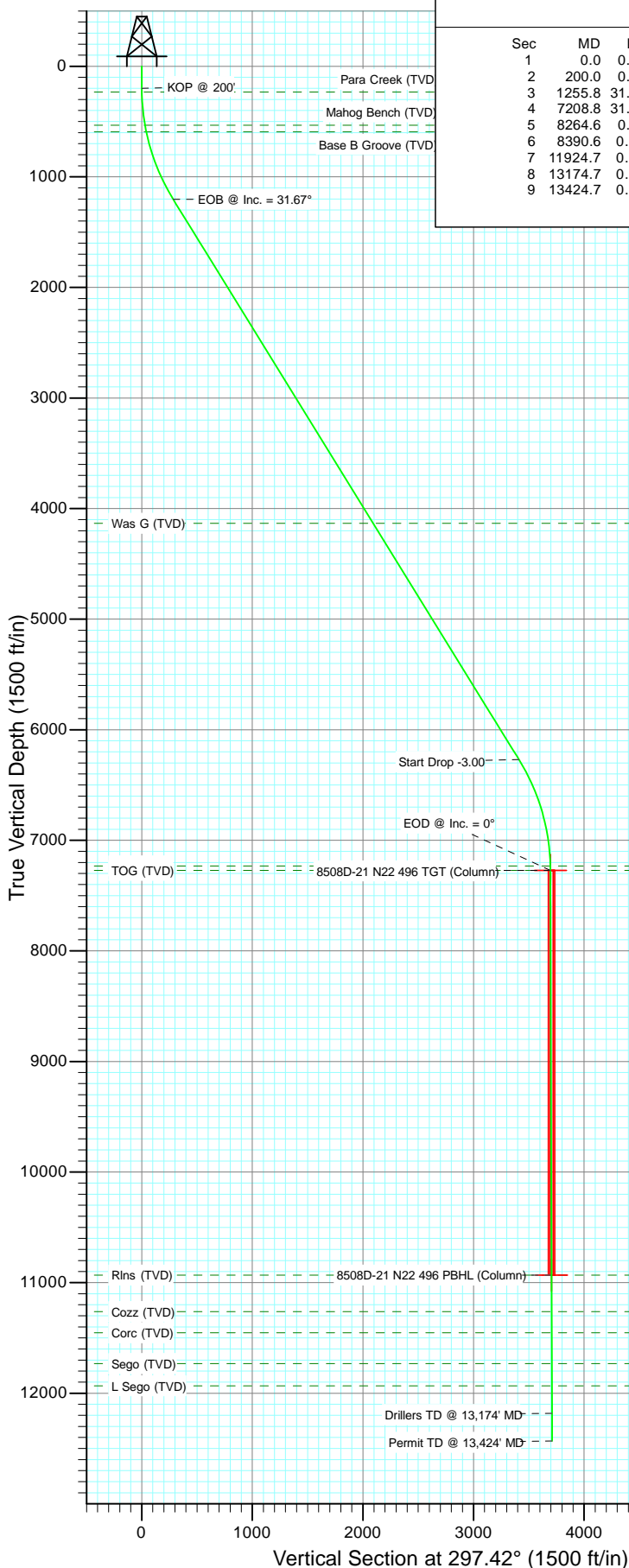


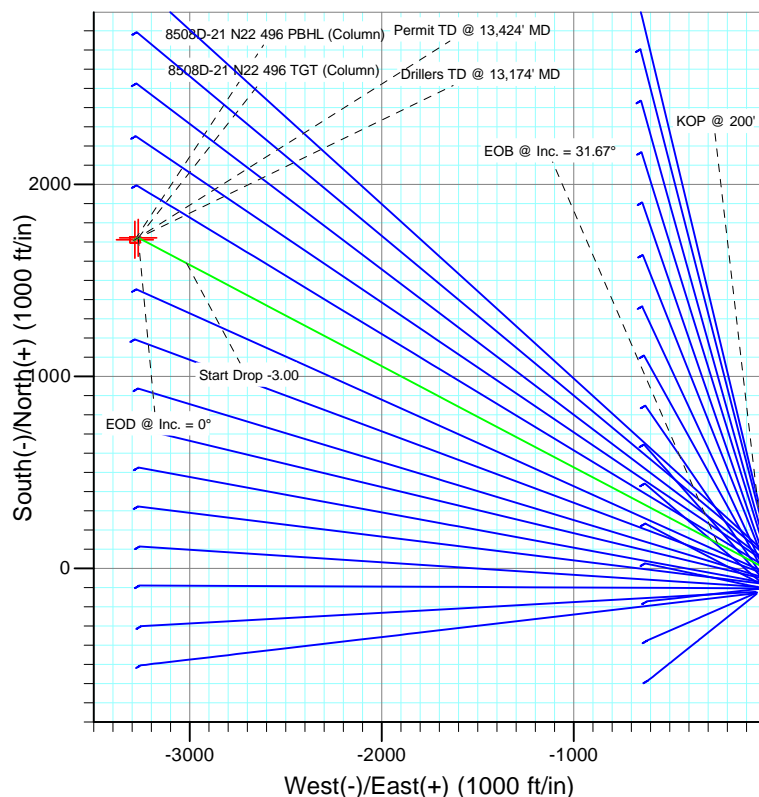


Project: Story Gulch
Site: S22-T4S-R96W (N22 496) (Column Pattern)
Well: 8508D-21 N22 496
Wellbore: DD
Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	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	1255.8	31.67	297.79	1202.8	132.6	-251.7	3.00	297.79	284.5	
4	7208.8	31.67	297.79	6269.2	1590.2	-3016.9	0.00	0.00	3410.3	
5	8264.6	0.00	0.00	7272.0	1722.8	-3268.6	3.00	180.00	3694.8	8508D-21 N22 496 TGT (Column)
6	8390.6	0.31	239.56	7398.0	1722.6	-3268.9	0.25	239.56	3694.9	
7	11924.7	0.31	239.56	10932.0	1712.8	-3285.6	0.00	0.00	3705.3	8508D-21 N22 496 PBHL (Column)
8	13174.7	0.31	239.56	12182.0	1709.3	-3291.6	0.00	0.00	3708.9	
9	13424.7	0.31	239.56	12432.0	1708.6	-3292.8	0.00	0.00	3709.7	



FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
232.0	232.0	Para Creek (TVD)
532.0	533.7	Mahog Bench (TVD)
592.0	594.8	Base B Groove (TVD)
4132.0	4697.6	Was G (TVD)
7232.0	8224.6	WF (TVD)
7272.0	8264.6	TOG (TVD)
10932.0	11924.7	Rlns (TVD)
11262.0	12254.7	Cozz (TVD)
11452.0	12444.7	Corc (TVD)
11732.0	12724.7	Sego (TVD)
11932.0	12924.7	L Sego (TVD)



Azimuths to True North
Magnetic North: 10.52°

Magnetic Field
Strength: 52372.2snT
Dip Angle: 65.88°
Date: 12/2/2010
Model: IGRF2010

Plan #1
8508D-21 N22 496
WELL @ 7602.0ft (Original Well Elev)
