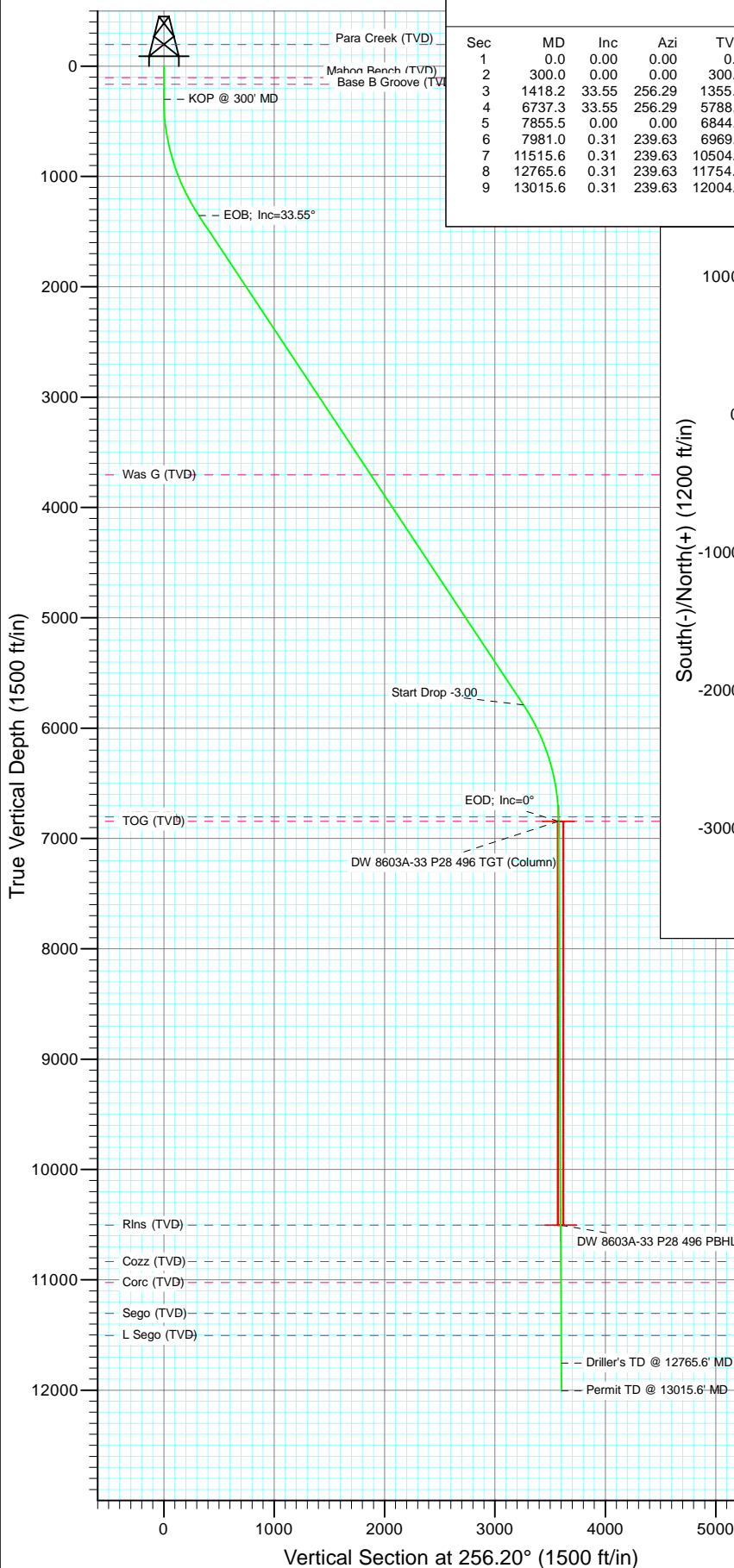


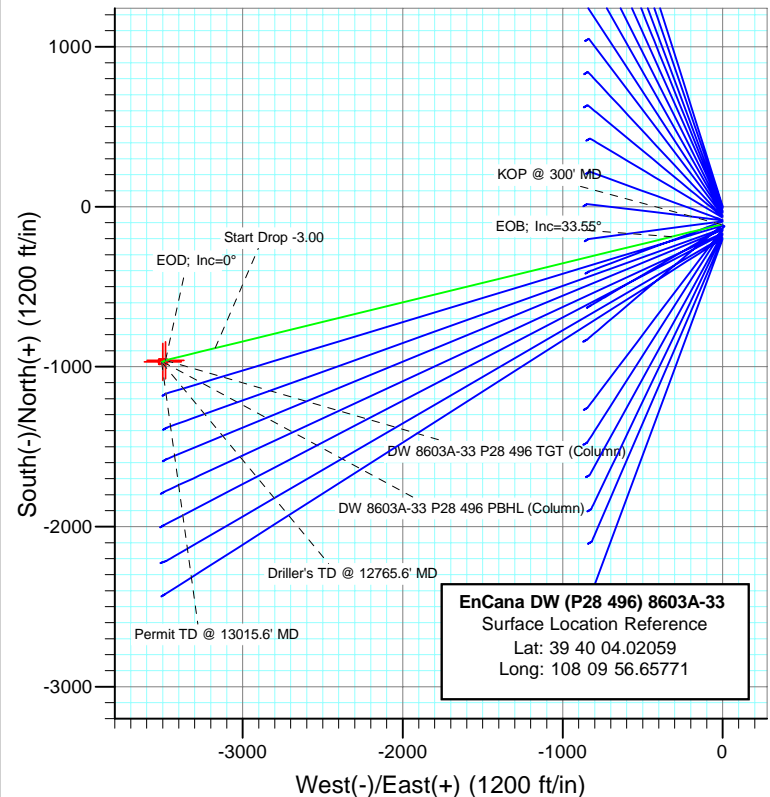


Project: Double Willow
Site: S28-T4S-R96W (P28 496)(column pattern)
Well: DW 8603A-33 (P28 496)
Wellbore: DD
Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	-112.0	-8.6	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	-112.0	-8.6	0.00	0.00	0.0	
3	1418.2	33.55	256.29	1355.4	-187.4	-317.6	3.00	256.29	318.1	
4	6737.3	33.55	256.29	5788.6	-884.3	-3173.2	0.00	0.00	3257.4	
5	7855.5	0.00	0.00	6844.0	-959.7	-3482.2	3.00	180.00	3575.5	DW 8603A-33 P28 496 TGT (Column)
6	7981.0	0.31	239.63	6969.5	-959.9	-3482.5	0.25	239.63	3575.9	
7	11515.6	0.31	239.63	10504.0	-969.6	-3499.2	0.00	0.00	3594.4	DW 8603A-33 P28 496 PBHL (Column)
8	12765.6	0.31	239.63	11754.0	-973.1	-3505.1	0.00	0.00	3601.0	
9	13015.6	0.31	239.63	12004.0	-973.8	-3506.3	0.00	0.00	3602.3	



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
104.0	104.0	Mahog Bench (TVD)
164.0	164.0	Base B Groove (TVD)
3704.0	4236.1	Was G (TVD)
6804.0	7815.5	WF (TVD)
6844.0	7855.5	TOG (TVD)
10504.0	11515.6	Rins (TVD)
10834.0	11845.6	Cozz (TVD)
11024.0	12035.6	Corc (TVD)
11304.0	12315.6	Sego (TVD)
11504.0	12515.6	L Sego (TVD)



Azimuths to True North
Magnetic North: 10.52°

Magnetic Field
Strength: 52361.4snT
Dip Angle: 65.86°
Date: 11/29/2010
Model: IGRF2010

Plan #1						
DW 8603A-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 8603A-33 P28 496 PBHL (Column)	256.20	-112.0	Slot	-8.6	0.0
Name						
TVD						
+N/-S						
+E/-W						
Latitude						
Longitude						
DW 8603A-33 P28 496 TGT (Column)	6844.0	-959.7	-3482.239° 39'	55.64 N	108° 10'	41.08 W
DW 8603A-33 P28 496 PBHL (Column)	10504.0	-969.6	-3499.239° 39'	55.54 N	108° 10'	41.29 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 8603A-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 8603A-33 (P28 496)			
Well Position	+N/-S	-112.0 ft	Northing:	1,679,131.60 ft
