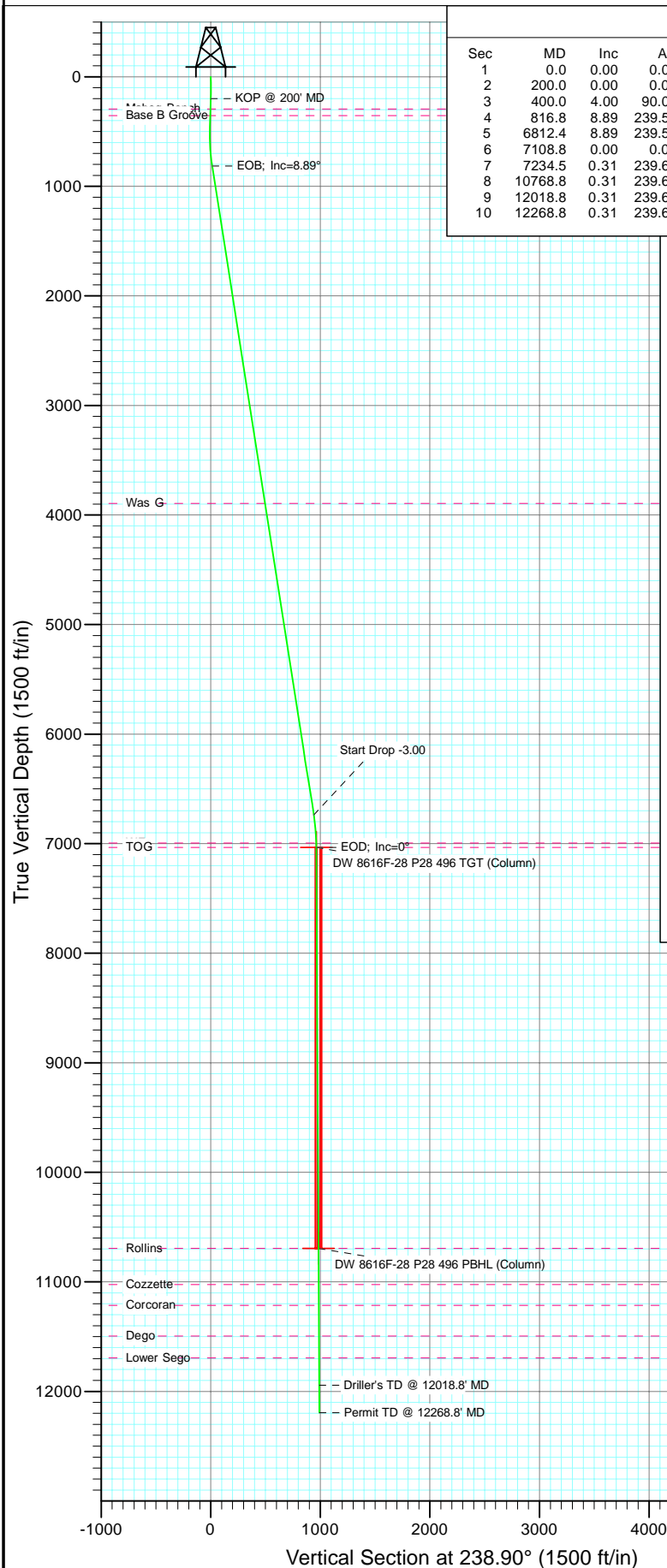


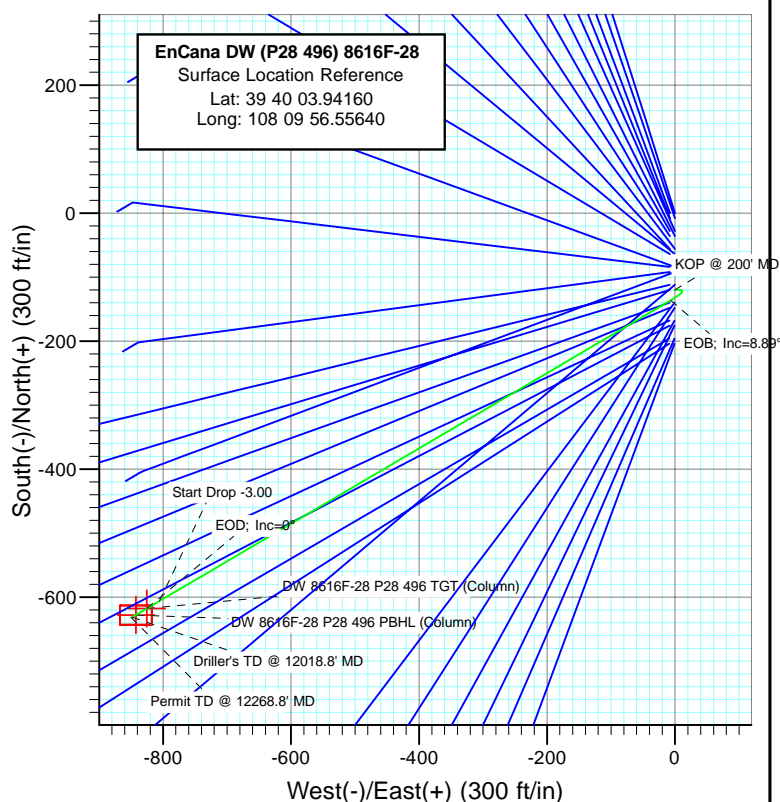


Project: Double Willow
Site: S28-T4S-R96W (P28 496)(column pattern)
Well: DW 8616F-28 (P28 496)
Wellbore: DD
Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	-120.0	-0.7	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	-120.0	-0.7	0.00	0.00	0.0	
3	400.0	4.00	90.00	399.8	-120.0	6.3	2.00	90.00	-6.0	
4	816.8	8.89	239.54	815.3	-136.4	-7.0	3.00	158.78	13.9	
5	6812.4	8.89	239.54	6738.8	-606.2	-805.8	0.00	0.00	940.6	
6	7108.8	0.00	0.00	7034.0	-617.9	-825.6	3.00	180.00	963.5	DW 8616F-28 P28 496 TGT (Column)
7	7234.5	0.31	239.63	7159.7	-618.0	-825.9	0.25	239.63	963.9	
8	10768.8	0.31	239.63	10694.0	-627.9	-842.6	0.00	0.00	983.2	DW 8616F-28 P28 496 PBHL (Column)
9	12018.8	0.31	239.63	11944.0	-631.3	-848.5	0.00	0.00	990.1	
10	12268.8	0.31	239.63	12194.0	-632.0	-849.7	0.00	0.00	991.5	



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
294.0	294.0	Mahog Bench
354.0	354.1	Base B Groove
3894.0	3933.0	Was G
6994.0	7068.8	WF
7034.0	7108.8	TOG
10694.0	10768.8	Rollins
11024.0	11098.8	Cozzette
11214.0	11288.8	Corcoran
11494.0	11568.8	Dego
11694.0	11768.8	Lower Sego



Azimuths to True North
Magnetic North: 10.52°

Magnetic Field
Strength: 52360.9nT
Dip Angle: 65.86°
Date: 12/1/2010
Model: IGRF2010

Type	Target	Azimuth	Origin	Type N/S	E/W From	TVD
Target	DW 8616F-28 P28 496 PBHL (Column)	238.90	-120.0	-0.7	0.0	
Name	DW 8616F-28 P28 496 TGT (Column)	7034.0	-617.9	-825.639° 39' 59.02 N	108° 10' 7.11 W	
	DW 8616F-28 P28 496 PBHL (Column)	10694.0	-627.9	-842.639° 39' 58.92 N	108° 10' 7.32 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 8616F-28 (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 8616F-28 (P28 496)					
Well Position	+N/-S	-120.0 ft	Northing:	1,679,123.38 ft	Latitude:	39° 40' 3.94 N
	+E/-W	-0.7 ft	Easting:	2,249,683.36 ft	Longitude:	108° 9' 56.56 W
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	-120.0	-0.7	238.90

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	-120.0	-0.7	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	-120.0	-0.7	0.00	0.00	0.00	0.00	