North American Datum 1983
Well 8508D-21 N22 496, True North

Type	Target	Azimuth	Origin	Type	N/S	E/W	From
TD	No Target (Freehand)	297.42	Slot		0.0	0.0	TVD
							0.0
Name		TVD	+N/-S	+E/-W	Latitude	Longitude	
8508D-21 N22 496 TGT (Column)		7272.0	1722.8	-3268.6	39° 41' 19.71 N	108° 10' 7.34 W	
8508D-21 N22 496 PBHL (Column)		10932.0	1712.8	-3285.6	39° 41' 19.61 N	108° 10' 7.55 W	

Cathedral Energy

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well 8508D-21 N22 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7602.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 7602.0ft (Original Well Elev)
Site:	S22-T4S-R96W (N22 496) (Column Pattern)	North Reference:	True
Well:	8508D-21 N22 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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

Site		S22-T4S-R96W (N22 496) (Column Pattern)			
Site Position:		Northing:	1,685,048.56 ft	Latitude:	39° 41' 3.24 N
From:	Lat/Long	Easting:	2,252,316.79 ft	Longitude:	108° 9' 25.11 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.68 °

Well	8508D-21 N22 496					
Well Position	+N/-S	0.0 ft	Northing:	1,684,993.70 ft	Latitude:	39° 41' 2.69 N
	+E/-W	0.0 ft	Easting:	2,252,282.84 ft	Longitude:	108° 9' 25.52 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,569.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/2/2010	10.52	65.88	52,372

