,500.0	23.00	146.08	5,143.0	-1,498.7	1,007.7	1,805.9	0.00	0.00	
5,600.0	23.00	146.08	5,235.1	-1,531.1	1,029.5	1,844.9	0.00	0.00	
5,609.7	23.00	146.08	5,244.0	-1,534.2	1,031.6	1,848.7	0.00	0.00	WASATCH G
5,700.0	23.00	146.08	5,327.1	-1,563.5	1,051.3	1,884.0	0.00	0.00	
5,800.0	23.00	146.08	5,419.2	-1,595.9	1,073.1	1,923.1	0.00	0.00	
5,900.0	23.00	146.08	5,511.2	-1,628.4	1,094.9	1,962.1	0.00	0.00	
6,000.0	23.00	146.08	5,603.3	-1,660.8	1,116.7	2,001.2	0.00	0.00	
6,100.0	23.00	146.08	5,695.3	-1,693.2	1,138.5	2,040.3	0.00	0.00	
6,200.0	23.00	146.08	5,787.4	-1,725.7	1,160.3	2,079.4	0.00	0.00	
6,300.0	23.00	146.08	5,879.4	-1,758.1	1,182.2	2,118.4	0.00	0.00	
6,400.0	23.00	146.08	5,971.5	-1,790.5	1,204.0	2,157.5	0.00	0.00	
6,500.0	23.00	146.08	6,063.5	-1,822.9	1,225.8	2,196.6	0.00	0.00	
6,600.0	23.00	146.08	6,155.6	-1,855.4	1,247.6	2,235.6	0.00	0.00	
6,700.0	23.00	146.08	6,247.6	-1,887.8	1,269.4	2,274.7	0.00	0.00	
6,800.0	23.00	146.08	6,339.7	-1,920.2	1,291.2	2,313.8	0.00	0.00	
6,900.0	23.00	146.08	6,431.7	-1,952.6	1,313.0	2,352.9	0.00	0.00	
7,000.0	23.00	146.08	6,523.8	-1,985.1	1,334.8	2,391.9	0.00	0.00	
7,023.9	23.00	146.08	6,545.7	-1,992.8	1,340.0	2,401.3	0.00	0.00	Start 3° Drop
7,100.0	20.72	146.08	6,616.4	-2,016.3	1,355.8	2,429.6	3.00	-3.00	
7,200.0	17.72	146.08	6,710.8	-2,043.6	1,374.2	2,462.5	3.00	-3.00	
7,300.0	14.72	146.08	6,806.8	-2,066.8	1,389.7	2,490.4	3.00	-3.00	
7,400.0	11.72	146.08	6,904.2	-2,085.8	1,402.5	2,513.3	3.00	-3.00	
7,500.0	8.72	146.08	7,002.6	-2,100.5	1,412.4	2,531.0	3.00	-3.00	
7,600.0	5.72	146.08	7,101.8	-2,110.9	1,419.4	2,543.6	3.00	-3.00	
7,700.0	2.72	146.08	7,201.5	-2,117.0	1,423.5	2,550.9	3.00	-3.00	
7,790.6	0.00	0.00	7,292.0	-2,118.8	1,424.7	2,553.1	3.00	-3.00	EOD @ Inc. = 0° - WILLIAMS FORK
7,800.0	0.00	236.26	7,301.4	-2,118.8	1,424.7	2,553.1	0.02	0.02	
7,900.0	0.02	236.26	7,401.4	-2,118.8	1,424.7	2,553.1	0.02	0.02	
8,000.0	0.05	236.26	7,501.4	-2,118.8	1,424.6	2,553.1	0.02	0.02	
8,100.0	0.07	236.26	7,601.4	-2,118.9	1,424.5	2,553.1	0.02	0.02	
8,200.0	0.09	236.26	7,701.4	-2,119.0	1,424.4	2,553.1	0.02	0.02	
8,300.0	0.11	236.26	7,801.4	-2,119.1	1,424.3	2,553.1	0.02	0.02	
8,400.0	0.13	236.26	7,901.4	-2,119.2	1,424.1	2,553.1	0.02	0.02	
8,500.0	0.15	236.26	8,001.4	-2,119.3	1,423.9	2,553.1	0.02	0.02	
8,600.0	0.18	236.26	8,101.4	-2,119.5	1,423.7	2,553.1	0.02	0.02	
8,700.0	0.20	236.26	8,201.4	-2,119.7	1,423.4	2,553.1	0.02	0.02	
8,800.0	0.22	236.26	8,301.4	-2,119.9	1,423.1	2,553.1	0.02	0.02	
