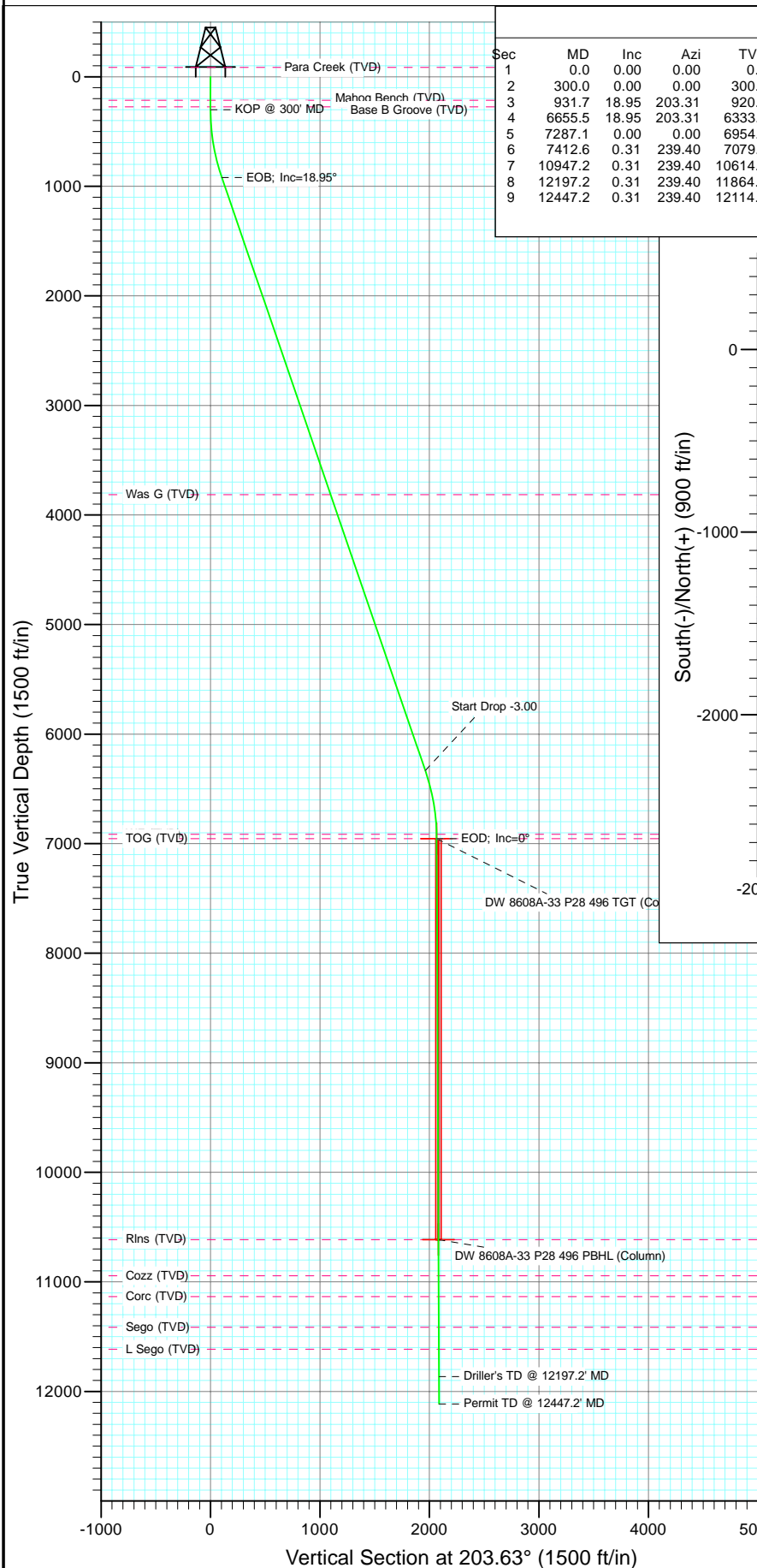
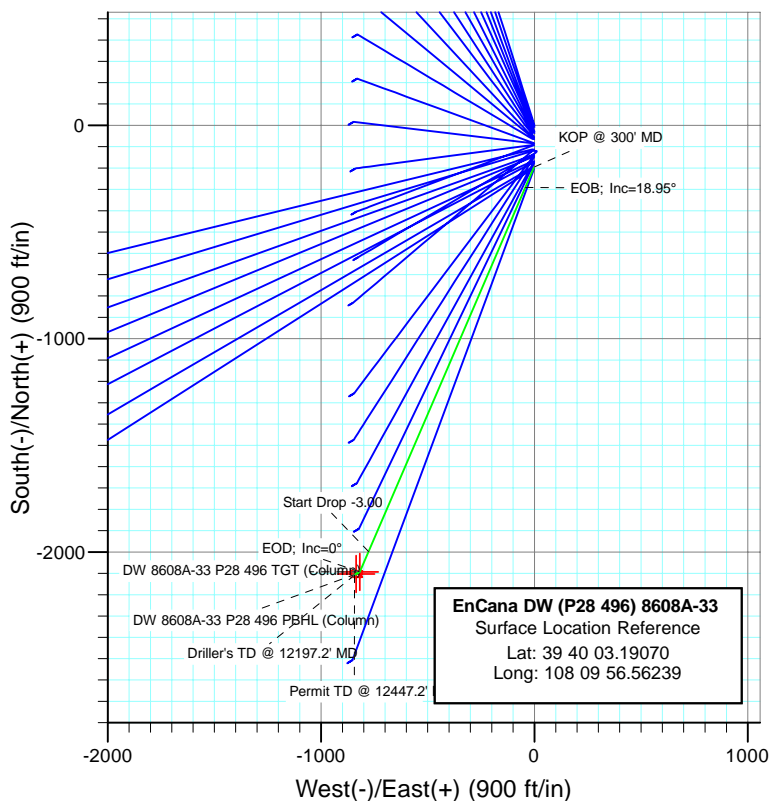




