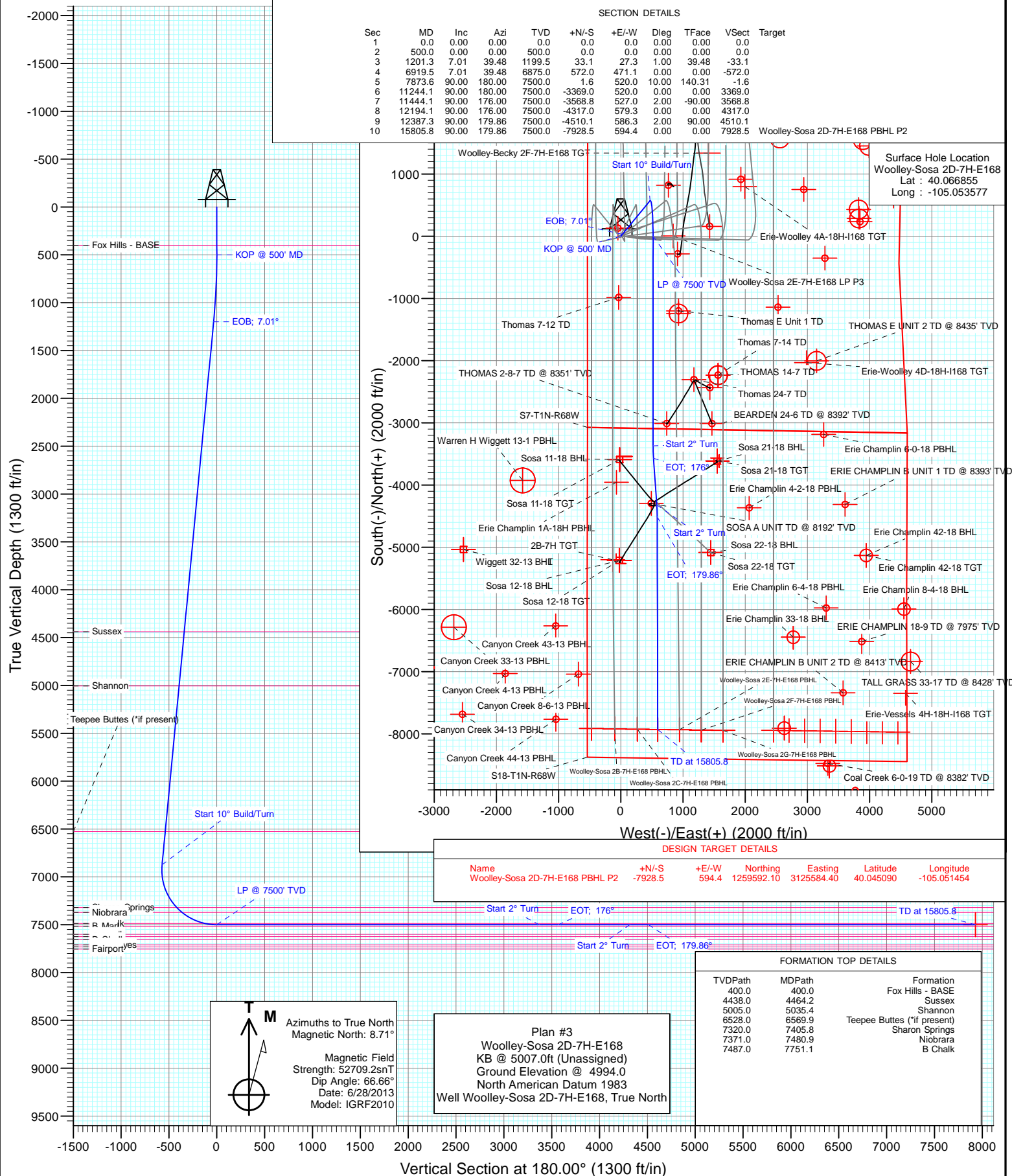




Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)
Well: Woolley-Sosa 2D-7H-E168
Wellbore: HZ
Design: Plan #3



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)			
Site Position:		Northing:	1,265,219.42 ft	Latitude:	40.060530
From:	Lat/Long	Easting:	3,126,139.27 ft	Longitude:	-105.049370
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Woolley-Sosa 2D-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,517.47 ft	Latitude:	40.066855
	+E/-W	0.0 ft	Easting:	3,124,950.12 ft	Longitude:	-105.053577
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,994.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	6/28/2013	8.72	66.66	52,709

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	180.00

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,201.3	7.01	39.48	1,199.5	33.1	27.3	1.00	1.00	0.00	39.48	
6,919.5	7.01	39.48	6,875.0	572.0	471.1	0.00	0.00	0.00	0.00	
7,873.6	90.00	180.00	7,500.0	1.6	520.0	10.00	8.70	14.73	140.31	
11,244.1	90.00	180.00	7,500.0	-3,369.0	520.0	0.00	0.00	0.00	0.00	
11,444.1	90.00	176.00	7,500.0	-3,568.8	527.0	2.00	0.00	-2.00	-90.00	
12,194.1	90.00	176.00	7,500.0	-4,317.0	579.3	0.00	0.00	0.00	0.00	
12,387.3	90.00	179.86	7,500.0	-4,510.1	586.3	2.00	0.00	2.00	90.00	
15,805.8	90.00	179.86	7,500.0	-7,928.5	594.4	0.00	0.00	0.00	0.00	Woolley-Sosa 2D-7H-

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

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	
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	Fox Hills - BASE
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500' MD
600.0	1.00	39.48	600.0	0.7	0.6	-0.7	1.00	1.00	
700.0	2.00	39.48	700.0	2.7	2.2	-2.7	1.00	1.00	
800.0	3.00	39.48	799.9	6.1	5.0	-6.1	1.00	1.00	
900.0	4.00	39.48	899.7	10.8	8.9	-10.8	1.00	1.00	
1,000.0	5.00	39.48	999.4	16.8	13.9	-16.8	1.00	1.00	
1,100.0	6.00	39.48	1,098.9	24.2	20.0	-24.2	1.00	1.00	
1,200.0	7.00	39.48	1,198.3	33.0	27.2	-33.0	1.00	1.00	
1,201.3	7.01	39.48	1,199.5	33.1	27.3	-33.1	1.00	1.00	EOB; 7.01°
1,300.0	7.01	39.48	1,297.5	42.4	34.9	-42.4	0.00	0.00	
1,400.0	7.01	39.48	1,396.8	51.8	42.7	-51.8	0.00	0.00	
1,500.0	7.01	39.48	1,496.0	61.2	50.4	-61.2	0.00	0.00	
1,600.0	7.01	39.48	1,595.3	70.7	58.2	-70.7	0.00	0.00	
1,700.0	7.01	39.48	1,694.5	80.1	66.0	-80.1	0.00	0.00	
1,800.0	7.01	39.48	1,793.8	89.5	73.7	-89.5	0.00	0.00	
1,900.0	7.01	39.48	1,893.0	98.9	81.5	-98.9	0.00	0.00	
2,000.0	7.01	39.48	1,992.3	108.4	89.3	-108.4	0.00	0.00	
2,100.0	7.01	39.48	2,091.5	117.8	97.0	-117.8	0.00	0.00	
2,200.0	7.01	39.48	2,190.8	127.2	104.8	-127.2	0.00	0.00	
2,300.0	7.01	39.48	2,290.0	136.6	112.5	-136.6	0.00	0.00	
2,400.0	7.01	39.48	2,389.3	146.1	120.3	-146.1	0.00	0.00	
2,500.0	7.01	39.48	2,488.5	155.5	128.1	-155.5	0.00	0.00	
2,600.0	7.01	39.48	2,587.8	164.9	135.8	-164.9	0.00	0.00	
2,700.0	7.01	39.48	2,687.0	174.3	143.6	-174.3	0.00	0.00	
2,800.0	7.01	39.48	2,786.3	183.8	151.3	-183.8	0.00	0.00	
2,900.0	7.01	39.48	2,885.5	193.2	159.1	-193.2	0.00	0.00	
3,000.0	7.01	39.48	2,984.8	202.6	166.9	-202.6	0.00	0.00	
3,100.0	7.01	39.48	3,084.0	212.0	174.6	-212.0	0.00	0.00	
3,200.0	7.01	39.48	3,183.3	221.5	182.4	-221.5	0.00	0.00	
3,300.0	7.01	39.48	3,282.5	230.9	190.2	-230.9	0.00	0.00	
3,400.0	7.01	39.48	3,381.8	240.3	197.9	-240.3	0.00	0.00	
3,500.0	7.01	39.48	3,481.1	249.7	205.7	-249.7	0.00	0.00	
3,600.0	7.01	39.48	3,580.3	259.1	213.4	-259.1	0.00	0.00	
3,700.0	7.01	39.48	3,679.6	268.6	221.2	-268.6	0.00	0.00	
3,800.0	7.01	39.48	3,778.8	278.0	229.0	-278.0	0.00	0.00	
3,900.0	7.01	39.48	3,878.1	287.4	236.7	-287.4	0.00	0.00	
4,000.0	7.01	39.48	3,977.3	296.8	244.5	-296.8	0.00	0.00	
4,100.0	7.01	39.48	4,076.6	306.3	252.3	-306.3	0.00	0.00	
4,200.0	7.01	39.48	4,175.8	315.7	260.0	-315.7	0.00	0.00	
4,300.0	7.01	39.48	4,275.1	325.1	267.8	-325.1	0.00	0.00	
4,400.0	7.01	39.48	4,374.3	334.5	275.5	-334.5	0.00	0.00	
4,464.2	7.01	39.48	4,438.0	340.6	280.5	-340.6	0.00	0.00	Sussex
4,500.0	7.01	39.48	4,473.6	344.0	283.3	-344.0	0.00	0.00	
4,600.0	7.01	39.48	4,572.8	353.4	291.1	-353.4	0.00	0.00	
4,700.0	7.01	39.48	4,672.1	362.8	298.8	-362.8	0.00	0.00	
4,800.0	7.01	39.48	4,771.3	372.2	306.6	-372.2	0.00	0.00	
4,900.0	7.01	39.48	4,870.6	381.7	314.4	-381.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

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
5,000.0	7.01	39.48	4,969.8	391.1	322.1	-391.1	0.00	0.00	
5,035.4	7.01	39.48	5,005.0	394.4	324.9	-394.4	0.00	0.00	Shannon
5,100.0	7.01	39.48	5,069.1	400.5	329.9	-400.5	0.00	0.00	
5,200.0	7.01	39.48	5,168.3	409.9	337.6	-409.9	0.00	0.00	
5,300.0	7.01	39.48	5,267.6	419.4	345.4	-419.4	0.00	0.00	
5,400.0	7.01	39.48	5,366.8	428.8	353.2	-428.8	0.00	0.00	
5,500.0	7.01	39.48	5,466.1	438.2	360.9	-438.2	0.00	0.00	
5,600.0	7.01	39.48	5,565.3	447.6	368.7	-447.6	0.00	0.00	
5,700.0	7.01	39.48	5,664.6	457.1	376.5	-457.1	0.00	0.00	
5,800.0	7.01	39.48	5,763.8	466.5	384.2	-466.5	0.00	0.00	
5,900.0	7.01	39.48	5,863.1	475.9	392.0	-475.9	0.00	0.00	
6,000.0	7.01	39.48	5,962.3	485.3	399.7	-485.3	0.00	0.00	
6,100.0	7.01	39.48	6,061.6	494.8	407.5	-494.8	0.00	0.00	
6,200.0	7.01	39.48	6,160.9	504.2	415.3	-504.2	0.00	0.00	
6,300.0	7.01	39.48	6,260.1	513.6	423.0	-513.6	0.00	0.00	
6,400.0	7.01	39.48	6,359.4	523.0	430.8	-523.0	0.00	0.00	
6,500.0	7.01	39.48	6,458.6	532.5	438.6	-532.5	0.00	0.00	
6,569.9	7.01	39.48	6,528.0	539.0	444.0	-539.0	0.00	0.00	Teepee Buttes (*if present)
6,600.0	7.01	39.48	6,557.9	541.9	446.3	-541.9	0.00	0.00	
6,700.0	7.01	39.48	6,657.1	551.3	454.1	-551.3	0.00	0.00	
6,800.0	7.01	39.48	6,756.4	560.7	461.8	-560.7	0.00	0.00	
6,900.0	7.01	39.48	6,855.6	570.1	469.6	-570.1	0.00	0.00	
6,919.5	7.01	39.48	6,875.0	572.0	471.1	-572.0	0.00	0.00	Start 10° Build/Turn
7,000.0	5.19	120.64	6,955.1	573.9	477.4	-573.9	10.00	-2.26	
7,100.0	13.40	160.83	7,053.8	560.6	485.1	-560.6	10.00	8.21	
7,200.0	23.06	169.41	7,148.7	530.4	492.5	-530.4	10.00	9.66	
7,300.0	32.92	173.06	7,236.9	484.0	499.4	-484.0	10.00	9.86	
7,400.0	42.83	175.16	7,315.7	423.0	505.6	-423.0	10.00	9.92	
7,405.8	43.41	175.26	7,320.0	419.1	505.9	-419.1	10.00	9.93	Sharon Springs
7,480.9	50.87	176.35	7,371.0	364.2	509.9	-364.2	10.00	9.94	Niobrara
7,500.0	52.78	176.59	7,382.8	349.2	510.8	-349.2	10.00	9.95	
7,600.0	62.73	177.69	7,436.1	264.9	515.0	-264.9	10.00	9.96	
7,700.0	72.70	178.60	7,474.0	172.5	518.0	-172.5	10.00	9.96	
7,751.1	77.79	179.03	7,487.0	123.1	519.0	-123.1	10.00	9.97	B Chalk
7,800.0	82.67	179.42	7,495.3	74.9	519.6	-74.9	10.00	9.97	
7,873.6	90.00	180.00	7,500.0	1.6	520.0	-1.6	10.00	9.97	LP @ 7500' TVD
7,900.0	90.00	180.00	7,500.0	-24.9	520.0	24.9	0.00	0.00	
8,000.0	90.00	180.00	7,500.0	-124.9	520.0	124.9	0.00	0.00	
8,100.0	90.00	180.00	7,500.0	-224.9	520.0	224.9	0.00	0.00	
8,200.0	90.00	180.00	7,500.0	-324.9	520.0	324.9	0.00	0.00	
8,300.0	90.00	180.00	7,500.0	-424.9	520.0	424.9	0.00	0.00	
8,400.0	90.00	180.00	7,500.0	-524.9	520.0	524.9	0.00	0.00	
8,500.0	90.00	180.00	7,500.0	-624.9	520.0	624.9	0.00	0.00	
8,600.0	90.00	180.00	7,500.0	-724.9	520.0	724.9	0.00	0.00	
8,700.0	90.00	180.00	7,500.0	-824.9	520.0	824.9	0.00	0.00	
8,800.0	90.00	180.00	7,500.0	-924.9	520.0	924.9	0.00	0.00	
8,900.0	90.00	180.00	7,500.0	-1,024.9	520.0	1,024.9	0.00	0.00	
9,000.0	90.00	180.00	7,500.0	-1,124.9	520.0	1,124.9	0.00	0.00	
9,100.0	90.00	180.00	7,500.0	-1,224.9	520.0	1,224.9	0.00	0.00	
9,200.0	90.00	180.00	7,500.0	-1,324.9	520.0	1,324.9	0.00	0.00	
9,300.0	90.00	180.00	7,500.0	-1,424.9	520.0	1,424.9	0.00	0.00	
9,400.0	90.00	180.00	7,500.0	-1,524.9	520.0	1,524.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

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	90.00	180.00	7,500.0	-1,624.9	520.0	1,624.9	0.00	0.00	
9,600.0	90.00	180.00	7,500.0	-1,724.9	520.0	1,724.9	0.00	0.00	
9,700.0	90.00	180.00	7,500.0	-1,824.9	520.0	1,824.9	0.00	0.00	
9,800.0	90.00	180.00	7,500.0	-1,924.9	520.0	1,924.9	0.00	0.00	
9,900.0	90.00	180.00	7,500.0	-2,024.9	520.0	2,024.9	0.00	0.00	
10,000.0	90.00	180.00	7,500.0	-2,124.9	520.0	2,124.9	0.00	0.00	
10,100.0	90.00	180.00	7,500.0	-2,224.9	520.0	2,224.9	0.00	0.00	
10,200.0	90.00	180.00	7,500.0	-2,324.9	520.0	2,324.9	0.00	0.00	
10,300.0	90.00	180.00	7,500.0	-2,424.9	520.0	2,424.9	0.00	0.00	
10,400.0	90.00	180.00	7,500.0	-2,524.9	520.0	2,524.9	0.00	0.00	
10,500.0	90.00	180.00	7,500.0	-2,624.9	520.0	2,624.9	0.00	0.00	
10,600.0	90.00	180.00	7,500.0	-2,724.9	520.0	2,724.9	0.00	0.00	
10,700.0	90.00	180.00	7,500.0	-2,824.9	520.0	2,824.9	0.00	0.00	
10,800.0	90.00	180.00	7,500.0	-2,924.9	520.0	2,924.9	0.00	0.00	
10,900.0	90.00	180.00	7,500.0	-3,024.9	520.0	3,024.9	0.00	0.00	
11,000.0	90.00	180.00	7,500.0	-3,124.9	520.0	3,124.9	0.00	0.00	
11,100.0	90.00	180.00	7,500.0	-3,224.9	520.0	3,224.9	0.00	0.00	
11,200.0	90.00	180.00	7,500.0	-3,324.9	520.0	3,324.9	0.00	0.00	
11,244.1	90.00	180.00	7,500.0	-3,369.0	520.0	3,369.0	0.00	0.00	Start 2° Turn
11,300.0	90.00	178.88	7,500.0	-3,424.9	520.5	3,424.9	2.00	0.00	
11,400.0	90.00	176.88	7,500.0	-3,524.8	524.2	3,524.8	2.00	0.00	
11,444.1	90.00	176.00	7,500.0	-3,568.8	527.0	3,568.8	2.00	0.00	EOT; 176°
11,500.0	90.00	176.00	7,500.0	-3,624.6	530.9	3,624.6	0.00	0.00	
11,600.0	90.00	176.00	7,500.0	-3,724.3	537.9	3,724.3	0.00	0.00	
11,700.0	90.00	176.00	7,500.0	-3,824.1	544.8	3,824.1	0.00	0.00	
11,800.0	90.00	176.00	7,500.0	-3,923.8	551.8	3,923.8	0.00	0.00	
11,900.0	90.00	176.00	7,500.0	-4,023.6	558.8	4,023.6	0.00	0.00	
12,000.0	90.00	176.00	7,500.0	-4,123.3	565.8	4,123.3	0.00	0.00	
12,100.0	90.00	176.00	7,500.0	-4,223.1	572.7	4,223.1	0.00	0.00	
12,194.1	90.00	176.00	7,500.0	-4,317.0	579.3	4,317.0	0.00	0.00	Start 2° Turn
12,200.0	90.00	176.12	7,500.0	-4,322.9	579.7	4,322.9	2.00	0.00	
12,300.0	90.00	178.12	7,500.0	-4,422.7	584.7	4,422.7	2.00	0.00	
12,387.3	90.00	179.86	7,500.0	-4,510.0	586.3	4,510.0	2.00	0.00	EOT; 179.86°
12,400.0	90.00	179.86	7,500.0	-4,522.7	586.3	4,522.7	0.01	0.00	
12,500.0	90.00	179.86	7,500.0	-4,622.7	586.5	4,622.7	0.00	0.00	
12,600.0	90.00	179.86	7,500.0	-4,722.7	586.8	4,722.7	0.00	0.00	
12,700.0	90.00	179.86	7,500.0	-4,822.7	587.0	4,822.7	0.00	0.00	
12,800.0	90.00	179.86	7,500.0	-4,922.7	587.2	4,922.7	0.00	0.00	
12,900.0	90.00	179.86	7,500.0	-5,022.7	587.5	5,022.7	0.00	0.00	
13,000.0	90.00	179.86	7,500.0	-5,122.7	587.7	5,122.7	0.00	0.00	
13,100.0	90.00	179.86	7,500.0	-5,222.7	588.0	5,222.7	0.00	0.00	
13,200.0	90.00	179.86	7,500.0	-5,322.7	588.2	5,322.7	0.00	0.00	
13,300.0	90.00	179.86	7,500.0	-5,422.7	588.4	5,422.7	0.00	0.00	
13,400.0	90.00	179.86	7,500.0	-5,522.7	588.7	5,522.7	0.00	0.00	
13,500.0	90.00	179.86	7,500.0	-5,622.7	588.9	5,622.7	0.00	0.00	
13,600.0	90.00	179.86	7,500.0	-5,722.7	589.1	5,722.7	0.00	0.00	
13,700.0	90.00	179.86	7,500.0	-5,822.7	589.4	5,822.7	0.00	0.00	
13,800.0	90.00	179.86	7,500.0	-5,922.7	589.6	5,922.7	0.00	0.00	
13,900.0	90.00	179.86	7,500.0	-6,022.7	589.9	6,022.7	0.00	0.00	
14,000.0	90.00	179.86	7,500.0	-6,122.7	590.1	6,122.7	0.00	0.00	
14,100.0	90.00	179.86	7,500.0	-6,222.7	590.3	6,222.7	0.00	0.00	
14,200.0	90.00	179.86	7,500.0	-6,322.7	590.6	6,322.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

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
14,300.0	90.00	179.86	7,500.0	-6,422.7	590.8	6,422.7	0.00	0.00	
14,400.0	90.00	179.86	7,500.0	-6,522.7	591.0	6,522.7	0.00	0.00	
14,500.0	90.00	179.86	7,500.0	-6,622.7	591.3	6,622.7	0.00	0.00	
14,600.0	90.00	179.86	7,500.0	-6,722.7	591.5	6,722.7	0.00	0.00	
14,700.0	90.00	179.86	7,500.0	-6,822.7	591.8	6,822.7	0.00	0.00	
14,800.0	90.00	179.86	7,500.0	-6,922.7	592.0	6,922.7	0.00	0.00	
14,900.0	90.00	179.86	7,500.0	-7,022.7	592.2	7,022.7	0.00	0.00	
15,000.0	90.00	179.86	7,500.0	-7,122.7	592.5	7,122.7	0.00	0.00	
15,100.0	90.00	179.86	7,500.0	-7,222.7	592.7	7,222.7	0.00	0.00	
15,200.0	90.00	179.86	7,500.0	-7,322.7	592.9	7,322.7	0.00	0.00	
15,300.0	90.00	179.86	7,500.0	-7,422.7	593.2	7,422.7	0.00	0.00	
15,400.0	90.00	179.86	7,500.0	-7,522.7	593.4	7,522.7	0.00	0.00	
15,500.0	90.00	179.86	7,500.0	-7,622.7	593.6	7,622.7	0.00	0.00	
15,600.0	90.00	179.86	7,500.0	-7,722.7	593.9	7,722.7	0.00	0.00	
15,700.0	90.00	179.86	7,500.0	-7,822.7	594.1	7,822.7	0.00	0.00	
15,800.0	90.00	179.86	7,500.0	-7,922.7	594.4	7,922.7	0.00	0.00	
15,805.8	90.00	179.86	7,500.0	-7,928.5	594.4	7,928.5	0.00	0.00	TD at 15805.8

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									
Woolley-Sosa 2D-7H-E1 - plan hits target center - Point	0.00	0.00	7,500.0	-7,928.5	594.4	1,259,592.10	3,125,584.40	40.045090	-105.051454
Woolley-Sosa 2D-7H-E1 - plan misses target center by 247.0ft at 15805.8ft MD (7500.0 TVD, -7928.5 N, 594.4 E) - Point	0.00	0.00	7,747.0	-7,928.5	594.4	1,259,592.10	3,125,584.40	40.045090	-105.051454

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
400.0	400.0	Fox Hills - BASE			
4,464.2	4,438.0	Sussex			
5,035.4	5,005.0	Shannon			
6,569.9	6,528.0	Teepee Buttes (*if present)			
7,405.8	7,320.0	Sharon Springs			
7,480.9	7,371.0	Niobrara			
7,751.1	7,487.0	B Chalk			

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
500.0	500.0	0.0	0.0	KOP @ 500' MD
1,201.3	1,199.5	33.1	27.3	EOB; 7.01°
6,919.5	6,875.0	572.0	471.1	Start 10° Build/Turn
7,873.6	7,500.0	1.6	520.0	LP @ 7500' TVD
11,244.1	7,500.0	-3,369.0	520.0	Start 2° Turn
11,444.1	7,500.0	-3,568.8	527.0	EOT; 176°
12,194.1	7,500.0	-4,317.0	579.3	Start 2° Turn
12,387.3	7,500.0	-4,510.0	586.3	EOT; 179.86°
15,805.8	7,500.0	-7,928.5	594.4	TD at 15805.8

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)