Design	Plan #1				
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	297.42	

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	
1,255.8	31.67	297.79	1,202.8	132.6	-251.7	3.00	3.00	0.00	297.79	
7,208.8	31.67	297.79	6,269.2	1,590.2	-3,016.9	0.00	0.00	0.00	0.00	
8,264.6	0.00	0.00	7,272.0	1,722.8	-3,268.6	3.00	-3.00	0.00	180.00	8508D-21 N22 496 TC
8,390.6	0.31	239.56	7,398.0	1,722.6	-3,268.9	0.25	0.25	-95.61	239.56	
11,924.7	0.31	239.56	10,932.0	1,712.8	-3,285.6	0.00	0.00	0.00	0.00	8508D-21 N22 496 PI
13,174.7	0.31	239.56	12,182.0	1,709.3	-3,291.6	0.00	0.00	0.00	0.00	
13,424.7	0.31	239.56	12,432.0	1,708.6	-3,292.8	0.00	0.00	0.00	0.00	

Cathedral Energy

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well 8508D-21 N22 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7602.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 7602.0ft (Original Well Elev)
Site:	S22-T4S-R96W (N22 496) (Column Pattern)	North Reference:	True
Well:	8508D-21 N22 496	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
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	KOP @ 200'
232.0	0.96	297.79	232.0	0.1	-0.2	0.3	3.00	3.00	Para Creek (TVD)
300.0	3.00	297.79	300.0	1.2	-2.3	2.6	3.00	3.00	
400.0	6.00	297.79	399.6	4.9	-9.3	10.5	3.00	3.00	
500.0	9.00	297.79	498.8	11.0	-20.8	23.5	3.00	3.00	
533.7	10.01	297.79	532.0	13.6	-25.7	29.1	3.00	3.00	Mahog Bench (TVD)
594.8	11.84	297.79	592.0	19.0	-36.0	40.7	3.00	3.00	Base B Groove (TVD)
600.0	12.00	297.79	597.1	19.5	-36.9	41.7	3.00	3.00	
700.0	15.00	297.79	694.3	30.3	-57.6	65.1	3.00	3.00	
800.0	18.00	297.79	790.2	43.6	-82.7	93.5	3.00	3.00	
900.0	21.00	297.79	884.4	59.1	-112.2	126.8	3.00	3.00	
1,000.0	24.00	297.79	976.8	77.0	-146.1	165.1	3.00	3.00	
1,100.0	27.00	297.79	1,067.1	97.1	-184.1	208.2	3.00	3.00	
1,200.0	30.00	297.79	1,154.9	119.3	-226.4	255.9	3.00	3.00	
1,255.8	31.67	297.79	1,202.8	132.6	-251.7	284.5	3.00	3.00	EOB @ Inc. = 31.67°
1,300.0	31.67	297.79	1,240.5	143.5	-272.2	307.7	0.00	0.00	
1,400.0	31.67	297.79	1,325.6	167.9	-318.6	360.2	0.00	0.00	