Project: Double Willow
Site: S28-T4S-R96W (P28 496)(column pattern)
Well: DW 8608A-33 (P28 496)
Wellbore: DD
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	-196.0	-1.1	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	-196.0	-1.1	0.00	0.00	0.0	
3	931.7	18.95	203.31	920.2	-291.0	-42.1	3.00	203.31	103.5	
4	6655.5	18.95	203.31	6333.8	-1998.0	-777.7	0.00	0.00	1962.2	
5	7287.1	0.00	0.00	6954.0	-2093.1	-818.6	3.00	180.00	2065.7	DW 8608A-33 P28 496 TGT (Column)
6	7412.6	0.31	239.40	7079.5	-2093.2	-818.9	0.25	239.40	2066.0	
7	10947.2	0.31	239.40	10614.0	-2103.1	-835.6	0.00	0.00	2081.7	DW 8608A-33 P28 496 PBHL (Column)
8	12197.2	0.31	239.40	11864.0	-2106.6	-841.5	0.00	0.00	2087.2	
9	12447.2	0.31	239.40	12114.0	-2107.3	-842.7	0.00	0.00	2088.4	



EnCana DW (P28 496) 8608A-33
Surface Location Reference
Lat: 39 40 03.19070
Long: 108 09 56.56239

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
214.0	214.0	Mahog Bench (TVD)
274.0	274.0	Base B Groove (TVD)
3814.0	3991.3	Was G (TVD)
6914.0	7247.1	WF (TVD)
6954.0	7287.1	TOG (TVD)
10614.0	10947.2	Rins (TVD)
10944.0	11277.2	Cozz (TVD)
11134.0	11467.2	Corc (TVD)
11414.0	11747.2	Sego (TVD)
11614.0	11947.2	L Sego (TVD)



Azimuths to True North
Magnetic North: 10.52°

Magnetic Field
Strength: 52360.7nT
Dip Angle: 65.86°
Date: 12/1/2010
Model: IGRF2010

Plan #1						
DW 8608A-33 (P28 496)						
WELL @ 7804.0ft (Original Well Elev)						
North American Datum 1983						
Site S28-T4S-R96W (P28 496)(column pattern), True North						
Type	Target	Azimuth	Origin	Type	N/S	E/W
Target	DW 8608A-33 P28 496 PBHL (Column)	203.63	-196.0	Slot	-1.1	0.0
Name						
TVD						
+N/-S						
+E/-W						
Latitude						
Longitude						
DW 8608A-33 P28 496 TGT (Column)	6954.0	-2093.1	-818.639° 39' 44.44 N	108° 10' 7.02 W		
DW 8608A-33 P28 496 PBHL (Column)	10614.0	-2103.1	-835.639° 39' 44.34 N	108° 10' 7.23 W		