Woolley-Sosa 2D-7H-E168

HZ

Plan #3

Anticollision Report

25 June, 2015

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference	Plan #3		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	6/24/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	15,805.8	Plan #3 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	10,885.1	7,558.0	946.6	872.3	12.747	CC
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	10,900.0	7,558.0	946.7	872.0	12.674	ES
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	11,100.0	7,558.0	970.7	891.6	12.275	SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	15,805.8	17,574.2	1,862.6	1,547.0	5.902	CC, ES, SF
Sosa 11-18 - DD - DD	11,440.8	7,596.2	542.2	457.9	6.431	CC, ES, SF
Sosa 12-18 - DD - DD	13,114.4	7,645.6	600.6	484.4	5.169	CC, ES, SF
Sosa 21-18 - DD (MWD) - DD	11,557.2	7,684.3	1,011.2	926.1	11.887	CC, ES
Sosa 21-18 - DD (MWD) - DD	11,600.0	7,683.4	1,012.1	926.6	11.843	SF
Sosa 22-18 - DD - DD	12,979.3	7,650.8	873.6	761.5	7.793	CC
Sosa 22-18 - DD - DD	13,000.0	7,650.9	873.8	760.9	7.737	ES
Sosa 22-18 - DD - DD	13,100.0	7,651.3	881.9	765.6	7.586	SF
SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTING	12,167.1	7,511.9	101.1	9.4	1.102	Level 2, CC, ES, SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,310.3	7,521.4	910.0	850.2	15.224	CC, ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,500.0	7,520.3	929.6	865.6	14.533	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,179.9	7,495.0	656.7	599.3	11.443	CC
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,200.0	7,495.0	657.0	599.1	11.334	ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,300.0	7,495.0	667.6	607.3	11.076	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	10,884.4	7,577.1	217.2	143.3	2.940	CC, ES
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	10,900.0	7,577.1	217.7	143.5	2.933	SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	8,858.3	7,488.0	553.3	516.9	15.186	CC, ES, SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,074.3	7,494.0	409.0	369.3	10.323	CC
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,100.0	7,494.0	409.8	369.3	10.135	ES
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,200.0	7,494.0	427.8	384.9	9.972	SF
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	6,933.0	7,064.0	1,164.3	1,123.8	28.777	CC, ES
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	7,000.0	7,131.5	1,167.8	1,127.2	28.742	SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,440.3	1,524.8	118.8	113.3	21.589	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,500.0	1,584.0	119.0	113.3	20.671	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	2,000.0	2,080.3	137.1	129.3	17.687	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	7,739.1	7,768.4	913.6	871.4	21.630	CC, ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	7,800.0	7,778.9	915.9	873.5	21.617	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	8,165.7	7,938.6	397.7	346.9	7.827	CC, ES, SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	7,030.8	7,030.1	398.2	373.6	16.152	CC, ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	7,050.0	7,049.0	398.5	373.8	16.128	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	730.4	731.2	15.8	13.2	6.122	CC, ES, SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	770.4	770.4	29.8	27.1	11.116	CC
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	800.0	799.9	29.9	27.1	10.723	ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	900.0	899.6	31.5	28.4	10.019	SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	730.1	729.1	43.8	41.3	17.472	CC, ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	7,806.6	7,533.6	106.1	79.3	3.952	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	500.0	500.0	52.6	50.9	30.953	CC
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	600.0	599.1	52.9	50.9	25.853	ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	7,600.0	7,592.0	177.5	149.1	6.245	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	400.0	400.0	60.2	58.8	44.545	CC, ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	7,800.0	7,544.4	366.1	339.0	13.511	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	300.0	300.0	67.7	66.7	67.612	CC, ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	6,919.5	6,846.2	888.5	853.9	25.703	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	203.3	203.3	75.0	74.3	112.901	CC
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	300.0	299.4	75.2	74.2	75.172	ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	8,800.0	7,379.2	1,391.1	1,345.7	30.646	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	200.0	200.0	82.6	81.9	126.491	CC, ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	1,400.0	1,371.6	172.1	167.0	33.549	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	200.0	200.0	22.4	21.7	34.301	CC, ES
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	15,805.8	15,949.8	1,091.8	815.8	3.955	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	300.0	300.0	14.8	13.8	14.807	CC, ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	15,794.7	15,706.0	690.1	407.5	2.442	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	572.7	572.8	6.7	4.8	3.430	CC
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	600.0	600.1	6.7	4.7	3.285	ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	15,805.8	15,953.0	405.2	175.1	1.761	SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	734.8	734.7	5.8	3.3	2.307	CC, ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	15,805.8	16,076.0	424.3	188.9	1.803	SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	300.0	300.0	15.1	14.1	15.086	CC, ES
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	15,805.8	15,832.2	699.9	417.0	2.474	SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	187.1	187.1	22.7	22.1	37.270	CC
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	200.0	200.0	22.7	22.0	34.691	ES
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	15,805.8	16,157.5	1,077.0	800.8	3.900	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	152.93	-2,304.0	1,177.6	2,587.5					
100.0	100.0	85.0	85.0	0.2	0.1	152.93	-2,304.0	1,177.6	2,587.5	2,587.2	0.28	9,358.855		
200.0	200.0	185.0	185.0	0.3	0.3	152.93	-2,304.0	1,177.6	2,587.5	2,586.9	0.62	4,164.271		
300.0	300.0	285.0	285.0	0.5	0.5	152.93	-2,304.0	1,177.6	2,587.5	2,586.5	0.97	2,666.359		
400.0	400.0	385.0	385.0	0.7	0.6	152.93	-2,304.0	1,177.6	2,587.5	2,586.2	1.32	1,960.982		
500.0	500.0	485.0	485.0	0.8	0.8	152.93	-2,304.0	1,177.6	2,587.5	2,585.8	1.67	1,550.739		
600.0	600.0	585.0	585.0	1.0	1.0	113.47	-2,304.0	1,177.6	2,587.8	2,585.8	2.02	1,282.383		
700.0	700.0	685.0	685.0	1.2	1.2	113.51	-2,304.0	1,177.6	2,588.9	2,586.5	2.37	1,092.568		
800.0	799.9	784.9	784.9	1.4	1.3	113.58	-2,304.0	1,177.6	2,590.6	2,587.9	2.73	950.450		
900.0	899.7	884.7	884.7	1.6	1.5	113.68	-2,304.0	1,177.6	2,593.1	2,590.0	3.09	839.411		
1,000.0	999.4	984.4	984.4	1.8	1.7	113.81	-2,304.0	1,177.6	2,596.2	2,592.8	3.46	749.774		
1,100.0	1,098.9	1,083.9	1,083.9	2.0	1.9	113.97	-2,304.0	1,177.6	2,600.1	2,596.3	3.85	675.559		
1,201.3	1,199.5	1,184.6	1,184.6	2.2	2.0	114.16	-2,304.0	1,177.6	2,604.8	2,600.6	4.26	612.135		
1,300.0	1,297.5	1,282.5	1,282.5	2.5	2.2	114.40	-2,304.0	1,177.6	2,609.8	2,605.2	4.66	560.367		
1,400.0	1,396.8	1,381.8	1,381.8	2.7	2.4	114.64	-2,304.0	1,177.6	2,614.9	2,609.9	5.07	515.857		
1,500.0	1,496.0	1,481.0	1,481.0	3.0	2.6	114.88	-2,304.0	1,177.6	2,620.1	2,614.6	5.48	477.764		
1,600.0	1,595.3	1,541.9	1,541.9	3.3	2.7	115.03	-2,304.3	1,177.7	2,625.9	2,620.0	5.83	450.141		
1,700.0	1,694.5	1,600.0	1,600.0	3.5	2.8	115.17	-2,305.6	1,178.2	2,633.4	2,627.3	6.18	426.250		
1,800.0	1,793.8	1,645.1	1,645.1	3.8	2.8	115.28	-2,307.4	1,179.0	2,642.8	2,636.3	6.50	406.650		
1,900.0	1,893.0	1,700.0	1,699.8	4.0	2.9	115.41	-2,310.5	1,180.2	2,654.1	2,647.2	6.84	388.225		
2,000.0	1,992.3	1,747.6	1,747.2	4.3	3.0	115.53	-2,313.9	1,181.6	2,667.1	2,660.0	7.16	372.559		
2,100.0	2,091.5	1,800.0	1,799.5	4.6	3.1	115.66	-2,318.5	1,183.5	2,682.0	2,674.5	7.49	358.154		
2,200.0	2,190.8	1,848.9	1,848.1	4.8	3.2	115.78	-2,323.6	1,185.6	2,698.6	2,690.8	7.81	345.564		
2,300.0	2,290.0	1,900.0	1,898.7	5.1	3.3	115.91	-2,329.8	1,188.1	2,717.0	2,708.8	8.13	334.145		
2,400.0	2,389.3	1,949.0	1,947.1	5.4	3.5	116.03	-2,336.5	1,190.9	2,737.1	2,728.6	8.45	324.029		
2,500.0	2,488.5	2,000.0	1,997.5	5.7	3.6	116.15	-2,344.3	1,194.1	2,759.0	2,750.2	8.76	314.832		
2,600.0	2,587.8	2,047.6	2,044.2	5.9	3.7	116.27	-2,352.3	1,197.3	2,782.5	2,773.5	9.07	306.785		
2,700.0	2,687.0	2,117.0	2,112.3	6.2	3.9	116.43	-2,365.0	1,202.5	2,807.6	2,798.2	9.42	297.954		
2,800.0	2,786.3	2,213.1	2,206.5	6.5	4.2	116.66	-2,382.7	1,209.8	2,833.0	2,823.2	9.84	288.030		
2,900.0	2,885.5	2,309.2	2,300.7	6.7	4.5	116.88	-2,400.4	1,217.0	2,858.5	2,848.2	10.25	278.917		
3,000.0	2,984.8	2,405.3	2,394.8	7.0	4.8	117.10	-2,418.2	1,224.3	2,884.0	2,873.3	10.66	270.521		
3,100.0	3,084.0	2,501.4	2,489.0	7.3	5.1	117.32	-2,435.9	1,231.6	2,909.5	2,898.4	11.07	262.761		
3,200.0	3,183.3	2,597.5	2,583.2	7.6	5.4	117.53	-2,453.6	1,238.8	2,935.0	2,923.6	11.48	255.566		
3,300.0	3,282.5	2,693.6	2,677.4	7.8	5.7	117.74	-2,471.4	1,246.1	2,960.6	2,948.8	11.90	248.878		
3,400.0	3,381.8	2,789.8	2,771.6	8.1	6.1	117.94	-2,489.1	1,253.3	2,986.3	2,974.0	12.31	242.645		
3,500.0	3,481.1	2,885.9	2,865.7	8.4	6.4	118.14	-2,506.8	1,260.6	3,012.0	2,999.2	12.72	236.824		
3,600.0	3,580.3	2,982.0	2,959.9	8.7	6.8	118.34	-2,524.6	1,267.9	3,037.7	3,024.5	13.13	231.374		
3,700.0	3,679.6	3,078.1	3,054.1	8.9	7.1	118.53	-2,542.3	1,275.1	3,063.4	3,049.9	13.54	226.261		
3,800.0	3,778.8	3,174.2	3,148.3	9.2	7.4	118.72	-2,560.0	1,282.4	3,089.2	3,075.2	13.95	221.455		
3,900.0	3,878.1	3,270.3	3,242.4	9.5	7.8	118.91	-2,577.8	1,289.6	3,115.0	3,100.6	14.36	216.929		
4,000.0	3,977.3	3,366.4	3,336.6	9.8	8.2	119.10	-2,595.5	1,296.9	3,140.8	3,126.0	14.77	212.660		
4,100.0	4,076.6	3,462.5	3,430.8	10.0	8.5	119.28	-2,613.2	1,304.2	3,166.7	3,151.5	15.18	208.625		
4,200.0	4,175.8	3,558.6	3,525.0	10.3	8.9	119.46	-2,631.0	1,311.4	3,192.6	3,177.0	15.59	204.806		
4,300.0	4,275.1	3,654.7	3,619.1	10.6	9.2	119.63	-2,648.7	1,318.7	3,218.5	3,202.5	16.00	201.187		
4,400.0	4,374.3	3,750.8	3,713.3	10.9	9.6	119.81	-2,666.4	1,325.9	3,244.5	3,228.0	16.41	197.751		
4,500.0	4,473.6	3,846.9	3,807.5	11.1	9.9	119.98	-2,684.2	1,333.2	3,270.4	3,253.6	16.82	194.486		
4,600.0	4,572.8	3,943.0	3,901.7	11.4	10.3	120.14	-2,701.9	1,340.4	3,296.4	3,279.2	17.22	191.379		
4,700.0	4,672.1	4,039.1	3,995.9	11.7	10.7	120.31	-2,719.6	1,347.7	3,322.5	3,304.8	17.63	188.418		
4,800.0	4,771.3	4,135.2	4,090.0	12.0	11.0	120.47	-2,737.4	1,355.0	3,348.5	3,330.5	18.04	185.594		
4,900.0	4,870.6	4,231.4	4,184.2	12.2	11.4	120.63	-2,755.1	1,362.2	3,374.6	3,356.2	18.45	182.896		
5,000.0	4,969.8	4,327.5	4,278.4	12.5	11.8	120.79	-2,772.8	1,369.5	3,400.7	3,381.9	18.86	180.318		
5,100.0	5,069.1	4,423.6	4,372.6	12.8	12.1	120.95	-2,790.6	1,376.7	3,426.9	3,407.6	19.27	177.851		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
5,200.0	5,168.3	4,519.7	4,466.7	13.1	12.5	121.10	-2,808.3	1,384.0	3,453.0	3,433.3	19.68	175.488		
5,300.0	5,267.6	4,615.8	4,560.9	13.3	12.9	121.25	-2,826.0	1,391.3	3,479.2	3,459.1	20.09	173.222		
5,400.0	5,366.8	4,711.9	4,655.1	13.6	13.2	121.40	-2,843.8	1,398.5	3,505.4	3,484.9	20.49	171.048		
5,500.0	5,466.1	4,808.0	4,749.3	13.9	13.6	121.55	-2,861.5	1,405.8	3,531.6	3,510.7	20.90	168.960		
5,600.0	5,565.3	4,904.1	4,843.5	14.2	14.0	121.69	-2,879.2	1,413.0	3,557.8	3,536.5	21.31	166.953		
5,700.0	5,664.6	5,000.2	4,937.6	14.4	14.3	121.83	-2,897.0	1,420.3	3,584.1	3,562.4	21.72	165.023		
5,800.0	5,763.8	5,096.3	5,031.8	14.7	14.7	121.97	-2,914.7	1,427.6	3,610.4	3,588.3	22.13	163.165		
5,900.0	5,863.1	5,192.4	5,126.0	15.0	15.1	122.11	-2,932.4	1,434.8	3,636.7	3,614.2	22.54	161.374		
6,000.0	5,962.3	6,020.3	5,947.4	15.3	17.0	123.35	-3,010.0	1,466.6	3,654.5	3,630.0	24.47	149.330		
6,100.0	6,061.6	6,119.6	6,046.6	15.5	17.1	123.51	-3,010.0	1,466.6	3,661.3	3,636.4	24.89	147.118		
6,200.0	6,160.9	6,218.8	6,145.9	15.8	17.2	123.67	-3,010.0	1,466.6	3,668.1	3,642.8	25.30	144.981		
6,300.0	6,260.1	6,318.1	6,245.1	16.1	17.3	123.83	-3,010.0	1,466.6	3,674.9	3,649.2	25.71	142.917		
6,400.0	6,359.4	6,417.3	6,344.4	16.4	17.4	123.98	-3,010.0	1,466.6	3,681.7	3,655.6	26.13	140.922		
6,500.0	6,458.6	6,516.6	6,443.6	16.6	17.5	124.14	-3,010.0	1,466.6	3,688.6	3,662.1	26.54	138.992		
6,600.0	6,557.9	6,615.8	6,542.9	16.9	17.6	124.30	-3,010.0	1,466.6	3,695.5	3,668.6	26.95	137.125		
6,700.0	6,657.1	6,715.1	6,642.1	17.2	17.7	124.45	-3,010.0	1,466.6	3,702.4	3,675.1	27.36	135.317		
6,800.0	6,756.4	6,814.3	6,741.4	17.5	17.9	124.61	-3,010.0	1,466.6	3,709.4	3,681.6	27.77	133.566		
6,900.0	6,855.6	6,913.6	6,840.6	17.7	18.0	124.76	-3,010.0	1,466.6	3,716.4	3,688.2	28.18	131.869		
6,919.5	6,875.0	6,932.9	6,860.0	17.8	18.0	124.79	-3,010.0	1,466.6	3,717.7	3,689.5	28.26	131.544		
6,950.0	6,905.3	6,963.3	6,890.3	17.9	18.0	102.29	-3,010.0	1,466.6	3,719.1	3,690.7	28.38	131.034		
7,000.0	6,955.1	7,013.1	6,940.1	17.9	18.1	44.05	-3,010.0	1,466.6	3,717.9	3,689.4	28.57	130.145		
7,050.0	7,004.8	7,062.7	6,989.8	17.9	18.2	14.93	-3,010.0	1,466.6	3,712.6	3,683.8	28.74	129.179		
7,100.0	7,053.8	7,111.8	7,038.8	17.9	18.2	3.90	-3,010.0	1,466.6	3,703.1	3,674.2	28.90	128.142		
7,150.0	7,101.9	7,159.9	7,086.9	17.9	18.3	-1.68	-3,010.0	1,466.6	3,689.5	3,660.5	29.04	127.036		
7,200.0	7,148.7	7,206.7	7,133.7	17.8	18.3	-5.21	-3,010.0	1,466.6	3,671.9	3,642.8	29.17	125.869		
7,250.0	7,193.8	7,251.8	7,178.8	17.7	18.4	-7.86	-3,010.0	1,466.6	3,650.5	3,621.2	29.29	124.646		
7,300.0	7,236.9	7,294.9	7,221.9	17.5	18.4	-10.13	-3,010.0	1,466.6	3,625.4	3,596.0	29.39	123.374		
7,350.0	7,277.7	7,335.6	7,262.7	17.4	18.5	-12.31	-3,010.0	1,466.6	3,596.8	3,567.4	29.47	122.058		
7,400.0	7,315.7	7,373.7	7,300.8	17.2	18.5	-14.58	-3,010.0	1,466.6	3,565.0	3,535.5	29.53	120.705		
7,450.0	7,350.9	7,408.8	7,335.9	17.1	18.6	-17.11	-3,010.0	1,466.6	3,530.2	3,500.6	29.58	119.324		
7,500.0	7,382.8	7,440.8	7,367.8	16.9	18.6	-20.09	-3,010.0	1,466.6	3,492.6	3,462.9	29.62	117.920		
7,550.0	7,411.3	7,469.3	7,396.3	16.7	18.6	-23.74	-3,010.0	1,466.6	3,452.5	3,422.9	29.63	116.501		
7,600.0	7,436.1	7,494.1	7,421.1	16.6	18.7	-28.36	-3,010.0	1,466.6	3,410.3	3,380.7	29.64	115.075		
7,650.0	7,457.1	7,515.0	7,442.1	16.5	18.7	-34.40	-3,010.0	1,466.6	3,366.3	3,336.7	29.62	113.647		
7,700.0	7,474.0	7,531.9	7,459.0	16.4	18.7	-42.42	-3,010.0	1,466.6	3,320.9	3,291.3	29.59	112.226		
7,750.0	7,486.8	7,544.7	7,471.8	16.4	18.7	-53.07	-3,010.0	1,466.6	3,274.3	3,244.8	29.55	110.819		
7,800.0	7,495.3	7,553.2	7,480.3	16.4	18.7	-66.67	-3,010.0	1,466.6	3,227.0	3,197.5	29.49	109.431		
7,850.0	7,499.5	7,557.5	7,484.5	16.5	18.7	-82.43	-3,010.0	1,466.6	3,179.3	3,149.9	29.42	108.069		
7,873.6	7,500.0	7,558.0	7,485.0	16.5	18.7	-90.00	-3,010.0	1,466.6	3,156.8	3,127.5	29.38	107.437		
7,900.0	7,500.0	7,558.0	7,485.0	16.5	18.7	-90.00	-3,010.0	1,466.6	3,131.6	3,102.3	29.34	106.730		
8,000.0	7,500.0	7,558.0	7,485.0	16.9	18.7	-90.00	-3,010.0	1,466.6	3,036.5	3,007.3	29.19	104.041		
8,100.0	7,500.0	7,558.0	7,485.0	17.4	18.7	-90.00	-3,010.0	1,466.6	2,941.6	2,912.6	29.03	101.321		
8,200.0	7,500.0	7,558.0	7,485.0	18.0	18.7	-90.00	-3,010.0	1,466.6	2,847.1	2,818.2	28.89	98.560		
8,300.0	7,500.0	7,558.0	7,485.0	18.8	18.7	-90.00	-3,010.0	1,466.6	2,753.0	2,724.2	28.75	95.747		
8,400.0	7,500.0	7,558.0	7,485.0	19.7	18.7	-90.00	-3,010.0	1,466.6	2,659.3	2,630.7	28.64	92.868		
8,500.0	7,500.0	7,558.0	7,485.0	20.7	18.7	-90.00	-3,010.0	1,466.6	2,566.1	2,537.6	28.54	89.909		
8,600.0	7,500.0	7,558.0	7,485.0	21.9	18.7	-90.00	-3,010.0	1,466.6	2,473.4	2,445.0	28.48	86.850		
8,700.0	7,500.0	7,558.0	7,485.0	23.1	18.7	-90.00	-3,010.0	1,466.6	2,381.4	2,352.9	28.46	83.673		
8,800.0	7,500.0	7,558.0	7,485.0	24.3	18.7	-90.00	-3,010.0	1,466.6	2,289.9	2,261.4	28.50	80.358		
8,900.0	7,500.0	7,558.0	7,485.0	25.6	18.7	-90.00	-3,010.0	1,466.6	2,199.3	2,170.7	28.60	76.885		
9,000.0	7,500.0	7,558.0	7,485.0	27.0	18.7	-90.00	-3,010.0	1,466.6	2,109.5	2,080.6	28.80	73.238		
9,100.0	7,500.0	7,558.0	7,485.0	28.4	18.7	-90.00	-3,010.0	1,466.6	2,020.6	1,991.5	29.11	69.405		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
9,200.0	7,500.0	7,558.0	7,485.0	29.9	18.7	-90.00	-3,010.0	1,466.6	1,932.8	1,903.2	29.56	65.387		
9,300.0	7,500.0	7,558.0	7,485.0	31.4	18.7	-90.00	-3,010.0	1,466.6	1,846.3	1,816.1	30.17	61.195		
9,400.0	7,500.0	7,558.0	7,485.0	32.9	18.7	-90.00	-3,010.0	1,466.6	1,761.2	1,730.2	30.97	56.859		
9,500.0	7,500.0	7,558.0	7,485.0	34.4	18.7	-90.00	-3,010.0	1,466.6	1,677.7	1,645.7	32.00	52.424		
9,600.0	7,500.0	7,558.0	7,485.0	36.0	18.7	-90.00	-3,010.0	1,466.6	1,596.1	1,562.8	33.29	47.952		
9,700.0	7,500.0	7,558.0	7,485.0	37.5	18.7	-90.00	-3,010.0	1,466.6	1,516.8	1,481.9	34.86	43.515		
9,800.0	7,500.0	7,558.0	7,485.0	39.1	18.7	-90.00	-3,010.0	1,466.6	1,440.0	1,403.2	36.74	39.192		
9,900.0	7,500.0	7,558.0	7,485.0	40.7	18.7	-90.00	-3,010.0	1,466.6	1,366.2	1,327.2	38.97	35.058		
10,000.0	7,500.0	7,558.0	7,485.0	42.3	18.7	-90.00	-3,010.0	1,466.6	1,296.0	1,254.4	41.56	31.183		
10,100.0	7,500.0	7,558.0	7,485.0	43.9	18.7	-90.00	-3,010.0	1,466.6	1,229.8	1,185.3	44.52	27.624		
10,200.0	7,500.0	7,558.0	7,485.0	45.6	18.7	-90.00	-3,010.0	1,466.6	1,168.5	1,120.7	47.85	24.420		
10,300.0	7,500.0	7,558.0	7,485.0	47.2	18.7	-90.00	-3,010.0	1,466.6	1,112.8	1,061.3	51.52	21.600		
10,400.0	7,500.0	7,558.0	7,485.0	48.9	18.7	-90.00	-3,010.0	1,466.6	1,063.7	1,008.2	55.47	19.176		
10,500.0	7,500.0	7,558.0	7,485.0	50.5	18.7	-90.00	-3,010.0	1,466.6	1,021.9	962.3	59.60	17.147		
10,600.0	7,500.0	7,558.0	7,485.0	52.2	18.7	-90.00	-3,010.0	1,466.6	988.6	924.8	63.77	15.502		
10,700.0	7,500.0	7,558.0	7,485.0	53.8	18.7	-90.00	-3,010.0	1,466.6	964.5	896.7	67.80	14.225		
10,800.0	7,500.0	7,558.0	7,485.0	55.5	18.7	-90.00	-3,010.0	1,466.6	950.4	878.9	71.51	13.291		
10,885.1	7,500.0	7,558.0	7,485.0	56.9	18.7	-90.00	-3,010.0	1,466.6	946.6	872.3	74.26	12.747 CC		
10,900.0	7,500.0	7,558.0	7,485.0	57.2	18.7	-90.00	-3,010.0	1,466.6	946.7	872.0	74.70	12.674 ES		
11,000.0	7,500.0	7,558.0	7,485.0	58.9	18.7	-90.00	-3,010.0	1,466.6	953.5	876.3	77.24	12.345		
11,100.0	7,500.0	7,558.0	7,485.0	60.6	18.7	-90.00	-3,010.0	1,466.6	970.7	891.6	79.07	12.275 SF		
11,200.0	7,500.0	7,558.0	7,485.0	62.3	18.7	-90.00	-3,010.0	1,466.6	997.6	917.4	80.20	12.438		
11,244.1	7,500.0	7,558.0	7,485.0	63.0	18.7	-90.00	-3,010.0	1,466.6	1,012.4	931.9	80.50	12.577		
11,300.0	7,500.0	7,558.0	7,485.0	64.0	18.7	-90.00	-3,010.0	1,466.6	1,033.0	952.3	80.70	12.800		
11,400.0	7,500.0	7,558.0	7,485.0	65.7	18.7	-90.00	-3,010.0	1,466.6	1,073.8	993.1	80.68	13.309		
11,444.1	7,500.0	7,558.0	7,485.0	66.4	18.7	-90.00	-3,010.0	1,466.6	1,093.2	1,012.7	80.52	13.577		
11,500.0	7,500.0	7,558.0	7,485.0	67.4	18.7	-90.00	-3,010.0	1,466.6	1,119.5	1,039.3	80.21	13.957		
11,600.0	7,500.0	7,558.0	7,485.0	69.1	18.7	-90.00	-3,010.0	1,466.6	1,171.7	1,092.3	79.40	14.756		
11,700.0	7,500.0	7,558.0	7,485.0	70.8	18.7	-90.00	-3,010.0	1,466.6	1,229.8	1,151.4	78.37	15.692		
11,800.0	7,500.0	7,558.0	7,485.0	72.5	18.7	-90.00	-3,010.0	1,466.6	1,293.0	1,215.8	77.20	16.750		
11,900.0	7,500.0	7,558.0	7,485.0	74.2	18.7	-90.00	-3,010.0	1,466.6	1,360.7	1,284.7	75.95	17.916		
12,000.0	7,500.0	7,558.0	7,485.0	76.0	18.7	-90.00	-3,010.0	1,466.6	1,432.1	1,357.5	74.68	19.178		
12,100.0	7,500.0	7,558.0	7,485.0	77.7	18.7	-90.00	-3,010.0	1,466.6	1,506.8	1,433.4	73.42	20.524		
12,194.1	7,500.0	7,558.0	7,485.0	79.3	18.7	-90.00	-3,010.0	1,466.6	1,579.7	1,507.5	72.26	21.861		
12,200.0	7,500.0	7,558.0	7,485.0	79.4	18.7	-90.00	-3,010.0	1,466.6	1,584.3	1,512.1	72.19	21.946		
12,300.0	7,500.0	7,558.0	7,485.0	81.1	18.7	-90.00	-3,010.0	1,466.6	1,665.4	1,594.3	71.03	23.447		
12,387.3	7,500.0	7,558.0	7,485.0	82.6	18.7	-90.00	-3,010.0	1,466.6	1,739.3	1,669.2	70.11	24.809		
12,400.0	7,500.0	7,558.0	7,485.0	82.9	18.7	-90.00	-3,010.0	1,466.6	1,750.2	1,680.2	69.98	25.009		
12,500.0	7,500.0	7,558.0	7,485.0	84.6	18.7	-90.00	-3,010.0	1,466.6	1,837.2	1,768.2	69.04	26.609		
12,600.0	7,500.0	7,558.0	7,485.0	86.3	18.7	-90.00	-3,010.0	1,466.6	1,925.5	1,857.3	68.17	28.246		
12,700.0	7,500.0	7,558.0	7,485.0	88.0	18.7	-90.00	-3,010.0	1,466.6	2,014.8	1,947.5	67.35	29.914		
12,800.0	7,500.0	7,558.0	7,485.0	89.7	18.7	-90.00	-3,010.0	1,466.6	2,105.1	2,038.6	66.60	31.610		
12,900.0	7,500.0	7,558.0	7,485.0	91.5	18.7	-90.00	-3,010.0	1,466.6	2,196.3	2,130.4	65.89	33.331		
13,000.0	7,500.0	7,558.0	7,485.0	93.2	18.7	-90.00	-3,010.0	1,466.6	2,288.2	2,223.0	65.24	35.073		
13,100.0	7,500.0	7,558.0	7,485.0	94.9	18.7	-90.00	-3,010.0	1,466.6	2,380.8	2,316.1	64.64	36.833		
13,200.0	7,500.0	7,558.0	7,485.0	96.6	18.7	-90.00	-3,010.0	1,466.6	2,473.9	2,409.8	64.07	38.610		
13,300.0	7,500.0	7,558.0	7,485.0	98.4	18.7	-90.00	-3,010.0	1,466.6	2,567.5	2,504.0	63.55	40.401		
13,400.0	7,500.0	7,558.0	7,485.0	100.1	18.7	-90.00	-3,010.0	1,466.6	2,661.6	2,598.6	63.07	42.203		
13,500.0	7,500.0	7,558.0	7,485.0	101.8	18.7	-90.00	-3,010.0	1,466.6	2,756.2	2,693.6	62.62	44.017		
13,600.0	7,500.0	7,558.0	7,485.0	103.5	18.7	-90.00	-3,010.0	1,466.6	2,851.1	2,788.9	62.20	45.839		
13,700.0	7,500.0	7,558.0	7,485.0	105.3	18.7	-90.00	-3,010.0	1,466.6	2,946.3	2,884.5	61.81	47.669		
13,800.0	7,500.0	7,558.0	7,485.0	107.0	18.7	-90.00	-3,010.0	1,466.6	3,041.9	2,980.4	61.45	49.505		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	7,558.0	7,485.0	108.7	18.7	-90.00	-3,010.0	1,466.6	3,137.7	3,076.6	61.11	51.346		
14,000.0	7,500.0	7,558.0	7,485.0	110.5	18.7	-90.00	-3,010.0	1,466.6	3,233.7	3,173.0	60.79	53.192		
14,100.0	7,500.0	7,558.0	7,485.0	112.2	18.7	-90.00	-3,010.0	1,466.6	3,330.0	3,269.5	60.50	55.041		
14,200.0	7,500.0	7,558.0	7,485.0	113.9	18.7	-90.00	-3,010.0	1,466.6	3,426.6	3,366.3	60.23	56.893		
14,300.0	7,500.0	7,558.0	7,485.0	115.7	18.7	-90.00	-3,010.0	1,466.6	3,523.3	3,463.3	59.97	58.747		
14,400.0	7,500.0	7,558.0	7,485.0	117.4	18.7	-90.00	-3,010.0	1,466.6	3,620.2	3,560.4	59.74	60.602		
14,500.0	7,500.0	7,558.0	7,485.0	119.1	18.7	-90.00	-3,010.0	1,466.6	3,717.2	3,657.7	59.52	62.458		
14,600.0	7,500.0	7,558.0	7,485.0	120.9	18.7	-90.00	-3,010.0	1,466.6	3,814.4	3,755.1	59.31	64.314		
14,700.0	7,500.0	7,558.0	7,485.0	122.6	18.7	-90.00	-3,010.0	1,466.6	3,911.8	3,852.7	59.12	66.169		
14,800.0	7,500.0	7,558.0	7,485.0	124.4	18.7	-90.00	-3,010.0	1,466.6	4,009.2	3,950.3	58.94	68.024		
14,900.0	7,500.0	7,558.0	7,485.0	126.1	18.7	-90.00	-3,010.0	1,466.6	4,106.8	4,048.1	58.77	69.878		
15,000.0	7,500.0	7,558.0	7,485.0	127.8	18.7	-90.00	-3,010.0	1,466.6	4,204.6	4,145.9	58.62	71.730		
15,100.0	7,500.0	7,558.0	7,485.0	129.6	18.7	-90.00	-3,010.0	1,466.6	4,302.4	4,243.9	58.47	73.580		
15,200.0	7,500.0	7,558.0	7,485.0	131.3	18.7	-90.00	-3,010.0	1,466.6	4,400.3	4,342.0	58.34	75.429		
15,300.0	7,500.0	7,558.0	7,485.0	133.1	18.7	-90.00	-3,010.0	1,466.6	4,498.3	4,440.1	58.21	77.274		
15,400.0	7,500.0	7,558.0	7,485.0	134.8	18.7	-90.00	-3,010.0	1,466.6	4,596.4	4,538.3	58.10	79.117		
15,500.0	7,500.0	7,558.0	7,485.0	136.5	18.7	-90.00	-3,010.0	1,466.6	4,694.6	4,636.6	57.99	80.957		
15,600.0	7,500.0	7,558.0	7,485.0	138.3	18.7	-90.00	-3,010.0	1,466.6	4,792.8	4,734.9	57.89	82.794		
15,700.0	7,500.0	7,558.0	7,485.0	140.0	18.7	-90.00	-3,010.0	1,466.6	4,891.1	4,833.3	57.80	84.627		
15,805.8	7,500.0	7,558.0	7,485.0	141.9	18.7	-90.00	-3,010.0	1,466.6	4,995.2	4,937.5	57.71	86.563		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	29.0	29.0	0.0	0.0	65.64	1,870.2	4,129.9	4,533.6					
100.0	100.0	129.0	129.0	0.2	0.2	65.64	1,870.2	4,129.9	4,533.6	4,533.2	0.35	N/A		
200.0	200.0	278.3	278.3	0.3	0.5	65.63	1,870.3	4,129.3	4,533.4	4,532.6	0.79	5,741.263		
300.0	300.0	547.9	547.7	0.5	1.0	65.56	1,872.5	4,119.6	4,530.5	4,529.0	1.45	3,134.731		
400.0	400.0	815.9	814.7	0.7	1.6	65.38	1,877.6	4,097.6	4,523.8	4,521.7	2.13	2,121.080		
500.0	500.0	1,081.3	1,077.8	0.8	2.3	65.11	1,885.3	4,063.9	4,513.4	4,510.6	2.87	1,570.193		
600.0	600.0	1,342.7	1,335.1	1.0	3.2	25.35	1,895.6	4,019.2	4,498.7	4,495.0	3.69	1,220.393		
700.0	700.0	1,598.7	1,584.8	1.2	4.2	25.02	1,908.1	3,964.3	4,479.0	4,474.4	4.57	979.024		
800.0	799.9	1,732.7	1,714.6	1.4	4.9	24.88	1,915.6	3,931.7	4,455.3	4,450.2	5.16	863.136		
900.0	899.7	1,828.6	1,807.4	1.6	5.3	24.82	1,921.0	3,908.1	4,430.1	4,424.4	5.64	785.386		
1,000.0	999.4	1,924.2	1,899.9	1.8	5.8	24.77	1,926.4	3,884.6	4,403.3	4,397.2	6.12	719.052		
1,100.0	1,098.9	2,019.4	1,992.1	2.0	6.2	24.74	1,931.8	3,861.2	4,375.0	4,368.4	6.61	661.777		
1,201.3	1,199.5	2,115.5	2,085.1	2.2	6.7	24.72	1,937.2	3,837.6	4,344.9	4,337.8	7.11	611.194		
1,300.0	1,297.5	2,209.0	2,175.5	2.5	7.1	24.58	1,942.5	3,814.7	4,314.8	4,307.2	7.60	567.985		
1,400.0	1,396.8	2,303.6	2,267.1	2.7	7.6	24.44	1,947.8	3,791.4	4,284.3	4,276.2	8.09	529.301		
1,500.0	1,496.0	2,398.3	2,358.7	3.0	8.0	24.29	1,953.1	3,768.2	4,253.9	4,245.3	8.60	494.927		
1,600.0	1,595.3	2,493.0	2,450.3	3.3	8.5	24.14	1,958.5	3,744.9	4,223.5	4,214.4	9.10	464.202		
1,700.0	1,694.5	2,587.6	2,541.9	3.5	8.9	23.99	1,963.8	3,721.6	4,193.1	4,183.5	9.60	436.588		
1,800.0	1,793.8	2,682.3	2,633.6	3.8	9.4	23.83	1,969.1	3,698.4	4,162.7	4,152.6	10.11	411.647		
1,900.0	1,893.0	2,777.0	2,725.2	4.0	9.8	23.68	1,974.5	3,675.1	4,132.4	4,121.8	10.62	389.016		
2,000.0	1,992.3	2,871.7	2,816.8	4.3	10.3	23.52	1,979.8	3,651.9	4,102.1	4,091.0	11.14	368.395		
2,100.0	2,091.5	2,966.3	2,908.4	4.6	10.7	23.36	1,985.1	3,628.6	4,071.8	4,060.2	11.65	349.531		
2,200.0	2,190.8	3,061.0	3,000.0	4.8	11.2	23.20	1,990.5	3,605.3	4,041.6	4,029.4	12.17	332.213		
2,300.0	2,290.0	3,155.7	3,091.6	5.1	11.6	23.03	1,995.8	3,582.1	4,011.4	3,998.7	12.68	316.260		
2,400.0	2,389.3	3,250.3	3,183.2	5.4	12.1	22.86	2,001.1	3,558.8	3,981.2	3,968.0	13.20	301.521		
2,500.0	2,488.5	3,345.0	3,274.9	5.7	12.5	22.69	2,006.4	3,535.6	3,951.0	3,937.3	13.73	287.862		
2,600.0	2,587.8	3,439.7	3,366.5	5.9	13.0	22.52	2,011.8	3,512.3	3,920.9	3,906.7	14.25	275.172		
2,700.0	2,687.0	3,534.4	3,458.1	6.2	13.5	22.34	2,017.1	3,489.1	3,890.8	3,876.1	14.77	263.351		
2,800.0	2,786.3	3,629.0	3,549.7	6.5	13.9	22.17	2,022.4	3,465.8	3,860.8	3,845.5	15.30	252.316		
2,900.0	2,885.5	3,723.7	3,641.3	6.7	14.4	21.98	2,027.8	3,442.5	3,830.8	3,814.9	15.83	241.990		
3,000.0	2,984.8	3,818.4	3,732.9	7.0	14.8	21.80	2,033.1	3,419.3	3,800.8	3,784.4	16.36	232.308		
3,100.0	3,084.0	3,913.0	3,824.6	7.3	15.3	21.61	2,038.4	3,396.0	3,770.9	3,754.0	16.89	223.213		
3,200.0	3,183.3	4,007.7	3,916.2	7.6	15.7	21.42	2,043.8	3,372.8	3,741.0	3,723.5	17.43	214.654		
3,300.0	3,282.5	4,102.4	4,007.8	7.8	16.2	21.23	2,049.1	3,349.5	3,711.1	3,693.1	17.96	206.584		
3,400.0	3,381.8	4,197.1	4,099.4	8.1	16.7	21.04	2,054.4	3,326.2	3,681.3	3,662.8	18.50	198.965		
3,500.0	3,481.1	4,291.7	4,191.0	8.4	17.1	20.84	2,059.8	3,303.0	3,651.5	3,632.4	19.04	191.759		
3,600.0	3,580.3	4,386.4	4,282.6	8.7	17.6	20.63	2,065.1	3,279.7	3,621.7	3,602.1	19.58	184.934		
3,700.0	3,679.6	4,481.1	4,374.2	8.9	18.0	20.43	2,070.4	3,256.5	3,592.0	3,571.9	20.13	178.462		
3,800.0	3,778.8	4,575.7	4,465.9	9.2	18.5	20.22	2,075.8	3,233.2	3,562.4	3,541.7	20.67	172.316		
3,900.0	3,878.1	4,670.4	4,557.5	9.5	19.0	20.01	2,081.1	3,210.0	3,532.8	3,511.5	21.22	166.472		
4,000.0	3,977.3	4,765.1	4,649.1	9.8	19.4	19.79	2,086.4	3,186.7	3,503.2	3,481.4	21.77	160.910		
4,100.0	4,076.6	4,859.8	4,740.7	10.0	19.9	19.57	2,091.8	3,163.4	3,473.7	3,451.3	22.32	155.609		
4,200.0	4,175.8	4,954.4	4,832.3	10.3	20.3	19.35	2,097.1	3,140.2	3,444.2	3,421.3	22.88	150.551		
4,300.0	4,275.1	5,049.1	4,923.9	10.6	20.8	19.12	2,102.4	3,116.9	3,414.8	3,391.3	23.43	145.722		
4,400.0	4,374.3	5,143.8	5,015.5	10.9	21.2	18.89	2,107.8	3,093.7	3,385.4	3,361.4	23.99	141.105		
4,500.0	4,473.6	5,238.4	5,107.2	11.1	21.7	18.66	2,113.1	3,070.4	3,356.1	3,331.5	24.55	136.688		
4,600.0	4,572.8	5,333.1	5,198.8	11.4	22.2	18.42	2,118.4	3,047.1	3,326.8	3,301.7	25.12	132.458		
4,700.0	4,672.1	5,427.8	5,290.4	11.7	22.6	18.18	2,123.8	3,023.9	3,297.6	3,271.9	25.68	128.404		
4,800.0	4,771.3	5,522.5	5,382.0	12.0	23.1	17.93	2,129.1	3,000.6	3,268.4	3,242.2	26.25	124.516		
4,900.0	4,870.6	5,617.1	5,473.6	12.2	23.5	17.68	2,134.4	2,977.4	3,239.3	3,212.5	26.82	120.783		
5,000.0	4,969.8	5,711.8	5,565.2	12.5	24.0	17.42	2,139.8	2,954.1	3,210.3	3,182.9	27.39	117.196		
5,100.0	5,069.1	5,806.5	5,656.8	12.8	24.5	17.16	2,145.1	2,930.9	3,181.3	3,153.4	27.97	113.749		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2											Offset Site Error: 0.0 ft		
Survey Program: O-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,200.0	5,168.3	9,235.8	7,530.0	13.1	42.6	57.24	410.3	2,455.6	3,150.7	3,119.3	31.45	100.195	
5,300.0	5,267.6	9,226.4	7,530.0	13.3	42.5	56.96	419.7	2,455.6	3,072.6	3,040.7	31.98	96.077	
5,400.0	5,366.8	9,217.0	7,530.0	13.6	42.4	56.69	429.1	2,455.6	2,995.8	2,963.3	32.53	92.082	
5,500.0	5,466.1	9,207.5	7,530.0	13.9	42.3	56.41	438.6	2,455.6	2,920.4	2,887.3	33.11	88.214	
5,600.0	5,565.3	9,198.1	7,530.0	14.2	42.2	56.14	448.0	2,455.6	2,846.4	2,812.7	33.69	84.476	
5,700.0	5,664.6	9,188.7	7,530.0	14.4	42.1	55.86	457.4	2,455.6	2,774.0	2,739.7	34.30	80.871	
5,800.0	5,763.8	9,179.3	7,530.0	14.7	42.0	55.59	466.8	2,455.6	2,703.4	2,668.5	34.93	77.405	
5,900.0	5,863.1	9,169.8	7,530.0	15.0	41.9	55.31	476.2	2,455.6	2,634.6	2,599.1	35.56	74.082	
6,000.0	5,962.3	9,160.4	7,530.0	15.3	41.8	55.03	485.7	2,455.6	2,567.9	2,531.7	36.22	70.906	
6,100.0	6,061.6	9,151.0	7,530.0	15.5	41.7	54.76	495.1	2,455.6	2,503.3	2,466.4	36.88	67.883	
6,200.0	6,160.9	9,141.6	7,530.0	15.8	41.6	54.48	504.5	2,455.6	2,441.1	2,403.6	37.55	65.015	
6,300.0	6,260.1	9,132.1	7,530.0	16.1	41.5	54.20	513.9	2,455.6	2,381.4	2,343.2	38.22	62.309	
6,400.0	6,359.4	9,122.7	7,530.0	16.4	41.4	53.92	523.4	2,455.6	2,324.5	2,285.6	38.89	59.767	
6,500.0	6,458.6	9,113.3	7,530.0	16.6	41.3	53.65	532.8	2,455.6	2,270.5	2,230.9	39.56	57.396	
6,600.0	6,557.9	9,103.9	7,530.0	16.9	41.2	53.37	542.2	2,455.6	2,219.6	2,179.4	40.21	55.200	
6,700.0	6,657.1	9,094.5	7,530.0	17.2	41.1	53.09	551.6	2,455.6	2,172.1	2,131.3	40.84	53.180	
6,800.0	6,756.4	9,085.0	7,530.0	17.5	41.0	52.81	561.1	2,455.6	2,128.3	2,086.8	41.45	51.343	
6,900.0	6,855.6	9,075.6	7,530.0	17.7	40.9	52.53	570.5	2,455.6	2,088.2	2,046.2	42.02	49.694	
6,919.5	6,875.0	9,073.8	7,530.0	17.8	40.9	52.48	572.3	2,455.6	2,080.9	2,038.8	42.13	49.395	
6,950.0	6,905.3	9,071.7	7,530.0	17.9	40.9	28.63	574.4	2,455.6	2,069.7	2,027.4	42.28	48.947	
7,000.0	6,955.1	9,071.8	7,530.0	17.9	40.9	-31.50	574.3	2,455.6	2,052.1	2,009.6	42.54	48.245	
7,050.0	7,004.8	9,076.3	7,530.0	17.9	40.9	-62.12	569.8	2,455.6	2,035.7	1,992.9	42.79	47.575	
7,100.0	7,053.8	9,085.1	7,530.0	17.9	41.0	-74.24	561.0	2,455.6	2,020.6	1,977.5	43.05	46.938	
7,150.0	7,101.9	9,098.2	7,530.0	17.9	41.1	-80.49	547.9	2,455.6	2,006.8	1,963.5	43.31	46.337	
7,200.0	7,148.7	9,115.4	7,530.0	17.8	41.3	-84.27	530.7	2,455.6	1,994.4	1,950.9	43.58	45.764	
7,250.0	7,193.8	9,136.6	7,530.0	17.7	41.5	-86.74	509.5	2,455.6	1,983.5	1,939.6	43.86	45.221	
7,300.0	7,236.9	9,161.7	7,530.0	17.5	41.8	-88.39	484.4	2,455.6	1,973.9	1,929.8	44.16	44.702	
7,350.0	7,277.7	9,190.5	7,530.0	17.4	42.1	-89.48	455.6	2,455.6	1,965.7	1,921.3	44.47	44.201	
7,400.0	7,315.7	9,222.7	7,530.0	17.2	42.5	-90.16	423.4	2,455.6	1,958.8	1,914.0	44.82	43.706	
7,450.0	7,350.9	9,258.2	7,530.0	17.1	42.9	-90.55	387.9	2,455.6	1,953.1	1,907.9	45.20	43.211	
7,500.0	7,382.8	9,296.5	7,530.0	16.9	43.3	-90.72	349.6	2,455.6	1,948.4	1,902.8	45.62	42.711	
7,550.0	7,411.3	9,337.6	7,530.0	16.7	43.8	-90.74	308.5	2,455.6	1,944.6	1,898.5	46.09	42.191	
7,600.0	7,436.1	9,380.9	7,530.0	16.6	44.3	-90.65	265.2	2,455.6	1,941.7	1,895.1	46.62	41.650	
7,650.0	7,457.1	9,426.3	7,530.0	16.5	44.8	-90.51	219.8	2,455.7	1,939.5	1,892.3	47.21	41.081	
7,700.0	7,474.0	9,473.3	7,530.0	16.4	45.4	-90.35	172.8	2,455.7	1,937.9	1,890.0	47.87	40.481	
7,750.0	7,486.8	9,521.6	7,530.0	16.4	46.0	-90.20	124.5	2,455.7	1,936.8	1,888.2	48.60	39.850	
7,800.0	7,495.3	9,570.8	7,530.0	16.4	46.6	-90.09	75.3	2,455.7	1,936.1	1,886.6	49.40	39.190	
7,850.0	7,499.5	9,620.6	7,530.0	16.5	47.2	-90.04	25.5	2,455.7	1,935.7	1,885.5	50.27	38.507	
7,872.3	7,500.0	9,643.0	7,530.0	16.5	47.5	-90.03	3.1	2,455.7	1,935.7	1,885.0	50.68	38.196	
7,873.6	7,500.0	9,644.2	7,530.0	16.5	47.5	-90.03	1.9	2,455.7	1,935.7	1,885.0	50.70	38.179	
7,900.0	7,500.0	9,670.6	7,530.0	16.5	47.8	-90.03	-24.5	2,455.7	1,935.7	1,884.5	51.20	37.807	
8,000.0	7,500.0	9,770.6	7,530.0	16.9	49.1	-90.03	-124.5	2,455.7	1,935.7	1,882.5	53.23	36.367	
8,100.0	7,500.0	9,870.6	7,530.0	17.4	50.4	-90.03	-224.5	2,455.7	1,935.7	1,880.3	55.46	34.900	
8,200.0	7,500.0	9,970.6	7,530.0	18.0	51.8	-90.03	-324.5	2,455.7	1,935.7	1,877.9	57.89	33.440	
8,300.0	7,500.0	10,070.6	7,530.0	18.8	53.1	-90.03	-424.5	2,455.8	1,935.8	1,875.3	60.47	32.012	
8,400.0	7,500.0	10,170.6	7,530.0	19.7	54.5	-90.03	-524.5	2,455.8	1,935.8	1,872.6	63.19	30.635	
8,500.0	7,500.0	10,270.6	7,530.0	20.7	55.9	-90.03	-624.5	2,455.8	1,935.8	1,869.8	66.02	29.322	
8,600.0	7,500.0	10,370.6	7,530.0	21.9	57.4	-90.03	-724.5	2,455.8	1,935.8	1,866.9	68.94	28.079	
8,700.0	7,500.0	10,470.6	7,530.0	23.1	58.8	-90.03	-824.5	2,455.8	1,935.8	1,863.9	71.94	26.907	
8,800.0	7,500.0	10,570.6	7,530.0	24.3	60.3	-90.03	-924.5	2,455.8	1,935.8	1,860.8	75.01	25.807	
8,900.0	7,500.0	10,670.6	7,530.0	25.6	61.7	-90.03	-1,024.5	2,455.9	1,935.9	1,857.7	78.13	24.777	
9,000.0	7,500.0	10,770.6	7,530.0	27.0	63.2	-90.03	-1,124.5	2,455.9	1,935.9	1,854.6	81.30	23.812	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,100.0	7,500.0	10,870.6	7,530.0	28.4	64.7	-90.03	-1,224.5	2,455.9	1,935.9	1,851.4	84.50	22.910		
9,200.0	7,500.0	10,970.6	7,530.0	29.9	66.3	-90.03	-1,324.5	2,455.9	1,935.9	1,848.2	87.73	22.065		
9,300.0	7,500.0	11,070.6	7,530.0	31.4	67.8	-90.03	-1,424.5	2,455.9	1,935.9	1,844.9	91.00	21.274		
9,400.0	7,500.0	11,170.6	7,530.0	32.9	69.3	-90.03	-1,524.5	2,455.9	1,935.9	1,841.7	94.28	20.533		
9,500.0	7,500.0	11,270.6	7,530.0	34.4	70.9	-90.03	-1,624.5	2,456.0	1,936.0	1,838.4	97.59	19.838		
9,600.0	7,500.0	11,370.6	7,530.0	36.0	72.5	-90.03	-1,724.5	2,456.0	1,936.0	1,835.1	100.91	19.184		
9,700.0	7,500.0	11,470.6	7,530.0	37.5	74.0	-90.03	-1,824.5	2,456.0	1,936.0	1,831.7	104.25	18.570		
9,800.0	7,500.0	11,570.6	7,530.0	39.1	75.6	-90.03	-1,924.5	2,456.0	1,936.0	1,828.4	107.61	17.991		
9,900.0	7,500.0	11,670.6	7,530.0	40.7	77.2	-90.03	-2,024.5	2,456.0	1,936.0	1,825.1	110.97	17.446		
10,000.0	7,500.0	11,770.6	7,530.0	42.3	78.8	-90.03	-2,124.5	2,456.0	1,936.0	1,821.7	114.35	16.931		
10,100.0	7,500.0	11,870.6	7,530.0	43.9	80.4	-90.03	-2,224.5	2,456.1	1,936.1	1,818.3	117.73	16.444		
10,200.0	7,500.0	11,970.6	7,530.0	45.6	82.0	-90.03	-2,324.5	2,456.1	1,936.1	1,814.9	121.13	15.984		
10,300.0	7,500.0	12,070.6	7,530.0	47.2	83.6	-90.03	-2,424.5	2,456.1	1,936.1	1,811.6	124.53	15.547		
10,400.0	7,500.0	12,170.6	7,530.0	48.9	85.2	-90.03	-2,524.5	2,456.1	1,936.1	1,808.2	127.94	15.133		
10,500.0	7,500.0	12,270.6	7,530.0	50.5	86.8	-90.03	-2,624.5	2,456.1	1,936.1	1,804.8	131.35	14.740		
10,600.0	7,500.0	12,370.6	7,530.0	52.2	88.5	-90.03	-2,724.5	2,456.1	1,936.1	1,801.4	134.77	14.366		
10,700.0	7,500.0	12,470.6	7,530.0	53.8	90.1	-90.03	-2,824.5	2,456.2	1,936.2	1,798.0	138.20	14.010		
10,800.0	7,500.0	12,570.6	7,530.0	55.5	91.7	-90.03	-2,924.5	2,456.2	1,936.2	1,794.5	141.63	13.671		
10,900.0	7,500.0	12,670.6	7,530.0	57.2	93.4	-90.03	-3,024.5	2,456.2	1,936.2	1,791.1	145.06	13.347		
11,000.0	7,500.0	12,770.6	7,530.0	58.9	95.0	-90.03	-3,124.5	2,456.2	1,936.2	1,787.7	148.50	13.038		
11,100.0	7,500.0	12,870.6	7,530.0	60.6	96.7	-90.03	-3,224.5	2,456.2	1,936.2	1,784.3	151.94	12.743		
11,200.0	7,500.0	12,970.6	7,530.0	62.3	98.3	-90.03	-3,324.5	2,456.2	1,936.2	1,780.9	155.39	12.461		
11,244.1	7,500.0	13,014.8	7,530.0	63.0	99.1	-90.03	-3,368.7	2,456.2	1,936.2	1,779.3	156.91	12.340		
11,300.0	7,500.0	13,070.6	7,530.0	64.0	100.0	-90.03	-3,424.5	2,456.3	1,935.7	1,776.9	158.84	12.187		
11,400.0	7,500.0	13,170.6	7,530.0	65.7	101.7	-90.03	-3,524.5	2,456.3	1,932.0	1,769.8	162.28	11.905		
11,444.1	7,500.0	13,214.6	7,530.0	66.4	102.4	-90.03	-3,568.5	2,456.3	1,929.3	1,765.5	163.81	11.778		
11,500.0	7,500.0	13,270.3	7,530.0	67.4	103.3	-90.03	-3,624.2	2,456.3	1,925.4	1,759.7	165.73	11.618		
11,600.0	7,500.0	13,370.1	7,530.0	69.1	105.0	-90.03	-3,724.0	2,456.3	1,918.5	1,749.3	169.18	11.340		
11,700.0	7,500.0	13,469.8	7,530.0	70.8	106.6	-90.03	-3,823.8	2,456.3	1,911.5	1,738.9	172.63	11.073		
11,800.0	7,500.0	13,569.6	7,530.0	72.5	108.3	-90.03	-3,923.5	2,456.3	1,904.5	1,728.5	176.08	10.816		
11,900.0	7,500.0	13,669.4	7,530.0	74.2	110.0	-90.03	-4,023.3	2,456.4	1,897.6	1,718.0	179.54	10.569		
12,000.0	7,500.0	13,769.1	7,530.0	76.0	111.7	-90.03	-4,123.0	2,456.4	1,890.6	1,707.6	182.99	10.332		
12,100.0	7,500.0	13,868.9	7,530.0	77.7	113.3	-90.03	-4,222.8	2,456.4	1,883.7	1,697.2	186.45	10.103		
12,194.1	7,500.0	13,962.8	7,530.0	79.3	114.9	-90.03	-4,316.7	2,456.4	1,877.1	1,687.4	189.71	9.895		
12,200.0	7,500.0	13,968.6	7,530.0	79.4	115.0	-90.03	-4,322.5	2,456.4	1,876.7	1,686.8	189.91	9.882		
12,300.0	7,500.0	14,068.5	7,530.0	81.1	116.7	-90.03	-4,422.4	2,456.4	1,871.7	1,678.3	193.38	9.679		
12,387.3	7,500.0	14,155.8	7,530.0	82.6	118.2	-90.03	-4,509.7	2,456.4	1,870.2	1,673.8	196.41	9.522		
12,400.0	7,500.0	14,168.5	7,530.0	82.9	118.4	-90.03	-4,522.4	2,456.4	1,870.1	1,673.3	196.85	9.500		
12,500.0	7,500.0	14,268.5	7,530.0	84.6	120.1	-90.03	-4,622.4	2,456.5	1,869.9	1,669.6	200.32	9.334		
12,600.0	7,500.0	14,368.5	7,530.0	86.3	121.8	-90.03	-4,722.4	2,456.5	1,869.7	1,665.9	203.80	9.174		
12,700.0	7,500.0	14,468.5	7,530.0	88.0	123.4	-90.03	-4,822.4	2,456.5	1,869.5	1,662.2	207.27	9.019		
12,800.0	7,500.0	14,568.5	7,530.0	89.7	125.1	-90.03	-4,922.4	2,456.5	1,869.3	1,658.5	210.75	8.870		
12,900.0	7,500.0	14,668.5	7,530.0	91.5	126.8	-90.03	-5,022.4	2,456.5	1,869.0	1,654.8	214.23	8.725		
13,000.0	7,500.0	14,768.5	7,530.0	93.2	128.5	-90.03	-5,122.4	2,456.5	1,868.8	1,651.1	217.71	8.584		
13,100.0	7,500.0	14,868.5	7,530.0	94.9	130.2	-90.03	-5,222.4	2,456.6	1,868.6	1,647.4	221.19	8.448		
13,200.0	7,500.0	14,968.5	7,530.0	96.6	131.9	-90.03	-5,322.4	2,456.6	1,868.4	1,643.7	224.67	8.316		
13,300.0	7,500.0	15,068.5	7,530.0	98.4	133.6	-90.03	-5,422.4	2,456.6	1,868.2	1,640.0	228.15	8.188		
13,400.0	7,500.0	15,168.5	7,530.0	100.1	135.3	-90.03	-5,522.4	2,456.6	1,867.9	1,636.3	231.63	8.064		
13,500.0	7,500.0	15,268.5	7,530.0	101.8	137.0	-90.03	-5,622.4	2,456.6	1,867.7	1,632.6	235.11	7.944		
13,600.0	7,500.0	15,368.5	7,530.0	103.5	138.7	-90.03	-5,722.4	2,456.6	1,867.5	1,628.9	238.60	7.827		
13,700.0	7,500.0	15,468.5	7,530.0	105.3	140.4	-90.03	-5,822.4	2,456.7	1,867.3	1,625.2	242.08	7.713		
13,800.0	7,500.0	15,568.5	7,530.0	107.0	142.2	-90.03	-5,922.4	2,456.7	1,867.1	1,621.5	245.57	7.603		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	15,668.5	7,530.0	108.7	143.9	-90.03	-6,022.4	2,456.7	1,866.8	1,617.8	249.05	7.496		
14,000.0	7,500.0	15,768.5	7,530.0	110.5	145.6	-90.03	-6,122.4	2,456.7	1,866.6	1,614.1	252.54	7.391		
14,100.0	7,500.0	15,868.5	7,530.0	112.2	147.3	-90.03	-6,222.4	2,456.7	1,866.4	1,610.4	256.03	7.290		
14,200.0	7,500.0	15,968.5	7,530.0	113.9	149.0	-90.03	-6,322.4	2,456.7	1,866.2	1,606.7	259.51	7.191		
14,300.0	7,500.0	16,068.5	7,530.0	115.7	150.7	-90.03	-6,422.4	2,456.8	1,866.0	1,603.0	263.00	7.095		
14,400.0	7,500.0	16,168.5	7,530.0	117.4	152.4	-90.03	-6,522.4	2,456.8	1,865.7	1,599.2	266.49	7.001		
14,500.0	7,500.0	16,268.5	7,530.0	119.1	154.1	-90.03	-6,622.4	2,456.8	1,865.5	1,595.5	269.98	6.910		
14,600.0	7,500.0	16,368.5	7,530.0	120.9	155.8	-90.03	-6,722.4	2,456.8	1,865.3	1,591.8	273.47	6.821		
14,700.0	7,500.0	16,468.5	7,530.0	122.6	157.6	-90.03	-6,822.4	2,456.8	1,865.1	1,588.1	276.96	6.734		
14,800.0	7,500.0	16,568.5	7,530.0	124.4	159.3	-90.03	-6,922.4	2,456.8	1,864.9	1,584.4	280.45	6.649		
14,900.0	7,500.0	16,668.5	7,530.0	126.1	161.0	-90.03	-7,022.4	2,456.9	1,864.6	1,580.7	283.94	6.567		
15,000.0	7,500.0	16,768.5	7,530.0	127.8	162.7	-90.03	-7,122.4	2,456.9	1,864.4	1,577.0	287.43	6.486		
15,100.0	7,500.0	16,868.5	7,530.0	129.6	164.4	-90.03	-7,222.4	2,456.9	1,864.2	1,573.3	290.93	6.408		
15,200.0	7,500.0	16,968.5	7,530.0	131.3	166.2	-90.03	-7,322.4	2,456.9	1,864.0	1,569.5	294.42	6.331		
15,300.0	7,500.0	17,068.5	7,530.0	133.1	167.9	-90.03	-7,422.4	2,456.9	1,863.7	1,565.8	297.91	6.256		
15,400.0	7,500.0	17,168.5	7,530.0	134.8	169.6	-90.03	-7,522.4	2,456.9	1,863.5	1,562.1	301.41	6.183		
15,500.0	7,500.0	17,268.5	7,530.0	136.5	171.3	-90.03	-7,622.4	2,457.0	1,863.3	1,558.4	304.90	6.111		
15,600.0	7,500.0	17,368.5	7,530.0	138.3	173.0	-90.03	-7,722.4	2,457.0	1,863.1	1,554.7	308.39	6.041		
15,700.0	7,500.0	17,468.5	7,530.0	140.0	174.8	-90.03	-7,822.4	2,457.0	1,862.9	1,551.0	311.89	5.973		
15,805.8	7,500.0	17,574.2	7,530.0	141.9	176.6	-90.03	-7,928.2	2,457.0	1,862.6	1,547.0	315.58	5.902 CC, ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error: 0.0 ft	
Survey Program: 811-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	27.2	27.2	0.0	0.0	173.06	-4,267.5	519.8	4,299.0					
100.0	100.0	140.4	140.4	0.2	0.2	173.06	-4,267.3	519.7	4,298.8	4,298.4	0.39	N/A		
200.0	200.0	253.7	253.7	0.3	0.4	173.06	-4,266.7	519.5	4,298.3	4,297.5	0.76	5,644.052		
300.0	300.0	366.9	366.9	0.5	0.6	173.06	-4,265.7	519.2	4,297.4	4,296.3	1.13	3,801.978		
400.0	400.0	480.1	480.1	0.7	0.8	173.07	-4,264.5	518.7	4,296.3	4,294.8	1.50	2,866.044		
500.0	500.0	593.3	593.3	0.8	1.0	173.07	-4,262.9	518.1	4,294.8	4,293.0	1.87	2,299.540		
600.0	600.0	706.5	706.5	1.0	1.2	133.62	-4,261.0	517.4	4,293.7	4,291.4	2.24	1,919.780		
700.0	700.0	983.0	982.7	1.2	1.8	133.76	-4,252.4	512.1	4,293.4	4,290.5	2.90	1,483.005		
800.0	799.9	1,488.3	1,483.2	1.4	3.1	134.54	-4,202.3	467.6	4,284.8	4,280.7	4.08	1,050.597		
900.0	899.7	1,605.4	1,598.2	1.6	3.5	134.87	-4,185.5	452.8	4,273.3	4,268.7	4.54	941.979		
1,000.0	999.4	1,643.5	1,635.6	1.8	3.6	135.02	-4,180.3	447.9	4,263.7	4,258.8	4.82	884.176		
1,100.0	1,098.9	1,842.7	1,831.5	2.0	4.3	135.55	-4,153.1	424.2	4,256.3	4,250.8	5.48	776.621		
1,201.3	1,199.5	1,924.0	1,911.3	2.2	4.6	135.81	-4,140.8	414.3	4,247.9	4,242.0	5.89	720.634		
1,300.0	1,297.5	1,997.3	1,983.2	2.5	4.9	136.01	-4,130.1	405.1	4,240.8	4,234.5	6.29	674.317		
1,400.0	1,396.8	2,116.0	2,099.8	2.7	5.3	136.32	-4,112.7	390.9	4,233.8	4,227.0	6.79	623.290		
1,500.0	1,496.0	2,203.8	2,185.9	3.0	5.6	136.55	-4,099.6	380.2	4,226.7	4,219.4	7.24	583.994		
1,600.0	1,595.3	2,255.4	2,236.5	3.3	5.8	136.69	-4,092.2	373.7	4,220.2	4,212.6	7.60	555.557		
1,700.0	1,694.5	2,354.1	2,333.6	3.5	6.1	136.95	-4,079.0	361.9	4,214.7	4,206.7	8.06	522.692		
1,800.0	1,793.8	2,496.0	2,473.2	3.8	6.7	137.30	-4,058.3	346.1	4,208.0	4,199.4	8.63	487.597		
1,900.0	1,893.0	2,560.0	2,536.1	4.0	6.9	137.46	-4,048.9	338.9	4,201.7	4,192.6	9.02	465.992		
2,000.0	1,992.3	2,719.0	2,692.2	4.3	7.5	137.88	-4,025.8	320.2	4,195.4	4,185.7	9.64	435.115		
2,100.0	2,091.5	2,782.0	2,754.1	4.6	7.7	138.05	-4,016.5	312.7	4,188.8	4,178.8	10.03	417.480		
2,200.0	2,190.8	2,858.4	2,829.3	4.8	8.0	138.24	-4,005.8	304.0	4,183.2	4,172.7	10.46	399.959		
2,300.0	2,290.0	2,973.0	2,941.9	5.1	8.4	138.54	-3,989.3	290.6	4,177.2	4,166.2	10.98	380.504		
2,400.0	2,389.3	3,067.7	3,034.9	5.4	8.7	138.80	-3,975.6	279.5	4,171.3	4,159.8	11.45	364.200		
2,500.0	2,488.5	3,163.4	3,129.0	5.7	9.1	139.05	-3,962.0	268.3	4,165.7	4,153.8	11.93	349.176		
2,600.0	2,587.8	3,265.2	3,229.0	5.9	9.4	139.32	-3,947.3	256.4	4,160.0	4,147.6	12.42	334.838		
2,700.0	2,687.0	3,337.5	3,300.1	6.2	9.7	139.51	-3,937.1	248.0	4,154.7	4,141.8	12.85	323.428		
2,800.0	2,786.3	3,450.7	3,411.5	6.5	10.1	139.81	-3,921.7	235.0	4,150.0	4,136.7	13.37	310.406		
2,900.0	2,885.5	3,552.9	3,511.8	6.7	10.5	140.08	-3,906.9	222.9	4,144.6	4,130.7	13.87	298.862		
3,000.0	2,984.8	3,646.5	3,603.9	7.0	10.8	140.33	-3,893.7	212.2	4,139.5	4,125.2	14.34	288.579		
3,100.0	3,084.0	3,741.1	3,696.9	7.3	11.2	140.58	-3,880.3	201.4	4,134.6	4,119.7	14.82	278.962		
3,200.0	3,183.3	3,855.2	3,809.2	7.6	11.6	140.88	-3,864.1	188.3	4,129.6	4,114.3	15.36	268.936		
3,300.0	3,282.5	3,976.8	3,928.6	7.8	12.0	141.21	-3,846.1	174.3	4,124.1	4,108.2	15.90	259.426		
3,400.0	3,381.8	4,054.0	4,004.4	8.1	12.3	141.41	-3,834.6	166.0	4,118.8	4,102.5	16.33	252.208		
3,500.0	3,481.1	4,149.0	4,097.9	8.4	12.6	141.65	-3,820.8	155.9	4,113.8	4,097.0	16.81	244.795		
3,600.0	3,580.3	4,231.0	4,178.5	8.7	13.0	141.87	-3,809.2	146.7	4,109.2	4,091.9	17.27	237.987		
3,700.0	3,679.6	4,297.9	4,244.3	8.9	13.2	142.05	-3,800.0	138.6	4,105.2	4,087.5	17.69	232.120		
3,800.0	3,778.8	4,385.3	4,330.4	9.2	13.5	142.29	-3,788.6	128.6	4,101.9	4,083.8	18.15	225.991		
3,900.0	3,878.1	4,471.9	4,415.7	9.5	13.8	142.51	-3,777.3	119.1	4,098.7	4,080.1	18.61	220.242		
4,000.0	3,977.3	4,548.5	4,491.3	9.8	14.0	142.71	-3,767.8	110.9	4,096.3	4,077.2	19.05	215.077		
4,100.0	4,076.6	4,666.4	4,607.5	10.0	14.5	143.02	-3,752.6	97.9	4,093.3	4,073.8	19.59	208.971		
4,200.0	4,175.8	4,755.0	4,694.9	10.3	14.7	143.25	-3,741.6	88.4	4,091.0	4,070.9	20.05	204.070		
4,300.0	4,275.1	4,840.4	4,779.2	10.6	15.0	143.46	-3,730.9	79.8	4,088.7	4,068.2	20.49	199.514		
4,400.0	4,374.3	4,906.6	4,844.6	10.9	15.2	143.62	-3,723.2	73.7	4,087.2	4,066.3	20.89	195.666		
4,500.0	4,473.6	5,037.0	4,973.7	11.1	15.6	143.92	-3,708.2	62.5	4,086.0	4,064.6	21.42	190.800		
4,600.0	4,572.8	5,100.0	5,036.1	11.4	15.8	144.06	-3,701.1	57.4	4,084.9	4,063.1	21.79	187.424		
4,659.7	4,632.1	5,124.3	5,060.1	11.6	15.9	144.12	-3,698.6	55.5	4,084.7	4,062.7	22.00	185.703		
4,700.0	4,672.1	5,153.9	5,089.5	11.7	16.0	144.18	-3,695.5	52.9	4,084.8	4,062.6	22.16	184.320		
4,800.0	4,771.3	5,288.3	5,222.5	12.0	16.4	144.50	-3,681.1	40.8	4,084.4	4,061.7	22.71	179.851		
4,872.6	4,843.4	5,340.2	5,274.0	12.2	16.5	144.62	-3,675.5	36.1	4,084.2	4,061.2	23.00	177.543		
4,900.0	4,870.6	5,359.5	5,293.0	12.2	16.6	144.67	-3,673.5	34.4	4,084.3	4,061.2	23.11	176.700		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error: 0.0 ft			
Survey Program: 811-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
5,000.0	4,969.8	5,461.3	5,394.0	12.5	16.9	144.90	-3,663.1	25.6	4,084.6	4,061.0	23.58	173.208				
5,100.0	5,069.1	5,531.8	5,463.9	12.8	17.1	145.06	-3,655.9	19.7	4,085.1	4,061.1	23.98	170.380				
5,200.0	5,168.3	5,640.9	5,572.1	13.1	17.4	145.30	-3,645.2	11.1	4,085.9	4,061.5	24.45	167.113				
5,300.0	5,267.6	5,706.0	5,636.7	13.3	17.6	145.44	-3,638.8	6.2	4,086.9	4,062.1	24.82	164.636				
5,400.0	5,366.8	5,801.0	5,731.0	13.6	17.8	145.63	-3,630.3	-0.5	4,088.6	4,063.3	25.25	161.904				
5,500.0	5,466.1	5,841.3	5,771.1	13.9	17.9	145.71	-3,627.1	-3.1	4,091.2	4,065.6	25.56	160.033				
5,600.0	5,565.3	5,897.0	5,826.6	14.2	18.0	145.82	-3,623.3	-6.7	4,095.1	4,069.1	25.90	158.090				
5,700.0	5,664.6	5,960.0	5,889.4	14.4	18.2	145.93	-3,619.5	-10.1	4,099.8	4,073.5	26.24	156.224				
5,800.0	5,763.8	6,024.0	5,953.2	14.7	18.3	146.04	-3,616.2	-12.9	4,105.3	4,078.7	26.57	154.490				
5,900.0	5,863.1	6,099.9	6,029.1	15.0	18.4	146.14	-3,613.1	-14.9	4,111.7	4,084.8	26.89	152.879				
6,000.0	5,962.3	6,159.5	6,088.6	15.3	18.5	146.21	-3,611.2	-15.5	4,118.8	4,091.6	27.19	151.487				
6,100.0	6,061.6	6,215.0	6,144.1	15.5	18.5	146.27	-3,610.1	-16.0	4,127.1	4,099.6	27.47	150.215				
6,200.0	6,160.9	6,326.5	6,255.6	15.8	18.7	146.39	-3,608.5	-17.2	4,135.9	4,108.1	27.85	148.526				
6,300.0	6,260.1	6,406.0	6,335.1	16.1	18.8	146.47	-3,607.2	-17.3	4,144.5	4,116.4	28.15	147.206				
6,400.0	6,359.4	6,470.0	6,399.1	16.4	18.8	146.52	-3,606.5	-16.5	4,153.8	4,125.3	28.43	146.112				
6,500.0	6,458.6	6,538.5	6,467.5	16.6	18.9	146.58	-3,606.4	-16.0	4,163.8	4,135.0	28.73	144.941				
6,600.0	6,557.9	6,640.8	6,569.9	16.9	19.0	146.68	-3,607.0	-16.6	4,174.6	4,145.5	29.08	143.576				
6,700.0	6,657.1	6,757.1	6,686.2	17.2	19.1	146.79	-3,606.9	-16.8	4,184.8	4,155.3	29.44	142.136				
6,800.0	6,756.4	6,887.4	6,816.5	17.5	19.3	146.91	-3,606.3	-16.6	4,194.6	4,164.7	29.83	140.623				
6,900.0	6,855.6	6,984.3	6,913.4	17.7	19.4	147.00	-3,605.5	-16.3	4,204.0	4,173.8	30.16	139.384				
6,919.5	6,875.0	7,003.2	6,932.2	17.8	19.4	147.01	-3,605.4	-16.3	4,205.8	4,175.6	30.23	139.146				
6,950.0	6,905.3	7,027.0	6,956.0	17.9	19.4	124.43	-3,605.2	-16.2	4,207.9	4,177.6	30.32	138.781				
7,000.0	6,955.1	7,074.2	7,003.3	17.9	19.5	66.21	-3,604.9	-15.9	4,207.9	4,177.4	30.49	137.995				
7,050.0	7,004.8	7,121.0	7,050.0	17.9	19.5	37.30	-3,604.7	-15.7	4,203.7	4,173.0	30.67	137.062				
7,100.0	7,053.8	7,180.6	7,109.7	17.9	19.6	26.69	-3,604.4	-15.5	4,195.1	4,164.3	30.87	135.892				
7,150.0	7,101.9	7,235.8	7,164.8	17.9	19.7	21.75	-3,603.9	-15.2	4,182.2	4,151.1	31.07	134.603				
7,200.0	7,148.7	7,278.1	7,207.1	17.8	19.7	19.07	-3,603.6	-15.0	4,165.1	4,133.9	31.26	133.261				
7,250.0	7,193.8	7,318.8	7,247.8	17.7	19.8	17.55	-3,603.3	-14.9	4,144.1	4,112.7	31.44	131.801				
7,300.0	7,236.9	7,342.0	7,271.0	17.5	19.8	16.70	-3,603.1	-14.8	4,119.4	4,087.8	31.61	130.333				
7,350.0	7,277.7	7,392.2	7,321.2	17.4	19.9	16.41	-3,602.9	-14.7	4,091.0	4,059.2	31.82	128.581				
7,400.0	7,315.7	7,425.1	7,354.1	17.2	19.9	16.48	-3,602.7	-14.6	4,059.3	4,027.3	32.00	126.837				
7,450.0	7,350.9	7,455.5	7,384.6	17.1	19.9	16.94	-3,602.7	-14.5	4,024.4	3,992.2	32.19	125.017				
7,500.0	7,382.8	7,483.2	7,412.3	16.9	20.0	17.81	-3,602.6	-14.4	3,986.6	3,954.2	32.38	123.133				
7,550.0	7,411.3	7,508.0	7,437.0	16.7	20.0	19.18	-3,602.6	-14.4	3,946.2	3,913.7	32.56	121.195				
7,600.0	7,436.1	7,529.6	7,458.6	16.6	20.0	21.24	-3,602.6	-14.3	3,903.5	3,870.8	32.74	119.217				
7,650.0	7,457.1	7,547.9	7,477.0	16.5	20.0	24.31	-3,602.6	-14.3	3,858.8	3,825.9	32.92	117.210				
7,700.0	7,474.0	7,562.8	7,491.8	16.4	20.0	29.03	-3,602.7	-14.2	3,812.5	3,779.4	33.10	115.188				
7,750.0	7,486.8	7,574.1	7,503.1	16.4	20.0	36.70	-3,602.7	-14.2	3,764.8	3,731.5	33.27	113.161				
7,800.0	7,495.3	7,581.7	7,510.7	16.4	20.1	50.10	-3,602.7	-14.2	3,716.2	3,682.7	33.44	111.143				
7,850.0	7,499.5	7,585.5	7,514.5	16.5	20.1	73.89	-3,602.7	-14.2	3,667.0	3,633.4	33.60	109.146				
7,873.6	7,500.0	7,586.0	7,515.0	16.5	20.1	89.03	-3,602.7	-14.2	3,643.7	3,610.0	33.67	108.214				
7,900.0	7,500.0	7,586.1	7,515.1	16.5	20.1	89.04	-3,602.7	-14.2	3,617.5	3,583.8	33.75	107.174				
8,000.0	7,500.0	7,586.3	7,515.3	16.9	20.1	89.07	-3,602.7	-14.2	3,518.6	3,484.6	34.07	103.268				
8,100.0	7,500.0	7,586.6	7,515.6	17.4	20.1	89.10	-3,602.7	-14.2	3,419.8	3,385.4	34.40	99.408				
8,200.0	7,500.0	7,586.8	7,515.8	18.0	20.1	89.12	-3,602.7	-14.2	3,321.1	3,286.4	34.74	95.594				
8,300.0	7,500.0	7,587.1	7,516.1	18.8	20.1	89.15	-3,602.7	-14.2	3,222.4	3,187.3	35.09	91.823				
8,400.0	7,500.0	7,587.3	7,516.4	19.7	20.1	89.18	-3,602.7	-14.2	3,123.9	3,088.4	35.46	88.096				
8,500.0	7,500.0	7,587.6	7,516.6	20.7	20.1	89.21	-3,602.7	-14.2	3,025.4	2,989.6	35.84	84.411				
8,600.0	7,500.0	7,587.9	7,516.9	21.9	20.1	89.24	-3,602.7	-14.2	2,927.0	2,890.8	36.24	80.768				
8,700.0	7,500.0	7,588.1	7,517.2	23.1	20.1	89.26	-3,602.7	-14.2	2,828.8	2,792.1	36.66	77.166				
8,800.0	7,500.0	7,588.4	7,517.4	24.3	20.1	89.29	-3,602.7	-14.2	2,730.6	2,693.5	37.10	73.605				
8,900.0	7,500.0	7,588.7	7,517.7	25.6	20.1	89.32	-3,602.7	-14.2	2,632.6	2,595.1	37.56	70.085				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error: 0.0 ft	
Survey Program: 811-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,500.0	7,588.9	7,518.0	27.0	20.1	89.35	-3,602.7	-14.2	2,534.8	2,496.7	38.06	66.605		
9,100.0	7,500.0	7,589.2	7,518.2	28.4	20.1	89.38	-3,602.7	-14.2	2,437.1	2,398.5	38.58	63.166		
9,200.0	7,500.0	7,589.5	7,518.5	29.9	20.1	89.41	-3,602.7	-14.2	2,339.7	2,300.5	39.15	59.768		
9,300.0	7,500.0	7,589.8	7,518.8	31.4	20.1	89.44	-3,602.7	-14.2	2,242.4	2,202.7	39.75	56.413		
9,400.0	7,500.0	7,590.0	7,519.1	32.9	20.1	89.47	-3,602.7	-14.2	2,145.4	2,105.0	40.40	53.101		
9,500.0	7,500.0	7,590.3	7,519.3	34.4	20.1	89.50	-3,602.7	-14.2	2,048.7	2,007.6	41.11	49.833		
9,600.0	7,500.0	7,590.6	7,519.6	36.0	20.1	89.53	-3,602.7	-14.2	1,952.4	1,910.5	41.88	46.613		
9,700.0	7,500.0	7,590.9	7,519.9	37.5	20.1	89.56	-3,602.7	-14.2	1,856.4	1,813.6	42.73	43.442		
9,800.0	7,500.0	7,591.2	7,520.2	39.1	20.1	89.59	-3,602.7	-14.2	1,760.8	1,717.2	43.67	40.325		
9,900.0	7,500.0	7,591.5	7,520.5	40.7	20.1	89.62	-3,602.7	-14.2	1,665.8	1,621.1	44.70	37.264		
10,000.0	7,500.0	7,591.8	7,520.8	42.3	20.1	89.65	-3,602.7	-14.2	1,571.4	1,525.6	45.86	34.266		
10,100.0	7,500.0	7,592.0	7,521.1	43.9	20.1	89.68	-3,602.7	-14.2	1,477.8	1,430.6	47.16	31.338		
10,200.0	7,500.0	7,592.3	7,521.4	45.6	20.1	89.72	-3,602.7	-14.2	1,385.0	1,336.4	48.62	28.486		
10,300.0	7,500.0	7,592.6	7,521.7	47.2	20.1	89.75	-3,602.7	-14.2	1,293.3	1,243.0	50.28	25.722		
10,400.0	7,500.0	7,592.9	7,522.0	48.9	20.1	89.78	-3,602.7	-14.2	1,203.0	1,150.8	52.18	23.056		
10,500.0	7,500.0	7,593.2	7,522.3	50.5	20.1	89.81	-3,602.7	-14.2	1,114.3	1,059.9	54.35	20.503		
10,600.0	7,500.0	7,593.5	7,522.6	52.2	20.1	89.85	-3,602.7	-14.2	1,027.6	970.8	56.84	18.079		
10,700.0	7,500.0	7,593.9	7,522.9	53.8	20.1	89.88	-3,602.7	-14.2	943.6	883.9	59.70	15.805		
10,800.0	7,500.0	7,594.2	7,523.2	55.5	20.1	89.91	-3,602.7	-14.2	863.0	800.1	62.98	13.703		
10,900.0	7,500.0	7,594.5	7,523.5	57.2	20.1	89.94	-3,602.7	-14.2	786.9	720.2	66.68	11.801		
11,000.0	7,500.0	7,594.8	7,523.8	58.9	20.1	89.98	-3,602.7	-14.2	716.7	646.0	70.76	10.128		
11,100.0	7,500.0	7,595.1	7,524.1	60.6	20.1	90.01	-3,602.7	-14.2	654.3	579.2	75.05	8.718		
11,200.0	7,500.0	7,595.4	7,524.4	62.3	20.1	90.05	-3,602.7	-14.1	602.1	522.9	79.16	7.606		
11,244.1	7,500.0	7,595.6	7,524.6	63.0	20.1	90.06	-3,602.7	-14.1	583.1	502.3	80.77	7.218		
11,300.0	7,500.0	7,595.7	7,524.8	64.0	20.1	90.08	-3,602.7	-14.1	563.5	481.0	82.49	6.831		
11,400.0	7,500.0	7,596.1	7,525.1	65.7	20.1	90.11	-3,602.7	-14.1	544.0	459.8	84.22	6.460		
11,440.8	7,500.0	7,596.2	7,525.2	66.4	20.1	90.13	-3,602.7	-14.1	542.2	457.9	84.30	6.431 CC, ES, SF		
11,444.1	7,500.0	7,596.2	7,525.2	66.4	20.1	90.13	-3,602.7	-14.1	542.2	457.9	84.30	6.432		
11,500.0	7,500.0	7,596.4	7,525.4	67.4	20.1	90.15	-3,602.7	-14.1	545.5	461.7	83.77	6.512		
11,600.0	7,500.0	7,596.8	7,525.8	69.1	20.1	90.19	-3,602.7	-14.1	565.2	484.0	81.27	6.955		
11,700.0	7,500.0	7,597.1	7,526.1	70.8	20.1	90.22	-3,602.7	-14.1	601.2	523.8	77.43	7.764		
11,800.0	7,500.0	7,597.4	7,526.5	72.5	20.1	90.26	-3,602.7	-14.1	650.7	577.6	73.06	8.906		
11,900.0	7,500.0	7,597.8	7,526.8	74.2	20.1	90.30	-3,602.7	-14.1	710.9	642.1	68.76	10.339		
12,000.0	7,500.0	7,598.2	7,527.2	76.0	20.1	90.33	-3,602.7	-14.1	779.3	714.5	64.85	12.017		
12,100.0	7,500.0	7,598.5	7,527.5	77.7	20.1	90.37	-3,602.7	-14.1	854.0	792.5	61.44	13.899		
12,194.1	7,500.0	7,598.9	7,527.9	79.3	20.1	90.41	-3,602.8	-14.1	928.6	869.9	58.69	15.822		
12,200.0	7,500.0	7,598.9	7,527.9	79.4	20.1	90.41	-3,602.8	-14.1	933.4	874.9	58.53	15.946		