1,500.0	31.67	297.79	1,410.7	192.4	-365.1	412.7	0.00	0.00	
1,600.0	31.67	297.79	1,495.8	216.9	-411.5	465.2	0.00	0.00	
1,700.0	31.67	297.79	1,580.9	241.4	-458.0	517.7	0.00	0.00	
1,800.0	31.67	297.79	1,666.0	265.9	-504.4	570.2	0.00	0.00	
1,900.0	31.67	297.79	1,751.1	290.4	-550.9	622.7	0.00	0.00	
2,000.0	31.67	297.79	1,836.2	314.8	-597.4	675.2	0.00	0.00	
2,100.0	31.67	297.79	1,921.3	339.3	-643.8	727.7	0.00	0.00	
2,200.0	31.67	297.79	2,006.4	363.8	-690.3	780.2	0.00	0.00	
2,300.0	31.67	297.79	2,091.5	388.3	-736.7	832.8	0.00	0.00	
2,400.0	31.67	297.79	2,176.6	412.8	-783.2	885.3	0.00	0.00	
2,500.0	31.67	297.79	2,261.7	437.3	-829.6	937.8	0.00	0.00	
2,600.0	31.67	297.79	2,346.8	461.8	-876.1	990.3	0.00	0.00	
2,700.0	31.67	297.79	2,431.9	486.2	-922.5	1,042.8	0.00	0.00	
2,800.0	31.67	297.79	2,517.0	510.7	-969.0	1,095.3	0.00	0.00	
2,900.0	31.67	297.79	2,602.1	535.2	-1,015.4	1,147.8	0.00	0.00	
3,000.0	31.67	297.79	2,687.2	559.7	-1,061.9	1,200.3	0.00	0.00	
3,100.0	31.67	297.79	2,772.3	584.2	-1,108.3	1,252.8	0.00	0.00	
3,200.0	31.67	297.79	2,857.4	608.7	-1,154.8	1,305.3	0.00	0.00	
3,300.0	31.67	297.79	2,942.5	633.1	-1,201.2	1,357.8	0.00	0.00	
3,400.0	31.67	297.79	3,027.7	657.6	-1,247.7	1,410.3	0.00	0.00	
3,500.0	31.67	297.79	3,112.8	682.1	-1,294.1	1,462.9	0.00	0.00	
3,600.0	31.67	297.79	3,197.9	706.6	-1,340.6	1,515.4	0.00	0.00	
3,700.0	31.67	297.79	3,283.0	731.1	-1,387.0	1,567.9	0.00	0.00	
3,800.0	31.67	297.79	3,368.1	755.6	-1,433.5	1,620.4	0.00	0.00	
3,900.0	31.67	297.79	3,453.2	780.0	-1,479.9	1,672.9	0.00	0.00	
4,000.0	31.67	297.79	3,538.3	804.5	-1,526.4	1,725.4	0.00	0.00	
4,100.0	31.67	297.79	3,623.4	829.0	-1,572.8	1,777.9	0.00	0.00	
4,200.0	31.67	297.79	3,708.5	853.5	-1,619.3	1,830.4	0.00	0.00	
4,300.0	31.67	297.79	3,793.6	878.0	-1,665.7	1,882.9	0.00	0.00	
4,400.0	31.67	297.79	3,878.7	902.5	-1,712.2	1,935.4	0.00	0.00	
4,500.0	31.67	297.79	3,963.8	926.9	-1,758.6	1,987.9	0.00	0.00	
4,600.0	31.67	297.79	4,048.9	951.4	-1,805.1	2,040.4	0.00	0.00	
4,697.6	31.67	297.79	4,132.0	975.3	-1,850.4	2,091.7	0.00	0.00	Was G (TVD)