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site S28-T4S-R96W (P28 496)(column pattern)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7804.0ft (Original Well Elev)
Project:	Double Willow	MD Reference:	WELL @ 7804.0ft (Original Well Elev)
Site:	S28-T4S-R96W (P28 496)(column pattern)	North Reference:	True
Well:	DW 8608A-33 (P28 496)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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

Site	S28-T4S-R96W (P28 496)(column pattern)			
Site Position:		Northing:	1,679,243.29 ft	Latitude: 39° 40' 5.13 N
From:	Lat/Long	Easting:	2,249,687.54 ft	Longitude: 108° 9' 56.55 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence: -1.68 °

Well	DW 8608A-33 (P28 496)			
Well Position	+N/-S	-196.0 ft	Northing:	1,679,047.45 ft
	+E/-W	-1.1 ft	Easting:	2,249,680.66 ft
Position Uncertainty	0.0 ft		Wellhead Elevation:	ft
			Ground Level:	7,771.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/1/2010	10.52	65.86	52,361

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	-196.0	-1.1	203.63

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	-196.0	-1.1	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	-196.0	-1.1	0.00	0.00	0.00	0.00	
931.7	18.95	203.31	920.2	-291.0	-42.1	3.00	3.00	0.00	203.31	
6,655.5	18.95	203.31	6,333.8	-1,998.0	-777.7	0.00	0.00	0.00	0.00	
7,287.1	0.00	0.00	6,954.0	-2,093.1	-818.6	3.00	-3.00	0.00	180.00	DW 8608A-33 P28 49
7,412.6	0.31	239.40	7,079.5	-2,093.2	-818.9	0.25	0.25	-96.07	239.40	
10,947.2	0.31	239.40	10,614.0	-2,103.1	-835.6	0.00	0.00	0.00	0.00	DW 8608A-33 P28 49
12,197.2	0.31	239.40	11,864.0	-2,106.6	-841.5	0.00	0.00	0.00	0.00	
12,447.2	0.31	239.40	12,114.0	-2,107.3	-842.7	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site S28-T4S-R96W (P28 496)(column pattern)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7804.0ft (Original Well Elev)
Project:	Double Willow	MD Reference:	WELL @ 7804.0ft (Original Well Elev)
Site:	S28-T4S-R96W (P28 496)(column pattern)	North Reference:	True
Well:	DW 8608A-33 (P28 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	-196.0	-1.1	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	-196.0	-1.1	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	-196.0	-1.1	0.0	0.00	0.00	
214.0	0.00	0.00	214.0	-196.0	-1.1	0.0	0.00	0.00	Mahog Bench (TVD)
274.0	0.00	0.00	274.0	-196.0	-1.1	0.0	0.00	0.00	Base B Groove (TVD)
300.0	0.00	0.00	300.0	-196.0	-1.1	0.0	0.00	0.00	KOP @ 300' MD
400.0	3.00	203.31	400.0	-198.4	-2.2	2.6	3.00	3.00	
500.0	6.00	203.31	499.6	-205.6	-5.3	10.5	3.00	3.00	
600.0	9.00	203.31	598.8	-217.6	-10.4	23.5	3.00	3.00	
700.0	12.00	203.31	697.1	-234.3	-17.7	41.7	3.00	3.00	
800.0	15.00	203.31	794.3	-255.7	-26.9	65.1	3.00	3.00	
900.0	18.00	203.31	890.2	-281.8	-38.1	93.5	3.00	3.00	
931.7	18.95	203.31	920.2	-291.0	-42.1	103.5	3.00	3.00	EOB; Inc=18.95°
1,000.0	18.95	203.31	984.8	-311.4	-50.9	125.7	0.00	0.00	
1,100.0	18.95	203.31	1,079.4	-341.2	-63.7	158.2	0.00	0.00	