12,300.0	7,500.0	7,599.2	7,528.3	81.1	20.1	90.43	-3,602.8	-14.1	1,015.4	959.4	56.03	18.122		
12,387.3	7,500.0	7,599.5	7,528.6	82.6	20.1	90.44	-3,602.8	-14.1	1,088.0	1,033.9	54.07	20.122		
12,400.0	7,500.0	7,599.6	7,528.6	82.9	20.1	90.44	-3,602.8	-14.1	1,098.6	1,044.8	53.80	20.420		
12,500.0	7,500.0	7,599.9	7,529.0	84.6	20.1	90.47	-3,602.8	-14.1	1,183.7	1,131.8	51.86	22.826		
12,600.0	7,500.0	7,600.3	7,529.3	86.3	20.1	90.51	-3,602.8	-14.1	1,271.0	1,220.8	50.22	25.311		
12,700.0	7,500.0	7,600.6	7,529.7	88.0	20.1	90.54	-3,602.8	-14.1	1,360.0	1,311.2	48.83	27.855		
12,800.0	7,500.0	7,601.0	7,530.0	89.7	20.1	90.58	-3,602.8	-14.1	1,450.5	1,402.9	47.65	30.441		
12,900.0	7,500.0	7,601.4	7,530.4	91.5	20.1	90.61	-3,602.8	-14.1	1,542.2	1,495.5	46.65	33.057		
13,000.0	7,500.0	7,601.7	7,530.8	93.2	20.1	90.65	-3,602.8	-14.1	1,634.8	1,589.0	45.80	35.691		
13,100.0	7,500.0	7,602.1	7,531.1	94.9	20.1	90.68	-3,602.8	-14.1	1,728.2	1,683.1	45.08	38.334		
13,200.0	7,500.0	7,602.5	7,531.5	96.6	20.1	90.72	-3,602.8	-14.1	1,822.4	1,777.9	44.47	40.978		
13,300.0	7,500.0	7,602.9	7,531.9	98.4	20.1	90.75	-3,602.8	-14.1	1,917.1	1,873.2	43.95	43.618		
13,400.0	7,500.0	7,603.2	7,532.3	100.1	20.1	90.79	-3,602.8	-14.1	2,012.4	1,968.9	43.51	46.250		
13,500.0	7,500.0	7,603.6	7,532.6	101.8	20.1	90.83	-3,602.8	-14.1	2,108.1	2,064.9	43.14	48.870		
13,600.0	7,500.0	7,604.0	7,533.0	103.5	20.1	90.86	-3,602.8	-14.1	2,204.1	2,161.3	42.82	51.474		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error: 0.0 ft	
Survey Program: 811-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,700.0	7,500.0	7,604.4	7,533.4	105.3	20.1	90.90	-3,602.8	-14.1	2,300.5	2,258.0	42.55	54.062		
13,800.0	7,500.0	7,604.8	7,533.8	107.0	20.1	90.94	-3,602.8	-14.1	2,397.2	2,354.9	42.33	56.631		
13,900.0	7,500.0	7,605.2	7,534.2	108.7	20.1	90.97	-3,602.8	-14.1	2,494.2	2,452.0	42.15	59.181		
14,000.0	7,500.0	7,605.6	7,534.6	110.5	20.1	91.01	-3,602.8	-14.1	2,591.4	2,549.4	41.99	61.710		
14,100.0	7,500.0	7,606.0	7,535.0	112.2	20.1	91.05	-3,602.8	-14.1	2,688.8	2,646.9	41.87	64.219		
14,200.0	7,500.0	7,606.4	7,535.4	113.9	20.1	91.09	-3,602.8	-14.1	2,786.4	2,744.6	41.77	66.706		
14,300.0	7,500.0	7,606.8	7,535.8	115.7	20.1	91.13	-3,602.8	-14.1	2,884.1	2,842.4	41.69	69.173		
14,400.0	7,500.0	7,607.2	7,536.2	117.4	20.1	91.17	-3,602.8	-14.1	2,982.0	2,940.4	41.64	71.618		
14,500.0	7,500.0	7,607.6	7,536.6	119.1	20.1	91.21	-3,602.8	-14.1	3,080.0	3,038.4	41.60	74.043		
14,600.0	7,500.0	7,608.0	7,537.0	120.9	20.1	91.25	-3,602.8	-14.1	3,178.2	3,136.6	41.57	76.447		
14,700.0	7,500.0	7,608.4	7,537.5	122.6	20.1	91.29	-3,602.8	-14.1	3,276.5	3,234.9	41.56	78.830		
14,800.0	7,500.0	7,608.9	7,537.9	124.4	20.1	91.33	-3,602.8	-14.1	3,374.8	3,333.3	41.56	81.194		
14,900.0	7,500.0	7,609.3	7,538.3	126.1	20.1	91.37	-3,602.8	-14.1	3,473.3	3,431.7	41.58	83.537		
15,000.0	7,500.0	7,609.7	7,538.7	127.8	20.1	91.41	-3,602.8	-14.1	3,571.8	3,530.2	41.60	85.862		
15,100.0	7,500.0	7,610.2	7,539.2	129.6	20.1	91.45	-3,602.8	-14.1	3,670.5	3,628.8	41.63	88.167		
15,200.0	7,500.0	7,610.6	7,539.6	131.3	20.1	91.50	-3,602.8	-14.1	3,769.1	3,727.5	41.67	90.453		
15,300.0	7,500.0	7,611.0	7,540.1	133.1	20.1	91.54	-3,602.8	-14.1	3,867.9	3,826.2	41.72	92.722		
15,400.0	7,500.0	7,611.5	7,540.5	134.8	20.1	91.58	-3,602.8	-14.1	3,966.7	3,925.0	41.77	94.972		
15,500.0	7,500.0	7,611.9	7,541.0	136.5	20.1	91.62	-3,602.8	-14.1	4,065.6	4,023.8	41.83	97.205		
15,600.0	7,500.0	7,612.4	7,541.4	138.3	20.1	91.67	-3,602.8	-14.1	4,164.6	4,122.7	41.89	99.420		
15,700.0	7,500.0	7,612.9	7,541.9	140.0	20.1	91.71	-3,602.8	-14.1	4,263.5	4,221.6	41.96	101.619		
15,805.8	7,500.0	7,613.4	7,542.4	141.9	20.1	91.76	-3,602.8	-14.1	4,368.3	4,326.3	42.03	103.927		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor	
0.0	0.0	17.3	17.3	0.0	0.0	172.65	-4,267.5	550.6	4,302.9					
100.0	100.0	99.1	99.1	0.2	0.1	172.66	-4,268.0	549.7	4,303.3	4,303.0	0.30	N/A		
200.0	200.0	196.1	196.1	0.3	0.3	172.68	-4,268.7	548.4	4,303.8	4,303.2	0.65	6,667.351		
300.0	300.0	267.9	267.9	0.5	0.4	172.69	-4,269.5	547.7	4,304.8	4,303.9	0.95	4,551.493		
400.0	400.0	339.4	339.4	0.7	0.6	172.70	-4,270.6	547.3	4,306.4	4,305.1	1.25	3,457.594		
500.0	500.0	396.3	396.3	0.8	0.7	172.71	-4,272.1	546.8	4,308.9	4,307.3	1.52	2,834.701		
600.0	600.0	450.0	449.9	1.0	0.8	133.22	-4,274.1	546.2	4,313.0	4,311.2	1.79	2,410.611		
700.0	700.0	490.6	490.5	1.2	0.9	133.19	-4,276.1	545.7	4,319.5	4,317.5	2.04	2,121.236		
800.0	799.9	547.9	547.6	1.4	1.0	133.16	-4,279.7	545.1	4,328.5	4,326.1	2.32	1,868.438		
900.0	899.7	606.0	605.6	1.6	1.1	133.13	-4,283.7	544.1	4,339.4	4,336.8	2.60	1,666.876		
1,000.0	999.4	668.0	667.4	1.8	1.2	133.11	-4,288.5	542.9	4,352.3	4,349.4	2.90	1,498.875		
1,100.0	1,098.9	767.2	766.2	2.0	1.4	133.14	-4,297.0	540.6	4,367.1	4,363.8	3.28	1,330.497		
1,201.3	1,199.5	860.7	859.3	2.2	1.6	133.16	-4,304.7	538.3	4,383.0	4,379.3	3.66	1,196.604		
1,300.0	1,297.5	919.3	917.7	2.5	1.8	133.26	-4,310.1	536.8	4,399.9	4,395.9	3.98	1,106.261		
1,400.0	1,396.8	969.0	967.1	2.7	1.9	133.34	-4,315.1	535.4	4,417.9	4,413.6	4.28	1,032.115		
1,500.0	1,496.0	1,004.0	1,001.9	3.0	2.0	133.41	-4,319.0	534.3	4,437.2	4,432.6	4.56	973.810		
1,600.0	1,595.3	1,068.0	1,065.3	3.3	2.2	133.52	-4,327.0	532.3	4,457.7	4,452.8	4.89	911.440		
1,700.0	1,694.5	1,095.9	1,093.0	3.5	2.3	133.57	-4,330.9	531.4	4,479.4	4,474.2	5.15	869.103		
1,800.0	1,793.8	1,133.0	1,129.6	3.8	2.4	133.63	-4,336.4	530.1	4,502.3	4,496.9	5.43	828.442		
1,900.0	1,893.0	1,197.0	1,192.7	4.0	2.6	133.75	-4,346.8	527.7	4,526.4	4,520.6	5.77	784.052		
2,000.0	1,992.3	1,234.2	1,229.3	4.3	2.7	133.83	-4,353.3	525.8	4,551.5	4,545.5	6.06	751.255		
2,100.0	2,091.5	1,299.3	1,293.1	4.6	2.9	133.98	-4,365.3	521.4	4,577.6	4,571.2	6.41	713.992		
2,200.0	2,190.8	1,419.1	1,410.1	4.8	3.4	134.30	-4,387.7	508.7	4,603.8	4,596.9	6.92	665.205		
2,300.0	2,290.0	1,465.9	1,455.7	5.1	3.6	134.44	-4,396.6	502.9	4,630.3	4,623.0	7.24	639.120		
2,400.0	2,389.3	1,516.0	1,504.4	5.4	3.8	134.59	-4,406.6	496.8	4,657.8	4,650.2	7.58	614.835		
2,500.0	2,488.5	1,625.3	1,610.7	5.7	4.2	134.90	-4,428.7	483.7	4,685.6	4,677.5	8.07	580.618		
2,600.0	2,587.8	1,675.0	1,658.9	5.9	4.5	135.03	-4,438.8	477.9	4,713.7	4,705.3	8.40	561.060		
2,700.0	2,687.0	1,738.0	1,720.0	6.2	4.8	135.21	-4,452.6	470.3	4,743.1	4,734.4	8.77	540.791		
2,800.0	2,786.3	1,781.9	1,762.3	6.5	5.0	135.34	-4,462.5	464.8	4,773.3	4,764.2	9.09	525.329		
2,900.0	2,885.5	1,941.4	1,916.6	6.7	5.7	135.79	-4,497.8	444.8	4,803.4	4,793.6	9.73	493.444		
3,000.0	2,984.8	2,055.0	2,026.9	7.0	6.2	136.09	-4,521.7	431.4	4,832.5	4,822.3	10.25	471.568		
3,100.0	3,084.0	2,143.9	2,113.1	7.3	6.6	136.34	-4,540.2	420.3	4,861.5	4,850.8	10.69	454.638		
3,200.0	3,183.3	2,261.3	2,227.0	7.6	7.1	136.65	-4,564.7	405.7	4,890.6	4,879.4	11.21	436.125		
3,300.0	3,282.5	2,363.0	2,325.9	7.8	7.5	136.91	-4,585.4	394.2	4,919.3	4,907.6	11.68	421.229		
3,400.0	3,381.8	2,532.5	2,490.6	8.1	8.3	137.36	-4,618.4	371.8	4,947.2	4,934.8	12.39	399.439		
3,500.0	3,481.1	2,630.0	2,585.5	8.4	8.7	137.63	-4,636.4	358.5	4,974.2	4,961.4	12.85	387.012		
3,600.0	3,580.3	2,699.9	2,653.7	8.7	9.0	137.80	-4,649.3	350.1	5,001.6	4,988.3	13.22	378.206		
3,700.0	3,679.6	2,751.1	2,703.5	8.9	9.2	137.93	-4,659.4	344.2	5,029.9	5,016.4	13.55	371.339		
3,800.0	3,778.8	2,819.0	2,769.5	9.2	9.5	138.10	-4,673.3	335.8	5,059.1	5,045.2	13.92	363.482		
3,900.0	3,878.1	2,870.0	2,818.8	9.5	9.8	138.23	-4,684.1	329.2	5,089.0	5,074.8	14.24	357.440		
4,000.0	3,977.3	2,966.5	2,912.4	9.8	10.2	138.47	-4,704.8	316.8	5,119.3	5,104.6	14.69	348.480		
4,100.0	4,076.6	3,104.0	3,045.6	10.0	10.9	138.81	-4,733.2	299.0	5,149.0	5,133.7	15.27	337.191		
4,200.0	4,175.8	3,217.7	3,156.0	10.3	11.4	139.09	-4,756.3	284.3	5,178.3	5,162.5	15.77	328.321		
4,300.0	4,275.1	3,326.2	3,261.4	10.6	11.9	139.35	-4,778.0	270.8	5,207.5	5,191.3	16.25	320.445		
4,400.0	4,374.3	3,417.2	3,350.0	10.9	12.3	139.56	-4,796.0	259.8	5,236.6	5,219.9	16.67	314.069		
4,500.0	4,473.6	3,473.2	3,404.4	11.1	12.5	139.69	-4,807.3	252.9	5,266.1	5,249.1	17.00	309.842		
4,600.0	4,572.8	3,614.0	3,541.2	11.4	13.1	140.01	-4,835.5	235.1	5,295.5	5,277.9	17.57	301.426		
4,700.0	4,672.1	3,678.0	3,603.4	11.7	13.4	140.16	-4,848.3	227.0	5,325.0	5,307.1	17.91	297.289		
4,800.0	4,771.3	3,805.0	3,726.6	12.0	14.0	140.45	-4,874.2	210.8	5,355.1	5,336.6	18.44	290.400		
4,900.0	4,870.6	3,877.1	3,796.7	12.2	14.3	140.61	-4,888.4	201.7	5,384.3	5,365.5	18.80	286.353		
5,000.0	4,969.8	4,053.4	3,968.4	12.5	15.1	140.99	-4,922.4	180.3	5,413.4	5,393.9	19.46	278.164		
5,100.0	5,069.1	4,126.2	4,039.4	12.8	15.4	141.15	-4,935.9	171.4	5,441.7	5,421.9	19.82	274.538		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,200.0	5,168.3	4,186.0	4,097.6	13.1	15.7	141.27	-4,947.5	164.0	5,470.9	5,450.7	20.14	271.609		
5,300.0	5,267.6	4,308.5	4,216.9	13.3	16.2	141.53	-4,971.1	149.3	5,500.0	5,479.4	20.64	266.518		
5,400.0	5,366.8	4,502.8	4,406.5	13.6	17.0	141.92	-5,007.0	126.1	5,528.8	5,507.5	21.33	259.201		
5,500.0	5,466.1	4,614.0	4,515.3	13.9	17.4	142.14	-5,025.8	113.8	5,555.8	5,534.0	21.78	255.046		
5,600.0	5,565.3	4,693.2	4,592.8	14.2	17.8	142.29	-5,039.4	104.7	5,583.0	5,560.8	22.15	252.016		
5,700.0	5,664.6	4,781.9	4,679.5	14.4	18.1	142.47	-5,054.6	93.7	5,610.4	5,587.8	22.55	248.805		
5,800.0	5,763.8	4,854.0	4,750.0	14.7	18.4	142.61	-5,067.2	85.3	5,638.1	5,615.2	22.89	246.355		
5,900.0	5,863.1	5,187.8	5,078.3	15.0	19.6	143.16	-5,119.0	54.8	5,663.1	5,639.3	23.86	237.315		
6,000.0	5,962.3	5,351.4	5,239.9	15.3	20.1	143.41	-5,140.7	41.2	5,686.7	5,662.3	24.41	233.008		
6,100.0	6,061.6	5,512.2	5,399.0	15.5	20.6	143.65	-5,160.3	28.0	5,709.2	5,684.3	24.93	228.966		
6,200.0	6,160.9	5,576.7	5,462.8	15.8	20.8	143.75	-5,167.9	23.3	5,731.2	5,706.0	25.24	227.113		
6,300.0	6,260.1	5,647.0	5,532.4	16.1	21.0	143.84	-5,176.8	18.2	5,754.1	5,728.6	25.55	225.236		
6,400.0	6,359.4	5,923.8	5,807.0	16.4	21.8	144.21	-5,206.4	0.0	5,774.4	5,748.1	26.31	219.516		
6,500.0	6,458.6	6,572.7	6,454.0	16.6	22.9	144.84	-5,242.0	-19.9	5,792.6	5,765.1	27.57	210.120		
6,600.0	6,557.9	6,672.7	6,553.9	16.9	23.0	144.90	-5,242.6	-18.9	5,803.2	5,775.3	27.89	208.059		
6,700.0	6,657.1	6,833.6	6,714.8	17.2	23.1	144.99	-5,242.4	-17.1	5,812.9	5,784.6	28.30	205.440		
6,800.0	6,756.4	6,932.1	6,813.3	17.5	23.2	145.05	-5,242.1	-15.9	5,822.5	5,793.9	28.62	203.425		
6,900.0	6,855.6	7,033.6	6,914.8	17.7	23.2	145.11	-5,241.5	-15.2	5,831.9	5,803.0	28.96	201.398		
6,919.5	6,875.0	7,051.4	6,932.6	17.8	23.3	145.13	-5,241.4	-15.1	5,833.8	5,804.7	29.02	201.024		
6,950.0	6,905.3	7,076.0	6,957.2	17.9	23.3	122.54	-5,241.3	-15.0	5,835.9	5,806.7	29.12	200.438		
7,000.0	6,955.1	7,114.7	6,995.9	17.9	23.3	64.31	-5,241.1	-14.7	5,835.9	5,806.6	29.27	199.379		
7,050.0	7,004.8	7,150.5	7,031.7	17.9	23.3	35.36	-5,241.1	-14.4	5,831.6	5,802.2	29.42	198.195		
7,100.0	7,053.8	7,212.5	7,093.7	17.9	23.4	24.69	-5,241.1	-13.9	5,823.2	5,793.6	29.62	196.620		
7,150.0	7,101.9	7,289.6	7,170.8	17.9	23.5	19.69	-5,240.7	-13.4	5,810.2	5,780.4	29.83	194.762		
7,200.0	7,148.7	7,338.5	7,219.7	17.8	23.5	16.93	-5,240.3	-13.2	5,793.0	5,763.0	30.01	193.016		
7,250.0	7,193.8	7,378.8	7,260.0	17.7	23.5	15.30	-5,240.0	-13.1	5,771.8	5,741.6	30.18	191.217		
7,300.0	7,236.9	7,416.4	7,297.6	17.5	23.6	14.33	-5,239.7	-13.1	5,746.8	5,716.4	30.35	189.327		
7,350.0	7,277.7	7,451.3	7,332.5	17.4	23.6	13.82	-5,239.5	-13.1	5,718.2	5,687.7	30.52	187.354		
7,400.0	7,315.7	7,491.3	7,372.5	17.2	23.6	13.69	-5,239.3	-13.0	5,686.2	5,655.5	30.69	185.247		
7,450.0	7,350.9	7,529.6	7,410.7	17.1	23.7	13.88	-5,239.1	-13.0	5,650.9	5,620.0	30.87	183.071		
7,500.0	7,382.8	7,552.0	7,433.2	16.9	23.7	14.38	-5,239.0	-12.9	5,612.7	5,581.7	31.02	180.946		
7,550.0	7,411.3	7,585.6	7,466.7	16.7	23.7	15.32	-5,238.8	-12.8	5,571.9	5,540.7	31.18	178.679		
7,600.0	7,436.1	7,606.5	7,487.7	16.6	23.7	16.78	-5,238.7	-12.7	5,528.8	5,497.5	31.33	176.456		
7,650.0	7,457.1	7,624.2	7,505.4	16.5	23.7	19.04	-5,238.6	-12.7	5,483.7	5,452.3	31.48	174.220		
7,700.0	7,474.0	7,638.6	7,519.7	16.4	23.8	22.69	-5,238.5	-12.6	5,437.0	5,405.4	31.61	171.982		
7,750.0	7,486.8	7,649.4	7,530.5	16.4	23.8	29.03	-5,238.5	-12.6	5,389.0	5,357.2	31.75	169.756		
7,800.0	7,495.3	7,656.5	7,537.7	16.4	23.8	41.61	-5,238.5	-12.5	5,340.0	5,308.1	31.87	167.553		
7,850.0	7,499.5	7,660.0	7,541.2	16.5	23.8	70.18	-5,238.5	-12.5	5,290.5	5,258.5	31.99	165.387		
7,873.6	7,500.0	7,660.4	7,541.6	16.5	23.8	91.89	-5,238.5	-12.5	5,267.0	5,235.0	32.04	164.381		
7,900.0	7,500.0	7,660.3	7,541.5	16.5	23.8	91.88	-5,238.5	-12.5	5,240.7	5,208.6	32.10	163.258		
8,000.0	7,500.0	7,660.1	7,541.3	16.9	23.8	91.86	-5,238.5	-12.5	5,141.3	5,108.9	32.33	159.040		
8,100.0	7,500.0	7,659.8	7,541.0	17.4	23.8	91.83	-5,238.5	-12.5	5,041.8	5,009.3	32.55	154.871		
8,200.0	7,500.0	7,659.6	7,540.8	18.0	23.8	91.80	-5,238.5	-12.5	4,942.4	4,909.6	32.79	150.748		
8,300.0	7,500.0	7,659.3	7,540.5	18.8	23.8	91.77	-5,238.5	-12.5	4,843.0	4,810.0	33.02	146.671		
8,400.0	7,500.0	7,659.1	7,540.3	19.7	23.8	91.75	-5,238.5	-12.5	4,743.6	4,710.3	33.26	142.638		
8,500.0	7,500.0	7,658.8	7,540.0	20.7	23.8	91.72	-5,238.5	-12.5	4,644.3	4,610.8	33.50	138.648		
8,600.0	7,500.0	7,658.6	7,539.7	21.9	23.8	91.69	-5,238.5	-12.5	4,544.9	4,511.2	33.74	134.699		
8,700.0	7,500.0	7,658.3	7,539.5	23.1	23.8	91.67	-5,238.5	-12.5	4,445.6	4,411.6	33.99	130.790		
8,800.0	7,500.0	7,658.1	7,539.2	24.3	23.8	91.64	-5,238.5	-12.5	4,346.4	4,312.1	34.24	126.921		
8,900.0	7,500.0	7,657.8	7,539.0	25.6	23.8	91.61	-5,238.5	-12.5	4,247.1	4,212.6	34.50	123.089		
9,000.0	7,500.0	7,657.5	7,538.7	27.0	23.8	91.58	-5,238.5	-12.5	4,147.9	4,113.2	34.77	119.295		
9,100.0	7,500.0	7,657.3	7,538.5	28.4	23.8	91.55	-5,238.5	-12.5	4,048.8	4,013.8	35.04	115.536		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error: 0.0 ft			
Survey Program: 56-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
9,200.0	7,500.0	7,657.0	7,538.2	29.9	23.8	91.52	-5,238.5	-12.5	3,949.7	3,914.4	35.32	111.813				
9,300.0	7,500.0	7,656.7	7,537.9	31.4	23.8	91.50	-5,238.5	-12.5	3,850.6	3,815.0	35.61	108.125				
9,400.0	7,500.0	7,656.5	7,537.7	32.9	23.8	91.47	-5,238.5	-12.5	3,751.6	3,715.7	35.91	104.469				
9,500.0	7,500.0	7,656.2	7,537.4	34.4	23.8	91.44	-5,238.5	-12.5	3,652.7	3,616.4	36.22	100.847				
9,600.0	7,500.0	7,655.9	7,537.1	36.0	23.8	91.41	-5,238.5	-12.5	3,553.8	3,517.2	36.54	97.257				
9,700.0	7,500.0	7,655.7	7,536.8	37.5	23.8	91.38	-5,238.5	-12.5	3,454.9	3,418.0	36.87	93.698				
9,800.0	7,500.0	7,655.4	7,536.6	39.1	23.8	91.35	-5,238.5	-12.5	3,356.1	3,318.9	37.22	90.171				
9,900.0	7,500.0	7,655.1	7,536.3	40.7	23.8	91.32	-5,238.5	-12.5	3,257.5	3,219.9	37.58	86.674				
10,000.0	7,500.0	7,654.8	7,536.0	42.3	23.8	91.29	-5,238.5	-12.5	3,158.8	3,120.9	37.96	83.207				
10,100.0	7,500.0	7,654.6	7,535.7	43.9	23.8	91.26	-5,238.5	-12.5	3,060.3	3,022.0	38.36	79.770				
10,200.0	7,500.0	7,654.3	7,535.5	45.6	23.8	91.23	-5,238.5	-12.5	2,961.9	2,923.1	38.79	76.363				
10,300.0	7,500.0	7,654.0	7,535.2	47.2	23.8	91.20	-5,238.5	-12.5	2,863.6	2,824.3	39.24	72.985				
10,400.0	7,500.0	7,653.7	7,534.9	48.9	23.8	91.17	-5,238.5	-12.5	2,765.4	2,725.7	39.71	69.637				
10,500.0	7,500.0	7,653.4	7,534.6	50.5	23.8	91.14	-5,238.5	-12.5	2,667.3	2,627.1	40.22	66.320				
10,600.0	7,500.0	7,653.1	7,534.3	52.2	23.8	91.11	-5,238.5	-12.5	2,569.4	2,528.7	40.76	63.033				
10,700.0	7,500.0	7,652.8	7,534.0	53.8	23.8	91.08	-5,238.5	-12.5	2,471.7	2,430.3	41.35	59.777				
10,800.0	7,500.0	7,652.5	7,533.7	55.5	23.8	91.05	-5,238.5	-12.6	2,374.1	2,332.2	41.98	56.553				
10,900.0	7,500.0	7,652.3	7,533.4	57.2	23.8	91.01	-5,238.5	-12.6	2,276.8	2,234.1	42.67	53.363				
11,000.0	7,500.0	7,652.0	7,533.1	58.9	23.8	90.98	-5,238.5	-12.6	2,179.7	2,136.3	43.41	50.209				
11,100.0	7,500.0	7,651.7	7,532.8	60.6	23.8	90.95	-5,238.5	-12.6	2,082.9	2,038.6	44.23	47.091				
11,200.0	7,500.0	7,651.4	7,532.5	62.3	23.8	90.92	-5,238.5	-12.6	1,986.4	1,941.2	45.13	44.013				
11,244.1	7,500.0	7,651.2	7,532.4	63.0	23.8	90.90	-5,238.5	-12.6	1,943.9	1,898.3	45.56	42.668				
11,300.0	7,500.0	7,651.1	7,532.2	64.0	23.8	90.83	-5,238.5	-12.6	1,890.4	1,844.2	46.15	40.959				
11,400.0	7,500.0	7,650.8	7,532.0	65.7	23.8	90.72	-5,238.5	-12.6	1,795.8	1,748.4	47.41	37.875				
11,444.1	7,500.0	7,650.7	7,531.8	66.4	23.8	90.69	-5,238.5	-12.6	1,754.7	1,706.6	48.05	36.517				
11,500.0	7,500.0	7,650.5	7,531.7	67.4	23.8	90.67	-5,238.5	-12.6	1,703.0	1,654.1	48.91	34.815				
11,600.0	7,500.0	7,650.2	7,531.4	69.1	23.8	90.65	-5,238.5	-12.6	1,611.1	1,560.5	50.61	31.831				
11,700.0	7,500.0	7,650.0	7,531.1	70.8	23.8	90.62	-5,238.5	-12.6	1,520.3	1,467.8	52.54	28.937				
11,800.0	7,500.0	7,649.7	7,530.9	72.5	23.8	90.60	-5,238.5	-12.6	1,430.7	1,376.0	54.73	26.143				
11,900.0	7,500.0	7,649.4	7,530.6	74.2	23.8	90.57	-5,238.5	-12.6	1,342.6	1,285.3	57.23	23.461				
12,000.0	7,500.0	7,649.1	7,530.3	76.0	23.8	90.55	-5,238.5	-12.6	1,256.2	1,196.1	60.09	20.905				
12,100.0	7,500.0	7,648.8	7,530.0	77.7	23.8	90.53	-5,238.5	-12.6	1,172.0	1,108.6	63.39	18.489				
12,194.1	7,500.0	7,648.6	7,529.7	79.3	23.8	90.50	-5,238.5	-12.6	1,095.2	1,028.2	66.95	16.358				
12,200.0	7,500.0	7,648.5	7,529.7	79.4	23.8	90.50	-5,238.5	-12.6	1,090.5	1,023.3	67.19	16.230				
12,300.0	7,500.0	7,648.2	7,529.4	81.1	23.8	90.50	-5,238.5	-12.6	1,011.1	939.6	71.44	14.153				
12,387.3	7,500.0	7,648.0	7,529.2	82.6	23.8	90.49	-5,238.5	-12.6	943.0	867.5	75.51	12.488				
12,400.0	7,500.0	7,647.9	7,529.1	82.9	23.8	90.49	-5,238.5	-12.6	933.3	857.1	76.14	12.258				
12,500.0	7,500.0	7,647.6	7,528.8	84.6	23.8	90.46	-5,238.5	-12.6	859.1	777.7	81.47	10.545				
12,600.0	7,500.0	7,647.3	7,528.5	86.3	23.8	90.43	-5,238.5	-12.6	790.7	703.2	87.51	9.036				
12,700.0	7,500.0	7,647.0	7,528.1	88.0	23.8	90.39	-5,238.5	-12.6	729.7	635.5	94.14	7.751				
12,800.0	7,500.0	7,646.6	7,527.8	89.7	23.8	90.36	-5,238.5	-12.6	677.9	576.9	101.03	6.710				
12,900.0	7,500.0	7,646.3	7,527.5	91.5	23.8	90.33	-5,238.5	-12.6	637.7	530.1	107.56	5.929				
13,000.0	7,500.0	7,646.0	7,527.1	93.2	23.8	90.30	-5,238.5	-12.6	611.4	498.5	112.85	5.418				
13,100.0	7,500.0	7,645.6	7,526.8	94.9	23.8	90.27	-5,238.5	-12.6	600.8	484.8	115.97	5.180				
13,114.4	7,500.0	7,645.6	7,526.8	95.2	23.8	90.26	-5,238.5	-12.6	600.6	484.4	116.20	5.169 CC, ES, SF				
13,200.0	7,500.0	7,645.3	7,526.5	96.6	23.8	90.23	-5,238.5	-12.6	606.7	490.3	116.37	5.213				
13,300.0	7,500.0	7,644.9	7,526.1	98.4	23.8	90.20	-5,238.5	-12.6	628.6	514.5	114.14	5.508				
13,400.0	7,500.0	7,644.6	7,525.8	100.1	23.8	90.17	-5,238.5	-12.6	665.0	555.1	109.92	6.050				
13,500.0	7,500.0	7,644.3	7,525.4	101.8	23.8	90.14	-5,238.5	-12.6	713.7	609.2	104.57	6.825				
13,600.0	7,500.0	7,643.9	7,525.1	103.5	23.8	90.10	-5,238.5	-12.6	772.4	673.5	98.83	7.815				
13,700.0	7,500.0	7,643.6	7,524.7	105.3	23.8	90.07	-5,238.5	-12.6	838.8	745.7	93.20	9.001				
13,800.0	7,500.0	7,643.2	7,524.4	107.0	23.8	90.04	-5,238.5	-12.6	911.5	823.5	87.95	10.364				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,900.0	7,500.0	7,642.8	7,524.0	108.7	23.8	90.00	-5,238.5	-12.6	988.9	905.7	83.21	11.885		
14,000.0	7,500.0	7,642.5	7,523.7	110.5	23.8	89.97	-5,238.5	-12.6	1,070.1	991.1	78.99	13.547		
14,100.0	7,500.0	7,642.1	7,523.3	112.2	23.8	89.93	-5,238.5	-12.6	1,154.2	1,078.9	75.28	15.333		
14,200.0	7,500.0	7,641.8	7,522.9	113.9	23.8	89.90	-5,238.5	-12.6	1,240.7	1,168.7	72.02	17.227		
14,300.0	7,500.0	7,641.4	7,522.6	115.7	23.8	89.86	-5,238.5	-12.6	1,329.1	1,259.9	69.17	19.214		
14,400.0	7,500.0	7,641.0	7,522.2	117.4	23.8	89.83	-5,238.5	-12.6	1,419.0	1,352.3	66.68	21.280		
14,500.0	7,500.0	7,640.7	7,521.8	119.1	23.8	89.79	-5,238.5	-12.6	1,510.2	1,445.7	64.50	23.415		
14,600.0	7,500.0	7,640.3	7,521.5	120.9	23.8	89.76	-5,238.5	-12.6	1,602.4	1,539.9	62.58	25.606		
14,700.0	7,500.0	7,639.9	7,521.1	122.6	23.8	89.72	-5,238.5	-12.6	1,695.6	1,634.7	60.89	27.844		
14,800.0	7,500.0	7,639.5	7,520.7	124.4	23.8	89.69	-5,238.5	-12.6	1,789.4	1,730.0	59.41	30.120		
14,900.0	7,500.0	7,639.2	7,520.3	126.1	23.8	89.65	-5,238.5	-12.6	1,883.9	1,825.8	58.10	32.427		
15,000.0	7,500.0	7,638.8	7,519.9	127.8	23.8	89.61	-5,238.5	-12.6	1,979.0	1,922.0	56.94	34.757		
15,100.0	7,500.0	7,638.4	7,519.6	129.6	23.8	89.58	-5,238.5	-12.6	2,074.5	2,018.6	55.91	37.105		
15,200.0	7,500.0	7,638.0	7,519.2	131.3	23.8	89.54	-5,238.5	-12.6	2,170.4	2,115.4	54.99	39.465		
15,300.0	7,500.0	7,637.6	7,518.8	133.1	23.8	89.50	-5,238.5	-12.6	2,266.6	2,212.5	54.18	41.834		
15,400.0	7,500.0	7,637.2	7,518.4	134.8	23.8	89.46	-5,238.5	-12.6	2,363.2	2,309.8	53.46	44.207		
15,500.0	7,500.0	7,636.8	7,518.0	136.5	23.8	89.43	-5,238.5	-12.6	2,460.1	2,407.2	52.81	46.581		
15,600.0	7,500.0	7,636.4	7,517.6	138.3	23.8	89.39	-5,238.5	-12.6	2,557.1	2,504.9	52.24	48.954		
15,700.0	7,500.0	7,636.0	7,517.2	140.0	23.8	89.35	-5,238.5	-12.6	2,654.5	2,602.7	51.72	51.322		
15,805.8	7,500.0	7,635.6	7,516.7	141.9	23.8	89.31	-5,238.5	-12.6	2,757.6	2,706.3	51.24	53.820		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error: 0.0 ft			
Survey Program: 814-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
0.0	0.0	23.2	23.2	0.0	0.0	172.87	-4,267.5	533.8	4,300.8							
100.0	100.0	123.9	123.9	0.2	0.2	172.87	-4,267.5	533.8	4,300.8	4,300.4	0.36	N/A				
200.0	200.0	224.7	224.7	0.3	0.4	172.87	-4,267.5	533.8	4,300.7	4,300.0	0.71	6,045.851				
300.0	300.0	325.5	325.5	0.5	0.6	172.87	-4,267.4	533.9	4,300.7	4,299.6	1.06	4,062.950				
400.0	400.0	426.2	426.2	0.7	0.7	172.87	-4,267.3	533.9	4,300.6	4,299.2	1.41	3,059.474				
500.0	500.0	527.0	527.0	0.8	0.9	172.87	-4,267.3	534.0	4,300.5	4,298.8	1.75	2,453.478				
507.8	507.8	534.9	534.9	0.9	0.9	133.39	-4,267.2	534.0	4,300.5	4,298.8	1.78	2,416.025				
600.0	600.0	627.7	627.7	1.0	1.1	133.39	-4,267.1	534.0	4,301.0	4,298.9	2.10	2,047.892				
700.0	700.0	728.5	728.5	1.2	1.2	133.41	-4,267.0	534.1	4,302.7	4,300.3	2.45	1,756.977				
800.0	799.9	828.9	828.9	1.4	1.4	133.43	-4,266.9	534.2	4,305.6	4,302.8	2.80	1,537.359				
900.0	899.7	1,096.5	1,096.0	1.6	1.9	133.39	-4,261.1	546.7	4,309.1	4,305.6	3.48	1,239.990				
1,000.0	999.4	1,269.4	1,267.5	1.8	2.3	133.25	-4,249.6	565.5	4,308.9	4,304.9	4.05	1,062.797				
1,042.0	1,041.2	1,404.6	1,400.7	1.9	2.7	133.08	-4,237.9	586.0	4,308.8	4,304.3	4.50	957.169				
1,100.0	1,098.9	1,535.6	1,528.7	2.0	3.2	132.88	-4,223.4	609.5	4,307.6	4,302.5	5.04	855.401				
1,201.3	1,199.5	1,771.3	1,756.7	2.2	4.2	132.44	-4,192.0	659.8	4,305.4	4,299.3	6.16	699.115				
1,300.0	1,297.5	1,865.0	1,846.9	2.5	4.6	132.25	-4,177.3	680.6	4,301.2	4,294.4	6.77	635.550				
1,400.0	1,396.8	1,929.0	1,908.5	2.7	4.9	132.12	-4,167.6	695.1	4,297.4	4,290.1	7.27	591.140				
1,500.0	1,496.0	2,012.8	1,989.2	3.0	5.3	131.94	-4,155.4	714.1	4,294.4	4,286.5	7.86	546.418				
1,600.0	1,595.3	2,141.2	2,113.0	3.3	5.9	131.68	-4,136.6	742.6	4,291.1	4,282.5	8.65	496.248				
1,700.0	1,694.5	2,216.0	2,185.0	3.5	6.3	131.52	-4,125.6	759.5	4,288.0	4,278.8	9.22	464.979				
1,800.0	1,793.8	2,311.0	2,276.5	3.8	6.7	131.32	-4,111.8	781.0	4,285.1	4,275.2	9.88	433.853				
1,900.0	1,893.0	2,406.0	2,368.2	4.0	7.2	131.13	-4,098.2	801.9	4,282.5	4,271.9	10.54	406.419				
2,000.0	1,992.3	2,485.4	2,444.8	4.3	7.6	130.97	-4,087.3	819.3	4,280.3	4,269.2	11.13	384.697				
2,100.0	2,091.5	2,567.0	2,523.7	4.6	7.9	130.81	-4,076.2	837.1	4,278.4	4,266.7	11.73	364.759				
2,200.0	2,190.8	2,654.4	2,608.2	4.8	8.4	130.64	-4,064.9	856.2	4,277.2	4,264.8	12.36	345.912				
2,300.0	2,290.0	2,799.1	2,747.9	5.1	9.1	130.35	-4,044.8	888.2	4,275.0	4,261.7	13.27	322.241				
2,400.0	2,389.3	2,885.1	2,831.0	5.4	9.5	130.18	-4,032.8	907.2	4,272.9	4,259.0	13.91	307.247				
2,500.0	2,488.5	3,001.4	2,943.2	5.7	10.1	129.94	-4,016.6	933.2	4,270.9	4,256.2	14.69	290.756				
2,600.0	2,587.8	3,137.0	3,073.8	5.9	10.8	129.65	-3,996.5	963.5	4,268.1	4,252.5	15.58	273.939				
2,700.0	2,687.0	3,204.7	3,138.9	6.2	11.1	129.51	-3,986.3	979.0	4,265.3	4,249.1	16.15	264.129				
2,800.0	2,786.3	3,282.3	3,213.7	6.5	11.5	129.34	-3,975.4	996.5	4,263.3	4,246.6	16.77	254.212				
2,900.0	2,885.5	3,359.0	3,287.6	6.7	11.9	129.18	-3,964.7	1,014.1	4,261.8	4,244.4	17.39	245.136				
3,000.0	2,984.8	3,498.7	3,422.5	7.0	12.5	128.90	-3,945.8	1,044.7	4,260.5	4,242.2	18.28	233.073				
3,100.0	3,084.0	3,573.9	3,495.1	7.3	12.9	128.75	-3,935.3	1,061.4	4,258.8	4,239.9	18.89	225.422				
3,200.0	3,183.3	3,669.3	3,587.0	7.6	13.4	128.54	-3,922.1	1,083.4	4,257.4	4,237.8	19.62	217.035				
3,300.0	3,282.5	3,763.0	3,677.2	7.8	13.9	128.33	-3,909.0	1,105.3	4,256.1	4,235.8	20.32	209.466				
3,400.0	3,381.8	3,844.8	3,756.3	8.1	14.3	128.17	-3,898.1	1,123.1	4,255.1	4,234.2	20.95	203.116				
3,500.0	3,481.1	3,931.0	3,839.7	8.4	14.7	128.00	-3,887.2	1,141.6	4,254.7	4,233.1	21.60	197.001				
3,600.0	3,580.3	4,024.0	3,929.8	8.7	15.1	127.83	-3,875.5	1,161.7	4,254.6	4,232.3	22.29	190.914				
3,700.0	3,679.6	4,210.4	4,109.9	8.9	16.0	127.45	-3,849.7	1,202.5	4,253.2	4,229.7	23.42	181.568				
3,800.0	3,778.8	4,311.3	4,207.1	9.2	16.5	127.24	-3,834.7	1,224.6	4,250.9	4,226.7	24.16	175.927				
3,900.0	3,878.1	4,392.4	4,285.3	9.5	16.9	127.08	-3,822.9	1,242.3	4,248.9	4,224.1	24.81	171.282				
4,000.0	3,977.3	4,439.0	4,330.4	9.8	17.2	126.99	-3,816.4	1,252.3	4,247.7	4,222.4	25.28	168.002				
4,065.8	4,042.6	4,487.0	4,376.9	9.9	17.4	126.90	-3,810.1	1,262.5	4,247.5	4,221.8	25.67	165.444				
4,100.0	4,076.6	4,509.1	4,398.3	10.0	17.5	126.85	-3,807.4	1,267.1	4,247.5	4,221.7	25.86	164.237				
4,200.0	4,175.8	4,653.0	4,537.8	10.3	18.2	126.58	-3,789.1	1,297.5	4,247.4	4,220.7	26.79	158.575				
4,300.0	4,275.1	4,742.6	4,624.6	10.6	18.6	126.42	-3,777.3	1,316.1	4,246.8	4,219.4	27.45	154.739				
4,400.0	4,374.3	4,824.7	4,704.5	10.9	18.9	126.28	-3,767.0	1,332.2	4,246.6	4,218.6	28.04	151.437				
4,401.8	4,376.1	4,826.1	4,705.9	10.9	18.9	126.28	-3,766.8	1,332.5	4,246.6	4,218.5	28.05	151.381				
4,500.0	4,473.6	4,910.0	4,787.8	11.1	19.3	126.16	-3,756.9	1,347.8	4,246.8	4,218.2	28.64	148.273				
4,600.0	4,572.8	5,004.2	4,879.9	11.4	19.7	126.03	-3,746.2	1,364.3	4,247.2	4,217.9	29.27	145.108				
4,700.0	4,672.1	5,094.8	4,968.5	11.7	20.0	125.91	-3,736.1	1,379.7	4,247.8	4,217.9	29.87	142.190				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
4,800.0	4,771.3	5,183.1	5,055.2	12.0	20.4	125.81	-3,726.6	1,394.2	4,248.7	4,218.2	30.46	139.479		
4,900.0	4,870.6	5,284.5	5,154.5	12.2	20.8	125.68	-3,715.7	1,411.5	4,249.8	4,218.6	31.11	136.593		
5,000.0	4,969.8	5,383.3	5,251.5	12.5	21.1	125.57	-3,705.2	1,427.6	4,250.7	4,219.0	31.73	133.971		
5,100.0	5,069.1	5,457.0	5,323.8	12.8	21.4	125.49	-3,697.8	1,438.8	4,252.1	4,219.8	32.24	131.876		
5,200.0	5,168.3	5,527.0	5,392.7	13.1	21.7	125.42	-3,691.3	1,449.4	4,254.1	4,221.3	32.74	129.924		
5,300.0	5,267.6	5,673.3	5,536.6	13.3	22.2	125.27	-3,677.4	1,472.1	4,256.0	4,222.4	33.53	126.934		
5,400.0	5,366.8	5,743.9	5,606.1	13.6	22.4	125.21	-3,670.4	1,482.7	4,257.5	4,223.5	34.02	125.130		
5,500.0	5,466.1	5,814.9	5,676.1	13.9	22.7	125.15	-3,664.4	1,492.5	4,259.9	4,225.4	34.51	123.451		
5,600.0	5,565.3	5,890.9	5,751.2	14.2	22.9	125.10	-3,658.3	1,503.0	4,262.8	4,227.8	35.01	121.775		
5,700.0	5,664.6	5,983.1	5,842.2	14.4	23.2	125.04	-3,651.3	1,515.3	4,266.1	4,230.5	35.54	120.031		
5,800.0	5,763.8	6,097.6	5,955.8	14.7	23.5	125.00	-3,643.7	1,527.9	4,269.6	4,233.5	36.09	118.307		
5,900.0	5,863.1	6,183.9	6,041.6	15.0	23.7	125.00	-3,638.2	1,535.1	4,272.8	4,236.2	36.53	116.980		
6,000.0	5,962.3	6,255.8	6,113.2	15.3	23.9	125.02	-3,634.3	1,540.2	4,276.5	4,239.6	36.91	115.854		
6,100.0	6,061.6	6,321.8	6,179.1	15.5	24.0	125.04	-3,631.4	1,544.3	4,280.9	4,243.6	37.26	114.891		
6,200.0	6,160.9	6,391.7	6,248.8	15.8	24.1	125.09	-3,629.3	1,547.3	4,286.2	4,248.6	37.59	114.036		
6,300.0	6,260.1	6,506.0	6,363.1	16.1	24.2	125.22	-3,626.3	1,548.6	4,290.9	4,253.0	37.91	113.198		
6,400.0	6,359.4	6,571.0	6,428.1	16.4	24.2	125.31	-3,625.5	1,547.8	4,296.5	4,258.4	38.17	112.571		
6,500.0	6,458.6	6,621.5	6,478.6	16.6	24.3	125.39	-3,625.7	1,547.2	4,303.4	4,265.0	38.43	111.985		
6,600.0	6,557.9	6,728.6	6,585.7	16.9	24.4	125.53	-3,625.7	1,547.4	4,310.6	4,271.8	38.75	111.233		
6,700.0	6,657.1	6,844.9	6,701.9	17.2	24.5	125.67	-3,625.2	1,548.0	4,317.4	4,278.3	39.09	110.450		
6,800.0	6,756.4	6,952.6	6,809.7	17.5	24.6	125.81	-3,624.4	1,548.4	4,324.0	4,284.5	39.42	109.700		
6,900.0	6,855.6	7,075.6	6,932.6	17.7	24.7	125.96	-3,623.1	1,548.6	4,330.2	4,290.4	39.76	108.914		
6,919.5	6,875.0	7,099.9	6,956.9	17.8	24.7	125.99	-3,622.8	1,548.6	4,331.3	4,291.5	39.82	108.764		
6,950.0	6,905.3	7,138.0	6,995.0	17.9	24.7	103.48	-3,622.2	1,548.6	4,332.3	4,292.4	39.92	108.519		
7,000.0	6,955.1	7,202.9	7,059.9	17.9	24.8	45.23	-3,621.1	1,548.4	4,330.4	4,290.3	40.08	108.054		
7,050.0	7,004.8	7,258.8	7,115.8	17.9	24.9	16.10	-3,620.0	1,548.2	4,324.1	4,283.8	40.21	107.531		
7,100.0	7,053.8	7,303.0	7,160.0	17.9	24.9	5.06	-3,619.1	1,548.0	4,313.6	4,273.3	40.33	106.962		
7,150.0	7,101.9	7,364.8	7,221.8	17.9	25.0	-0.52	-3,617.9	1,547.8	4,299.0	4,258.6	40.45	106.279		
7,200.0	7,148.7	7,419.6	7,276.6	17.8	25.0	-4.05	-3,616.6	1,547.6	4,280.3	4,239.8	40.55	105.549		
7,250.0	7,193.8	7,465.0	7,322.0	17.7	25.1	-6.68	-3,615.5	1,547.1	4,257.8	4,217.1	40.63	104.783		
7,300.0	7,236.9	7,506.7	7,363.6	17.5	25.1	-8.93	-3,614.6	1,546.6	4,231.6	4,190.9	40.70	103.966		
7,350.0	7,277.7	7,543.2	7,400.1	17.4	25.1	-11.06	-3,613.9	1,546.0	4,201.9	4,161.2	40.75	103.104		
7,400.0	7,315.7	7,577.5	7,434.4	17.2	25.2	-13.27	-3,613.2	1,545.4	4,169.1	4,128.3	40.80	102.193		
7,450.0	7,350.9	7,613.3	7,470.2	17.1	25.2	-15.76	-3,612.5	1,544.8	4,133.3	4,092.5	40.83	101.231		
7,500.0	7,382.8	7,645.6	7,502.6	16.9	25.2	-18.70	-3,611.9	1,544.2	4,094.8	4,053.9	40.85	100.232		
7,550.0	7,411.3	7,674.4	7,531.3	16.7	25.2	-22.34	-3,611.3	1,543.6	4,053.9	4,013.0	40.87	99.200		
7,600.0	7,436.1	7,699.2	7,556.1	16.6	25.3	-27.04	-3,610.8	1,543.1	4,010.9	3,970.0	40.87	98.142		
7,650.0	7,457.1	7,717.3	7,574.2	16.5	25.3	-33.25	-3,610.5	1,542.8	3,966.2	3,925.3	40.86	97.068		
7,700.0	7,474.0	7,731.2	7,588.1	16.4	25.3	-41.73	-3,610.2	1,542.5	3,920.0	3,879.2	40.84	95.982		
7,750.0	7,486.8	7,741.5	7,598.4	16.4	25.3	-53.35	-3,610.0	1,542.3	3,872.9	3,832.1	40.82	94.886		
7,800.0	7,495.3	7,748.1	7,605.0	16.4	25.3	-68.63	-3,609.9	1,542.2	3,825.0	3,784.3	40.78	93.789		
7,850.0	7,499.5	7,751.0	7,607.9	16.5	25.3	-86.39	-3,609.8	1,542.1	3,776.9	3,736.2	40.75	92.695		
7,873.6	7,500.0	7,751.1	7,608.0	16.5	25.3	-94.75	-3,609.8	1,542.1	3,754.2	3,713.5	40.73	92.183		
7,900.0	7,500.0	7,750.7	7,607.5	16.5	25.3	-94.73	-3,609.8	1,542.1	3,728.8	3,688.1	40.70	91.608		
8,000.0	7,500.0	7,749.1	7,606.0	16.9	25.3	-94.64	-3,609.9	1,542.1	3,632.8	3,592.1	40.62	89.427		
8,100.0	7,500.0	7,747.5	7,604.4	17.4	25.3	-94.55	-3,609.9	1,542.2	3,536.9	3,496.4	40.55	87.233		
8,200.0	7,500.0	7,746.0	7,602.8	18.0	25.3	-94.46	-3,609.9	1,542.2	3,441.4	3,400.9	40.47	85.025		
8,300.0	7,500.0	7,744.4	7,601.2	18.8	25.3	-94.38	-3,610.0	1,542.2	3,346.0	3,305.6	40.41	82.797		
8,400.0	7,500.0	7,742.8	7,599.6	19.7	25.3	-94.29	-3,610.0	1,542.3	3,251.0	3,210.6	40.36	80.546		
8,500.0	7,500.0	7,741.1	7,598.0	20.7	25.3	-94.20	-3,610.0	1,542.3	3,156.2	3,115.9	40.33	78.268		
8,600.0	7,500.0	7,739.5	7,596.4	21.9	25.3	-94.10	-3,610.0	1,542.3	3,061.8	3,021.5	40.31	75.957		
8,700.0	7,500.0	7,737.8	7,594.7	23.1	25.3	-94.01	-3,610.1	1,542.4	2,967.8	2,927.5	40.32	73.607		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error: 0.0 ft			
Survey Program: 814-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning			
8,800.0	7,500.0	7,736.2	7,593.1	24.3	25.3	-93.92	-3,610.1	1,542.4	2,874.1	2,833.8	40.36	71.213				
8,900.0	7,500.0	7,734.5	7,591.4	25.6	25.3	-93.83	-3,610.1	1,542.4	2,780.9	2,740.5	40.44	68.769				
9,000.0	7,500.0	7,732.8	7,589.7	27.0	25.3	-93.73	-3,610.2	1,542.5	2,688.2	2,647.7	40.57	66.269				
9,100.0	7,500.0	7,731.1	7,588.0	28.4	25.3	-93.64	-3,610.2	1,542.5	2,596.1	2,555.3	40.75	63.708				
9,200.0	7,500.0	7,729.4	7,586.3	29.9	25.3	-93.54	-3,610.2	1,542.5	2,504.5	2,463.5	41.00	61.081				
9,300.0	7,500.0	7,727.7	7,584.5	31.4	25.3	-93.44	-3,610.3	1,542.6	2,413.6	2,372.2	41.34	58.387				
9,400.0	7,500.0	7,725.9	7,582.8	32.9	25.3	-93.35	-3,610.3	1,542.6	2,323.4	2,281.7	41.77	55.626				
9,500.0	7,500.0	7,724.2	7,581.0	34.4	25.3	-93.25	-3,610.3	1,542.6	2,234.1	2,191.8	42.31	52.803				
9,600.0	7,500.0	7,722.4	7,579.3	36.0	25.3	-93.15	-3,610.4	1,542.7	2,145.7	2,102.7	42.98	49.926				
9,700.0	7,500.0	7,720.6	7,577.5	37.5	25.3	-93.05	-3,610.4	1,542.7	2,058.4	2,014.6	43.79	47.007				
9,800.0	7,500.0	7,718.8	7,575.7	39.1	25.3	-92.95	-3,610.4	1,542.7	1,972.3	1,927.5	44.76	44.064				
9,900.0	7,500.0	7,717.0	7,573.9	40.7	25.3	-92.85	-3,610.5	1,542.8	1,887.5	1,841.6	45.90	41.119				
10,000.0	7,500.0	7,715.2	7,572.0	42.3	25.3	-92.74	-3,610.5	1,542.8	1,804.3	1,757.1	47.24	38.195				
10,100.0	7,500.0	7,713.3	7,570.2	43.9	25.3	-92.64	-3,610.5	1,542.9	1,722.9	1,674.2	48.78	35.320				
10,200.0	7,500.0	7,711.4	7,568.3	45.6	25.3	-92.54	-3,610.6	1,542.9	1,643.6	1,593.1	50.54	32.522				
10,300.0	7,500.0	7,709.6	7,566.4	47.2	25.3	-92.43	-3,610.6	1,542.9	1,566.6	1,514.1	52.52	29.828				
10,400.0	7,500.0	7,707.7	7,564.5	48.9	25.3	-92.33	-3,610.6	1,543.0	1,492.3	1,437.6	54.74	27.263				
10,500.0	7,500.0	7,705.7	7,562.6	50.5	25.3	-92.22	-3,610.7	1,543.0	1,421.2	1,364.1	57.19	24.853				
10,600.0	7,500.0	7,703.8	7,560.7	52.2	25.3	-92.11	-3,610.7	1,543.0	1,353.8	1,293.9	59.86	22.617				
10,700.0	7,500.0	7,701.8	7,558.7	53.8	25.3	-92.00	-3,610.8	1,543.1	1,290.6	1,227.8	62.73	20.573				
10,800.0	7,500.0	7,699.8	7,556.7	55.5	25.3	-91.88	-3,610.8	1,543.1	1,232.2	1,166.5	65.77	18.735				
10,900.0	7,500.0	7,697.8	7,554.6	57.2	25.3	-91.77	-3,610.8	1,543.2	1,179.5	1,110.6	68.92	17.115				
11,000.0	7,500.0	7,695.7	7,552.6	58.9	25.3	-91.66	-3,610.9	1,543.2	1,133.1	1,061.1	72.09	15.719				
11,100.0	7,500.0	7,693.7	7,550.6	60.6	25.3	-91.55	-3,610.9	1,543.2	1,094.0	1,018.8	75.18	14.551				
11,200.0	7,500.0	7,691.7	7,548.6	62.3	25.3	-91.43	-3,611.0	1,543.3	1,062.8	984.7	78.08	13.612				
11,244.1	7,500.0	7,690.8	7,547.7	63.0	25.3	-91.38	-3,611.0	1,543.3	1,051.8	972.5	79.26	13.270				
11,300.0	7,500.0	7,689.7	7,546.6	64.0	25.3	-91.33	-3,611.0	1,543.3	1,039.8	959.2	80.64	12.894				
11,400.0	7,500.0	7,687.6	7,544.5	65.7	25.3	-91.22	-3,611.0	1,543.4	1,023.0	940.2	82.76	12.361				
11,444.1	7,500.0	7,686.7	7,543.6	66.4	25.3	-91.17	-3,611.1	1,543.4	1,017.5	933.9	83.54	12.180				
11,500.0	7,500.0	7,685.5	7,542.4	67.4	25.3	-91.10	-3,611.1	1,543.4	1,012.8	928.4	84.38	12.003				
11,557.2	7,500.0	7,684.3	7,541.2	68.4	25.3	-91.03	-3,611.1	1,543.4	1,011.2	926.1	85.06	11.887 CC, ES				
11,600.0	7,500.0	7,683.4	7,540.3	69.1	25.3	-90.98	-3,611.1	1,543.4	1,012.1	926.6	85.46	11.843 SF				
11,700.0	7,500.0	7,681.2	7,538.1	70.8	25.3	-90.86	-3,611.2	1,543.5	1,021.2	935.2	86.01	11.873				
11,800.0	7,500.0	7,679.1	7,536.0	72.5	25.3	-90.74	-3,611.2	1,543.5	1,039.9	953.8	86.09	12.079				
11,900.0	7,500.0	7,677.0	7,533.9	74.2	25.2	-90.62	-3,611.3	1,543.6	1,067.7	981.9	85.80	12.444				
12,000.0	7,500.0	7,674.9	7,531.8	76.0	25.2	-90.50	-3,611.3	1,543.6	1,103.8	1,018.6	85.24	12.950				
12,100.0	7,500.0	7,672.8	7,529.7	77.7	25.2	-90.38	-3,611.3	1,543.6	1,147.6	1,063.1	84.50	13.581				
12,194.1	7,500.0	7,670.8	7,527.7	79.3	25.2	-90.26	-3,611.4	1,543.7	1,195.0	1,111.3	83.70	14.277				
12,200.0	7,500.0	7,670.7	7,527.5	79.4	25.2	-90.26	-3,611.4	1,543.7	1,198.1	1,114.5	83.65	14.324				
12,300.0	7,500.0	7,668.6	7,525.5	81.1	25.2	-90.14	-3,611.4	1,543.7	1,256.1	1,173.4	82.72	15.185				
12,387.3	7,500.0	7,666.8	7,523.7	82.6	25.2	-90.04	-3,611.5	1,543.8	1,313.1	1,231.2	81.92	16.030				
12,400.0	7,500.0	7,666.6	7,523.5	82.9	25.2	-90.03	-3,611.5	1,543.8	1,321.8	1,240.0	81.80	16.158				
12,500.0	7,500.0	7,664.6	7,521.5	84.6	25.2	-89.91	-3,611.5	1,543.8	1,392.4	1,311.5	80.91	17.211				
12,600.0	7,500.0	7,662.6	7,519.5	86.3	25.2	-89.79	-3,611.5	1,543.8	1,466.5	1,386.5	80.02	18.326				
12,700.0	7,500.0	7,660.6	7,517.5	88.0	25.2	-89.67	-3,611.6	1,543.9	1,543.5	1,464.4	79.17	19.497				
12,800.0	7,500.0	7,658.7	7,515.6	89.7	25.2	-89.56	-3,611.6	1,543.9	1,623.0	1,544.7	78.34	20.717				
12,900.0	7,500.0	7,656.7	7,513.6	91.5	25.2	-89.44	-3,611.6	1,543.9	1,704.7	1,627.1	77.55	21.981				
13,000.0	7,500.0	7,654.7	7,511.6	93.2	25.2	-89.32	-3,611.7	1,544.0	1,788.2	1,711.4	76.80	23.283				
13,100.0	7,500.0	7,652.8	7,509.7	94.9	25.2	-89.20	-3,611.7	1,544.0	1,873.4	1,797.3	76.09	24.619				
13,200.0	7,500.0	7,650.8	7,507.7	96.6	25.2	-89.09	-3,611.8	1,544.1	1,959.9	1,884.5	75.42	25.985				
13,300.0	7,500.0	7,648.9	7,505.8	98.4	25.2	-88.97	-3,611.8	1,544.1	2,047.7	1,972.9	74.79	27.378				
13,400.0	7,500.0	7,646.9	7,503.8	100.1	25.2	-88.85	-3,611.8	1,544.1	2,136.5	2,062.3	74.20	28.793				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,500.0	7,500.0	7,644.9	7,501.9	101.8	25.2	-88.74	-3,611.9	1,544.2	2,226.3	2,152.7	73.65	30.229		
13,600.0	7,500.0	7,643.0	7,499.9	103.5	25.2	-88.62	-3,611.9	1,544.2	2,316.9	2,243.8	73.13	31.683		
13,700.0	7,500.0	7,641.0	7,498.0	105.3	25.2	-88.50	-3,612.0	1,544.2	2,408.3	2,335.6	72.64	33.153		
13,800.0	7,500.0	7,639.1	7,496.0	107.0	25.2	-88.39	-3,612.0	1,544.3	2,500.3	2,428.1	72.19	34.637		
13,900.0	7,500.0	7,637.2	7,494.1	108.7	25.2	-88.27	-3,612.0	1,544.3	2,592.9	2,521.2	71.76	36.133		
14,000.0	7,500.0	7,635.2	7,492.1	110.5	25.2	-88.16	-3,612.1	1,544.4	2,686.1	2,614.7	71.36	37.640		
14,100.0	7,500.0	7,633.3	7,490.2	112.2	25.2	-88.04	-3,612.1	1,544.4	2,779.7	2,708.7	70.99	39.156		
14,200.0	7,500.0	7,631.3	7,488.2	113.9	25.2	-87.93	-3,612.1	1,544.4	2,873.7	2,803.1	70.64	40.680		
14,300.0	7,500.0	7,629.4	7,486.3	115.7	25.2	-87.81	-3,612.2	1,544.5	2,968.1	2,897.8	70.32	42.211		
14,400.0	7,500.0	7,627.5	7,484.4	117.4	25.2	-87.70	-3,612.2	1,544.5	3,062.9	2,992.9	70.01	43.749		
14,500.0	7,500.0	7,625.5	7,482.5	119.1	25.2	-87.58	-3,612.3	1,544.5	3,158.0	3,088.3	69.73	45.291		
14,600.0	7,500.0	7,623.6	7,480.5	120.9	25.2	-87.47	-3,612.3	1,544.6	3,253.4	3,184.0	69.46	46.838		
14,700.0	7,500.0	7,621.7	7,478.6	122.6	25.2	-87.35	-3,612.3	1,544.6	3,349.1	3,279.9	69.21	48.389		
14,800.0	7,500.0	7,619.8	7,476.7	124.4	25.2	-87.24	-3,612.4	1,544.6	3,445.0	3,376.0	68.98	49.942		
14,900.0	7,500.0	7,617.8	7,474.8	126.1	25.2	-87.12	-3,612.4	1,544.7	3,541.1	3,472.4	68.76	51.499		
15,000.0	7,500.0	7,615.9	7,472.8	127.8	25.2	-87.01	-3,612.4	1,544.7	3,637.5	3,568.9	68.56	53.057		
15,100.0	7,500.0	7,614.0	7,470.9	129.6	25.2	-86.90	-3,612.5	1,544.7	3,734.0	3,665.6	68.37	54.616		
15,200.0	7,500.0	7,612.1	7,469.0	131.3	25.2	-86.78	-3,612.5	1,544.8	3,830.7	3,762.5	68.19	56.177		
15,300.0	7,500.0	7,610.2	7,467.1	133.1	25.2	-86.67	-3,612.6	1,544.8	3,927.6	3,859.6	68.02	57.738		
15,400.0	7,500.0	7,608.3	7,465.2	134.8	25.2	-86.56	-3,612.6	1,544.9	4,024.6	3,956.8	67.87	59.300		
15,500.0	7,500.0	7,606.4	7,463.3	136.5	25.2	-86.44	-3,612.6	1,544.9	4,121.8	4,054.1	67.72	60.861		
15,600.0	7,500.0	7,604.5	7,461.4	138.3	25.2	-86.33	-3,612.7	1,544.9	4,219.1	4,151.5	67.59	62.422		
15,700.0	7,500.0	7,602.6	7,459.5	140.0	25.2	-86.22	-3,612.7	1,545.0	4,316.5	4,249.0	67.46	63.983		
15,805.8	7,500.0	7,600.6	7,457.5	141.9	25.2	-86.10	-3,612.7	1,545.0	4,419.7	4,352.3	67.34	65.632		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	33.7	33.7	0.0	0.0	172.46	-4,267.5	564.6	4,304.7					
100.0	100.0	118.0	118.0	0.2	0.2	172.46	-4,267.4	564.8	4,304.6	4,304.2	0.33	N/A		
200.0	200.0	178.0	178.0	0.3	0.3	172.45	-4,267.9	565.5	4,305.4	4,304.8	0.61	7,038.532		
300.0	300.0	207.8	207.7	0.5	0.3	172.44	-4,268.5	566.1	4,307.4	4,306.5	0.84	5,125.947		
400.0	400.0	270.0	269.9	0.7	0.5	172.42	-4,270.4	568.3	4,310.8	4,309.6	1.13	3,822.934		
500.0	500.0	298.4	298.3	0.8	0.5	172.40	-4,271.6	569.6	4,315.3	4,313.9	1.36	3,180.206		
600.0	600.0	362.0	361.6	1.0	0.7	132.84	-4,275.0	573.4	4,321.8	4,320.1	1.65	2,612.265		
700.0	700.0	362.0	361.6	1.2	0.7	132.78	-4,275.0	573.4	4,330.8	4,328.9	1.83	2,368.667		
800.0	799.9	425.7	425.0	1.4	0.8	132.66	-4,279.6	578.3	4,342.1	4,339.9	2.14	2,029.435		
900.0	899.7	454.0	453.1	1.6	0.9	132.55	-4,282.0	580.7	4,356.0	4,353.7	2.38	1,830.972		
1,000.0	999.4	511.2	509.7	1.8	1.1	132.40	-4,287.5	586.2	4,372.4	4,369.7	2.70	1,621.490		
1,100.0	1,098.9	546.0	544.1	2.0	1.2	132.25	-4,291.3	589.9	4,391.2	4,388.2	2.97	1,478.933		
1,201.3	1,199.5	598.9	596.2	2.2	1.4	132.08	-4,297.6	596.3	4,412.6	4,409.3	3.31	1,331.987		
1,300.0	1,297.5	642.0	638.6	2.5	1.5	132.06	-4,303.2	602.2	4,435.2	4,431.6	3.63	1,222.459		
1,400.0	1,396.8	697.3	692.7	2.7	1.7	132.03	-4,310.9	610.5	4,459.2	4,455.2	3.99	1,116.492		
1,500.0	1,496.0	828.5	821.1	3.0	2.3	131.96	-4,329.4	630.7	4,483.5	4,478.9	4.57	980.365		
1,600.0	1,595.3	899.4	890.5	3.3	2.5	131.93	-4,339.2	640.9	4,507.4	4,502.4	4.98	904.382		
1,700.0	1,694.5	940.0	930.2	3.5	2.7	131.91	-4,345.1	647.1	4,532.1	4,526.8	5.31	853.155		
1,800.0	1,793.8	1,004.0	992.6	3.8	3.0	131.86	-4,355.0	657.6	4,557.8	4,552.1	5.72	796.824		
1,900.0	1,893.0	1,044.2	1,031.5	4.0	3.2	131.83	-4,361.6	664.5	4,584.7	4,578.6	6.06	756.905		
2,000.0	1,992.3	1,111.6	1,096.8	4.3	3.5	131.78	-4,373.3	676.8	4,612.4	4,605.9	6.49	710.847		
2,100.0	2,091.5	1,195.8	1,178.3	4.6	3.9	131.70	-4,388.0	692.5	4,640.4	4,633.5	6.98	664.868		
2,200.0	2,190.8	1,365.2	1,342.2	4.8	4.7	131.56	-4,417.2	723.6	4,668.4	4,660.6	7.76	601.689		
2,300.0	2,290.0	1,469.5	1,443.4	5.1	5.2	131.47	-4,433.7	742.7	4,694.8	4,686.5	8.32	564.330		
2,400.0	2,389.3	1,554.5	1,525.8	5.4	5.5	131.40	-4,447.5	757.9	4,721.5	4,712.7	8.81	535.963		
2,500.0	2,488.5	1,628.5	1,597.7	5.7	5.9	131.34	-4,459.6	771.0	4,748.5	4,739.2	9.26	512.680		
2,600.0	2,587.8	1,712.3	1,678.8	5.9	6.3	131.28	-4,473.7	786.2	4,775.8	4,766.1	9.76	489.522		
2,700.0	2,687.0	1,792.6	1,756.6	6.2	6.7	131.21	-4,487.4	801.3	4,803.4	4,793.2	10.24	469.120		
2,800.0	2,786.3	1,925.0	1,884.6	6.5	7.3	131.09	-4,509.7	826.3	4,831.0	4,820.1	10.91	442.645		
2,900.0	2,885.5	2,008.0	1,965.0	6.7	7.7	131.02	-4,523.3	842.0	4,858.1	4,846.7	11.41	425.946		
3,000.0	2,984.8	2,113.0	2,066.7	7.0	8.2	130.94	-4,540.8	861.4	4,885.4	4,873.5	11.97	408.052		
3,100.0	3,084.0	2,174.4	2,126.1	7.3	8.5	130.89	-4,551.1	872.7	4,912.9	4,900.6	12.38	396.709		
3,200.0	3,183.3	2,317.2	2,264.5	7.6	9.1	130.79	-4,575.7	898.3	4,940.8	4,927.8	13.07	378.046		
3,300.0	3,282.5	2,424.8	2,368.9	7.8	9.7	130.71	-4,592.9	917.6	4,967.5	4,953.8	13.65	363.916		
3,400.0	3,381.8	2,497.0	2,438.8	8.1	10.0	130.65	-4,604.9	931.3	4,994.7	4,980.6	14.11	354.020		
3,500.0	3,481.1	2,583.2	2,522.2	8.4	10.4	130.59	-4,619.5	947.1	5,022.3	5,007.7	14.60	343.981		
3,600.0	3,580.3	2,695.9	2,631.6	8.7	10.9	130.52	-4,638.3	966.7	5,049.4	5,034.2	15.18	332.684		
3,700.0	3,679.6	2,788.9	2,721.9	8.9	11.3	130.46	-4,653.8	982.7	5,076.5	5,060.8	15.69	323.582		
3,800.0	3,778.8	2,880.0	2,810.3	9.2	11.8	130.40	-4,668.4	999.0	5,103.3	5,087.1	16.21	314.845		
3,900.0	3,878.1	2,975.0	2,902.4	9.5	12.2	130.33	-4,684.2	1,016.5	5,130.5	5,113.8	16.74	306.541		
4,000.0	3,977.3	3,004.0	2,930.4	9.8	12.4	130.31	-4,689.3	1,021.9	5,158.6	5,141.5	17.03	302.992		
4,100.0	4,076.6	3,071.0	2,995.1	10.0	12.7	130.27	-4,701.6	1,034.0	5,187.4	5,170.0	17.45	297.322		
4,200.0	4,175.8	3,178.6	3,099.2	10.3	13.2	130.20	-4,721.2	1,053.3	5,216.2	5,198.2	18.01	289.564		
4,300.0	4,275.1	3,327.0	3,242.6	10.6	13.9	130.11	-4,747.9	1,080.5	5,245.0	5,226.3	18.74	279.931		
4,400.0	4,374.3	3,483.0	3,393.6	10.9	14.7	129.99	-4,773.8	1,110.1	5,272.4	5,252.9	19.50	270.326		
4,500.0	4,473.6	3,554.7	3,463.0	11.1	15.0	129.93	-4,785.3	1,123.9	5,299.4	5,279.5	19.96	265.550		
4,600.0	4,572.8	3,643.0	3,548.4	11.4	15.5	129.87	-4,799.8	1,140.9	5,326.8	5,306.3	20.47	260.216		
4,700.0	4,672.1	3,746.9	3,649.0	11.7	15.9	129.80	-4,817.0	1,160.1	5,354.1	5,333.1	21.03	254.629		
4,800.0	4,771.3	3,836.7	3,736.1	12.0	16.4	129.74	-4,832.0	1,176.2	5,381.4	5,359.9	21.53	249.945		
4,900.0	4,870.6	3,979.5	3,874.7	12.2	17.0	129.66	-4,855.3	1,201.0	5,408.3	5,386.1	22.22	243.447		
5,000.0	4,969.8	4,069.0	3,961.7	12.5	17.4	129.61	-4,869.6	1,217.3	5,435.0	5,412.3	22.72	239.204		
5,100.0	5,069.1	4,194.8	4,083.9	12.8	18.0	129.54	-4,889.3	1,239.0	5,461.2	5,437.9	23.34	233.957		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error: 0.0 ft	
Survey Program: 41-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,168.3	4,271.6	4,158.7	13.1	18.3	129.51	-4,901.5	1,251.9	5,487.6	5,463.8	23.78	230.764		
5,300.0	5,267.6	4,611.0	4,491.0	13.3	19.6	129.43	-4,949.8	1,300.8	5,511.8	5,486.8	25.01	220.367		
5,400.0	5,366.8	4,693.6	4,572.2	13.6	19.9	129.41	-4,960.1	1,311.9	5,534.2	5,508.7	25.46	217.348		
5,500.0	5,466.1	4,760.8	4,638.2	13.9	20.2	129.40	-4,968.5	1,321.4	5,556.9	5,531.1	25.86	214.872		
5,600.0	5,565.3	4,839.4	4,715.3	14.2	20.5	129.38	-4,978.9	1,332.3	5,580.2	5,553.9	26.29	212.273		
5,700.0	5,664.6	5,141.8	5,013.5	14.4	21.5	129.38	-5,014.0	1,368.0	5,600.9	5,573.6	27.32	205.045		
5,800.0	5,763.8	5,224.9	5,095.6	14.7	21.8	129.38	-5,022.4	1,377.9	5,620.8	5,593.0	27.75	202.535		
5,900.0	5,863.1	5,308.6	5,178.2	15.0	22.0	129.37	-5,031.1	1,388.2	5,641.0	5,612.8	28.19	200.104		
6,000.0	5,962.3	5,601.0	5,467.8	15.3	22.9	129.40	-5,057.2	1,418.5	5,659.1	5,630.0	29.12	194.317		
6,100.0	6,061.6	5,693.7	5,559.9	15.5	23.1	129.42	-5,064.3	1,426.3	5,675.9	5,646.4	29.55	192.079		
6,200.0	6,160.9	5,774.3	5,639.9	15.8	23.3	129.44	-5,070.8	1,433.1	5,693.2	5,663.2	29.95	190.113		
6,300.0	6,260.1	6,444.9	6,309.1	16.1	24.3	129.90	-5,096.5	1,456.4	5,704.5	5,673.3	31.20	182.814		
6,400.0	6,359.4	6,546.2	6,410.4	16.4	24.4	130.00	-5,096.1	1,455.6	5,711.9	5,680.3	31.57	180.955		
6,500.0	6,458.6	6,628.9	6,493.1	16.6	24.4	130.08	-5,095.9	1,455.2	5,719.4	5,687.5	31.91	179.226		
6,600.0	6,557.9	6,703.2	6,567.4	16.9	24.5	130.16	-5,095.9	1,455.0	5,727.3	5,695.1	32.25	177.595		
6,700.0	6,657.1	6,818.3	6,682.5	17.2	24.6	130.26	-5,095.9	1,455.2	5,735.3	5,702.7	32.64	175.715		
6,800.0	6,756.4	6,912.5	6,776.7	17.5	24.7	130.34	-5,095.9	1,455.6	5,743.2	5,710.2	33.01	173.996		
6,900.0	6,855.6	7,000.8	6,865.0	17.7	24.7	130.42	-5,095.8	1,456.2	5,751.3	5,717.9	33.37	172.346		
6,919.5	6,875.0	7,014.0	6,878.2	17.8	24.8	130.43	-5,095.9	1,456.3	5,752.9	5,719.4	33.44	172.053		
6,950.0	6,905.3	7,034.9	6,899.1	17.9	24.8	107.90	-5,095.9	1,456.5	5,754.6	5,721.1	33.54	171.591		
7,000.0	6,955.1	7,075.0	6,939.2	17.9	24.8	49.65	-5,096.1	1,456.9	5,754.2	5,720.5	33.70	170.748		
7,050.0	7,004.8	7,126.8	6,991.0	17.9	24.9	20.59	-5,096.4	1,457.4	5,749.5	5,715.6	33.87	169.764		
7,100.0	7,053.8	7,183.8	7,048.0	17.9	24.9	9.66	-5,096.7	1,457.8	5,740.4	5,706.4	34.03	168.679		
7,150.0	7,101.9	7,228.0	7,092.2	17.9	25.0	4.23	-5,096.9	1,458.1	5,727.1	5,693.0	34.17	167.614		
7,200.0	7,148.7	7,266.0	7,130.2	17.8	25.0	0.92	-5,097.1	1,458.3	5,709.9	5,675.6	34.29	166.522		
7,250.0	7,193.8	7,305.6	7,169.8	17.7	25.1	-1.44	-5,097.3	1,458.5	5,688.7	5,654.3	34.40	165.355		
7,300.0	7,236.9	7,339.4	7,203.6	17.5	25.1	-3.33	-5,097.6	1,458.7	5,663.7	5,629.2	34.50	164.167		
7,350.0	7,277.7	7,375.9	7,240.1	17.4	25.1	-5.02	-5,097.9	1,458.9	5,635.3	5,600.7	34.59	162.904		
7,400.0	7,315.7	7,418.3	7,282.5	17.2	25.2	-6.69	-5,098.3	1,459.3	5,603.4	5,568.7	34.69	161.542		
7,450.0	7,350.9	7,457.4	7,321.6	17.1	25.2	-8.47	-5,098.7	1,459.6	5,568.4	5,533.6	34.77	160.159		
7,500.0	7,382.8	7,493.0	7,357.1	16.9	25.2	-10.51	-5,099.0	1,459.8	5,530.4	5,495.6	34.83	158.764		
7,550.0	7,411.3	7,524.7	7,388.9	16.7	25.3	-12.99	-5,099.2	1,460.1	5,489.9	5,455.0	34.89	157.364		
7,600.0	7,436.1	7,552.3	7,416.5	16.6	25.3	-16.18	-5,099.4	1,460.3	5,447.1	5,412.1	34.92	155.965		
7,650.0	7,457.1	7,575.7	7,439.8	16.5	25.3	-20.52	-5,099.5	1,460.5	5,402.3	5,367.3	34.95	154.575		
7,700.0	7,474.0	7,594.6	7,458.7	16.4	25.4	-26.81	-5,099.6	1,460.7	5,355.9	5,320.9	34.96	153.200		
7,750.0	7,486.8	7,608.9	7,473.1	16.4	25.4	-36.46	-5,099.7	1,460.8	5,308.2	5,273.3	34.96	151.847		
7,800.0	7,495.3	7,618.5	7,482.7	16.4	25.4	-51.91	-5,099.8	1,460.9	5,259.7	5,224.8	34.94	150.522		
7,850.0	7,499.5	7,623.4	7,487.6	16.5	25.4	-75.15	-5,099.8	1,461.0	5,210.7	5,175.8	34.92	149.233		
7,873.6	7,500.0	7,624.1	7,488.3	16.5	25.4	-87.89	-5,099.8	1,461.0	5,187.5	5,152.6	34.90	148.638		
7,900.0	7,500.0	7,624.2	7,488.4	16.5	25.4	-87.89	-5,099.8	1,461.0	5,161.5	5,126.7	34.88	147.973		
8,000.0	7,500.0	7,624.8	7,489.0	16.9	25.4	-87.93	-5,099.8	1,461.0	5,063.2	5,028.4	34.81	145.458		
8,100.0	7,500.0	7,625.4	7,489.5	17.4	25.4	-87.96	-5,099.8	1,461.0	4,965.0	4,930.3	34.74	142.939		
8,200.0	7,500.0	7,625.9	7,490.1	18.0	25.4	-88.00	-5,099.8	1,461.0	4,866.9	4,832.2	34.66	140.413		
8,300.0	7,500.0	7,626.5	7,490.6	18.8	25.4	-88.03	-5,099.8	1,461.0	4,768.8	4,734.2	34.59	137.880		
8,400.0	7,500.0	7,627.0	7,491.2	19.7	25.4	-88.06	-5,099.8	1,461.0	4,670.8	4,636.3	34.51	135.336		
8,500.0	7,500.0	7,627.6	7,491.7	20.7	25.4	-88.10	-5,099.8	1,461.0	4,572.9	4,538.5	34.44	132.781		
8,600.0	7,500.0	7,628.1	7,492.3	21.9	25.4	-88.13	-5,099.8	1,461.0	4,475.1	4,440.7	34.37	130.210		
8,700.0	7,500.0	7,628.7	7,492.8	23.1	25.4	-88.16	-5,099.8	1,461.0	4,377.4	4,343.1	34.30	127.622		
8,800.0	7,500.0	7,629.2	7,493.4	24.3	25.4	-88.20	-5,099.8	1,461.0	4,279.8	4,245.6	34.23	125.014		
8,900.0	7,500.0	7,629.8	7,493.9	25.6	25.4	-88.23	-5,099.8	1,461.0	4,182.3	4,148.1	34.17	122.382		
9,000.0	7,500.0	7,630.3	7,494.5	27.0	25.4	-88.26	-5,099.8	1,461.0	4,084.9	4,050.8	34.12	119.722		
9,100.0	7,500.0	7,630.8	7,495.0	28.4	25.4	-88.30	-5,099.8	1,461.0	3,987.7	3,953.6	34.07	117.031		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD												Offset Site Error:	0.0 ft
Survey Program: 41-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis		
9,200.0	7,500.0	7,631.4	7,495.5	29.9	25.4	-88.33	-5,099.8	1,461.0	3,890.6	3,856.5	34.04	114.303	
9,300.0	7,500.0	7,631.9	7,496.1	31.4	25.4	-88.36	-5,099.8	1,461.0	3,793.6	3,759.6	34.01	111.535	
9,400.0	7,500.0	7,632.4	7,496.6	32.9	25.4	-88.39	-5,099.8	1,461.0	3,696.8	3,662.8	34.00	108.722	
9,500.0	7,500.0	7,633.0	7,497.1	34.4	25.4	-88.42	-5,099.8	1,461.0	3,600.2	3,566.2	34.01	105.859	
9,600.0	7,500.0	7,633.5	7,497.7	36.0	25.4	-88.46	-5,099.8	1,461.1	3,503.8	3,469.8	34.04	102.941	
9,700.0	7,500.0	7,634.0	7,498.2	37.5	25.4	-88.49	-5,099.8	1,461.1	3,407.6	3,373.5	34.09	99.962	
9,800.0	7,500.0	7,634.5	7,498.7	39.1	25.4	-88.52	-5,099.8	1,461.1	3,311.6	3,277.4	34.17	96.918	
9,900.0	7,500.0	7,635.0	7,499.2	40.7	25.4	-88.55	-5,099.8	1,461.1	3,215.8	3,181.6	34.28	93.804	
10,000.0	7,500.0	7,635.6	7,499.7	42.3	25.4	-88.58	-5,099.8	1,461.1	3,120.4	3,085.9	34.43	90.617	
10,100.0	7,500.0	7,636.1	7,500.3	43.9	25.4	-88.61	-5,099.8	1,461.1	3,025.2	2,990.5	34.63	87.355	
10,200.0	7,500.0	7,636.6	7,500.8	45.6	25.4	-88.65	-5,099.8	1,461.1	2,930.3	2,895.4	34.88	84.015	
10,300.0	7,500.0	7,637.1	7,501.3	47.2	25.4	-88.68	-5,099.9	1,461.1	2,835.8	2,800.6	35.18	80.598	
10,400.0	7,500.0	7,637.6	7,501.8	48.9	25.4	-88.71	-5,099.9	1,461.1	2,741.7	2,706.1	35.56	77.107	
10,500.0	7,500.0	7,638.1	7,502.3	50.5	25.4	-88.74	-5,099.9	1,461.1	2,648.0	2,612.0	36.00	73.547	
10,600.0	7,500.0	7,638.6	7,502.8	52.2	25.4	-88.77	-5,099.9	1,461.1	2,554.7	2,518.2	36.54	69.924	
10,700.0	7,500.0	7,639.1	7,503.3	53.8	25.4	-88.80	-5,099.9	1,461.1	2,462.0	2,424.9	37.16	66.248	
10,800.0	7,500.0	7,639.6	7,503.8	55.5	25.4	-88.83	-5,099.9	1,461.1	2,370.0	2,332.1	37.90	62.533	
10,900.0	7,500.0	7,640.1	7,504.3	57.2	25.4	-88.86	-5,099.9	1,461.1	2,278.5	2,239.8	38.75	58.795	
11,000.0	7,500.0	7,640.6	7,504.8	58.9	25.4	-88.89	-5,099.9	1,461.1	2,187.8	2,148.1	39.74	55.050	
11,100.0	7,500.0	7,641.1	7,505.3	60.6	25.4	-88.92	-5,099.9	1,461.1	2,098.0	2,057.1	40.88	51.319	
11,200.0	7,500.0	7,641.6	7,505.8	62.3	25.4	-88.95	-5,099.9	1,461.1	2,009.1	1,967.0	42.19	47.624	
11,244.1	7,500.0	7,641.9	7,506.0	63.0	25.4	-88.97	-5,099.9	1,461.1	1,970.3	1,927.4	42.82	46.011	
11,300.0	7,500.0	7,642.1	7,506.3	64.0	25.4	-88.95	-5,099.9	1,461.1	1,921.1	1,877.5	43.66	44.003	
11,400.0	7,500.0	7,642.7	7,506.8	65.7	25.4	-88.91	-5,099.9	1,461.1	1,832.7	1,787.5	45.23	40.522	
11,444.1	7,500.0	7,642.9	7,507.1	66.4	25.4	-88.89	-5,099.9	1,461.1	1,793.6	1,747.6	45.96	39.026	
11,500.0	7,500.0	7,643.2	7,507.4	67.4	25.4	-88.91	-5,099.9	1,461.1	1,744.2	1,697.3	46.94	37.160	
11,600.0	7,500.0	7,643.8	7,507.9	69.1	25.4	-88.95	-5,099.9	1,461.1	1,656.8	1,607.9	48.87	33.900	
11,700.0	7,500.0	7,644.3	7,508.5	70.8	25.4	-88.99	-5,099.9	1,461.2	1,570.8	1,519.8	51.07	30.758	
11,800.0	7,500.0	7,644.9	7,509.0	72.5	25.4	-89.03	-5,099.9	1,461.2	1,486.7	1,433.1	53.57	27.751	
11,900.0	7,500.0	7,645.4	7,509.6	74.2	25.4	-89.07	-5,099.9	1,461.2	1,404.6	1,348.2	56.42	24.895	
12,000.0	7,500.0	7,645.9	7,510.1	76.0	25.4	-89.10	-5,099.9	1,461.2	1,325.0	1,265.3	59.67	22.207	
12,100.0	7,500.0	7,646.5	7,510.7	77.7	25.4	-89.14	-5,099.9	1,461.2	1,248.3	1,184.9	63.36	19.703	
12,194.1	7,500.0	7,647.0	7,511.2	79.3	25.4	-89.18	-5,099.9	1,461.2	1,179.3	1,112.0	67.29	17.527	
12,200.0	7,500.0	7,647.0	7,511.2	79.4	25.4	-89.18	-5,099.9	1,461.2	1,175.1	1,107.6	67.55	17.398	
12,300.0	7,500.0	7,647.6	7,511.7	81.1	25.4	-89.24	-5,099.9	1,461.2	1,107.6	1,035.3	72.38	15.304	
12,387.3	7,500.0	7,648.0	7,512.1	82.6	25.4	-89.29	-5,099.9	1,461.2	1,055.2	978.1	77.16	13.676	
12,400.0	7,500.0	7,648.0	7,512.2	82.9	25.4	-89.29	-5,099.9	1,461.2	1,048.2	970.3	77.89	13.457	
12,500.0	7,500.0	7,648.5	7,512.7	84.6	25.4	-89.32	-5,099.9	1,461.2	996.4	912.5	83.92	11.874	
12,600.0	7,500.0	7,649.0	7,513.2	86.3	25.4	-89.35	-5,099.9	1,461.2	952.4	862.1	90.27	10.551	
12,700.0	7,500.0	7,649.5	7,513.6	88.0	25.4	-89.38	-5,099.9	1,461.2	917.1	820.4	96.70	9.485	
12,800.0	7,500.0	7,649.9	7,514.1	89.7	25.4	-89.42	-5,099.9	1,461.2	891.8	788.9	102.87	8.669	
12,900.0	7,500.0	7,650.4	7,514.6	91.5	25.4	-89.45	-5,099.9	1,461.2	877.2	768.8	108.40	8.092	
12,979.3	7,500.0	7,650.8	7,514.9	92.8	25.4	-89.47	-5,099.9	1,461.2	873.6	761.5	112.10	7.793 CC	
13,000.0	7,500.0	7,650.9	7,515.0	93.2	25.4	-89.48	-5,099.9	1,461.2	873.8	760.9	112.95	7.737 ES	
13,100.0	7,500.0	7,651.3	7,515.5	94.9	25.4	-89.51	-5,099.9	1,461.2	881.9	765.6	116.26	7.586 SF	
13,200.0	7,500.0	7,651.8	7,515.9	96.6	25.4	-89.54	-5,099.9	1,461.2	901.0	782.8	118.24	7.620	
13,300.0	7,500.0	7,652.2	7,516.4	98.4	25.4	-89.57	-5,099.9	1,461.2	930.6	811.6	118.97	7.822	
13,400.0	7,500.0	7,652.7	7,516.9	100.1	25.4	-89.60	-5,099.9	1,461.2	969.6	851.0	118.62	8.174	
13,500.0	7,500.0	7,653.2	7,517.3	101.8	25.4	-89.63	-5,099.9	1,461.2	1,017.0	899.6	117.44	8.659	
13,600.0	7,500.0	7,653.6	7,517.8	103.5	25.4	-89.66	-5,099.9	1,461.2	1,071.6	956.0	115.68	9.264	
13,700.0	7,500.0	7,654.1	7,518.2	105.3	25.4	-89.69	-5,099.9	1,461.2	1,132.5	1,019.0	113.53	9.975	
13,800.0	7,500.0	7,654.5	7,518.7	107.0	25.4	-89.72	-5,099.9	1,461.2	1,198.6	1,087.4	111.18	10.781	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,900.0	7,500.0	7,655.0	7,519.1	108.7	25.4	-89.75	-5,099.9	1,461.3	1,269.2	1,160.4	108.75	11.670		
14,000.0	7,500.0	7,655.4	7,519.6	110.5	25.4	-89.78	-5,099.9	1,461.3	1,343.5	1,237.2	106.33	12.635		