	+E/-W	-8.6 ft	Easting:	2,249,675.67 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	11/29/2010	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	-112.0	-8.6	256.20

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	-112.0	-8.6	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	-112.0	-8.6	0.00	0.00	0.00	0.00	
1,418.2	33.55	256.29	1,355.4	-187.4	-317.6	3.00	3.00	0.00	256.29	
6,737.3	33.55	256.29	5,788.6	-884.3	-3,173.2	0.00	0.00	0.00	0.00	
7,855.5	0.00	0.00	6,844.0	-959.7	-3,482.2	3.00	-3.00	0.00	180.00	DW 8603A-33 P28 49
7,981.0	0.31	239.63	6,969.5	-959.9	-3,482.5	0.25	0.25	-95.94	239.63	
11,515.6	0.31	239.63	10,504.0	-969.6	-3,499.2	0.00	0.00	0.00	0.00	DW 8603A-33 P28 49
12,765.6	0.31	239.63	11,754.0	-973.1	-3,505.1	0.00	0.00	0.00	0.00	
13,015.6	0.31	239.63	12,004.0	-973.8	-3,506.3	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 8603A-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	-112.0	-8.6	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	-112.0	-8.6	0.0	0.00	0.00	
104.0	0.00	0.00	104.0	-112.0	-8.6	0.0	0.00	0.00	Mahog Bench (TVD)
164.0	0.00	0.00	164.0	-112.0	-8.6	0.0	0.00	0.00	Base B Groove (TVD)
200.0	0.00	0.00	200.0	-112.0	-8.6	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	-112.0	-8.6	0.0	0.00	0.00	KOP @ 300' MD
400.0	3.00	256.29	400.0	-112.6	-11.1	2.6	3.00	3.00	
500.0	6.00	256.29	499.6	-114.5	-18.8	10.5	3.00	3.00	
600.0	9.00	256.29	598.8	-117.6	-31.4	23.5	3.00	3.00	
700.0	12.00	256.29	697.1	-121.9	-49.1	41.7	3.00	3.00	
800.0	15.00	256.29	794.3	-127.4	-71.8	65.1	3.00	3.00	
900.0	18.00	256.29	890.2	-134.2	-99.4	93.5	3.00	3.00	
1,000.0	21.00	256.29	984.4	-142.1	-131.8	126.9	3.00	3.00	
1,100.0	24.00	256.29	1,076.8	-151.1	-169.0	165.1	3.00	3.00	
1,200.0	27.00	256.29	1,167.1	-161.3	-210.8	208.2	3.00	3.00	
1,300.0	30.00	256.29	1,254.9	-172.7	-257.2	255.9	3.00	3.00	
1,400.0	33.00	256.29	1,340.2	-185.0	-307.9	308.1	3.00	3.00	
1,418.2	33.55	256.29	1,355.4	-187.4	-317.6	318.1	3.00	3.00	EOB; Inc=33.55°