1,200.0	18.95	203.31	1,174.0	-371.0	-76.6	190.6	0.00	0.00	
1,300.0	18.95	203.31	1,268.6	-400.9	-89.4	223.1	0.00	0.00	
1,400.0	18.95	203.31	1,363.2	-430.7	-102.3	255.6	0.00	0.00	
1,500.0	18.95	203.31	1,457.7	-460.5	-115.1	288.1	0.00	0.00	
1,600.0	18.95	203.31	1,552.3	-490.3	-128.0	320.5	0.00	0.00	
1,700.0	18.95	203.31	1,646.9	-520.2	-140.8	353.0	0.00	0.00	
1,800.0	18.95	203.31	1,741.5	-550.0	-153.7	385.5	0.00	0.00	
1,900.0	18.95	203.31	1,836.1	-579.8	-166.5	418.0	0.00	0.00	
2,000.0	18.95	203.31	1,930.6	-609.6	-179.4	450.4	0.00	0.00	
2,100.0	18.95	203.31	2,025.2	-639.4	-192.2	482.9	0.00	0.00	
2,200.0	18.95	203.31	2,119.8	-669.3	-205.1	515.4	0.00	0.00	
2,300.0	18.95	203.31	2,214.4	-699.1	-217.9	547.8	0.00	0.00	
2,400.0	18.95	203.31	2,309.0	-728.9	-230.8	580.3	0.00	0.00	
2,500.0	18.95	203.31	2,403.6	-758.7	-243.6	612.8	0.00	0.00	
2,600.0	18.95	203.31	2,498.1	-788.6	-256.5	645.3	0.00	0.00	
2,700.0	18.95	203.31	2,592.7	-818.4	-269.3	677.7	0.00	0.00	
2,800.0	18.95	203.31	2,687.3	-848.2	-282.2	710.2	0.00	0.00	
2,900.0	18.95	203.31	2,781.9	-878.0	-295.1	742.7	0.00	0.00	
3,000.0	18.95	203.31	2,876.5	-907.9	-307.9	775.2	0.00	0.00	
3,100.0	18.95	203.31	2,971.0	-937.7	-320.8	807.6	0.00	0.00	
3,200.0	18.95	203.31	3,065.6	-967.5	-333.6	840.1	0.00	0.00	
3,300.0	18.95	203.31	3,160.2	-997.3	-346.5	872.6	0.00	0.00	
3,400.0	18.95	203.31	3,254.8	-1,027.1	-359.3	905.1	0.00	0.00	
3,500.0	18.95	203.31	3,349.4	-1,057.0	-372.2	937.5	0.00	0.00	
3,600.0	18.95	203.31	3,443.9	-1,086.8	-385.0	970.0	0.00	0.00	
3,700.0	18.95	203.31	3,538.5	-1,116.6	-397.9	1,002.5	0.00	0.00	
3,800.0	18.95	203.31	3,633.1	-1,146.4	-410.7	1,034.9	0.00	0.00	
3,900.0	18.95	203.31	3,727.7	-1,176.3	-423.6	1,067.4	0.00	0.00	
3,991.3	18.95	203.31	3,814.0	-1,203.5	-435.3	1,097.1	0.00	0.00	Was G (TVD)
4,000.0	18.95	203.31	3,822.3	-1,206.1	-436.4	1,099.9	0.00	0.00	
4,100.0	18.95	203.31	3,916.8	-1,235.9	-449.3	1,132.4	0.00	0.00	
4,200.0	18.95	203.31	4,011.4	-1,265.7	-462.1	1,164.8	0.00	0.00	
4,300.0	18.95	203.31	4,106.0	-1,295.5	-475.0	1,197.3	0.00	0.00	
4,400.0	18.95	203.31	4,200.6	-1,325.4	-487.8	1,229.8	0.00	0.00	
4,500.0	18.95	203.31	4,295.2	-1,355.2	-500.7	1,262.3	0.00	0.00	
4,600.0	18.95	203.31	4,389.7	-1,385.0	-513.5	1,294.7	0.00	0.00	
4,700.0	18.95	203.31	4,484.3	-1,414.8	-526.4	1,327.2	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site S28-T4S-R96W (P28 496)(column pattern)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7804.0ft (Original Well Elev)
Project:	Double Willow	MD Reference:	WELL @ 7804.0ft (Original Well Elev)
Site:	S28-T4S-R96W (P28 496)(column pattern)	North Reference:	True
Well:	DW 8608A-33 (P28 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
4,800.0	18.95	203.31	4,578.9	-1,444.7	-539.2	1,359.7	0.00	0.00	
4,900.0	18.95	203.31	4,673.5	-1,474.5	-552.1	1,392.1	0.00	0.00	
5,000.0	18.95	203.31	4,768.1	-1,504.3	-564.9	1,424.6	0.00	0.00	
5,100.0	18.95	203.31	4,862.6	-1,534.1	-577.8	1,457.1	0.00	0.00	
5,200.0	18.95	203.31	4,957.2	-1,563.9	-590.6	1,489.6	0.00	0.00	