14,100.0	7,500.0	7,655.9	7,520.0	112.2	25.4	-89.80	-5,099.9	1,461.3	1,421.0	1,317.0	103.98	13.666		
14,200.0	7,500.0	7,656.3	7,520.5	113.9	25.4	-89.83	-5,099.9	1,461.3	1,501.1	1,399.4	101.72	14.757		
14,300.0	7,500.0	7,656.7	7,520.9	115.7	25.4	-89.86	-5,099.9	1,461.3	1,583.5	1,483.9	99.58	15.902		
14,400.0	7,500.0	7,657.2	7,521.4	117.4	25.4	-89.89	-5,099.9	1,461.3	1,667.8	1,570.2	97.57	17.094		
14,500.0	7,500.0	7,657.6	7,521.8	119.1	25.4	-89.92	-5,099.9	1,461.3	1,753.8	1,658.1	95.68	18.329		
14,600.0	7,500.0	7,658.1	7,522.2	120.9	25.4	-89.95	-5,100.0	1,461.3	1,841.1	1,747.2	93.93	19.602		
14,700.0	7,500.0	7,658.5	7,522.7	122.6	25.4	-89.98	-5,100.0	1,461.3	1,929.8	1,837.5	92.29	20.909		
14,800.0	7,500.0	7,658.9	7,523.1	124.4	25.4	-90.01	-5,100.0	1,461.3	2,019.4	1,928.7	90.77	22.248		
14,900.0	7,500.0	7,659.4	7,523.5	126.1	25.4	-90.04	-5,100.0	1,461.3	2,110.0	2,020.7	89.36	23.613		
15,000.0	7,500.0	7,659.8	7,524.0	127.8	25.4	-90.06	-5,100.0	1,461.3	2,201.4	2,113.4	88.04	25.004		
15,100.0	7,500.0	7,660.2	7,524.4	129.6	25.4	-90.09	-5,100.0	1,461.3	2,293.6	2,206.8	86.82	26.416		
15,200.0	7,500.0	7,660.7	7,524.8	131.3	25.4	-90.12	-5,100.0	1,461.3	2,386.3	2,300.7	85.69	27.849		
15,300.0	7,500.0	7,661.1	7,525.3	133.1	25.4	-90.15	-5,100.0	1,461.3	2,479.7	2,395.0	84.63	29.300		
15,400.0	7,500.0	7,661.5	7,525.7	134.8	25.4	-90.18	-5,100.0	1,461.3	2,573.5	2,489.9	83.65	30.766		
15,500.0	7,500.0	7,661.9	7,526.1	136.5	25.4	-90.20	-5,100.0	1,461.3	2,667.8	2,585.0	82.73	32.247		
15,600.0	7,500.0	7,662.4	7,526.5	138.3	25.4	-90.23	-5,100.0	1,461.3	2,762.5	2,680.6	81.87	33.741		
15,700.0	7,500.0	7,662.8	7,527.0	140.0	25.4	-90.26	-5,100.0	1,461.3	2,857.5	2,776.4	81.07	35.246		
15,805.8	7,500.0	7,663.2	7,527.4	141.9	25.4	-90.29	-5,100.0	1,461.3	2,958.4	2,878.1	80.28	36.849		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTI													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	172.67	-4,325.8	556.2	4,361.4					
100.0	100.0	83.1	83.1	0.2	0.1	172.67	-4,326.0	556.4	4,361.7	4,361.4	0.30	N/A		
200.0	200.0	163.6	163.6	0.3	0.3	172.67	-4,326.5	556.8	4,362.4	4,361.8	0.61	7,127.080		
300.0	300.0	270.6	270.6	0.5	0.5	172.67	-4,327.6	556.7	4,363.4	4,362.4	0.97	4,482.943		
400.0	400.0	368.9	368.8	0.7	0.6	172.68	-4,328.4	556.3	4,364.1	4,362.8	1.32	3,308.098		
500.0	500.0	475.4	475.4	0.8	0.8	172.68	-4,329.2	556.3	4,364.9	4,363.3	1.68	2,598.518		
600.0	600.0	599.8	599.7	1.0	1.0	133.21	-4,329.8	555.6	4,366.0	4,363.9	2.07	2,107.279		
700.0	700.0	690.9	690.9	1.2	1.2	133.23	-4,330.1	555.2	4,368.0	4,365.6	2.41	1,814.586		
800.0	799.9	800.0	800.0	1.4	1.4	133.26	-4,330.5	554.4	4,371.2	4,368.4	2.78	1,573.874		
900.0	899.7	898.3	898.2	1.6	1.6	133.30	-4,330.7	553.3	4,375.5	4,372.4	3.13	1,396.545		
1,000.0	999.4	989.1	989.1	1.8	1.7	133.34	-4,331.1	552.3	4,381.1	4,377.6	3.48	1,257.858		
1,100.0	1,098.9	1,104.7	1,104.7	2.0	1.9	133.42	-4,331.5	550.5	4,387.9	4,384.0	3.89	1,129.430		
1,201.3	1,199.5	1,206.8	1,206.8	2.2	2.1	133.50	-4,331.7	548.8	4,395.8	4,391.5	4.28	1,027.953		
1,300.0	1,297.5	1,302.3	1,302.2	2.5	2.3	133.63	-4,331.9	546.9	4,404.1	4,399.5	4.66	946.023		
1,400.0	1,396.8	1,414.9	1,414.7	2.7	2.5	133.80	-4,332.0	544.1	4,412.4	4,407.3	5.07	870.106		
1,500.0	1,496.0	1,503.5	1,503.4	3.0	2.6	133.92	-4,332.0	542.4	4,420.7	4,415.3	5.45	811.854		
1,600.0	1,595.3	1,625.0	1,624.9	3.3	2.9	134.09	-4,331.8	540.0	4,428.8	4,422.9	5.88	753.129		
1,700.0	1,694.5	1,712.2	1,712.0	3.5	3.0	134.21	-4,331.7	538.3	4,437.0	4,430.7	6.26	709.258		
1,800.0	1,793.8	1,837.2	1,837.0	3.8	3.2	134.39	-4,331.1	535.1	4,444.8	4,438.1	6.70	663.306		
1,900.0	1,893.0	1,926.0	1,925.7	4.0	3.4	134.52	-4,330.7	532.7	4,452.6	4,445.6	7.08	628.735		
2,000.0	1,992.3	2,011.9	2,011.6	4.3	3.5	134.65	-4,330.6	530.4	4,460.8	4,453.4	7.46	598.112		
2,100.0	2,091.5	2,123.0	2,122.7	4.6	3.7	134.81	-4,330.2	527.5	4,468.9	4,461.0	7.88	567.116		
2,200.0	2,190.8	2,200.0	2,199.6	4.8	3.9	134.92	-4,330.2	525.5	4,477.2	4,469.0	8.24	543.332		
2,300.0	2,290.0	2,320.5	2,320.1	5.1	4.1	135.10	-4,330.2	521.9	4,485.6	4,476.9	8.68	516.652		
2,400.0	2,389.3	2,425.9	2,425.5	5.4	4.3	135.26	-4,329.9	518.4	4,493.8	4,484.7	9.10	494.031		
2,500.0	2,488.5	2,553.1	2,552.6	5.7	4.5	135.45	-4,328.8	514.0	4,501.3	4,491.7	9.55	471.332		
2,600.0	2,587.8	2,639.7	2,639.1	5.9	4.7	135.58	-4,328.0	511.2	4,508.8	4,498.9	9.93	454.135		
2,700.0	2,687.0	2,723.1	2,722.5	6.2	4.8	135.70	-4,327.5	509.3	4,516.7	4,506.4	10.30	438.543		
2,800.0	2,786.3	2,819.7	2,819.1	6.5	5.0	135.83	-4,327.1	507.1	4,524.9	4,514.2	10.69	423.129		
2,900.0	2,885.5	2,927.7	2,927.0	6.7	5.2	135.97	-4,326.4	505.4	4,533.0	4,521.9	11.11	408.136		
3,000.0	2,984.8	3,028.0	3,027.3	7.0	5.4	136.09	-4,325.7	503.8	4,540.9	4,529.4	11.51	394.648		
3,100.0	3,084.0	3,118.4	3,117.7	7.3	5.5	136.21	-4,325.1	502.2	4,549.1	4,537.2	11.89	382.645		
3,200.0	3,183.3	3,213.3	3,212.6	7.6	5.7	136.33	-4,324.7	500.5	4,557.3	4,545.0	12.28	371.183		
3,300.0	3,282.5	3,300.0	3,299.3	7.8	5.8	136.44	-4,324.6	499.3	4,565.9	4,553.3	12.65	360.915		
3,400.0	3,381.8	3,391.3	3,390.5	8.1	6.0	136.55	-4,324.6	498.5	4,574.8	4,561.8	13.03	351.072		
3,500.0	3,481.1	3,480.3	3,479.6	8.4	6.2	136.65	-4,324.7	497.8	4,583.7	4,570.3	13.41	341.881		
3,600.0	3,580.3	3,578.2	3,577.5	8.7	6.3	136.76	-4,324.9	496.9	4,592.8	4,579.0	13.80	332.826		
3,700.0	3,679.6	3,687.3	3,686.5	8.9	6.5	136.89	-4,325.0	496.0	4,601.8	4,587.6	14.21	323.832		
3,800.0	3,778.8	3,782.8	3,782.1	9.2	6.7	136.99	-4,325.0	495.4	4,610.7	4,596.1	14.60	315.872		
3,900.0	3,878.1	3,883.2	3,882.5	9.5	6.9	137.11	-4,325.1	494.7	4,619.8	4,604.8	14.99	308.120		
4,000.0	3,977.3	3,978.2	3,977.5	9.8	7.0	137.22	-4,325.2	493.3	4,628.8	4,613.4	15.38	300.951		
4,100.0	4,076.6	4,083.5	4,082.8	10.0	7.2	137.35	-4,325.4	491.4	4,637.9	4,622.1	15.79	293.774		
4,200.0	4,175.8	4,202.2	4,201.4	10.3	7.4	137.51	-4,325.3	489.0	4,646.7	4,630.4	16.22	286.526		
4,300.0	4,275.1	4,305.2	4,304.3	10.6	7.6	137.64	-4,324.9	486.6	4,655.2	4,638.6	16.62	280.085		
4,400.0	4,374.3	4,400.0	4,399.1	10.9	7.8	137.77	-4,324.6	483.9	4,663.8	4,646.8	17.01	274.206		
4,500.0	4,473.6	4,488.7	4,487.9	11.1	7.9	137.88	-4,324.4	481.9	4,672.6	4,655.2	17.38	268.811		
4,600.0	4,572.8	4,579.3	4,578.4	11.4	8.1	137.99	-4,324.4	480.2	4,681.6	4,663.8	17.76	263.604		
4,700.0	4,672.1	4,713.7	4,712.7	11.7	8.3	138.16	-4,323.9	477.8	4,690.3	4,672.1	18.22	257.475		
4,800.0	4,771.3	4,800.0	4,799.1	12.0	8.5	138.27	-4,323.6	476.1	4,698.9	4,680.3	18.59	252.816		
4,900.0	4,870.6	4,908.7	4,907.7	12.2	8.7	138.40	-4,323.2	473.7	4,707.6	4,688.6	19.00	247.822		
5,000.0	4,969.8	5,027.0	5,026.0	12.5	8.9	138.54	-4,322.1	472.0	4,715.8	4,696.4	19.42	242.833		
5,100.0	5,069.1	5,127.4	5,126.4	12.8	9.1	138.65	-4,321.1	470.8	4,724.0	4,704.2	19.81	238.436		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI										Offset Site Error:		0.0 ft	
Survey Program: 100-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,168.3	5,252.0	5,251.0	13.1	9.3	138.79	-4,319.4	469.4	4,731.8	4,711.6	20.25	233.706	
5,300.0	5,267.6	5,351.3	5,350.3	13.3	9.5	138.90	-4,317.7	468.6	4,739.3	4,718.7	20.64	229.668	
5,400.0	5,366.8	5,438.5	5,437.5	13.6	9.6	138.99	-4,316.4	467.9	4,747.0	4,726.0	21.00	226.019	
5,500.0	5,466.1	5,536.8	5,535.7	13.9	9.8	139.10	-4,315.2	466.9	4,755.0	4,733.6	21.39	222.306	
5,600.0	5,565.3	5,638.5	5,637.5	14.2	10.0	139.20	-4,313.6	466.2	4,762.8	4,741.0	21.78	218.664	
5,700.0	5,664.6	5,723.8	5,722.8	14.4	10.1	139.29	-4,312.6	465.7	4,770.8	4,748.7	22.14	215.452	
5,800.0	5,763.8	5,844.3	5,843.2	14.7	10.3	139.41	-4,311.1	465.0	4,778.8	4,756.2	22.57	211.755	
5,900.0	5,863.1	5,939.7	5,938.5	15.0	10.5	139.51	-4,309.5	464.8	4,786.5	4,763.5	22.95	208.591	
6,000.0	5,962.3	6,011.8	6,010.7	15.3	10.6	139.58	-4,308.6	464.7	4,794.6	4,771.3	23.28	205.918	
6,100.0	6,061.6	6,088.2	6,087.1	15.5	10.8	139.65	-4,308.1	464.4	4,803.3	4,779.6	23.63	203.279	
6,200.0	6,160.9	6,159.2	6,158.1	15.8	10.9	139.73	-4,308.0	463.8	4,812.5	4,788.5	23.96	200.823	
6,300.0	6,260.1	6,245.7	6,244.6	16.1	11.0	139.82	-4,308.4	462.9	4,822.2	4,797.9	24.33	198.235	
6,400.0	6,359.4	6,397.6	6,396.5	16.4	11.3	139.97	-4,308.4	462.0	4,831.7	4,806.9	24.81	194.770	
6,500.0	6,458.6	6,500.0	6,498.9	16.6	11.5	140.07	-4,307.7	461.4	4,840.3	4,815.1	25.20	192.091	
6,600.0	6,557.9	6,593.7	6,592.5	16.9	11.6	140.17	-4,307.1	460.7	4,849.1	4,823.5	25.57	189.617	
6,700.0	6,657.1	6,707.4	6,706.3	17.2	11.8	140.28	-4,306.2	459.9	4,857.8	4,831.8	25.98	186.954	
6,800.0	6,756.4	6,834.3	6,833.1	17.5	12.1	140.41	-4,304.7	458.9	4,865.9	4,839.5	26.42	184.190	
6,900.0	6,855.6	6,934.4	6,933.2	17.7	12.2	140.51	-4,303.1	458.3	4,873.8	4,847.0	26.80	181.841	
6,919.5	6,875.0	6,952.1	6,950.9	17.8	12.3	140.53	-4,302.9	458.2	4,875.4	4,848.5	26.87	181.415	
6,950.0	6,905.3	6,979.8	6,978.6	17.9	12.3	117.97	-4,302.5	458.2	4,877.0	4,850.1	26.99	180.722	
7,000.0	6,955.1	7,023.7	7,022.5	17.9	12.4	59.75	-4,301.9	458.2	4,876.3	4,849.1	27.17	179.488	
7,050.0	7,004.8	7,066.1	7,064.9	17.9	12.5	30.78	-4,301.4	458.3	4,871.2	4,843.8	27.35	178.131	
7,100.0	7,053.8	7,110.5	7,109.3	17.9	12.5	20.03	-4,300.9	458.6	4,861.9	4,834.4	27.53	176.617	
7,150.0	7,101.9	7,163.9	7,162.7	17.9	12.6	14.89	-4,300.3	459.2	4,848.3	4,820.6	27.72	174.876	
7,200.0	7,148.7	7,219.6	7,218.4	17.8	12.7	11.96	-4,299.7	460.4	4,830.6	4,802.6	27.92	172.992	
7,250.0	7,193.8	7,281.2	7,279.9	17.7	12.8	10.10	-4,298.7	462.9	4,808.7	4,780.5	28.13	170.942	
7,300.0	7,236.9	7,318.9	7,317.5	17.5	12.9	8.83	-4,298.1	464.9	4,782.9	4,754.6	28.30	169.028	
7,350.0	7,277.7	7,345.2	7,343.8	17.4	12.9	7.92	-4,297.8	466.5	4,753.5	4,725.1	28.44	167.134	
7,400.0	7,315.7	7,369.9	7,368.4	17.2	13.0	7.27	-4,297.5	468.0	4,720.9	4,692.3	28.58	165.166	
7,450.0	7,350.9	7,400.0	7,398.5	17.1	13.0	6.80	-4,297.2	470.0	4,685.2	4,656.5	28.73	163.067	
7,500.0	7,382.8	7,414.7	7,413.2	16.9	13.0	6.47	-4,297.2	471.0	4,646.6	4,617.8	28.85	161.044	
7,550.0	7,411.3	7,434.9	7,433.3	16.7	13.1	6.27	-4,297.1	472.3	4,605.5	4,576.5	28.98	158.907	
7,600.0	7,436.1	7,452.6	7,451.0	16.6	13.1	6.19	-4,297.0	473.4	4,562.1	4,533.0	29.10	156.747	
7,650.0	7,457.1	7,467.6	7,465.9	16.5	13.1	6.25	-4,297.0	474.3	4,516.7	4,487.5	29.22	154.574	
7,700.0	7,474.0	7,479.8	7,478.1	16.4	13.1	6.52	-4,297.0	475.0	4,469.7	4,440.4	29.33	152.400	
7,750.0	7,486.8	7,500.0	7,498.3	16.4	13.2	7.20	-4,297.1	476.1	4,421.5	4,392.0	29.45	150.144	
7,800.0	7,495.3	7,500.0	7,498.3	16.4	13.2	8.88	-4,297.1	476.1	4,372.2	4,342.7	29.53	148.059	
7,850.0	7,499.5	7,500.0	7,498.3	16.5	13.2	17.48	-4,297.1	476.1	4,322.4	4,292.8	29.61	145.982	
7,873.6	7,500.0	7,500.0	7,498.3	16.5	13.2	81.35	-4,297.1	476.1	4,298.9	4,269.2	29.65	145.007	
7,900.0	7,500.0	7,500.0	7,498.3	16.5	13.2	81.35	-4,297.1	476.1	4,272.4	4,242.7	29.69	143.915	
8,000.0	7,500.0	7,500.0	7,498.3	16.9	13.2	81.35	-4,297.1	476.1	4,172.4	4,142.6	29.84	139.816	
8,100.0	7,500.0	7,500.0	7,498.3	17.4	13.2	81.35	-4,297.1	476.1	4,072.4	4,042.4	30.00	135.761	
8,200.0	7,500.0	7,500.0	7,498.3	18.0	13.2	81.35	-4,297.1	476.1	3,972.4	3,942.3	30.15	131.748	
8,300.0	7,500.0	7,500.0	7,498.3	18.8	13.2	81.35	-4,297.1	476.1	3,872.5	3,842.1	30.31	127.777	
8,400.0	7,500.0	7,500.0	7,498.3	19.7	13.2	81.35	-4,297.1	476.1	3,772.5	3,742.0	30.46	123.847	
8,500.0	7,500.0	7,500.0	7,498.3	20.7	13.2	81.35	-4,297.1	476.1	3,672.5	3,641.9	30.61	119.957	
8,600.0	7,500.0	7,500.0	7,498.3	21.9	13.2	81.35	-4,297.1	476.1	3,572.5	3,541.7	30.77	116.106	
8,700.0	7,500.0	7,500.0	7,498.3	23.1	13.2	81.35	-4,297.1	476.1	3,472.5	3,441.6	30.92	112.294	
8,800.0	7,500.0	7,500.0	7,498.3	24.3	13.2	81.35	-4,297.1	476.1	3,372.5	3,341.4	31.08	108.519	
8,900.0	7,500.0	7,500.0	7,498.3	25.6	13.2	81.35	-4,297.1	476.1	3,272.5	3,241.3	31.23	104.780	
9,000.0	7,500.0	7,500.0	7,498.3	27.0	13.2	81.35	-4,297.1	476.1	3,172.5	3,141.1	31.39	101.078	
9,100.0	7,500.0	7,500.0	7,498.3	28.4	13.2	81.35	-4,297.1	476.1	3,072.5	3,041.0	31.54	97.411	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI										Offset Site Error:		0.0 ft	
Survey Program: 100-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,200.0	7,500.0	7,500.0	7,498.3	29.9	13.2	81.35	-4,297.1	476.1	2,972.5	2,940.8	31.70	93.778	
9,300.0	7,500.0	7,500.0	7,498.3	31.4	13.2	81.35	-4,297.1	476.1	2,872.5	2,840.7	31.85	90.179	
9,400.0	7,500.0	7,500.0	7,498.3	32.9	13.2	81.35	-4,297.1	476.1	2,772.6	2,740.5	32.01	86.613	
9,500.0	7,500.0	7,500.0	7,498.3	34.4	13.2	81.35	-4,297.1	476.1	2,672.6	2,640.4	32.17	83.080	
9,600.0	7,500.0	7,500.0	7,498.3	36.0	13.2	81.35	-4,297.1	476.1	2,572.6	2,540.3	32.33	79.578	
9,700.0	7,500.0	7,500.0	7,498.3	37.5	13.2	81.35	-4,297.1	476.1	2,472.6	2,440.1	32.49	76.108	
9,800.0	7,500.0	7,500.0	7,498.3	39.1	13.2	81.35	-4,297.1	476.1	2,372.6	2,340.0	32.65	72.668	
9,900.0	7,500.0	7,500.0	7,498.3	40.7	13.2	81.35	-4,297.1	476.1	2,272.6	2,239.8	32.81	69.258	
10,000.0	7,500.0	7,503.4	7,501.7	42.3	13.2	85.67	-4,297.1	476.3	2,172.6	2,139.7	32.98	65.875	
10,100.0	7,500.0	7,503.6	7,501.9	43.9	13.2	85.99	-4,297.1	476.3	2,072.7	2,039.5	33.15	62.524	
10,200.0	7,500.0	7,503.9	7,502.2	45.6	13.2	86.30	-4,297.1	476.3	1,972.7	1,939.4	33.32	59.203	
10,300.0	7,500.0	7,504.1	7,502.4	47.2	13.2	86.62	-4,297.1	476.3	1,872.7	1,839.2	33.50	55.909	
10,400.0	7,500.0	7,504.4	7,502.7	48.9	13.2	86.94	-4,297.1	476.3	1,772.7	1,739.1	33.68	52.642	
10,500.0	7,500.0	7,504.6	7,502.9	50.5	13.2	87.27	-4,297.1	476.3	1,672.8	1,638.9	33.86	49.403	
10,600.0	7,500.0	7,504.8	7,503.2	52.2	13.2	87.59	-4,297.1	476.4	1,572.8	1,538.8	34.05	46.190	
10,700.0	7,500.0	7,505.1	7,503.4	53.8	13.2	87.92	-4,297.1	476.4	1,472.9	1,438.6	34.25	43.003	
10,800.0	7,500.0	7,505.4	7,503.7	55.5	13.2	88.25	-4,297.1	476.4	1,372.9	1,338.4	34.46	39.842	
10,900.0	7,500.0	7,505.6	7,503.9	57.2	13.2	88.58	-4,297.1	476.4	1,273.0	1,238.3	34.68	36.706	
11,000.0	7,500.0	7,505.9	7,504.2	58.9	13.2	88.92	-4,297.1	476.4	1,173.0	1,138.1	34.92	33.594	
11,100.0	7,500.0	7,506.1	7,504.4	60.6	13.2	89.25	-4,297.1	476.4	1,073.1	1,037.9	35.18	30.506	
11,200.0	7,500.0	7,506.4	7,504.7	62.3	13.2	89.59	-4,297.1	476.4	973.2	937.7	35.46	27.442	
11,244.1	7,500.0	7,506.5	7,504.8	63.0	13.2	89.74	-4,297.1	476.4	929.1	893.5	35.60	26.097	
11,300.0	7,500.0	7,506.7	7,505.0	64.0	13.2	89.98	-4,297.1	476.5	873.3	837.5	35.82	24.381	
11,400.0	7,500.0	7,507.1	7,505.4	65.7	13.2	90.27	-4,297.1	476.5	773.8	737.3	36.42	21.245	
11,444.1	7,500.0	7,507.4	7,505.7	66.4	13.2	90.39	-4,297.1	476.5	730.0	693.2	36.79	19.839	
11,500.0	7,500.0	7,507.7	7,506.0	67.4	13.2	90.58	-4,297.1	476.5	674.7	637.3	37.36	18.058	
11,600.0	7,500.0	7,508.3	7,506.7	69.1	13.2	90.94	-4,297.1	476.5	576.0	537.4	38.68	14.893	
11,700.0	7,500.0	7,509.0	7,507.3	70.8	13.2	91.29	-4,297.1	476.6	477.9	437.3	40.60	11.770	
11,800.0	7,500.0	7,509.6	7,507.9	72.5	13.2	91.64	-4,297.1	476.6	380.8	337.1	43.66	8.720	
11,900.0	7,500.0	7,510.2	7,508.5	74.2	13.2	92.00	-4,297.1	476.6	285.6	236.5	49.04	5.824	
12,000.0	7,500.0	7,510.9	7,509.2	76.0	13.2	92.36	-4,297.1	476.7	195.3	135.6	59.71	3.271	
12,100.0	7,500.0	7,511.5	7,509.8	77.7	13.2	92.72	-4,297.1	476.7	121.3	40.1	81.21	1.494 Level 3	
12,167.1	7,500.0	7,511.9	7,510.2	78.8	13.2	92.96	-4,297.1	476.7	101.1	9.4	91.71	1.102 Level 2, CC, ES, SF	
12,194.1	7,500.0	7,512.1	7,510.4	79.3	13.2	93.06	-4,297.1	476.7	104.6	16.2	88.44	1.183 Level 2	
12,200.0	7,500.0	7,512.1	7,510.4	79.4	13.2	93.08	-4,297.1	476.7	106.3	19.1	87.19	1.219 Level 2	
12,300.0	7,500.0	7,512.7	7,511.0	81.1	13.2	93.29	-4,297.1	476.8	165.8	105.1	60.69	2.731	
12,387.3	7,500.0	7,513.0	7,511.3	82.6	13.2	93.31	-4,297.1	476.8	239.5	192.3	47.25	5.070	
12,400.0	7,500.0	7,513.0	7,511.3	82.9	13.2	93.33	-4,297.1	476.8	250.9	204.9	45.97	5.457	
12,500.0	7,500.0	7,513.3	7,511.6	84.6	13.2	93.48	-4,297.1	476.8	343.7	304.1	39.55	8.690	
12,600.0	7,500.0	7,513.6	7,511.9	86.3	13.2	93.64	-4,297.1	476.8	439.6	402.9	36.74	11.966	
12,700.0	7,500.0	7,513.9	7,512.2	88.0	13.2	93.80	-4,297.1	476.8	537.1	501.6	35.49	15.135	
12,800.0	7,500.0	7,514.2	7,512.5	89.7	13.2	93.96	-4,297.1	476.9	635.3	600.4	34.95	18.180	
12,900.0	7,500.0	7,514.5	7,512.8	91.5	13.2	94.12	-4,297.1	476.9	734.0	699.3	34.75	21.123	
13,000.0	7,500.0	7,514.8	7,513.2	93.2	13.2	94.28	-4,297.1	476.9	833.1	798.3	34.73	23.985	
13,100.0	7,500.0	7,515.2	7,513.5	94.9	13.2	94.44	-4,297.1	476.9	932.3	897.5	34.81	26.785	
13,200.0	7,500.0	7,515.5	7,513.8	96.6	13.2	94.61	-4,297.1	476.9	1,031.7	996.7	34.93	29.534	
13,300.0	7,500.0	7,515.8	7,514.1	98.4	13.2	94.77	-4,297.1	476.9	1,131.1	1,096.1	35.08	32.242	
13,400.0	7,500.0	7,516.1	7,514.4	100.1	13.2	94.94	-4,297.1	476.9	1,230.7	1,195.5	35.25	34.915	
13,500.0	7,500.0	7,516.4	7,514.7	101.8	13.2	95.10	-4,297.1	477.0	1,330.4	1,294.9	35.42	37.557	
13,600.0	7,500.0	7,516.7	7,515.0	103.5	13.2	95.27	-4,297.1	477.0	1,430.0	1,394.4	35.60	40.171	
13,700.0	7,500.0	7,517.1	7,515.4	105.3	13.2	95.44	-4,297.1	477.0	1,529.8	1,494.0	35.78	42.760	
13,800.0	7,500.0	7,517.4	7,515.7	107.0	13.2	95.61	-4,297.1	477.0	1,629.5	1,593.6	35.95	45.326	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTI													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,900.0	7,500.0	7,517.7	7,516.0	108.7	13.2	95.78	-4,297.1	477.0	1,729.3	1,693.2	36.12	47.870		
14,000.0	7,500.0	7,518.0	7,516.3	110.5	13.2	95.95	-4,297.1	477.0	1,829.1	1,792.8	36.30	50.394		
14,100.0	7,500.0	7,518.4	7,516.7	112.2	13.2	96.12	-4,297.1	477.1	1,929.0	1,892.5	36.47	52.898		
14,200.0	7,500.0	7,518.7	7,517.0	113.9	13.2	96.30	-4,297.1	477.1	2,028.8	1,992.2	36.63	55.383		
14,300.0	7,500.0	7,519.0	7,517.3	115.7	13.2	96.47	-4,297.1	477.1	2,128.7	2,091.9	36.80	57.849		
14,400.0	7,500.0	7,519.4	7,517.7	117.4	13.2	96.65	-4,297.1	477.1	2,228.5	2,191.6	36.96	60.299		
14,500.0	7,500.0	7,519.7	7,518.0	119.1	13.2	96.82	-4,297.1	477.1	2,328.4	2,291.3	37.12	62.730		
14,600.0	7,500.0	7,520.0	7,518.3	120.9	13.2	97.00	-4,297.1	477.1	2,428.3	2,391.0	37.28	65.146		
14,700.0	7,500.0	7,520.4	7,518.7	122.6	13.2	97.18	-4,297.1	477.2	2,528.2	2,490.8	37.43	67.544		
14,800.0	7,500.0	7,520.7	7,519.0	124.4	13.2	97.36	-4,297.1	477.2	2,628.1	2,590.5	37.58	69.927		
14,900.0	7,500.0	7,521.1	7,519.4	126.1	13.2	97.54	-4,297.1	477.2	2,728.0	2,690.3	37.74	72.294		
15,000.0	7,500.0	7,521.4	7,519.7	127.8	13.2	97.72	-4,297.1	477.2	2,828.0	2,790.1	37.89	74.646		
15,100.0	7,500.0	7,521.8	7,520.1	129.6	13.2	97.90	-4,297.1	477.2	2,927.9	2,889.9	38.03	76.982		
15,200.0	7,500.0	7,522.1	7,520.4	131.3	13.2	98.09	-4,297.1	477.3	3,027.8	2,989.6	38.18	79.304		
15,300.0	7,500.0	7,522.5	7,520.8	133.1	13.2	98.27	-4,297.1	477.3	3,127.8	3,089.4	38.33	81.611		
15,400.0	7,500.0	7,522.8	7,521.1	134.8	13.2	98.46	-4,297.1	477.3	3,227.7	3,189.2	38.47	83.904		
15,500.0	7,500.0	7,523.2	7,521.5	136.5	13.2	98.65	-4,297.1	477.3	3,327.6	3,289.0	38.61	86.182		
15,600.0	7,500.0	7,523.6	7,521.9	138.3	13.2	98.84	-4,297.1	477.3	3,427.6	3,388.8	38.75	88.447		
15,700.0	7,500.0	7,523.9	7,522.2	140.0	13.2	99.02	-4,297.1	477.3	3,527.5	3,488.7	38.89	90.697		
15,805.8	7,500.0	7,524.3	7,522.6	141.9	13.2	99.23	-4,297.1	477.4	3,633.3	3,594.2	39.04	93.063		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 1024-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	11.3	11.3	0.0	0.0	152.93	-2,304.0	1,177.6	2,587.5					
100.0	100.0	114.1	114.1	0.2	0.2	152.93	-2,303.9	1,177.6	2,587.4	2,587.1	0.35	7,430.073		
200.0	200.0	216.9	216.9	0.3	0.4	152.93	-2,303.7	1,177.6	2,587.3	2,586.6	0.70	3,697.756		
300.0	300.0	319.7	319.7	0.5	0.6	152.92	-2,303.4	1,177.6	2,587.0	2,585.9	1.05	2,461.149		
400.0	400.0	422.5	422.5	0.7	0.7	152.92	-2,303.0	1,177.6	2,586.6	2,585.2	1.40	1,844.187		
500.0	500.0	525.3	525.3	0.8	0.9	152.91	-2,302.4	1,177.6	2,586.1	2,584.3	1.75	1,474.401		
594.4	594.4	622.4	622.4	1.0	1.1	113.45	-2,301.7	1,177.6	2,585.8	2,583.7	2.09	1,239.478		
600.0	600.0	628.1	628.1	1.0	1.1	113.45	-2,301.7	1,177.6	2,585.8	2,583.7	2.11	1,227.958		
700.0	700.0	730.9	730.9	1.2	1.3	113.49	-2,300.8	1,177.6	2,586.2	2,583.7	2.46	1,051.400		
800.0	799.9	833.6	833.6	1.4	1.4	113.56	-2,299.9	1,177.6	2,587.1	2,584.3	2.82	917.962		
900.0	899.7	936.3	936.3	1.6	1.6	113.67	-2,298.8	1,177.6	2,588.6	2,585.4	3.18	812.947		
1,000.0	999.4	1,034.4	1,034.4	1.8	1.8	113.79	-2,297.7	1,177.7	2,590.7	2,587.2	3.55	729.194		
1,100.0	1,098.9	1,105.2	1,105.1	2.0	1.9	113.88	-2,297.2	1,178.0	2,594.2	2,590.3	3.89	667.026		
1,201.3	1,199.5	1,183.0	1,183.0	2.2	2.0	114.00	-2,297.5	1,178.9	2,599.7	2,595.5	4.26	610.781		
1,300.0	1,297.5	1,243.9	1,243.9	2.5	2.2	114.13	-2,298.3	1,180.1	2,606.6	2,602.0	4.59	567.498		
1,400.0	1,396.8	1,322.5	1,322.4	2.7	2.3	114.31	-2,300.1	1,181.7	2,614.6	2,609.6	4.97	526.248		
1,500.0	1,496.0	1,407.8	1,407.6	3.0	2.4	114.50	-2,302.4	1,183.8	2,623.2	2,617.8	5.36	489.502		
1,600.0	1,595.3	1,490.3	1,490.1	3.3	2.6	114.67	-2,304.9	1,186.4	2,632.4	2,626.6	5.75	458.010		
1,700.0	1,694.5	1,564.0	1,563.7	3.5	2.7	114.81	-2,307.3	1,189.5	2,642.4	2,636.2	6.12	431.587		
1,800.0	1,793.8	1,641.8	1,641.2	3.8	2.9	114.94	-2,310.0	1,194.1	2,653.2	2,646.7	6.51	407.598		
1,900.0	1,893.0	1,724.3	1,723.5	4.0	3.0	115.05	-2,313.2	1,200.0	2,664.9	2,658.0	6.91	385.817		
2,000.0	1,992.3	1,820.0	1,818.8	4.3	3.2	115.17	-2,317.0	1,207.3	2,677.1	2,669.7	7.33	365.059		
2,100.0	2,091.5	1,916.9	1,915.4	4.6	3.4	115.29	-2,321.0	1,214.7	2,689.2	2,681.5	7.76	346.352		
2,200.0	2,190.8	2,024.5	2,022.6	4.8	3.6	115.42	-2,325.3	1,222.9	2,701.4	2,693.2	8.22	328.711		
2,300.0	2,290.0	2,103.6	2,101.4	5.1	3.8	115.53	-2,328.6	1,228.8	2,713.6	2,705.0	8.62	314.977		
2,400.0	2,389.3	2,187.5	2,185.0	5.4	4.0	115.63	-2,332.7	1,235.6	2,726.6	2,717.6	9.02	302.189		
2,500.0	2,488.5	2,273.1	2,270.2	5.7	4.2	115.73	-2,337.1	1,242.6	2,740.1	2,730.6	9.44	290.390		
2,600.0	2,587.8	2,380.0	2,376.5	5.9	4.4	115.85	-2,342.9	1,251.8	2,753.9	2,744.0	9.89	278.393		
2,700.0	2,687.0	2,526.8	2,522.7	6.2	4.7	116.06	-2,349.9	1,262.0	2,766.5	2,756.1	10.43	265.256		
2,800.0	2,786.3	2,626.6	2,622.2	6.5	4.9	116.18	-2,353.6	1,269.0	2,778.1	2,767.3	10.87	255.486		
2,900.0	2,885.5	2,707.0	2,702.3	6.7	5.1	116.28	-2,356.8	1,275.0	2,790.2	2,778.9	11.28	247.440		
3,000.0	2,984.8	2,806.7	2,801.7	7.0	5.3	116.40	-2,361.3	1,282.3	2,802.7	2,791.0	11.72	239.156		
3,100.0	3,084.0	2,925.7	2,920.3	7.3	5.6	116.56	-2,366.2	1,290.5	2,814.8	2,802.6	12.20	230.684		
3,200.0	3,183.3	3,023.0	3,017.3	7.6	5.8	116.68	-2,369.9	1,297.2	2,826.5	2,813.8	12.64	223.591		
3,300.0	3,282.5	3,118.0	3,112.0	7.8	6.0	116.80	-2,373.6	1,303.8	2,838.4	2,825.3	13.07	217.104		
3,400.0	3,381.8	3,204.9	3,198.6	8.1	6.2	116.90	-2,377.2	1,310.1	2,850.6	2,837.1	13.49	211.274		
3,500.0	3,481.1	3,326.2	3,319.5	8.4	6.4	117.04	-2,381.9	1,318.8	2,862.5	2,848.6	13.98	204.687		
3,600.0	3,580.3	3,408.9	3,401.9	8.7	6.6	117.13	-2,384.8	1,325.2	2,874.5	2,860.1	14.40	199.640		
3,700.0	3,679.6	3,506.5	3,499.1	8.9	6.8	117.23	-2,388.7	1,332.8	2,886.7	2,871.9	14.84	194.529		
3,800.0	3,778.8	3,602.1	3,594.4	9.2	7.1	117.34	-2,392.7	1,339.7	2,899.1	2,883.8	15.28	189.782		
3,900.0	3,878.1	3,711.1	3,702.9	9.5	7.3	117.45	-2,396.9	1,348.3	2,911.3	2,895.5	15.75	184.844		
4,000.0	3,977.3	3,811.5	3,803.0	9.8	7.5	117.55	-2,400.3	1,356.4	2,923.3	2,907.1	16.20	180.417		
4,100.0	4,076.6	3,896.4	3,887.6	10.0	7.7	117.64	-2,403.7	1,362.9	2,935.6	2,918.9	16.62	176.655		
4,200.0	4,175.8	3,988.1	3,978.9	10.3	7.9	117.72	-2,407.6	1,370.3	2,948.2	2,931.2	17.05	172.901		
4,300.0	4,275.1	4,088.6	4,079.0	10.6	8.2	117.82	-2,411.7	1,378.7	2,961.0	2,943.5	17.51	169.140		
4,400.0	4,374.3	4,178.5	4,168.5	10.9	8.4	117.90	-2,415.6	1,386.1	2,973.8	2,955.9	17.94	165.808		
4,500.0	4,473.6	4,261.5	4,251.0	11.1	8.6	117.97	-2,419.5	1,393.3	2,987.2	2,968.8	18.35	162.790		
4,600.0	4,572.8	4,385.4	4,374.4	11.4	8.9	118.09	-2,425.3	1,403.3	3,000.3	2,981.5	18.86	159.126		
4,700.0	4,672.1	4,507.2	4,495.7	11.7	9.1	118.21	-2,430.1	1,412.9	3,012.8	2,993.4	19.36	155.621		
4,800.0	4,771.3	4,636.0	4,624.0	12.0	9.4	118.34	-2,434.3	1,422.5	3,024.4	3,004.5	19.88	152.169		
4,900.0	4,870.6	4,746.3	4,734.1	12.2	9.7	118.46	-2,437.5	1,429.6	3,035.3	3,014.9	20.34	149.211		
5,000.0	4,969.8	4,885.5	4,873.1	12.5	9.9	118.65	-2,441.4	1,436.1	3,045.5	3,024.7	20.85	146.083		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 1024-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,100.0	5,069.1	5,076.5	5,064.1	12.8	10.2	119.03	-2,444.5	1,437.8	3,053.2	3,031.8	21.41	142.574		
5,200.0	5,168.3	5,175.8	5,163.4	13.1	10.4	119.23	-2,445.1	1,437.8	3,059.7	3,037.9	21.82	140.208		
5,300.0	5,267.6	5,296.3	5,283.8	13.3	10.5	119.48	-2,445.6	1,437.4	3,066.0	3,043.7	22.26	137.711		
5,400.0	5,366.8	5,401.8	5,389.3	13.6	10.7	119.70	-2,445.4	1,436.8	3,071.7	3,049.0	22.68	135.433		
5,500.0	5,466.1	5,502.8	5,490.4	13.9	10.9	119.92	-2,445.3	1,436.0	3,077.4	3,054.3	23.09	133.289		
5,600.0	5,565.3	5,606.4	5,594.0	14.2	11.0	120.13	-2,445.0	1,435.2	3,083.0	3,059.5	23.50	131.192		
5,700.0	5,664.6	5,701.5	5,689.1	14.4	11.1	120.33	-2,444.8	1,434.4	3,088.7	3,064.8	23.90	129.240		
5,800.0	5,763.8	5,806.2	5,793.7	14.7	11.3	120.55	-2,444.5	1,433.7	3,094.4	3,070.1	24.31	127.278		
5,900.0	5,863.1	5,917.8	5,905.4	15.0	11.5	120.78	-2,443.9	1,432.7	3,099.9	3,075.1	24.74	125.320		
6,000.0	5,962.3	6,019.6	6,007.1	15.3	11.6	120.99	-2,443.1	1,431.6	3,105.1	3,080.0	25.14	123.503		
6,100.0	6,061.6	6,112.1	6,099.6	15.5	11.8	121.18	-2,442.5	1,430.5	3,110.4	3,084.9	25.54	121.805		
6,200.0	6,160.9	6,202.9	6,190.4	15.8	11.9	121.35	-2,441.9	1,430.4	3,116.1	3,090.2	25.93	120.169		
6,300.0	6,260.1	6,307.4	6,294.9	16.1	12.1	121.55	-2,441.1	1,430.4	3,121.8	3,095.5	26.35	118.487		
6,400.0	6,359.4	6,406.1	6,393.6	16.4	12.2	121.74	-2,440.3	1,430.3	3,127.5	3,100.7	26.75	116.897		
6,500.0	6,458.6	6,503.3	6,490.8	16.6	12.4	121.92	-2,439.6	1,430.3	3,133.3	3,106.1	27.16	115.374		
6,600.0	6,557.9	6,600.0	6,587.5	16.9	12.5	122.10	-2,439.0	1,430.1	3,139.1	3,111.6	27.56	113.908		
6,700.0	6,657.1	6,691.0	6,678.5	17.2	12.7	122.27	-2,438.6	1,429.9	3,145.2	3,117.2	27.95	112.533		
6,800.0	6,756.4	6,784.9	6,772.4	17.5	12.8	122.45	-2,438.5	1,429.8	3,151.5	3,123.2	28.34	111.190		
6,900.0	6,855.6	6,881.5	6,869.0	17.7	13.0	122.64	-2,438.4	1,429.5	3,158.0	3,129.3	28.74	109.874		
6,919.5	6,875.0	6,899.9	6,887.4	17.8	13.0	122.67	-2,438.4	1,429.5	3,159.3	3,130.5	28.82	109.625		
6,950.0	6,905.3	6,928.8	6,916.3	17.9	13.0	100.18	-2,438.4	1,429.5	3,160.5	3,131.6	28.93	109.230		
7,000.0	6,955.1	6,978.6	6,966.0	17.9	13.1	41.94	-2,438.4	1,429.4	3,159.2	3,130.1	29.11	108.516		
7,050.0	7,004.8	7,028.3	7,015.8	17.9	13.2	12.81	-2,438.5	1,429.4	3,153.8	3,124.5	29.28	107.719		
7,100.0	7,053.8	7,078.8	7,066.3	17.9	13.3	1.74	-2,438.5	1,429.3	3,144.2	3,114.8	29.43	106.835		
7,150.0	7,101.9	7,131.0	7,118.5	17.9	13.4	-3.91	-2,438.4	1,429.4	3,130.6	3,101.0	29.57	105.859		
7,200.0	7,148.7	7,190.6	7,178.1	17.8	13.5	-7.54	-2,438.1	1,429.5	3,112.9	3,083.2	29.72	104.759		
7,250.0	7,193.8	7,245.6	7,233.1	17.7	13.6	-10.34	-2,437.7	1,429.6	3,091.3	3,061.4	29.84	103.611		
7,300.0	7,236.9	7,296.6	7,284.1	17.5	13.6	-12.81	-2,437.1	1,429.7	3,065.9	3,035.9	29.93	102.418		
7,350.0	7,277.7	7,332.8	7,320.3	17.4	13.7	-15.20	-2,436.6	1,429.8	3,037.0	3,007.0	30.00	101.246		
7,400.0	7,315.7	7,363.4	7,350.9	17.2	13.7	-17.70	-2,436.3	1,429.8	3,005.1	2,975.0	30.03	100.052		
7,450.0	7,350.9	7,392.1	7,379.6	17.1	13.8	-20.50	-2,436.1	1,429.9	2,970.3	2,940.2	30.06	98.820		
7,500.0	7,382.8	7,424.5	7,412.0	16.9	13.8	-23.86	-2,435.8	1,429.9	2,932.9	2,902.8	30.07	97.523		
7,550.0	7,411.3	7,453.4	7,440.8	16.7	13.9	-27.95	-2,435.6	1,430.0	2,893.0	2,863.0	30.07	96.206		
7,600.0	7,436.1	7,478.4	7,465.9	16.6	13.9	-33.08	-2,435.5	1,430.0	2,851.2	2,821.1	30.05	94.877		
7,650.0	7,457.1	7,497.8	7,485.3	16.5	14.0	-39.58	-2,435.3	1,430.0	2,807.6	2,777.6	30.01	93.549		
7,700.0	7,474.0	7,512.5	7,500.0	16.4	14.0	-47.86	-2,435.2	1,430.0	2,762.6	2,732.7	29.96	92.225		
7,750.0	7,486.8	7,523.6	7,511.0	16.4	14.0	-58.27	-2,435.2	1,430.0	2,716.7	2,686.8	29.88	90.907		
7,800.0	7,495.3	7,530.9	7,518.3	16.4	14.0	-70.72	-2,435.1	1,430.0	2,670.1	2,640.3	29.80	89.600		
7,850.0	7,499.5	7,534.3	7,521.8	16.5	14.0	-84.32	-2,435.1	1,430.0	2,623.2	2,593.5	29.70	88.312		
7,873.6	7,500.0	7,534.6	7,522.1	16.5	14.0	-90.70	-2,435.1	1,430.0	2,601.1	2,571.4	29.65	87.712		
7,900.0	7,500.0	7,534.5	7,522.0	16.5	14.0	-90.69	-2,435.1	1,430.0	2,576.3	2,546.7	29.60	87.041		
8,000.0	7,500.0	7,534.0	7,521.5	16.9	14.0	-90.66	-2,435.1	1,430.0	2,483.0	2,453.6	29.39	84.489		
8,100.0	7,500.0	7,533.5	7,520.9	17.4	14.0	-90.63	-2,435.1	1,430.0	2,390.3	2,361.1	29.18	81.908		
8,200.0	7,500.0	7,532.9	7,520.4	18.0	14.0	-90.59	-2,435.1	1,430.0	2,298.1	2,269.1	28.99	79.284		
8,300.0	7,500.0	7,532.4	7,519.9	18.8	14.0	-90.56	-2,435.1	1,430.0	2,206.7	2,177.8	28.81	76.601		
8,400.0	7,500.0	7,531.9	7,519.4	19.7	14.0	-90.53	-2,435.1	1,430.0	2,116.0	2,087.3	28.66	73.840		
8,500.0	7,500.0	7,531.4	7,518.8	20.7	14.0	-90.49	-2,435.1	1,430.0	2,026.1	1,997.6	28.55	70.975		
8,600.0	7,500.0	7,530.8	7,518.3	21.9	14.0	-90.46	-2,435.1	1,430.0	1,937.3	1,908.8	28.50	67.981		
8,700.0	7,500.0	7,530.3	7,517.8	23.1	14.0	-90.43	-2,435.1	1,430.0	1,849.6	1,821.1	28.53	64.831		
8,800.0	7,500.0	7,529.8	7,517.2	24.3	14.0	-90.39	-2,435.1	1,430.0	1,763.3	1,734.6	28.67	61.498		
8,900.0	7,500.0	7,529.2	7,516.7	25.6	14.0	-90.36	-2,435.1	1,430.0	1,678.4	1,649.4	28.95	57.967		
9,000.0	7,500.0	7,528.7	7,516.2	27.0	14.0	-90.32	-2,435.1	1,430.0	1,595.3	1,565.9	29.41	54.234		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error: 0.0 ft		
Survey Program: 1024-MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,100.0	7,500.0	7,528.1	7,515.6	28.4	14.0	-90.29	-2,435.1	1,430.0	1,514.2	1,484.1	30.09	50.320	
9,200.0	7,500.0	7,527.6	7,515.1	29.9	14.0	-90.26	-2,435.1	1,430.0	1,435.6	1,404.5	31.03	46.271	
9,300.0	7,500.0	7,527.0	7,514.5	31.4	14.0	-90.22	-2,435.1	1,430.0	1,359.7	1,327.5	32.25	42.160	
9,400.0	7,500.0	7,526.5	7,514.0	32.9	14.0	-90.19	-2,435.1	1,430.0	1,287.1	1,253.3	33.80	38.080	
9,500.0	7,500.0	7,525.9	7,513.4	34.4	14.0	-90.15	-2,435.1	1,430.0	1,218.5	1,182.8	35.70	34.134	
9,600.0	7,500.0	7,525.4	7,512.9	36.0	14.0	-90.12	-2,435.1	1,430.0	1,154.4	1,116.4	37.95	30.419	
9,700.0	7,500.0	7,524.8	7,512.3	37.5	14.0	-90.08	-2,435.2	1,430.0	1,095.7	1,055.2	40.55	27.020	
9,800.0	7,500.0	7,524.3	7,511.7	39.1	14.0	-90.05	-2,435.2	1,430.0	1,043.3	999.8	43.47	24.001	
9,900.0	7,500.0	7,523.7	7,511.2	40.7	14.0	-90.01	-2,435.2	1,430.0	998.2	951.6	46.65	21.400	
10,000.0	7,500.0	7,523.1	7,510.6	42.3	14.0	-89.97	-2,435.2	1,430.0	961.5	911.5	49.98	19.237	
10,100.0	7,500.0	7,522.6	7,510.0	43.9	14.0	-89.94	-2,435.2	1,430.0	934.0	880.7	53.34	17.510	
10,200.0	7,500.0	7,522.0	7,509.5	45.6	14.0	-89.90	-2,435.2	1,430.0	916.7	860.1	56.56	16.206	
10,300.0	7,500.0	7,521.4	7,508.9	47.2	14.0	-89.87	-2,435.2	1,430.0	910.1	850.6	59.49	15.297	
10,310.3	7,500.0	7,521.4	7,508.8	47.4	14.0	-89.86	-2,435.2	1,430.0	910.0	850.2	59.77	15.224 CC, ES	
10,400.0	7,500.0	7,520.8	7,508.3	48.9	14.0	-89.83	-2,435.2	1,430.0	914.4	852.4	61.99	14.751	
10,500.0	7,500.0	7,520.3	7,507.7	50.5	14.0	-89.79	-2,435.2	1,430.0	929.6	865.6	63.96	14.533 SF	
10,600.0	7,500.0	7,519.7	7,507.2	52.2	14.0	-89.76	-2,435.2	1,430.0	955.0	889.6	65.39	14.606	
10,700.0	7,500.0	7,519.1	7,506.6	53.8	14.0	-89.72	-2,435.2	1,430.0	989.9	923.6	66.29	14.934	
10,800.0	7,500.0	7,518.5	7,506.0	55.5	14.0	-89.68	-2,435.2	1,430.0	1,033.4	966.6	66.74	15.483	
10,900.0	7,500.0	7,517.9	7,505.4	57.2	14.0	-89.65	-2,435.2	1,430.0	1,084.4	1,017.5	66.83	16.225	
11,000.0	7,500.0	7,517.3	7,504.8	58.9	14.0	-89.61	-2,435.2	1,430.0	1,141.8	1,075.2	66.65	17.132	
11,100.0	7,500.0	7,516.7	7,504.2	60.6	14.0	-89.57	-2,435.2	1,430.0	1,204.9	1,138.6	66.27	18.181	
11,200.0	7,500.0	7,516.1	7,503.6	62.3	14.0	-89.53	-2,435.2	1,430.0	1,272.6	1,206.9	65.76	19.352	
11,244.1	7,500.0	7,515.9	7,503.3	63.0	14.0	-89.52	-2,435.2	1,430.0	1,303.9	1,238.4	65.51	19.903	
11,300.0	7,500.0	7,515.5	7,503.0	64.0	14.0	-89.51	-2,435.2	1,430.0	1,344.1	1,278.9	65.18	20.621	
11,400.0	7,500.0	7,514.9	7,502.4	65.7	14.0	-89.49	-2,435.2	1,430.0	1,416.9	1,352.4	64.55	21.952	
11,444.1	7,500.0	7,514.7	7,502.1	66.4	14.0	-89.48	-2,435.2	1,430.0	1,449.3	1,385.1	64.24	22.560	
11,500.0	7,500.0	7,514.3	7,501.8	67.4	14.0	-89.46	-2,435.2	1,430.0	1,491.0	1,427.1	63.85	23.352	
11,600.0	7,500.0	7,513.7	7,501.2	69.1	14.0	-89.43	-2,435.2	1,430.0	1,567.7	1,504.6	63.14	24.830	
11,700.0	7,500.0	7,513.1	7,500.6	70.8	14.0	-89.39	-2,435.2	1,430.0	1,647.0	1,584.5	62.44	26.377	
11,800.0	7,500.0	7,512.5	7,500.0	72.5	14.0	-89.36	-2,435.2	1,430.0	1,728.4	1,666.6	61.76	27.984	
11,900.0	7,500.0	7,511.9	7,499.4	74.2	14.0	-89.32	-2,435.2	1,430.0	1,811.6	1,750.5	61.12	29.643	
12,000.0	7,500.0	7,511.3	7,498.8	76.0	14.0	-89.29	-2,435.2	1,430.0	1,896.5	1,836.0	60.50	31.348	
12,100.0	7,500.0	7,510.7	7,498.2	77.7	14.0	-89.25	-2,435.2	1,430.0	1,982.8	1,922.9	59.92	33.092	
12,194.1	7,500.0	7,510.1	7,497.6	79.3	14.0	-89.22	-2,435.2	1,430.0	2,065.2	2,005.8	59.40	34.767	
12,200.0	7,500.0	7,510.1	7,497.6	79.4	14.0	-89.21	-2,435.2	1,430.0	2,070.3	2,011.0	59.37	34.872	
12,300.0	7,500.0	7,509.5	7,496.9	81.1	14.0	-89.11	-2,435.2	1,430.0	2,159.8	2,100.9	58.85	36.698	
12,387.3	7,500.0	7,508.9	7,496.4	82.6	14.0	-89.01	-2,435.3	1,430.0	2,239.8	2,181.4	58.46	38.313	
12,400.0	7,500.0	7,508.8	7,496.3	82.9	14.0	-89.01	-2,435.3	1,430.0	2,251.6	2,193.1	58.41	38.546	
12,500.0	7,500.0	7,508.2	7,495.7	84.6	14.0	-88.96	-2,435.3	1,430.0	2,344.5	2,286.4	58.03	40.398	
12,600.0	7,500.0	7,507.5	7,495.0	86.3	14.0	-88.92	-2,435.3	1,430.0	2,438.0	2,380.3	57.69	42.263	
12,700.0	7,500.0	7,506.9	7,494.4	88.0	14.0	-88.88	-2,435.3	1,430.0	2,531.9	2,474.6	57.36	44.140	
12,800.0	7,500.0	7,506.3	7,493.7	89.7	14.0	-88.83	-2,435.3	1,430.0	2,626.4	2,569.3	57.06	46.027	
12,900.0	7,500.0	7,505.6	7,493.1	91.5	14.0	-88.79	-2,435.3	1,430.0	2,721.2	2,664.4	56.79	47.921	
13,000.0	7,500.0	7,504.9	7,492.4	93.2	14.0	-88.75	-2,435.3	1,430.0	2,816.4	2,759.9	56.53	49.822	
13,100.0	7,500.0	7,504.3	7,491.8	94.9	14.0	-88.70	-2,435.3	1,430.0	2,911.9	2,855.6	56.29	51.728	
13,200.0	7,500.0	7,503.6	7,491.1	96.6	14.0	-88.66	-2,435.3	1,430.0	3,007.7	2,951.6	56.07	53.639	
13,300.0	7,500.0	7,503.0	7,490.4	98.4	14.0	-88.61	-2,435.3	1,430.0	3,103.8	3,047.9	55.87	55.552	
13,400.0	7,500.0	7,502.3	7,489.8	100.1	14.0	-88.57	-2,435.3	1,430.0	3,200.1	3,144.4	55.68	57.468	
13,500.0	7,500.0	7,501.6	7,489.1	101.8	14.0	-88.52	-2,435.3	1,430.0	3,296.6	3,241.1	55.51	59.386	
13,600.0	7,500.0	7,501.0	7,488.4	103.5	14.0	-88.48	-2,435.3	1,430.0	3,393.3	3,338.0	55.35	61.304	
13,700.0	7,500.0	7,500.3	7,487.8	105.3	14.0	-88.43	-2,435.3	1,430.0	3,490.2	3,435.0	55.20	63.223	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error: 0.0 ft
Survey Program: 1024-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
13,800.0	7,500.0	7,499.6	7,487.1	107.0	14.0	-88.38	-2,435.3	1,430.0	3,587.3	3,532.2	55.07	65.141	
13,900.0	7,500.0	7,498.9	7,486.4	108.7	14.0	-88.34	-2,435.3	1,430.0	3,684.5	3,629.6	54.94	67.059	
14,000.0	7,500.0	7,498.2	7,485.7	110.5	14.0	-88.29	-2,435.3	1,430.0	3,781.9	3,727.1	54.83	68.975	
14,100.0	7,500.0	7,497.5	7,485.0	112.2	14.0	-88.25	-2,435.3	1,430.0	3,879.4	3,824.7	54.73	70.889	
14,200.0	7,500.0	7,496.8	7,484.3	113.9	14.0	-88.20	-2,435.3	1,430.0	3,977.1	3,922.4	54.63	72.801	
14,300.0	7,500.0	7,496.1	7,483.6	115.7	14.0	-88.15	-2,435.3	1,430.0	4,074.8	4,020.3	54.54	74.711	
14,400.0	7,500.0	7,495.4	7,482.9	117.4	14.0	-88.10	-2,435.3	1,430.0	4,172.7	4,118.2	54.46	76.618	
14,500.0	7,500.0	7,494.7	7,482.2	119.1	14.0	-88.06	-2,435.3	1,430.0	4,270.6	4,216.2	54.39	78.522	
14,600.0	7,500.0	7,494.0	7,481.5	120.9	14.0	-88.01	-2,435.3	1,430.0	4,368.7	4,314.3	54.32	80.422	
14,700.0	7,500.0	7,493.3	7,480.8	122.6	14.0	-87.96	-2,435.4	1,430.0	4,466.8	4,412.5	54.26	82.319	
14,800.0	7,500.0	7,492.6	7,480.1	124.4	14.0	-87.91	-2,435.4	1,430.0	4,565.0	4,510.8	54.21	84.213	
14,900.0	7,500.0	7,491.9	7,479.3	126.1	14.0	-87.86	-2,435.4	1,430.0	4,663.3	4,609.2	54.16	86.102	
15,000.0	7,500.0	7,491.1	7,478.6	127.8	14.0	-87.81	-2,435.4	1,430.0	4,761.7	4,707.6	54.12	87.987	
15,100.0	7,500.0	7,490.4	7,477.9	129.6	13.9	-87.77	-2,435.4	1,430.0	4,860.1	4,806.0	54.08	89.868	
15,200.0	7,500.0	7,489.7	7,477.2	131.3	13.9	-87.72	-2,435.4	1,430.0	4,958.6	4,904.5	54.05	91.744	
15,300.0	7,500.0	7,488.9	7,476.4	133.1	13.9	-87.67	-2,435.4	1,430.0	5,057.1	5,003.1	54.02	93.616	
15,400.0	7,500.0	7,488.2	7,475.7	134.8	13.9	-87.62	-2,435.4	1,430.0	5,155.8	5,101.8	54.00	95.483	
15,500.0	7,500.0	7,487.5	7,474.9	136.5	13.9	-87.57	-2,435.4	1,430.0	5,254.4	5,200.4	53.98	97.346	
15,600.0	7,500.0	7,486.7	7,474.2	138.3	13.9	-87.52	-2,435.4	1,430.0	5,353.1	5,299.2	53.96	99.203	
15,700.0	7,500.0	7,486.0	7,473.5	140.0	13.9	-87.47	-2,435.4	1,430.0	5,451.9	5,397.9	53.95	101.055	
15,805.8	7,500.0	7,485.3	7,472.8	141.9	13.9	-87.42	-2,435.4	1,430.0	5,556.4	5,502.4	53.94	103.009	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS										Offset Site Error: 0.0 ft			
Survey Program: 8365-Geolink MWD										Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Total	Separation		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Uncertainty Axis		Factor
0.0	0.0	0.0	0.0	0.0	0.0	152.95	-2,304.7	1,176.7	2,587.8				
100.0	100.0	95.0	95.0	0.2	0.2	152.95	-2,304.7	1,176.7	2,587.8	2,587.4	0.32	8,141.520	
200.0	200.0	195.0	195.0	0.3	0.3	152.95	-2,304.7	1,176.7	2,587.8	2,587.1	0.67	3,880.223	
300.0	300.0	295.0	295.0	0.5	0.5	152.95	-2,304.7	1,176.7	2,587.8	2,586.7	1.02	2,547.076	
400.0	400.0	395.0	395.0	0.7	0.7	152.95	-2,304.7	1,176.7	2,587.8	2,586.4	1.37	1,895.745	
500.0	500.0	495.0	495.0	0.8	0.9	152.95	-2,304.7	1,176.7	2,587.8	2,586.1	1.71	1,509.691	
600.0	600.0	595.0	595.0	1.0	1.0	113.49	-2,304.7	1,176.7	2,588.1	2,586.0	2.06	1,254.211	
700.0	700.0	695.0	695.0	1.2	1.2	113.53	-2,304.7	1,176.7	2,589.2	2,586.7	2.42	1,072.078	
800.0	799.9	794.9	794.9	1.4	1.4	113.61	-2,304.7	1,176.7	2,590.9	2,588.1	2.77	934.932	
900.0	899.7	894.7	894.7	1.6	1.6	113.71	-2,304.7	1,176.7	2,593.4	2,590.2	3.13	827.308	
1,000.0	999.4	994.4	994.4	1.8	1.7	113.84	-2,304.7	1,176.7	2,596.5	2,593.0	3.51	740.126	
1,100.0	1,098.9	1,093.9	1,093.9	2.0	1.9	113.99	-2,304.7	1,176.7	2,600.4	2,596.5	3.89	667.739	
1,201.3	1,199.5	1,194.5	1,194.5	2.2	2.1	114.18	-2,304.7	1,176.7	2,605.1	2,600.8	4.30	605.729	
1,300.0	1,297.5	1,292.5	1,292.5	2.5	2.3	114.42	-2,304.7	1,176.7	2,610.1	2,605.4	4.70	555.013	
1,400.0	1,396.8	1,391.8	1,391.8	2.7	2.4	114.66	-2,304.7	1,176.7	2,615.2	2,610.1	5.11	511.334	
1,500.0	1,496.0	1,491.0	1,491.0	3.0	2.6	114.90	-2,304.7	1,176.7	2,620.4	2,614.9	5.53	473.896	
1,600.0	1,595.3	1,590.3	1,590.3	3.3	2.8	115.14	-2,304.7	1,176.7	2,625.6	2,619.6	5.95	441.518	
1,700.0	1,694.5	1,689.5	1,689.5	3.5	2.9	115.38	-2,304.7	1,176.7	2,630.8	2,624.5	6.37	413.283	
1,800.0	1,793.8	1,788.8	1,788.8	3.8	3.1	115.62	-2,304.7	1,176.7	2,636.1	2,629.3	6.79	388.471	
1,900.0	1,893.0	1,888.0	1,888.0	4.0	3.3	115.86	-2,304.7	1,176.7	2,641.4	2,634.2	7.21	366.514	
2,000.0	1,992.3	1,987.3	1,987.3	4.3	3.5	116.09	-2,304.7	1,176.7	2,646.8	2,639.2	7.63	346.960	
2,100.0	2,091.5	2,086.5	2,086.5	4.6	3.6	116.33	-2,304.7	1,176.7	2,652.2	2,644.2	8.05	329.443	
2,200.0	2,190.8	2,185.8	2,185.8	4.8	3.8	116.56	-2,304.7	1,176.7	2,657.7	2,649.2	8.47	313.667	
2,300.0	2,290.0	2,285.0	2,285.0	5.1	4.0	116.80	-2,304.7	1,176.7	2,663.2	2,654.3	8.90	299.391	
2,400.0	2,389.3	2,384.3	2,384.3	5.4	4.2	117.03	-2,304.7	1,176.7	2,668.8	2,659.5	9.32	286.414	
2,500.0	2,488.5	2,483.5	2,483.5	5.7	4.3	117.26	-2,304.7	1,176.7	2,674.4	2,664.7	9.74	274.570	
2,600.0	2,587.8	2,582.8	2,582.8	5.9	4.5	117.49	-2,304.7	1,176.7	2,680.0	2,669.9	10.16	263.718	
2,700.0	2,687.0	2,682.0	2,682.0	6.2	4.7	117.72	-2,304.7	1,176.7	2,685.7	2,675.2	10.58	253.741	
2,800.0	2,786.3	2,781.3	2,781.3	6.5	4.9	117.95	-2,304.7	1,176.7	2,691.5	2,680.5	11.01	244.539	
2,900.0	2,885.5	2,880.5	2,880.5	6.7	5.0	118.18	-2,304.7	1,176.7	2,697.2	2,685.8	11.43	236.027	
3,000.0	2,984.8	2,979.8	2,979.8	7.0	5.2	118.41	-2,304.7	1,176.7	2,703.1	2,691.2	11.85	228.130	
3,100.0	3,084.0	3,079.0	3,079.0	7.3	5.4	118.63	-2,304.7	1,176.7	2,708.9	2,696.7	12.27	220.785	
3,200.0	3,183.3	3,178.3	3,178.3	7.6	5.5	118.86	-2,304.7	1,176.7	2,714.8	2,702.1	12.69	213.937	
3,300.0	3,282.5	3,277.5	3,277.5	7.8	5.7	119.08	-2,304.7	1,176.7	2,720.8	2,707.7	13.11	207.538	
3,400.0	3,381.8	3,376.8	3,376.8	8.1	5.9	119.30	-2,304.7	1,176.7	2,726.8	2,713.2	13.53	201.546	
3,500.0	3,481.1	3,476.1	3,476.1	8.4	6.1	119.53	-2,304.7	1,176.7	2,732.8	2,718.9	13.95	195.924	
3,600.0	3,580.3	3,575.3	3,575.3	8.7	6.2	119.75	-2,304.7	1,176.7	2,738.9	2,724.5	14.37	190.639	
3,700.0	3,679.6	3,674.6	3,674.6	8.9	6.4	119.97	-2,304.7	1,176.7	2,745.0	2,730.2	14.78	185.661	
3,800.0	3,778.8	3,773.8	3,773.8	9.2	6.6	120.19	-2,304.7	1,176.7	2,751.1	2,735.9	15.20	180.967	
3,900.0	3,878.1	3,873.1	3,873.1	9.5	6.8	120.40	-2,304.7	1,176.7	2,757.3	2,741.7	15.62	176.531	
4,000.0	3,977.3	3,972.3	3,972.3	9.8	6.9	120.62	-2,304.7	1,176.7	2,763.6	2,747.5	16.04	172.334	
4,100.0	4,076.6	4,071.6	4,071.6	10.0	7.1	120.84	-2,304.7	1,176.7	2,769.8	2,753.4	16.45	168.357	
4,200.0	4,175.8	4,170.8	4,170.8	10.3	7.3	121.05	-2,304.7	1,176.7	2,776.2	2,759.3	16.87	164.584	
4,300.0	4,275.1	4,270.1	4,270.1	10.6	7.5	121.27	-2,304.7	1,176.7	2,782.5	2,765.2	17.28	161.000	
4,400.0	4,374.3	4,369.3	4,369.3	10.9	7.6	121.48	-2,304.7	1,176.7	2,788.9	2,771.2	17.70	157.591	
4,500.0	4,473.6	4,468.6	4,468.6	11.1	7.8	121.69	-2,304.7	1,176.7	2,795.3	2,777.2	18.11	154.344	
4,600.0	4,572.8	4,567.8	4,567.8	11.4	8.0	121.90	-2,304.7	1,176.7	2,801.8	2,783.3	18.52	151.250	
4,700.0	4,672.1	4,667.1	4,667.1	11.7	8.1	122.11	-2,304.7	1,176.7	2,808.3	2,789.4	18.94	148.296	
4,800.0	4,771.3	4,766.3	4,766.3	12.0	8.3	122.32	-2,304.7	1,176.7	2,814.8	2,795.5	19.35	145.475	
4,900.0	4,870.6	4,865.6	4,865.6	12.2	8.5	122.53	-2,304.7	1,176.7	2,821.4	2,801.7	19.76	142.777	
5,000.0	4,969.8	4,964.8	4,964.8	12.5	8.7	122.74	-2,304.7	1,176.7	2,828.0	2,807.9	20.17	140.195	
5,100.0	5,069.1	5,064.1	5,064.1	12.8	8.8	122.94	-2,304.7	1,176.7	2,834.7	2,814.1	20.58	137.722	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS											Offset Site Error: 0.0 ft		
Survey Program: 8365-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,168.3	5,163.3	5,163.3	13.1	9.0	123.15	-2,304.7	1,176.7	2,841.4	2,820.4	20.99	135.351	
5,300.0	5,267.6	5,262.6	5,262.6	13.3	9.2	123.35	-2,304.7	1,176.7	2,848.1	2,826.7	21.40	133.076	
5,400.0	5,366.8	5,361.8	5,361.8	13.6	9.4	123.56	-2,304.7	1,176.7	2,854.9	2,833.1	21.81	130.892	
5,500.0	5,466.1	5,461.1	5,461.1	13.9	9.5	123.76	-2,304.7	1,176.7	2,861.7	2,839.5	22.22	128.792	
5,600.0	5,565.3	5,560.3	5,560.3	14.2	9.7	123.96	-2,304.7	1,176.7	2,868.5	2,845.9	22.63	126.774	
5,700.0	5,664.6	5,659.6	5,659.6	14.4	9.9	124.16	-2,304.7	1,176.7	2,875.4	2,852.4	23.03	124.831	
5,800.0	5,763.8	5,758.8	5,758.8	14.7	10.1	124.36	-2,304.7	1,176.7	2,882.3	2,858.9	23.44	122.960	
5,900.0	5,863.1	5,858.1	5,858.1	15.0	10.2	124.56	-2,304.7	1,176.7	2,889.3	2,865.4	23.85	121.158	
6,000.0	5,962.3	5,957.3	5,957.3	15.3	10.4	124.76	-2,304.7	1,176.7	2,896.2	2,872.0	24.25	119.419	
6,100.0	6,061.6	6,056.6	6,056.6	15.5	10.6	124.96	-2,304.7	1,176.7	2,903.3	2,878.6	24.66	117.743	
6,200.0	6,160.9	6,155.9	6,155.9	15.8	10.7	125.15	-2,304.7	1,176.7	2,910.3	2,885.2	25.06	116.124	
6,300.0	6,260.1	6,255.1	6,255.1	16.1	10.9	125.35	-2,304.7	1,176.7	2,917.4	2,891.9	25.47	114.561	
6,400.0	6,359.4	6,354.4	6,354.4	16.4	11.1	125.54	-2,304.7	1,176.7	2,924.5	2,898.6	25.87	113.050	
6,500.0	6,458.6	6,453.6	6,453.6	16.6	11.3	125.74	-2,304.7	1,176.7	2,931.6	2,905.4	26.27	111.589	
6,600.0	6,557.9	6,552.9	6,552.9	16.9	11.4	125.93	-2,304.7	1,176.7	2,938.8	2,912.2	26.67	110.176	
6,700.0	6,657.1	6,652.1	6,652.1	17.2	11.6	126.12	-2,304.7	1,176.7	2,946.0	2,919.0	27.08	108.808	
6,800.0	6,756.4	6,751.4	6,751.4	17.5	11.8	126.31	-2,304.7	1,176.7	2,953.3	2,925.8	27.48	107.483	
6,900.0	6,855.6	6,850.6	6,850.6	17.7	12.0	126.50	-2,304.7	1,176.7	2,960.6	2,932.7	27.88	106.200	
6,919.5	6,875.0	6,870.0	6,870.0	17.8	12.0	126.54	-2,304.7	1,176.7	2,962.0	2,934.0	27.96	105.955	
6,950.0	6,905.3	6,900.3	6,900.3	17.9	12.0	104.04	-2,304.7	1,176.7	2,963.4	2,935.4	28.07	105.560	
7,000.0	6,955.1	6,950.1	6,950.1	17.9	12.1	45.83	-2,304.7	1,176.7	2,962.4	2,934.1	28.26	104.838	
7,050.0	7,004.8	6,999.8	6,999.8	17.9	12.2	16.74	-2,304.7	1,176.7	2,957.1	2,928.7	28.43	104.014	
7,100.0	7,053.8	7,048.8	7,048.8	17.9	12.3	5.75	-2,304.7	1,176.7	2,947.7	2,919.1	28.59	103.094	
7,150.0	7,101.9	7,096.9	7,096.9	17.9	12.4	0.23	-2,304.7	1,176.7	2,934.1	2,905.4	28.74	102.082	
7,200.0	7,148.7	7,143.7	7,143.7	17.8	12.5	-3.24	-2,304.7	1,176.7	2,916.5	2,887.6	28.88	100.985	
7,250.0	7,193.8	7,188.8	7,188.8	17.7	12.5	-5.81	-2,304.7	1,176.7	2,895.0	2,866.0	29.01	99.810	
7,300.0	7,236.9	7,231.9	7,231.9	17.5	12.6	-7.98	-2,304.7	1,176.7	2,869.8	2,840.7	29.12	98.563	
7,350.0	7,277.7	7,272.7	7,272.7	17.4	12.7	-10.04	-2,304.7	1,176.7	2,841.1	2,811.9	29.21	97.252	
7,400.0	7,315.7	7,310.7	7,310.7	17.2	12.8	-12.16	-2,304.7	1,176.7	2,809.1	2,779.8	29.30	95.885	
7,450.0	7,350.9	7,345.9	7,345.9	17.1	12.8	-14.53	-2,304.7	1,176.7	2,774.1	2,744.7	29.36	94.471	
7,500.0	7,382.8	7,377.8	7,377.8	16.9	12.9	-17.31	-2,304.7	1,176.7	2,736.2	2,706.8	29.42	93.017	
7,550.0	7,411.3	7,406.3	7,406.3	16.7	12.9	-20.74	-2,304.7	1,176.7	2,695.9	2,666.5	29.45	91.532	
7,600.0	7,436.1	7,431.1	7,431.1	16.6	13.0	-25.14	-2,304.7	1,176.7	2,653.4	2,624.0	29.47	90.026	
7,650.0	7,457.1	7,452.1	7,452.1	16.5	13.0	-30.96	-2,304.7	1,176.7	2,609.1	2,579.7	29.48	88.506	
7,700.0	7,474.0	7,469.0	7,469.0	16.4	13.0	-38.90	-2,304.7	1,176.7	2,563.3	2,533.9	29.47	86.981	
7,750.0	7,486.8	7,481.8	7,481.8	16.4	13.1	-49.81	-2,304.7	1,176.7	2,516.4	2,487.0	29.45	85.461	
7,800.0	7,495.3	7,490.3	7,490.3	16.4	13.1	-64.31	-2,304.7	1,176.7	2,468.7	2,439.3	29.41	83.953	
7,850.0	7,499.5	7,494.5	7,494.5	16.5	13.1	-81.63	-2,304.7	1,176.7	2,420.7	2,391.3	29.35	82.465	
7,873.6	7,500.0	7,495.0	7,495.0	16.5	13.1	-90.00	-2,304.7	1,176.7	2,398.0	2,368.7	29.33	81.773	
7,900.0	7,500.0	7,495.0	7,495.0	16.5	13.1	-90.00	-2,304.7	1,176.7	2,372.6	2,343.3	29.29	80.999	
8,000.0	7,500.0	7,495.0	7,495.0	16.9	13.1	-90.00	-2,304.7	1,176.7	2,276.7	2,247.5	29.16	78.074	
8,100.0	7,500.0	7,495.0	7,495.0	17.4	13.1	-90.00	-2,304.7	1,176.7	2,181.1	2,152.1	29.02	75.148	
8,200.0	7,500.0	7,495.0	7,495.0	18.0	13.1	-90.00	-2,304.7	1,176.7	2,086.0	2,057.1	28.89	72.213	
8,300.0	7,500.0	7,495.0	7,495.0	18.8	13.1	-90.00	-2,304.7	1,176.7	1,991.3	1,962.5	28.75	69.263	
8,400.0	7,500.0	7,495.0	7,495.0	19.7	13.1	-90.00	-2,304.7	1,176.7	1,897.2	1,868.6	28.62	66.286	
8,500.0	7,500.0	7,495.0	7,495.0	20.7	13.1	-90.00	-2,304.7	1,176.7	1,803.7	1,775.2	28.51	63.270	
8,600.0	7,500.0	7,495.0	7,495.0	21.9	13.1	-90.00	-2,304.7	1,176.7	1,710.9	1,682.5	28.42	60.198	
8,700.0	7,500.0	7,495.0	7,495.0	23.1	13.1	-90.00	-2,304.7	1,176.7	1,619.1	1,590.7	28.38	57.048	
8,800.0	7,500.0	7,495.0	7,495.0	24.3	13.1	-90.00	-2,304.7	1,176.7	1,528.2	1,499.8	28.41	53.799	
8,900.0	7,500.0	7,495.0	7,495.0	25.6	13.1	-90.00	-2,304.7	1,176.7	1,438.5	1,410.0	28.53	50.426	
9,000.0	7,500.0	7,495.0	7,495.0	27.0	13.1	-90.00	-2,304.7	1,176.7	1,350.3	1,321.5	28.79	46.906	
9,100.0	7,500.0	7,495.0	7,495.0	28.4	13.1	-90.00	-2,304.7	1,176.7	1,263.9	1,234.7	29.24	43.227	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8365-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
9,200.0	7,500.0	7,495.0	7,495.0	29.9	13.1	-90.00	-2,304.7	1,176.7	1,179.6	1,149.7	29.94	39.398		
9,300.0	7,500.0	7,495.0	7,495.0	31.4	13.1	-90.00	-2,304.7	1,176.7	1,097.9	1,067.0	30.97	35.454		
9,400.0	7,500.0	7,495.0	7,495.0	32.9	13.1	-90.00	-2,304.7	1,176.7	1,019.6	987.2	32.39	31.473		
9,500.0	7,500.0	7,495.0	7,495.0	34.4	13.1	-90.00	-2,304.7	1,176.7	945.3	911.0	34.29	27.564		
9,600.0	7,500.0	7,495.0	7,495.0	36.0	13.1	-90.00	-2,304.7	1,176.7	876.1	839.4	36.72	23.859		
9,700.0	7,500.0	7,495.0	7,495.0	37.5	13.1	-90.00	-2,304.7	1,176.7	813.4	773.7	39.69	20.492		
9,800.0	7,500.0	7,495.0	7,495.0	39.1	13.1	-90.00	-2,304.7	1,176.7	758.7	715.5	43.18	17.572		
9,900.0	7,500.0	7,495.0	7,495.0	40.7	13.1	-90.00	-2,304.7	1,176.7	713.9	666.8	47.03	15.178		
10,000.0	7,500.0	7,495.0	7,495.0	42.3	13.1	-90.00	-2,304.7	1,176.7	680.9	629.9	51.02	13.345		
10,100.0	7,500.0	7,495.0	7,495.0	43.9	13.1	-90.00	-2,304.7	1,176.7	661.6	606.8	54.79	12.074		
10,179.9	7,500.0	7,495.0	7,495.0	45.2	13.1	-90.00	-2,304.7	1,176.7	656.7	599.3	57.39	11.443 CC		
10,200.0	7,500.0	7,495.0	7,495.0	45.6	13.1	-90.00	-2,304.7	1,176.7	657.0	599.1	57.97	11.334 ES		
10,300.0	7,500.0	7,495.0	7,495.0	47.2	13.1	-90.00	-2,304.7	1,176.7	667.6	607.3	60.28	11.076 SF		
10,400.0	7,500.0	7,495.0	7,495.0	48.9	13.1	-90.00	-2,304.7	1,176.7	692.6	631.0	61.63	11.238		
10,500.0	7,500.0	7,495.0	7,495.0	50.5	13.1	-90.00	-2,304.7	1,176.7	730.6	668.5	62.13	11.759		
10,600.0	7,500.0	7,495.0	7,495.0	52.2	13.1	-90.00	-2,304.7	1,176.7	779.6	717.6	61.98	12.579		
10,700.0	7,500.0	7,495.0	7,495.0	53.8	13.1	-90.00	-2,304.7	1,176.7	837.7	776.3	61.39	13.646		
10,800.0	7,500.0	7,495.0	7,495.0	55.5	13.1	-90.00	-2,304.7	1,176.7	903.2	842.7	60.56	14.914		
10,900.0	7,500.0	7,495.0	7,495.0	57.2	13.1	-90.00	-2,304.7	1,176.7	974.6	915.0	59.62	16.348		
11,000.0	7,500.0	7,495.0	7,495.0	58.9	13.1	-90.00	-2,304.7	1,176.7	1,050.7	992.0	58.65	17.915		
11,100.0	7,500.0	7,495.0	7,495.0	60.6	13.1	-90.00	-2,304.7	1,176.7	1,130.4	1,072.7	57.70	19.593		
11,200.0	7,500.0	7,495.0	7,495.0	62.3	13.1	-90.00	-2,304.7	1,176.7	1,213.2	1,156.4	56.80	21.359		
11,244.1	7,500.0	7,495.0	7,495.0	63.0	13.1	-90.00	-2,304.7	1,176.7	1,250.6	1,194.1	56.43	22.163		
11,300.0	7,500.0	7,495.0	7,495.0	64.0	13.1	-90.00	-2,304.7	1,176.7	1,298.2	1,242.2	55.97	23.195		
11,400.0	7,500.0	7,495.0	7,495.0	65.7	13.1	-90.00	-2,304.7	1,176.7	1,383.6	1,328.4	55.17	25.076		
11,444.1	7,500.0	7,495.0	7,495.0	66.4	13.1	-90.00	-2,304.7	1,176.7	1,421.3	1,366.5	54.82	25.924		
11,500.0	7,500.0	7,495.0	7,495.0	67.4	13.1	-90.00	-2,304.7	1,176.7	1,469.4	1,415.0	54.39	27.016		
11,600.0	7,500.0	7,495.0	7,495.0	69.1	13.1	-90.00	-2,304.7	1,176.7	1,556.7	1,503.0	53.66	29.010		
11,700.0	7,500.0	7,495.0	7,495.0	70.8	13.1	-90.00	-2,304.7	1,176.7	1,645.5	1,592.5	53.00	31.048		
11,800.0	7,500.0	7,495.0	7,495.0	72.5	13.1	-90.00	-2,304.7	1,176.7	1,735.5	1,683.1	52.40	33.122		
11,900.0	7,500.0	7,495.0	7,495.0	74.2	13.1	-90.00	-2,304.7	1,176.7	1,826.5	1,774.7	51.85	35.227		
12,000.0	7,500.0	7,495.0	7,495.0	76.0	13.1	-90.00	-2,304.7	1,176.7	1,918.5	1,867.1	51.36	37.357		
12,100.0	7,500.0	7,495.0	7,495.0	77.7	13.1	-90.00	-2,304.7	1,176.7	2,011.2	1,960.3	50.91	39.508		
12,194.1	7,500.0	7,495.0	7,495.0	79.3	13.1	-90.00	-2,304.7	1,176.7	2,099.1	2,048.6	50.52	41.547		
12,200.0	7,500.0	7,495.0	7,495.0	79.4	13.1	-90.00	-2,304.7	1,176.7	2,104.6	2,054.1	50.50	41.675		
12,300.0	7,500.0	7,495.0	7,495.0	81.1	13.1	-90.00	-2,304.7	1,176.7	2,199.2	2,149.0	50.13	43.869		
12,387.3	7,500.0	7,495.0	7,495.0	82.6	13.1	-90.00	-2,304.7	1,176.7	2,283.0	2,233.1	49.87	45.777		
12,400.0	7,500.0	7,495.0	7,495.0	82.9	13.1	-90.00	-2,304.7	1,176.7	2,295.2	2,245.4	49.84	46.051		
12,500.0	7,500.0	7,495.0	7,495.0	84.6	13.1	-90.00	-2,304.7	1,176.7	2,391.9	2,342.3	49.61	48.212		
12,600.0	7,500.0	7,495.0	7,495.0	86.3	13.1	-90.00	-2,304.7	1,176.7	2,488.9	2,439.5	49.41	50.375		
12,700.0	7,500.0	7,495.0	7,495.0	88.0	13.1	-90.00	-2,304.7	1,176.7	2,586.1	2,536.9	49.22	52.538		
12,800.0	7,500.0	7,495.0	7,495.0	89.7	13.1	-90.00	-2,304.7	1,176.7	2,683.5	2,634.4	49.06	54.699		
12,900.0	7,500.0	7,495.0	7,495.0	91.5	13.1	-90.00	-2,304.7	1,176.7	2,781.1	2,732.2	48.91	56.858		
13,000.0	7,500.0	7,495.0	7,495.0	93.2	13.1	-90.00	-2,304.7	1,176.7	2,878.9	2,830.1	48.78	59.015		
13,100.0	7,500.0	7,495.0	7,495.0	94.9	13.1	-90.00	-2,304.7	1,176.7	2,976.8	2,928.1	48.67	61.168		
13,200.0	7,500.0	7,495.0	7,495.0	96.6	13.1	-90.00	-2,304.7	1,176.7	3,074.8	3,026.2	48.56	63.317		
13,300.0	7,500.0	7,495.0	7,495.0	98.4	13.1	-90.00	-2,304.7	1,176.7	3,173.0	3,124.5	48.47	65.461		
13,400.0	7,500.0	7,495.0	7,495.0	100.1	13.1	-90.00	-2,304.7	1,176.7	3,271.3	3,222.9	48.39	67.600		
13,500.0	7,500.0	7,495.0	7,495.0	101.8	13.1	-90.00	-2,304.7	1,176.7	3,369.6	3,321.3	48.32	69.734		
13,600.0	7,500.0	7,495.0	7,495.0	103.5	13.1	-90.00	-2,304.7	1,176.7	3,468.1	3,419.8	48.26	71.862		
13,700.0	7,500.0	7,495.0	7,495.0	105.3	13.1	-90.00	-2,304.7	1,176.7	3,566.7	3,518.4	48.21	73.984		
13,800.0	7,500.0	7,495.0	7,495.0	107.0	13.1	-90.00	-2,304.7	1,176.7	3,665.3	3,617.1	48.16	76.100		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design										S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS					Offset Site Error:		0.0 ft		
Survey Program: 8365-Geolink MWD																	Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning						
13,900.0	7,500.0	7,495.0	7,495.0	108.7	13.1	-90.00	-2,304.7	1,176.7	3,764.0	3,715.9	48.13	78.209							
14,000.0	7,500.0	7,495.0	7,495.0	110.5	13.1	-90.00	-2,304.7	1,176.7	3,862.8	3,814.7	48.10	80.311							
14,100.0	7,500.0	7,495.0	7,495.0	112.2	13.1	-90.00	-2,304.7	1,176.7	3,961.6	3,913.5	48.07	82.406							
14,200.0	7,500.0	7,495.0	7,495.0	113.9	13.1	-90.00	-2,304.7	1,176.7	4,060.5	4,012.4	48.06	84.494							
14,300.0	7,500.0	7,495.0	7,495.0	115.7	13.1	-90.00	-2,304.7	1,176.7	4,159.4	4,111.4	48.04	86.575							
14,400.0	7,500.0	7,495.0	7,495.0	117.4	13.1	-90.00	-2,304.7	1,176.7	4,258.4	4,210.4	48.04	88.648							
14,500.0	7,500.0	7,495.0	7,495.0	119.1	13.1	-90.00	-2,304.7	1,176.7	4,357.5	4,309.4	48.04	90.714							
14,600.0	7,500.0	7,495.0	7,495.0	120.9	13.1	-90.00	-2,304.7	1,176.7	4,456.5	4,408.5	48.04	92.773							
14,700.0	7,500.0	7,495.0	7,495.0	122.6	13.1	-90.00	-2,304.7	1,176.7	4,555.7	4,507.6	48.04	94.824							
14,800.0	7,500.0	7,495.0	7,495.0	124.4	13.1	-90.00	-2,304.7	1,176.7	4,654.8	4,606.8	48.05	96.867							
14,900.0	7,500.0	7,495.0	7,495.0	126.1	13.1	-90.00	-2,304.7	1,176.7	4,754.0	4,706.0	48.07	98.902							
15,000.0	7,500.0	7,495.0	7,495.0	127.8	13.1	-90.00	-2,304.7	1,176.7	4,853.3	4,805.2	48.09	100.930							
15,100.0	7,500.0	7,495.0	7,495.0	129.6	13.1	-90.00	-2,304.7	1,176.7	4,952.5	4,904.4	48.11	102.949							
15,200.0	7,500.0	7,495.0	7,495.0	131.3	13.1	-90.00	-2,304.7	1,176.7	5,051.8	5,003.7	48.13	104.961							
15,300.0	7,500.0	7,495.0	7,495.0	133.1	13.1	-90.00	-2,304.7	1,176.7	5,151.1	5,103.0	48.16	106.965							
15,400.0	7,500.0	7,495.0	7,495.0	134.8	13.1	-90.00	-2,304.7	1,176.7	5,250.5	5,202.3	48.19	108.961							
15,500.0	7,500.0	7,495.0	7,495.0	136.5	13.1	-90.00	-2,304.7	1,176.7	5,349.8	5,301.6	48.22	110.949							
15,600.0	7,500.0	7,495.0	7,495.0	138.3	13.1	-90.00	-2,304.7	1,176.7	5,449.2	5,401.0	48.25	112.930							
15,700.0	7,500.0	7,495.0	7,495.0	140.0	13.1	-90.00	-2,304.7	1,176.7	5,548.6	5,500.3	48.29	114.902							
15,805.8	7,500.0	7,495.0	7,495.0	141.9	13.1	-90.00	-2,304.7	1,176.7	5,653.8	5,605.5	48.33	116.979							