1,500.0	33.55	256.29	1,423.6	-198.1	-361.5	363.3	0.00	0.00	
1,600.0	33.55	256.29	1,506.9	-211.2	-415.2	418.6	0.00	0.00	
1,700.0	33.55	256.29	1,590.3	-224.3	-468.9	473.8	0.00	0.00	
1,800.0	33.55	256.29	1,673.6	-237.4	-522.6	529.1	0.00	0.00	
1,900.0	33.55	256.29	1,757.0	-250.5	-576.3	584.3	0.00	0.00	
2,000.0	33.55	256.29	1,840.3	-263.6	-630.0	639.6	0.00	0.00	
2,100.0	33.55	256.29	1,923.6	-276.7	-683.6	694.9	0.00	0.00	
2,200.0	33.55	256.29	2,007.0	-289.8	-737.3	750.1	0.00	0.00	
2,300.0	33.55	256.29	2,090.3	-302.9	-791.0	805.4	0.00	0.00	
2,400.0	33.55	256.29	2,173.7	-316.0	-844.7	860.6	0.00	0.00	
2,500.0	33.55	256.29	2,257.0	-329.1	-898.4	915.9	0.00	0.00	
2,600.0	33.55	256.29	2,340.4	-342.2	-952.1	971.2	0.00	0.00	
2,700.0	33.55	256.29	2,423.7	-355.3	-1,005.7	1,026.4	0.00	0.00	
2,800.0	33.55	256.29	2,507.1	-368.4	-1,059.4	1,081.7	0.00	0.00	
2,900.0	33.55	256.29	2,590.4	-381.5	-1,113.1	1,136.9	0.00	0.00	
3,000.0	33.55	256.29	2,673.7	-394.6	-1,166.8	1,192.2	0.00	0.00	
3,100.0	33.55	256.29	2,757.1	-407.7	-1,220.5	1,247.5	0.00	0.00	
3,200.0	33.55	256.29	2,840.4	-420.8	-1,274.2	1,302.7	0.00	0.00	
3,300.0	33.55	256.29	2,923.8	-433.9	-1,327.9	1,358.0	0.00	0.00	
3,400.0	33.55	256.29	3,007.1	-447.0	-1,381.5	1,413.2	0.00	0.00	
3,500.0	33.55	256.29	3,090.5	-460.1	-1,435.2	1,468.5	0.00	0.00	
3,600.0	33.55	256.29	3,173.8	-473.2	-1,488.9	1,523.8	0.00	0.00	
3,700.0	33.55	256.29	3,257.2	-486.3	-1,542.6	1,579.0	0.00	0.00	
3,800.0	33.55	256.29	3,340.5	-499.4	-1,596.3	1,634.3	0.00	0.00	
3,900.0	33.55	256.29	3,423.8	-512.6	-1,650.0	1,689.5	0.00	0.00	
4,000.0	33.55	256.29	3,507.2	-525.7	-1,703.6	1,744.8	0.00	0.00	
4,100.0	33.55	256.29	3,590.5	-538.8	-1,757.3	1,800.1	0.00	0.00	
4,200.0	33.55	256.29	3,673.9	-551.9	-1,811.0	1,855.3	0.00	0.00	
4,236.1	33.55	256.29	3,704.0	-556.6	-1,830.4	1,875.3	0.00	0.00	Was G (TVD)
4,300.0	33.55	256.29	3,757.2	-565.0	-1,864.7	1,910.6	0.00	0.00	
4,400.0	33.55	256.29	3,840.6	-578.1	-1,918.4	1,965.8	0.00	0.00	