400.0	4.00	90.00	399.8	-120.0	6.3	2.00	2.00	0.00	90.00	
816.8	8.89	239.54	815.3	-136.4	-7.0	3.00	1.17	35.88	158.78	
6,812.4	8.89	239.54	6,738.8	-606.2	-805.8	0.00	0.00	0.00	0.00	
7,108.8	0.00	0.00	7,034.0	-617.9	-825.6	3.00	-3.00	0.00	180.00	DW 8616F-28 P28 49
7,234.5	0.31	239.63	7,159.7	-618.0	-825.9	0.25	0.25	-95.74	239.63	
10,768.8	0.31	239.63	10,694.0	-627.9	-842.6	0.00	0.00	0.00	0.00	DW 8616F-28 P28 49
12,018.8	0.31	239.63	11,944.0	-631.3	-848.5	0.00	0.00	0.00	0.00	
12,268.8	0.31	239.63	12,194.0	-632.0	-849.7	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 8616F-28 (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	-120.0	-0.7	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	-120.0	-0.7	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	-120.0	-0.7	0.0	0.00	0.00	KOP @ 200' MD
294.0	1.88	90.00	294.0	-120.0	0.9	-1.3	2.00	2.00	Mahog Bench
300.0	2.00	90.00	300.0	-120.0	1.1	-1.5	2.00	2.00	
354.1	3.08	90.00	354.0	-120.0	3.5	-3.5	2.00	2.00	Base B Groove
400.0	4.00	90.00	399.8	-120.0	6.3	-6.0	2.00	2.00	
500.0	1.62	132.06	499.7	-120.9	10.9	-9.4	3.00	-2.38	
600.0	2.69	216.34	599.7	-123.8	10.5	-7.6	3.00	1.07	
700.0	5.46	233.52	699.4	-128.5	5.3	-0.7	3.00	2.77	
800.0	8.40	238.97	798.7	-135.1	-4.8	11.3	3.00	2.93	
816.8	8.89	239.54	815.3	-136.4	-7.0	13.9	3.00	2.96	EOB; Inc=8.89°
900.0	8.89	239.54	897.5	-142.9	-18.1	26.7	0.00	0.00	
1,000.0	8.89	239.54	996.3	-150.7	-31.4	42.2	0.00	0.00	
1,100.0	8.89	239.54	1,095.1	-158.6	-44.7	57.6	0.00	0.00	
1,200.0	8.89	239.54	1,193.9	-166.4	-58.0	73.1	0.00	0.00	
1,300.0	8.89	239.54	1,292.7	-174.2	-71.3	88.6	0.00	0.00	
1,400.0	8.89	239.54	1,391.5	-182.1	-84.7	104.0	0.00	0.00	
1,500.0	8.89	239.54	1,490.3	-189.9	-98.0	119.5	0.00	0.00	
1,600.0	8.89	239.54	1,589.1	-197.8	-111.3	134.9	0.00	0.00	
1,700.0	8.89	239.54	1,687.9	-205.6	-124.6	150.4	0.00	0.00	
1,800.0	8.89	239.54	1,786.7	-213.4	-138.0	165.8	0.00	0.00	
1,900.0	8.89	239.54	1,885.5	-221.3	-151.3	181.3	0.00	0.00	
2,000.0	8.89	239.54	1,984.3	-229.1	-164.6	196.7	0.00	0.00	
2,100.0	8.89	239.54	2,083.1	-236.9	-177.9	212.2	0.00	0.00	