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 838-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	11.7	11.7	0.0	0.0	153.22	-2,333.2	1,177.6	2,613.5					
100.0	100.0	118.2	118.2	0.2	0.2	153.22	-2,333.1	1,177.4	2,613.3	2,613.0	0.36	7,326.823		
200.0	200.0	224.8	224.8	0.3	0.4	153.23	-2,332.8	1,176.9	2,612.9	2,612.2	0.72	3,650.773		
300.0	300.0	331.3	331.3	0.5	0.6	153.24	-2,332.4	1,176.1	2,612.3	2,611.2	1.07	2,430.618		
400.0	400.0	437.8	437.7	0.7	0.8	153.26	-2,331.9	1,175.1	2,611.4	2,609.9	1.43	1,821.387		
500.0	500.0	544.3	544.2	0.8	1.0	153.28	-2,331.2	1,173.7	2,610.2	2,608.4	1.79	1,456.042		
600.0	600.0	650.7	650.7	1.0	1.1	113.85	-2,330.4	1,172.0	2,609.2	2,607.0	2.15	1,212.457		
700.0	700.0	757.1	757.1	1.2	1.3	113.94	-2,329.4	1,170.1	2,608.6	2,606.1	2.51	1,037.901		
774.5	774.4	836.4	836.3	1.3	1.5	114.03	-2,328.6	1,168.4	2,608.5	2,605.7	2.79	936.342		
800.0	799.9	854.6	854.6	1.4	1.5	114.06	-2,328.4	1,168.1	2,608.5	2,605.7	2.86	910.621		
900.0	899.7	909.0	909.0	1.6	1.6	114.12	-2,328.2	1,167.5	2,610.2	2,607.0	3.15	828.926		
1,000.0	999.4	985.6	985.5	1.8	1.7	114.22	-2,328.9	1,167.0	2,613.9	2,610.4	3.48	750.353		
1,100.0	1,098.9	1,060.0	1,059.9	2.0	1.9	114.36	-2,330.9	1,165.7	2,619.5	2,615.7	3.83	683.859		
1,201.3	1,199.5	1,114.0	1,113.7	2.2	2.0	114.46	-2,333.4	1,164.3	2,627.2	2,623.1	4.16	630.973		
1,300.0	1,297.5	1,179.8	1,179.4	2.5	2.1	114.70	-2,337.6	1,162.2	2,636.6	2,632.1	4.52	583.858		
1,400.0	1,396.8	1,264.4	1,263.7	2.7	2.2	115.03	-2,344.1	1,158.9	2,647.1	2,642.2	4.92	538.007		
1,500.0	1,496.0	1,370.9	1,369.8	3.0	2.5	115.45	-2,352.0	1,154.3	2,657.3	2,651.9	5.37	494.410		
1,600.0	1,595.3	1,466.3	1,464.8	3.3	2.7	115.83	-2,359.7	1,149.8	2,668.0	2,662.2	5.81	459.101		
1,700.0	1,694.5	1,556.1	1,554.2	3.5	2.8	116.19	-2,366.9	1,145.7	2,678.9	2,672.6	6.24	429.413		
1,800.0	1,793.8	1,634.0	1,631.8	3.8	3.0	116.50	-2,373.6	1,141.9	2,690.3	2,683.7	6.65	404.768		
1,900.0	1,893.0	1,708.3	1,705.5	4.0	3.2	116.81	-2,380.9	1,137.9	2,702.7	2,695.7	7.05	383.375		
2,000.0	1,992.3	1,788.3	1,784.9	4.3	3.4	117.16	-2,389.5	1,133.4	2,716.1	2,708.6	7.47	363.540		
2,100.0	2,091.5	1,875.8	1,871.7	4.6	3.6	117.56	-2,399.6	1,127.4	2,729.9	2,722.0	7.92	344.701		
2,200.0	2,190.8	1,952.0	1,947.0	4.8	3.8	117.92	-2,409.4	1,121.9	2,744.8	2,736.4	8.34	329.008		
2,300.0	2,290.0	2,020.4	2,014.6	5.1	4.0	118.25	-2,418.9	1,116.6	2,760.6	2,751.9	8.75	315.419		
2,400.0	2,389.3	2,092.5	2,085.6	5.4	4.3	118.61	-2,429.6	1,110.4	2,777.3	2,768.1	9.18	302.698		
2,500.0	2,488.5	2,174.4	2,166.1	5.7	4.5	119.03	-2,442.7	1,103.1	2,795.0	2,785.4	9.63	290.378		
2,600.0	2,587.8	2,283.7	2,273.8	5.9	4.9	119.57	-2,459.5	1,093.9	2,812.7	2,802.5	10.15	277.091		
2,700.0	2,687.0	2,395.3	2,383.6	6.2	5.2	120.12	-2,476.3	1,084.4	2,830.2	2,819.5	10.68	264.903		
2,800.0	2,786.3	2,494.3	2,481.2	6.5	5.5	120.60	-2,491.0	1,075.4	2,847.5	2,836.3	11.18	254.593		
2,900.0	2,885.5	2,590.0	2,575.3	6.7	5.9	121.08	-2,505.3	1,065.9	2,864.9	2,853.2	11.68	245.189		
3,000.0	2,984.8	2,679.4	2,663.2	7.0	6.2	121.52	-2,518.8	1,057.0	2,882.6	2,870.4	12.15	237.188		
3,100.0	3,084.0	2,759.0	2,741.5	7.3	6.4	121.90	-2,531.0	1,049.9	2,900.9	2,888.3	12.59	230.486		
3,200.0	3,183.3	2,870.8	2,851.6	7.6	6.8	122.41	-2,548.0	1,040.4	2,919.5	2,906.4	13.11	222.692		
3,300.0	3,282.5	2,961.2	2,940.7	7.8	7.1	122.82	-2,561.4	1,032.8	2,937.9	2,924.4	13.57	216.530		
3,400.0	3,381.8	3,067.0	3,044.9	8.1	7.4	123.29	-2,577.1	1,023.7	2,956.4	2,942.4	14.07	210.087		
3,500.0	3,481.1	3,152.2	3,128.9	8.4	7.7	123.67	-2,589.7	1,016.2	2,975.1	2,960.6	14.51	205.012		
3,600.0	3,580.3	3,278.2	3,253.0	8.7	8.1	124.22	-2,608.0	1,005.4	2,993.6	2,978.6	15.07	198.704		
3,700.0	3,679.6	3,366.0	3,339.7	8.9	8.4	124.59	-2,620.3	998.3	3,012.0	2,996.5	15.50	194.309		
3,800.0	3,778.8	3,448.0	3,420.5	9.2	8.7	124.93	-2,632.1	991.3	3,030.9	3,015.0	15.93	190.308		
3,900.0	3,878.1	3,524.6	3,495.9	9.5	9.0	125.27	-2,643.8	984.3	3,050.5	3,034.2	16.34	186.696		
4,000.0	3,977.3	3,639.3	3,608.8	9.8	9.4	125.77	-2,661.5	973.5	3,070.4	3,053.5	16.86	182.130		
4,100.0	4,076.6	3,751.9	3,719.6	10.0	9.8	126.23	-2,677.8	963.4	3,089.7	3,072.3	17.36	177.964		
4,200.0	4,175.8	3,855.9	3,822.3	10.3	10.1	126.64	-2,692.4	955.0	3,108.8	3,091.0	17.83	174.360		
4,300.0	4,275.1	3,957.3	3,922.4	10.6	10.4	127.05	-2,706.4	946.1	3,127.7	3,109.4	18.30	170.927		
4,400.0	4,374.3	4,040.6	4,004.5	10.9	10.7	127.38	-2,718.1	938.6	3,146.9	3,128.2	18.71	168.168		
4,500.0	4,473.6	4,115.0	4,077.7	11.1	11.0	127.69	-2,728.9	931.3	3,166.7	3,147.6	19.11	165.731		
4,600.0	4,572.8	4,198.0	4,159.3	11.4	11.3	128.03	-2,741.6	923.0	3,187.2	3,167.7	19.52	163.298		
4,700.0	4,672.1	4,311.1	4,270.6	11.7	11.7	128.48	-2,758.9	912.5	3,208.1	3,188.1	20.01	160.284		
4,800.0	4,771.3	4,465.0	4,422.4	12.0	12.2	129.06	-2,779.7	898.5	3,227.1	3,206.5	20.62	156.501		
4,900.0	4,870.6	4,530.4	4,487.0	12.2	12.4	129.31	-2,788.5	892.5	3,246.5	3,225.5	20.97	154.808		
5,000.0	4,969.8	4,642.7	4,597.7	12.5	12.8	129.73	-2,803.9	882.4	3,266.3	3,244.9	21.45	152.277		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU												Offset Site Error: 0.0 ft			
Survey Program: 838-MWD														Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
5,100.0	5,069.1	4,705.8	4,660.0	12.8	13.0	129.96	-2,812.7	876.8	3,286.4	3,264.6	21.79	150.837			
5,200.0	5,168.3	4,783.0	4,735.9	13.1	13.3	130.25	-2,824.4	869.4	3,307.6	3,285.4	22.17	149.194			
5,300.0	5,267.6	4,935.6	4,886.4	13.3	13.8	130.81	-2,845.9	855.1	3,328.0	3,305.3	22.76	146.221			
5,400.0	5,366.8	5,032.4	4,981.8	13.6	14.1	131.15	-2,858.8	846.3	3,347.8	3,324.6	23.19	144.375			
5,500.0	5,466.1	5,126.1	5,074.4	13.9	14.4	131.48	-2,871.2	837.7	3,367.8	3,344.2	23.60	142.702			
5,600.0	5,565.3	5,211.5	5,158.7	14.2	14.7	131.76	-2,882.6	830.7	3,388.0	3,364.0	23.98	141.294			
5,700.0	5,664.6	5,332.9	5,278.6	14.4	15.0	132.14	-2,898.8	821.6	3,408.4	3,384.0	24.45	139.389			
5,800.0	5,763.8	5,448.0	5,392.5	14.7	15.4	132.51	-2,913.0	812.3	3,427.8	3,402.9	24.92	137.565			
5,900.0	5,863.1	5,520.4	5,464.0	15.0	15.6	132.74	-2,922.0	806.0	3,447.6	3,422.3	25.26	136.483			
6,000.0	5,962.3	5,602.9	5,545.5	15.3	15.9	133.01	-2,933.0	799.0	3,468.0	3,442.4	25.63	135.294			
6,100.0	6,061.6	5,715.3	5,656.5	15.5	16.3	133.37	-2,947.9	789.0	3,488.6	3,462.5	26.08	133.750			
6,200.0	6,160.9	5,863.0	5,802.6	15.8	16.7	133.82	-2,965.6	777.0	3,508.1	3,481.4	26.62	131.785			
6,300.0	6,260.1	5,946.4	5,885.2	16.1	17.0	134.07	-2,975.1	770.4	3,527.1	3,500.1	26.98	130.720			
6,400.0	6,359.4	6,067.2	6,004.9	16.4	17.3	134.41	-2,989.0	761.6	3,546.4	3,519.0	27.43	129.295			
6,500.0	6,458.6	6,491.6	6,427.9	16.6	18.1	135.30	-3,015.1	745.7	3,561.1	3,532.7	28.41	125.326			
6,600.0	6,557.9	6,641.5	6,577.8	16.9	18.3	135.52	-3,016.1	744.9	3,570.5	3,541.6	28.82	123.874			
6,700.0	6,657.1	6,755.9	6,692.2	17.2	18.4	135.68	-3,015.5	744.7	3,578.7	3,549.5	29.18	122.622			
6,800.0	6,756.4	6,864.8	6,801.1	17.5	18.5	135.84	-3,014.7	744.4	3,586.7	3,557.2	29.54	121.425			
6,900.0	6,855.6	6,972.8	6,909.1	17.7	18.6	135.99	-3,013.5	744.1	3,594.4	3,564.5	29.89	120.241			
6,919.5	6,875.0	6,991.9	6,928.2	17.8	18.7	136.01	-3,013.3	744.0	3,595.9	3,565.9	29.96	120.023			
6,950.0	6,905.3	7,021.6	6,957.8	17.9	18.7	113.48	-3,013.0	743.9	3,597.4	3,567.4	30.06	119.661			
7,000.0	6,955.1	7,069.6	7,005.8	17.9	18.7	55.28	-3,012.4	743.6	3,596.4	3,566.2	30.23	118.967			
7,050.0	7,004.8	7,117.3	7,053.6	17.9	18.8	26.28	-3,011.9	743.3	3,591.1	3,560.8	30.39	118.151			
7,100.0	7,053.8	7,160.9	7,097.1	17.9	18.8	15.47	-3,011.5	743.0	3,581.6	3,551.0	30.55	117.231			
7,150.0	7,101.9	7,201.3	7,137.5	17.9	18.9	10.22	-3,011.2	742.6	3,567.9	3,537.2	30.70	116.210			
7,200.0	7,148.7	7,245.3	7,181.6	17.8	18.9	7.14	-3,011.0	742.1	3,550.2	3,519.4	30.86	115.056			
7,250.0	7,193.8	7,301.8	7,238.0	17.7	19.0	5.10	-3,010.6	741.3	3,528.4	3,497.4	31.03	113.719			
7,300.0	7,236.9	7,345.5	7,281.7	17.5	19.1	3.59	-3,010.2	740.5	3,502.7	3,471.5	31.18	112.352			
7,350.0	7,277.7	7,379.1	7,315.3	17.4	19.1	2.36	-3,010.0	739.9	3,473.4	3,442.1	31.31	110.949			
7,400.0	7,315.7	7,410.6	7,346.8	17.2	19.1	1.29	-3,009.8	739.4	3,440.8	3,409.4	31.43	109.472			
7,450.0	7,350.9	7,442.2	7,378.4	17.1	19.2	0.27	-3,009.7	738.9	3,405.1	3,373.6	31.55	107.919			
7,500.0	7,382.8	7,472.7	7,408.9	16.9	19.2	-0.78	-3,009.5	738.5	3,366.5	3,334.8	31.67	106.305			
7,550.0	7,411.3	7,499.8	7,436.1	16.7	19.3	-1.99	-3,009.5	738.1	3,325.3	3,293.5	31.78	104.647			
7,600.0	7,436.1	7,523.4	7,459.6	16.6	19.3	-3.48	-3,009.4	737.8	3,281.8	3,250.0	31.88	102.958			
7,650.0	7,457.1	7,543.1	7,479.3	16.5	19.3	-5.51	-3,009.3	737.5	3,236.4	3,204.4	31.96	101.251			
7,700.0	7,474.0	7,559.0	7,495.2	16.4	19.3	-8.60	-3,009.3	737.3	3,189.4	3,157.3	32.04	99.531			
7,750.0	7,486.8	7,570.9	7,507.1	16.4	19.3	-14.01	-3,009.3	737.2	3,141.1	3,108.9	32.11	97.808			
7,800.0	7,495.3	7,578.9	7,515.1	16.4	19.3	-25.83	-3,009.2	737.1	3,091.9	3,059.7	32.18	96.092			
7,850.0	7,499.5	7,582.8	7,519.0	16.5	19.4	-60.79	-3,009.2	737.1	3,042.1	3,009.9	32.23	94.395			
7,873.6	7,500.0	7,583.2	7,519.4	16.5	19.4	-92.21	-3,009.2	737.1	3,018.6	2,986.4	32.25	93.603			
7,900.0	7,500.0	7,583.1	7,519.3	16.5	19.4	-92.20	-3,009.2	737.1	2,992.3	2,960.0	32.27	92.718			
8,000.0	7,500.0	7,582.9	7,519.1	16.9	19.4	-92.15	-3,009.2	737.1	2,892.5	2,860.2	32.36	89.387			
8,100.0	7,500.0	7,582.7	7,519.0	17.4	19.4	-92.10	-3,009.2	737.1	2,792.8	2,760.4	32.44	86.081			
8,200.0	7,500.0	7,582.6	7,518.8	18.0	19.4	-92.04	-3,009.2	737.1	2,693.2	2,660.6	32.53	82.801			
8,300.0	7,500.0	7,582.4	7,518.6	18.8	19.4	-91.99	-3,009.2	737.1	2,593.5	2,560.9	32.60	79.544			
8,400.0	7,500.0	7,582.2	7,518.4	19.7	19.4	-91.94	-3,009.2	737.1	2,493.9	2,461.2	32.68	76.312			
8,500.0	7,500.0	7,582.0	7,518.2	20.7	19.4	-91.89	-3,009.2	737.1	2,394.3	2,361.5	32.75	73.102			
8,600.0	7,500.0	7,581.8	7,518.0	21.9	19.4	-91.84	-3,009.2	737.1	2,294.7	2,261.9	32.82	69.914			
8,700.0	7,500.0	7,581.6	7,517.8	23.1	19.4	-91.78	-3,009.2	737.1	2,195.2	2,162.3	32.89	66.749			
8,800.0	7,500.0	7,581.4	7,517.6	24.3	19.4	-91.73	-3,009.2	737.1	2,095.7	2,062.7	32.95	63.603			
8,900.0	7,500.0	7,581.2	7,517.4	25.6	19.4	-91.68	-3,009.2	737.1	1,996.2	1,963.2	33.01	60.478			
9,000.0	7,500.0	7,581.0	7,517.2	27.0	19.4	-91.63	-3,009.2	737.1	1,896.9	1,863.8	33.06	57.371			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error: 0.0 ft			
Survey Program: 838-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
9,100.0	7,500.0	7,580.8	7,517.0	28.4	19.4	-91.57	-3,009.2	737.1	1,797.5	1,764.4	33.12	54.282				
9,200.0	7,500.0	7,580.6	7,516.8	29.9	19.4	-91.52	-3,009.2	737.1	1,698.3	1,665.2	33.17	51.208				
9,300.0	7,500.0	7,580.4	7,516.6	31.4	19.4	-91.47	-3,009.2	737.1	1,599.2	1,566.0	33.21	48.148				
9,400.0	7,500.0	7,580.2	7,516.4	32.9	19.4	-91.41	-3,009.2	737.1	1,500.2	1,466.9	33.26	45.101				
9,500.0	7,500.0	7,580.0	7,516.2	34.4	19.4	-91.36	-3,009.2	737.1	1,401.3	1,368.0	33.32	42.061				
9,600.0	7,500.0	7,579.8	7,516.0	36.0	19.4	-91.31	-3,009.2	737.1	1,302.6	1,269.2	33.38	39.027				
9,700.0	7,500.0	7,579.6	7,515.8	37.5	19.4	-91.25	-3,009.2	737.1	1,204.1	1,170.7	33.46	35.992				
9,800.0	7,500.0	7,579.4	7,515.6	39.1	19.4	-91.20	-3,009.2	737.1	1,105.9	1,072.4	33.56	32.949				
9,900.0	7,500.0	7,579.1	7,515.4	40.7	19.3	-91.15	-3,009.2	737.1	1,008.1	974.3	33.72	29.891				
10,000.0	7,500.0	7,578.9	7,515.1	42.3	19.3	-91.09	-3,009.2	737.1	910.7	876.7	33.98	26.804				
10,100.0	7,500.0	7,578.7	7,514.9	43.9	19.3	-91.04	-3,009.2	737.1	813.9	779.5	34.38	23.673				
10,200.0	7,500.0	7,578.5	7,514.7	45.6	19.3	-90.98	-3,009.2	737.1	718.0	683.0	35.05	20.484				
10,300.0	7,500.0	7,578.3	7,514.5	47.2	19.3	-90.93	-3,009.2	737.1	623.4	587.2	36.19	17.225				
10,400.0	7,500.0	7,578.1	7,514.3	48.9	19.3	-90.87	-3,009.2	737.1	530.8	492.7	38.15	13.915				
10,500.0	7,500.0	7,577.9	7,514.1	50.5	19.3	-90.82	-3,009.2	737.1	441.5	400.0	41.51	10.635				
10,600.0	7,500.0	7,577.7	7,513.9	52.2	19.3	-90.76	-3,009.2	737.1	357.8	310.6	47.19	7.582				
10,700.0	7,500.0	7,577.5	7,513.7	53.8	19.3	-90.71	-3,009.2	737.1	284.9	228.7	56.16	5.073				
10,800.0	7,500.0	7,577.3	7,513.5	55.5	19.3	-90.65	-3,009.3	737.1	233.0	165.5	67.49	3.452				
10,884.4	7,500.0	7,577.1	7,513.3	56.9	19.3	-90.60	-3,009.3	737.1	217.2	143.3	73.87	2.940 CC, ES				
10,900.0	7,500.0	7,577.1	7,513.3	57.2	19.3	-90.60	-3,009.3	737.1	217.7	143.5	74.23	2.933 SF				
11,000.0	7,500.0	7,576.9	7,513.1	58.9	19.3	-90.54	-3,009.3	737.2	246.0	175.1	70.90	3.470				
11,100.0	7,500.0	7,576.6	7,512.8	60.6	19.3	-90.48	-3,009.3	737.2	306.0	242.1	63.89	4.790				
11,200.0	7,500.0	7,576.4	7,512.6	62.3	19.3	-90.43	-3,009.3	737.2	383.1	325.0	58.11	6.593				
11,244.1	7,500.0	7,576.3	7,512.5	63.0	19.3	-90.40	-3,009.3	737.2	420.2	364.1	56.13	7.487				
11,300.0	7,500.0	7,576.2	7,512.4	64.0	19.3	-90.36	-3,009.3	737.2	468.7	414.7	54.02	8.676				
11,400.0	7,500.0	7,576.0	7,512.2	65.7	19.3	-90.27	-3,009.3	737.2	557.8	506.8	51.01	10.934				
11,444.1	7,500.0	7,575.8	7,512.0	66.4	19.3	-90.24	-3,009.3	737.2	597.8	547.8	49.92	11.975				
11,500.0	7,500.0	7,575.7	7,511.9	67.4	19.3	-90.20	-3,009.3	737.2	649.0	600.3	48.71	13.323				
11,600.0	7,500.0	7,575.4	7,511.6	69.1	19.3	-90.13	-3,009.3	737.2	742.3	695.3	47.01	15.791				
11,700.0	7,500.0	7,575.1	7,511.3	70.8	19.3	-90.07	-3,009.3	737.2	837.2	791.5	45.74	18.304				
11,800.0	7,500.0	7,574.8	7,511.0	72.5	19.3	-90.00	-3,009.3	737.2	933.2	888.4	44.77	20.842				
11,900.0	7,500.0	7,574.5	7,510.7	74.2	19.3	-89.93	-3,009.3	737.2	1,029.9	985.9	44.03	23.391				
12,000.0	7,500.0	7,574.2	7,510.4	76.0	19.3	-89.86	-3,009.3	737.2	1,127.2	1,083.8	43.45	25.943				
12,100.0	7,500.0	7,573.9	7,510.1	77.7	19.3	-89.80	-3,009.3	737.2	1,224.9	1,181.9	42.99	28.491				
12,194.1	7,500.0	7,573.6	7,509.8	79.3	19.3	-89.73	-3,009.3	737.2	1,317.3	1,274.6	42.65	30.883				
12,200.0	7,500.0	7,573.6	7,509.8	79.4	19.3	-89.73	-3,009.3	737.2	1,323.0	1,280.4	42.63	31.032				
12,300.0	7,500.0	7,573.4	7,509.6	81.1	19.3	-89.58	-3,009.3	737.2	1,421.7	1,379.3	42.37	33.556				
12,387.3	7,500.0	7,573.1	7,509.3	82.6	19.3	-89.38	-3,009.3	737.2	1,508.4	1,466.1	42.23	35.715				
12,400.0	7,500.0	7,573.1	7,509.3	82.9	19.3	-89.37	-3,009.3	737.2	1,521.0	1,478.7	42.22	36.022				
12,500.0	7,500.0	7,572.9	7,509.1	84.6	19.3	-89.29	-3,009.3	737.2	1,620.5	1,578.3	42.15	38.446				
12,600.0	7,500.0	7,572.7	7,508.9	86.3	19.3	-89.20	-3,009.3	737.2	1,720.0	1,677.9	42.10	40.856				
12,700.0	7,500.0	7,572.4	7,508.6	88.0	19.3	-89.12	-3,009.3	737.2	1,819.7	1,777.6	42.07	43.253				
12,800.0	7,500.0	7,572.2	7,508.4	89.7	19.3	-89.04	-3,009.3	737.2	1,919.3	1,877.3	42.06	45.637				
12,900.0	7,500.0	7,572.0	7,508.2	91.5	19.3	-88.95	-3,009.3	737.2	2,019.0	1,977.0	42.06	48.008				
13,000.0	7,500.0	7,571.7	7,508.0	93.2	19.3	-88.87	-3,009.3	737.2	2,118.7	2,076.7	42.07	50.365				
13,100.0	7,500.0	7,571.5	7,507.7	94.9	19.3	-88.78	-3,009.3	737.2	2,218.5	2,176.4	42.09	52.709				
13,200.0	7,500.0	7,571.3	7,507.5	96.6	19.3	-88.70	-3,009.3	737.2	2,318.2	2,276.1	42.12	55.040				
13,300.0	7,500.0	7,571.1	7,507.3	98.4	19.3	-88.61	-3,009.3	737.2	2,418.0	2,375.9	42.16	57.358				
13,400.0	7,500.0	7,570.8	7,507.0	100.1	19.3	-88.53	-3,009.3	737.2	2,517.8	2,475.6	42.20	59.663				
13,500.0	7,500.0	7,570.6	7,506.8	101.8	19.3	-88.44	-3,009.3	737.2	2,617.7	2,575.4	42.25	61.956				
13,600.0	7,500.0	7,570.4	7,506.6	103.5	19.3	-88.35	-3,009.3	737.2	2,717.5	2,675.2	42.31	64.235				
13,700.0	7,500.0	7,570.1	7,506.3	105.3	19.3	-88.27	-3,009.3	737.2	2,817.3	2,775.0	42.36	66.502				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 838-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,800.0	7,500.0	7,569.9	7,506.1	107.0	19.3	-88.18	-3,009.3	737.2	2,917.2	2,874.8	42.43	68.756		
13,900.0	7,500.0	7,569.7	7,505.9	108.7	19.3	-88.09	-3,009.3	737.2	3,017.0	2,974.6	42.49	70.998		
14,000.0	7,500.0	7,569.4	7,505.6	110.5	19.3	-88.01	-3,009.3	737.2	3,116.9	3,074.4	42.56	73.228		
14,100.0	7,500.0	7,569.2	7,505.4	112.2	19.3	-87.92	-3,009.3	737.2	3,216.8	3,174.2	42.64	75.445		
14,200.0	7,500.0	7,569.0	7,505.2	113.9	19.3	-87.83	-3,009.3	737.2	3,316.7	3,274.0	42.71	77.651		
14,300.0	7,500.0	7,568.7	7,504.9	115.7	19.3	-87.74	-3,009.3	737.2	3,416.6	3,373.8	42.79	79.844		
14,400.0	7,500.0	7,568.5	7,504.7	117.4	19.3	-87.65	-3,009.3	737.2	3,516.5	3,473.6	42.87	82.025		
14,500.0	7,500.0	7,568.2	7,504.4	119.1	19.3	-87.57	-3,009.3	737.2	3,616.4	3,573.4	42.95	84.195		
14,600.0	7,500.0	7,568.0	7,504.2	120.9	19.3	-87.48	-3,009.3	737.2	3,716.3	3,673.3	43.04	86.353		
14,700.0	7,500.0	7,567.8	7,504.0	122.6	19.3	-87.39	-3,009.3	737.2	3,816.2	3,773.1	43.12	88.500		
14,800.0	7,500.0	7,567.5	7,503.7	124.4	19.3	-87.30	-3,009.3	737.3	3,916.1	3,872.9	43.21	90.635		
14,900.0	7,500.0	7,567.3	7,503.5	126.1	19.3	-87.21	-3,009.3	737.3	4,016.1	3,972.8	43.30	92.759		
15,000.0	7,500.0	7,567.0	7,503.2	127.8	19.3	-87.12	-3,009.3	737.3	4,116.0	4,072.6	43.38	94.871		
15,100.0	7,500.0	7,566.8	7,503.0	129.6	19.3	-87.03	-3,009.3	737.3	4,215.9	4,172.4	43.48	96.973		
15,200.0	7,500.0	7,566.5	7,502.7	131.3	19.3	-86.94	-3,009.3	737.3	4,315.9	4,272.3	43.57	99.063		
15,300.0	7,500.0	7,566.3	7,502.5	133.1	19.3	-86.85	-3,009.3	737.3	4,415.8	4,372.1	43.66	101.143		
15,400.0	7,500.0	7,566.1	7,502.3	134.8	19.3	-86.76	-3,009.3	737.3	4,515.7	4,472.0	43.75	103.211		
15,500.0	7,500.0	7,565.8	7,502.0	136.5	19.3	-86.67	-3,009.3	737.3	4,615.7	4,571.8	43.85	105.269		
15,600.0	7,500.0	7,565.6	7,501.8	138.3	19.3	-86.58	-3,009.3	737.3	4,715.6	4,671.7	43.94	107.316		
15,700.0	7,500.0	7,565.3	7,501.5	140.0	19.3	-86.48	-3,009.3	737.3	4,815.6	4,771.5	44.04	109.353		
15,805.8	7,500.0	7,565.0	7,501.3	141.9	19.3	-86.39	-3,009.3	737.3	4,921.3	4,877.1	44.14	111.496		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program:		7894-Geolink MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-178.06	-983.2	-33.3	983.8					
100.0	100.0	88.0	88.0	0.2	0.2	-178.06	-983.2	-33.3	983.7	983.4	0.31	3,218.721		
200.0	200.0	188.0	188.0	0.3	0.3	-178.06	-983.2	-33.3	983.7	983.1	0.65	1,502.595		
300.0	300.0	288.0	288.0	0.5	0.5	-178.06	-983.2	-33.3	983.7	982.7	1.00	980.057		
400.0	400.0	388.0	388.0	0.7	0.7	-178.06	-983.2	-33.3	983.7	982.4	1.35	727.177		
500.0	500.0	488.0	488.0	0.8	0.9	-178.06	-983.2	-33.3	983.7	982.0	1.70	578.030		
600.0	600.0	588.0	588.0	1.0	1.0	142.49	-983.2	-33.3	984.4	982.4	2.05	479.951		
700.0	700.0	688.0	688.0	1.2	1.2	142.57	-983.2	-33.3	986.5	984.1	2.40	410.836		
800.0	799.9	787.9	787.9	1.4	1.4	142.70	-983.2	-33.3	990.0	987.2	2.75	359.562		
900.0	899.7	887.7	887.7	1.6	1.5	142.89	-983.2	-33.3	994.8	991.7	3.11	320.050		
1,000.0	999.4	987.4	987.4	1.8	1.7	143.12	-983.2	-33.3	1,001.1	997.6	3.47	288.703		
1,100.0	1,098.9	1,086.9	1,086.9	2.0	1.9	143.40	-983.2	-33.3	1,008.8	1,005.0	3.83	263.263		
1,201.3	1,199.5	1,187.5	1,187.5	2.2	2.1	143.73	-983.2	-33.3	1,018.1	1,013.9	4.21	241.995		
1,300.0	1,297.5	1,285.5	1,285.5	2.5	2.2	144.12	-983.2	-33.3	1,027.8	1,023.3	4.57	224.698		
1,400.0	1,396.8	1,384.8	1,384.8	2.7	2.4	144.52	-983.2	-33.3	1,037.8	1,032.8	4.95	209.747		
1,500.0	1,496.0	1,484.0	1,484.0	3.0	2.6	144.91	-983.2	-33.3	1,047.8	1,042.4	5.32	196.876		
1,600.0	1,595.3	1,583.3	1,583.3	3.3	2.8	145.28	-983.2	-33.3	1,057.8	1,052.1	5.70	185.692		
1,700.0	1,694.5	1,682.5	1,682.5	3.5	2.9	145.66	-983.2	-33.3	1,067.9	1,061.8	6.07	175.894		
1,800.0	1,793.8	1,781.8	1,781.8	3.8	3.1	146.02	-983.2	-33.3	1,078.0	1,071.6	6.45	167.246		
1,900.0	1,893.0	1,881.0	1,881.0	4.0	3.3	146.38	-983.2	-33.3	1,088.2	1,081.4	6.82	159.560		
2,000.0	1,992.3	1,980.3	1,980.3	4.3	3.5	146.73	-983.2	-33.3	1,098.4	1,091.2	7.19	152.689		
2,100.0	2,091.5	2,079.5	2,079.5	4.6	3.6	147.08	-983.2	-33.3	1,108.6	1,101.1	7.57	146.512		
2,200.0	2,190.8	2,178.8	2,178.8	4.8	3.8	147.42	-983.2	-33.3	1,118.9	1,111.0	7.94	140.930		
2,300.0	2,290.0	2,278.0	2,278.0	5.1	4.0	147.75	-983.2	-33.3	1,129.3	1,121.0	8.31	135.863		
2,400.0	2,389.3	2,377.3	2,377.3	5.4	4.1	148.08	-983.2	-33.3	1,139.6	1,130.9	8.68	131.244		
2,500.0	2,488.5	2,476.5	2,476.5	5.7	4.3	148.40	-983.2	-33.3	1,150.0	1,141.0	9.05	127.017		
2,600.0	2,587.8	2,575.8	2,575.8	5.9	4.5	148.71	-983.2	-33.3	1,160.5	1,151.0	9.42	123.135		
2,700.0	2,687.0	2,675.0	2,675.0	6.2	4.7	149.02	-983.2	-33.3	1,170.9	1,161.1	9.79	119.558		
2,800.0	2,786.3	2,774.3	2,774.3	6.5	4.8	149.33	-983.2	-33.3	1,181.4	1,171.3	10.16	116.252		
2,900.0	2,885.5	2,873.5	2,873.5	6.7	5.0	149.63	-983.2	-33.3	1,192.0	1,181.5	10.53	113.188		
3,000.0	2,984.8	2,972.8	2,972.8	7.0	5.2	149.92	-983.2	-33.3	1,202.6	1,191.7	10.90	110.340		
3,100.0	3,084.0	3,072.0	3,072.0	7.3	5.4	150.21	-983.2	-33.3	1,213.2	1,201.9	11.27	107.687		
3,200.0	3,183.3	3,171.3	3,171.3	7.6	5.5	150.49	-983.2	-33.3	1,223.8	1,212.2	11.63	105.210		
3,300.0	3,282.5	3,270.5	3,270.5	7.8	5.7	150.77	-983.2	-33.3	1,234.4	1,222.4	12.00	102.891		
3,400.0	3,381.8	3,369.8	3,369.8	8.1	5.9	151.04	-983.2	-33.3	1,245.1	1,232.8	12.36	100.717		
3,500.0	3,481.1	3,469.1	3,469.1	8.4	6.1	151.31	-983.2	-33.3	1,255.8	1,243.1	12.73	98.675		
3,600.0	3,580.3	3,568.3	3,568.3	8.7	6.2	151.58	-983.2	-33.3	1,266.6	1,253.5	13.09	96.753		
3,700.0	3,679.6	3,667.6	3,667.6	8.9	6.4	151.84	-983.2	-33.3	1,277.4	1,263.9	13.45	94.940		
3,800.0	3,778.8	3,766.8	3,766.8	9.2	6.6	152.09	-983.2	-33.3	1,288.2	1,274.3	13.82	93.229		
3,900.0	3,878.1	3,866.1	3,866.1	9.5	6.7	152.35	-983.2	-33.3	1,299.0	1,284.8	14.18	91.610		
4,000.0	3,977.3	3,965.3	3,965.3	9.8	6.9	152.59	-983.2	-33.3	1,309.8	1,295.3	14.54	90.077		
4,100.0	4,076.6	4,064.6	4,064.6	10.0	7.1	152.84	-983.2	-33.3	1,320.7	1,305.8	14.90	88.623		
4,200.0	4,175.8	4,163.8	4,163.8	10.3	7.3	153.08	-983.2	-33.3	1,331.6	1,316.3	15.26	87.242		
4,300.0	4,275.1	4,263.1	4,263.1	10.6	7.4	153.31	-983.2	-33.3	1,342.5	1,326.9	15.62	85.929		
4,400.0	4,374.3	4,362.3	4,362.3	10.9	7.6	153.54	-983.2	-33.3	1,353.4	1,337.4	15.98	84.679		
4,500.0	4,473.6	4,461.6	4,461.6	11.1	7.8	153.77	-983.2	-33.3	1,364.4	1,348.0	16.34	83.488		
4,600.0	4,572.8	4,560.8	4,560.8	11.4	8.0	154.00	-983.2	-33.3	1,375.4	1,358.7	16.70	82.352		
4,700.0	4,672.1	4,660.1	4,660.1	11.7	8.1	154.22	-983.2	-33.3	1,386.4	1,369.3	17.06	81.266		
4,800.0	4,771.3	4,759.3	4,759.3	12.0	8.3	154.43	-983.2	-33.3	1,397.4	1,380.0	17.42	80.228		
4,900.0	4,870.6	4,858.6	4,858.6	12.2	8.5	154.65	-983.2	-33.3	1,408.4	1,390.6	17.78	79.235		
5,000.0	4,969.8	4,957.8	4,957.8	12.5	8.7	154.86	-983.2	-33.3	1,419.5	1,401.3	18.13	78.284		
5,100.0	5,069.1	5,057.1	5,057.1	12.8	8.8	155.07	-983.2	-33.3	1,430.6	1,412.1	18.49	77.373		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 7894-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,168.3	5,156.3	5,156.3	13.1	9.0	155.27	-983.2	-33.3	1,441.7	1,422.8	18.85	76.498		
5,300.0	5,267.6	5,255.6	5,255.6	13.3	9.2	155.47	-983.2	-33.3	1,452.8	1,433.6	19.20	75.658		
5,400.0	5,366.8	5,354.8	5,354.8	13.6	9.3	155.67	-983.2	-33.3	1,463.9	1,444.3	19.56	74.851		
5,500.0	5,466.1	5,454.1	5,454.1	13.9	9.5	155.87	-983.2	-33.3	1,475.0	1,455.1	19.91	74.075		
5,600.0	5,565.3	5,553.3	5,553.3	14.2	9.7	156.06	-983.2	-33.3	1,486.2	1,465.9	20.27	73.328		
5,700.0	5,664.6	5,652.6	5,652.6	14.4	9.9	156.25	-983.2	-33.3	1,497.4	1,476.8	20.62	72.608		
5,800.0	5,763.8	5,751.8	5,751.8	14.7	10.0	156.43	-983.2	-33.3	1,508.6	1,487.6	20.98	71.915		
5,900.0	5,863.1	5,851.1	5,851.1	15.0	10.2	156.62	-983.2	-33.3	1,519.8	1,498.5	21.33	71.247		
6,000.0	5,962.3	5,950.3	5,950.3	15.3	10.4	156.80	-983.2	-33.3	1,531.0	1,509.3	21.69	70.602		
6,100.0	6,061.6	6,049.6	6,049.6	15.5	10.6	156.98	-983.2	-33.3	1,542.3	1,520.2	22.04	69.979		
6,200.0	6,160.9	6,148.9	6,148.9	15.8	10.7	157.15	-983.2	-33.3	1,553.5	1,531.1	22.39	69.377		
6,300.0	6,260.1	6,248.1	6,248.1	16.1	10.9	157.33	-983.2	-33.3	1,564.8	1,542.1	22.75	68.796		
6,400.0	6,359.4	6,347.4	6,347.4	16.4	11.1	157.50	-983.2	-33.3	1,576.1	1,553.0	23.10	68.234		
6,500.0	6,458.6	6,446.6	6,446.6	16.6	11.3	157.67	-983.2	-33.3	1,587.4	1,563.9	23.45	67.690		
6,600.0	6,557.9	6,545.9	6,545.9	16.9	11.4	157.83	-983.2	-33.3	1,598.7	1,574.9	23.80	67.163		
6,700.0	6,657.1	6,645.1	6,645.1	17.2	11.6	158.00	-983.2	-33.3	1,610.0	1,585.9	24.16	66.653		
6,800.0	6,756.4	6,744.4	6,744.4	17.5	11.8	158.16	-983.2	-33.3	1,621.4	1,596.8	24.51	66.158		
6,900.0	6,855.6	6,843.6	6,843.6	17.7	11.9	158.32	-983.2	-33.3	1,632.7	1,607.8	24.86	65.679		
6,919.5	6,875.0	6,863.0	6,863.0	17.8	12.0	158.35	-983.2	-33.3	1,634.9	1,610.0	24.93	65.587		
6,950.0	6,905.3	6,893.3	6,893.3	17.9	12.0	135.74	-983.2	-33.3	1,637.6	1,612.6	25.04	65.407		
7,000.0	6,955.1	6,943.1	6,943.1	17.9	12.1	77.57	-983.2	-33.3	1,638.7	1,613.5	25.22	64.967		
7,050.0	7,004.8	6,992.8	6,992.8	17.9	12.2	48.83	-983.2	-33.3	1,635.7	1,610.3	25.41	64.359		
7,100.0	7,053.8	7,041.8	7,041.8	17.9	12.3	38.50	-983.2	-33.3	1,628.5	1,602.9	25.61	63.589		
7,150.0	7,101.9	7,089.9	7,089.9	17.9	12.4	33.96	-983.2	-33.3	1,617.4	1,591.6	25.81	62.665		
7,200.0	7,148.7	7,136.7	7,136.7	17.8	12.5	31.84	-983.2	-33.3	1,602.3	1,576.3	26.01	61.597		
7,250.0	7,193.8	7,181.8	7,181.8	17.7	12.5	31.05	-983.2	-33.3	1,583.4	1,557.2	26.22	60.394		
7,300.0	7,236.9	7,224.9	7,224.9	17.5	12.6	31.14	-983.2	-33.3	1,560.9	1,534.5	26.43	59.067		
7,350.0	7,277.7	7,265.7	7,265.7	17.4	12.7	31.94	-983.2	-33.3	1,535.0	1,508.4	26.64	57.626		
7,400.0	7,315.7	7,303.7	7,303.7	17.2	12.7	33.40	-983.2	-33.3	1,505.9	1,479.1	26.85	56.085		
7,450.0	7,350.9	7,338.9	7,338.9	17.1	12.8	35.53	-983.2	-33.3	1,473.9	1,446.8	27.07	54.454		
7,500.0	7,382.8	7,370.8	7,370.8	16.9	12.9	38.41	-983.2	-33.3	1,439.2	1,411.9	27.29	52.748		
7,550.0	7,411.3	7,399.3	7,399.3	16.7	12.9	42.13	-983.2	-33.3	1,402.2	1,374.7	27.51	50.979		
7,600.0	7,436.1	7,424.1	7,424.1	16.6	13.0	46.83	-983.2	-33.3	1,363.2	1,335.4	27.73	49.160		
7,650.0	7,457.1	7,445.1	7,445.1	16.5	13.0	52.64	-983.2	-33.3	1,322.5	1,294.5	27.96	47.305		
7,700.0	7,474.0	7,462.0	7,462.0	16.4	13.0	59.62	-983.2	-33.3	1,280.4	1,252.2	28.19	45.428		
7,750.0	7,486.8	7,474.8	7,474.8	16.4	13.0	67.70	-983.2	-33.3	1,237.4	1,209.0	28.42	43.542		
7,800.0	7,495.3	7,483.3	7,483.3	16.4	13.1	76.59	-983.2	-33.3	1,193.9	1,165.2	28.66	41.660		
7,850.0	7,499.5	7,487.5	7,487.5	16.5	13.1	85.76	-983.2	-33.3	1,150.1	1,121.2	28.90	39.798		
7,873.6	7,500.0	7,488.0	7,488.0	16.5	13.1	90.00	-983.2	-33.3	1,129.6	1,100.5	29.02	38.930		
7,900.0	7,500.0	7,488.0	7,488.0	16.5	13.1	90.00	-983.2	-33.3	1,106.6	1,077.4	29.15	37.964		
8,000.0	7,500.0	7,488.0	7,488.0	16.9	13.1	90.00	-983.2	-33.3	1,021.2	991.5	29.69	34.391		
8,100.0	7,500.0	7,488.0	7,488.0	17.4	13.1	90.00	-983.2	-33.3	938.7	908.4	30.32	30.965		
8,200.0	7,500.0	7,488.0	7,488.0	18.0	13.1	90.00	-983.2	-33.3	860.0	828.9	31.03	27.715		
8,300.0	7,500.0	7,488.0	7,488.0	18.8	13.1	90.00	-983.2	-33.3	786.0	754.2	31.84	24.685		
8,400.0	7,500.0	7,488.0	7,488.0	19.7	13.1	90.00	-983.2	-33.3	718.5	685.7	32.76	21.932		
8,500.0	7,500.0	7,488.0	7,488.0	20.7	13.1	90.00	-983.2	-33.3	659.2	625.4	33.75	19.531		
8,600.0	7,500.0	7,488.0	7,488.0	21.9	13.1	90.00	-983.2	-33.3	610.6	575.9	34.75	17.572		
8,700.0	7,500.0	7,488.0	7,488.0	23.1	13.1	90.00	-983.2	-33.3	575.5	539.9	35.64	16.149		
8,800.0	7,500.0	7,488.0	7,488.0	24.3	13.1	90.00	-983.2	-33.3	556.4	520.1	36.25	15.348		
8,858.3	7,500.0	7,488.0	7,488.0	25.1	13.1	90.00	-983.2	-33.3	553.3	516.9	36.44	15.186 CC, ES, SF		
8,900.0	7,500.0	7,488.0	7,488.0	25.6	13.1	90.00	-983.2	-33.3	554.9	518.4	36.47	15.215		
9,000.0	7,500.0	7,488.0	7,488.0	27.0	13.1	90.00	-983.2	-33.3	571.2	534.9	36.28	15.745		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
9,100.0	7,500.0	7,488.0	7,488.0	28.4	13.1	90.00	-983.2	-33.3	603.8	568.0	35.77	16.878		
9,200.0	7,500.0	7,488.0	7,488.0	29.9	13.1	90.00	-983.2	-33.3	650.3	615.2	35.12	18.515		
9,300.0	7,500.0	7,488.0	7,488.0	31.4	13.1	90.00	-983.2	-33.3	708.0	673.5	34.45	20.549		
9,400.0	7,500.0	7,488.0	7,488.0	32.9	13.1	90.00	-983.2	-33.3	774.3	740.5	33.84	22.879		
9,500.0	7,500.0	7,488.0	7,488.0	34.4	13.1	90.00	-983.2	-33.3	847.3	814.0	33.33	25.419		
9,600.0	7,500.0	7,488.0	7,488.0	36.0	13.1	90.00	-983.2	-33.3	925.3	892.4	32.92	28.107		
9,700.0	7,500.0	7,488.0	7,488.0	37.5	13.1	90.00	-983.2	-33.3	1,007.3	974.7	32.61	30.893		
9,800.0	7,500.0	7,488.0	7,488.0	39.1	13.1	90.00	-983.2	-33.3	1,092.2	1,059.8	32.37	33.743		
9,900.0	7,500.0	7,488.0	7,488.0	40.7	13.1	90.00	-983.2	-33.3	1,179.5	1,147.3	32.20	36.634		
10,000.0	7,500.0	7,488.0	7,488.0	42.3	13.1	90.00	-983.2	-33.3	1,268.7	1,236.6	32.08	39.547		
10,100.0	7,500.0	7,488.0	7,488.0	43.9	13.1	90.00	-983.2	-33.3	1,359.4	1,327.4	32.01	42.470		
10,200.0	7,500.0	7,488.0	7,488.0	45.6	13.1	90.00	-983.2	-33.3	1,451.3	1,419.3	31.97	45.394		
10,300.0	7,500.0	7,488.0	7,488.0	47.2	13.1	90.00	-983.2	-33.3	1,544.2	1,512.3	31.96	48.314		
10,400.0	7,500.0	7,488.0	7,488.0	48.9	13.1	90.00	-983.2	-33.3	1,638.0	1,606.0	31.98	51.224		
10,500.0	7,500.0	7,488.0	7,488.0	50.5	13.1	90.00	-983.2	-33.3	1,732.4	1,700.4	32.01	54.121		
10,600.0	7,500.0	7,488.0	7,488.0	52.2	13.1	90.00	-983.2	-33.3	1,827.5	1,795.4	32.06	57.003		
10,700.0	7,500.0	7,488.0	7,488.0	53.8	13.1	90.00	-983.2	-33.3	1,923.0	1,890.9	32.12	59.868		
10,800.0	7,500.0	7,488.0	7,488.0	55.5	13.1	90.00	-983.2	-33.3	2,019.0	1,986.8	32.19	62.714		
10,900.0	7,500.0	7,488.0	7,488.0	57.2	13.1	90.00	-983.2	-33.3	2,115.3	2,083.1	32.27	65.542		
11,000.0	7,500.0	7,488.0	7,488.0	58.9	13.1	90.00	-983.2	-33.3	2,212.0	2,179.6	32.36	68.351		
11,100.0	7,500.0	7,488.0	7,488.0	60.6	13.1	90.00	-983.2	-33.3	2,309.0	2,276.5	32.46	71.139		
11,200.0	7,500.0	7,488.0	7,488.0	62.3	13.1	90.00	-983.2	-33.3	2,406.2	2,373.6	32.56	73.907		
11,244.1	7,500.0	7,488.0	7,488.0	63.0	13.1	90.00	-983.2	-33.3	2,449.1	2,416.5	32.60	75.123		
11,300.0	7,500.0	7,488.0	7,488.0	64.0	13.1	90.00	-983.2	-33.3	2,503.7	2,471.1	32.66	76.662		
11,400.0	7,500.0	7,488.0	7,488.0	65.7	13.1	90.00	-983.2	-33.3	2,602.0	2,569.3	32.76	79.416		
11,444.1	7,500.0	7,488.0	7,488.0	66.4	13.1	90.00	-983.2	-33.3	2,645.7	2,612.9	32.82	80.623		
11,500.0	7,500.0	7,488.0	7,488.0	67.4	13.1	90.00	-983.2	-33.3	2,701.0	2,668.1	32.88	82.142		
11,600.0	7,500.0	7,488.0	7,488.0	69.1	13.1	90.00	-983.2	-33.3	2,800.0	2,767.0	33.00	84.843		
11,700.0	7,500.0	7,488.0	7,488.0	70.8	13.1	90.00	-983.2	-33.3	2,899.1	2,866.0	33.12	87.523		
11,800.0	7,500.0	7,488.0	7,488.0	72.5	13.1	90.00	-983.2	-33.3	2,998.3	2,965.1	33.25	90.182		
11,900.0	7,500.0	7,488.0	7,488.0	74.2	13.1	90.00	-983.2	-33.3	3,097.5	3,064.2	33.37	92.821		
12,000.0	7,500.0	7,488.0	7,488.0	76.0	13.1	90.00	-983.2	-33.3	3,196.8	3,163.3	33.50	95.439		
12,100.0	7,500.0	7,488.0	7,488.0	77.7	13.1	90.00	-983.2	-33.3	3,296.1	3,262.5	33.62	98.037		
12,194.1	7,500.0	7,488.0	7,488.0	79.3	13.1	90.00	-983.2	-33.3	3,389.7	3,355.9	33.74	100.465		
12,200.0	7,500.0	7,488.0	7,488.0	79.4	13.1	90.00	-983.2	-33.3	3,395.5	3,361.7	33.75	100.615		
12,300.0	7,500.0	7,488.0	7,488.0	81.1	13.1	90.00	-983.2	-33.3	3,494.6	3,460.8	33.88	103.156		
12,387.3	7,500.0	7,488.0	7,488.0	82.6	13.1	90.00	-983.2	-33.3	3,580.9	3,546.9	33.99	105.355		
12,400.0	7,500.0	7,488.0	7,488.0	82.9	13.1	90.00	-983.2	-33.3	3,593.4	3,559.4	34.00	105.674		
12,500.0	7,500.0	7,488.0	7,488.0	84.6	13.1	90.00	-983.2	-33.3	3,691.9	3,657.8	34.13	108.183		
12,600.0	7,500.0	7,488.0	7,488.0	86.3	13.1	90.00	-983.2	-33.3	3,790.6	3,756.3	34.25	110.673		
12,700.0	7,500.0	7,488.0	7,488.0	88.0	13.1	90.00	-983.2	-33.3	3,889.3	3,854.9	34.37	113.146		
12,800.0	7,500.0	7,488.0	7,488.0	89.7	13.1	90.00	-983.2	-33.3	3,988.1	3,953.6	34.50	115.601		
12,900.0	7,500.0	7,488.0	7,488.0	91.5	13.1	90.00	-983.2	-33.3	4,087.0	4,052.3	34.62	118.039		
13,000.0	7,500.0	7,488.0	7,488.0	93.2	13.1	90.00	-983.2	-33.3	4,185.9	4,151.1	34.75	120.460		
13,100.0	7,500.0	7,488.0	7,488.0	94.9	13.1	90.00	-983.2	-33.3	4,284.8	4,249.9	34.87	122.863		
13,200.0	7,500.0	7,488.0	7,488.0	96.6	13.1	90.00	-983.2	-33.3	4,383.8	4,348.8	35.00	125.250		
13,300.0	7,500.0	7,488.0	7,488.0	98.4	13.1	90.00	-983.2	-33.3	4,482.9	4,447.7	35.13	127.620		
13,400.0	7,500.0	7,488.0	7,488.0	100.1	13.1	90.00	-983.2	-33.3	4,581.9	4,546.7	35.25	129.973		
13,500.0	7,500.0	7,488.0	7,488.0	101.8	13.1	90.00	-983.2	-33.3	4,681.1	4,645.7	35.38	132.311		
13,600.0	7,500.0	7,488.0	7,488.0	103.5	13.1	90.00	-983.2	-33.3	4,780.2	4,744.7	35.51	134.632		
13,700.0	7,500.0	7,488.0	7,488.0	105.3	13.1	90.00	-983.2	-33.3	4,879.4	4,843.8	35.63	136.938		
13,800.0	7,500.0	7,488.0	7,488.0	107.0	13.1	90.00	-983.2	-33.3	4,978.7	4,942.9	35.76	139.228		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,900.0	7,500.0	7,488.0	7,488.0	108.7	13.1	90.00	-983.2	-33.3	5,077.9	5,042.0	35.89	141.503		
14,000.0	7,500.0	7,488.0	7,488.0	110.5	13.1	90.00	-983.2	-33.3	5,177.2	5,141.2	36.01	143.762		
14,100.0	7,500.0	7,488.0	7,488.0	112.2	13.1	90.00	-983.2	-33.3	5,276.5	5,240.4	36.14	146.006		
14,200.0	7,500.0	7,488.0	7,488.0	113.9	13.1	90.00	-983.2	-33.3	5,375.9	5,339.6	36.27	148.236		
14,300.0	7,500.0	7,488.0	7,488.0	115.7	13.1	90.00	-983.2	-33.3	5,475.2	5,438.8	36.39	150.451		
14,400.0	7,500.0	7,488.0	7,488.0	117.4	13.1	90.00	-983.2	-33.3	5,574.6	5,538.1	36.52	152.652		
14,500.0	7,500.0	7,488.0	7,488.0	119.1	13.1	90.00	-983.2	-33.3	5,674.0	5,637.4	36.64	154.838		
14,600.0	7,500.0	7,488.0	7,488.0	120.9	13.1	90.00	-983.2	-33.3	5,773.4	5,736.7	36.77	157.010		
14,700.0	7,500.0	7,488.0	7,488.0	122.6	13.1	90.00	-983.2	-33.3	5,872.9	5,836.0	36.90	159.168		
14,800.0	7,500.0	7,488.0	7,488.0	124.4	13.1	90.00	-983.2	-33.3	5,972.4	5,935.3	37.02	161.313		
14,900.0	7,500.0	7,488.0	7,488.0	126.1	13.1	90.00	-983.2	-33.3	6,071.8	6,034.7	37.15	163.444		
15,000.0	7,500.0	7,488.0	7,488.0	127.8	13.1	90.00	-983.2	-33.3	6,171.3	6,134.1	37.28	165.561		
15,100.0	7,500.0	7,488.0	7,488.0	129.6	13.1	90.00	-983.2	-33.3	6,270.9	6,233.5	37.40	167.666		
15,200.0	7,500.0	7,488.0	7,488.0	131.3	13.1	90.00	-983.2	-33.3	6,370.4	6,332.9	37.53	169.757		
15,300.0	7,500.0	7,488.0	7,488.0	133.1	13.1	90.00	-983.2	-33.3	6,469.9	6,432.3	37.65	171.835		
15,400.0	7,500.0	7,488.0	7,488.0	134.8	13.1	90.00	-983.2	-33.3	6,569.5	6,531.7	37.78	173.900		
15,500.0	7,500.0	7,488.0	7,488.0	136.5	13.1	90.00	-983.2	-33.3	6,669.1	6,631.2	37.90	175.953		
15,600.0	7,500.0	7,488.0	7,488.0	138.3	13.1	90.00	-983.2	-33.3	6,768.6	6,730.6	38.03	177.993		
15,700.0	7,500.0	7,488.0	7,488.0	140.0	13.1	90.00	-983.2	-33.3	6,868.2	6,830.1	38.15	180.020		
15,805.8	7,500.0	7,488.0	7,488.0	141.9	13.1	90.00	-983.2	-33.3	6,973.6	6,935.3	38.28	182.152		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	142.24	-1,199.2	929.0	1,516.9					
100.0	100.0	94.0	94.0	0.2	0.2	142.24	-1,199.2	929.0	1,516.9	1,516.6	0.32	4,798.781		
200.0	200.0	194.0	194.0	0.3	0.3	142.24	-1,199.2	929.0	1,516.9	1,516.2	0.67	2,280.493		
300.0	300.0	294.0	294.0	0.5	0.5	142.24	-1,199.2	929.0	1,516.9	1,515.9	1.01	1,495.625		
400.0	400.0	394.0	394.0	0.7	0.7	142.24	-1,199.2	929.0	1,516.9	1,515.5	1.36	1,112.678		
500.0	500.0	494.0	494.0	0.8	0.9	142.24	-1,199.2	929.0	1,516.9	1,515.2	1.71	885.859		
600.0	600.0	594.0	594.0	1.0	1.0	102.79	-1,199.2	929.0	1,517.1	1,515.0	2.06	735.798		
700.0	700.0	694.0	694.0	1.2	1.2	102.88	-1,199.2	929.0	1,517.7	1,515.3	2.41	628.773		
800.0	799.9	793.9	793.9	1.4	1.4	103.03	-1,199.2	929.0	1,518.7	1,515.9	2.77	548.094		
900.0	899.7	893.7	893.7	1.6	1.6	103.24	-1,199.2	929.0	1,520.1	1,516.9	3.14	484.682		
1,000.0	999.4	993.4	993.4	1.8	1.7	103.51	-1,199.2	929.0	1,521.9	1,518.4	3.51	433.221		
1,100.0	1,098.9	1,092.9	1,092.9	2.0	1.9	103.84	-1,199.2	929.0	1,524.1	1,520.2	3.90	390.420		
1,201.3	1,199.5	1,193.5	1,193.5	2.2	2.1	104.23	-1,199.2	929.0	1,526.9	1,522.6	4.32	353.704		
1,300.0	1,297.5	1,291.5	1,291.5	2.5	2.3	104.66	-1,199.2	929.0	1,530.0	1,525.2	4.73	323.724		
1,400.0	1,396.8	1,390.8	1,390.8	2.7	2.4	105.10	-1,199.2	929.0	1,533.1	1,528.0	5.15	297.956		
1,500.0	1,496.0	1,490.0	1,490.0	3.0	2.6	105.53	-1,199.2	929.0	1,536.4	1,530.8	5.57	275.916		
1,600.0	1,595.3	1,589.3	1,589.3	3.3	2.8	105.97	-1,199.2	929.0	1,539.7	1,533.7	5.99	256.897		
1,700.0	1,694.5	1,688.5	1,688.5	3.5	2.9	106.40	-1,199.2	929.0	1,543.1	1,536.7	6.42	240.347		
1,800.0	1,793.8	1,787.8	1,787.8	3.8	3.1	106.83	-1,199.2	929.0	1,546.7	1,539.8	6.85	225.835		
1,900.0	1,893.0	1,887.0	1,887.0	4.0	3.3	107.26	-1,199.2	929.0	1,550.3	1,543.0	7.28	213.018		
2,000.0	1,992.3	1,986.3	1,986.3	4.3	3.5	107.69	-1,199.2	929.0	1,554.0	1,546.2	7.71	201.627		
2,100.0	2,091.5	2,085.5	2,085.5	4.6	3.6	108.11	-1,199.2	929.0	1,557.7	1,549.6	8.14	191.442		
2,200.0	2,190.8	2,184.8	2,184.8	4.8	3.8	108.54	-1,199.2	929.0	1,561.6	1,553.0	8.57	182.289		
2,300.0	2,290.0	2,284.0	2,284.0	5.1	4.0	108.96	-1,199.2	929.0	1,565.5	1,556.6	9.00	174.021		
2,400.0	2,389.3	2,383.3	2,383.3	5.4	4.2	109.38	-1,199.2	929.0	1,569.6	1,560.2	9.43	166.519		
2,500.0	2,488.5	2,482.5	2,482.5	5.7	4.3	109.79	-1,199.2	929.0	1,573.7	1,563.8	9.86	159.686		
2,600.0	2,587.8	2,581.8	2,581.8	5.9	4.5	110.21	-1,199.2	929.0	1,577.9	1,567.6	10.28	153.437		
2,700.0	2,687.0	2,681.0	2,681.0	6.2	4.7	110.62	-1,199.2	929.0	1,582.2	1,571.5	10.71	147.702		
2,800.0	2,786.3	2,780.3	2,780.3	6.5	4.9	111.03	-1,199.2	929.0	1,586.6	1,575.4	11.14	142.423		
2,900.0	2,885.5	2,879.5	2,879.5	6.7	5.0	111.44	-1,199.2	929.0	1,591.0	1,579.4	11.57	137.548		
3,000.0	2,984.8	2,978.8	2,978.8	7.0	5.2	111.84	-1,199.2	929.0	1,595.5	1,583.6	11.99	133.035		
3,100.0	3,084.0	3,078.0	3,078.0	7.3	5.4	112.25	-1,199.2	929.0	1,600.2	1,587.7	12.42	128.845		
3,200.0	3,183.3	3,177.3	3,177.3	7.6	5.5	112.65	-1,199.2	929.0	1,604.9	1,592.0	12.84	124.947		
3,300.0	3,282.5	3,276.5	3,276.5	7.8	5.7	113.05	-1,199.2	929.0	1,609.6	1,596.4	13.27	121.310		
3,400.0	3,381.8	3,375.8	3,375.8	8.1	5.9	113.44	-1,199.2	929.0	1,614.5	1,600.8	13.69	117.912		
3,500.0	3,481.1	3,475.1	3,475.1	8.4	6.1	113.84	-1,199.2	929.0	1,619.4	1,605.3	14.11	114.730		
3,600.0	3,580.3	3,574.3	3,574.3	8.7	6.2	114.23	-1,199.2	929.0	1,624.4	1,609.9	14.54	111.744		
3,700.0	3,679.6	3,673.6	3,673.6	8.9	6.4	114.62	-1,199.2	929.0	1,629.5	1,614.5	14.96	108.939		
3,800.0	3,778.8	3,772.8	3,772.8	9.2	6.6	115.00	-1,199.2	929.0	1,634.6	1,619.3	15.38	106.297		
3,900.0	3,878.1	3,872.1	3,872.1	9.5	6.8	115.39	-1,199.2	929.0	1,639.9	1,624.1	15.80	103.807		
4,000.0	3,977.3	3,971.3	3,971.3	9.8	6.9	115.77	-1,199.2	929.0	1,645.2	1,629.0	16.22	101.456		
4,100.0	4,076.6	4,070.6	4,070.6	10.0	7.1	116.15	-1,199.2	929.0	1,650.5	1,633.9	16.63	99.232		
4,200.0	4,175.8	4,169.8	4,169.8	10.3	7.3	116.53	-1,199.2	929.0	1,656.0	1,638.9	17.05	97.128		
4,300.0	4,275.1	4,269.1	4,269.1	10.6	7.5	116.90	-1,199.2	929.0	1,661.5	1,644.1	17.47	95.132		
4,400.0	4,374.3	4,368.3	4,368.3	10.9	7.6	117.27	-1,199.2	929.0	1,667.1	1,649.2	17.88	93.238		
4,500.0	4,473.6	4,467.6	4,467.6	11.1	7.8	117.64	-1,199.2	929.0	1,672.8	1,654.5	18.29	91.439		
4,600.0	4,572.8	4,566.8	4,566.8	11.4	8.0	118.01	-1,199.2	929.0	1,678.5	1,659.8	18.71	89.728		
4,700.0	4,672.1	4,666.1	4,666.1	11.7	8.1	118.37	-1,199.2	929.0	1,684.3	1,665.2	19.12	88.098		
4,800.0	4,771.3	4,765.3	4,765.3	12.0	8.3	118.74	-1,199.2	929.0	1,690.2	1,670.6	19.53	86.545		
4,900.0	4,870.6	4,864.6	4,864.6	12.2	8.5	119.09	-1,199.2	929.0	1,696.1	1,676.2	19.94	85.063		
5,000.0	4,969.8	4,963.8	4,963.8	12.5	8.7	119.45	-1,199.2	929.0	1,702.1	1,681.8	20.35	83.648		
5,100.0	5,069.1	5,063.1	5,063.1	12.8	8.8	119.81	-1,199.2	929.0	1,708.2	1,687.4	20.76	82.296		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU												Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,168.3	5,162.3	5,162.3	13.1	9.0	120.16	-1,199.2	929.0	1,714.3	1,693.2	21.16	81.003	
5,300.0	5,267.6	5,261.6	5,261.6	13.3	9.2	120.51	-1,199.2	929.0	1,720.5	1,699.0	21.57	79.765	
5,400.0	5,366.8	5,360.8	5,360.8	13.6	9.4	120.86	-1,199.2	929.0	1,726.8	1,704.8	21.98	78.580	
5,500.0	5,466.1	5,460.1	5,460.1	13.9	9.5	121.20	-1,199.2	929.0	1,733.1	1,710.7	22.38	77.443	
5,600.0	5,565.3	5,559.3	5,559.3	14.2	9.7	121.54	-1,199.2	929.0	1,739.5	1,716.7	22.78	76.353	
5,700.0	5,664.6	5,658.6	5,658.6	14.4	9.9	121.88	-1,199.2	929.0	1,746.0	1,722.8	23.18	75.306	
5,800.0	5,763.8	5,757.8	5,757.8	14.7	10.0	122.22	-1,199.2	929.0	1,752.5	1,728.9	23.59	74.300	
5,900.0	5,863.1	5,857.1	5,857.1	15.0	10.2	122.55	-1,199.2	929.0	1,759.1	1,735.1	23.99	73.334	
6,000.0	5,962.3	5,956.3	5,956.3	15.3	10.4	122.89	-1,199.2	929.0	1,765.7	1,741.3	24.39	72.405	
6,100.0	6,061.6	6,055.6	6,055.6	15.5	10.6	123.22	-1,199.2	929.0	1,772.4	1,747.6	24.78	71.510	
6,200.0	6,160.9	6,154.9	6,154.9	15.8	10.7	123.54	-1,199.2	929.0	1,779.1	1,753.9	25.18	70.649	
6,300.0	6,260.1	6,254.1	6,254.1	16.1	10.9	123.87	-1,199.2	929.0	1,785.9	1,760.4	25.58	69.819	
6,400.0	6,359.4	6,353.4	6,353.4	16.4	11.1	124.19	-1,199.2	929.0	1,792.8	1,766.8	25.98	69.020	
6,500.0	6,458.6	6,452.6	6,452.6	16.6	11.3	124.51	-1,199.2	929.0	1,799.7	1,773.4	26.37	68.249	
6,600.0	6,557.9	6,551.9	6,551.9	16.9	11.4	124.83	-1,199.2	929.0	1,806.7	1,780.0	26.76	67.505	
6,700.0	6,657.1	6,651.1	6,651.1	17.2	11.6	125.14	-1,199.2	929.0	1,813.8	1,786.6	27.16	66.787	
6,800.0	6,756.4	6,750.4	6,750.4	17.5	11.8	125.45	-1,199.2	929.0	1,820.8	1,793.3	27.55	66.093	
6,900.0	6,855.6	6,849.6	6,849.6	17.7	12.0	125.76	-1,199.2	929.0	1,828.0	1,800.0	27.94	65.423	