8,900.0	0.24	236.26	8,401.4	-2,120.1	1,422.8	2,553.1	0.02	0.02	
9,000.0	0.26	236.26	8,501.4	-2,120.3	1,422.4	2,553.1	0.02	0.02	
9,100.0	0.28	236.26	8,601.4	-2,120.6	1,422.0	2,553.1	0.02	0.02	
9,200.0	0.31	236.26	8,701.4	-2,120.9	1,421.6	2,553.1	0.02	0.02	
9,300.0	0.33	236.26	8,801.4	-2,121.2	1,421.1	2,553.1	0.02	0.02	
9,400.0	0.35	236.26	8,901.4	-2,121.5	1,420.6	2,553.1	0.02	0.02	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: North Piceance
Site: H04 Pad
Well: UWF13A-03 H04 596
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well UWF13A-03 H04 596
TVD Reference: WELL @ 8293.0ft (Original Well Elev)
MD Reference: WELL @ 8293.0ft (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
9,500.0	0.37	236.26	9,001.4	-2,121.9	1,420.1	2,553.1	0.02	0.02	
9,540.8	0.38	236.26	9,042.2	-2,122.0	1,419.9	2,553.1	0.02	0.02	
9,600.0	0.38	236.26	9,101.4	-2,122.2	1,419.6	2,553.1	0.00	0.00	
9,700.0	0.38	236.26	9,201.4	-2,122.6	1,419.0	2,553.1	0.00	0.00	
9,800.0	0.38	236.26	9,301.4	-2,123.0	1,418.5	2,553.1	0.00	0.00	
9,900.0	0.38	236.26	9,401.4	-2,123.3	1,417.9	2,553.1	0.00	0.00	
10,000.0	0.38	236.26	9,501.4	-2,123.7	1,417.4	2,553.2	0.00	0.00	
10,100.0	0.38	236.26	9,601.4	-2,124.1	1,416.8	2,553.2	0.00	0.00	
10,200.0	0.38	236.26	9,701.4	-2,124.4	1,416.3	2,553.2	0.00	0.00	
10,300.0	0.38	236.26	9,801.4	-2,124.8	1,415.7	2,553.2	0.00	0.00	
10,400.0	0.38	236.26	9,901.4	-2,125.2	1,415.1	2,553.2	0.00	0.00	
10,500.0	0.38	236.26	10,001.4	-2,125.5	1,414.6	2,553.2	0.00	0.00	
10,600.0	0.38	236.26	10,101.4	-2,125.9	1,414.0	2,553.2	0.00	0.00	
10,700.0	0.38	236.26	10,201.4	-2,126.3	1,413.5	2,553.2	0.00	0.00	
10,800.0	0.38	236.26	10,301.4	-2,126.6	1,412.9	2,553.2	0.00	0.00	
10,900.0	0.38	236.26	10,401.4	-2,127.0	1,412.4	2,553.2	0.00	0.00	
11,000.0	0.38	236.26	10,501.4	-2,127.4	1,411.8	2,553.2	0.00	0.00	
11,100.0	0.38	236.26	10,601.4	-2,127.7	1,411.3	2,553.2	0.00	0.00	
11,200.0	0.38	236.26	10,701.4	-2,128.1	1,410.7	2,553.2	0.00	0.00	
11,300.0	0.38	236.26	10,801.4	-2,128.5	1,410.2	2,553.2	0.00	0.00	
11,392.6	0.38	236.26	10,894.0	-2,128.8	1,409.7	2,553.2	0.00	0.00	TD @ 11,392.6' MD - ROLLINS
11,400.0	0.38	236.26	10,901.4	-2,128.8	1,409.6	2,553.2	0.00	0.00	
11,500.0	0.38	236.26	11,001.4	-2,129.2	1,409.1	2,553.2	0.00	0.00	
11,600.0	0.38	236.26	11,101.4	-2,129.6	1,408.5	2,553.2	0.00	0.00	
11,636.6	0.38	236.26	11,138.0	-2,129.7	1,408.3	2,553.2	0.00	0.00	COZZETTE