2,200.0	8.89	239.54	2,181.9	-244.8	-191.3	227.7	0.00	0.00	
2,300.0	8.89	239.54	2,280.6	-252.6	-204.6	243.1	0.00	0.00	
2,400.0	8.89	239.54	2,379.4	-260.5	-217.9	258.6	0.00	0.00	
2,500.0	8.89	239.54	2,478.2	-268.3	-231.2	274.0	0.00	0.00	
2,600.0	8.89	239.54	2,577.0	-276.1	-244.6	289.5	0.00	0.00	
2,700.0	8.89	239.54	2,675.8	-284.0	-257.9	304.9	0.00	0.00	
2,800.0	8.89	239.54	2,774.6	-291.8	-271.2	320.4	0.00	0.00	
2,900.0	8.89	239.54	2,873.4	-299.6	-284.5	335.9	0.00	0.00	
3,000.0	8.89	239.54	2,972.2	-307.5	-297.8	351.3	0.00	0.00	
3,100.0	8.89	239.54	3,071.0	-315.3	-311.2	366.8	0.00	0.00	
3,200.0	8.89	239.54	3,169.8	-323.1	-324.5	382.2	0.00	0.00	
3,300.0	8.89	239.54	3,268.6	-331.0	-337.8	397.7	0.00	0.00	
3,400.0	8.89	239.54	3,367.4	-338.8	-351.1	413.1	0.00	0.00	
3,500.0	8.89	239.54	3,466.2	-346.7	-364.5	428.6	0.00	0.00	
3,600.0	8.89	239.54	3,565.0	-354.5	-377.8	444.0	0.00	0.00	
3,700.0	8.89	239.54	3,663.8	-362.3	-391.1	459.5	0.00	0.00	
3,800.0	8.89	239.54	3,762.6	-370.2	-404.4	475.0	0.00	0.00	
3,900.0	8.89	239.54	3,861.4	-378.0	-417.8	490.4	0.00	0.00	
3,933.0	8.89	239.54	3,894.0	-380.6	-422.1	495.5	0.00	0.00	Was G
4,000.0	8.89	239.54	3,960.2	-385.8	-431.1	505.9	0.00	0.00	
4,100.0	8.89	239.54	4,059.0	-393.7	-444.4	521.3	0.00	0.00	
4,200.0	8.89	239.54	4,157.8	-401.5	-457.7	536.8	0.00	0.00	
4,300.0	8.89	239.54	4,256.6	-409.3	-471.0	552.2	0.00	0.00	
4,400.0	8.89	239.54	4,355.4	-417.2	-484.4	567.7	0.00	0.00	
4,500.0	8.89	239.54	4,454.2	-425.0	-497.7	583.2	0.00	0.00	
4,600.0	8.89	239.54	4,553.0	-432.9	-511.0	598.6	0.00	0.00	
4,700.0	8.89	239.54	4,651.8	-440.7	-524.3	614.1	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 8616F-28 (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	8.89	239.54	4,750.6	-448.5	-537.7	629.5	0.00	0.00	
4,900.0	8.89	239.54	4,849.4	-456.4	-551.0	645.0	0.00	0.00	
5,000.0	8.89	239.54	4,948.2	-464.2	-564.3	660.4	0.00	0.00	
5,100.0	8.89	239.54	5,047.0	-472.0	-577.6	675.9	0.00	0.00	
5,200.0	8.89	239.54	5,145.8	-479.9	-591.0	691.3	0.00	0.00	
5,300.0	8.89	239.54	5,244.6	-487.7	-604.3	706.8	0.00	0.00	