6,919.5	6,875.0	6,869.0	6,869.0	17.8	12.0	125.83	-1,199.2	929.0	1,829.4	1,801.4	28.02	65.295	
6,950.0	6,905.3	6,899.3	6,899.3	17.9	12.0	103.37	-1,199.2	929.0	1,830.8	1,802.7	28.13	65.077	
7,000.0	6,955.1	6,949.1	6,949.1	17.9	12.1	45.19	-1,199.2	929.0	1,829.7	1,801.4	28.31	64.627	
7,050.0	7,004.8	6,998.8	6,998.8	17.9	12.2	16.13	-1,199.2	929.0	1,824.4	1,795.9	28.48	64.057	
7,100.0	7,053.8	7,047.8	7,047.8	17.9	12.3	5.15	-1,199.2	929.0	1,814.9	1,786.3	28.64	63.370	
7,150.0	7,101.9	7,095.9	7,095.9	17.9	12.4	-0.39	-1,199.2	929.0	1,801.3	1,772.6	28.79	62.572	
7,200.0	7,148.7	7,142.7	7,142.7	17.8	12.5	-3.89	-1,199.2	929.0	1,783.8	1,754.8	28.92	61.669	
7,250.0	7,193.8	7,187.8	7,187.8	17.7	12.5	-6.51	-1,199.2	929.0	1,762.3	1,733.3	29.05	60.668	
7,300.0	7,236.9	7,230.9	7,230.9	17.5	12.6	-8.77	-1,199.2	929.0	1,737.2	1,708.0	29.16	59.575	
7,350.0	7,277.7	7,271.7	7,271.7	17.4	12.7	-10.94	-1,199.2	929.0	1,708.5	1,679.2	29.26	58.399	
7,400.0	7,315.7	7,309.7	7,309.7	17.2	12.8	-13.24	-1,199.2	929.0	1,676.5	1,647.2	29.34	57.148	
7,450.0	7,350.9	7,344.9	7,344.9	17.1	12.8	-15.83	-1,199.2	929.0	1,641.6	1,612.2	29.40	55.831	
7,500.0	7,382.8	7,376.8	7,376.8	16.9	12.9	-18.91	-1,199.2	929.0	1,603.9	1,574.4	29.45	54.457	
7,550.0	7,411.3	7,405.3	7,405.3	16.7	12.9	-22.73	-1,199.2	929.0	1,563.7	1,534.2	29.48	53.036	
7,600.0	7,436.1	7,430.1	7,430.1	16.6	13.0	-27.62	-1,199.2	929.0	1,521.4	1,491.9	29.50	51.578	
7,650.0	7,457.1	7,451.1	7,451.1	16.5	13.0	-34.04	-1,199.2	929.0	1,477.4	1,447.9	29.49	50.092	
7,700.0	7,474.0	7,468.0	7,468.0	16.4	13.0	-42.58	-1,199.2	929.0	1,431.9	1,402.5	29.47	48.590	
7,750.0	7,486.8	7,480.8	7,480.8	16.4	13.1	-53.77	-1,199.2	929.0	1,385.4	1,356.0	29.43	47.080	
7,800.0	7,495.3	7,489.3	7,489.3	16.4	13.1	-67.63	-1,199.2	929.0	1,338.3	1,308.9	29.37	45.572	
7,850.0	7,499.5	7,493.5	7,493.5	16.5	13.1	-82.93	-1,199.2	929.0	1,290.8	1,261.5	29.28	44.078	
7,873.6	7,500.0	7,494.0	7,494.0	16.5	13.1	-90.00	-1,199.2	929.0	1,268.5	1,239.2	29.24	43.381	
7,900.0	7,500.0	7,494.0	7,494.0	16.5	13.1	-90.00	-1,199.2	929.0	1,243.5	1,214.3	29.19	42.602	
8,000.0	7,500.0	7,494.0	7,494.0	16.9	13.1	-90.00	-1,199.2	929.0	1,149.5	1,120.6	28.97	39.677	
8,100.0	7,500.0	7,494.0	7,494.0	17.4	13.1	-90.00	-1,199.2	929.0	1,056.7	1,027.9	28.73	36.783	
8,200.0	7,500.0	7,494.0	7,494.0	18.0	13.1	-90.00	-1,199.2	929.0	965.2	936.8	28.46	33.913	
8,300.0	7,500.0	7,494.0	7,494.0	18.8	13.1	-90.00	-1,199.2	929.0	875.7	847.5	28.20	31.056	
8,400.0	7,500.0	7,494.0	7,494.0	19.7	13.1	-90.00	-1,199.2	929.0	788.6	760.7	27.98	28.189	
8,500.0	7,500.0	7,494.0	7,494.0	20.7	13.1	-90.00	-1,199.2	929.0	705.0	677.2	27.89	25.276	
8,600.0	7,500.0	7,494.0	7,494.0	21.9	13.1	-90.00	-1,199.2	929.0	626.3	598.2	28.12	22.272	
8,700.0	7,500.0	7,494.0	7,494.0	23.1	13.1	-90.00	-1,199.2	929.0	554.4	525.5	28.93	19.164	
8,800.0	7,500.0	7,494.0	7,494.0	24.3	13.1	-90.00	-1,199.2	929.0	492.4	461.8	30.65	16.067	
8,900.0	7,500.0	7,494.0	7,494.0	25.6	13.1	-90.00	-1,199.2	929.0	444.6	411.1	33.44	13.294	
9,000.0	7,500.0	7,494.0	7,494.0	27.0	13.1	-90.00	-1,199.2	929.0	415.7	378.7	36.99	11.238	
9,074.3	7,500.0	7,494.0	7,494.0	28.1	13.1	-90.00	-1,199.2	929.0	409.0	369.3	39.62	10.323 CC	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU												Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor	
9,100.0	7,500.0	7,494.0	7,494.0	28.4	13.1	-90.00	-1,199.2	929.0	409.8	369.3	40.43	10.135 ES	
9,200.0	7,500.0	7,494.0	7,494.0	29.9	13.1	-90.00	-1,199.2	929.0	427.8	384.9	42.90	9.972 SF	
9,300.0	7,500.0	7,494.0	7,494.0	31.4	13.1	-90.00	-1,199.2	929.0	467.1	423.0	44.15	10.579	
9,400.0	7,500.0	7,494.0	7,494.0	32.9	13.1	-90.00	-1,199.2	929.0	522.8	478.3	44.48	11.754	
9,500.0	7,500.0	7,494.0	7,494.0	34.4	13.1	-90.00	-1,199.2	929.0	590.3	546.0	44.29	13.327	
9,600.0	7,500.0	7,494.0	7,494.0	36.0	13.1	-90.00	-1,199.2	929.0	666.0	622.1	43.89	15.175	
9,700.0	7,500.0	7,494.0	7,494.0	37.5	13.1	-90.00	-1,199.2	929.0	747.5	704.1	43.43	17.212	
9,800.0	7,500.0	7,494.0	7,494.0	39.1	13.1	-90.00	-1,199.2	929.0	833.0	790.0	42.98	19.381	
9,900.0	7,500.0	7,494.0	7,494.0	40.7	13.1	-90.00	-1,199.2	929.0	921.4	878.8	42.57	21.643	
10,000.0	7,500.0	7,494.0	7,494.0	42.3	13.1	-90.00	-1,199.2	929.0	1,012.0	969.8	42.22	23.970	
10,100.0	7,500.0	7,494.0	7,494.0	43.9	13.1	-90.00	-1,199.2	929.0	1,104.2	1,062.3	41.92	26.344	
10,200.0	7,500.0	7,494.0	7,494.0	45.6	13.1	-90.00	-1,199.2	929.0	1,197.7	1,156.0	41.66	28.750	
10,300.0	7,500.0	7,494.0	7,494.0	47.2	13.1	-90.00	-1,199.2	929.0	1,292.1	1,250.7	41.44	31.178	
10,400.0	7,500.0	7,494.0	7,494.0	48.9	13.1	-90.00	-1,199.2	929.0	1,387.3	1,346.1	41.26	33.622	
10,500.0	7,500.0	7,494.0	7,494.0	50.5	13.1	-90.00	-1,199.2	929.0	1,483.2	1,442.1	41.11	36.075	
10,600.0	7,500.0	7,494.0	7,494.0	52.2	13.1	-90.00	-1,199.2	929.0	1,579.5	1,538.6	40.99	38.533	
10,700.0	7,500.0	7,494.0	7,494.0	53.8	13.1	-90.00	-1,199.2	929.0	1,676.3	1,635.4	40.89	40.993	
10,800.0	7,500.0	7,494.0	7,494.0	55.5	13.1	-90.00	-1,199.2	929.0	1,773.5	1,732.7	40.82	43.451	
10,900.0	7,500.0	7,494.0	7,494.0	57.2	13.1	-90.00	-1,199.2	929.0	1,870.9	1,830.2	40.75	45.907	
11,000.0	7,500.0	7,494.0	7,494.0	58.9	13.1	-90.00	-1,199.2	929.0	1,968.6	1,927.9	40.71	48.358	
11,100.0	7,500.0	7,494.0	7,494.0	60.6	13.1	-90.00	-1,199.2	929.0	2,066.6	2,025.9	40.68	50.803	
11,200.0	7,500.0	7,494.0	7,494.0	62.3	13.1	-90.00	-1,199.2	929.0	2,164.7	2,124.0	40.66	53.241	
11,244.1	7,500.0	7,494.0	7,494.0	63.0	13.1	-90.00	-1,199.2	929.0	2,208.0	2,167.4	40.65	54.315	
11,300.0	7,500.0	7,494.0	7,494.0	64.0	13.1	-90.00	-1,199.2	929.0	2,262.8	2,222.2	40.65	55.664	
11,400.0	7,500.0	7,494.0	7,494.0	65.7	13.1	-90.00	-1,199.2	929.0	2,360.6	2,319.9	40.65	58.066	
11,444.1	7,500.0	7,494.0	7,494.0	66.4	13.1	-90.00	-1,199.2	929.0	2,403.5	2,362.9	40.65	59.134	
11,500.0	7,500.0	7,494.0	7,494.0	67.4	13.1	-90.00	-1,199.2	929.0	2,457.8	2,417.2	40.63	60.491	
11,600.0	7,500.0	7,494.0	7,494.0	69.1	13.1	-90.00	-1,199.2	929.0	2,555.3	2,514.6	40.61	62.916	
11,700.0	7,500.0	7,494.0	7,494.0	70.8	13.1	-90.00	-1,199.2	929.0	2,652.9	2,612.3	40.61	65.333	
11,800.0	7,500.0	7,494.0	7,494.0	72.5	13.1	-90.00	-1,199.2	929.0	2,750.6	2,710.0	40.60	67.742	
11,900.0	7,500.0	7,494.0	7,494.0	74.2	13.1	-90.00	-1,199.2	929.0	2,848.6	2,808.0	40.61	70.142	
12,000.0	7,500.0	7,494.0	7,494.0	76.0	13.1	-90.00	-1,199.2	929.0	2,946.6	2,906.0	40.63	72.532	
12,100.0	7,500.0	7,494.0	7,494.0	77.7	13.1	-90.00	-1,199.2	929.0	3,044.8	3,004.2	40.64	74.913	
12,194.1	7,500.0	7,494.0	7,494.0	79.3	13.1	-90.00	-1,199.2	929.0	3,137.4	3,096.7	40.67	77.146	
12,200.0	7,500.0	7,494.0	7,494.0	79.4	13.1	-90.00	-1,199.2	929.0	3,143.1	3,102.5	40.67	77.285	
12,300.0	7,500.0	7,494.0	7,494.0	81.1	13.1	-90.00	-1,199.2	929.0	3,241.9	3,201.2	40.69	79.678	
12,387.3	7,500.0	7,494.0	7,494.0	82.6	13.1	-90.00	-1,199.2	929.0	3,328.6	3,287.8	40.72	81.744	
12,400.0	7,500.0	7,494.0	7,494.0	82.9	13.1	-90.00	-1,199.2	929.0	3,341.2	3,300.4	40.73	82.037	
12,500.0	7,500.0	7,494.0	7,494.0	84.6	13.1	-90.00	-1,199.2	929.0	3,440.6	3,399.8	40.79	84.348	
12,600.0	7,500.0	7,494.0	7,494.0	86.3	13.1	-90.00	-1,199.2	929.0	3,540.1	3,499.3	40.86	86.648	
12,700.0	7,500.0	7,494.0	7,494.0	88.0	13.1	-90.00	-1,199.2	929.0	3,639.6	3,598.7	40.92	88.935	
12,800.0	7,500.0	7,494.0	7,494.0	89.7	13.1	-90.00	-1,199.2	929.0	3,739.2	3,698.2	40.99	91.211	
12,900.0	7,500.0	7,494.0	7,494.0	91.5	13.1	-90.00	-1,199.2	929.0	3,838.7	3,797.7	41.07	93.476	
13,000.0	7,500.0	7,494.0	7,494.0	93.2	13.1	-90.00	-1,199.2	929.0	3,938.3	3,897.2	41.14	95.729	
13,100.0	7,500.0	7,494.0	7,494.0	94.9	13.1	-90.00	-1,199.2	929.0	4,038.0	3,996.7	41.22	97.970	
13,200.0	7,500.0	7,494.0	7,494.0	96.6	13.1	-90.00	-1,199.2	929.0	4,137.6	4,096.3	41.29	100.201	
13,300.0	7,500.0	7,494.0	7,494.0	98.4	13.1	-90.00	-1,199.2	929.0	4,237.2	4,195.9	41.37	102.419	
13,400.0	7,500.0	7,494.0	7,494.0	100.1	13.1	-90.00	-1,199.2	929.0	4,336.9	4,295.4	41.45	104.627	
13,500.0	7,500.0	7,494.0	7,494.0	101.8	13.1	-90.00	-1,199.2	929.0	4,436.6	4,395.0	41.53	106.823	
13,600.0	7,500.0	7,494.0	7,494.0	103.5	13.1	-90.00	-1,199.2	929.0	4,536.3	4,494.7	41.61	109.008	
13,700.0	7,500.0	7,494.0	7,494.0	105.3	13.1	-90.00	-1,199.2	929.0	4,636.0	4,594.3	41.70	111.182	
13,800.0	7,500.0	7,494.0	7,494.0	107.0	13.1	-90.00	-1,199.2	929.0	4,735.7	4,693.9	41.78	113.345	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
13,900.0	7,500.0	7,494.0	7,494.0	108.7	13.1	-90.00	-1,199.2	929.0	4,835.4	4,793.6	41.87	115.496		
14,000.0	7,500.0	7,494.0	7,494.0	110.5	13.1	-90.00	-1,199.2	929.0	4,935.2	4,893.2	41.95	117.637		
14,100.0	7,500.0	7,494.0	7,494.0	112.2	13.1	-90.00	-1,199.2	929.0	5,034.9	4,992.9	42.04	119.767		
14,200.0	7,500.0	7,494.0	7,494.0	113.9	13.1	-90.00	-1,199.2	929.0	5,134.7	5,092.6	42.13	121.887		
14,300.0	7,500.0	7,494.0	7,494.0	115.7	13.1	-90.00	-1,199.2	929.0	5,234.5	5,192.2	42.22	123.995		
14,400.0	7,500.0	7,494.0	7,494.0	117.4	13.1	-90.00	-1,199.2	929.0	5,334.2	5,291.9	42.30	126.093		
14,500.0	7,500.0	7,494.0	7,494.0	119.1	13.1	-90.00	-1,199.2	929.0	5,434.0	5,391.6	42.39	128.181		
14,600.0	7,500.0	7,494.0	7,494.0	120.9	13.1	-90.00	-1,199.2	929.0	5,533.8	5,491.3	42.48	130.258		
14,700.0	7,500.0	7,494.0	7,494.0	122.6	13.1	-90.00	-1,199.2	929.0	5,633.6	5,591.1	42.57	132.324		
14,800.0	7,500.0	7,494.0	7,494.0	124.4	13.1	-90.00	-1,199.2	929.0	5,733.4	5,690.8	42.67	134.380		
14,900.0	7,500.0	7,494.0	7,494.0	126.1	13.1	-90.00	-1,199.2	929.0	5,833.3	5,790.5	42.76	136.426		
15,000.0	7,500.0	7,494.0	7,494.0	127.8	13.1	-90.00	-1,199.2	929.0	5,933.1	5,890.2	42.85	138.462		
15,100.0	7,500.0	7,494.0	7,494.0	129.6	13.1	-90.00	-1,199.2	929.0	6,032.9	5,990.0	42.94	140.488		
15,200.0	7,500.0	7,494.0	7,494.0	131.3	13.1	-90.00	-1,199.2	929.0	6,132.7	6,089.7	43.04	142.504		
15,300.0	7,500.0	7,494.0	7,494.0	133.1	13.1	-90.00	-1,199.2	929.0	6,232.6	6,189.4	43.13	144.509		
15,400.0	7,500.0	7,494.0	7,494.0	134.8	13.1	-90.00	-1,199.2	929.0	6,332.4	6,289.2	43.22	146.505		
15,500.0	7,500.0	7,494.0	7,494.0	136.5	13.1	-90.00	-1,199.2	929.0	6,432.3	6,389.0	43.32	148.491		
15,600.0	7,500.0	7,494.0	7,494.0	138.3	13.1	-90.00	-1,199.2	929.0	6,532.1	6,488.7	43.41	150.468		
15,700.0	7,500.0	7,494.0	7,494.0	140.0	13.1	-90.00	-1,199.2	929.0	6,632.0	6,588.5	43.51	152.434		
15,805.8	7,500.0	7,494.0	7,494.0	141.9	13.1	-90.00	-1,199.2	929.0	6,737.6	6,694.0	43.61	154.504		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 132-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	65.2	65.2	0.0	0.1	37.19	1,606.8	1,219.0	2,017.0					
100.0	100.0	192.1	192.1	0.2	0.3	37.14	1,606.5	1,216.8	2,015.7	2,015.2	0.49	4,105.216		
200.0	200.0	329.5	329.4	0.3	0.6	37.06	1,605.0	1,212.1	2,012.8	2,011.9	0.91	2,207.104		
300.0	300.0	437.8	437.5	0.5	0.8	36.93	1,603.9	1,205.7	2,008.4	2,007.1	1.30	1,550.810		
400.0	400.0	532.8	532.2	0.7	1.0	36.74	1,605.2	1,198.1	2,004.7	2,003.0	1.68	1,194.911		
500.0	500.0	804.1	799.4	0.8	2.0	35.59	1,610.9	1,152.9	1,996.4	1,993.7	2.65	753.861		
600.0	600.0	920.4	912.9	1.0	2.4	-4.48	1,610.3	1,127.7	1,982.3	1,979.1	3.21	617.593		
700.0	700.0	1,052.5	1,041.8	1.2	3.0	-5.17	1,608.5	1,099.1	1,966.1	1,962.3	3.83	512.756		
800.0	799.9	1,200.0	1,184.8	1.4	3.7	-6.05	1,605.2	1,062.9	1,946.1	1,941.5	4.57	425.464		
900.0	899.7	1,289.4	1,270.9	1.6	4.1	-6.68	1,603.4	1,038.7	1,923.2	1,918.1	5.14	374.417		
1,000.0	999.4	1,408.0	1,384.8	1.8	4.7	-7.55	1,600.6	1,006.2	1,898.4	1,892.6	5.81	326.634		
1,100.0	1,098.9	1,497.2	1,470.5	2.0	5.2	-8.25	1,598.1	981.3	1,871.7	1,865.3	6.39	292.740		
1,201.3	1,199.5	1,574.9	1,545.1	2.2	5.6	-8.92	1,596.7	959.4	1,843.9	1,837.0	6.94	265.594		
1,300.0	1,297.5	1,655.5	1,622.6	2.5	6.0	-9.57	1,595.7	937.4	1,817.1	1,809.6	7.49	242.448		
1,400.0	1,396.8	1,763.0	1,726.0	2.7	6.6	-10.45	1,593.8	908.2	1,789.9	1,781.7	8.18	218.838		
1,500.0	1,496.0	1,860.9	1,819.7	3.0	7.1	-11.34	1,592.9	879.9	1,762.8	1,754.0	8.87	198.845		
1,600.0	1,595.3	1,958.1	1,912.5	3.3	7.7	-12.27	1,591.7	850.9	1,735.6	1,726.1	9.56	181.485		
1,700.0	1,694.5	2,070.2	2,019.7	3.5	8.3	-13.35	1,589.7	818.2	1,708.6	1,698.3	10.31	165.776		
1,800.0	1,793.8	2,137.1	2,083.9	3.8	8.6	-13.97	1,587.7	799.7	1,681.8	1,670.9	10.85	155.041		
1,900.0	1,893.0	2,238.8	2,181.6	4.0	9.2	-14.96	1,586.2	771.4	1,656.5	1,644.9	11.58	142.993		
2,000.0	1,992.3	2,358.2	2,295.3	4.3	9.9	-16.26	1,583.5	734.9	1,629.7	1,617.2	12.44	130.987		
2,100.0	2,091.5	2,430.0	2,363.6	4.6	10.3	-17.08	1,582.4	712.7	1,603.9	1,590.9	13.09	122.539		
2,200.0	2,190.8	2,486.1	2,417.0	4.8	10.6	-17.74	1,582.5	695.7	1,580.4	1,566.7	13.66	115.713		
2,300.0	2,290.0	2,568.6	2,495.9	5.1	11.1	-18.71	1,583.5	671.4	1,558.6	1,544.3	14.36	108.547		
2,400.0	2,389.3	2,656.0	2,579.5	5.4	11.6	-19.74	1,584.4	646.2	1,537.7	1,522.6	15.09	101.898		
2,500.0	2,488.5	2,752.7	2,672.1	5.7	12.1	-20.92	1,585.8	618.3	1,517.7	1,501.8	15.88	95.546		
2,600.0	2,587.8	2,861.0	2,775.7	5.9	12.7	-22.26	1,586.4	586.9	1,497.5	1,480.8	16.74	89.484		
2,700.0	2,687.0	2,968.6	2,879.1	6.2	13.2	-23.57	1,585.3	557.0	1,477.0	1,459.4	17.55	84.158		
2,800.0	2,786.3	3,065.5	2,972.4	6.5	13.7	-24.75	1,584.0	530.8	1,456.9	1,438.6	18.32	79.539		
2,900.0	2,885.5	3,171.5	3,074.2	6.7	14.3	-26.08	1,580.8	501.6	1,435.8	1,416.7	19.15	74.981		
3,000.0	2,984.8	3,251.8	3,151.2	7.0	14.8	-27.15	1,579.5	478.8	1,416.4	1,396.5	19.88	71.243		
3,100.0	3,084.0	3,339.2	3,234.9	7.3	15.2	-28.35	1,578.1	453.7	1,397.8	1,377.2	20.66	67.670		
3,200.0	3,183.3	3,423.6	3,315.9	7.6	15.7	-29.52	1,577.7	429.9	1,381.0	1,359.6	21.41	64.502		
3,300.0	3,282.5	3,516.0	3,404.8	7.8	16.1	-30.78	1,576.7	405.0	1,364.7	1,342.5	22.18	61.517		
3,400.0	3,381.8	3,588.9	3,475.2	8.1	16.5	-31.77	1,576.5	386.0	1,350.1	1,327.2	22.86	59.052		
3,500.0	3,481.1	3,658.5	3,542.2	8.4	16.9	-32.77	1,577.8	367.0	1,337.9	1,314.3	23.54	56.825		
3,600.0	3,580.3	3,764.7	3,644.0	8.7	17.5	-34.38	1,580.6	336.9	1,327.3	1,302.9	24.45	54.294		
3,700.0	3,679.6	3,890.3	3,764.7	8.9	18.1	-36.26	1,580.6	302.0	1,314.9	1,289.5	25.44	51.688		
3,800.0	3,778.8	3,975.8	3,846.7	9.2	18.6	-37.58	1,580.1	278.0	1,303.2	1,277.0	26.21	49.711		
3,900.0	3,878.1	4,073.0	3,939.7	9.5	19.1	-39.14	1,580.1	249.9	1,292.7	1,265.7	27.08	47.740		
4,000.0	3,977.3	4,188.8	4,050.4	9.8	19.8	-41.06	1,578.6	215.5	1,282.3	1,254.2	28.05	45.721		
4,100.0	4,076.6	4,285.6	4,143.0	10.0	20.3	-42.66	1,575.8	187.6	1,271.2	1,242.3	28.88	44.017		
4,200.0	4,175.8	4,350.0	4,204.6	10.3	20.7	-43.73	1,575.0	169.1	1,262.8	1,233.3	29.52	42.780		
4,300.0	4,275.1	4,437.4	4,288.7	10.6	21.1	-45.16	1,575.3	144.8	1,256.8	1,226.6	30.24	41.566		
4,400.0	4,374.3	4,528.8	4,377.3	10.9	21.5	-46.51	1,576.0	122.7	1,251.8	1,220.9	30.89	40.526		
4,500.0	4,473.6	4,623.6	4,470.1	11.1	21.9	-47.75	1,577.4	103.6	1,247.7	1,216.2	31.49	39.625		
4,600.0	4,572.8	4,724.7	4,569.7	11.4	22.2	-48.95	1,579.2	86.1	1,244.0	1,212.0	32.06	38.801		
4,700.0	4,672.1	4,826.0	4,669.8	11.7	22.5	-50.04	1,581.0	71.1	1,240.5	1,207.9	32.59	38.057		
4,800.0	4,771.3	4,923.7	4,766.7	12.0	22.8	-51.03	1,582.8	58.2	1,237.1	1,204.0	33.08	37.396		
4,900.0	4,870.6	5,028.2	4,870.5	12.2	23.0	-52.01	1,585.1	46.3	1,234.0	1,200.5	33.56	36.771		
5,000.0	4,969.8	5,136.4	4,978.1	12.5	23.2	-52.97	1,586.9	35.4	1,230.5	1,196.4	34.03	36.159		
5,100.0	5,069.1	5,237.4	5,078.7	12.8	23.4	-53.82	1,588.3	26.5	1,226.6	1,192.2	34.45	35.610		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S											Offset Site Error: 0.0 ft		
Survey Program: 132-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,200.0	5,168.3	5,333.9	5,175.0	13.1	23.6	-54.54	1,590.2	19.9	1,223.1	1,188.3	34.82	35.125	
5,300.0	5,267.6	5,440.8	5,281.7	13.3	23.7	-55.27	1,592.4	14.1	1,219.5	1,184.3	35.20	34.650	
5,400.0	5,366.8	5,546.1	5,386.9	13.6	23.9	-55.93	1,594.3	9.9	1,215.4	1,179.8	35.55	34.187	
5,500.0	5,466.1	5,647.0	5,487.7	13.9	24.0	-56.55	1,595.9	6.4	1,211.1	1,175.2	35.90	33.741	
5,600.0	5,565.3	5,740.8	5,581.5	14.2	24.1	-57.12	1,597.6	3.5	1,207.1	1,170.9	36.22	33.332	
5,700.0	5,664.6	5,834.0	5,674.6	14.4	24.2	-57.65	1,600.0	0.9	1,203.8	1,167.2	36.53	32.949	
5,800.0	5,763.8	5,936.6	5,777.1	14.7	24.3	-58.23	1,602.8	-1.7	1,200.6	1,163.8	36.86	32.571	
5,900.0	5,863.1	6,040.8	5,881.2	15.0	24.4	-58.82	1,605.3	-4.0	1,197.3	1,160.1	37.19	32.198	
6,000.0	5,962.3	6,148.3	5,988.7	15.3	24.5	-59.39	1,607.6	-5.6	1,193.5	1,156.0	37.50	31.825	
6,100.0	6,061.6	6,249.4	6,089.8	15.5	24.6	-59.91	1,609.5	-6.3	1,189.3	1,151.5	37.82	31.448	
6,200.0	6,160.9	6,347.2	6,187.5	15.8	24.7	-60.43	1,611.2	-7.4	1,185.3	1,147.1	38.13	31.082	
6,300.0	6,260.1	6,442.8	6,283.1	16.1	24.8	-60.96	1,613.0	-8.9	1,181.6	1,143.1	38.45	30.728	
6,400.0	6,359.4	6,538.4	6,378.7	16.4	24.9	-61.50	1,615.0	-10.7	1,178.3	1,139.5	38.77	30.393	
6,500.0	6,458.6	6,638.4	6,478.7	16.6	25.0	-62.09	1,617.0	-12.9	1,175.2	1,136.1	39.10	30.058	
6,600.0	6,557.9	6,737.4	6,577.6	16.9	25.2	-62.68	1,618.9	-15.3	1,172.3	1,132.8	39.42	29.735	
6,700.0	6,657.1	6,834.6	6,674.8	17.2	25.3	-63.26	1,621.0	-17.6	1,169.5	1,129.8	39.74	29.432	
6,800.0	6,756.4	6,932.6	6,772.7	17.5	25.4	-63.83	1,623.3	-19.6	1,167.1	1,127.0	40.05	29.141	
6,900.0	6,855.6	7,031.3	6,871.4	17.7	25.5	-64.39	1,625.9	-21.3	1,164.8	1,124.5	40.36	28.861	
6,919.5	6,875.0	7,050.6	6,890.6	17.8	25.5	-64.49	1,626.4	-21.6	1,164.4	1,124.0	40.42	28.807	
6,933.0	6,888.4	7,064.0	6,904.1	17.8	25.5	-72.74	1,626.7	-21.8	1,164.3	1,123.8	40.46	28.777 CC, ES	
6,950.0	6,905.3	7,081.2	6,921.2	17.9	25.5	-87.23	1,627.2	-22.1	1,164.5	1,124.0	40.51	28.748	
7,000.0	6,955.1	7,131.5	6,971.5	17.9	25.6	-145.81	1,628.6	-22.8	1,167.8	1,127.2	40.63	28.742 SF	
7,050.0	7,004.8	7,181.6	7,021.6	17.9	25.6	-175.22	1,630.0	-23.4	1,175.0	1,134.3	40.74	28.843	
7,100.0	7,053.8	7,230.9	7,070.9	17.9	25.7	173.52	1,631.3	-23.9	1,186.1	1,145.2	40.83	29.048	
7,150.0	7,101.9	7,280.4	7,120.3	17.9	25.7	167.76	1,632.7	-24.4	1,200.9	1,159.9	40.91	29.353	
7,200.0	7,148.7	7,328.4	7,168.3	17.8	25.8	164.09	1,634.0	-24.8	1,219.3	1,178.3	40.98	29.755	
7,250.0	7,193.8	7,374.6	7,214.5	17.7	25.8	161.36	1,635.1	-25.2	1,241.2	1,200.1	41.03	30.251	
7,300.0	7,236.9	7,418.3	7,258.2	17.5	25.9	159.03	1,636.1	-25.5	1,266.4	1,225.4	41.07	30.839	
7,350.0	7,277.7	7,458.3	7,298.2	17.4	25.9	156.84	1,637.1	-25.7	1,294.9	1,253.9	41.09	31.515	
7,400.0	7,315.7	7,495.6	7,335.5	17.2	25.9	154.58	1,638.0	-25.9	1,326.5	1,285.4	41.10	32.273	
7,450.0	7,350.9	7,529.8	7,369.6	17.1	26.0	152.11	1,638.9	-25.9	1,361.0	1,319.9	41.11	33.104	
7,500.0	7,382.8	7,560.6	7,400.5	16.9	26.0	149.23	1,639.7	-25.9	1,398.1	1,357.0	41.12	34.004	
7,550.0	7,411.3	7,587.8	7,427.6	16.7	26.0	145.75	1,640.5	-25.8	1,437.6	1,396.5	41.12	34.965	
7,600.0	7,436.1	7,610.9	7,450.7	16.6	26.0	141.37	1,641.1	-25.8	1,479.2	1,438.1	41.11	35.980	
7,650.0	7,457.1	7,630.1	7,469.9	16.5	26.0	135.73	1,641.7	-25.7	1,522.6	1,481.5	41.11	37.040	
7,700.0	7,474.0	7,645.3	7,485.1	16.4	26.1	128.37	1,642.1	-25.7	1,567.5	1,526.4	41.10	38.137	
7,750.0	7,486.8	7,656.4	7,496.2	16.4	26.1	118.73	1,642.5	-25.6	1,613.6	1,572.5	41.10	39.263	
7,800.0	7,495.3	7,663.3	7,503.2	16.4	26.1	106.52	1,642.7	-25.6	1,660.4	1,619.3	41.09	40.407	
7,850.0	7,499.5	7,666.0	7,505.8	16.5	26.1	92.20	1,642.7	-25.6	1,707.7	1,666.7	41.09	41.562	
7,873.6	7,500.0	7,665.8	7,505.6	16.5	26.1	85.14	1,642.7	-25.6	1,730.1	1,689.0	41.09	42.106	
7,900.0	7,500.0	7,665.1	7,504.9	16.5	26.1	85.06	1,642.7	-25.6	1,755.2	1,714.1	41.09	42.716	
8,000.0	7,500.0	7,662.2	7,502.0	16.9	26.1	84.77	1,642.6	-25.6	1,850.5	1,809.4	41.11	45.016	
8,100.0	7,500.0	7,659.4	7,499.2	17.4	26.1	84.47	1,642.5	-25.6	1,946.2	1,905.1	41.14	47.305	
8,200.0	7,500.0	7,656.5	7,496.3	18.0	26.1	84.17	1,642.5	-25.6	2,042.3	2,001.1	41.19	49.579	
8,300.0	7,500.0	7,653.7	7,493.5	18.8	26.1	83.88	1,642.4	-25.6	2,138.8	2,097.6	41.26	51.840	
8,400.0	7,500.0	7,650.9	7,490.7	19.7	26.1	83.59	1,642.3	-25.6	2,235.6	2,194.3	41.34	54.086	
8,500.0	7,500.0	7,648.1	7,487.9	20.7	26.1	83.30	1,642.2	-25.7	2,332.7	2,291.3	41.42	56.316	
8,600.0	7,500.0	7,645.3	7,485.1	21.9	26.1	83.01	1,642.1	-25.7	2,430.0	2,388.5	41.52	58.532	
8,700.0	7,500.0	7,642.5	7,482.3	23.1	26.1	82.72	1,642.1	-25.7	2,527.5	2,485.9	41.62	60.733	
8,800.0	7,500.0	7,639.7	7,479.5	24.3	26.1	82.43	1,642.0	-25.7	2,625.2	2,583.5	41.72	62.919	
8,900.0	7,500.0	7,636.9	7,476.8	25.6	26.1	82.15	1,641.9	-25.7	2,723.1	2,681.2	41.84	65.090	
9,000.0	7,500.0	7,634.2	7,474.0	27.0	26.1	81.87	1,641.8	-25.7	2,821.1	2,779.1	41.95	67.246	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft	
Survey Program: 132-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,100.0	7,500.0	7,631.4	7,471.3	28.4	26.0	81.58	1,641.7	-25.7	2,919.2	2,877.1	42.07	69.387	
9,200.0	7,500.0	7,628.7	7,468.5	29.9	26.0	81.30	1,641.7	-25.7	3,017.4	2,975.3	42.19	71.514	
9,300.0	7,500.0	7,626.0	7,465.8	31.4	26.0	81.02	1,641.6	-25.7	3,115.8	3,073.5	42.32	73.627	
9,400.0	7,500.0	7,623.3	7,463.1	32.9	26.0	80.75	1,641.5	-25.7	3,214.3	3,171.8	42.45	75.726	
9,500.0	7,500.0	7,620.6	7,460.4	34.4	26.0	80.47	1,641.4	-25.7	3,312.8	3,270.3	42.58	77.811	
9,600.0	7,500.0	7,617.9	7,457.7	36.0	26.0	80.20	1,641.3	-25.7	3,411.5	3,368.8	42.71	79.882	
9,700.0	7,500.0	7,615.2	7,455.0	37.5	26.0	79.92	1,641.3	-25.8	3,510.2	3,467.3	42.84	81.941	
9,800.0	7,500.0	7,612.5	7,452.3	39.1	26.0	79.65	1,641.2	-25.8	3,609.0	3,566.0	42.97	83.986	
9,900.0	7,500.0	7,609.8	7,449.7	40.7	26.0	79.38	1,641.1	-25.8	3,707.8	3,664.7	43.10	86.018	
10,000.0	7,500.0	7,607.2	7,447.0	42.3	26.0	79.11	1,641.0	-25.8	3,806.7	3,763.5	43.24	88.038	
10,100.0	7,500.0	7,604.5	7,444.3	43.9	26.0	78.84	1,641.0	-25.8	3,905.7	3,862.3	43.37	90.045	
10,200.0	7,500.0	7,601.9	7,441.7	45.6	26.0	78.58	1,640.9	-25.8	4,004.7	3,961.1	43.51	92.040	
10,300.0	7,500.0	7,599.2	7,439.1	47.2	26.0	78.31	1,640.8	-25.8	4,103.7	4,060.1	43.65	94.023	
10,400.0	7,500.0	7,596.6	7,436.5	48.9	26.0	78.05	1,640.7	-25.8	4,202.8	4,159.0	43.78	95.994	
10,500.0	7,500.0	7,594.0	7,433.8	50.5	26.0	77.79	1,640.7	-25.8	4,301.9	4,258.0	43.92	97.953	
10,600.0	7,500.0	7,591.4	7,431.2	52.2	26.0	77.53	1,640.6	-25.8	4,401.1	4,357.1	44.05	99.901	
10,700.0	7,500.0	7,588.8	7,428.7	53.8	26.0	77.27	1,640.5	-25.8	4,500.3	4,456.1	44.19	101.837	
10,800.0	7,500.0	7,580.0	7,419.8	55.5	26.0	76.39	1,640.3	-25.9	4,599.6	4,555.2	44.32	103.783	
10,900.0	7,500.0	7,580.0	7,419.8	57.2	26.0	76.39	1,640.3	-25.9	4,698.8	4,654.4	44.46	105.689	
11,000.0	7,500.0	7,580.0	7,419.8	58.9	26.0	76.39	1,640.3	-25.9	4,798.1	4,753.5	44.60	107.583	
11,100.0	7,500.0	7,580.0	7,419.8	60.6	26.0	76.39	1,640.3	-25.9	4,897.5	4,852.7	44.74	109.466	
11,200.0	7,500.0	7,580.0	7,419.8	62.3	26.0	76.39	1,640.3	-25.9	4,996.8	4,951.9	44.88	111.338	
11,244.1	7,500.0	7,580.0	7,419.8	63.0	26.0	76.39	1,640.3	-25.9	5,040.7	4,995.7	44.94	112.161	
11,300.0	7,500.0	7,580.0	7,419.8	64.0	26.0	73.55	1,640.3	-25.9	5,096.2	5,051.2	45.02	113.198	
11,400.0	7,500.0	7,571.0	7,410.8	65.7	26.0	62.26	1,640.0	-25.9	5,195.9	5,150.8	45.15	115.078	
11,444.1	7,500.0	7,569.9	7,409.8	66.4	26.0	52.91	1,640.0	-25.9	5,240.0	5,194.8	45.21	115.897	
11,500.0	7,500.0	7,568.5	7,408.4	67.4	26.0	52.65	1,640.0	-25.9	5,295.8	5,250.5	45.29	116.934	
11,600.0	7,500.0	7,566.1	7,405.9	69.1	26.0	52.18	1,639.9	-25.9	5,395.7	5,350.3	45.43	118.782	
11,700.0	7,500.0	7,563.6	7,403.5	70.8	26.0	51.72	1,639.8	-25.9	5,495.6	5,450.1	45.56	120.620	
11,800.0	7,500.0	7,561.2	7,401.0	72.5	26.0	51.26	1,639.8	-25.9	5,595.5	5,549.8	45.70	122.449	
11,900.0	7,500.0	7,558.7	7,398.6	74.2	26.0	50.82	1,639.7	-25.9	5,695.5	5,649.6	45.83	124.267	
12,000.0	7,500.0	7,556.3	7,396.2	76.0	26.0	50.38	1,639.6	-25.9	5,795.4	5,749.4	45.97	126.076	
12,100.0	7,500.0	7,553.9	7,393.8	77.7	26.0	49.94	1,639.6	-25.9	5,895.3	5,849.2	46.10	127.876	
12,194.1	7,500.0	7,551.6	7,391.5	79.3	26.0	49.54	1,639.5	-25.9	5,989.3	5,943.1	46.23	129.561	
12,200.0	7,500.0	7,551.5	7,391.3	79.4	26.0	51.29	1,639.5	-25.9	5,995.2	5,949.0	46.24	129.666	
12,300.0	7,500.0	7,549.1	7,388.9	81.1	26.0	68.37	1,639.4	-25.9	6,095.0	6,048.7	46.37	131.456	
12,387.3	7,500.0	7,547.0	7,386.9	82.6	26.0	74.55	1,639.4	-25.9	6,182.0	6,135.6	46.48	133.007	
12,400.0	7,500.0	7,546.7	7,386.6	82.9	26.0	74.53	1,639.4	-25.9	6,194.6	6,148.1	46.50	133.229	
12,500.0	7,500.0	7,544.3	7,384.2	84.6	26.0	74.31	1,639.3	-25.9	6,294.1	6,247.5	46.63	134.984	
12,600.0	7,500.0	7,541.9	7,381.8	86.3	26.0	74.10	1,639.2	-25.9	6,393.7	6,346.9	46.76	136.730	
12,700.0	7,500.0	7,539.6	7,379.4	88.0	26.0	73.89	1,639.2	-25.9	6,493.2	6,446.3	46.89	138.467	
12,800.0	7,500.0	7,537.2	7,377.1	89.7	26.0	73.69	1,639.1	-25.9	6,592.7	6,545.7	47.03	140.195	
12,900.0	7,500.0	7,534.9	7,374.7	91.5	26.0	73.48	1,639.1	-25.9	6,692.3	6,645.1	47.16	141.915	
13,000.0	7,500.0	7,532.6	7,372.4	93.2	26.0	73.27	1,639.0	-25.9	6,791.9	6,744.6	47.29	143.626	
13,100.0	7,500.0	7,530.2	7,370.1	94.9	26.0	73.07	1,638.9	-25.9	6,891.4	6,844.0	47.42	145.328	
13,200.0	7,500.0	7,527.9	7,367.8	96.6	26.0	72.87	1,638.9	-25.9	6,991.0	6,943.5	47.55	147.022	
13,300.0	7,500.0	7,525.6	7,365.5	98.4	26.0	72.67	1,638.8	-25.9	7,090.6	7,043.0	47.68	148.708	
13,400.0	7,500.0	7,523.3	7,363.2	100.1	26.0	72.47	1,638.7	-25.9	7,190.3	7,142.4	47.81	150.386	
13,500.0	7,500.0	7,521.1	7,360.9	101.8	26.0	72.27	1,638.7	-25.9	7,289.9	7,241.9	47.94	152.056	
13,600.0	7,500.0	7,518.8	7,358.7	103.5	26.0	72.07	1,638.6	-25.9	7,389.5	7,341.4	48.07	153.717	
13,700.0	7,500.0	7,516.5	7,356.4	105.3	26.0	71.88	1,638.6	-25.9	7,489.2	7,441.0	48.20	155.371	
13,800.0	7,500.0	7,514.3	7,354.2	107.0	25.9	71.68	1,638.5	-25.9	7,588.8	7,540.5	48.33	157.017	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 132-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,900.0	7,500.0	7,512.1	7,351.9	108.7	25.9	71.49	1,638.5	-25.9	7,688.5	7,640.0	48.46	158.655		
14,000.0	7,500.0	7,509.8	7,349.7	110.5	25.9	71.30	1,638.4	-25.9	7,788.1	7,739.5	48.59	160.285		
14,100.0	7,500.0	7,507.6	7,347.5	112.2	25.9	71.11	1,638.3	-25.9	7,887.8	7,839.1	48.72	161.908		
14,200.0	7,500.0	7,505.4	7,345.3	113.9	25.9	70.92	1,638.3	-25.9	7,987.5	7,938.6	48.85	163.523		
14,300.0	7,500.0	7,503.2	7,343.1	115.7	25.9	70.73	1,638.2	-25.9	8,087.2	8,038.2	48.97	165.131		
14,400.0	7,500.0	7,501.0	7,340.9	117.4	25.9	70.54	1,638.2	-25.9	8,186.9	8,137.8	49.10	166.731		
14,500.0	7,500.0	7,498.8	7,338.7	119.1	25.9	70.36	1,638.1	-25.9	8,286.6	8,237.4	49.23	168.324		
14,600.0	7,500.0	7,496.7	7,336.5	120.9	25.9	70.17	1,638.1	-25.9	8,386.3	8,336.9	49.36	169.910		
14,700.0	7,500.0	7,494.5	7,334.4	122.6	25.9	69.99	1,638.0	-25.9	8,486.0	8,436.5	49.48	171.488		
14,800.0	7,500.0	7,492.4	7,332.2	124.4	25.9	69.81	1,637.9	-25.9	8,585.7	8,536.1	49.61	173.059		
14,900.0	7,500.0	7,490.2	7,330.1	126.1	25.9	69.63	1,637.9	-25.9	8,685.5	8,635.7	49.74	174.623		
15,000.0	7,500.0	7,488.1	7,328.0	127.8	25.9	69.45	1,637.8	-25.9	8,785.2	8,735.3	49.86	176.181		
15,100.0	7,500.0	7,486.0	7,325.8	129.6	25.9	69.27	1,637.8	-25.9	8,884.9	8,834.9	49.99	177.731		
15,200.0	7,500.0	7,483.9	7,323.7	131.3	25.9	69.09	1,637.7	-25.8	8,984.7	8,934.6	50.12	179.274		
15,300.0	7,500.0	7,481.8	7,321.6	133.1	25.9	68.92	1,637.7	-25.8	9,084.4	9,034.2	50.24	180.811		
15,400.0	7,500.0	7,479.7	7,319.5	134.8	25.9	68.74	1,637.6	-25.8	9,184.2	9,133.8	50.37	182.340		
15,500.0	7,500.0	7,477.6	7,317.5	136.5	25.9	68.57	1,637.6	-25.8	9,283.9	9,233.4	50.49	183.863		
15,600.0	7,500.0	7,475.5	7,315.4	138.3	25.9	68.40	1,637.5	-25.8	9,383.7	9,333.1	50.62	185.380		
15,700.0	7,500.0	7,473.4	7,313.3	140.0	25.9	68.22	1,637.5	-25.8	9,483.5	9,432.7	50.74	186.889		
15,805.8	7,500.0	7,471.3	7,311.1	141.9	25.9	68.04	1,637.4	-25.8	9,589.0	9,538.1	50.88	188.479		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program:		8325-Geolink MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	88.0	88.0	0.0	0.2	-19.29	131.1	-45.9	138.9					
100.0	100.0	188.0	188.0	0.2	0.3	-19.29	131.1	-45.9	138.9	138.5	0.48	289.370		
200.0	200.0	288.0	288.0	0.3	0.5	-19.29	131.1	-45.9	138.9	138.1	0.83	167.560		
300.0	300.0	388.0	388.0	0.5	0.7	-19.29	131.1	-45.9	138.9	137.8	1.18	117.921		
400.0	400.0	488.0	488.0	0.7	0.9	-19.29	131.1	-45.9	138.9	137.4	1.53	90.971		
500.0	500.0	588.0	588.0	0.8	1.0	-19.29	131.1	-45.9	138.9	137.1	1.88	74.048		
600.0	600.0	688.0	688.0	1.0	1.2	-59.08	131.1	-45.9	138.5	136.3	2.23	62.222		
700.0	700.0	788.0	788.0	1.2	1.4	-60.03	131.1	-45.9	137.2	134.6	2.58	53.226		
800.0	799.9	887.9	887.9	1.4	1.5	-61.65	131.1	-45.9	135.0	132.1	2.93	46.046		
900.0	899.7	987.7	987.7	1.6	1.7	-64.00	131.1	-45.9	132.2	129.0	3.30	40.122		
1,000.0	999.4	1,087.4	1,087.4	1.8	1.9	-67.15	131.1	-45.9	129.0	125.3	3.67	35.136		
1,100.0	1,098.9	1,186.9	1,186.9	2.0	2.1	-71.20	131.1	-45.9	125.6	121.5	4.06	30.905		
1,201.3	1,199.5	1,287.5	1,287.5	2.2	2.2	-76.30	131.1	-45.9	122.3	117.9	4.48	27.297		
1,300.0	1,297.5	1,385.5	1,385.5	2.5	2.4	-81.86	131.1	-45.9	120.0	115.1	4.90	24.494		
1,400.0	1,396.8	1,484.8	1,484.8	2.7	2.6	-87.65	131.1	-45.9	118.9	113.6	5.33	22.310		
1,440.3	1,436.8	1,524.8	1,524.8	2.8	2.7	-90.00	131.1	-45.9	118.8	113.3	5.50	21.589 CC		
1,500.0	1,496.0	1,584.0	1,584.0	3.0	2.8	-93.48	131.1	-45.9	119.0	113.3	5.76	20.671 ES		
1,600.0	1,595.3	1,683.3	1,683.3	3.3	2.9	-99.25	131.1	-45.9	120.4	114.2	6.18	19.480		
1,700.0	1,694.5	1,782.5	1,782.5	3.5	3.1	-104.84	131.1	-45.9	123.0	116.4	6.59	18.653		
1,800.0	1,793.8	1,881.8	1,881.8	3.8	3.3	-110.15	131.1	-45.9	126.7	119.7	6.99	18.118		
1,900.0	1,893.0	1,981.0	1,981.0	4.0	3.5	-115.12	131.1	-45.9	131.4	124.0	7.38	17.813		
2,000.0	1,992.3	2,080.3	2,080.3	4.3	3.6	-119.72	131.1	-45.9	137.1	129.3	7.75	17.687 SF		
2,100.0	2,091.5	2,179.5	2,179.5	4.6	3.8	-123.94	131.1	-45.9	143.5	135.4	8.11	17.698		
2,200.0	2,190.8	2,278.8	2,278.8	4.8	4.0	-127.77	131.1	-45.9	150.7	142.3	8.46	17.812		
2,300.0	2,290.0	2,378.0	2,378.0	5.1	4.2	-131.25	131.1	-45.9	158.5	149.7	8.81	18.000		
2,400.0	2,389.3	2,477.3	2,477.3	5.4	4.3	-134.39	131.1	-45.9	166.9	157.7	9.15	18.244		
2,500.0	2,488.5	2,576.5	2,576.5	5.7	4.5	-137.23	131.1	-45.9	175.7	166.2	9.48	18.525		
2,600.0	2,587.8	2,675.8	2,675.8	5.9	4.7	-139.79	131.1	-45.9	184.8	175.0	9.81	18.832		
2,700.0	2,687.0	2,775.0	2,775.0	6.2	4.8	-142.11	131.1	-45.9	194.3	184.2	10.15	19.156		
2,800.0	2,786.3	2,874.3	2,874.3	6.5	5.0	-144.21	131.1	-45.9	204.1	193.7	10.48	19.488		
2,900.0	2,885.5	2,973.5	2,973.5	6.7	5.2	-146.11	131.1	-45.9	214.2	203.4	10.81	19.823		
3,000.0	2,984.8	3,072.8	3,072.8	7.0	5.4	-147.85	131.1	-45.9	224.5	213.3	11.13	20.158		
3,100.0	3,084.0	3,172.0	3,172.0	7.3	5.5	-149.43	131.1	-45.9	234.9	223.4	11.46	20.490		
3,200.0	3,183.3	3,271.3	3,271.3	7.6	5.7	-150.88	131.1	-45.9	245.5	233.7	11.79	20.816		
3,300.0	3,282.5	3,370.5	3,370.5	7.8	5.9	-152.20	131.1	-45.9	256.3	244.1	12.12	21.136		
3,400.0	3,381.8	3,469.8	3,469.8	8.1	6.1	-153.42	131.1	-45.9	267.1	254.7	12.46	21.447		
3,500.0	3,481.1	3,569.1	3,569.1	8.4	6.2	-154.55	131.1	-45.9	278.1	265.3	12.79	21.751		
3,600.0	3,580.3	3,668.3	3,668.3	8.7	6.4	-155.58	131.1	-45.9	289.2	276.1	13.12	22.045		
3,700.0	3,679.6	3,767.6	3,767.6	8.9	6.6	-156.55	131.1	-45.9	300.4	286.9	13.45	22.330		
3,800.0	3,778.8	3,866.8	3,866.8	9.2	6.7	-157.44	131.1	-45.9	311.6	297.9	13.79	22.605		
3,900.0	3,878.1	3,966.1	3,966.1	9.5	6.9	-158.27	131.1	-45.9	323.0	308.8	14.12	22.872		
4,000.0	3,977.3	4,065.3	4,065.3	9.8	7.1	-159.04	131.1	-45.9	334.3	319.9	14.46	23.130		
4,100.0	4,076.6	4,164.6	4,164.6	10.0	7.3	-159.77	131.1	-45.9	345.8	331.0	14.79	23.379		
4,200.0	4,175.8	4,263.8	4,263.8	10.3	7.4	-160.44	131.1	-45.9	357.3	342.1	15.13	23.619		
4,300.0	4,275.1	4,363.1	4,363.1	10.6	7.6	-161.08	131.1	-45.9	368.8	353.3	15.46	23.851		
4,400.0	4,374.3	4,462.3	4,462.3	10.9	7.8	-161.67	131.1	-45.9	380.4	364.6	15.80	24.075		
4,500.0	4,473.6	4,561.6	4,561.6	11.1	8.0	-162.23	131.1	-45.9	392.0	375.9	16.14	24.292		
4,600.0	4,572.8	4,660.8	4,660.8	11.4	8.1	-162.76	131.1	-45.9	403.7	387.2	16.48	24.501		
4,700.0	4,672.1	4,760.1	4,760.1	11.7	8.3	-163.26	131.1	-45.9	415.3	398.5	16.81	24.703		
4,800.0	4,771.3	4,859.3	4,859.3	12.0	8.5	-163.73	131.1	-45.9	427.1	409.9	17.15	24.898		
4,900.0	4,870.6	4,958.6	4,958.6	12.2	8.7	-164.18	131.1	-45.9	438.8	421.3	17.49	25.086		
5,000.0	4,969.8	5,057.8	5,057.8	12.5	8.8	-164.60	131.1	-45.9	450.6	432.7	17.83	25.269		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N												Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,069.1	5,157.1	5,157.1	12.8	9.0	-165.00	131.1	-45.9	462.4	444.2	18.17	25.445	
5,200.0	5,168.3	5,256.3	5,256.3	13.1	9.2	-165.38	131.1	-45.9	474.2	455.7	18.51	25.615	
5,300.0	5,267.6	5,355.6	5,355.6	13.3	9.3	-165.75	131.1	-45.9	486.0	467.1	18.85	25.780	
5,400.0	5,366.8	5,454.8	5,454.8	13.6	9.5	-166.09	131.1	-45.9	497.8	478.6	19.19	25.940	
5,500.0	5,466.1	5,554.1	5,554.1	13.9	9.7	-166.42	131.1	-45.9	509.7	490.2	19.53	26.095	
5,600.0	5,565.3	5,653.3	5,653.3	14.2	9.9	-166.74	131.1	-45.9	521.6	501.7	19.87	26.244	
5,700.0	5,664.6	5,752.6	5,752.6	14.4	10.0	-167.04	131.1	-45.9	533.5	513.3	20.22	26.390	
5,800.0	5,763.8	5,851.8	5,851.8	14.7	10.2	-167.33	131.1	-45.9	545.4	524.8	20.56	26.530	
5,900.0	5,863.1	5,951.1	5,951.1	15.0	10.4	-167.60	131.1	-45.9	557.3	536.4	20.90	26.667	
6,000.0	5,962.3	6,050.3	6,050.3	15.3	10.6	-167.87	131.1	-45.9	569.2	548.0	21.24	26.799	
6,100.0	6,061.6	6,149.6	6,149.6	15.5	10.7	-168.12	131.1	-45.9	581.2	559.6	21.58	26.928	
6,200.0	6,160.9	6,248.9	6,248.9	15.8	10.9	-168.36	131.1	-45.9	593.2	571.2	21.93	27.053	
6,300.0	6,260.1	6,348.1	6,348.1	16.1	11.1	-168.59	131.1	-45.9	605.1	582.9	22.27	27.174	
6,400.0	6,359.4	6,447.4	6,447.4	16.4	11.3	-168.82	131.1	-45.9	617.1	594.5	22.61	27.292	
6,500.0	6,458.6	6,546.6	6,546.6	16.6	11.4	-169.03	131.1	-45.9	629.1	606.1	22.95	27.406	
6,600.0	6,557.9	6,645.9	6,645.9	16.9	11.6	-169.24	131.1	-45.9	641.1	617.8	23.30	27.517	
6,700.0	6,657.1	6,745.1	6,745.1	17.2	11.8	-169.44	131.1	-45.9	653.1	629.4	23.64	27.625	
6,800.0	6,756.4	6,844.4	6,844.4	17.5	11.9	-169.63	131.1	-45.9	665.1	641.1	23.98	27.731	
6,900.0	6,855.6	6,943.6	6,943.6	17.7	12.1	-169.82	131.1	-45.9	677.1	652.8	24.33	27.833	
6,919.5	6,875.0	6,963.0	6,963.0	17.8	12.2	-169.86	131.1	-45.9	679.4	655.1	24.39	27.853	
6,950.0	6,905.3	6,993.3	6,993.3	17.9	12.2	167.32	131.1	-45.9	682.6	658.1	24.50	27.864	
7,000.0	6,955.1	7,043.1	7,043.1	17.9	12.3	109.06	131.1	-45.9	685.5	660.8	24.67	27.791	
7,050.0	7,004.8	7,092.8	7,092.8	17.9	12.4	80.53	131.1	-45.9	685.6	660.7	24.83	27.606	
7,100.0	7,053.8	7,141.8	7,141.8	17.9	12.5	70.70	131.1	-45.9	683.0	658.0	25.00	27.315	
7,150.0	7,101.9	7,189.9	7,189.9	17.9	12.5	66.94	131.1	-45.9	677.8	652.6	25.17	26.927	
7,200.0	7,148.7	7,236.7	7,236.7	17.8	12.6	65.86	131.1	-45.9	670.3	644.9	25.34	26.454	
7,250.0	7,193.8	7,281.8	7,281.8	17.7	12.7	66.30	131.1	-45.9	660.7	635.2	25.50	25.909	
7,300.0	7,236.9	7,324.9	7,324.9	17.5	12.8	67.76	131.1	-45.9	649.5	623.9	25.66	25.310	
7,350.0	7,277.7	7,365.7	7,365.7	17.4	12.9	69.95	131.1	-45.9	637.1	611.3	25.82	24.674	
7,400.0	7,315.7	7,403.7	7,403.7	17.2	12.9	72.67	131.1	-45.9	624.0	598.0	25.97	24.023	
7,450.0	7,350.9	7,438.9	7,438.9	17.1	13.0	75.71	131.1	-45.9	610.7	584.6	26.12	23.379	
7,500.0	7,382.8	7,470.8	7,470.8	16.9	13.0	78.89	131.1	-45.9	597.9	571.7	26.26	22.767	
7,550.0	7,411.3	7,499.3	7,499.3	16.7	13.1	82.00	131.1	-45.9	586.3	559.9	26.40	22.212	
7,600.0	7,436.1	7,524.1	7,524.1	16.6	13.1	84.86	131.1	-45.9	576.6	550.1	26.52	21.740	
7,650.0	7,457.1	7,545.1	7,545.1	16.5	13.2	87.30	131.1	-45.9	569.4	542.8	26.64	21.374	
7,700.0	7,474.0	7,562.0	7,562.0	16.4	13.2	89.17	131.1	-45.9	565.4	538.6	26.75	21.135	
7,731.4	7,482.5	7,570.5	7,570.5	16.4	13.2	90.00	131.1	-45.9	564.6	537.8	26.82	21.052	
7,750.0	7,486.8	7,574.8	7,574.8	16.4	13.2	90.36	131.1	-45.9	564.9	538.1	26.85	21.038	
7,800.0	7,495.3	7,583.3	7,583.3	16.4	13.2	90.80	131.1	-45.9	568.3	541.4	26.94	21.093	
7,850.0	7,499.5	7,587.5	7,587.5	16.5	13.2	90.45	131.1	-45.9	575.7	548.7	27.03	21.302	
7,873.6	7,500.0	7,588.0	7,588.0	16.5	13.2	90.00	131.1	-45.9	580.5	553.5	27.06	21.452	
7,900.0	7,500.0	7,588.0	7,588.0	16.5	13.2	90.00	131.1	-45.9	587.0	559.9	27.10	21.659	
8,000.0	7,500.0	7,588.0	7,588.0	16.9	13.2	90.00	131.1	-45.9	621.1	593.9	27.25	22.790	
8,100.0	7,500.0	7,588.0	7,588.0	17.4	13.2	90.00	131.1	-45.9	668.6	641.2	27.41	24.395	
8,200.0	7,500.0	7,588.0	7,588.0	18.0	13.2	90.00	131.1	-45.9	726.8	699.2	27.56	26.369	
8,300.0	7,500.0	7,588.0	7,588.0	18.8	13.2	90.00	131.1	-45.9	793.3	765.6	27.72	28.620	
8,400.0	7,500.0	7,588.0	7,588.0	19.7	13.2	90.00	131.1	-45.9	866.4	838.5	27.88	31.075	
8,500.0	7,500.0	7,588.0	7,588.0	20.7	13.2	90.00	131.1	-45.9	944.3	916.3	28.04	33.677	
8,600.0	7,500.0	7,588.0	7,588.0	21.9	13.2	90.00	131.1	-45.9	1,026.2	997.9	28.20	36.384	
8,700.0	7,500.0	7,588.0	7,588.0	23.1	13.2	90.00	131.1	-45.9	1,110.9	1,082.6	28.37	39.165	
8,800.0	7,500.0	7,588.0	7,588.0	24.3	13.2	90.00	131.1	-45.9	1,198.1	1,169.6	28.53	41.997	
8,900.0	7,500.0	7,588.0	7,588.0	25.6	13.2	90.00	131.1	-45.9	1,287.1	1,258.4	28.69	44.864	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N											Offset Site Error: 0.0 ft			
Survey Program: 8325-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,500.0	7,588.0	7,588.0	27.0	13.2	90.00	131.1	-45.9	1,377.6	1,348.8	28.85	47.751		
9,100.0	7,500.0	7,588.0	7,588.0	28.4	13.2	90.00	131.1	-45.9	1,469.4	1,440.3	29.01	50.650		
9,200.0	7,500.0	7,588.0	7,588.0	29.9	13.2	90.00	131.1	-45.9	1,562.1	1,532.9	29.17	53.554		
9,300.0	7,500.0	7,588.0	7,588.0	31.4	13.2	90.00	131.1	-45.9	1,655.7	1,626.4	29.33	56.456		
9,400.0	7,500.0	7,588.0	7,588.0	32.9	13.2	90.00	131.1	-45.9	1,750.0	1,720.5	29.49	59.353		
9,500.0	7,500.0	7,588.0	7,588.0	34.4	13.2	90.00	131.1	-45.9	1,844.9	1,815.3	29.64	62.241		
9,600.0	7,500.0	7,588.0	7,588.0	36.0	13.2	90.00	131.1	-45.9	1,940.4	1,910.6	29.80	65.118		
9,700.0	7,500.0	7,588.0	7,588.0	37.5	13.2	90.00	131.1	-45.9	2,036.2	2,006.3	29.95	67.981		
9,800.0	7,500.0	7,588.0	7,588.0	39.1	13.2	90.00	131.1	-45.9	2,132.5	2,102.4	30.11	70.830		
9,900.0	7,500.0	7,588.0	7,588.0	40.7	13.2	90.00	131.1	-45.9	2,229.0	2,198.8	30.26	73.662		
10,000.0	7,500.0	7,588.0	7,588.0	42.3	13.2	90.00	131.1	-45.9	2,325.9	2,295.5	30.41	76.477		
10,100.0	7,500.0	7,588.0	7,588.0	43.9	13.2	90.00	131.1	-45.9	2,423.0	2,392.5	30.57	79.274		
10,200.0	7,500.0	7,588.0	7,588.0	45.6	13.2	90.00	131.1	-45.9	2,520.4	2,489.6	30.72	82.053		
10,300.0	7,500.0	7,588.0	7,588.0	47.2	13.2	90.00	131.1	-45.9	2,617.9	2,587.0	30.87	84.813		
10,400.0	7,500.0	7,588.0	7,588.0	48.9	13.2	90.00	131.1	-45.9	2,715.6	2,684.6	31.02	87.555		
10,500.0	7,500.0	7,588.0	7,588.0	50.5	13.2	90.00	131.1	-45.9	2,813.5	2,782.3	31.17	90.277		
10,600.0	7,500.0	7,588.0	7,588.0	52.2	13.2	90.00	131.1	-45.9	2,911.5	2,880.2	31.31	92.980		
10,700.0	7,500.0	7,588.0	7,588.0	53.8	13.2	90.00	131.1	-45.9	3,009.7	2,978.2	31.46	95.663		
10,800.0	7,500.0	7,588.0	7,588.0	55.5	13.2	90.00	131.1	-45.9	3,108.0	3,076.4	31.61	98.327		
10,900.0	7,500.0	7,588.0	7,588.0	57.2	13.2	90.00	131.1	-45.9	3,206.3	3,174.6	31.75	100.972		
11,000.0	7,500.0	7,588.0	7,588.0	58.9	13.2	90.00	131.1	-45.9	3,304.8	3,272.9	31.90	103.598		
11,100.0	7,500.0	7,588.0	7,588.0	60.6	13.2	90.00	131.1	-45.9	3,403.4	3,371.3	32.05	106.204		
11,200.0	7,500.0	7,588.0	7,588.0	62.3	13.2	90.00	131.1	-45.9	3,502.0	3,469.8	32.19	108.792		
11,244.1	7,500.0	7,588.0	7,588.0	63.0	13.2	90.00	131.1	-45.9	3,545.6	3,513.3	32.25	109.928		
11,300.0	7,500.0	7,588.0	7,588.0	64.0	13.2	90.00	131.1	-45.9	3,600.8	3,568.5	32.33	111.365		
11,400.0	7,500.0	7,588.0	7,588.0	65.7	13.2	90.00	131.1	-45.9	3,700.1	3,667.6	32.48	113.934		
11,444.1	7,500.0	7,588.0	7,588.0	66.4	13.2	90.00	131.1	-45.9	3,744.1	3,711.5	32.54	115.065		
11,500.0	7,500.0	7,588.0	7,588.0	67.4	13.2	90.00	131.1	-45.9	3,799.7	3,767.1	32.62	116.492		
11,600.0	7,500.0	7,588.0	7,588.0	69.1	13.2	90.00	131.1	-45.9	3,899.4	3,866.6	32.76	119.031		
11,700.0	7,500.0	7,588.0	7,588.0	70.8	13.2	90.00	131.1	-45.9	3,999.1	3,966.2	32.90	121.550		
11,800.0	7,500.0	7,588.0	7,588.0	72.5	13.2	90.00	131.1	-45.9	4,098.8	4,065.7	33.04	124.050		
11,900.0	7,500.0	7,588.0	7,588.0	74.2	13.2	90.00	131.1	-45.9	4,198.5	4,165.3	33.18	126.531		
12,000.0	7,500.0	7,588.0	7,588.0	76.0	13.2	90.00	131.1	-45.9	4,298.2	4,264.9	33.32	128.994		
12,100.0	7,500.0	7,588.0	7,588.0	77.7	13.2	90.00	131.1	-45.9	4,398.0	4,364.5	33.46	131.438		
12,194.1	7,500.0	7,588.0	7,588.0	79.3	13.2	90.00	131.1	-45.9	4,491.9	4,458.3	33.59	133.722		
12,200.0	7,500.0	7,588.0	7,588.0	79.4	13.2	90.00	131.1	-45.9	4,497.7	4,464.1	33.60	133.864		
12,300.0	7,500.0	7,588.0	7,588.0	81.1	13.2	90.00	131.1	-45.9	4,597.3	4,563.6	33.74	136.264		
12,387.3	7,500.0	7,588.0	7,588.0	82.6	13.2	90.00	131.1	-45.9	4,684.1	4,650.2	33.86	138.336		
12,400.0	7,500.0	7,588.0	7,588.0	82.9	13.2	90.00	131.1	-45.9	4,696.6	4,662.7	33.88	138.635		
12,500.0	7,500.0	7,588.0	7,588.0	84.6	13.2	90.00	131.1	-45.9	4,795.7	4,761.7	34.02	140.987		
12,600.0	7,500.0	7,588.0	7,588.0	86.3	13.2	90.00	131.1	-45.9	4,894.9	4,860.8	34.15	143.322		
12,700.0	7,500.0	7,588.0	7,588.0	88.0	13.2	90.00	131.1	-45.9	4,994.1	4,959.8	34.29	145.642		
12,800.0	7,500.0	7,588.0	7,588.0	89.7	13.2	90.00	131.1	-45.9	5,093.4	5,058.9	34.43	147.946		
12,900.0	7,500.0	7,588.0	7,588.0	91.5	13.2	90.00	131.1	-45.9	5,192.6	5,158.1	34.56	150.234		
13,000.0	7,500.0	7,588.0	7,588.0	93.2	13.2	90.00	131.1	-45.9	5,291.9	5,257.2	34.70	152.507		
