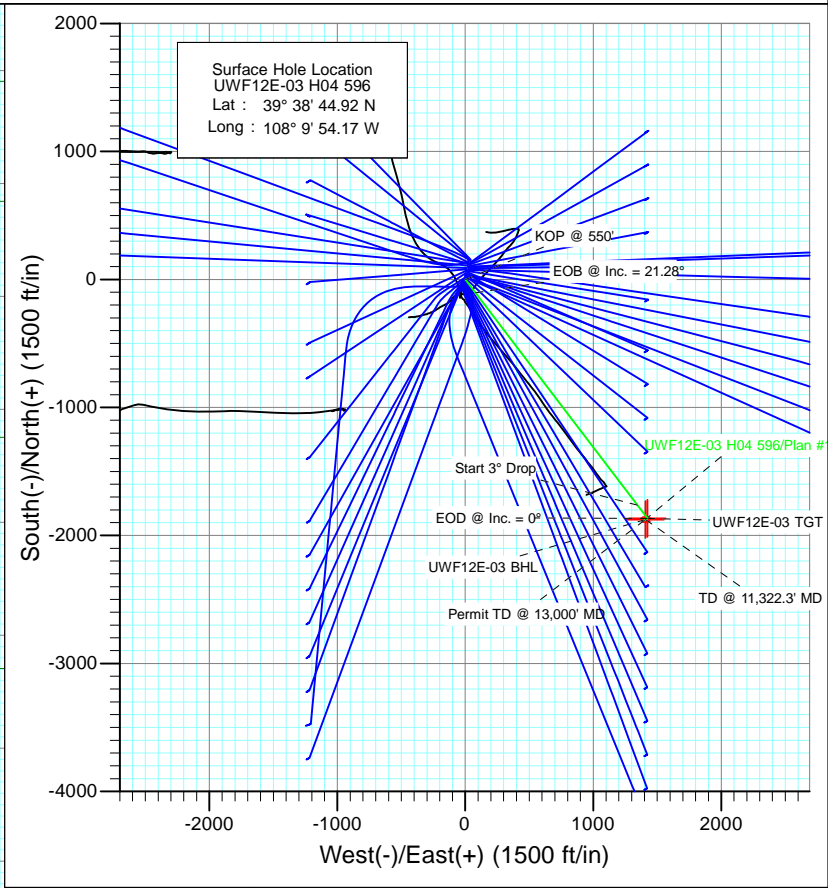


**SECTION DETAILS**

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	0.0	0.00	0.0	
2	550.0	0.00	0.00	550.0	0.0	0.0	0.00	0.00	0.0	
3	1259.2	21.28	142.67	1243.0	-103.5	78.9	3.00	142.67	130.1	
4	7009.1	21.28	142.67	6601.0	-1762.4	1344.2	0.00	0.00	2216.3	
5	7718.2	0.00	0.00	7294.0	-1865.9	1423.1	3.00	180.00	2346.5	UWF12E-03 TGT
6	9466.8	0.38	236.37	9042.6	-1869.1	1418.3	0.02	236.37	2346.2	
7	11322.3	0.38	236.37	10898.0	-1875.9	1408.1	0.00	0.00	2345.5	UWF12E-03 BHL
8	13000.0	0.38	236.37	12575.7	-1882.0	1398.9	0.00	0.00	2345.0	



**T M**

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
1074.0	1080.8	A GROOVE
1232.0	1247.4	B GROOVE
1272.0	1290.3	B GROOVE BASE
2096.0	2174.6	GARDEN GULCH
3158.0	3314.2	WASATCH FM
5247.0	5556.0	WASATCH G
7294.0	7718.2	WILLIAMS FORK
10898.0	11322.3	ROLLINS
11154.0	11578.3	COZZETTE
11328.0	11752.3	CORCORAN
11625.0	12049.3	UPPER SEGO

Plan #1  
 UWF12E-03 H04 596  
 WELL @ 8293.0ft (Original Well Elev)  
 North American Datum 1983  
 Well UWF12E-03 H04 596, True North

Type TD	Target	Azimuth	Origin Type	N/S	E/W	From TVD
	No Target (Freehand)	143.38	Slot	0.0	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
UWF12E-03 TGT	7294.0	-1865.9	1423.1	39° 38' 26.48 N	108° 9' 35.98 W	
UWF12E-03 BHL	10898.0	-1875.9	1408.1	39° 38' 26.38 N	108° 9' 36.17 W	