4,500.0	33.55	256.29	3,923.9	-591.2	-1,972.1	2,021.1	0.00	0.00	
4,600.0	33.55	256.29	4,007.3	-604.3	-2,025.8	2,076.4	0.00	0.00	
4,700.0	33.55	256.29	4,090.6	-617.4	-2,079.4	2,131.6	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 8603A-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	33.55	256.29	4,174.0	-630.5	-2,133.1	2,186.9	0.00	0.00	
4,900.0	33.55	256.29	4,257.3	-643.6	-2,186.8	2,242.1	0.00	0.00	
5,000.0	33.55	256.29	4,340.6	-656.7	-2,240.5	2,297.4	0.00	0.00	
5,100.0	33.55	256.29	4,424.0	-669.8	-2,294.2	2,352.7	0.00	0.00	
5,200.0	33.55	256.29	4,507.3	-682.9	-2,347.9	2,407.9	0.00	0.00	
5,300.0	33.55	256.29	4,590.7	-696.0	-2,401.5	2,463.2	0.00	0.00	
5,400.0	33.55	256.29	4,674.0	-709.1	-2,455.2	2,518.4	0.00	0.00	
5,500.0	33.55	256.29	4,757.4	-722.2	-2,508.9	2,573.7	0.00	0.00	
5,600.0	33.55	256.29	4,840.7	-735.3	-2,562.6	2,629.0	0.00	0.00	
5,700.0	33.55	256.29	4,924.1	-748.4	-2,616.3	2,684.2	0.00	0.00	
5,800.0	33.55	256.29	5,007.4	-761.5	-2,670.0	2,739.5	0.00	0.00	
5,900.0	33.55	256.29	5,090.7	-774.6	-2,723.6	2,794.7	0.00	0.00	
6,000.0	33.55	256.29	5,174.1	-787.7	-2,777.3	2,850.0	0.00	0.00	
6,100.0	33.55	256.29	5,257.4	-800.8	-2,831.0	2,905.3	0.00	0.00	
6,200.0	33.55	256.29	5,340.8	-813.9	-2,884.7	2,960.5	0.00	0.00	
6,300.0	33.55	256.29	5,424.1	-827.0	-2,938.4	3,015.8	0.00	0.00	
6,400.0	33.55	256.29	5,507.5	-840.1	-2,992.1	3,071.0	0.00	0.00	
6,500.0	33.55	256.29	5,590.8	-853.2	-3,045.8	3,126.3	0.00	0.00	
6,600.0	33.55	256.29	5,674.2	-866.3	-3,099.4	3,181.6	0.00	0.00	
6,700.0	33.55	256.29	5,757.5	-879.4	-3,153.1	3,236.8	0.00	0.00	
6,737.3	33.55	256.29	5,788.6	-884.3	-3,173.2	3,257.4	0.00	0.00	Start Drop -3.00
6,800.0	31.67	256.29	5,841.4	-892.3	-3,206.0	3,291.2	3.00	-3.00	
6,900.0	28.67	256.29	5,927.9	-904.2	-3,254.8	3,341.5	3.00	-3.00	
7,000.0	25.67	256.29	6,016.8	-915.0	-3,299.1	3,387.1	3.00	-3.00	
7,100.0	22.67	256.29	6,108.0	-924.7	-3,338.9	3,428.0	3.00	-3.00	