5,400.0	8.89	239.54	5,343.4	-495.6	-617.6	722.3	0.00	0.00	
5,500.0	8.89	239.54	5,442.2	-503.4	-630.9	737.7	0.00	0.00	
5,600.0	8.89	239.54	5,541.0	-511.2	-644.3	753.2	0.00	0.00	
5,700.0	8.89	239.54	5,639.8	-519.1	-657.6	768.6	0.00	0.00	
5,800.0	8.89	239.54	5,738.6	-526.9	-670.9	784.1	0.00	0.00	
5,900.0	8.89	239.54	5,837.4	-534.7	-684.2	799.5	0.00	0.00	
6,000.0	8.89	239.54	5,936.2	-542.6	-697.5	815.0	0.00	0.00	
6,100.0	8.89	239.54	6,035.0	-550.4	-710.9	830.5	0.00	0.00	
6,200.0	8.89	239.54	6,133.8	-558.2	-724.2	845.9	0.00	0.00	
6,300.0	8.89	239.54	6,232.6	-566.1	-737.5	861.4	0.00	0.00	
6,400.0	8.89	239.54	6,331.4	-573.9	-750.8	876.8	0.00	0.00	
6,500.0	8.89	239.54	6,430.2	-581.8	-764.2	892.3	0.00	0.00	
6,600.0	8.89	239.54	6,529.0	-589.6	-777.5	907.7	0.00	0.00	
6,700.0	8.89	239.54	6,627.8	-597.4	-790.8	923.2	0.00	0.00	
6,800.0	8.89	239.54	6,726.6	-605.3	-804.1	938.6	0.00	0.00	
6,812.4	8.89	239.54	6,738.8	-606.2	-805.8	940.6	0.00	0.00	Start Drop -3.00
6,900.0	6.26	239.54	6,825.6	-612.1	-815.7	952.1	3.00	-3.00	
7,000.0	3.26	239.54	6,925.3	-616.3	-822.9	960.4	3.00	-3.00	
7,068.8	1.20	239.54	6,994.0	-617.7	-825.2	963.1	3.00	-3.00	WF
7,100.0	0.26	239.54	7,025.2	-617.9	-825.5	963.5	3.00	-3.00	
7,108.8	0.00	0.00	7,034.0	-617.9	-825.6	963.5	3.00	-3.00	EOD; Inc=0° - TOG - DW 8616F-28 P28 496 TC
7,200.0	0.23	239.63	7,125.2	-618.0	-825.7	963.7	0.25	0.25	
7,234.5	0.31	239.63	7,159.7	-618.0	-825.9	963.9	0.25	0.25	
7,300.0	0.31	239.63	7,225.2	-618.2	-826.2	964.2	0.00	0.00	
7,400.0	0.31	239.63	7,325.2	-618.5	-826.6	964.8	0.00	0.00	
7,500.0	0.31	239.63	7,425.2	-618.8	-827.1	965.3	0.00	0.00	
7,600.0	0.31	239.63	7,525.2	-619.1	-827.6	965.9	0.00	0.00	
7,700.0	0.31	239.63	7,625.2	-619.3	-828.1	966.4	0.00	0.00	
7,800.0	0.31	239.63	7,725.2	-619.6	-828.5	967.0	0.00	0.00	
7,900.0	0.31	239.63	7,825.2	-619.9	-829.0	967.5	0.00	0.00	
8,000.0	0.31	239.63	7,925.2	-620.2	-829.5	968.1	0.00	0.00	
8,100.0	0.31	239.63	8,025.2	-620.5	-830.0	968.6	0.00	0.00	
8,200.0	0.31	239.63	8,125.2	-620.7	-830.4	969.2	0.00	0.00	
8,300.0	0.31	239.63	8,225.2	-621.0	-830.9	969.7	0.00	0.00	