13,100.0	7,500.0	7,588.0	7,588.0	94.9	13.2	90.00	131.1	-45.9	5,391.2	5,356.4	34.84	154.764		
13,200.0	7,500.0	7,588.0	7,588.0	96.6	13.2	90.00	131.1	-45.9	5,490.6	5,455.6	34.97	157.007		
13,300.0	7,500.0	7,588.0	7,588.0	98.4	13.2	90.00	131.1	-45.9	5,590.0	5,554.9	35.11	159.235		
13,400.0	7,500.0	7,588.0	7,588.0	100.1	13.2	90.00	131.1	-45.9	5,689.4	5,654.1	35.24	161.448		
13,500.0	7,500.0	7,588.0	7,588.0	101.8	13.2	90.00	131.1	-45.9	5,788.8	5,753.4	35.37	163.646		
13,600.0	7,500.0	7,588.0	7,588.0	103.5	13.2	90.00	131.1	-45.9	5,888.2	5,852.7	35.51	165.830		
13,700.0	7,500.0	7,588.0	7,588.0	105.3	13.2	90.00	131.1	-45.9	5,987.6	5,952.0	35.64	168.000		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N													Offset Site Error: 0.0 ft
Survey Program: 8325-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
13,800.0	7,500.0	7,588.0	7,588.0	107.0	13.2	90.00	131.1	-45.9	6,087.1	6,051.3	35.77	170.156	
13,900.0	7,500.0	7,588.0	7,588.0	108.7	13.2	90.00	131.1	-45.9	6,186.6	6,150.7	35.91	172.298	
14,000.0	7,500.0	7,588.0	7,588.0	110.5	13.2	90.00	131.1	-45.9	6,286.1	6,250.1	36.04	174.427	
14,100.0	7,500.0	7,588.0	7,588.0	112.2	13.2	90.00	131.1	-45.9	6,385.6	6,349.5	36.17	176.541	
14,200.0	7,500.0	7,588.0	7,588.0	113.9	13.2	90.00	131.1	-45.9	6,485.2	6,448.9	36.30	178.643	
14,300.0	7,500.0	7,588.0	7,588.0	115.7	13.2	90.00	131.1	-45.9	6,584.7	6,548.3	36.43	180.731	
14,400.0	7,500.0	7,588.0	7,588.0	117.4	13.2	90.00	131.1	-45.9	6,684.3	6,647.7	36.56	182.806	
14,500.0	7,500.0	7,588.0	7,588.0	119.1	13.2	90.00	131.1	-45.9	6,783.8	6,747.1	36.70	184.869	
14,600.0	7,500.0	7,588.0	7,588.0	120.9	13.2	90.00	131.1	-45.9	6,883.4	6,846.6	36.83	186.918	
14,700.0	7,500.0	7,588.0	7,588.0	122.6	13.2	90.00	131.1	-45.9	6,983.0	6,946.1	36.96	188.955	
14,800.0	7,500.0	7,588.0	7,588.0	124.4	13.2	90.00	131.1	-45.9	7,082.6	7,045.5	37.09	190.980	
14,900.0	7,500.0	7,588.0	7,588.0	126.1	13.2	90.00	131.1	-45.9	7,182.3	7,145.0	37.22	192.992	
15,000.0	7,500.0	7,588.0	7,588.0	127.8	13.2	90.00	131.1	-45.9	7,281.9	7,244.5	37.34	194.992	
15,100.0	7,500.0	7,588.0	7,588.0	129.6	13.2	90.00	131.1	-45.9	7,381.5	7,344.0	37.47	196.979	
15,200.0	7,500.0	7,588.0	7,588.0	131.3	13.2	90.00	131.1	-45.9	7,481.2	7,443.6	37.60	198.955	
15,300.0	7,500.0	7,588.0	7,588.0	133.1	13.2	90.00	131.1	-45.9	7,580.8	7,543.1	37.73	200.919	
15,400.0	7,500.0	7,588.0	7,588.0	134.8	13.2	90.00	131.1	-45.9	7,680.5	7,642.6	37.86	202.872	
15,500.0	7,500.0	7,588.0	7,588.0	136.5	13.2	90.00	131.1	-45.9	7,780.2	7,742.2	37.99	204.813	
15,600.0	7,500.0	7,588.0	7,588.0	138.3	13.2	90.00	131.1	-45.9	7,879.9	7,841.7	38.11	206.742	
15,700.0	7,500.0	7,588.0	7,588.0	140.0	13.2	90.00	131.1	-45.9	7,979.6	7,941.3	38.24	208.660	
15,805.8	7,500.0	7,588.0	7,588.0	141.9	13.2	90.00	131.1	-45.9	8,085.0	8,046.6	38.38	210.677	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	52.2	52.2	0.0	0.1	37.38	1,594.1	1,217.7	2,006.0					
100.0	100.0	151.2	151.2	0.2	0.3	37.38	1,594.1	1,217.7	2,006.0	2,005.6	0.42	4,825.613		
200.0	200.0	246.4	246.4	0.3	0.4	37.37	1,594.4	1,217.5	2,006.1	2,005.4	0.76	2,651.341		
300.0	300.0	383.3	383.3	0.5	0.7	37.33	1,594.7	1,216.3	2,005.8	2,004.7	1.17	1,713.875		
400.0	400.0	525.7	525.5	0.7	0.9	37.45	1,589.0	1,217.0	2,002.8	2,001.2	1.60	1,253.541		
500.0	500.0	811.0	807.6	0.8	1.7	38.42	1,548.8	1,228.3	1,993.2	1,990.8	2.45	815.040		
600.0	600.0	902.0	896.6	1.0	2.0	-0.63	1,530.8	1,232.9	1,979.8	1,977.0	2.90	683.478		
700.0	700.0	1,120.5	1,109.4	1.2	3.0	0.50	1,482.1	1,242.3	1,963.3	1,959.5	3.78	519.539		
800.0	799.9	1,290.4	1,271.9	1.4	3.8	1.61	1,432.8	1,248.0	1,938.3	1,933.7	4.61	420.010		
900.0	899.7	1,392.9	1,369.0	1.6	4.4	2.38	1,400.3	1,251.7	1,910.4	1,905.2	5.24	364.705		
1,000.0	999.4	1,491.4	1,462.0	1.8	5.0	3.18	1,368.4	1,256.1	1,881.1	1,875.2	5.87	320.217		
1,100.0	1,098.9	1,573.6	1,539.6	2.0	5.5	3.91	1,341.4	1,260.0	1,850.3	1,843.9	6.45	286.854		
1,201.3	1,199.5	1,652.1	1,613.9	2.2	5.9	4.62	1,316.2	1,264.0	1,818.5	1,811.5	7.03	258.786		
1,300.0	1,297.5	1,744.5	1,701.1	2.5	6.5	5.48	1,286.4	1,269.4	1,787.5	1,779.9	7.68	232.711		
1,400.0	1,396.8	1,830.1	1,781.8	2.7	7.0	6.32	1,258.3	1,274.8	1,756.3	1,748.0	8.33	210.906		
1,500.0	1,496.0	1,949.0	1,894.0	3.0	7.7	7.51	1,219.5	1,281.6	1,725.4	1,716.2	9.12	189.273		
1,600.0	1,595.3	2,026.4	1,967.2	3.3	8.1	8.28	1,194.6	1,284.7	1,694.1	1,684.3	9.72	174.296		
1,700.0	1,694.5	2,089.3	2,026.9	3.5	8.5	8.91	1,174.9	1,287.8	1,664.4	1,654.1	10.27	162.134		
1,800.0	1,793.8	2,178.2	2,111.4	3.8	9.0	9.84	1,147.9	1,293.3	1,636.5	1,625.6	10.95	149.510		
1,900.0	1,893.0	2,285.7	2,213.2	4.0	9.6	11.03	1,113.9	1,299.8	1,608.2	1,596.5	11.75	136.867		
2,000.0	1,992.3	2,380.2	2,302.3	4.3	10.2	12.15	1,083.1	1,305.7	1,580.0	1,567.5	12.50	126.361		
2,100.0	2,091.5	2,475.8	2,392.8	4.6	10.8	13.28	1,052.6	1,310.7	1,552.2	1,538.9	13.25	117.130		
2,200.0	2,190.8	2,567.5	2,479.7	4.8	11.3	14.37	1,023.8	1,315.1	1,524.8	1,510.8	13.99	108.974		
2,300.0	2,290.0	2,661.5	2,569.0	5.1	11.8	15.51	994.4	1,319.2	1,497.8	1,483.1	14.75	101.578		
2,400.0	2,389.3	2,763.5	2,665.7	5.4	12.4	16.81	962.4	1,323.9	1,471.5	1,455.9	15.57	94.537		
2,500.0	2,488.5	2,908.5	2,802.0	5.7	13.3	18.80	913.3	1,328.0	1,443.0	1,426.4	16.63	86.754		
2,600.0	2,587.8	2,986.9	2,875.3	5.9	13.8	19.96	885.4	1,329.9	1,414.4	1,397.0	17.41	81.222		
2,700.0	2,687.0	3,074.2	2,956.9	6.2	14.4	21.30	854.5	1,332.6	1,387.0	1,368.8	18.25	76.022		
2,800.0	2,786.3	3,151.4	3,029.2	6.5	14.9	22.52	827.5	1,335.2	1,361.0	1,341.9	19.04	71.467		
2,900.0	2,885.5	3,251.5	3,122.8	6.7	15.5	24.16	792.5	1,338.9	1,336.2	1,316.2	19.98	66.879		
3,000.0	2,984.8	3,359.7	3,224.2	7.0	16.2	25.96	754.6	1,341.2	1,311.0	1,290.1	20.95	62.574		
3,100.0	3,084.0	3,433.0	3,293.0	7.3	16.6	27.20	729.4	1,342.7	1,287.1	1,265.3	21.75	59.171		
3,200.0	3,183.3	3,492.3	3,348.9	7.6	17.0	28.21	709.8	1,344.7	1,265.8	1,243.4	22.45	56.374		
3,300.0	3,282.5	3,565.8	3,418.7	7.8	17.4	29.44	687.0	1,348.2	1,247.5	1,224.3	23.22	53.720		
3,400.0	3,381.8	3,643.0	3,492.1	8.1	17.8	30.74	663.7	1,352.5	1,231.1	1,207.1	24.01	51.280		
3,500.0	3,481.1	3,720.2	3,565.8	8.4	18.3	32.07	640.8	1,357.8	1,217.1	1,192.4	24.78	49.127		
3,600.0	3,580.3	3,832.5	3,673.7	8.7	18.8	33.87	610.8	1,364.5	1,204.3	1,178.6	25.66	46.930		
3,700.0	3,679.6	3,976.3	3,812.9	8.9	19.5	36.05	574.7	1,367.1	1,188.9	1,162.2	26.67	44.579		
3,800.0	3,778.8	4,064.0	3,896.9	9.2	20.0	37.56	549.6	1,367.7	1,172.5	1,145.0	27.49	42.649		
3,900.0	3,878.1	4,132.0	3,961.8	9.5	20.3	38.80	529.4	1,369.9	1,159.1	1,130.9	28.22	41.079		
4,000.0	3,977.3	4,207.6	4,033.6	9.8	20.8	40.26	506.1	1,373.9	1,148.6	1,119.6	29.00	39.601		
4,100.0	4,076.6	4,315.1	4,134.7	10.0	21.5	42.49	470.1	1,379.4	1,139.0	1,109.0	30.03	37.926		
4,200.0	4,175.8	4,411.7	4,225.1	10.3	22.1	44.61	436.1	1,383.4	1,129.8	1,098.8	30.98	36.469		
4,300.0	4,275.1	4,490.4	4,298.7	10.6	22.6	46.35	408.4	1,387.0	1,122.6	1,090.9	31.77	35.333		
4,400.0	4,374.3	4,576.9	4,380.2	10.9	23.1	48.20	379.8	1,391.3	1,117.7	1,085.1	32.54	34.343		
4,500.0	4,473.6	4,664.5	4,463.5	11.1	23.6	49.94	353.5	1,396.1	1,114.5	1,081.3	33.25	33.518		
4,600.0	4,572.8	4,760.7	4,555.6	11.4	24.1	51.80	326.0	1,401.4	1,112.8	1,078.8	33.98	32.747		
4,700.0	4,672.1	4,878.0	4,668.3	11.7	24.7	53.99	294.1	1,406.5	1,111.2	1,076.4	34.79	31.938		
4,800.0	4,771.3	4,976.6	4,763.5	12.0	25.1	55.80	268.2	1,409.1	1,109.0	1,073.6	35.44	31.291		
4,900.0	4,870.6	5,067.1	4,851.3	12.2	25.5	57.35	246.6	1,412.0	1,108.2	1,072.3	35.98	30.798		
5,000.0	4,969.8	5,176.4	4,958.3	12.5	25.9	59.04	224.3	1,415.8	1,108.1	1,071.6	36.55	30.316		
5,100.0	5,069.1	5,285.0	5,065.2	12.8	26.3	60.52	206.1	1,418.6	1,107.3	1,070.3	37.05	29.889		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,200.0	5,168.3	5,392.5	5,171.6	13.1	26.6	61.87	190.7	1,420.9	1,106.3	1,068.8	37.50	29.500		
5,300.0	5,267.6	5,506.2	5,284.5	13.3	26.9	63.18	177.0	1,422.3	1,104.4	1,066.5	37.93	29.120		
5,400.0	5,366.8	5,621.6	5,399.4	13.6	27.1	64.35	166.7	1,422.8	1,101.4	1,063.1	38.30	28.756		
5,500.0	5,466.1	5,717.4	5,495.0	13.9	27.2	65.20	160.6	1,423.2	1,098.2	1,059.6	38.61	28.443		
5,600.0	5,565.3	5,842.4	5,620.0	14.2	27.3	66.07	157.5	1,424.4	1,094.9	1,056.0	38.89	28.152		
5,700.0	5,664.6	5,947.5	5,725.0	14.4	27.4	66.71	157.3	1,423.1	1,088.7	1,049.6	39.16	27.802		
5,800.0	5,763.8	6,032.4	5,809.9	14.7	27.5	67.23	157.1	1,422.9	1,083.8	1,044.4	39.42	27.492		
5,900.0	5,863.1	6,130.8	5,908.3	15.0	27.5	67.82	156.8	1,423.6	1,079.8	1,040.2	39.68	27.216		
6,000.0	5,962.3	6,232.7	6,010.3	15.3	27.6	68.41	157.2	1,424.2	1,075.7	1,035.8	39.93	26.940		
6,100.0	6,061.6	6,327.3	6,104.8	15.5	27.7	68.94	157.7	1,425.0	1,071.9	1,031.7	40.19	26.673		
6,200.0	6,160.9	6,423.8	6,201.3	15.8	27.7	69.49	158.1	1,426.2	1,068.5	1,028.1	40.44	26.423		
6,300.0	6,260.1	6,527.7	6,305.2	16.1	27.8	70.09	158.5	1,427.2	1,065.2	1,024.5	40.70	26.171		
6,400.0	6,359.4	6,628.6	6,406.1	16.4	27.9	70.69	158.8	1,427.9	1,061.6	1,020.6	40.96	25.918		
6,500.0	6,458.6	6,727.0	6,504.5	16.6	27.9	71.28	159.0	1,428.5	1,058.1	1,016.9	41.21	25.673		
6,600.0	6,557.9	6,824.9	6,602.4	16.9	28.0	71.88	159.1	1,429.2	1,054.8	1,013.4	41.47	25.435		
6,700.0	6,657.1	6,922.7	6,700.2	17.2	28.1	72.49	159.0	1,430.0	1,051.9	1,010.1	41.73	25.208		
6,800.0	6,756.4	7,020.9	6,798.4	17.5	28.2	73.10	158.9	1,430.9	1,049.1	1,007.2	41.98	24.989		
6,900.0	6,855.6	7,118.1	6,895.6	17.7	28.2	73.72	158.6	1,431.9	1,046.7	1,004.4	42.24	24.779		
6,919.5	6,875.0	7,136.3	6,913.7	17.8	28.3	73.83	158.5	1,432.1	1,046.2	1,003.9	42.29	24.739		
6,950.0	6,905.3	7,164.8	6,942.3	17.9	28.3	74.31	158.3	1,432.4	1,045.3	1,002.9	42.36	24.677		
7,000.0	6,955.1	7,211.6	6,989.1	17.9	28.3	-7.13	157.9	1,433.0	1,042.4	1,000.0	42.44	24.560		
7,050.0	7,004.8	7,258.3	7,035.8	17.9	28.4	-36.67	157.3	1,433.7	1,038.0	995.5	42.51	24.416		
7,100.0	7,053.8	7,309.8	7,087.2	17.9	28.4	-48.38	156.5	1,434.5	1,032.0	989.4	42.57	24.241		
7,150.0	7,101.9	7,363.2	7,140.6	17.9	28.5	-54.93	155.9	1,435.1	1,024.2	981.6	42.62	24.034		
7,200.0	7,148.7	7,415.0	7,192.5	17.8	28.5	-59.68	155.4	1,435.5	1,014.9	972.2	42.64	23.799		
7,250.0	7,193.8	7,465.5	7,243.0	17.7	28.6	-63.74	155.0	1,435.7	1,004.2	961.5	42.65	23.543		
7,300.0	7,236.9	7,514.9	7,292.4	17.5	28.6	-67.55	154.8	1,435.6	992.4	949.7	42.64	23.272		
7,350.0	7,277.7	7,561.5	7,339.0	17.4	28.7	-71.26	154.6	1,435.2	979.9	937.3	42.61	22.997		
7,400.0	7,315.7	7,605.0	7,382.5	17.2	28.7	-74.89	154.4	1,434.6	967.2	924.6	42.56	22.726		
7,450.0	7,350.9	7,641.6	7,419.0	17.1	28.7	-78.26	154.3	1,433.9	954.7	912.2	42.49	22.470		
7,500.0	7,382.8	7,671.9	7,449.3	16.9	28.7	-81.29	154.2	1,433.4	943.1	900.7	42.41	22.239		
7,550.0	7,411.3	7,698.9	7,476.4	16.7	28.8	-84.03	154.2	1,433.0	932.8	890.5	42.32	22.040		
7,600.0	7,436.1	7,722.5	7,499.9	16.6	28.8	-86.42	154.1	1,432.7	924.4	882.1	42.25	21.879		
7,650.0	7,457.1	7,742.4	7,519.9	16.5	28.8	-88.37	154.1	1,432.4	918.2	876.0	42.20	21.756		
7,700.0	7,474.0	7,758.5	7,536.0	16.4	28.8	-89.84	154.1	1,432.2	914.5	872.3	42.20	21.672		
7,739.1	7,484.4	7,768.4	7,545.8	16.4	28.8	-90.61	154.1	1,432.1	913.6	871.4	42.24	21.630 CC, ES		
7,750.0	7,486.8	7,770.7	7,548.1	16.4	28.8	-90.77	154.0	1,432.1	913.7	871.4	42.25	21.626		
7,800.0	7,495.3	7,778.9	7,556.3	16.4	28.8	-91.12	154.0	1,432.0	915.9	873.5	42.37	21.617 SF		
7,850.0	7,499.5	7,783.0	7,560.4	16.5	28.8	-90.88	154.0	1,432.0	921.1	878.6	42.55	21.646		
7,873.6	7,500.0	7,783.5	7,560.9	16.5	28.8	-90.56	154.0	1,432.0	924.7	882.0	42.66	21.674		
7,900.0	7,500.0	7,783.5	7,560.9	16.5	28.8	-90.56	154.0	1,432.0	929.4	886.6	42.80	21.715		
8,000.0	7,500.0	7,783.7	7,561.1	16.9	28.8	-90.57	154.0	1,432.0	953.7	910.3	43.43	21.961		
8,100.0	7,500.0	7,783.8	7,561.2	17.4	28.8	-90.58	154.0	1,432.0	987.6	943.5	44.13	22.380		
8,200.0	7,500.0	7,784.0	7,561.4	18.0	28.8	-90.59	154.0	1,432.0	1,030.1	985.3	44.80	22.994		
8,300.0	7,500.0	7,784.1	7,561.6	18.8	28.8	-90.60	154.0	1,432.0	1,080.2	1,034.9	45.38	23.804		
8,400.0	7,500.0	7,784.3	7,561.7	19.7	28.8	-90.61	154.0	1,432.0	1,137.0	1,091.1	45.85	24.797		
8,500.0	7,500.0	7,784.5	7,561.9	20.7	28.8	-90.62	154.0	1,432.0	1,199.4	1,153.1	46.21	25.954		
8,600.0	7,500.0	7,784.6	7,562.0	21.9	28.8	-90.63	154.0	1,432.0	1,266.6	1,220.1	46.47	27.254		
8,700.0	7,500.0	7,784.8	7,562.2	23.1	28.8	-90.64	154.0	1,432.0	1,337.9	1,291.3	46.66	28.674		
8,800.0	7,500.0	7,784.9	7,562.4	24.3	28.8	-90.65	154.0	1,432.0	1,412.7	1,365.9	46.79	30.196		
8,900.0	7,500.0	7,785.1	7,562.5	25.6	28.8	-90.66	154.0	1,432.0	1,490.5	1,443.6	46.87	31.804		
9,000.0	7,500.0	7,785.3	7,562.7	27.0	28.8	-90.67	154.0	1,432.0	1,570.8	1,523.9	46.91	33.483		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft		
Survey Program: 71-Geolink MWD										Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,100.0	7,500.0	7,785.4	7,562.8	28.4	28.8	-90.68	154.0	1,432.0	1,653.2	1,606.3	46.94	35.222		
9,200.0	7,500.0	7,785.6	7,563.0	29.9	28.8	-90.69	154.0	1,432.0	1,737.5	1,690.6	46.95	37.011		
9,300.0	7,500.0	7,785.7	7,563.2	31.4	28.8	-90.70	154.0	1,432.0	1,823.4	1,776.4	46.95	38.840		
9,400.0	7,500.0	7,785.9	7,563.3	32.9	28.8	-90.71	154.0	1,432.0	1,910.6	1,863.7	46.94	40.705		
9,500.0	7,500.0	7,786.1	7,563.5	34.4	28.8	-90.72	154.0	1,432.0	1,999.1	1,952.1	46.93	42.597		
9,600.0	7,500.0	7,786.2	7,563.6	36.0	28.8	-90.73	154.0	1,432.0	2,088.5	2,041.6	46.92	44.513		
9,700.0	7,500.0	7,786.4	7,563.8	37.5	28.8	-90.74	154.0	1,432.0	2,178.9	2,132.0	46.91	46.449		
9,800.0	7,500.0	7,786.5	7,564.0	39.1	28.8	-90.75	154.0	1,432.0	2,270.1	2,223.2	46.90	48.400		
9,900.0	7,500.0	7,786.7	7,564.1	40.7	28.8	-90.76	154.0	1,432.0	2,362.1	2,315.2	46.90	50.364		
10,000.0	7,500.0	7,786.9	7,564.3	42.3	28.8	-90.77	154.0	1,431.9	2,454.6	2,407.7	46.90	52.338		
10,100.0	7,500.0	7,787.0	7,564.4	43.9	28.8	-90.78	154.0	1,431.9	2,547.7	2,500.8	46.90	54.321		
10,200.0	7,500.0	7,787.2	7,564.6	45.6	28.8	-90.79	154.0	1,431.9	2,641.3	2,594.4	46.91	56.309		
10,300.0	7,500.0	7,787.3	7,564.7	47.2	28.8	-90.80	154.0	1,431.9	2,735.4	2,688.5	46.92	58.302		
10,400.0	7,500.0	7,787.5	7,564.9	48.9	28.8	-90.81	154.0	1,431.9	2,829.9	2,782.9	46.93	60.299		
10,500.0	7,500.0	7,787.6	7,565.1	50.5	28.8	-90.82	154.0	1,431.9	2,924.7	2,877.8	46.95	62.297		
10,600.0	7,500.0	7,787.8	7,565.2	52.2	28.8	-90.83	154.0	1,431.9	3,019.9	2,972.9	46.97	64.296		
10,700.0	7,500.0	7,788.0	7,565.4	53.8	28.8	-90.84	154.0	1,431.9	3,115.4	3,068.4	46.99	66.296		
10,800.0	7,500.0	7,788.1	7,565.5	55.5	28.8	-90.85	154.0	1,431.9	3,211.1	3,164.1	47.02	68.294		
10,900.0	7,500.0	7,788.3	7,565.7	57.2	28.8	-90.86	154.0	1,431.9	3,307.1	3,260.1	47.05	70.292		
11,000.0	7,500.0	7,788.4	7,565.9	58.9	28.8	-90.87	154.0	1,431.9	3,403.4	3,356.3	47.08	72.287		
11,100.0	7,500.0	7,788.6	7,566.0	60.6	28.8	-90.88	154.0	1,431.9	3,499.8	3,452.7	47.12	74.280		
11,200.0	7,500.0	7,788.7	7,566.2	62.3	28.8	-90.89	154.0	1,431.9	3,596.4	3,549.3	47.15	76.269		
11,244.1	7,500.0	7,788.8	7,566.2	63.0	28.8	-90.89	154.0	1,431.9	3,639.2	3,592.0	47.17	77.147		
11,300.0	7,500.0	7,788.9	7,566.3	64.0	28.8	-90.84	154.0	1,431.9	3,693.1	3,645.9	47.20	78.243		
11,400.0	7,500.0	7,789.0	7,566.4	65.7	28.8	-90.75	154.0	1,431.9	3,789.2	3,741.9	47.26	80.177		
11,444.1	7,500.0	7,789.1	7,566.5	66.4	28.8	-90.71	154.0	1,431.9	3,831.3	3,784.0	47.28	81.036		
11,500.0	7,500.0	7,789.1	7,566.5	67.4	28.8	-90.72	154.0	1,431.9	3,884.6	3,837.3	47.30	82.131		
11,600.0	7,500.0	7,789.2	7,566.6	69.1	28.8	-90.72	154.0	1,431.9	3,980.1	3,932.8	47.33	84.088		
11,700.0	7,500.0	7,789.3	7,566.7	70.8	28.8	-90.73	154.0	1,431.9	4,075.8	4,028.5	47.37	86.043		
11,800.0	7,500.0	7,789.4	7,566.8	72.5	28.8	-90.73	154.0	1,431.9	4,171.8	4,124.4	47.41	87.994		
11,900.0	7,500.0	7,789.5	7,566.9	74.2	28.8	-90.74	154.0	1,431.9	4,267.9	4,220.5	47.45	89.942		
12,000.0	7,500.0	7,789.6	7,567.0	76.0	28.8	-90.74	154.0	1,431.9	4,364.2	4,316.7	47.50	91.886		
12,100.0	7,500.0	7,789.7	7,567.1	77.7	28.8	-90.75	154.0	1,431.9	4,460.7	4,413.1	47.54	93.827		
12,194.1	7,500.0	7,789.8	7,567.2	79.3	28.8	-90.75	154.0	1,431.9	4,551.6	4,504.0	47.59	95.649		
12,200.0	7,500.0	7,789.8	7,567.2	79.4	28.8	-90.76	154.0	1,431.9	4,557.3	4,509.7	47.59	95.763		
12,300.0	7,500.0	7,789.9	7,567.3	81.1	28.8	-90.88	154.0	1,431.9	4,654.5	4,606.9	47.62	97.745		
12,387.3	7,500.0	7,790.0	7,567.5	82.6	28.8	-91.03	154.0	1,431.9	4,740.1	4,692.5	47.65	99.473		
12,400.0	7,500.0	7,790.1	7,567.5	82.9	28.8	-91.03	154.0	1,431.9	4,752.6	4,704.9	47.66	99.717		
12,500.0	7,500.0	7,790.2	7,567.6	84.6	28.8	-91.05	154.0	1,431.9	4,851.0	4,803.3	47.72	101.649		
12,600.0	7,500.0	7,790.4	7,567.8	86.3	28.8	-91.06	154.0	1,431.9	4,949.4	4,901.7	47.79	103.575		
12,700.0	7,500.0	7,790.5	7,567.9	88.0	28.8	-91.07	154.0	1,431.9	5,048.0	5,000.1	47.85	105.495		
12,800.0	7,500.0	7,790.7	7,568.1	89.7	28.8	-91.08	154.0	1,431.9	5,146.5	5,098.6	47.92	107.408		
12,900.0	7,500.0	7,790.8	7,568.2	91.5	28.8	-91.09	154.0	1,431.9	5,245.2	5,197.2	47.98	109.315		
13,000.0	7,500.0	7,791.0	7,568.4	93.2	28.8	-91.10	154.0	1,431.9	5,343.9	5,295.8	48.05	111.216		
13,100.0	7,500.0	7,791.1	7,568.5	94.9	28.8	-91.11	154.0	1,431.9	5,442.6	5,394.5	48.12	113.110		
13,200.0	7,500.0	7,791.3	7,568.7	96.6	28.8	-91.12	154.0	1,431.9	5,541.4	5,493.2	48.19	114.998		
13,300.0	7,500.0	7,791.4	7,568.9	98.4	28.8	-91.13	154.0	1,431.9	5,640.2	5,591.9	48.26	116.880		
13,400.0	7,500.0	7,791.6	7,569.0	100.1	28.8	-91.14	154.0	1,431.9	5,739.0	5,690.7	48.33	118.755		
13,500.0	7,500.0	7,791.7	7,569.2	101.8	28.8	-91.15	154.0	1,431.9	5,837.9	5,789.5	48.40	120.624		
13,600.0	7,500.0	7,798.0	7,575.4	103.5	28.9	-91.57	154.0	1,431.9	5,936.9	5,888.4	48.48	122.455		
13,700.0	7,500.0	7,798.0	7,575.4	105.3	28.9	-91.57	154.0	1,431.9	6,035.8	5,987.3	48.55	124.312		
13,800.0	7,500.0	7,798.0	7,575.4	107.0	28.9	-91.57	154.0	1,431.9	6,134.8	6,086.2	48.63	126.162		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	7,798.0	7,575.4	108.7	28.9	-91.57	154.0	1,431.9	6,233.9	6,185.2	48.70	128.005		
14,000.0	7,500.0	7,798.0	7,575.4	110.5	28.9	-91.57	154.0	1,431.9	6,332.9	6,284.2	48.77	129.842		
14,100.0	7,500.0	7,798.0	7,575.4	112.2	28.9	-91.57	154.0	1,431.9	6,432.0	6,383.2	48.85	131.672		
14,200.0	7,500.0	7,798.0	7,575.4	113.9	28.9	-91.57	154.0	1,431.9	6,531.2	6,482.2	48.92	133.497		
14,300.0	7,500.0	7,798.0	7,575.4	115.7	28.9	-91.57	154.0	1,431.9	6,630.3	6,581.3	49.00	135.314		
14,400.0	7,500.0	7,798.0	7,575.4	117.4	28.9	-91.57	154.0	1,431.9	6,729.5	6,680.4	49.08	137.126		
14,500.0	7,500.0	7,798.0	7,575.4	119.1	28.9	-91.57	154.0	1,431.9	6,828.7	6,779.5	49.15	138.930		
14,600.0	7,500.0	7,798.0	7,575.4	120.9	28.9	-91.57	154.0	1,431.9	6,927.9	6,878.7	49.23	140.729		
14,700.0	7,500.0	7,798.0	7,575.4	122.6	28.9	-91.57	154.0	1,431.9	7,027.1	6,977.8	49.31	142.521		
14,800.0	7,500.0	7,798.0	7,575.4	124.4	28.9	-91.57	154.0	1,431.9	7,126.4	7,077.0	49.38	144.307		
14,900.0	7,500.0	7,798.0	7,575.4	126.1	28.9	-91.57	154.0	1,431.9	7,225.7	7,176.2	49.46	146.086		
15,000.0	7,500.0	7,798.0	7,575.4	127.8	28.9	-91.57	154.0	1,431.9	7,325.0	7,275.5	49.54	147.859		
15,100.0	7,500.0	7,798.0	7,575.4	129.6	28.9	-91.57	154.0	1,431.9	7,424.3	7,374.7	49.62	149.626		
15,200.0	7,500.0	7,798.0	7,575.4	131.3	28.9	-91.57	154.0	1,431.9	7,523.7	7,474.0	49.70	151.386		
15,300.0	7,500.0	7,798.0	7,575.4	133.1	28.9	-91.57	154.0	1,431.9	7,623.0	7,573.2	49.78	153.140		
15,400.0	7,500.0	7,798.0	7,575.4	134.8	28.9	-91.57	154.0	1,431.9	7,722.4	7,672.5	49.86	154.888		
15,500.0	7,500.0	7,798.0	7,575.4	136.5	28.9	-91.57	154.0	1,431.9	7,821.8	7,771.8	49.94	156.629		
15,600.0	7,500.0	7,798.0	7,575.4	138.3	28.9	-91.57	154.0	1,431.9	7,921.2	7,871.2	50.02	158.365		
15,700.0	7,500.0	7,798.0	7,575.4	140.0	28.9	-91.57	154.0	1,431.9	8,020.6	7,970.5	50.10	160.094		
15,805.8	7,500.0	7,798.0	7,575.4	141.9	28.9	-91.57	154.0	1,431.9	8,125.8	8,075.6	50.19	161.915		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	106.2	106.2	0.0	0.2	37.53	1,583.8	1,216.4	1,997.8					
100.0	100.0	307.2	306.9	0.2	0.6	37.59	1,574.2	1,211.8	1,992.6	1,991.9	0.69		2,884.101	
200.0	200.0	503.5	502.0	0.3	1.1	37.82	1,553.4	1,205.9	1,982.3	1,981.1	1.23		1,609.328	
300.0	300.0	617.6	614.8	0.5	1.5	38.06	1,537.1	1,203.3	1,969.7	1,968.0	1.64		1,198.847	
400.0	400.0	755.5	750.7	0.7	1.9	38.43	1,513.2	1,200.8	1,954.7	1,952.6	2.13		917.138	
500.0	500.0	868.5	861.5	0.8	2.4	38.80	1,491.6	1,199.4	1,938.8	1,936.2	2.58		750.445	
600.0	600.0	941.0	932.8	1.0	2.6	-0.43	1,478.1	1,198.9	1,922.9	1,920.0	2.94		653.310	
700.0	700.0	1,084.9	1,074.0	1.2	3.2	0.08	1,450.5	1,197.9	1,905.1	1,901.7	3.49		545.620	
800.0	799.9	1,311.6	1,293.9	1.4	4.2	1.04	1,396.1	1,192.4	1,880.9	1,876.5	4.30		437.009	
900.0	899.7	1,446.0	1,422.5	1.6	4.9	1.75	1,357.3	1,187.3	1,850.3	1,845.4	4.91		377.216	
1,000.0	999.4	1,568.0	1,538.4	1.8	5.6	2.49	1,319.6	1,182.5	1,816.6	1,811.1	5.50		330.093	
1,100.0	1,098.9	1,693.3	1,656.7	2.0	6.4	3.35	1,278.4	1,177.4	1,780.0	1,773.9	6.14		289.795	
1,201.3	1,199.5	1,882.5	1,832.1	2.2	7.7	4.93	1,208.2	1,168.2	1,737.7	1,730.6	7.08		245.518	
1,300.0	1,297.5	1,976.1	1,917.5	2.5	8.4	5.84	1,170.2	1,163.7	1,693.8	1,686.0	7.71		219.552	
1,400.0	1,396.8	2,081.5	2,013.2	2.7	9.2	6.95	1,126.4	1,158.2	1,648.5	1,640.1	8.43		195.670	
1,500.0	1,496.0	2,184.9	2,106.4	3.0	10.0	8.16	1,081.9	1,153.2	1,603.0	1,593.8	9.18		174.551	
1,600.0	1,595.3	2,314.1	2,221.1	3.3	11.0	9.90	1,022.8	1,146.9	1,556.1	1,545.9	10.12		153.758	
1,700.0	1,694.5	2,394.7	2,292.4	3.5	11.7	11.04	985.6	1,142.0	1,508.6	1,497.7	10.85		139.087	
1,800.0	1,793.8	2,473.0	2,361.9	3.8	12.3	12.19	949.9	1,137.1	1,462.0	1,450.4	11.59		126.176	
1,900.0	1,893.0	2,534.7	2,417.0	4.0	12.8	13.14	922.2	1,133.6	1,416.8	1,404.6	12.27		115.427	
2,000.0	1,992.3	2,616.9	2,490.8	4.3	13.4	14.43	886.2	1,129.0	1,373.1	1,360.1	13.07		105.063	
2,100.0	2,091.5	2,704.4	2,569.4	4.6	14.1	15.83	848.5	1,123.2	1,329.8	1,315.9	13.92		95.534	
2,200.0	2,190.8	2,772.9	2,631.0	4.8	14.7	17.02	818.6	1,119.3	1,287.6	1,272.9	14.73		87.440	
2,300.0	2,290.0	2,859.2	2,708.9	5.1	15.3	18.60	781.6	1,115.5	1,247.6	1,232.0	15.66		79.692	
2,400.0	2,389.3	2,968.8	2,807.0	5.4	16.2	20.72	733.5	1,108.2	1,206.2	1,189.5	16.74		72.042	
2,500.0	2,488.5	3,060.6	2,889.4	5.7	16.9	22.60	693.3	1,101.5	1,165.6	1,147.8	17.77		65.593	
2,600.0	2,587.8	3,142.3	2,962.7	5.9	17.6	24.33	658.0	1,094.7	1,125.5	1,106.8	18.77		59.949	
2,700.0	2,687.0	3,236.9	3,047.7	6.2	18.3	26.46	617.3	1,086.8	1,086.8	1,066.9	19.90		54.613	
2,800.0	2,786.3	3,310.9	3,113.9	6.5	18.9	28.27	584.7	1,080.5	1,048.9	1,027.9	20.99		49.976	
2,900.0	2,885.5	3,399.7	3,193.3	6.7	19.6	30.58	545.5	1,074.2	1,013.4	991.2	22.21		45.630	
3,000.0	2,984.8	3,481.9	3,266.7	7.0	20.3	32.84	509.1	1,067.4	978.6	955.2	23.44		41.745	
3,100.0	3,084.0	3,555.2	3,332.1	7.3	20.9	34.98	476.5	1,062.3	946.7	922.1	24.67		38.375	
3,200.0	3,183.3	3,640.9	3,408.7	7.6	21.5	37.62	438.4	1,056.9	917.5	891.5	26.01		35.272	
3,300.0	3,282.5	3,737.1	3,494.8	7.8	22.3	40.69	396.0	1,049.5	889.6	862.2	27.43		32.431	
3,400.0	3,381.8	3,826.2	3,574.9	8.1	23.0	43.60	358.0	1,041.6	863.5	834.7	28.78		30.006	
3,500.0	3,481.1	3,910.2	3,651.2	8.4	23.6	46.35	323.8	1,033.6	839.6	809.5	30.06		27.935	
3,600.0	3,580.3	3,987.4	3,721.5	8.7	24.2	48.95	292.8	1,026.7	818.8	787.5	31.28		26.178	
3,700.0	3,679.6	4,063.9	3,791.3	8.9	24.7	51.64	261.7	1,020.9	801.9	769.5	32.47		24.698	
3,800.0	3,778.8	4,145.9	3,865.7	9.2	25.4	54.64	227.7	1,015.0	788.4	754.8	33.66		23.423	
3,900.0	3,878.1	4,219.0	3,931.7	9.5	25.9	57.41	196.8	1,011.3	779.8	745.1	34.70		22.475	
4,000.0	3,977.3	4,294.9	4,000.3	9.8	26.5	60.32	164.3	1,008.4	775.8	740.2	35.64		21.768	
4,064.5	4,041.4	4,349.3	4,049.5	9.9	26.9	62.41	141.2	1,006.2	775.1	738.8	36.23		21.396	
4,100.0	4,076.6	4,379.1	4,076.5	10.0	27.1	63.54	128.7	1,005.2	775.3	738.8	36.52		21.229	
4,200.0	4,175.8	4,461.8	4,151.1	10.3	27.8	66.75	93.0	1,002.0	778.4	741.1	37.30		20.869	
4,300.0	4,275.1	4,549.4	4,228.4	10.6	28.6	70.32	52.3	997.5	785.3	747.3	37.99		20.670	
4,400.0	4,374.3	4,635.1	4,303.8	10.9	29.3	73.82	11.9	992.4	795.6	757.1	38.49		20.672	
4,500.0	4,473.6	4,721.2	4,380.4	11.1	30.0	77.17	-27.4	987.7	809.4	770.6	38.80		20.861	
4,600.0	4,572.8	4,824.0	4,473.7	11.4	30.7	80.76	-70.2	983.4	825.6	786.5	39.13		21.097	
4,700.0	4,672.1	4,934.8	4,576.5	11.7	31.4	84.19	-111.2	979.1	842.2	802.8	39.42		21.367	
4,800.0	4,771.3	5,049.1	4,684.2	12.0	32.1	87.40	-149.1	973.5	857.9	818.2	39.63		21.645	
4,900.0	4,870.6	5,157.5	4,787.5	12.2	32.7	90.15	-181.7	968.6	873.9	834.2	39.72		21.999	
5,000.0	4,969.8	5,276.5	4,902.5	12.5	33.2	92.77	-212.0	964.0	888.8	849.0	39.83		22.314	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S												Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,069.1	5,399.5	5,022.8	12.8	33.6	95.03	-236.8	960.2	901.7	861.8	39.91	22.594	
5,200.0	5,168.3	5,510.7	5,132.5	13.1	34.0	96.82	-255.2	957.3	913.2	873.3	39.94	22.863	
5,300.0	5,267.6	5,646.3	5,266.9	13.3	34.3	98.75	-272.5	953.5	922.6	882.6	40.01	23.060	
5,400.0	5,366.8	5,767.3	5,387.3	13.6	34.5	100.24	-282.9	949.9	929.3	889.3	40.02	23.220	
5,500.0	5,466.1	5,878.9	5,498.8	13.9	34.7	101.39	-288.6	947.6	934.2	894.2	40.03	23.336	
5,600.0	5,565.3	6,000.2	5,620.0	14.2	34.8	102.48	-291.6	945.6	937.7	897.6	40.06	23.406	
5,700.0	5,664.6	6,108.0	5,727.8	14.4	34.8	103.37	-291.7	943.6	939.4	899.3	40.09	23.431	
5,800.0	5,763.8	6,206.0	5,825.8	14.7	34.9	104.16	-291.6	941.8	941.2	901.0	40.13	23.452	
5,900.0	5,863.1	6,303.9	5,923.7	15.0	34.9	104.95	-291.7	940.1	943.3	903.1	40.17	23.483	
6,000.0	5,962.3	6,402.4	6,022.2	15.3	35.0	105.74	-291.8	938.5	945.6	905.4	40.20	23.523	
6,100.0	6,061.6	6,501.1	6,120.9	15.5	35.1	106.52	-291.9	936.9	948.3	908.0	40.23	23.570	
6,200.0	6,160.9	6,600.9	6,220.7	15.8	35.1	107.28	-291.8	935.7	951.0	910.8	40.26	23.625	
6,300.0	6,260.1	6,699.9	6,319.7	16.1	35.2	107.98	-291.2	935.1	953.9	913.6	40.30	23.670	
6,400.0	6,359.4	6,797.1	6,416.9	16.4	35.2	108.68	-290.8	934.5	957.1	916.7	40.35	23.721	
6,500.0	6,458.6	6,895.1	6,514.9	16.6	35.3	109.38	-290.6	933.8	960.6	920.2	40.39	23.781	
6,600.0	6,557.9	6,993.8	6,613.5	16.9	35.3	110.10	-290.6	933.0	964.3	923.9	40.44	23.848	
6,700.0	6,657.1	7,093.1	6,712.8	17.2	35.4	110.82	-290.8	932.1	968.3	927.8	40.48	23.917	
6,800.0	6,756.4	7,192.5	6,812.3	17.5	35.5	111.56	-291.0	930.8	972.3	931.8	40.52	23.993	
6,900.0	6,855.6	7,292.0	6,911.8	17.7	35.5	112.31	-291.3	929.4	976.5	935.9	40.56	24.073	
6,919.5	6,875.0	7,311.4	6,931.2	17.8	35.6	112.45	-291.3	929.1	977.3	936.7	40.57	24.089	
6,950.0	6,905.3	7,341.9	6,961.6	17.9	35.6	90.10	-291.4	928.7	977.9	937.3	40.58	24.096	
7,000.0	6,955.1	7,392.4	7,012.1	17.9	35.6	31.99	-291.6	927.9	975.8	935.1	40.62	24.019	
7,050.0	7,004.8	7,443.1	7,062.8	17.9	35.7	2.82	-291.7	927.0	969.7	929.0	40.69	23.830	
7,100.0	7,053.8	7,493.3	7,113.0	17.9	35.7	-8.43	-291.8	926.2	959.8	919.0	40.79	23.530	
7,150.0	7,101.9	7,542.3	7,162.0	17.9	35.7	-14.43	-291.8	925.2	946.1	905.2	40.92	23.122	
7,200.0	7,148.7	7,589.5	7,209.1	17.8	35.8	-18.58	-291.8	924.3	928.7	887.6	41.07	22.612	
7,250.0	7,193.8	7,634.9	7,254.5	17.7	35.8	-22.09	-291.8	923.5	907.9	866.6	41.26	22.003	
7,300.0	7,236.9	7,678.2	7,297.9	17.5	35.8	-25.49	-291.8	922.6	883.8	842.3	41.48	21.304	
7,350.0	7,277.7	7,719.3	7,339.0	17.4	35.8	-29.11	-291.7	921.8	856.6	814.9	41.74	20.522	
7,400.0	7,315.7	7,758.3	7,377.9	17.2	35.9	-33.18	-291.6	921.1	826.7	784.7	42.04	19.666	
7,450.0	7,350.9	7,794.1	7,413.7	17.1	35.9	-37.87	-291.5	920.4	794.4	752.0	42.38	18.746	
7,500.0	7,382.8	7,826.5	7,446.2	16.9	35.9	-43.32	-291.3	919.8	760.0	717.3	42.76	17.775	
7,550.0	7,411.3	7,855.3	7,475.0	16.7	35.9	-49.59	-291.2	919.2	724.1	680.9	43.19	16.765	
7,600.0	7,436.1	7,880.3	7,500.0	16.6	35.9	-56.58	-291.0	918.7	687.1	643.4	43.68	15.731	
7,650.0	7,457.1	7,900.7	7,520.3	16.5	35.9	-63.99	-290.8	918.3	649.6	605.4	44.21	14.691	
7,700.0	7,474.0	7,916.9	7,536.5	16.4	36.0	-71.43	-290.7	918.0	612.2	567.4	44.81	13.662	
7,750.0	7,486.8	7,929.0	7,548.6	16.4	36.0	-78.42	-290.6	917.8	575.6	530.1	45.45	12.663	
7,800.0	7,495.3	7,937.0	7,556.6	16.4	36.0	-84.50	-290.6	917.7	540.5	494.4	46.14	11.713	
7,850.0	7,499.5	7,940.7	7,560.3	16.5	36.0	-89.39	-290.5	917.6	507.8	460.9	46.87	10.835	
7,873.6	7,500.0	7,941.0	7,560.6	16.5	36.0	-91.23	-290.5	917.6	493.5	446.3	47.22	10.451	
7,900.0	7,500.0	7,940.7	7,560.4	16.5	36.0	-91.20	-290.5	917.6	478.3	430.7	47.61	10.046	
8,000.0	7,500.0	7,939.9	7,559.6	16.9	36.0	-91.09	-290.5	917.7	430.9	381.8	49.08	8.779	
8,100.0	7,500.0	7,939.2	7,558.8	17.4	36.0	-90.98	-290.5	917.7	403.1	352.8	50.33	8.010	
8,165.7	7,500.0	7,938.6	7,558.3	17.8	36.0	-90.90	-290.6	917.7	397.7	346.9	50.82	7.827 CC, ES, SF	
8,200.0	7,500.0	7,938.4	7,558.0	18.0	36.0	-90.86	-290.6	917.7	399.2	348.3	50.87	7.848	
8,300.0	7,500.0	7,937.6	7,557.2	18.8	36.0	-90.75	-290.6	917.7	419.8	369.6	50.21	8.360	
8,400.0	7,500.0	7,936.8	7,556.4	19.7	36.0	-90.64	-290.6	917.7	461.6	413.1	48.53	9.511	
8,500.0	7,500.0	7,936.0	7,555.6	20.7	36.0	-90.52	-290.6	917.7	519.6	473.1	46.44	11.188	
8,600.0	7,500.0	7,935.2	7,554.9	21.9	36.0	-90.41	-290.6	917.7	588.9	544.5	44.43	13.254	
8,700.0	7,500.0	7,934.5	7,554.1	23.1	36.0	-90.30	-290.6	917.7	666.1	623.3	42.73	15.587	
8,800.0	7,500.0	7,933.7	7,553.3	24.3	36.0	-90.19	-290.6	917.8	748.7	707.3	41.38	18.092	
8,900.0	7,500.0	7,932.9	7,552.5	25.6	36.0	-90.08	-290.6	917.8	835.1	794.7	40.35	20.698	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft	
Survey Program: 41-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,000.0	7,500.0	7,932.1	7,551.8	27.0	36.0	-89.97	-290.6	917.8	924.2	884.7	39.57	23.357	
9,100.0	7,500.0	7,931.4	7,551.0	28.4	36.0	-89.86	-290.6	917.8	1,015.4	976.4	39.00	26.039	
9,200.0	7,500.0	7,930.6	7,550.2	29.9	36.0	-89.75	-290.6	917.8	1,108.1	1,069.5	38.58	28.724	
9,300.0	7,500.0	7,929.9	7,549.5	31.4	36.0	-89.64	-290.6	917.8	1,202.0	1,163.7	38.28	31.400	
9,400.0	7,500.0	7,929.1	7,548.7	32.9	36.0	-89.53	-290.6	917.8	1,296.8	1,258.7	38.07	34.060	
9,500.0	7,500.0	7,928.3	7,548.0	34.4	36.0	-89.42	-290.6	917.8	1,392.3	1,354.3	37.94	36.702	
9,600.0	7,500.0	7,927.6	7,547.2	36.0	36.0	-89.31	-290.6	917.9	1,488.4	1,450.5	37.85	39.322	
9,700.0	7,500.0	7,926.8	7,546.5	37.5	36.0	-89.20	-290.6	917.9	1,585.0	1,547.2	37.81	41.922	
9,800.0	7,500.0	7,926.1	7,545.7	39.1	36.0	-89.09	-290.7	917.9	1,682.0	1,644.2	37.80	44.501	
9,900.0	7,500.0	7,925.3	7,545.0	40.7	36.0	-88.99	-290.7	917.9	1,779.3	1,741.5	37.81	47.059	
10,000.0	7,500.0	7,924.6	7,544.2	42.3	36.0	-88.88	-290.7	917.9	1,876.9	1,839.0	37.84	49.597	
10,100.0	7,500.0	7,923.9	7,543.5	43.9	36.0	-88.77	-290.7	917.9	1,974.7	1,936.8	37.89	52.116	
10,200.0	7,500.0	7,923.1	7,542.7	45.6	36.0	-88.67	-290.7	917.9	2,072.8	2,034.8	37.95	54.616	
10,300.0	7,500.0	7,922.4	7,542.0	47.2	36.0	-88.56	-290.7	917.9	2,171.0	2,133.0	38.02	57.098	
10,400.0	7,500.0	7,921.7	7,541.3	48.9	36.0	-88.46	-290.7	918.0	2,269.4	2,231.3	38.10	59.563	
10,500.0	7,500.0	7,920.9	7,540.5	50.5	36.0	-88.35	-290.7	918.0	2,367.9	2,329.7	38.19	62.010	
10,600.0	7,500.0	7,920.2	7,539.8	52.2	36.0	-88.25	-290.7	918.0	2,466.5	2,428.2	38.28	64.441	
10,700.0	7,500.0	7,919.5	7,539.1	53.8	36.0	-88.14	-290.7	918.0	2,565.3	2,526.9	38.37	66.856	
10,800.0	7,500.0	7,918.8	7,538.4	55.5	36.0	-88.04	-290.7	918.0	2,664.1	2,625.6	38.47	69.256	
10,900.0	7,500.0	7,918.0	7,537.6	57.2	36.0	-87.93	-290.7	918.0	2,763.0	2,724.4	38.57	71.640	
11,000.0	7,500.0	7,917.3	7,536.9	58.9	36.0	-87.83	-290.7	918.0	2,862.0	2,823.3	38.67	74.010	
11,100.0	7,500.0	7,916.6	7,536.2	60.6	36.0	-87.73	-290.7	918.0	2,961.1	2,922.3	38.78	76.365	
11,200.0	7,500.0	7,915.9	7,535.5	62.3	36.0	-87.63	-290.7	918.1	3,060.2	3,021.3	38.88	78.706	
11,244.1	7,500.0	7,915.6	7,535.2	63.0	36.0	-87.58	-290.7	918.1	3,103.9	3,065.0	38.93	79.734	
11,300.0	7,500.0	7,915.2	7,534.8	64.0	36.0	-87.85	-290.7	918.1	3,159.3	3,120.3	38.99	81.018	
11,400.0	7,500.0	7,914.4	7,534.0	65.7	36.0	-88.19	-290.7	918.1	3,258.0	3,218.9	39.12	83.273	
11,444.1	7,500.0	7,914.0	7,533.7	66.4	36.0	-88.30	-290.7	918.1	3,301.4	3,262.2	39.18	84.269	
11,500.0	7,500.0	7,913.6	7,533.2	67.4	36.0	-88.26	-290.8	918.1	3,356.3	3,317.0	39.24	85.533	
11,600.0	7,500.0	7,912.8	7,532.4	69.1	36.0	-88.18	-290.8	918.1	3,454.6	3,415.3	39.35	87.785	
11,700.0	7,500.0	7,911.9	7,531.6	70.8	36.0	-88.11	-290.8	918.1	3,553.0	3,513.6	39.47	90.024	
11,800.0	7,500.0	7,911.1	7,530.8	72.5	36.0	-88.03	-290.8	918.1	3,651.5	3,612.0	39.58	92.248	
11,900.0	7,500.0	7,910.3	7,529.9	74.2	36.0	-87.96	-290.8	918.2	3,750.1	3,710.4	39.70	94.459	
12,000.0	7,500.0	7,909.5	7,529.1	76.0	36.0	-87.88	-290.8	918.2	3,848.8	3,809.0	39.82	96.658	
12,100.0	7,500.0	7,908.7	7,528.3	77.7	36.0	-87.81	-290.8	918.2	3,947.5	3,907.6	39.94	98.843	
12,194.1	7,500.0	7,907.9	7,527.6	79.3	36.0	-87.74	-290.8	918.2	4,040.5	4,000.5	40.05	100.889	
12,200.0	7,500.0	7,907.9	7,527.5	79.4	36.0	-87.70	-290.8	918.2	4,046.3	4,006.3	40.06	101.017	
12,300.0	7,500.0	7,907.1	7,526.7	81.1	36.0	-86.92	-290.8	918.2	4,145.4	4,105.3	40.15	103.237	
12,387.3	7,500.0	7,906.5	7,526.1	82.6	35.9	-85.67	-290.8	918.2	4,232.4	4,192.1	40.24	105.177	
12,400.0	7,500.0	7,906.4	7,526.0	82.9	35.9	-85.66	-290.8	918.2	4,245.0	4,204.7	40.25	105.453	
12,500.0	7,500.0	7,905.7	7,525.3	84.6	35.9	-85.54	-290.8	918.2	4,344.7	4,304.3	40.37	107.626	
12,600.0	7,500.0	7,905.0	7,524.7	86.3	35.9	-85.43	-290.8	918.2	4,444.4	4,403.9	40.48	109.787	
12,700.0	7,500.0	7,904.4	7,524.0	88.0	35.9	-85.32	-290.8	918.3	4,544.1	4,503.5	40.59	111.937	
12,800.0	7,500.0	7,903.7	7,523.3	89.7	35.9	-85.20	-290.8	918.3	4,643.8	4,603.1	40.71	114.076	
12,900.0	7,500.0	7,903.0	7,522.6	91.5	35.9	-85.09	-290.8	918.3	4,743.5	4,702.7	40.82	116.203	
13,000.0	7,500.0	7,902.3	7,521.9	93.2	35.9	-84.98	-290.8	918.3	4,843.3	4,802.3	40.93	118.320	
13,100.0	7,500.0	7,901.6	7,521.3	94.9	35.9	-84.86	-290.8	918.3	4,943.0	4,902.0	41.05	120.425	
13,200.0	7,500.0	7,901.0	7,520.6	96.6	35.9	-84.75	-290.8	918.3	5,042.8	5,001.6	41.16	122.520	
13,300.0	7,500.0	7,900.3	7,519.9	98.4	35.9	-84.64	-290.9	918.3	5,142.5	5,101.3	41.27	124.604	
13,400.0	7,500.0	7,899.6	7,519.2	100.1	35.9	-84.53	-290.9	918.3	5,242.3	5,200.9	41.38	126.677	
13,500.0	7,500.0	7,898.9	7,518.6	101.8	35.9	-84.42	-290.9	918.4	5,342.1	5,300.6	41.50	128.740	
13,600.0	7,500.0	7,898.3	7,517.9	103.5	35.9	-84.31	-290.9	918.4	5,441.9	5,400.3	41.61	130.792	
13,700.0	7,500.0	7,897.6	7,517.2	105.3	35.9	-84.20	-290.9	918.4	5,541.7	5,500.0	41.72	132.834	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,800.0	7,500.0	7,897.0	7,516.6	107.0	35.9	-84.09	-290.9	918.4	5,641.5	5,599.7	41.83	134.866		
13,900.0	7,500.0	7,896.3	7,515.9	108.7	35.9	-83.98	-290.9	918.4	5,741.3	5,699.4	41.94	136.887		
14,000.0	7,500.0	7,886.0	7,505.6	110.5	35.9	-82.29	-291.0	918.6	5,841.2	5,799.2	42.03	138.979		
14,100.0	7,500.0	7,886.0	7,505.6	112.2	35.9	-82.29	-291.0	918.6	5,941.0	5,898.9	42.14	140.975		
14,200.0	7,500.0	7,886.0	7,505.6	113.9	35.9	-82.29	-291.0	918.6	6,040.8	5,998.6	42.26	142.961		
14,300.0	7,500.0	7,886.0	7,505.6	115.7	35.9	-82.29	-291.0	918.6	6,140.7	6,098.3	42.37	144.938		
14,400.0	7,500.0	7,886.0	7,505.6	117.4	35.9	-82.29	-291.0	918.6	6,240.5	6,198.0	42.48	146.905		
14,500.0	7,500.0	7,886.0	7,505.6	119.1	35.9	-82.29	-291.0	918.6	6,340.4	6,297.8	42.59	148.862		
14,600.0	7,500.0	7,886.0	7,505.6	120.9	35.9	-82.29	-291.0	918.6	6,440.2	6,397.5	42.70	150.809		
14,700.0	7,500.0	7,886.0	7,505.6	122.6	35.9	-82.29	-291.0	918.6	6,540.1	6,497.3	42.82	152.747		
14,800.0	7,500.0	7,886.0	7,505.6	124.4	35.9	-82.29	-291.0	918.6	6,639.9	6,597.0	42.93	154.675		
14,900.0	7,500.0	7,886.0	7,505.6	126.1	35.9	-82.29	-291.0	918.6	6,739.8	6,696.8	43.04	156.594		
15,000.0	7,500.0	7,886.0	7,505.6	127.8	35.9	-82.29	-291.0	918.6	6,839.7	6,796.5	43.15	158.504		
15,100.0	7,500.0	7,886.0	7,505.6	129.6	35.9	-82.29	-291.0	918.6	6,939.6	6,896.3	43.26	160.404		
15,200.0	7,500.0	7,886.0	7,505.6	131.3	35.9	-82.29	-291.0	918.6	7,039.4	6,996.1	43.37	162.295		
15,300.0	7,500.0	7,886.0	7,505.6	133.1	35.9	-82.29	-291.0	918.6	7,139.3	7,095.8	43.49	164.177		
15,400.0	7,500.0	7,886.0	7,505.6	134.8	35.9	-82.29	-291.0	918.6	7,239.2	7,195.6	43.60	166.050		
15,500.0	7,500.0	7,886.0	7,505.6	136.5	35.9	-82.29	-291.0	918.6	7,339.1	7,295.4	43.71	167.914		
15,600.0	7,500.0	7,886.0	7,505.6	138.3	35.9	-82.29	-291.0	918.6	7,439.0	7,395.2	43.82	169.769		
15,700.0	7,500.0	7,886.0	7,505.6	140.0	35.9	-82.29	-291.0	918.6	7,538.9	7,494.9	43.93	171.616		
15,805.8	7,500.0	7,886.0	7,505.6	141.9	35.9	-82.29	-291.0	918.6	7,644.5	7,600.5	44.05	173.559		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL														Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	33.0	33.0	0.0	0.1	46.68	801.1	849.5	1,167.6						
100.0	100.0	121.5	121.5	0.2	0.2	46.71	801.3	850.5	1,168.6	1,168.3	0.36	3,203.266			
200.0	200.0	219.5	219.5	0.3	0.4	46.76	801.6	852.4	1,170.2	1,169.5	0.71	1,644.785			
300.0	300.0	332.6	332.6	0.5	0.6	46.80	801.7	853.8	1,171.2	1,170.1	1.08	1,081.184			
400.0	400.0	436.3	436.2	0.7	0.8	46.80	801.8	853.9	1,171.4	1,169.9	1.44	814.548			
500.0	500.0	535.9	535.9	0.8	0.9	46.78	802.3	853.9	1,171.6	1,169.9	1.79	656.001			
600.0	600.0	639.7	639.7	1.0	1.1	7.31	802.4	853.7	1,170.7	1,168.6	2.14	546.673			
700.0	700.0	744.8	744.8	1.2	1.3	7.32	802.3	853.4	1,167.9	1,165.4	2.50	467.281			
800.0	799.9	849.0	849.0	1.4	1.5	7.32	802.2	852.2	1,162.6	1,159.8	2.86	407.160			
900.0	899.7	948.9	948.9	1.6	1.7	7.31	802.3	850.9	1,155.7	1,152.5	3.20	360.650			
1,000.0	999.4	1,050.4	1,050.3	1.8	1.8	7.34	802.0	849.6	1,146.8	1,143.3	3.56	322.462			
1,100.0	1,098.9	1,151.5	1,151.4	2.0	2.0	7.39	801.7	848.4	1,136.2	1,132.3	3.91	290.723			
1,201.3	1,199.5	1,254.2	1,254.1	2.2	2.2	7.44	801.3	846.7	1,123.4	1,119.1	4.27	263.382			
1,300.0	1,297.5	1,348.6	1,348.5	2.5	2.4	7.46	801.2	844.9	1,110.0	1,105.4	4.60	241.119			
1,400.0	1,396.8	1,443.3	1,443.2	2.7	2.5	7.47	801.6	843.5	1,097.0	1,092.1	4.95	221.818			
1,500.0	1,496.0	1,543.5	1,543.3	3.0	2.7	7.48	802.1	841.9	1,084.2	1,078.9	5.30	204.687			
1,600.0	1,595.3	1,641.7	1,641.6	3.3	2.9	7.49	802.5	840.3	1,071.1	1,065.5	5.64	189.752			
1,700.0	1,694.5	1,736.2	1,736.1	3.5	3.0	7.49	803.2	839.0	1,058.5	1,052.5	5.99	176.796			
1,800.0	1,793.8	1,835.3	1,835.1	3.8	3.2	7.50	804.1	837.7	1,046.1	1,039.8	6.34	165.072			
1,900.0	1,893.0	1,933.7	1,933.5	4.0	3.4	7.48	805.2	836.3	1,033.7	1,027.0	6.69	154.583			
2,000.0	1,992.3	2,027.9	2,027.7	4.3	3.6	7.46	806.5	835.0	1,021.5	1,014.5	7.03	145.316			
2,100.0	2,091.5	2,120.3	2,120.0	4.6	3.7	7.44	808.3	834.1	1,010.0	1,002.7	7.37	137.054			
2,200.0	2,190.8	2,215.9	2,215.6	4.8	3.9	7.42	810.4	833.6	999.1	991.4	7.72	129.493			
2,300.0	2,290.0	2,314.3	2,314.1	5.1	4.1	7.40	812.7	833.3	988.4	980.3	8.07	122.546			
2,400.0	2,389.3	2,418.3	2,418.0	5.4	4.2	7.40	814.8	833.1	977.4	969.0	8.42	116.033			
2,500.0	2,488.5	2,521.0	2,520.7	5.7	4.4	7.43	816.1	832.9	966.1	957.3	8.78	110.039			
2,600.0	2,587.8	2,622.1	2,621.8	5.9	4.6	7.47	817.2	832.6	954.5	945.3	9.13	104.514			
2,700.0	2,687.0	2,723.3	2,723.0	6.2	4.8	7.51	818.0	832.2	942.6	933.1	9.49	99.374			
2,800.0	2,786.3	2,821.8	2,821.5	6.5	4.9	7.55	818.8	831.9	930.8	921.0	9.83	94.645			
2,900.0	2,885.5	2,924.4	2,924.1	6.7	5.1	7.60	819.6	831.3	918.8	908.6	10.19	90.165			
3,000.0	2,984.8	3,025.4	3,025.1	7.0	5.3	7.60	820.6	830.1	906.6	896.0	10.54	85.975			
3,100.0	3,084.0	3,125.6	3,125.3	7.3	5.5	7.62	821.5	828.9	894.2	883.3	10.90	82.060			
3,200.0	3,183.3	3,227.2	3,226.8	7.6	5.7	7.62	822.2	827.5	881.5	870.3	11.25	78.353			
3,300.0	3,282.5	3,324.9	3,324.6	7.8	5.8	7.61	823.1	825.9	868.9	857.3	11.60	74.899			
3,400.0	3,381.8	3,420.2	3,419.8	8.1	6.0	7.60	824.3	824.5	856.5	844.6	11.95	71.696			
3,500.0	3,481.1	3,514.8	3,514.4	8.4	6.2	7.60	825.6	823.7	844.7	832.4	12.29	68.721			
3,600.0	3,580.3	3,607.5	3,607.1	8.7	6.3	7.60	827.2	823.3	833.5	820.9	12.63	65.975			
3,700.0	3,679.6	3,700.5	3,700.0	8.9	6.5	7.59	829.6	823.3	823.2	810.2	12.98	63.433			
3,800.0	3,778.8	3,808.2	3,807.7	9.2	6.7	7.55	832.4	823.1	812.7	799.3	13.34	60.913			
3,900.0	3,878.1	3,913.2	3,912.7	9.5	6.9	7.55	834.1	822.5	801.3	787.6	13.70	58.491			
4,000.0	3,977.3	4,018.5	4,018.0	9.8	7.1	7.58	835.2	821.7	789.3	775.2	14.06	56.146			
4,100.0	4,076.6	4,126.0	4,125.5	10.0	7.2	7.60	835.5	819.9	776.2	761.7	14.42	53.833			
4,200.0	4,175.8	4,223.8	4,223.3	10.3	7.4	7.59	835.9	817.8	762.8	748.0	14.77	51.650			
4,300.0	4,275.1	4,322.0	4,321.4	10.6	7.6	7.62	836.0	816.1	749.5	734.4	15.12	49.578			
4,400.0	4,374.3	4,420.6	4,420.0	10.9	7.8	7.67	836.0	814.7	736.4	720.9	15.47	47.606			
4,500.0	4,473.6	4,521.4	4,520.8	11.1	7.9	7.64	836.5	812.5	723.0	707.2	15.82	45.695			
4,600.0	4,572.8	4,615.3	4,614.7	11.4	8.1	7.55	837.9	810.1	710.0	693.9	16.17	43.914			
4,700.0	4,672.1	4,716.2	4,715.6	11.7	8.3	7.49	839.2	808.0	697.3	680.8	16.52	42.205			
4,800.0	4,771.3	4,817.2	4,816.5	12.0	8.5	7.46	840.0	805.9	684.2	667.4	16.87	40.550			
4,900.0	4,870.6	4,915.5	4,914.8	12.2	8.6	7.51	840.1	804.6	671.2	654.0	17.22	38.971			
5,000.0	4,969.8	5,016.8	5,016.1	12.5	8.8	7.60	839.7	803.4	657.9	640.4	17.58	37.435			
5,100.0	5,069.1	5,113.6	5,112.8	12.8	9.0	7.65	839.7	802.0	644.8	626.9	17.93	35.971			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