7,200.0	19.67	256.29	6,201.3	-933.3	-3,374.0	3,464.1	3.00	-3.00	
7,300.0	16.67	256.29	6,296.3	-940.7	-3,404.3	3,495.3	3.00	-3.00	
7,400.0	13.67	256.29	6,392.8	-946.9	-3,429.7	3,521.5	3.00	-3.00	
7,500.0	10.67	256.29	6,490.5	-951.9	-3,450.1	3,542.5	3.00	-3.00	
7,600.0	7.67	256.29	6,589.3	-955.6	-3,465.6	3,558.5	3.00	-3.00	
7,700.0	4.67	256.29	6,688.7	-958.2	-3,476.0	3,569.2	3.00	-3.00	
7,800.0	1.67	256.29	6,788.5	-959.5	-3,481.4	3,574.7	3.00	-3.00	
7,815.5	1.20	256.29	6,804.0	-959.6	-3,481.8	3,575.1	3.00	-3.00	WF (TVD)
7,855.5	0.00	0.00	6,844.0	-959.7	-3,482.2	3,575.5	3.00	-3.00	EOD; Inc=0° - TOG (TVD) - DW 8603A-33 P28
7,900.0	0.11	239.63	6,888.5	-959.7	-3,482.2	3,575.6	0.25	0.25	
7,981.0	0.31	239.63	6,969.5	-959.9	-3,482.5	3,575.9	0.25	0.25	
8,000.0	0.31	239.63	6,988.5	-959.9	-3,482.6	3,576.0	0.00	0.00	
8,100.0	0.31	239.63	7,088.5	-960.2	-3,483.0	3,576.5	0.00	0.00	
8,200.0	0.31	239.63	7,188.5	-960.5	-3,483.5	3,577.0	0.00	0.00	
8,300.0	0.31	239.63	7,288.5	-960.7	-3,484.0	3,577.5	0.00	0.00	
8,400.0	0.31	239.63	7,388.5	-961.0	-3,484.5	3,578.1	0.00	0.00	
8,500.0	0.31	239.63	7,488.5	-961.3	-3,484.9	3,578.6	0.00	0.00	
8,600.0	0.31	239.63	7,588.5	-961.6	-3,485.4	3,579.1	0.00	0.00	
8,700.0	0.31	239.63	7,688.5	-961.8	-3,485.9	3,579.6	0.00	0.00	
8,800.0	0.31	239.63	7,788.5	-962.1	-3,486.4	3,580.2	0.00	0.00	
8,900.0	0.31	239.63	7,888.5	-962.4	-3,486.8	3,580.7	0.00	0.00	
9,000.0	0.31	239.63	7,988.5	-962.7	-3,487.3	3,581.2	0.00	0.00	
9,100.0	0.31	239.63	8,088.5	-963.0	-3,487.8	3,581.7	0.00	0.00	
9,200.0	0.31	239.63	8,188.5	-963.2	-3,488.2	3,582.3	0.00	0.00	
9,300.0	0.31	239.63	8,288.5	-963.5	-3,488.7	3,582.8	0.00	0.00	
9,400.0	0.31	239.63	8,388.5	-963.8	-3,489.2	3,583.3	0.00	0.00	
9,500.0	0.31	239.63	8,488.5	-964.1	-3,489.7	3,583.8	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 8603A-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	239.63	8,588.5	-964.3	-3,490.1	3,584.4	0.00	0.00	