# Cathedral Energy Services

## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well UWF12E-03 H04 596
<b>Project:</b> North Piceance	<b>TVD Reference:</b> WELL @ 8293.0ft (Original Well Elev)
<b>Site:</b> H04 Pad	<b>MD Reference:</b> WELL @ 8293.0ft (Original Well Elev)
<b>Well:</b> UWF12E-03 H04 596	<b>North Reference:</b> True
<b>Wellbore:</b> DD	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> Plan #1	<b>Database:</b> USA EDM 5000 Multi Users DB

<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		

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

<b>Well</b> UWF12E-03 H04 596					
<b>Well Position</b>	<b>+N/-S</b> 0.0 ft	<b>Northing:</b> 1,671,125.70 ft	<b>Latitude:</b> 39° 38' 44.92 N		
	<b>+E/-W</b> 0.0 ft	<b>Easting:</b> 2,249,635.36 ft	<b>Longitude:</b> 108° 9' 54.17 W		
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b> ft	<b>Ground Level:</b> 8,260.0 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>
	IGRF2010	4/19/2012	10.34	65.81	52,206

<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	143.38

<b>Survey Tool Program</b>		<b>Date</b> 4/24/2012
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>
0.0	13,000.0	Plan #1 (DD)
		<b>Tool Name</b> MWD
		<b>Description</b> Geolink MWD

<b>Planned Survey</b>									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
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	
550.0	0.00	0.00	550.0	0.0	0.0	0.0	0.00	0.00	KOP @ 550'
600.0	1.50	142.67	600.0	-0.5	0.4	0.7	3.00	3.00	
700.0	4.50	142.67	699.8	-4.7	3.6	5.9	3.00	3.00	
800.0	7.50	142.67	799.3	-13.0	9.9	16.3	3.00	3.00	
900.0	10.50	142.67	898.0	-25.4	19.4	32.0	3.00	3.00	
1,000.0	13.50	142.67	995.8	-42.0	32.0	52.8	3.00	3.00	
1,080.8	15.92	142.67	1,074.0	-58.3	44.4	73.3	3.00	3.00	A GROOVE

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well UWF12E-03 H04 596
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	WELL @ 8293.0ft (Original Well Elev)
<b>Site:</b>	H04 Pad	<b>MD Reference:</b>	WELL @ 8293.0ft (Original Well Elev)
<b>Well:</b>	UWF12E-03 H04 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	USA EDM 5000 Multi Users DB