8,400.0	0.31	239.63	8,325.2	-621.3	-831.4	970.3	0.00	0.00	
8,500.0	0.31	239.63	8,425.2	-621.6	-831.9	970.8	0.00	0.00	
8,600.0	0.31	239.63	8,525.2	-621.8	-832.3	971.3	0.00	0.00	
8,700.0	0.31	239.63	8,625.2	-622.1	-832.8	971.9	0.00	0.00	
8,800.0	0.31	239.63	8,725.2	-622.4	-833.3	972.4	0.00	0.00	
8,900.0	0.31	239.63	8,825.2	-622.7	-833.7	973.0	0.00	0.00	
9,000.0	0.31	239.63	8,925.2	-622.9	-834.2	973.5	0.00	0.00	
9,100.0	0.31	239.63	9,025.2	-623.2	-834.7	974.1	0.00	0.00	
9,200.0	0.31	239.63	9,125.2	-623.5	-835.2	974.6	0.00	0.00	
9,300.0	0.31	239.63	9,225.2	-623.8	-835.6	975.2	0.00	0.00	
9,400.0	0.31	239.63	9,325.2	-624.1	-836.1	975.7	0.00	0.00	
9,500.0	0.31	239.63	9,425.2	-624.3	-836.6	976.3	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 8616F-28 (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	9,525.2	-624.6	-837.1	976.8	0.00	0.00	
9,700.0	0.31	239.63	9,625.2	-624.9	-837.5	977.4	0.00	0.00	
9,800.0	0.31	239.63	9,725.2	-625.2	-838.0	977.9	0.00	0.00	
9,900.0	0.31	239.63	9,825.2	-625.4	-838.5	978.5	0.00	0.00	
10,000.0	0.31	239.63	9,925.2	-625.7	-839.0	979.0	0.00	0.00	
10,100.0	0.31	239.63	10,025.2	-626.0	-839.4	979.6	0.00	0.00	
10,200.0	0.31	239.63	10,125.2	-626.3	-839.9	980.1	0.00	0.00	
10,300.0	0.31	239.63	10,225.2	-626.6	-840.4	980.7	0.00	0.00	
10,400.0	0.31	239.63	10,325.2	-626.8	-840.8	981.2	0.00	0.00	
10,500.0	0.31	239.63	10,425.2	-627.1	-841.3	981.8	0.00	0.00	
10,600.0	0.31	239.63	10,525.2	-627.4	-841.8	982.3	0.00	0.00	
10,700.0	0.31	239.63	10,625.2	-627.7	-842.3	982.9	0.00	0.00	
10,768.8	0.31	239.63	10,694.0	-627.9	-842.6	983.2	0.00	0.00	Rollins - DW 8616F-28 P28 496 PBHL (Column
10,800.0	0.31	239.63	10,725.2	-627.9	-842.7	983.4	0.00	0.00	
10,900.0	0.31	239.63	10,825.2	-628.2	-843.2	984.0	0.00	0.00	
11,000.0	0.31	239.63	10,925.2	-628.5	-843.7	984.5	0.00	0.00	
11,098.8	0.31	239.63	11,024.0	-628.8	-844.2	985.1	0.00	0.00	Cozzette
11,100.0	0.31	239.63	11,025.2	-628.8	-844.2	985.1	0.00	0.00	
11,200.0	0.31	239.63	11,125.2	-629.0	-844.6	985.6	0.00	0.00	
11,288.8	0.31	239.63	11,214.0	-629.3	-845.1	986.1	0.00	0.00	Corcoran