5,300.0	18.95	203.31	5,051.8	-1,593.8	-603.5	1,522.0	0.00	0.00	
5,400.0	18.95	203.31	5,146.4	-1,623.6	-616.3	1,554.5	0.00	0.00	
5,500.0	18.95	203.31	5,241.0	-1,653.4	-629.2	1,587.0	0.00	0.00	
5,600.0	18.95	203.31	5,335.5	-1,683.2	-642.0	1,619.5	0.00	0.00	
5,700.0	18.95	203.31	5,430.1	-1,713.1	-654.9	1,651.9	0.00	0.00	
5,800.0	18.95	203.31	5,524.7	-1,742.9	-667.7	1,684.4	0.00	0.00	
5,900.0	18.95	203.31	5,619.3	-1,772.7	-680.6	1,716.9	0.00	0.00	
6,000.0	18.95	203.31	5,713.9	-1,802.5	-693.4	1,749.4	0.00	0.00	
6,100.0	18.95	203.31	5,808.4	-1,832.3	-706.3	1,781.8	0.00	0.00	
6,200.0	18.95	203.31	5,903.0	-1,862.2	-719.1	1,814.3	0.00	0.00	
6,300.0	18.95	203.31	5,997.6	-1,892.0	-732.0	1,846.8	0.00	0.00	
6,400.0	18.95	203.31	6,092.2	-1,921.8	-744.8	1,879.2	0.00	0.00	
6,500.0	18.95	203.31	6,186.8	-1,951.6	-757.7	1,911.7	0.00	0.00	
6,600.0	18.95	203.31	6,281.3	-1,981.5	-770.5	1,944.2	0.00	0.00	
6,655.5	18.95	203.31	6,333.8	-1,998.0	-777.7	1,962.2	0.00	0.00	Start Drop -3.00
6,700.0	17.61	203.31	6,376.1	-2,010.8	-783.2	1,976.2	3.00	-3.00	
6,800.0	14.61	203.31	6,472.2	-2,036.3	-794.2	2,003.9	3.00	-3.00	
6,900.0	11.61	203.31	6,569.5	-2,057.1	-803.2	2,026.6	3.00	-3.00	
7,000.0	8.61	203.31	6,668.0	-2,073.3	-810.1	2,044.2	3.00	-3.00	
7,100.0	5.61	203.31	6,767.2	-2,084.6	-815.0	2,056.5	3.00	-3.00	
7,200.0	2.61	203.31	6,866.9	-2,091.2	-817.8	2,063.7	3.00	-3.00	
7,247.1	1.20	203.31	6,914.0	-2,092.7	-818.5	2,065.3	3.00	-3.00	WF (TVD)
7,287.1	0.00	0.00	6,954.0	-2,093.1	-818.6	2,065.7	3.00	-3.00	EOD; Inc=0° - TOG (TVD) - DW 8608A-33 P28
7,300.0	0.03	239.40	6,966.9	-2,093.1	-818.6	2,065.7	0.25	0.25	
7,400.0	0.28	239.40	7,066.9	-2,093.2	-818.9	2,065.9	0.25	0.25	
7,412.6	0.31	239.40	7,079.5	-2,093.2	-818.9	2,066.0	0.25	0.25	
7,500.0	0.31	239.40	7,166.9	-2,093.5	-819.3	2,066.4	0.00	0.00	
7,600.0	0.31	239.40	7,266.9	-2,093.8	-819.8	2,066.8	0.00	0.00	
7,700.0	0.31	239.40	7,366.9	-2,094.0	-820.3	2,067.3	0.00	0.00	
7,800.0	0.31	239.40	7,466.9	-2,094.3	-820.8	2,067.7	0.00	0.00	
7,900.0	0.31	239.40	7,566.9	-2,094.6	-821.2	2,068.1	0.00	0.00	
8,000.0	0.31	239.40	7,666.9	-2,094.9	-821.7	2,068.6	0.00	0.00	
8,100.0	0.31	239.40	7,766.9	-2,095.1	-822.2	2,069.0	0.00	0.00	
8,200.0	0.31	239.40	7,866.9	-2,095.4	-822.6	2,069.5	0.00	0.00	
8,300.0	0.31	239.40	7,966.9	-2,095.7	-823.1	2,069.9	0.00	0.00	
8,400.0	0.31	239.40	8,066.9	-2,096.0	-823.6	2,070.4	0.00	0.00	
8,500.0	0.31	239.40	8,166.9	-2,096.3	-824.1	2,070.8	0.00	0.00	
8,600.0	0.31	239.40	8,266.9	-2,096.5	-824.5	2,071.3	0.00	0.00	
8,700.0	0.31	239.40	8,366.9	-2,096.8	-825.0	2,071.7	0.00	0.00	
8,800.0	0.31	239.40	8,466.9	-2,097.1	-825.5	2,072.1	0.00	0.00	
8,900.0	0.31	239.40	8,566.9	-2,097.4	-825.9	2,072.6	0.00	0.00	
9,000.0	0.31	239.40	8,666.9	-2,097.7	-826.4	2,073.0	0.00	0.00	
9,100.0	0.31	239.40	8,766.9	-2,097.9	-826.9	2,073.5	0.00	0.00	
9,200.0	0.31	239.40	8,866.9	-2,098.2	-827.4	2,073.9	0.00	0.00	
9,300.0	0.31	239.40	8,966.9	-2,098.5	-827.8	2,074.4	0.00	0.00	