### 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)	Formations / Comments
1,100.0	16.50	142.67	1,092.4	-62.5	47.7	78.6	3.00	3.00	
1,200.0	19.50	142.67	1,187.5	-87.1	66.4	109.5	3.00	3.00	
1,247.4	20.92	142.67	1,232.0	-100.1	76.4	125.9	3.00	3.00	B GROOVE
1,259.2	21.28	142.67	1,243.0	-103.5	78.9	130.1	3.00	3.00	EOB @ Inc. = 21.28°
1,290.3	21.28	142.67	1,272.0	-112.5	85.8	141.4	0.00	0.00	B GROOVE BASE
1,300.0	21.28	142.67	1,281.0	-115.3	87.9	145.0	0.00	0.00	
1,400.0	21.28	142.67	1,374.2	-144.1	109.9	181.2	0.00	0.00	
1,500.0	21.28	142.67	1,467.4	-173.0	131.9	217.5	0.00	0.00	
1,600.0	21.28	142.67	1,560.6	-201.8	153.9	253.8	0.00	0.00	
1,700.0	21.28	142.67	1,653.8	-230.7	175.9	290.1	0.00	0.00	
1,800.0	21.28	142.67	1,747.0	-259.5	197.9	326.4	0.00	0.00	
1,900.0	21.28	142.67	1,840.1	-288.4	219.9	362.7	0.00	0.00	
2,000.0	21.28	142.67	1,933.3	-317.2	241.9	398.9	0.00	0.00	
2,100.0	21.28	142.67	2,026.5	-346.1	264.0	435.2	0.00	0.00	
2,174.6	21.28	142.67	2,096.0	-367.6	280.4	462.3	0.00	0.00	GARDEN GULCH
2,200.0	21.28	142.67	2,119.7	-374.9	286.0	471.5	0.00	0.00	
2,300.0	21.28	142.67	2,212.9	-403.8	308.0	507.8	0.00	0.00	
2,400.0	21.28	142.67	2,306.1	-432.6	330.0	544.1	0.00	0.00	
2,500.0	21.28	142.67	2,399.3	-461.5	352.0	580.3	0.00	0.00	
2,600.0	21.28	142.67	2,492.4	-490.3	374.0	616.6	0.00	0.00	
2,700.0	21.28	142.67	2,585.6	-519.2	396.0	652.9	0.00	0.00	
2,800.0	21.28	142.67	2,678.8	-548.0	418.0	689.2	0.00	0.00	
2,900.0	21.28	142.67	2,772.0	-576.9	440.0	725.5	0.00	0.00	
3,000.0	21.28	142.67	2,865.2	-605.7	462.0	761.8	0.00	0.00	
3,100.0	21.28	142.67	2,958.4	-634.6	484.0	798.0	0.00	0.00	
3,200.0	21.28	142.67	3,051.5	-663.4	506.0	834.3	0.00	0.00	
3,300.0	21.28	142.67	3,144.7	-692.3	528.0	870.6	0.00	0.00	
3,314.2	21.28	142.67	3,158.0	-696.4	531.1	875.8	0.00	0.00	WASATCH FM
3,400.0	21.28	142.67	3,237.9	-721.1	550.0	906.9	0.00	0.00	
3,500.0	21.28	142.67	3,331.1	-750.0	572.0	943.2	0.00	0.00	
3,600.0	21.28	142.67	3,424.3	-778.8	594.0	979.4	0.00	0.00	
3,700.0	21.28	142.67	3,517.5	-807.7	616.0	1,015.7	0.00	0.00	
3,800.0	21.28	142.67	3,610.7	-836.6	638.0	1,052.0	0.00	0.00	
3,900.0	21.28	142.67	3,703.8	-865.4	660.0	1,088.3	0.00	0.00	
4,000.0	21.28	142.67	3,797.0	-894.3	682.0	1,124.6	0.00	0.00	
4,100.0	21.28	142.67	3,890.2	-923.1	704.0	1,160.9	0.00	0.00	
4,200.0	21.28	142.67	3,983.4	-952.0	726.0	1,197.1	0.00	0.00	
4,300.0	21.28	142.67	4,076.6	-980.8	748.1	1,233.4	0.00	0.00	
4,400.0	21.28	142.67	4,169.8	-1,009.7	770.1	1,269.7	0.00	0.00	
4,500.0	21.28	142.67	4,262.9	-1,038.5	792.1	1,306.0	0.00	0.00	
4,600.0	21.28	142.67	4,356.1	-1,067.4	814.1	1,342.3	0.00	0.00	
4,700.0	21.28	142.67	4,449.3	-1,096.2	836.1	1,378.6	0.00	0.00	
4,800.0	21.28	142.67	4,542.5	-1,125.1	858.1	1,414.8	0.00	0.00	
4,900.0	21.28	142.67	4,635.7	-1,153.9	880.1	1,451.1	0.00	0.00	
5,000.0	21.28	142.67	4,728.9	-1,182.8	902.1	1,487.4	0.00	0.00	
5,100.0	21.28	142.67	4,822.1	-1,211.6	924.1	1,523.7	0.00	0.00	
5,200.0	21.28	142.67	4,915.2	-1,240.5	946.1	1,560.0	0.00	0.00	
5,300.0	21.28	142.67	5,008.4	-1,269.3	968.1	1,596.2	0.00	0.00	
5,400.0	21.28	142.67	5,101.6	-1,298.2	990.1	1,632.5	0.00	0.00	
5,500.0	21.28	142.67	5,194.8	-1,327.0	1,012.1	1,668.8	0.00	0.00	
5,556.0	21.28	142.67	5,247.0	-1,343.2	1,024.4	1,689.1	0.00	0.00	WASATCH G
5,600.0	21.28	142.67	5,288.0	-1,355.9	1,034.1	1,705.1	0.00	0.00	
5,700.0	21.28	142.67	5,381.2	-1,384.7	1,056.1	1,741.4	0.00	0.00	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well UWF12E-03 H04 596
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	WELL @ 8293.0ft (Original Well Elev)
<b>Site:</b>	H04 Pad	<b>MD Reference:</b>	WELL @ 8293.0ft (Original Well Elev)
<b>Well:</b>	UWF12E-03 H04 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	USA EDM 5000 Multi Users DB