Cathedral Energy

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well 8508D-21 N22 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7602.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 7602.0ft (Original Well Elev)
Site:	S22-T4S-R96W (N22 496) (Column Pattern)	North Reference:	True
Well:	8508D-21 N22 496	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
4,700.0	31.67	297.79	4,134.0	975.9	-1,851.5	2,092.9	0.00	0.00	
4,800.0	31.67	297.79	4,219.1	1,000.4	-1,898.0	2,145.5	0.00	0.00	
4,900.0	31.67	297.79	4,304.2	1,024.9	-1,944.4	2,198.0	0.00	0.00	
5,000.0	31.67	297.79	4,389.3	1,049.4	-1,990.9	2,250.5	0.00	0.00	
5,100.0	31.67	297.79	4,474.4	1,073.8	-2,037.3	2,303.0	0.00	0.00	
5,200.0	31.67	297.79	4,559.5	1,098.3	-2,083.8	2,355.5	0.00	0.00	
5,300.0	31.67	297.79	4,644.6	1,122.8	-2,130.3	2,408.0	0.00	0.00	
5,400.0	31.67	297.79	4,729.7	1,147.3	-2,176.7	2,460.5	0.00	0.00	
5,500.0	31.67	297.79	4,814.9	1,171.8	-2,223.2	2,513.0	0.00	0.00	
5,600.0	31.67	297.79	4,900.0	1,196.3	-2,269.6	2,565.5	0.00	0.00	
5,700.0	31.67	297.79	4,985.1	1,220.7	-2,316.1	2,618.0	0.00	0.00	
5,800.0	31.67	297.79	5,070.2	1,245.2	-2,362.5	2,670.5	0.00	0.00	
5,900.0	31.67	297.79	5,155.3	1,269.7	-2,409.0	2,723.0	0.00	0.00	
6,000.0	31.67	297.79	5,240.4	1,294.2	-2,455.4	2,775.5	0.00	0.00	
6,100.0	31.67	297.79	5,325.5	1,318.7	-2,501.9	2,828.1	0.00	0.00	
6,200.0	31.67	297.79	5,410.6	1,343.2	-2,548.3	2,880.6	0.00	0.00	
6,300.0	31.67	297.79	5,495.7	1,367.6	-2,594.8	2,933.1	0.00	0.00	
6,400.0	31.67	297.79	5,580.8	1,392.1	-2,641.2	2,985.6	0.00	0.00	
6,500.0	31.67	297.79	5,665.9	1,416.6	-2,687.7	3,038.1	0.00	0.00	
6,600.0	31.67	297.79	5,751.0	1,441.1	-2,734.1	3,090.6	0.00	0.00	
6,700.0	31.67	297.79	5,836.1	1,465.6	-2,780.6	3,143.1	0.00	0.00	
6,800.0	31.67	297.79	5,921.2	1,490.1	-2,827.0	3,195.6	0.00	0.00	
6,900.0	31.67	297.79	6,006.3	1,514.5	-2,873.5	3,248.1	0.00	0.00	
7,000.0	31.67	297.79	6,091.4	1,539.0	-2,919.9	3,300.6	0.00	0.00	
7,100.0	31.67	297.79	6,176.5	1,563.5	-2,966.4	3,353.1	0.00	0.00	
7,200.0	31.67	297.79	6,261.6	1,588.0	-3,012.8	3,405.6	0.00	0.00	
7,208.8	31.67	297.79	6,269.2	1,590.2	-3,016.9	3,410.3	0.00	0.00	Start Drop -3.00
7,300.0	28.94	297.79	6,347.8	1,611.6	-3,057.6	3,456.3	3.00	-3.00	
7,400.0	25.94	297.79	6,436.6	1,633.1	-3,098.4	3,502.4	3.00	-3.00	
7,500.0	22.94	297.79	6,527.6	1,652.4	-3,135.0	3,543.7	3.00	-3.00	
7,600.0	19.94	297.79	6,620.7	1,669.4	-3,167.3	3,580.3	3.00	-3.00	
7,700.0	16.94	297.79	6,715.5	1,684.2	-3,195.3	3,611.9	3.00	-3.00	
7,800.0	13.94	297.79	6,811.9	1,696.6	-3,218.8	3,638.5	3.00	-3.00	
7,900.0	10.94	297.79	6,909.6	1,706.6	-3,237.9	3,660.1	3.00	-3.00	
8,000.0	7.94	297.79	7,008.2	1,714.3	-3,252.4	3,676.5	3.00	-3.00	
8,100.0	4.94	297.79	7,107.6	1,719.5	-3,262.3	3,687.7	3.00	-3.00	
8,200.0	1.94	297.79	7,207.4	1,722.3	-3,267.6	3,693.7	3.00	-3.00	
8,224.6	1.20	297.79	7,232.0	1,722.6	-3,268.2	3,694.3	3.00	-3.00	WF (TVD)
8,264.6	0.00	0.00	7,272.0	1,722.8	-3,268.6	3,694.8	3.00	-3.00	EOD @ Inc. = 0° - TOG (TVD) - 8508D-21 N22
8,300.0	0.09	239.56	7,307.4	1,722.8	-3,268.6	3,694.8	0.25	0.25	
8,390.6	0.31	239.56	7,398.0	1,722.6	-3,268.9	3,694.9	0.25	0.25	
8,400.0	0.31	239.56	7,407.4	1,722.6	-3,268.9	3,695.0	0.00	0.00	
8,500.0	0.31	239.56	7,507.4	1,722.3	-3,269.4	3,695.3	0.00	0.00	
8,600.0	0.31	239.56	7,607.3	1,722.0	-3,269.9	3,695.6	0.00	0.00	
8,700.0	0.31	239.56	7,707.3	1,721.8	-3,270.4	3,695.8	0.00	0.00	
8,800.0	0.31	239.56	7,807.3	1,721.5	-3,270.8	3,696.1	0.00	0.00	
8,900.0	0.31	239.56	7,907.3	1,721.2	-3,271.3	3,696.4	0.00	0.00	
9,000.0	0.31	239.56	8,007.3	1,720.9	-3,271.8	3,696.7	0.00	0.00	
9,100.0	0.31	239.56	8,107.3	1,720.7	-3,272.3	3,697.0	0.00	0.00	
9,200.0	0.31	239.56	8,207.3	1,720.4	-3,272.7	3,697.3	0.00	0.00	
9,300.0	0.31	239.56	8,307.3	1,720.1	-3,273.2	3,697.6	0.00	0.00	
9,400.0	0.31	239.56	8,407.3	1,719.8	-3,273.7	3,697.9	0.00	0.00	