9,400.0	0.31	239.40	9,066.9	-2,098.8	-828.3	2,074.8	0.00	0.00	
9,500.0	0.31	239.40	9,166.9	-2,099.0	-828.8	2,075.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site S28-T4S-R96W (P28 496)(column pattern)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7804.0ft (Original Well Elev)
Project:	Double Willow	MD Reference:	WELL @ 7804.0ft (Original Well Elev)
Site:	S28-T4S-R96W (P28 496)(column pattern)	North Reference:	True
Well:	DW 8608A-33 (P28 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
9,600.0	0.31	239.40	9,266.9	-2,099.3	-829.2	2,075.7	0.00	0.00	
9,700.0	0.31	239.40	9,366.9	-2,099.6	-829.7	2,076.1	0.00	0.00	
9,800.0	0.31	239.40	9,466.9	-2,099.9	-830.2	2,076.6	0.00	0.00	
9,900.0	0.31	239.40	9,566.9	-2,100.2	-830.7	2,077.0	0.00	0.00	
10,000.0	0.31	239.40	9,666.9	-2,100.4	-831.1	2,077.5	0.00	0.00	
10,100.0	0.31	239.40	9,766.9	-2,100.7	-831.6	2,077.9	0.00	0.00	
10,200.0	0.31	239.40	9,866.8	-2,101.0	-832.1	2,078.4	0.00	0.00	
10,300.0	0.31	239.40	9,966.8	-2,101.3	-832.5	2,078.8	0.00	0.00	
10,400.0	0.31	239.40	10,066.8	-2,101.6	-833.0	2,079.3	0.00	0.00	
10,500.0	0.31	239.40	10,166.8	-2,101.8	-833.5	2,079.7	0.00	0.00	
10,600.0	0.31	239.40	10,266.8	-2,102.1	-834.0	2,080.1	0.00	0.00	
10,700.0	0.31	239.40	10,366.8	-2,102.4	-834.4	2,080.6	0.00	0.00	
10,800.0	0.31	239.40	10,466.8	-2,102.7	-834.9	2,081.0	0.00	0.00	
10,900.0	0.31	239.40	10,566.8	-2,103.0	-835.4	2,081.5	0.00	0.00	
10,947.2	0.31	239.40	10,614.0	-2,103.1	-835.6	2,081.7	0.00	0.00	Rins (TVD) - DW 8608A-33 P28 496 PBHL (Col
11,000.0	0.31	239.40	10,666.8	-2,103.2	-835.8	2,081.9	0.00	0.00	
11,100.0	0.31	239.40	10,766.8	-2,103.5	-836.3	2,082.4	0.00	0.00	
11,200.0	0.31	239.40	10,866.8	-2,103.8	-836.8	2,082.8	0.00	0.00	
11,277.2	0.31	239.40	10,944.0	-2,104.0	-837.2	2,083.2	0.00	0.00	Cozz (TVD)
11,300.0	0.31	239.40	10,966.8	-2,104.1	-837.3	2,083.3	0.00	0.00	
11,400.0	0.31	239.40	11,066.8	-2,104.3	-837.7	2,083.7	0.00	0.00	
11,467.2	0.31	239.40	11,134.0	-2,104.5	-838.0	2,084.0	0.00	0.00	Corc (TVD)
11,500.0	0.31	239.40	11,166.8	-2,104.6	-838.2	2,084.1	0.00	0.00	
11,600.0	0.31	239.40	11,266.8	-2,104.9	-838.7	2,084.6	0.00	0.00	
11,700.0	0.31	239.40	11,366.8	-2,105.2	-839.1	2,085.0	0.00	0.00	
11,747.2	0.31	239.40	11,414.0	-2,105.3	-839.4	2,085.2	0.00	0.00	Sego (TVD)
11,800.0	0.31	239.40	11,466.8	-2,105.5	-839.6	2,085.5	0.00	0.00	
11,900.0	0.31	239.40	11,566.8	-2,105.7	-840.1	2,085.9	0.00	0.00	
11,947.2	0.31	239.40	11,614.0	-2,105.9	-840.3	2,086.1	0.00	0.00	L Sego (TVD)
12,000.0	0.31	239.40	11,666.8	-2,106.0	-840.6	2,086.4	0.00	0.00	
12,100.0	0.31	239.40	11,766.8	-2,106.3	-841.0	2,086.8	0.00	0.00	
12,197.2	0.31	239.40	11,864.0	-2,106.6	-841.5	2,087.2	0.00	0.00	Driller's TD @ 12197.2' MD
12,200.0	0.31	239.40	11,866.8	-2,106.6	-841.5	2,087.3	0.00	0.00	
12,300.0	0.31	239.40	11,966.8	-2,106.9	-842.0	2,087.7	0.00	0.00	
12,400.0	0.31	239.40	12,066.8	-2,107.1	-842.4	2,088.1	0.00	0.00	
12,447.2	0.31	239.40	12,114.0	-2,107.3	-842.7	2,088.4	0.00	0.00	