### 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)	Formations / Comments
5,800.0	21.28	142.67	5,474.4	-1,413.6	1,078.1	1,777.7	0.00	0.00	
5,900.0	21.28	142.67	5,567.5	-1,442.4	1,100.1	1,813.9	0.00	0.00	
6,000.0	21.28	142.67	5,660.7	-1,471.3	1,122.1	1,850.2	0.00	0.00	
6,100.0	21.28	142.67	5,753.9	-1,500.1	1,144.1	1,886.5	0.00	0.00	
6,200.0	21.28	142.67	5,847.1	-1,529.0	1,166.1	1,922.8	0.00	0.00	
6,300.0	21.28	142.67	5,940.3	-1,557.8	1,188.1	1,959.1	0.00	0.00	
6,400.0	21.28	142.67	6,033.5	-1,586.7	1,210.1	1,995.3	0.00	0.00	
6,500.0	21.28	142.67	6,126.6	-1,615.5	1,232.2	2,031.6	0.00	0.00	
6,600.0	21.28	142.67	6,219.8	-1,644.4	1,254.2	2,067.9	0.00	0.00	
6,700.0	21.28	142.67	6,313.0	-1,673.2	1,276.2	2,104.2	0.00	0.00	
6,800.0	21.28	142.67	6,406.2	-1,702.1	1,298.2	2,140.5	0.00	0.00	
6,900.0	21.28	142.67	6,499.4	-1,730.9	1,320.2	2,176.8	0.00	0.00	
7,009.1	21.28	142.67	6,601.0	-1,762.4	1,344.2	2,216.3	0.00	0.00	Start 3° Drop
7,100.0	18.55	142.67	6,686.5	-1,787.0	1,362.9	2,247.3	3.00	-3.00	
7,200.0	15.55	142.67	6,782.1	-1,810.3	1,380.7	2,276.6	3.00	-3.00	
7,300.0	12.55	142.67	6,879.1	-1,829.6	1,395.4	2,300.9	3.00	-3.00	
7,400.0	9.55	142.67	6,977.2	-1,844.9	1,407.1	2,320.0	3.00	-3.00	
7,500.0	6.55	142.67	7,076.2	-1,856.0	1,415.5	2,334.0	3.00	-3.00	
7,600.0	3.55	142.67	7,175.8	-1,863.0	1,420.9	2,342.8	3.00	-3.00	
7,700.0	0.55	142.67	7,275.8	-1,865.8	1,423.0	2,346.4	3.00	-3.00	
7,718.2	0.00	0.00	7,294.0	-1,865.9	1,423.1	2,346.5	3.00	-3.00	EOD @ Inc. = 0° - WILLIAMS FORK
7,800.0	0.02	236.37	7,375.8	-1,865.9	1,423.1	2,346.5	0.02	0.02	
7,900.0	0.04	236.37	7,475.8	-1,865.9	1,423.0	2,346.5	0.02	0.02	
8,000.0	0.06	236.37	7,575.8	-1,866.0	1,423.0	2,346.5	0.02	0.02	
8,100.0	0.08	236.37	7,675.8	-1,866.0	1,422.9	2,346.5	0.02	0.02	
8,200.0	0.10	236.37	7,775.8	-1,866.1	1,422.7	2,346.5	0.02	0.02	
8,300.0	0.13	236.37	7,875.8	-1,866.2	1,422.6	2,346.4	0.02	0.02	
8,400.0	0.15	236.37	7,975.8	-1,866.4	1,422.4	2,346.4	0.02	0.02	
8,500.0	0.17	236.37	8,075.8	-1,866.5	1,422.1	2,346.4	0.02	0.02	
8,600.0	0.19	236.37	8,175.8	-1,866.7	1,421.9	2,346.4	0.02	0.02	
8,700.0	0.21	236.37	8,275.8	-1,866.9	1,421.6	2,346.4	0.02	0.02	
8,800.0	0.23	236.37	8,375.8	-1,867.1	1,421.3	2,346.4	0.02	0.02	
8,900.0	0.26	236.37	8,475.8	-1,867.4	1,420.9	2,346.3	0.02	0.02	
9,000.0	0.28	236.37	8,575.8	-1,867.6	1,420.5	2,346.3	0.02	0.02	
9,100.0	0.30	236.37	8,675.8	-1,867.9	1,420.1	2,346.3	0.02	0.02	
9,200.0	0.32	236.37	8,775.8	-1,868.2	1,419.7	2,346.3	0.02	0.02	
9,300.0	0.34	236.37	8,875.8	-1,868.5	1,419.2	2,346.2	0.02	0.02	
9,400.0	0.36	236.37	8,975.8	-1,868.9	1,418.7	2,346.2	0.02	0.02	
9,466.8	0.38	236.37	9,042.6	-1,869.1	1,418.3	2,346.2	0.02	0.02	
9,500.0	0.38	236.37	9,075.8	-1,869.2	1,418.1	2,346.2	0.00	0.00	
9,600.0	0.38	236.37	9,175.8	-1,869.6	1,417.6	2,346.1	0.00	0.00	
9,700.0	0.38	236.37	9,275.7	-1,869.9	1,417.0	2,346.1	0.00	0.00	
9,800.0	0.38	236.37	9,375.7	-1,870.3	1,416.5	2,346.1	0.00	0.00	
9,900.0	0.38	236.37	9,475.7	-1,870.7	1,415.9	2,346.0	0.00	0.00	
10,000.0	0.38	236.37	9,575.7	-1,871.0	1,415.4	2,346.0	0.00	0.00	
10,100.0	0.38	236.37	9,675.7	-1,871.4	1,414.8	2,346.0	0.00	0.00	
10,200.0	0.38	236.37	9,775.7	-1,871.8	1,414.3	2,345.9	0.00	0.00	
10,300.0	0.38	236.37	9,875.7	-1,872.1	1,413.7	2,345.9	0.00	0.00	
10,400.0	0.38	236.37	9,975.7	-1,872.5	1,413.2	2,345.9	0.00	0.00	
10,500.0	0.38	236.37	10,075.7	-1,872.9	1,412.6	2,345.8	0.00	0.00	
10,600.0	0.38	236.37	10,175.7	-1,873.2	1,412.1	2,345.8	0.00	0.00	
10,700.0	0.38	236.37	10,275.7	-1,873.6	1,411.5	2,345.7	0.00	0.00	
10,800.0	0.38	236.37	10,375.7	-1,874.0	1,411.0	2,345.7	0.00	0.00	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well UWF12E-03 H04 596
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	WELL @ 8293.0ft (Original Well Elev)
<b>Site:</b>	H04 Pad	<b>MD Reference:</b>	WELL @ 8293.0ft (Original Well Elev)
<b>Well:</b>	UWF12E-03 H04 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan #1	<b>Database:</b>	USA EDM 5000 Multi Users DB