9,700.0	0.31	239.63	8,688.5	-964.6	-3,490.6	3,584.9	0.00	0.00	
9,800.0	0.31	239.63	8,788.5	-964.9	-3,491.1	3,585.4	0.00	0.00	
9,900.0	0.31	239.63	8,888.5	-965.2	-3,491.5	3,585.9	0.00	0.00	
10,000.0	0.31	239.63	8,988.5	-965.4	-3,492.0	3,586.5	0.00	0.00	
10,100.0	0.31	239.63	9,088.5	-965.7	-3,492.5	3,587.0	0.00	0.00	
10,200.0	0.31	239.63	9,188.5	-966.0	-3,493.0	3,587.5	0.00	0.00	
10,300.0	0.31	239.63	9,288.5	-966.3	-3,493.4	3,588.0	0.00	0.00	
10,400.0	0.31	239.63	9,388.5	-966.6	-3,493.9	3,588.6	0.00	0.00	
10,500.0	0.31	239.63	9,488.5	-966.8	-3,494.4	3,589.1	0.00	0.00	
10,600.0	0.31	239.63	9,588.4	-967.1	-3,494.9	3,589.6	0.00	0.00	
10,700.0	0.31	239.63	9,688.4	-967.4	-3,495.3	3,590.1	0.00	0.00	
10,800.0	0.31	239.63	9,788.4	-967.7	-3,495.8	3,590.7	0.00	0.00	
10,900.0	0.31	239.63	9,888.4	-967.9	-3,496.3	3,591.2	0.00	0.00	
11,000.0	0.31	239.63	9,988.4	-968.2	-3,496.7	3,591.7	0.00	0.00	
11,100.0	0.31	239.63	10,088.4	-968.5	-3,497.2	3,592.2	0.00	0.00	
11,200.0	0.31	239.63	10,188.4	-968.8	-3,497.7	3,592.8	0.00	0.00	
11,300.0	0.31	239.63	10,288.4	-969.0	-3,498.2	3,593.3	0.00	0.00	
11,400.0	0.31	239.63	10,388.4	-969.3	-3,498.6	3,593.8	0.00	0.00	
11,500.0	0.31	239.63	10,488.4	-969.6	-3,499.1	3,594.3	0.00	0.00	
11,515.6	0.31	239.63	10,504.0	-969.6	-3,499.2	3,594.4	0.00	0.00	Rins (TVD) - DW 8603A-33 P28 496 PBHL (Col
11,600.0	0.31	239.63	10,588.4	-969.9	-3,499.6	3,594.9	0.00	0.00	
11,700.0	0.31	239.63	10,688.4	-970.1	-3,500.0	3,595.4	0.00	0.00	
11,800.0	0.31	239.63	10,788.4	-970.4	-3,500.5	3,595.9	0.00	0.00	
11,845.6	0.31	239.63	10,834.0	-970.6	-3,500.7	3,596.1	0.00	0.00	Cozz (TVD)
11,900.0	0.31	239.63	10,888.4	-970.7	-3,501.0	3,596.4	0.00	0.00	
12,000.0	0.31	239.63	10,988.4	-971.0	-3,501.5	3,597.0	0.00	0.00	
12,035.6	0.31	239.63	11,024.0	-971.1	-3,501.6	3,597.1	0.00	0.00	Corc (TVD)
12,100.0	0.31	239.63	11,088.4	-971.3	-3,501.9	3,597.5	0.00	0.00	
12,200.0	0.31	239.63	11,188.4	-971.5	-3,502.4	3,598.0	0.00	0.00	