Cathedral Energy

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well 8508D-21 N22 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7602.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 7602.0ft (Original Well Elev)
Site:	S22-T4S-R96W (N22 496) (Column Pattern)	North Reference:	True
Well:	8508D-21 N22 496	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
9,500.0	0.31	239.56	8,507.3	1,719.5	-3,274.2	3,698.2	0.00	0.00	
9,600.0	0.31	239.56	8,607.3	1,719.3	-3,274.6	3,698.5	0.00	0.00	
9,700.0	0.31	239.56	8,707.3	1,719.0	-3,275.1	3,698.8	0.00	0.00	
9,800.0	0.31	239.56	8,807.3	1,718.7	-3,275.6	3,699.1	0.00	0.00	
9,900.0	0.31	239.56	8,907.3	1,718.4	-3,276.1	3,699.4	0.00	0.00	
10,000.0	0.31	239.56	9,007.3	1,718.1	-3,276.5	3,699.6	0.00	0.00	
10,100.0	0.31	239.56	9,107.3	1,717.9	-3,277.0	3,699.9	0.00	0.00	
10,200.0	0.31	239.56	9,207.3	1,717.6	-3,277.5	3,700.2	0.00	0.00	
10,300.0	0.31	239.56	9,307.3	1,717.3	-3,277.9	3,700.5	0.00	0.00	
10,400.0	0.31	239.56	9,407.3	1,717.0	-3,278.4	3,700.8	0.00	0.00	
10,500.0	0.31	239.56	9,507.3	1,716.8	-3,278.9	3,701.1	0.00	0.00	
10,600.0	0.31	239.56	9,607.3	1,716.5	-3,279.4	3,701.4	0.00	0.00	
10,700.0	0.31	239.56	9,707.3	1,716.2	-3,279.8	3,701.7	0.00	0.00	
10,800.0	0.31	239.56	9,807.3	1,715.9	-3,280.3	3,702.0	0.00	0.00	
10,900.0	0.31	239.56	9,907.3	1,715.6	-3,280.8	3,702.3	0.00	0.00	
11,000.0	0.31	239.56	10,007.3	1,715.4	-3,281.3	3,702.6	0.00	0.00	
11,100.0	0.31	239.56	10,107.3	1,715.1	-3,281.7	3,702.9	0.00	0.00	
11,200.0	0.31	239.56	10,207.3	1,714.8	-3,282.2	3,703.2	0.00	0.00	
11,300.0	0.31	239.56	10,307.3	1,714.5	-3,282.7	3,703.4	0.00	0.00	
11,400.0	0.31	239.56	10,407.3	1,714.2	-3,283.2	3,703.7	0.00	0.00	
11,500.0	0.31	239.56	10,507.3	1,714.0	-3,283.6	3,704.0	0.00	0.00	
11,600.0	0.31	239.56	10,607.3	1,713.7	-3,284.1	3,704.3	0.00	0.00	
11,700.0	0.31	239.56	10,707.3	1,713.4	-3,284.6	3,704.6	0.00	0.00	
11,800.0	0.31	239.56	10,807.3	1,713.1	-3,285.1	3,704.9	0.00	0.00	
11,900.0	0.31	239.56	10,907.3	1,712.9	-3,285.5	3,705.2	0.00	0.00	
11,924.7	0.31	239.56	10,932.0	1,712.8	-3,285.6	3,705.3	0.00	0.00	Rins (TVD) - 8508D-21 N22 496 PBHL (Column
12,000.0	0.31	239.56	11,007.3	1,712.6	-3,286.0	3,705.5	0.00	0.00	
12,100.0	0.31	239.56	11,107.3	1,712.3	-3,286.5	3,705.8	0.00	0.00	
12,200.0	0.31	239.56	11,207.3	1,712.0	-3,287.0	3,706.1	0.00	0.00	
12,254.7	0.31	239.56	11,262.0	1,711.9	-3,287.2	3,706.2	0.00	0.00	Cozz (TVD)
12,300.0	0.31	239.56	11,307.3	1,711.7	-3,287.4	3,706.4	0.00	0.00	
12,400.0	0.31	239.56	11,407.3	1,711.5	-3,287.9	3,706.7	0.00	0.00	
12,444.7	0.31	239.56	11,452.0	1,711.3	-3,288.1	3,706.8	0.00	0.00	Corc (TVD)
12,500.0	0.31	239.56	11,507.3	1,711.2	-3,288.4	3,707.0	0.00	0.00	
12,600.0	0.31	239.56	11,607.3	1,710.9	-3,288.8	3,707.2	0.00	0.00	
12,700.0	0.31	239.56	11,707.3	1,710.6	-3,289.3	3,707.5	0.00	0.00	
12,724.7	0.31	239.56	11,732.0	1,710.6	-3,289.4	3,707.6	0.00	0.00	Sego (TVD)
12,800.0	0.31	239.56	11,807.3	1,710.3	-3,289.8	3,707.8	0.00	0.00	
12,900.0	0.31	239.56	11,907.3	1,710.1	-3,290.3	3,708.1	0.00	0.00	
12,924.7	0.31	239.56	11,932.0	1,710.0	-3,290.4	3,708.2	0.00	0.00	L Sego (TVD)
13,000.0	0.31	239.56	12,007.3	1,709.8	-3,290.7	3,708.4	0.00	0.00	
13,100.0	0.31	239.56	12,107.3	1,709.5	-3,291.2	3,708.7	0.00	0.00	
13,174.7	0.31	239.56	12,182.0	1,709.3	-3,291.6	3,708.9	0.00	0.00	Drillers TD @ 13,174' MD
13,200.0	0.31	239.56	12,207.3	1,709.2	-3,291.7	3,709.0	0.00	0.00	
13,300.0	0.31	239.56	12,307.3	1,709.0	-3,292.2	3,709.3	0.00	0.00	
13,400.0	0.31	239.56	12,407.3	1,708.7	-3,292.6	3,709.6	0.00	0.00	
13,424.7	0.31	239.56	12,432.0	1,708.6	-3,292.8	3,709.7	0.00	0.00	Permit TD @ 13,424' MD