### 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)	Formations / Comments
10,900.0	0.38	236.37	10,475.7	-1,874.3	1,410.4	2,345.7	0.00	0.00	
11,000.0	0.38	236.37	10,575.7	-1,874.7	1,409.9	2,345.6	0.00	0.00	
11,100.0	0.38	236.37	10,675.7	-1,875.1	1,409.3	2,345.6	0.00	0.00	
11,200.0	0.38	236.37	10,775.7	-1,875.4	1,408.8	2,345.6	0.00	0.00	
11,300.0	0.38	236.37	10,875.7	-1,875.8	1,408.2	2,345.5	0.00	0.00	
11,322.3	0.38	236.37	10,898.0	-1,875.9	1,408.1	2,345.5	0.00	0.00	TD @ 11,322.3' MD - ROLLINS
11,400.0	0.38	236.37	10,975.7	-1,876.2	1,407.7	2,345.5	0.00	0.00	
11,500.0	0.38	236.37	11,075.7	-1,876.5	1,407.1	2,345.5	0.00	0.00	
11,578.3	0.38	236.37	11,154.0	-1,876.8	1,406.7	2,345.4	0.00	0.00	COZZETTE
11,600.0	0.38	236.37	11,175.7	-1,876.9	1,406.6	2,345.4	0.00	0.00	
11,700.0	0.38	236.37	11,275.7	-1,877.2	1,406.0	2,345.4	0.00	0.00	
11,752.3	0.38	236.37	11,328.0	-1,877.4	1,405.7	2,345.4	0.00	0.00	CORCORAN
11,800.0	0.38	236.37	11,375.7	-1,877.6	1,405.5	2,345.4	0.00	0.00	
11,900.0	0.38	236.37	11,475.7	-1,878.0	1,404.9	2,345.3	0.00	0.00	
12,000.0	0.38	236.37	11,575.7	-1,878.3	1,404.4	2,345.3	0.00	0.00	
12,049.3	0.38	236.37	11,625.0	-1,878.5	1,404.1	2,345.3	0.00	0.00	UPPER SEGO
12,100.0	0.38	236.37	11,675.7	-1,878.7	1,403.8	2,345.3	0.00	0.00	
12,200.0	0.38	236.37	11,775.7	-1,879.1	1,403.3	2,345.2	0.00	0.00	
12,300.0	0.38	236.37	11,875.7	-1,879.4	1,402.7	2,345.2	0.00	0.00	
12,400.0	0.38	236.37	11,975.7	-1,879.8	1,402.2	2,345.2	0.00	0.00	
12,500.0	0.38	236.37	12,075.7	-1,880.2	1,401.6	2,345.1	0.00	0.00	
12,600.0	0.38	236.37	12,175.7	-1,880.5	1,401.1	2,345.1	0.00	0.00	
12,700.0	0.38	236.37	12,275.7	-1,880.9	1,400.5	2,345.1	0.00	0.00	
12,800.0	0.38	236.37	12,375.7	-1,881.3	1,400.0	2,345.0	0.00	0.00	
12,900.0	0.38	236.37	12,475.7	-1,881.6	1,399.4	2,345.0	0.00	0.00	
13,000.0	0.38	236.37	12,575.7	-1,882.0	1,398.9	2,345.0	0.00	0.00	Permit TD @ 13,000' MD