12,300.0	0.31	239.63	11,288.4	-971.8	-3,502.9	3,598.5	0.00	0.00	
12,315.6	0.31	239.63	11,304.0	-971.9	-3,503.0	3,598.6	0.00	0.00	Sego (TVD)
12,400.0	0.31	239.63	11,388.4	-972.1	-3,503.4	3,599.0	0.00	0.00	
12,500.0	0.31	239.63	11,488.4	-972.4	-3,503.8	3,599.6	0.00	0.00	
12,515.6	0.31	239.63	11,504.0	-972.4	-3,503.9	3,599.7	0.00	0.00	L Sego (TVD)
12,600.0	0.31	239.63	11,588.4	-972.6	-3,504.3	3,600.1	0.00	0.00	
12,700.0	0.31	239.63	11,688.4	-972.9	-3,504.8	3,600.6	0.00	0.00	
12,765.6	0.31	239.63	11,754.0	-973.1	-3,505.1	3,601.0	0.00	0.00	Driller's TD @ 12765.6' MD
12,800.0	0.31	239.63	11,788.4	-973.2	-3,505.2	3,601.1	0.00	0.00	
12,900.0	0.31	239.63	11,888.4	-973.5	-3,505.7	3,601.7	0.00	0.00	
13,000.0	0.31	239.63	11,988.4	-973.7	-3,506.2	3,602.2	0.00	0.00	
13,015.6	0.31	239.63	12,004.0	-973.8	-3,506.3	3,602.3	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 8603A-33 (P28 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)		
DW 8603A-33 P28 496 I	0.00	0.00	10,504.0	-969.6	-3,499.2	1,678,376.73	2,246,161.42	39° 39' 55.54 N	108° 10' 41.29 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									
DW 8603A-33 P28 496 ^	0.00	0.00	6,844.0	-959.7	-3,482.2	1,678,386.19	2,246,178.70	39° 39' 55.64 N	108° 10' 41.08 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
104.0	104.0	Mahog Bench (TVD)				
164.0	164.0	Base B Groove (TVD)				
4,236.1	3,704.0	Was G (TVD)				
7,815.5	6,804.0	WF (TVD)				
7,855.5	6,844.0	TOG (TVD)				
11,515.6	10,504.0	Rlms (TVD)				
11,845.6	10,834.0	Cozz (TVD)				
12,035.6	11,024.0	Corc (TVD)				
12,315.6	11,304.0	Sego (TVD)				
12,515.6	11,504.0	L Sego (TVD)				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
300.0	300.0	-112.0	-8.6	KOP @ 300' MD
1,418.2	1,355.4	-187.4	-317.6	EOB; Inc=33.55°
6,737.3	5,788.6	-884.3	-3,173.2	Start Drop -3.00
7,855.5	6,844.0	-959.7	-3,482.2	EOD; Inc=0°
12,765.6	11,754.0	-973.1	-3,505.1	Driller's TD @ 12765.6' MD
13,015.6	12,004.0	-973.8	-3,506.3	Permit TD @ 13015.6' MD