Cathedral Energy

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well 8508D-21 N22 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7602.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 7602.0ft (Original Well Elev)
Site:	S22-T4S-R96W (N22 496) (Column Pattern)	North Reference:	True
Well:	8508D-21 N22 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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)		
8508D-21 N22 496 TGT	0.00	0.00	7,272.0	1,722.8	-3,268.6	1,686,811.36	2,249,066.02	39° 41' 19.71 N	108° 10' 7.34 W
- plan hits target center									
- Point									
8508D-21 N22 496 PBH	0.00	0.00	10,932.0	1,712.8	-3,285.6	1,686,801.84	2,249,048.69	39° 41' 19.61 N	108° 10' 7.55 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
232.0	232.0	Para Creek (TVD)				
533.7	532.0	Mahog Bench (TVD)				
594.8	592.0	Base B Groove (TVD)				
4,697.6	4,132.0	Was G (TVD)				
8,224.6	7,232.0	WF (TVD)				
8,264.6	7,272.0	TOG (TVD)				
11,924.7	10,932.0	Rlms (TVD)				
12,254.7	11,262.0	Cozz (TVD)				
12,444.7	11,452.0	Corc (TVD)				
12,724.7	11,732.0	Sego (TVD)				
12,924.7	11,932.0	L Sego (TVD)				

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'
1,255.8	1,202.8	132.6	-251.7	EOB @ Inc. = 31.67°
7,208.8	6,269.2	1,590.2	-3,016.9	Start Drop -3.00
8,264.6	7,272.0	1,722.8	-3,268.6	EOD @ Inc. = 0°
13,174.7	12,182.0	1,722.6	-3,268.9	Drillers TD @ 13,174' MD
13,424.7	12,432.0	1,712.8	-3,285.6	Permit TD @ 13,424' MD