11,700.0	0.38	236.26	11,201.4	-2,130.0	1,408.0	2,553.2	0.00	0.00	
11,800.0	0.38	236.26	11,301.4	-2,130.3	1,407.4	2,553.3	0.00	0.00	
11,810.6	0.38	236.26	11,312.0	-2,130.4	1,407.4	2,553.3	0.00	0.00	CORCORAN
11,900.0	0.38	236.26	11,401.4	-2,130.7	1,406.9	2,553.3	0.00	0.00	
12,000.0	0.38	236.26	11,501.4	-2,131.1	1,406.3	2,553.3	0.00	0.00	
12,100.0	0.38	236.26	11,601.4	-2,131.4	1,405.8	2,553.3	0.00	0.00	
12,105.6	0.38	236.26	11,607.0	-2,131.4	1,405.8	2,553.3	0.00	0.00	UPPER SEGO
12,200.0	0.38	236.26	11,701.4	-2,131.8	1,405.2	2,553.3	0.00	0.00	
12,300.0	0.38	236.26	11,801.4	-2,132.2	1,404.7	2,553.3	0.00	0.00	
12,400.0	0.38	236.26	11,901.4	-2,132.5	1,404.1	2,553.3	0.00	0.00	
12,500.0	0.38	236.26	12,001.4	-2,132.9	1,403.6	2,553.3	0.00	0.00	
12,600.0	0.38	236.26	12,101.4	-2,133.3	1,403.0	2,553.3	0.00	0.00	
12,700.0	0.38	236.26	12,201.4	-2,133.6	1,402.5	2,553.3	0.00	0.00	
12,800.0	0.38	236.26	12,301.4	-2,134.0	1,401.9	2,553.3	0.00	0.00	
12,900.0	0.38	236.26	12,401.4	-2,134.4	1,401.4	2,553.3	0.00	0.00	
13,000.0	0.38	236.26	12,501.4	-2,134.7	1,400.8	2,553.3	0.00	0.00	Permit TD @ 13,000' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well UWF13A-03 H04 596
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8293.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	WELL @ 8293.0ft (Original Well Elev)
Site:	H04 Pad	North Reference:	True
Well:	UWF13A-03 H04 596	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
UWF13A-03 BHL - plan hits target center - Point	0.00	0.00	10,894.0	-2,128.8	1,409.7	1,668,946.40	2,250,979.36	39° 38' 23.78 N	108° 9' 36.18 W
UWF13A-03 TGT - plan hits target center - Point	0.00	0.00	7,292.0	-2,118.8	1,424.7	1,668,955.98	2,250,994.66	39° 38' 23.88 N	108° 9' 35.99 W

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1,079.9	1,071.0	A GROOVE				
1,250.1	1,231.0	B GROOVE				
1,293.6	1,271.0	B GROOVE BASE				
2,182.2	2,089.0	GARDEN GULCH				
3,335.9	3,151.0	WASATCH FM				
5,609.7	5,244.0	WASATCH G				
7,790.6	7,292.0	WILLIAMS FORK				
11,392.6	10,894.0	ROLLINS				
11,636.6	11,138.0	COZZETTE				
11,810.6	11,312.0	CORCORAN				
12,105.6	11,607.0	UPPER SEGO				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)		
500.0	500.0	0.0	0.0	KOP @ 500'	
1,266.7	1,246.3	-126.0	84.7	EOB @ Inc. = 23°	
7,023.9	6,545.7	-1,992.8	1,340.0	Start 3° Drop	
7,790.6	7,292.0	-2,118.8	1,424.7	EOD @ Inc. = 0°	
11,392.6	10,894.0	-2,128.8	1,409.7	TD @ 11,392.6' MD	
13,000.0	12,501.4	-2,134.7	1,400.8	Permit TD @ 13,000' MD	