11,300.0	0.31	239.63	11,225.2	-629.3	-845.1	986.2	0.00	0.00	
11,400.0	0.31	239.63	11,325.2	-629.6	-845.6	986.7	0.00	0.00	
11,500.0	0.31	239.63	11,425.2	-629.9	-846.1	987.3	0.00	0.00	
11,568.8	0.31	239.63	11,494.0	-630.1	-846.4	987.6	0.00	0.00	Dego
11,600.0	0.31	239.63	11,525.2	-630.2	-846.5	987.8	0.00	0.00	
11,700.0	0.31	239.63	11,625.2	-630.4	-847.0	988.4	0.00	0.00	
11,768.8	0.31	239.63	11,694.0	-630.6	-847.3	988.7	0.00	0.00	Lower Sego
11,800.0	0.31	239.63	11,725.2	-630.7	-847.5	988.9	0.00	0.00	
11,900.0	0.31	239.63	11,825.2	-631.0	-847.9	989.4	0.00	0.00	
12,000.0	0.31	239.63	11,925.2	-631.3	-848.4	990.0	0.00	0.00	
12,018.8	0.31	239.63	11,944.0	-631.3	-848.5	990.1	0.00	0.00	Driller's TD @ 12018.8' MD
12,100.0	0.31	239.63	12,025.2	-631.5	-848.9	990.5	0.00	0.00	
12,200.0	0.31	239.63	12,125.2	-631.8	-849.4	991.1	0.00	0.00	
12,268.8	0.31	239.63	12,194.0	-632.0	-849.7	991.5	0.00	0.00	Permit TD @ 12268.8' MD

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
DW 8616F-28 P28 496 f - hit/miss target - Shape - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,694.0	-627.9	-842.6	1,678,640.43	2,248,826.89	39° 39' 58.92 N	108° 10' 7.32 W
DW 8616F-28 P28 496 1 - plan hits target center - Point	0.00	0.00	7,034.0	-617.9	-825.6	1,678,649.90	2,248,844.20	39° 39' 59.02 N	108° 10' 7.11 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 8616F-28 (P28 496)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
294.0	294.0	Mahog Bench		0.00		
354.1	354.0	Base B Groove		0.00		
3,933.0	3,894.0	Was G		0.00		
7,068.8	6,994.0	WF		0.00		
7,108.8	7,034.0	TOG		0.00		
10,768.8	10,694.0	Rollins		0.00		
11,098.8	11,024.0	Cozzette		0.00		
11,288.8	11,214.0	Corcoran		0.00		
11,568.8	11,494.0	Dego		0.00		
11,768.8	11,694.0	Lower Sego		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	-120.0	-0.7	KOP @ 200' MD	
816.8	815.3	-136.4	-7.0	EOB; Inc=8.89°	
6,812.4	6,738.8	-606.2	-805.8	Start Drop -3.00	
7,108.8	7,034.0	-617.9	-825.6	EOD; Inc=0°	
12,018.8	11,944.0	-631.3	-848.5	Driller's TD @ 12018.8' MD	
12,268.8	12,194.0	-632.0	-849.7	Permit TD @ 12268.8' MD	