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									
DW 8608A-33 P28 496 - - plan hits target center - Point	0.00	0.00	6,954.0	-2,093.1	-818.6	1,677,175.16	2,248,807.85	39° 39' 44.44 N	108° 10' 7.02 W
DW 8608A-33 P28 496 I - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,614.0	-2,103.1	-835.6	1,677,165.63	2,248,790.61	39° 39' 44.34 N	108° 10' 7.23 W

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Site S28-T4S-R96W (P28 496)(column pattern)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7804.0ft (Original Well Elev)
Project:	Double Willow	MD Reference:	WELL @ 7804.0ft (Original Well Elev)
Site:	S28-T4S-R96W (P28 496)(column pattern)	North Reference:	True
Well:	DW 8608A-33 (P28 496)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
214.0	214.0	Mahog Bench (TVD)				
274.0	274.0	Base B Groove (TVD)				
3,991.3	3,814.0	Was G (TVD)				
7,247.1	6,914.0	WF (TVD)				
7,287.1	6,954.0	TOG (TVD)				
10,947.2	10,614.0	RIins (TVD)				
11,277.2	10,944.0	Cozz (TVD)				
11,467.2	11,134.0	Corc (TVD)				
11,747.2	11,414.0	Sego (TVD)				
11,947.2	11,614.0	L Sego (TVD)				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
300.0	300.0	-196.0	-1.1	KOP @ 300' MD	
931.7	920.2	-291.0	-42.1	EOB; Inc=18.95°	
6,655.5	6,333.8	-1,998.0	-777.7	Start Drop -3.00	
7,287.1	6,954.0	-2,093.1	-818.6	EOD; Inc=0°	
12,197.2	11,864.0	-2,106.6	-841.5	Driller's TD @ 12197.2' MD	
12,447.2	12,114.0	-2,107.3	-842.7	Permit TD @ 12447.2' MD	