# Cathedral Energy Services

## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well UWF12E-03 H04 596
<b>Project:</b> North Piceance	<b>TVD Reference:</b> WELL @ 8293.0ft (Original Well Elev)
<b>Site:</b> H04 Pad	<b>MD Reference:</b> WELL @ 8293.0ft (Original Well Elev)
<b>Well:</b> UWF12E-03 H04 596	<b>North Reference:</b> True
<b>Wellbore:</b> DD	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> Plan #1	<b>Database:</b> USA EDM 5000 Multi Users DB

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									
UWF12E-03 TGT - plan hits target center - Point	0.00	0.00	7,294.0	-1,865.9	1,423.1	1,669,218.87	2,251,003.12	39° 38' 26.48 N	108° 9' 35.98 W
UWF12E-03 BHL - plan hits target center - Point	0.00	0.00	10,898.0	-1,875.9	1,408.1	1,669,209.34	2,250,987.84	39° 38' 26.38 N	108° 9' 36.17 W

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
1,080.8	1,074.0	A GROOVE			
1,247.4	1,232.0	B GROOVE			
1,290.3	1,272.0	B GROOVE BASE			
2,174.6	2,096.0	GARDEN GULCH			
3,314.2	3,158.0	WASATCH FM			
5,556.0	5,247.0	WASATCH G			
7,718.2	7,294.0	WILLIAMS FORK			
11,322.3	10,898.0	ROLLINS			
11,578.3	11,154.0	COZZETTE			
11,752.3	11,328.0	CORCORAN			
12,049.3	11,625.0	UPPER SEGO			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
550.0	550.0	0.0	0.0	KOP @ 550'
1,259.2	1,243.0	-103.5	78.9	EOB @ Inc. = 21.28°
7,009.1	6,601.0	-1,762.4	1,344.2	Start 3° Drop
7,718.2	7,294.0	-1,865.9	1,423.1	EOD @ Inc. = 0°
11,322.3	10,898.0	-1,875.9	1,408.1	TD @ 11,322.3' MD
13,000.0	12,575.7	-1,882.0	1,398.9	Permit TD @ 13,000' MD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_