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Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
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Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,168.3	5,214.1	5,213.4	13.1	9.2	7.66	840.2	800.1	631.7	613.4	18.28	34.561		
5,300.0	5,267.6	5,314.1	5,313.3	13.3	9.3	7.65	840.6	798.0	618.3	599.7	18.63	33.191		
5,400.0	5,366.8	5,406.5	5,405.7	13.6	9.5	7.67	841.1	796.7	605.6	586.6	18.98	31.913		
5,500.0	5,466.1	5,508.7	5,507.9	13.9	9.7	7.72	841.7	795.6	593.1	573.8	19.33	30.683		
5,600.0	5,565.3	5,607.2	5,606.4	14.2	9.9	7.77	842.1	794.5	580.4	560.8	19.68	29.491		
5,700.0	5,664.6	5,709.2	5,708.4	14.4	10.0	7.78	842.7	792.8	567.6	547.5	20.03	28.329		
5,800.0	5,763.8	5,810.3	5,809.5	14.7	10.2	7.77	843.2	790.7	554.2	533.9	20.39	27.187		
5,900.0	5,863.1	5,908.2	5,907.4	15.0	10.4	7.76	843.6	788.6	540.9	520.1	20.74	26.083		
6,000.0	5,962.3	6,006.7	6,005.8	15.3	10.6	7.75	844.2	786.7	527.7	506.6	21.09	25.025		
6,100.0	6,061.6	6,110.6	6,109.7	15.5	10.8	7.75	844.3	784.4	514.1	492.7	21.44	23.979		
6,200.0	6,160.9	6,209.5	6,208.5	15.8	10.9	7.76	844.1	781.9	500.1	478.3	21.79	22.949		
6,300.0	6,260.1	6,307.2	6,306.3	16.1	11.1	7.77	844.0	779.5	486.2	464.0	22.14	21.957		
6,400.0	6,359.4	6,404.1	6,403.1	16.4	11.3	7.80	844.1	777.6	472.6	450.1	22.49	21.011		
6,500.0	6,458.6	6,500.9	6,499.9	16.6	11.4	7.78	844.7	775.7	459.6	436.7	22.85	20.115		
6,600.0	6,557.9	6,598.6	6,597.6	16.9	11.6	7.77	845.6	774.1	446.9	423.7	23.20	19.266		
6,700.0	6,657.1	6,698.6	6,697.6	17.2	11.8	7.81	846.3	772.9	434.3	410.8	23.55	18.444		
6,800.0	6,756.4	6,798.4	6,797.3	17.5	12.0	7.86	846.8	771.6	421.6	397.7	23.90	17.640		
6,900.0	6,855.6	6,900.4	6,899.3	17.7	12.2	7.94	846.9	770.0	408.5	384.2	24.25	16.843		
6,919.5	6,875.0	6,919.7	6,918.6	17.8	12.2	7.94	846.9	769.6	405.9	381.5	24.32	16.687		
6,950.0	6,905.3	6,950.0	6,948.9	17.9	12.2	-14.99	847.0	768.9	402.3	377.9	24.42	16.472		
7,000.0	6,955.1	6,999.8	6,998.7	17.9	12.3	-74.04	847.3	767.8	398.8	374.3	24.57	16.231		
7,030.8	6,985.8	7,030.1	7,029.0	17.9	12.4	-96.00	847.4	767.1	398.2	373.6	24.65	16.152 CC, ES		
7,050.0	7,004.8	7,049.0	7,047.9	17.9	12.4	-104.04	847.4	766.7	398.5	373.8	24.71	16.128 SF		
7,100.0	7,053.8	7,097.7	7,096.6	17.9	12.5	-115.95	847.4	765.9	401.4	376.5	24.84	16.156		
7,150.0	7,101.9	7,147.6	7,146.5	17.9	12.6	-122.46	847.2	765.1	407.6	382.6	25.00	16.306		
7,200.0	7,148.7	7,196.2	7,195.1	17.8	12.7	-126.88	847.0	764.0	417.2	392.0	25.18	16.565		
7,250.0	7,193.8	7,243.4	7,242.3	17.7	12.8	-130.24	846.8	762.6	430.3	404.9	25.42	16.929		
7,300.0	7,236.9	7,288.7	7,287.5	17.5	12.8	-132.91	846.4	761.2	447.2	421.5	25.71	17.395		
7,350.0	7,277.7	7,336.7	7,335.5	17.4	12.9	-135.35	846.6	759.4	467.7	441.6	26.04	17.960		
7,400.0	7,315.7	7,384.5	7,383.3	17.2	13.0	-137.45	844.0	757.4	491.4	465.0	26.41	18.609		
7,450.0	7,350.9	7,427.0	7,425.7	17.1	13.1	-138.89	841.7	755.7	518.4	491.6	26.79	19.348		
7,500.0	7,382.8	7,466.2	7,464.7	16.9	13.1	-139.71	838.8	755.0	548.8	521.6	27.18	20.188		
7,550.0	7,411.3	7,500.0	7,498.4	16.7	13.2	-139.74	835.6	755.0	582.3	554.7	27.57	21.118		
7,600.0	7,436.1	7,523.8	7,522.0	16.6	13.2	-138.59	833.3	755.4	619.0	591.0	27.96	22.136		
7,650.0	7,457.1	7,542.0	7,540.2	16.5	13.3	-136.32	831.7	755.7	658.8	630.4	28.33	23.249		
7,700.0	7,474.0	7,556.8	7,554.9	16.4	13.3	-132.75	830.5	756.1	701.1	672.4	28.68	24.447		
7,750.0	7,486.8	7,568.3	7,566.4	16.4	13.3	-127.34	829.7	756.4	745.6	716.6	28.99	25.716		
7,800.0	7,495.3	7,576.6	7,574.6	16.4	13.3	-119.24	829.1	756.7	791.7	762.4	29.28	27.040		
7,850.0	7,499.5	7,581.6	7,579.7	16.5	13.3	-107.40	828.8	756.9	838.9	809.4	29.53	28.408		
7,873.6	7,500.0	7,582.9	7,581.0	16.5	13.3	-100.28	828.7	756.9	861.5	831.8	29.64	29.062		
7,900.0	7,500.0	7,600.0	7,598.0	16.5	13.4	-104.18	827.8	757.5	887.1	857.4	29.76	29.807		
8,000.0	7,500.0	7,600.0	7,598.0	16.9	13.4	-104.18	827.8	757.5	983.6	953.4	30.18	32.590		
8,100.0	7,500.0	7,600.0	7,598.0	17.4	13.4	-104.18	827.8	757.5	1,080.8	1,050.2	30.55	35.377		
8,200.0	7,500.0	7,600.0	7,598.0	18.0	13.4	-104.18	827.8	757.5	1,178.4	1,147.5	30.88	38.163		
8,300.0	7,500.0	7,600.0	7,598.0	18.8	13.4	-104.18	827.8	757.5	1,276.4	1,245.2	31.17	40.943		
8,400.0	7,500.0	7,600.0	7,598.0	19.7	13.4	-104.18	827.8	757.5	1,374.6	1,343.2	31.45	43.714		
8,500.0	7,500.0	7,600.0	7,598.0	20.7	13.4	-104.18	827.8	757.5	1,473.1	1,441.4	31.70	46.474		
8,600.0	7,500.0	7,600.0	7,598.0	21.9	13.4	-104.18	827.8	757.5	1,571.8	1,539.9	31.93	49.223		
8,700.0	7,500.0	7,600.0	7,598.0	23.1	13.4	-104.18	827.8	757.5	1,670.7	1,638.5	32.15	51.958		
8,800.0	7,500.0	7,600.0	7,598.0	24.3	13.4	-104.18	827.8	757.5	1,769.7	1,737.3	32.36	54.680		
8,900.0	7,500.0	7,618.7	7,616.6	25.6	13.4	-108.27	826.8	758.2	1,868.6	1,836.0	32.60	57.320		
9,000.0	7,500.0	7,621.6	7,619.6	27.0	13.4	-108.90	826.7	758.3	1,967.7	1,934.9	32.80	59.995		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,100.0	7,500.0	7,624.5	7,622.4	28.4	13.4	-109.50	826.6	758.4	2,067.0	2,034.0	32.99	62.654		
9,200.0	7,500.0	7,627.2	7,625.2	29.9	13.4	-110.07	826.4	758.5	2,166.2	2,133.1	33.18	65.296		
9,300.0	7,500.0	7,629.8	7,627.8	31.4	13.4	-110.62	826.3	758.6	2,265.6	2,232.2	33.36	67.922		
9,400.0	7,500.0	7,632.3	7,630.3	32.9	13.4	-111.14	826.2	758.7	2,365.0	2,331.4	33.53	70.532		
9,500.0	7,500.0	7,634.8	7,632.7	34.4	13.4	-111.64	826.1	758.7	2,464.4	2,430.7	33.70	73.125		
9,600.0	7,500.0	7,637.1	7,635.0	36.0	13.4	-112.12	826.0	758.8	2,563.9	2,530.0	33.87	75.702		
9,700.0	7,500.0	7,639.4	7,637.3	37.5	13.4	-112.57	825.9	758.9	2,663.4	2,629.3	34.03	78.263		
9,800.0	7,500.0	7,641.5	7,639.5	39.1	13.4	-113.01	825.8	758.9	2,762.9	2,728.7	34.19	80.807		
9,900.0	7,500.0	7,643.6	7,641.6	40.7	13.4	-113.43	825.8	759.0	2,862.5	2,828.1	34.35	83.336		
10,000.0	7,500.0	7,645.7	7,643.6	42.3	13.4	-113.83	825.7	759.0	2,962.1	2,927.6	34.50	85.848		
10,100.0	7,500.0	7,647.6	7,645.5	43.9	13.4	-114.22	825.6	759.1	3,061.7	3,027.1	34.66	88.345		
10,200.0	7,500.0	7,649.5	7,647.4	45.6	13.4	-114.59	825.5	759.2	3,161.4	3,126.6	34.81	90.827		
10,300.0	7,500.0	7,651.3	7,649.3	47.2	13.5	-114.94	825.5	759.2	3,261.0	3,226.1	34.95	93.293		
10,400.0	7,500.0	7,653.1	7,651.0	48.9	13.5	-115.29	825.4	759.3	3,360.7	3,325.6	35.10	95.743		
10,500.0	7,500.0	7,654.8	7,652.8	50.5	13.5	-115.62	825.3	759.3	3,460.4	3,425.2	35.25	98.179		
10,600.0	7,500.0	7,656.5	7,654.4	52.2	13.5	-115.94	825.3	759.3	3,560.1	3,524.7	35.39	100.599		
10,700.0	7,500.0	7,658.1	7,656.0	53.8	13.5	-116.25	825.2	759.4	3,659.8	3,624.3	35.53	103.004		
10,800.0	7,500.0	7,659.7	7,657.6	55.5	13.5	-116.54	825.2	759.4	3,759.6	3,723.9	35.67	105.395		
10,900.0	7,500.0	7,661.2	7,659.1	57.2	13.5	-116.83	825.1	759.5	3,859.3	3,823.5	35.81	107.771		
11,000.0	7,500.0	7,662.7	7,660.6	58.9	13.5	-117.10	825.1	759.5	3,959.1	3,923.1	35.95	110.133		
11,100.0	7,500.0	7,664.1	7,662.0	60.6	13.5	-117.37	825.0	759.5	4,058.9	4,022.8	36.09	112.481		
11,200.0	7,500.0	7,665.5	7,663.4	62.3	13.5	-117.63	825.0	759.6	4,158.7	4,122.4	36.22	114.814		
11,244.1	7,500.0	7,666.1	7,664.0	63.0	13.5	-117.74	825.0	759.6	4,202.7	4,166.4	36.28	115.840		
11,300.0	7,500.0	7,666.9	7,664.8	64.0	13.5	-111.50	824.9	759.6	4,258.4	4,222.1	36.36	117.112		
11,400.0	7,500.0	7,668.2	7,666.1	65.7	13.5	-105.20	824.9	759.6	4,357.9	4,321.4	36.52	119.333		
11,444.1	7,500.0	7,668.8	7,666.7	66.4	13.5	-103.44	824.9	759.6	4,401.8	4,365.2	36.59	120.313		
11,500.0	7,500.0	7,669.5	7,667.5	67.4	13.5	-103.51	824.9	759.7	4,457.2	4,420.5	36.67	121.558		
11,600.0	7,500.0	7,700.0	7,697.9	69.1	13.5	-106.52	824.1	760.3	4,556.7	4,519.8	36.88	123.566		
11,700.0	7,500.0	7,700.0	7,697.9	70.8	13.5	-106.52	824.1	760.3	4,655.9	4,618.9	37.02	125.780		
11,800.0	7,500.0	7,700.0	7,697.9	72.5	13.5	-106.52	824.1	760.3	4,755.2	4,718.0	37.15	127.984		
11,900.0	7,500.0	7,700.0	7,697.9	74.2	13.5	-106.52	824.1	760.3	4,854.5	4,817.2	37.29	130.175		
12,000.0	7,500.0	7,700.0	7,697.9	76.0	13.5	-106.52	824.1	760.3	4,953.8	4,916.4	37.43	132.356		
12,100.0	7,500.0	7,700.0	7,697.9	77.7	13.5	-106.52	824.1	760.3	5,053.2	5,015.6	37.56	134.525		
12,194.1	7,500.0	7,700.0	7,697.9	79.3	13.5	-106.52	824.1	760.3	5,146.8	5,109.1	37.69	136.557		
12,200.0	7,500.0	7,700.0	7,697.9	79.4	13.5	-106.83	824.1	760.3	5,152.6	5,114.9	37.70	136.684		
12,300.0	7,500.0	7,700.0	7,697.9	81.1	13.5	-114.69	824.1	760.3	5,252.2	5,214.4	37.81	138.905		
12,387.3	7,500.0	7,700.0	7,697.9	82.6	13.5	-130.59	824.1	760.3	5,339.4	5,301.5	37.91	140.851		
12,400.0	7,500.0	7,700.0	7,697.9	82.9	13.5	-130.59	824.1	760.3	5,352.0	5,314.1	37.92	141.127		
12,500.0	7,500.0	7,700.0	7,697.9	84.6	13.5	-130.59	824.1	760.3	5,451.9	5,413.9	38.05	143.299		
12,600.0	7,500.0	7,700.0	7,697.9	86.3	13.5	-130.59	824.1	760.3	5,551.8	5,513.7	38.17	145.459		
12,700.0	7,500.0	7,700.0	7,697.9	88.0	13.5	-130.59	824.1	760.3	5,651.7	5,613.4	38.29	147.607		
12,800.0	7,500.0	7,700.0	7,697.9	89.7	13.5	-130.59	824.1	760.3	5,751.6	5,713.2	38.41	149.743		
12,900.0	7,500.0	7,700.0	7,697.9	91.5	13.5	-130.59	824.1	760.3	5,851.5	5,813.0	38.53	151.867		
13,000.0	7,500.0	7,700.0	7,697.9	93.2	13.5	-130.59	824.1	760.3	5,951.5	5,912.8	38.65	153.979		
13,100.0	7,500.0	7,700.0	7,697.9	94.9	13.5	-130.59	824.1	760.3	6,051.4	6,012.6	38.77	156.079		
13,200.0	7,500.0	7,700.0	7,697.9	96.6	13.5	-130.59	824.1	760.3	6,151.3	6,112.4	38.89	158.168		
13,300.0	7,500.0	7,700.0	7,697.9	98.4	13.5	-130.59	824.1	760.3	6,251.2	6,212.2	39.01	160.245		
13,400.0	7,500.0	7,700.0	7,697.9	100.1	13.5	-130.59	824.1	760.3	6,351.1	6,312.0	39.13	162.311		
13,500.0	7,500.0	7,700.0	7,697.9	101.8	13.5	-130.59	824.1	760.3	6,451.1	6,411.8	39.25	164.366		
13,600.0	7,500.0	7,700.0	7,697.9	103.5	13.5	-130.59	824.1	760.3	6,551.0	6,511.6	39.37	166.409		
13,700.0	7,500.0	7,700.0	7,697.9	105.3	13.5	-130.59	824.1	760.3	6,650.9	6,611.4	39.49	168.442		
13,800.0	7,500.0	7,700.0	7,697.9	107.0	13.5	-130.59	824.1	760.3	6,750.9	6,711.2	39.60	170.463		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	7,700.0	7,697.9	108.7	13.5	-130.59	824.1	760.3	6,850.8	6,811.1	39.72	172.473		
14,000.0	7,500.0	7,700.0	7,697.9	110.5	13.5	-130.59	824.1	760.3	6,950.7	6,910.9	39.84	174.473		
14,100.0	7,500.0	7,700.0	7,697.9	112.2	13.5	-130.59	824.1	760.3	7,050.7	7,010.7	39.96	176.462		
14,200.0	7,500.0	7,700.0	7,697.9	113.9	13.5	-130.59	824.1	760.3	7,150.6	7,110.5	40.07	178.440		
14,300.0	7,500.0	7,700.0	7,697.9	115.7	13.5	-130.59	824.1	760.3	7,250.5	7,210.4	40.19	180.408		
14,400.0	7,500.0	7,700.0	7,697.9	117.4	13.5	-130.59	824.1	760.3	7,350.5	7,310.2	40.31	182.366		
14,500.0	7,500.0	7,700.0	7,697.9	119.1	13.5	-130.59	824.1	760.3	7,450.4	7,410.0	40.42	184.313		
14,600.0	7,500.0	7,700.0	7,697.9	120.9	13.5	-130.59	824.1	760.3	7,550.4	7,509.8	40.54	186.250		
14,700.0	7,500.0	7,700.0	7,697.9	122.6	13.5	-130.59	824.1	760.3	7,650.3	7,609.7	40.66	188.176		
14,800.0	7,500.0	7,700.0	7,697.9	124.4	13.5	-130.59	824.1	760.3	7,750.3	7,709.5	40.77	190.093		
14,900.0	7,500.0	7,700.0	7,697.9	126.1	13.5	-130.59	824.1	760.3	7,850.2	7,809.3	40.89	192.000		
15,000.0	7,500.0	7,700.0	7,697.9	127.8	13.5	-130.59	824.1	760.3	7,950.2	7,909.2	41.00	193.897		
15,100.0	7,500.0	7,700.0	7,697.9	129.6	13.5	-130.59	824.1	760.3	8,050.1	8,009.0	41.12	195.784		
15,200.0	7,500.0	7,700.0	7,697.9	131.3	13.5	-130.59	824.1	760.3	8,150.1	8,108.9	41.23	197.661		
15,300.0	7,500.0	7,700.0	7,697.9	133.1	13.5	-130.59	824.1	760.3	8,250.0	8,208.7	41.35	199.529		
15,400.0	7,500.0	7,700.0	7,697.9	134.8	13.5	-130.59	824.1	760.3	8,350.0	8,308.5	41.46	201.387		
15,500.0	7,500.0	7,700.0	7,697.9	136.5	13.5	-130.59	824.1	760.3	8,450.0	8,408.4	41.58	203.236		
15,600.0	7,500.0	7,700.0	7,697.9	138.3	13.5	-130.59	824.1	760.3	8,549.9	8,508.2	41.69	205.076		
15,700.0	7,500.0	7,700.0	7,697.9	140.0	13.5	-130.59	824.1	760.3	8,649.9	8,608.1	41.81	206.906		
15,805.8	7,500.0	7,700.0	7,697.9	141.9	13.5	-130.59	824.1	760.3	8,755.6	8,713.7	41.93	208.832		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.69	-0.4	30.2	30.2					
100.0	100.0	100.0	100.0	0.2	0.2	90.69	-0.4	30.2	30.2	29.9	0.30	99.540		
200.0	200.0	200.0	200.0	0.3	0.3	90.69	-0.4	30.2	30.2	29.6	0.65	46.310		
300.0	300.0	300.4	300.4	0.5	0.5	91.56	-0.8	29.5	29.5	28.5	1.00	29.397		
400.0	400.0	400.8	400.8	0.7	0.7	94.47	-2.1	27.2	27.3	25.9	1.35	20.142		
500.0	500.0	501.1	501.0	0.8	0.9	100.47	-4.3	23.4	23.8	22.1	1.71	13.917		
600.0	600.0	601.1	600.8	1.0	1.1	75.26	-7.4	18.1	19.3	17.2	2.08	9.276		
700.0	700.0	700.9	700.3	1.2	1.3	102.57	-10.0	12.1	16.1	13.6	2.47	6.515		
730.4	730.3	731.2	730.6	1.3	1.3	112.73	-10.4	10.3	15.8	13.2	2.59	6.122 CC, ES, SF		
800.0	799.9	800.4	799.7	1.4	1.5	136.31	-11.4	6.3	17.5	14.6	2.84	6.159		
900.0	899.7	899.8	898.9	1.6	1.7	160.24	-12.7	0.4	25.0	21.8	3.17	7.886		
1,000.0	999.4	998.9	997.8	1.8	1.9	172.44	-14.0	-5.4	36.4	32.9	3.50	10.414		
1,100.0	1,098.9	1,097.8	1,096.5	2.0	2.1	178.72	-15.4	-11.2	50.5	46.6	3.84	13.147		
1,201.3	1,199.5	1,197.7	1,196.3	2.2	2.3	-177.76	-16.7	-17.1	66.8	62.6	4.19	15.944		
1,300.0	1,297.5	1,294.9	1,293.3	2.5	2.5	-175.73	-18.0	-22.8	83.7	79.1	4.53	18.463		
1,400.0	1,396.8	1,393.4	1,391.6	2.7	2.7	-174.36	-19.4	-28.6	100.9	96.0	4.88	20.659		
1,500.0	1,496.0	1,491.9	1,489.9	3.0	2.9	-173.39	-20.7	-34.4	118.1	112.8	5.23	22.564		
1,600.0	1,595.3	1,590.4	1,588.2	3.3	3.1	-172.67	-22.0	-40.2	135.3	129.7	5.59	24.230		
1,700.0	1,694.5	1,688.9	1,686.5	3.5	3.3	-172.11	-23.3	-46.0	152.6	146.7	5.94	25.698		
1,800.0	1,793.8	1,787.4	1,784.8	3.8	3.5	-171.66	-24.7	-51.8	169.9	163.6	6.29	27.002		
1,900.0	1,893.0	1,885.8	1,883.1	4.0	3.7	-171.30	-26.0	-57.5	187.2	180.5	6.65	28.166		
2,000.0	1,992.3	1,984.3	1,981.5	4.3	3.9	-171.00	-27.3	-63.3	204.5	197.5	7.00	29.212		
2,100.0	2,091.5	2,082.8	2,079.8	4.6	4.1	-170.74	-28.6	-69.1	221.8	214.4	7.35	30.157		
2,200.0	2,190.8	2,181.3	2,178.1	4.8	4.3	-170.52	-30.0	-74.9	239.1	231.4	7.71	31.015		
2,300.0	2,290.0	2,279.8	2,276.4	5.1	4.5	-170.34	-31.3	-80.7	256.4	248.3	8.06	31.797		
2,400.0	2,389.3	2,378.3	2,374.7	5.4	4.7	-170.17	-32.6	-86.5	273.7	265.3	8.42	32.512		
2,500.0	2,488.5	2,476.8	2,473.0	5.7	4.9	-170.03	-34.0	-92.3	291.0	282.2	8.77	33.170		
2,600.0	2,587.8	2,575.3	2,571.3	5.9	5.1	-169.90	-35.3	-98.1	308.3	299.2	9.13	33.776		
2,700.0	2,687.0	2,673.8	2,669.6	6.2	5.3	-169.78	-36.6	-103.9	325.6	316.1	9.48	34.336		
2,800.0	2,786.3	2,772.2	2,767.9	6.5	5.5	-169.68	-37.9	-109.6	342.9	333.1	9.84	34.856		
2,900.0	2,885.5	2,870.7	2,866.2	6.7	5.7	-169.59	-39.3	-115.4	360.2	350.1	10.19	35.339		
3,000.0	2,984.8	2,969.2	2,964.5	7.0	5.9	-169.50	-40.6	-121.2	377.6	367.0	10.55	35.790		
3,100.0	3,084.0	3,067.7	3,062.9	7.3	6.1	-169.42	-41.9	-127.0	394.9	384.0	10.90	36.211		
3,200.0	3,183.3	3,166.2	3,161.2	7.6	6.3	-169.35	-43.3	-132.8	412.2	400.9	11.26	36.606		
3,300.0	3,282.5	3,264.7	3,259.5	7.8	6.5	-169.29	-44.6	-138.6	429.5	417.9	11.62	36.976		
3,400.0	3,381.8	3,363.2	3,357.8	8.1	6.7	-169.23	-45.9	-144.4	446.8	434.9	11.97	37.324		
3,500.0	3,481.1	3,461.7	3,456.1	8.4	6.9	-169.17	-47.2	-150.2	464.2	451.8	12.33	37.652		
3,600.0	3,580.3	3,560.1	3,554.4	8.7	7.1	-169.12	-48.6	-156.0	481.5	468.8	12.68	37.961		
3,700.0	3,679.6	3,658.6	3,652.7	8.9	7.3	-169.07	-49.9	-161.7	498.8	485.8	13.04	38.253		
3,800.0	3,778.8	3,757.1	3,751.0	9.2	7.5	-169.03	-51.2	-167.5	516.1	502.7	13.39	38.530		
3,900.0	3,878.1	3,855.6	3,849.3	9.5	7.7	-168.99	-52.5	-173.3	533.4	519.7	13.75	38.793		
4,000.0	3,977.3	3,954.1	3,947.6	9.8	7.9	-168.95	-53.9	-179.1	550.7	536.6	14.11	39.042		
4,100.0	4,076.6	4,052.6	4,045.9	10.0	8.1	-168.91	-55.2	-184.9	568.1	553.6	14.46	39.278		
4,200.0	4,175.8	4,151.1	4,144.2	10.3	8.3	-168.87	-56.5	-190.7	585.4	570.6	14.82	39.504		
4,300.0	4,275.1	4,249.6	4,242.6	10.6	8.5	-168.84	-57.9	-196.5	602.7	587.5	15.17	39.719		
4,400.0	4,374.3	4,348.0	4,340.9	10.9	8.7	-168.81	-59.2	-202.3	620.0	604.5	15.53	39.923		
4,500.0	4,473.6	4,446.5	4,439.2	11.1	8.9	-168.78	-60.5	-208.1	637.4	621.5	15.89	40.119		
4,600.0	4,572.8	4,545.0	4,537.5	11.4	9.1	-168.75	-61.8	-213.8	654.7	638.4	16.24	40.306		
4,700.0	4,672.1	4,643.5	4,635.8	11.7	9.3	-168.73	-63.2	-219.6	672.0	655.4	16.60	40.485		
4,800.0	4,771.3	4,742.0	4,734.1	12.0	9.5	-168.70	-64.5	-225.4	689.3	672.4	16.95	40.657		
4,900.0	4,870.6	4,840.5	4,832.4	12.2	9.7	-168.68	-65.8	-231.2	706.6	689.3	17.31	40.821		
5,000.0	4,969.8	4,939.0	4,930.7	12.5	9.9	-168.66	-67.2	-237.0	724.0	706.3	17.67	40.979		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,069.1	5,037.5	5,029.0	12.8	10.1	-168.64	-68.5	-242.8	741.3	723.3	18.02	41.130		
5,200.0	5,168.3	5,135.9	5,127.3	13.1	10.3	-168.61	-69.8	-248.6	758.6	740.2	18.38	41.276		
5,300.0	5,267.6	5,234.4	5,225.6	13.3	10.5	-168.60	-71.1	-254.4	775.9	757.2	18.74	41.416		
5,400.0	5,366.8	5,332.9	5,324.0	13.6	10.7	-168.58	-72.5	-260.2	793.3	774.2	19.09	41.550		
5,500.0	5,466.1	5,431.4	5,422.3	13.9	10.9	-168.56	-73.8	-265.9	810.6	791.1	19.45	41.680		
5,600.0	5,565.3	5,529.9	5,520.6	14.2	11.1	-168.54	-75.1	-271.7	827.9	808.1	19.80	41.805		
5,700.0	5,664.6	5,628.4	5,618.9	14.4	11.3	-168.52	-76.4	-277.5	845.2	825.1	20.16	41.926		
5,800.0	5,763.8	5,726.9	5,717.2	14.7	11.5	-168.51	-77.8	-283.3	862.5	842.0	20.52	42.042		
5,900.0	5,863.1	5,825.4	5,815.5	15.0	11.7	-168.49	-79.1	-289.1	879.9	859.0	20.87	42.155		
6,000.0	5,962.3	5,923.9	5,913.8	15.3	11.9	-168.48	-80.4	-294.9	897.2	876.0	21.23	42.264		
6,100.0	6,061.6	6,022.3	6,012.1	15.5	12.1	-168.46	-81.8	-300.7	914.5	892.9	21.58	42.369		
6,200.0	6,160.9	6,120.8	6,110.4	15.8	12.3	-168.45	-83.1	-306.5	931.8	909.9	21.94	42.470		
6,300.0	6,260.1	6,219.3	6,208.7	16.1	12.5	-168.44	-84.4	-312.3	949.2	926.9	22.30	42.569		
6,400.0	6,359.4	6,317.8	6,307.0	16.4	12.7	-168.43	-85.7	-318.0	966.5	943.8	22.65	42.664		
6,500.0	6,458.6	6,416.3	6,405.3	16.6	12.9	-168.41	-87.1	-323.8	983.8	960.8	23.01	42.756		
6,600.0	6,557.9	6,514.8	6,503.7	16.9	13.1	-168.40	-88.4	-329.6	1,001.1	977.8	23.37	42.846		
6,700.0	6,657.1	6,613.3	6,602.0	17.2	13.3	-168.39	-89.7	-335.4	1,018.5	994.7	23.72	42.933		
6,800.0	6,756.4	6,711.8	6,700.3	17.5	13.5	-168.38	-91.0	-341.2	1,035.8	1,011.7	24.08	43.017		
6,900.0	6,855.6	6,810.2	6,798.6	17.7	13.7	-168.37	-92.4	-347.0	1,053.1	1,028.7	24.43	43.099		
6,919.5	6,875.0	6,829.4	6,817.7	17.8	13.7	-168.37	-92.6	-348.1	1,056.5	1,032.0	24.50	43.115		
6,950.0	6,905.3	6,859.6	6,847.8	17.9	13.8	168.71	-93.0	-349.9	1,061.3	1,036.6	24.61	43.125		
7,000.0	6,955.1	6,909.1	6,897.2	17.9	13.9	110.22	-93.7	-352.8	1,066.9	1,042.1	24.77	43.069		
7,050.0	7,004.8	6,958.4	6,946.5	17.9	14.0	81.36	-94.4	-355.7	1,069.8	1,044.9	24.93	42.920		
7,100.0	7,053.8	7,007.3	6,995.3	17.9	14.1	71.10	-95.0	-358.6	1,070.1	1,045.0	25.07	42.680		
7,150.0	7,101.9	7,055.3	7,043.2	17.9	14.2	66.80	-95.7	-361.4	1,067.8	1,042.6	25.21	42.356		
7,200.0	7,148.7	7,102.0	7,089.8	17.8	14.3	65.06	-96.3	-364.1	1,063.0	1,037.7	25.34	41.955		
7,250.0	7,193.8	8,113.9	7,740.0	17.7	18.6	112.77	509.1	-402.4	1,051.5	1,022.6	28.87	36.423		
7,300.0	7,236.9	8,088.8	7,740.0	17.5	18.3	112.17	484.0	-402.4	1,032.7	1,003.8	28.91	35.723		
7,350.0	7,277.7	7,887.4	7,707.9	17.4	16.6	102.50	286.3	-400.5	1,014.5	987.0	27.54	36.837		
7,400.0	7,315.7	7,793.3	7,669.7	17.2	16.0	98.28	200.4	-398.3	995.9	968.7	27.22	36.591		
7,450.0	7,350.9	7,741.3	7,642.7	17.1	15.7	96.46	156.0	-396.7	978.7	951.6	27.12	36.089		
7,500.0	7,382.8	7,701.9	7,619.7	16.9	15.6	95.31	124.1	-395.3	963.3	936.2	27.05	35.610		
7,550.0	7,411.3	7,668.0	7,598.2	16.7	15.4	94.36	98.0	-394.1	949.7	922.8	26.99	35.191		
7,600.0	7,436.1	7,636.9	7,577.1	16.6	15.3	93.46	75.2	-392.8	938.1	911.2	26.92	34.851		
7,650.0	7,457.1	7,607.5	7,556.0	16.5	15.2	92.52	54.7	-391.6	928.4	901.5	26.85	34.580		
7,700.0	7,474.0	7,579.2	7,534.8	16.4	15.2	91.51	36.0	-390.3	920.5	893.7	26.79	34.367		
7,750.0	7,486.8	7,551.6	7,513.2	16.4	15.1	90.42	18.8	-389.1	914.5	887.8	26.74	34.204		
7,800.0	7,495.3	7,524.5	7,491.3	16.4	15.0	89.24	2.9	-387.8	910.3	883.6	26.71	34.076		
7,850.0	7,499.5	7,497.8	7,468.9	16.5	15.0	87.98	-11.6	-386.5	907.7	881.0	26.72	33.971		
7,873.6	7,500.0	7,485.3	7,458.3	16.5	15.0	87.36	-18.1	-385.8	907.0	880.3	26.74	33.925		
7,899.9	7,500.0	7,471.9	7,446.7	16.5	14.9	86.63	-24.7	-385.2	906.7	880.0	26.76	33.884		
7,900.0	7,500.0	7,471.9	7,446.6	16.5	14.9	86.63	-24.7	-385.1	906.7	880.0	26.76	33.884		
8,000.0	7,500.0	7,429.7	7,409.1	16.9	14.9	84.25	-43.9	-382.9	911.1	884.2	26.94	33.821		
8,100.0	7,500.0	7,400.0	7,382.0	17.4	14.8	82.54	-55.7	-381.3	924.6	897.4	27.24	33.948		
8,200.0	7,500.0	7,372.6	7,356.4	18.0	14.8	80.93	-65.4	-379.8	947.5	919.9	27.59	34.334		
8,300.0	7,500.0	7,350.0	7,334.9	18.8	14.7	79.59	-72.4	-378.6	979.2	951.2	28.00	34.976		
8,400.0	7,500.0	7,336.3	7,321.7	19.7	14.7	78.77	-76.2	-377.8	1,019.3	990.9	28.43	35.858		
8,500.0	7,500.0	7,322.7	7,308.7	20.7	14.7	77.96	-79.7	-377.0	1,067.0	1,038.1	28.84	36.992		
8,600.0	7,500.0	7,300.0	7,286.6	21.9	14.7	76.60	-84.9	-375.7	1,121.4	1,092.2	29.20	38.398		
8,700.0	7,500.0	7,300.0	7,286.6	23.1	14.7	76.60	-84.9	-375.7	1,181.3	1,151.7	29.61	39.896		
8,800.0	7,500.0	7,300.0	7,286.6	24.3	14.7	76.60	-84.9	-375.7	1,246.4	1,216.4	29.98	41.574		
8,900.0	7,500.0	7,300.0	7,286.6	25.6	14.7	76.60	-84.9	-375.7	1,315.8	1,285.5	30.32	43.403		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,500.0	7,279.3	7,266.3	27.0	14.6	75.36	-88.8	-374.5	1,388.6	1,358.1	30.56	45.445		
9,100.0	7,500.0	7,273.6	7,260.7	28.4	14.6	75.02	-89.7	-374.2	1,464.7	1,433.9	30.82	47.523		
9,200.0	7,500.0	7,268.5	7,255.7	29.9	14.6	74.71	-90.6	-373.9	1,543.5	1,512.4	31.07	49.683		
9,300.0	7,500.0	7,250.0	7,237.4	31.4	14.6	73.61	-93.1	-372.8	1,624.7	1,593.5	31.25	51.995		
9,400.0	7,500.0	7,250.0	7,237.4	32.9	14.6	73.61	-93.1	-372.8	1,707.7	1,676.2	31.48	54.251		
9,500.0	7,500.0	7,250.0	7,237.4	34.4	14.6	73.61	-93.1	-372.8	1,792.3	1,760.6	31.69	56.555		
9,600.0	7,500.0	7,250.0	7,237.4	36.0	14.6	73.61	-93.1	-372.8	1,878.5	1,846.6	31.90	58.896		
9,700.0	7,500.0	7,250.0	7,237.4	37.5	14.6	73.61	-93.1	-372.8	1,966.0	1,933.9	32.09	61.267		
9,800.0	7,500.0	7,250.0	7,237.4	39.1	14.6	73.61	-93.1	-372.8	2,054.6	2,022.4	32.27	63.661		
9,900.0	7,500.0	7,250.0	7,237.4	40.7	14.6	73.61	-93.1	-372.8	2,144.3	2,111.8	32.45	66.073		
10,000.0	7,500.0	7,250.0	7,237.4	42.3	14.6	73.61	-93.1	-372.8	2,234.8	2,202.1	32.63	68.498		
10,100.0	7,500.0	7,250.0	7,237.4	43.9	14.6	73.61	-93.1	-372.8	2,326.1	2,293.3	32.79	70.931		
10,200.0	7,500.0	7,250.0	7,237.4	45.6	14.6	73.61	-93.1	-372.8	2,418.0	2,385.1	32.96	73.371		
10,300.0	7,500.0	7,250.0	7,237.4	47.2	14.6	73.61	-93.1	-372.8	2,510.6	2,477.5	33.12	75.814		
10,400.0	7,500.0	7,250.0	7,237.4	48.9	14.6	73.61	-93.1	-372.8	2,603.8	2,570.5	33.27	78.257		
10,500.0	7,500.0	7,250.0	7,237.4	50.5	14.6	73.61	-93.1	-372.8	2,697.4	2,664.0	33.43	80.699		
10,600.0	7,500.0	7,250.0	7,237.4	52.2	14.6	73.61	-93.1	-372.8	2,791.5	2,757.9	33.58	83.138		
10,700.0	7,500.0	7,228.7	7,216.2	53.8	14.5	72.35	-95.3	-371.6	2,885.5	2,851.8	33.66	85.729		
10,800.0	7,500.0	7,227.3	7,214.8	55.5	14.5	72.26	-95.4	-371.5	2,980.3	2,946.5	33.80	88.170		
10,900.0	7,500.0	7,226.0	7,213.5	57.2	14.5	72.18	-95.5	-371.4	3,075.4	3,041.4	33.94	90.604		
11,000.0	7,500.0	7,224.7	7,212.2	58.9	14.5	72.11	-95.6	-371.3	3,170.8	3,136.7	34.08	93.030		
11,100.0	7,500.0	7,223.5	7,211.1	60.6	14.5	72.04	-95.7	-371.3	3,266.4	3,232.2	34.22	95.447		
11,200.0	7,500.0	7,222.4	7,209.9	62.3	14.5	71.97	-95.8	-371.2	3,362.4	3,328.0	34.36	97.854		
11,244.1	7,500.0	7,221.9	7,209.5	63.0	14.5	71.94	-95.8	-371.2	3,404.8	3,370.3	34.42	98.914		
11,300.0	7,500.0	7,200.0	7,187.6	64.0	14.5	69.27	-97.0	-369.9	3,459.1	3,424.7	34.43	100.474		
11,400.0	7,500.0	7,200.0	7,187.6	65.7	14.5	66.15	-97.0	-369.9	3,556.3	3,521.7	34.56	102.909		
11,444.1	7,500.0	7,200.0	7,187.6	66.4	14.5	64.42	-97.0	-369.9	3,599.4	3,564.8	34.62	103.979		
11,500.0	7,500.0	7,200.0	7,187.6	67.4	14.5	64.42	-97.0	-369.9	3,654.2	3,619.5	34.69	105.326		
11,600.0	7,500.0	7,200.0	7,187.6	69.1	14.5	64.42	-97.0	-369.9	3,752.2	3,717.4	34.83	107.725		
11,700.0	7,500.0	7,200.0	7,187.6	70.8	14.5	64.42	-97.0	-369.9	3,850.4	3,815.4	34.97	110.110		
11,800.0	7,500.0	7,200.0	7,187.6	72.5	14.5	64.42	-97.0	-369.9	3,948.7	3,913.6	35.11	112.481		
11,900.0	7,500.0	7,200.0	7,187.6	74.2	14.5	64.42	-97.0	-369.9	4,047.0	4,011.8	35.24	114.838		
12,000.0	7,500.0	7,200.0	7,187.6	76.0	14.5	64.42	-97.0	-369.9	4,145.4	4,110.1	35.38	117.181		
12,100.0	7,500.0	7,200.0	7,187.6	77.7	14.5	64.42	-97.0	-369.9	4,243.9	4,208.4	35.51	119.510		
12,194.1	7,500.0	7,200.0	7,187.6	79.3	14.5	64.42	-97.0	-369.9	4,336.7	4,301.1	35.64	121.690		
12,200.0	7,500.0	7,200.0	7,187.6	79.4	14.5	64.71	-97.0	-369.9	4,342.5	4,306.9	35.65	121.825		
12,300.0	7,500.0	7,200.0	7,187.6	81.1	14.5	68.96	-97.0	-369.9	4,440.8	4,405.0	35.79	124.085		
12,387.3	7,500.0	7,200.0	7,187.6	82.6	14.5	71.72	-97.0	-369.9	4,526.3	4,490.4	35.91	126.037		
12,400.0	7,500.0	7,200.0	7,187.6	82.9	14.5	71.72	-97.0	-369.9	4,538.6	4,502.7	35.93	126.321		
12,500.0	7,500.0	7,200.0	7,187.6	84.6	14.5	71.72	-97.0	-369.9	4,636.2	4,600.2	36.06	128.563		
12,600.0	7,500.0	7,200.0	7,187.6	86.3	14.5	71.72	-97.0	-369.9	4,733.9	4,697.7	36.19	130.792		
12,700.0	7,500.0	7,200.0	7,187.6	88.0	14.5	71.72	-97.0	-369.9	4,831.7	4,795.4	36.33	133.010		
12,800.0	7,500.0	7,200.0	7,187.6	89.7	14.5	71.72	-97.0	-369.9	4,929.6	4,893.2	36.46	135.215		
12,900.0	7,500.0	7,200.0	7,187.6	91.5	14.5	71.72	-97.0	-369.9	5,027.6	4,991.0	36.59	137.409		
13,000.0	7,500.0	7,200.0	7,187.6	93.2	14.5	71.72	-97.0	-369.9	5,125.7	5,089.0	36.72	139.590		
13,100.0	7,500.0	7,200.0	7,187.6	94.9	14.5	71.72	-97.0	-369.9	5,223.8	5,187.0	36.85	141.760		
13,200.0	7,500.0	7,200.0	7,187.6	96.6	14.5	71.72	-97.0	-369.9	5,322.0	5,285.0	36.98	143.917		
13,300.0	7,500.0	7,200.0	7,187.6	98.4	14.5	71.72	-97.0	-369.9	5,420.3	5,383.2	37.11	146.063		
13,400.0	7,500.0	7,200.0	7,187.6	100.1	14.5	71.72	-97.0	-369.9	5,518.6	5,481.4	37.24	148.197		
13,500.0	7,500.0	7,200.0	7,187.6	101.8	14.5	71.72	-97.0	-369.9	5,617.0	5,579.6	37.37	150.319		
13,600.0	7,500.0	7,200.0	7,187.6	103.5	14.5	71.72	-97.0	-369.9	5,715.4	5,677.9	37.50	152.430		
13,700.0	7,500.0	7,200.0	7,187.6	105.3	14.5	71.72	-97.0	-369.9	5,813.9	5,776.3	37.62	154.528		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
13,800.0	7,500.0	7,200.0	7,187.6	107.0	14.5	71.72	-97.0	-369.9	5,912.5	5,874.7	37.75	156.615	
13,900.0	7,500.0	7,200.0	7,187.6	108.7	14.5	71.72	-97.0	-369.9	6,011.1	5,973.2	37.88	158.691	
14,000.0	7,500.0	7,200.0	7,187.6	110.5	14.5	71.72	-97.0	-369.9	6,109.7	6,071.7	38.01	160.755	
14,100.0	7,500.0	7,200.0	7,187.6	112.2	14.5	71.72	-97.0	-369.9	6,208.4	6,170.3	38.13	162.808	
14,200.0	7,500.0	7,200.0	7,187.6	113.9	14.5	71.72	-97.0	-369.9	6,307.1	6,268.9	38.26	164.849	
14,300.0	7,500.0	7,200.0	7,187.6	115.7	14.5	71.72	-97.0	-369.9	6,405.9	6,367.5	38.39	166.879	
14,400.0	7,500.0	7,200.0	7,187.6	117.4	14.5	71.72	-97.0	-369.9	6,504.7	6,466.2	38.51	168.898	
14,500.0	7,500.0	7,200.0	7,187.6	119.1	14.5	71.72	-97.0	-369.9	6,603.5	6,564.9	38.64	170.905	
14,600.0	7,500.0	7,200.0	7,187.6	120.9	14.5	71.72	-97.0	-369.9	6,702.4	6,663.6	38.76	172.902	
14,700.0	7,500.0	7,200.0	7,187.6	122.6	14.5	71.72	-97.0	-369.9	6,801.3	6,762.4	38.89	174.888	
14,800.0	7,500.0	7,200.0	7,187.6	124.4	14.5	71.72	-97.0	-369.9	6,900.2	6,861.2	39.01	176.863	
14,900.0	7,500.0	7,200.0	7,187.6	126.1	14.5	71.72	-97.0	-369.9	6,999.2	6,960.1	39.14	178.827	
15,000.0	7,500.0	7,200.0	7,187.6	127.8	14.5	71.72	-97.0	-369.9	7,098.2	7,058.9	39.26	180.780	
15,100.0	7,500.0	7,200.0	7,187.6	129.6	14.5	71.72	-97.0	-369.9	7,197.2	7,157.8	39.39	182.723	
15,200.0	7,500.0	7,200.0	7,187.6	131.3	14.5	71.72	-97.0	-369.9	7,296.3	7,256.8	39.51	184.655	
15,300.0	7,500.0	7,200.0	7,187.6	133.1	14.5	71.72	-97.0	-369.9	7,395.4	7,355.7	39.64	186.577	
15,400.0	7,500.0	7,200.0	7,187.6	134.8	14.5	71.72	-97.0	-369.9	7,494.5	7,454.7	39.76	188.489	
15,500.0	7,500.0	7,200.0	7,187.6	136.5	14.5	71.72	-97.0	-369.9	7,593.6	7,553.7	39.88	190.390	
15,600.0	7,500.0	7,200.0	7,187.6	138.3	14.5	71.72	-97.0	-369.9	7,692.7	7,652.7	40.01	192.281	
15,700.0	7,500.0	7,200.0	7,187.6	140.0	14.5	71.72	-97.0	-369.9	7,791.9	7,751.8	40.13	194.162	
15,805.8	7,500.0	7,200.0	7,187.6	141.9	14.5	71.72	-97.0	-369.9	7,896.8	7,856.5	40.26	196.141	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.56	-0.4	37.5	37.5					
100.0	100.0	100.0	100.0	0.2	0.2	90.56	-0.4	37.5	37.5	37.2	0.30	123.501		
200.0	200.0	200.0	200.0	0.3	0.3	90.56	-0.4	37.5	37.5	36.9	0.65	57.458		
300.0	300.0	300.0	300.0	0.5	0.5	90.56	-0.4	37.5	37.5	36.5	1.00	37.438		
400.0	400.0	400.4	400.4	0.7	0.7	91.61	-1.0	36.9	37.0	35.6	1.35	27.334		
500.0	500.0	500.8	500.7	0.8	0.9	94.96	-3.1	35.2	35.4	33.7	1.70	20.760		
600.0	600.0	600.9	600.8	1.0	1.0	63.09	-6.4	32.4	32.7	30.6	2.06	15.827		
700.0	700.0	700.4	700.1	1.2	1.2	75.07	-9.9	29.8	30.3	27.9	2.43	12.495		
770.4	770.3	770.4	770.2	1.3	1.3	84.47	-11.7	28.8	29.8	27.1	2.68	11.116 CC		
800.0	799.9	799.9	799.6	1.4	1.4	88.50	-12.3	28.5	29.9	27.1	2.79	10.723 ES		
900.0	899.7	899.6	899.3	1.6	1.6	101.58	-13.8	28.7	31.5	28.4	3.15	10.019 SF		
1,000.0	999.4	999.2	998.9	1.8	1.7	114.55	-14.9	29.2	35.3	31.7	3.51	10.044		
1,100.0	1,098.9	1,098.7	1,098.4	2.0	1.9	126.58	-16.0	29.8	41.4	37.6	3.87	10.707		
1,201.3	1,199.5	1,199.3	1,199.0	2.2	2.1	136.72	-17.1	30.4	50.3	46.1	4.23	11.902		
1,300.0	1,297.5	1,297.2	1,296.9	2.5	2.3	144.05	-18.3	30.9	60.8	56.2	4.57	13.289		
1,400.0	1,396.8	1,396.4	1,396.0	2.7	2.4	149.24	-19.4	31.5	72.1	67.1	4.92	14.645		
1,500.0	1,496.0	1,495.5	1,495.2	3.0	2.6	153.01	-20.5	32.0	83.8	78.5	5.27	15.904		
1,600.0	1,595.3	1,594.7	1,594.4	3.3	2.8	155.85	-21.6	32.6	95.7	90.1	5.61	17.055		
1,700.0	1,694.5	1,693.9	1,693.5	3.5	3.0	158.05	-22.7	33.2	107.9	101.9	5.96	18.102		
1,800.0	1,793.8	1,793.1	1,792.7	3.8	3.1	159.81	-23.8	33.7	120.2	113.9	6.31	19.053		
1,900.0	1,893.0	1,892.3	1,891.9	4.0	3.3	161.23	-24.9	34.3	132.6	125.9	6.66	19.918		
2,000.0	1,992.3	1,991.4	1,991.1	4.3	3.5	162.42	-26.1	34.8	145.0	138.0	7.00	20.706		
2,100.0	2,091.5	2,090.6	2,090.2	4.6	3.7	163.42	-27.2	35.4	157.5	150.2	7.35	21.426		
2,200.0	2,190.8	2,189.8	2,189.4	4.8	3.8	164.27	-28.3	36.0	170.0	162.3	7.70	22.086		
2,300.0	2,290.0	2,289.0	2,288.6	5.1	4.0	165.00	-29.4	36.5	182.6	174.6	8.05	22.692		
2,400.0	2,389.3	2,388.2	2,387.8	5.4	4.2	165.64	-30.5	37.1	195.2	186.8	8.40	23.251		
2,500.0	2,488.5	2,487.4	2,486.9	5.7	4.4	166.20	-31.6	37.7	207.8	199.1	8.74	23.768		
2,600.0	2,587.8	2,586.5	2,586.1	5.9	4.5	166.70	-32.7	38.2	220.4	211.4	9.09	24.246		
2,700.0	2,687.0	2,685.7	2,685.3	6.2	4.7	167.14	-33.9	38.8	233.1	223.7	9.44	24.691		
2,800.0	2,786.3	2,784.9	2,784.5	6.5	4.9	167.54	-35.0	39.3	245.7	236.0	9.79	25.105		
2,900.0	2,885.5	2,884.1	2,883.6	6.7	5.1	167.90	-36.1	39.9	258.4	248.3	10.14	25.492		
3,000.0	2,984.8	2,983.3	2,982.8	7.0	5.2	168.22	-37.2	40.5	271.1	260.6	10.49	25.853		
3,100.0	3,084.0	3,082.4	3,082.0	7.3	5.4	168.52	-38.3	41.0	283.8	272.9	10.83	26.192		
3,200.0	3,183.3	3,181.6	3,181.2	7.6	5.6	168.79	-39.4	41.6	296.5	285.3	11.18	26.511		
3,300.0	3,282.5	3,280.8	3,280.3	7.8	5.7	169.04	-40.6	42.1	309.2	297.6	11.53	26.810		
3,400.0	3,381.8	3,380.0	3,379.5	8.1	5.9	169.27	-41.7	42.7	321.9	310.0	11.88	27.093		
3,500.0	3,481.1	3,479.2	3,478.7	8.4	6.1	169.48	-42.8	43.3	334.6	322.4	12.23	27.359		
3,600.0	3,580.3	3,578.4	3,577.9	8.7	6.3	169.68	-43.9	43.8	347.3	334.7	12.58	27.612		
3,700.0	3,679.6	3,677.5	3,677.0	8.9	6.4	169.86	-45.0	44.4	360.0	347.1	12.93	27.850		
3,800.0	3,778.8	3,776.7	3,776.2	9.2	6.6	170.03	-46.1	45.0	372.7	359.5	13.28	28.077		
3,900.0	3,878.1	3,875.9	3,875.4	9.5	6.8	170.19	-47.2	45.5	385.4	371.8	13.62	28.292		
4,000.0	3,977.3	3,975.1	3,974.6	9.8	7.0	170.33	-48.4	46.1	398.2	384.2	13.97	28.496		
4,100.0	4,076.6	4,074.3	4,073.7	10.0	7.1	170.47	-49.5	46.6	410.9	396.6	14.32	28.691		
4,200.0	4,175.8	4,173.4	4,172.9	10.3	7.3	170.60	-50.6	47.2	423.6	409.0	14.67	28.876		
4,300.0	4,275.1	4,272.6	4,272.1	10.6	7.5	170.73	-51.7	47.8	436.4	421.3	15.02	29.053		
4,400.0	4,374.3	4,371.8	4,371.3	10.9	7.7	170.84	-52.8	48.3	449.1	433.7	15.37	29.222		
4,500.0	4,473.6	4,471.0	4,470.4	11.1	7.8	170.95	-53.9	48.9	461.8	446.1	15.72	29.384		
4,600.0	4,572.8	4,570.2	4,569.6	11.4	8.0	171.06	-55.0	49.4	474.6	458.5	16.07	29.539		
4,700.0	4,672.1	4,669.4	4,668.8	11.7	8.2	171.16	-56.2	50.0	487.3	470.9	16.41	29.687		
4,800.0	4,771.3	4,768.5	4,767.9	12.0	8.4	171.25	-57.3	50.6	500.0	483.3	16.76	29.829		
4,900.0	4,870.6	4,867.7	4,867.1	12.2	8.5	171.34	-58.4	51.1	512.8	495.7	17.11	29.965		
5,000.0	4,969.8	4,966.9	4,966.3	12.5	8.7	171.42	-59.5	51.7	525.5	508.1	17.46	30.096		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,069.1	5,066.1	5,065.5	12.8	8.9	171.50	-60.6	52.3	538.3	520.5	17.81	30.222	
5,200.0	5,168.3	5,165.3	5,164.6	13.1	9.1	171.58	-61.7	52.8	551.0	532.9	18.16	30.343	
5,300.0	5,267.6	5,264.4	5,263.8	13.3	9.2	171.65	-62.9	53.4	563.8	545.2	18.51	30.460	
5,400.0	5,366.8	5,363.6	5,363.0	13.6	9.4	171.72	-64.0	53.9	576.5	557.6	18.86	30.572	
5,500.0	5,466.1	5,462.8	5,462.2	13.9	9.6	171.79	-65.1	54.5	589.3	570.0	19.21	30.680	
5,600.0	5,565.3	5,562.0	5,561.3	14.2	9.8	171.86	-66.2	55.1	602.0	582.4	19.56	30.784	
5,700.0	5,664.6	5,661.2	5,660.5	14.4	9.9	171.92	-67.3	55.6	614.7	594.8	19.90	30.885	
5,800.0	5,763.8	5,760.4	5,759.7	14.7	10.1	171.98	-68.4	56.2	627.5	607.2	20.25	30.982	
5,900.0	5,863.1	5,859.5	5,858.9	15.0	10.3	172.03	-69.5	56.7	640.2	619.6	20.60	31.077	
6,000.0	5,962.3	5,958.7	5,958.0	15.3	10.5	172.09	-70.7	57.3	653.0	632.0	20.95	31.167	
6,100.0	6,061.6	6,057.9	6,057.2	15.5	10.6	172.14	-71.8	57.9	665.7	644.4	21.30	31.255	
6,200.0	6,160.9	6,157.1	6,156.4	15.8	10.8	172.19	-72.9	58.4	678.5	656.8	21.65	31.341	
6,300.0	6,260.1	6,256.3	6,255.6	16.1	11.0	172.24	-74.0	59.0	691.2	669.2	22.00	31.423	
6,400.0	6,359.4	6,355.5	6,354.7	16.4	11.2	172.29	-75.1	59.6	704.0	681.7	22.35	31.503	
6,500.0	6,458.6	6,454.6	6,453.9	16.6	11.3	172.33	-76.2	60.1	716.8	694.1	22.70	31.580	
6,600.0	6,557.9	6,553.8	6,553.1	16.9	11.5	172.37	-77.3	60.7	729.5	706.5	23.05	31.656	
6,700.0	6,657.1	6,653.0	6,652.3	17.2	11.7	172.42	-78.5	61.2	742.3	718.9	23.39	31.728	
6,800.0	6,756.4	6,752.2	6,751.4	17.5	11.9	172.46	-79.6	61.8	755.0	731.3	23.74	31.799	
6,900.0	6,855.6	6,851.3	7,500.0	17.7	17.2	-137.63	562.9	54.7	766.4	744.1	22.37	34.259	
6,919.5	6,875.0	7,901.1	7,500.0	17.8	17.2	-137.41	564.7	54.7	751.1	728.4	22.68	33.113	
6,950.0	6,905.3	7,903.2	7,500.0	17.9	17.2	-156.01	566.7	54.6	727.4	704.3	23.18	31.378	
7,000.0	6,955.1	7,903.0	7,500.0	17.9	17.2	151.46	566.5	54.6	689.7	665.7	24.02	28.715	
7,050.0	7,004.8	7,898.4	7,500.0	17.9	17.2	127.08	562.0	54.7	653.7	628.8	24.86	26.290	
7,100.0	7,053.8	7,889.5	7,500.0	17.9	17.0	119.77	553.1	54.9	619.9	594.2	25.70	24.119	
7,150.0	7,101.9	7,876.4	7,500.0	17.9	16.9	116.98	540.0	55.1	588.8	562.3	26.50	22.219	
7,200.0	7,148.7	7,859.1	7,500.0	17.8	16.7	115.39	522.7	55.4	560.9	533.6	27.23	20.599	
7,250.0	7,193.8	7,837.9	7,500.0	17.7	16.5	113.97	501.4	55.8	536.4	508.5	27.84	19.263	
7,300.0	7,236.9	7,800.1	7,499.3	17.5	16.0	111.10	463.7	56.4	515.3	487.2	28.11	18.332	
7,350.0	7,277.7	7,756.9	7,495.6	17.4	15.6	107.63	420.7	57.1	497.1	468.9	28.23	17.612	
7,400.0	7,315.7	7,717.6	7,489.4	17.2	15.2	104.43	381.8	57.8	482.1	453.7	28.33	17.018	
7,450.0	7,350.9	7,681.0	7,481.3	17.1	14.9	101.30	346.2	58.4	470.3	442.0	28.36	16.583	
7,500.0	7,382.8	7,646.5	7,471.5	16.9	14.6	98.17	313.1	58.9	462.0	433.7	28.30	16.325	
7,550.0	7,411.3	7,613.4	7,460.4	16.7	14.3	94.96	282.0	59.4	457.1	428.9	28.15	16.240	
7,599.8	7,436.0	7,581.6	7,447.9	16.6	14.1	91.68	252.8	59.8	455.5	427.6	27.90	16.324	
7,600.0	7,436.1	7,581.5	7,447.9	16.6	14.1	91.67	252.7	59.8	455.5	427.6	27.90	16.325	
7,650.0	7,457.1	7,550.0	7,434.0	16.5	13.8	88.24	224.4	60.2	457.0	429.4	27.58	16.572	
7,700.0	7,474.0	7,520.3	7,419.4	16.4	13.7	84.86	198.5	60.6	461.3	434.1	27.24	16.936	
7,750.0	7,486.8	7,490.6	7,403.6	16.4	13.5	81.40	173.4	61.0	468.1	441.2	26.88	17.414	
7,800.0	7,495.3	7,461.4	7,386.8	16.4	13.3	77.97	149.5	61.3	476.9	450.3	26.54	17.967	
7,850.0	7,499.5	7,432.6	7,369.0	16.5	13.2	74.60	126.8	61.6	487.3	461.1	26.25	18.568	
7,873.6	7,500.0	7,419.2	7,360.3	16.5	13.2	73.05	116.6	61.7	492.7	466.6	26.13	18.859	
7,900.0	7,500.0	7,400.0	7,347.6	16.5	13.1	71.60	102.3	61.9	499.3	473.3	25.94	19.247	
8,000.0	7,500.0	7,350.0	7,312.1	16.9	12.9	67.67	67.1	62.3	530.7	505.1	25.59	20.738	
8,100.0	7,500.0	7,312.5	7,283.5	17.4	12.8	64.67	42.9	62.6	572.5	547.1	25.47	22.475	
8,200.0	7,500.0	7,277.0	7,255.0	18.0	12.7	61.82	21.7	62.8	623.8	598.4	25.44	24.523	
8,300.0	7,500.0	7,250.0	7,232.5	18.8	12.6	59.66	6.7	62.9	683.2	657.6	25.54	26.745	
8,400.0	7,500.0	7,221.1	7,207.7	19.7	12.6	57.39	-8.1	63.1	749.2	723.6	25.65	29.209	
8,500.0	7,500.0	7,200.0	7,189.1	20.7	12.6	55.77	-18.1	63.1	820.7	794.9	25.84	31.761	
8,600.0	7,500.0	7,179.6	7,170.8	21.9	12.5	54.22	-27.1	63.2	896.6	870.6	26.03	34.440	
8,700.0	7,500.0	7,150.0	7,143.7	23.1	12.5	52.04	-39.0	63.2	976.3	950.2	26.14	37.350	
8,800.0	7,500.0	7,150.0	7,143.7	24.3	12.5	52.04	-39.0	63.2	1,058.5	1,032.0	26.48	39.975	
8,900.0	7,500.0	7,150.0	7,143.7	25.6	12.5	52.04	-39.0	63.2	1,143.5	1,116.7	26.78	42.693	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3											Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,500.0	7,122.9	7,118.4	27.0	12.4	50.12	-48.6	63.3	1,229.9	1,203.0	26.89	45.743		
9,100.0	7,500.0	7,100.0	7,096.7	28.4	12.4	48.55	-55.8	63.3	1,318.3	1,291.3	27.01	48.801		
9,200.0	7,500.0	7,100.0	7,096.7	29.9	12.4	48.55	-55.8	63.3	1,407.7	1,380.5	27.27	51.615		
9,300.0	7,500.0	7,100.0	7,096.7	31.4	12.4	48.55	-55.8	63.3	1,498.5	1,471.0	27.52	54.458		
9,400.0	7,500.0	7,100.0	7,096.7	32.9	12.4	48.55	-55.8	63.3	1,590.4	1,562.6	27.75	57.320		
9,500.0	7,500.0	7,079.4	7,076.8	34.4	12.4	47.18	-61.6	63.3	1,682.7	1,654.9	27.86	60.393		
9,600.0	7,500.0	7,072.8	7,070.5	36.0	12.4	46.76	-63.2	63.3	1,776.0	1,747.9	28.04	63.325		
9,700.0	7,500.0	7,050.0	7,048.3	37.5	12.3	45.32	-68.5	63.2	1,870.1	1,842.0	28.15	66.442		
9,800.0	7,500.0	7,050.0	7,048.3	39.1	12.3	45.32	-68.5	63.2	1,964.3	1,936.0	28.35	69.291		
9,900.0	7,500.0	7,050.0	7,048.3	40.7	12.3	45.32	-68.5	63.2	2,059.1	2,030.6	28.55	72.135		
10,000.0	7,500.0	7,050.0	7,048.3	42.3	12.3	45.32	-68.5	63.2	2,154.3	2,125.6	28.74	74.972		
10,100.0	7,500.0	7,050.0	7,048.3	43.9	12.3	45.32	-68.5	63.2	2,250.0	2,221.1	28.92	77.800		
10,200.0	7,500.0	7,050.0	7,048.3	45.6	12.3	45.32	-68.5	63.2	2,346.0	2,316.9	29.10	80.616		
10,300.0	7,500.0	7,050.0	7,048.3	47.2	12.3	45.32	-68.5	63.2	2,442.3	2,413.1	29.28	83.419		
10,400.0	7,500.0	7,050.0	7,048.3	48.9	12.3	45.32	-68.5	63.2	2,538.9	2,509.5	29.45	86.208		
10,500.0	7,500.0	7,050.0	7,048.3	50.5	12.3	45.32	-68.5	63.2	2,635.8	2,606.2	29.62	88.982		
10,600.0	7,500.0	7,029.0	7,027.7	52.2	12.3	44.04	-72.6	63.2	2,732.4	2,702.7	29.72	91.950		
10,700.0	7,500.0	7,026.0	7,024.7	53.8	12.3	43.87	-73.1	63.2	2,829.6	2,799.7	29.87	94.719		
10,800.0	7,500.0	7,023.2	7,022.0	55.5	12.3	43.70	-73.6	63.2	2,926.9	2,896.9	30.03	97.471		
10,900.0	7,500.0	7,000.0	6,999.0	57.2	12.3	42.37	-77.0	63.1	3,024.9	2,994.7	30.11	100.444		
11,000.0	7,500.0	7,000.0	6,999.0	58.9	12.3	42.37	-77.0	63.1	3,122.4	3,092.1	30.28	103.127		
11,100.0	7,500.0	7,000.0	6,999.0	60.6	12.3	42.37	-77.0	63.1	3,220.1	3,189.6	30.44	105.793		
11,200.0	7,500.0	7,000.0	6,999.0	62.3	12.3	42.37	-77.0	63.1	3,317.9	3,287.3	30.60	108.442		
11,244.1	7,500.0	7,000.0	6,999.0	63.0	12.3	42.37	-77.0	63.1	3,361.1	3,330.5	30.67	109.605		
11,300.0	7,500.0	7,000.0	6,999.0	64.0	12.3	38.05	-77.0	63.1	3,415.9	3,385.2	30.75	111.074		
11,400.0	7,500.0	7,000.0	6,999.0	65.7	12.3	28.58	-77.0	63.1	3,514.4	3,483.5	30.91	113.697		
11,444.1	7,500.0	7,000.0	6,999.0	66.4	12.3	23.63	-77.0	63.1	3,558.0	3,527.0	30.98	114.853		
11,500.0	7,500.0	7,000.0	6,999.0	67.4	12.3	23.63	-77.0	63.1	3,613.2	3,582.1	31.06	116.314		
11,600.0	7,500.0	7,000.0	6,999.0	69.1	12.3	23.63	-77.0	63.1	3,712.1	3,680.9	31.22	118.914		
11,700.0	7,500.0	7,000.0	6,999.0	70.8	12.3	23.63	-77.0	63.1	3,811.0	3,779.6	31.37	121.495		
11,800.0	7,500.0	7,000.0	6,999.0	72.5	12.3	23.63	-77.0	63.1	3,910.0	3,878.5	31.52	124.058		
11,900.0	7,500.0	7,000.0	6,999.0	74.2	12.3	23.63	-77.0	63.1	4,009.0	3,977.4	31.67	126.602		
12,000.0	7,500.0	7,000.0	6,999.0	76.0	12.3	23.63	-77.0	63.1	4,108.1	4,076.3	31.81	129.127		
12,100.0	7,500.0	7,000.0	6,999.0	77.7	12.3	23.63	-77.0	63.1	4,207.3	4,175.3	31.96	131.634		
12,194.1	7,500.0	7,000.0	6,999.0	79.3	12.3	23.63	-77.0	63.1	4,300.6	4,268.5	32.10	133.978		
12,200.0	7,500.0	7,000.0	6,999.0	79.4	12.3	24.46	-77.0	63.1	4,306.4	4,274.3	32.11	134.123		
12,300.0	7,500.0	7,000.0	6,999.0	81.1	12.3	37.08	-77.0	63.1	4,405.5	4,373.3	32.25	136.596		
12,387.3	7,500.0	7,000.0	6,999.0	82.6	12.3	45.66	-77.0	63.1	4,491.9	4,459.5	32.38	138.732		
12,400.0	7,500.0	7,000.0	6,999.0	82.9	12.3	45.66	-77.0	63.1	4,504.4	4,472.0	32.40	139.039		
12,500.0	7,500.0	7,000.0	6,999.0	84.6	12.3	45.66	-77.0	63.1	4,603.1	4,570.6	32.54	141.456		
12,600.0	7,500.0	7,000.0	6,999.0	86.3	12.3	45.66	-77.0	63.1	4,701.9	4,669.2	32.68	143.857		
12,700.0	7,500.0	7,000.0	6,999.0	88.0	12.3	45.66	-77.0	63.1	4,800.8	4,768.0	32.83	146.241		
12,800.0	7,500.0	7,000.0	6,999.0	89.7	12.3	45.66	-77.0	63.1	4,899.7	4,866.7	32.97	148.608		
12,900.0	7,500.0	7,000.0	6,999.0	91.5	12.3	45.66	-77.0	63.1	4,998.6	4,965.5	33.11	150.960		
13,000.0	7,500.0	7,000.0	6,999.0	93.2	12.3	45.66	-77.0	63.1	5,097.6	5,064.4	33.25	153.296		
13,100.0	7,500.0	7,000.0	6,999.0	94.9	12.3	45.66	-77.0	63.1	5,196.6	5,163.2	33.39	155.616		
13,200.0	7,500.0	7,000.0	6,999.0	96.6	12.3	45.66	-77.0	63.1	5,295.7	5,262.2	33.53	157.920		
13,300.0	7,500.0	7,000.0	6,999.0	98.4	12.3	45.66	-77.0	63.1	5,394.8	5,361.1	33.67	160.209		
13,400.0	7,500.0	7,000.0	6,999.0	100.1	12.3	45.66	-77.0	63.1	5,493.9	5,460.1	33.81	162.483		
13,500.0	7,500.0	7,000.0	6,999.0	101.8	12.3	45.66	-77.0	63.1	5,593.1	5,559.1	33.95	164.742		
13,600.0	7,500.0	7,000.0	6,999.0	103.5	12.3	45.66	-77.0	63.1	5,692.3	5,658.2	34.09	166.985		
13,700.0	7,500.0	7,000.0	6,999.0	105.3	12.3	45.66	-77.0	63.1	5,791.5	5,757.3	34.23	169.214		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
13,800.0	7,500.0	7,000.0	6,999.0	107.0	12.3	45.66	-77.0	63.1	5,890.7	5,856.4	34.36	171.428		
13,900.0	7,500.0	7,000.0	6,999.0	108.7	12.3	45.66	-77.0	63.1	5,990.0	5,955.5	34.50	173.628		
14,000.0	7,500.0	7,000.0	6,999.0	110.5	12.3	45.66	-77.0	63.1	6,089.3	6,054.7	34.64	175.813		
14,100.0	7,500.0	6,976.7	6,975.9	112.2	12.2	44.37	-79.4	63.0	6,188.1	6,153.4	34.71	178.274		
14,200.0	7,500.0	6,976.0	6,975.2	113.9	12.2	44.33	-79.5	63.0	6,287.4	6,252.6	34.84	180.442		
14,300.0	7,500.0	6,975.3	6,974.5	115.7	12.2	44.30	-79.5	63.0	6,386.7	6,351.8	34.98	182.595		
14,400.0	7,500.0	6,974.6	6,973.8	117.4	12.2	44.26	-79.6	63.0	6,486.1	6,451.0	35.11	184.734		
14,500.0	7,500.0	6,974.0	6,973.2	119.1	12.2	44.22	-79.7	63.0	6,585.4	6,550.2	35.24	186.859		
14,600.0	7,500.0	6,973.3	6,972.5	120.9	12.2	44.19	-79.7	63.0	6,684.8	6,649.5	35.37	188.971		
14,700.0	7,500.0	6,950.0	6,949.2	122.6	12.2	42.96	-81.1	62.9	6,784.7	6,749.3	35.45	191.390		
14,800.0	7,500.0	6,950.0	6,949.2	124.4	12.2	42.96	-81.1	62.9	6,884.1	6,848.5	35.58	193.467		
14,900.0	7,500.0	6,950.0	6,949.2	126.1	12.2	42.96	-81.1	62.9	6,983.5	6,947.8	35.72	195.531		
15,000.0	7,500.0	6,950.0	6,949.2	127.8	12.2	42.96	-81.1	62.9	7,082.9	7,047.1	35.85	197.583		
15,100.0	7,500.0	6,950.0	6,949.2	129.6	12.2	42.96	-81.1	62.9	7,182.4	7,146.4	35.98	199.622		
15,200.0	7,500.0	6,950.0	6,949.2	131.3	12.2	42.96	-81.1	62.9	7,281.8	7,245.7	36.11	201.648		
15,300.0	7,500.0	6,950.0	6,949.2	133.1	12.2	42.96	-81.1	62.9	7,381.3	7,345.1	36.24	203.662		
15,400.0	7,500.0	6,950.0	6,949.2	134.8	12.2	42.96	-81.1	62.9	7,480.8	7,444.4	36.37	205.664		
15,500.0	7,500.0	6,950.0	6,949.2	136.5	12.2	42.96	-81.1	62.9	7,580.3	7,543.8	36.50	207.653		
15,600.0	7,500.0	6,950.0	6,949.2	138.3	12.2	42.96	-81.1	62.9	7,679.8	7,643.2	36.63	209.631		
15,700.0	7,500.0	6,950.0	6,949.2	140.0	12.2	42.96	-81.1	62.9	7,779.3	7,742.6	36.76	211.597		
15,805.8	7,500.0	6,950.0	6,949.2	141.9	12.2	42.96	-81.1	62.9	7,884.6	7,847.7	36.90	213.663		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor			
0.0	0.0	0.0	0.0	0.0	0.0	90.47	-0.4	45.1	45.1						
100.0	100.0	100.0	100.0	0.2	0.2	90.47	-0.4	45.1	45.1	44.8	0.30	148.383			
200.0	200.0	200.0	200.0	0.3	0.3	90.47	-0.4	45.1	45.1	44.4	0.65	69.034			
300.0	300.0	300.0	300.0	0.5	0.5	90.47	-0.4	45.1	45.1	44.1	1.00	44.980			
400.0	400.0	400.0	400.0	0.7	0.7	90.47	-0.4	45.1	45.1	43.7	1.35	33.357			
500.0	500.0	500.0	500.0	0.8	0.8	90.47	-0.4	45.1	45.1	43.4	1.70	26.508			
600.0	600.0	600.0	600.0	1.0	1.0	51.87	-0.4	45.1	44.5	42.5	2.05	21.724			
700.0	700.0	699.2	699.2	1.2	1.2	54.65	-0.5	45.9	43.8	41.4	2.40	18.266			
730.1	730.1	729.1	729.1	1.3	1.3	55.88	-0.5	46.5	43.8	41.3	2.51	17.472 CC, ES			
800.0	799.9	798.4	798.3	1.4	1.4	59.37	-0.8	48.5	44.0	41.3	2.75	16.000			
900.0	899.7	897.5	897.3	1.6	1.6	65.69	-1.2	52.7	45.5	42.4	3.11	14.618			
1,000.0	999.4	997.1	996.8	1.8	1.7	73.16	-1.8	58.2	48.1	44.6	3.49	13.777			
1,100.0	1,098.9	1,096.8	1,096.3	2.0	1.9	81.67	-2.4	63.6	51.2	47.3	3.90	13.152			
1,201.3	1,199.5	1,197.6	1,197.0	2.2	2.1	90.96	-3.0	69.2	55.4	51.1	4.33	12.807			
1,300.0	1,297.5	1,295.8	1,295.1	2.5	2.3	99.44	-3.6	74.6	60.8	56.1	4.75	12.801			
1,400.0	1,396.8	1,395.3	1,394.4	2.7	2.5	106.50	-4.2	80.0	67.4	62.2	5.18	13.022			
1,500.0	1,496.0	1,494.7	1,493.7	3.0	2.7	112.24	-4.9	85.5	74.8	69.2	5.60	13.370			
1,600.0	1,595.3	1,594.2	1,593.0	3.3	2.9	116.91	-5.5	90.9	82.9	76.9	6.01	13.783			
1,700.0	1,694.5	1,693.7	1,692.3	3.5	3.1	120.74	-6.1	96.4	91.4	85.0	6.43	14.223			
1,800.0	1,793.8	1,793.1	1,791.6	3.8	3.3	123.90	-6.7	101.9	100.2	93.4	6.83	14.666			
1,900.0	1,893.0	1,892.6	1,891.0	4.0	3.5	126.55	-7.3	107.3	109.3	102.1	7.24	15.099			
2,000.0	1,992.3	1,992.1	1,990.3	4.3	3.7	128.78	-7.9	112.8	118.6	111.0	7.64	15.516			
2,100.0	2,091.5	2,091.5	2,089.6	4.6	3.9	130.69	-8.5	118.2	128.1	120.0	8.05	15.914			
2,200.0	2,190.8	2,191.0	2,188.9	4.8	4.1	132.34	-9.1	123.7	137.6	129.2	8.45	16.290			
2,300.0	2,290.0	2,290.5	2,288.2	5.1	4.3	133.77	-9.7	129.1	147.3	138.4	8.85	16.645			
2,400.0	2,389.3	2,390.0	2,387.5	5.4	4.5	135.03	-10.3	134.6	157.0	147.8	9.25	16.979			
2,500.0	2,488.5	2,489.4	2,486.9	5.7	4.7	136.14	-10.9	140.1	166.8	157.2	9.65	17.293			
2,600.0	2,587.8	2,588.9	2,586.2	5.9	4.8	137.12	-11.5	145.5	176.7	166.6	10.05	17.588			
2,700.0	2,687.0	2,688.4	2,685.5	6.2	5.0	138.00	-12.1	151.0	186.6	176.2	10.44	17.866			
2,800.0	2,786.3	2,787.8	2,784.8	6.5	5.2	138.79	-12.7	156.4	196.5	185.7	10.84	18.128			
2,900.0	2,885.5	2,887.3	2,884.1	6.7	5.4	139.51	-13.3	161.9	206.5	195.3	11.24	18.374			
3,000.0	2,984.8	2,986.8	2,983.4	7.0	5.6	140.16	-13.9	167.3	216.5	204.9	11.64	18.606			
3,100.0	3,084.0	3,086.2	3,082.8	7.3	5.8	140.75	-14.5	172.8	226.6	214.5	12.04	18.826			
3,200.0	3,183.3	3,185.7	3,182.1	7.6	6.0	141.29	-15.1	178.3	236.6	224.2	12.43	19.033			
3,300.0	3,282.5	3,285.2	3,281.4	7.8	6.2	141.79	-15.8	183.7	246.7	233.9	12.83	19.229			
3,400.0	3,381.8	3,384.6	3,380.7	8.1	6.4	142.25	-16.4	189.2	256.8	243.6	13.23	19.415			
3,500.0	3,481.1	3,484.1	3,480.0	8.4	6.6	142.67	-17.0	194.6	266.9	253.3	13.62	19.591			
3,600.0	3,580.3	3,583.6	3,579.4	8.7	6.8	143.06	-17.6	200.1	277.0	263.0	14.02	19.758			
3,700.0	3,679.6	3,683.0	3,678.7	8.9	7.0	143.43	-18.2	205.6	287.2	272.8	14.42	19.917			
3,800.0	3,778.8	3,782.5	3,778.0	9.2	7.2	143.77	-18.8	211.0	297.3	282.5	14.82	20.068			
3,900.0	3,878.1	3,882.0	3,877.3	9.5	7.4	144.09	-19.4	216.5	307.5	292.3	15.21	20.212			
4,000.0	3,977.3	3,981.5	3,976.6	9.8	7.6	144.39	-20.0	221.9	317.6	302.0	15.61	20.349			
4,100.0	4,076.6	4,080.9	4,075.9	10.0	7.8	144.66	-20.6	227.4	327.8	311.8	16.01	20.480			
4,200.0	4,175.8	4,180.4	4,175.3	10.3	8.0	144.93	-21.2	232.8	338.0	321.6	16.40	20.605			
4,300.0	4,275.1	4,279.9	4,274.6	10.6	8.2	145.17	-21.8	238.3	348.2	331.4	16.80	20.725			
4,400.0	4,374.3	4,379.3	4,373.9	10.9	8.4	145.41	-22.4	243.8	358.4	341.2	17.20	20.839			
4,500.0	4,473.6	4,478.8	4,473.2	11.1	8.6	145.63	-23.0	249.2	368.6	351.0	17.59	20.949			
4,600.0	4,572.8	4,578.3	4,572.5	11.4	8.8	145.83	-23.6	254.7	378.8	360.8	17.99	21.054			
4,700.0	4,672.1	4,677.7	4,671.8	11.7	9.0	146.03	-24.2	260.1	389.0	370.6	18.39	21.155			
4,800.0	4,771.3	4,777.2	4,771.2	12.0	9.2	146.22	-24.8	265.6	399.2	380.4	18.78	21.251			
4,900.0	4,870.6	4,876.7	4,870.5	12.2	9.4	146.40	-25.4	271.1	409.4	390.2	19.18	21.344			
5,000.0	4,969.8	4,976.1	4,969.8	12.5	9.6	146.57	-26.0	276.5	419.6	400.0	19.58	21.434			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,069.1	5,075.6	5,069.1	12.8	9.8	146.73	-26.6	282.0	429.8	409.9	19.97	21.520	
5,200.0	5,168.3	5,175.1	5,168.4	13.1	10.0	146.88	-27.3	287.4	440.1	419.7	20.37	21.603	
5,300.0	5,267.6	5,274.6	5,267.7	13.3	10.2	147.03	-27.9	292.9	450.3	429.5	20.77	21.683	
5,400.0	5,366.8	5,374.0	5,367.1	13.6	10.4	147.17	-28.5	298.3	460.5	439.4	21.16	21.760	
5,500.0	5,466.1	5,473.5	5,466.4	13.9	10.6	147.30	-29.1	303.8	470.8	449.2	21.56	21.834	
5,600.0	5,565.3	5,573.0	5,565.7	14.2	10.8	147.43	-29.7	309.3	481.0	459.0	21.96	21.906	
5,700.0	5,664.6	5,672.4	5,665.0	14.4	11.0	147.55	-30.3	314.7	491.2	468.9	22.35	21.975	
5,800.0	5,763.8	5,771.9	5,764.3	14.7	11.2	147.67	-30.9	320.2	501.5	478.7	22.75	22.042	
5,900.0	5,863.1	5,871.4	5,863.7	15.0	11.4	147.78	-31.5	325.6	511.7	488.6	23.15	22.107	
6,000.0	5,962.3	5,970.8	5,963.0	15.3	11.6	147.89	-32.1	331.1	522.0	498.4	23.54	22.169	
6,100.0	6,061.6	6,070.3	6,062.3	15.5	11.8	148.00	-32.7	336.5	532.2	508.3	23.94	22.230	
6,200.0	6,160.9	6,169.8	6,161.6	15.8	12.0	148.10	-33.3	342.0	542.5	518.1	24.34	22.289	
6,300.0	6,260.1	6,269.2	6,260.9	16.1	12.2	148.19	-33.9	347.5	552.7	528.0	24.73	22.346	
6,400.0	6,359.4	6,368.7	6,360.2	16.4	12.4	148.29	-34.5	352.9	563.0	537.8	25.13	22.401	
6,500.0	6,458.6	6,468.2	6,459.6	16.6	12.6	148.38	-35.1	358.4	573.2	547.7	25.53	22.454	
6,600.0	6,557.9	6,567.7	6,558.9	16.9	12.8	148.46	-35.7	363.8	583.5	557.5	25.92	22.506	
6,700.0	6,657.1	6,667.1	6,658.2	17.2	13.0	148.55	-36.3	369.3	593.7	567.4	26.32	22.557	
6,800.0	6,756.4	6,766.6	6,757.5	17.5	13.2	148.63	-36.9	374.8	604.0	577.3	26.72	22.606	
6,900.0	6,855.6	6,866.1	6,856.8	17.7	13.4	148.71	-37.5	380.2	614.2	587.1	27.11	22.653	
6,919.5	6,875.0	6,885.4	6,876.2	17.8	13.4	148.72	-37.7	381.3	616.2	589.0	27.19	22.663	
6,950.0	6,905.3	6,915.9	6,906.5	17.9	13.5	126.14	-37.8	382.9	618.6	591.2	27.31	22.646	
7,000.0	6,955.1	6,965.8	6,956.4	17.9	13.6	67.98	-38.2	385.7	618.9	591.4	27.52	22.493	
7,050.0	7,004.8	7,015.6	7,006.2	17.9	13.7	39.19	-38.5	388.4	614.9	587.2	27.72	22.187	
7,100.0	7,053.8	7,064.9	7,055.3	17.9	13.8	28.75	-38.8	391.1	606.7	578.8	27.92	21.734	
7,150.0	7,101.9	7,113.2	7,103.6	17.9	13.8	24.08	-39.0	393.8	594.3	566.2	28.11	21.140	
7,200.0	7,148.7	7,160.2	7,150.5	17.8	13.9	21.79	-39.3	396.4	577.8	549.5	28.31	20.412	
7,250.0	7,193.8	7,682.7	7,609.4	17.7	15.3	54.30	169.6	417.9	542.4	520.0	22.39	24.225	
7,300.0	7,236.9	7,733.5	7,639.9	17.5	15.5	89.47	210.2	418.8	493.9	472.6	21.31	23.180	
7,350.0	7,277.7	7,730.7	7,638.3	17.4	15.5	107.28	207.8	418.8	445.3	423.9	21.43	20.775	
7,400.0	7,315.7	7,716.2	7,629.9	17.2	15.4	116.63	196.0	418.5	397.3	375.4	21.83	18.198	
7,450.0	7,350.9	7,697.4	7,618.6	17.1	15.3	121.55	181.0	418.2	350.0	327.6	22.33	15.673	
7,500.0	7,382.8	7,676.5	7,605.4	16.9	15.2	123.67	164.8	417.7	303.7	280.8	22.89	13.271	
7,550.0	7,411.3	7,654.4	7,590.9	16.7	15.1	123.71	148.1	417.2	259.0	235.5	23.48	11.028	
7,600.0	7,436.1	7,631.6	7,575.2	16.6	15.0	121.88	131.6	416.7	216.3	192.2	24.12	8.968	
7,650.0	7,457.1	7,608.3	7,558.6	16.5	15.0	118.18	115.3	416.0	176.9	152.1	24.80	7.132	
7,700.0	7,474.0	7,584.7	7,541.0	16.4	14.9	112.41	99.5	415.3	142.6	117.1	25.53	5.587	
7,750.0	7,486.8	7,560.8	7,522.6	16.4	14.8	104.37	84.3	414.6	117.3	91.1	26.26	4.468	
7,800.0	7,495.3	7,536.8	7,503.5	16.4	14.7	94.11	69.8	413.8	106.3	79.5	26.80	3.965	
7,806.6	7,496.1	7,533.6	7,500.9	16.4	14.7	92.60	67.9	413.7	106.1	79.3	26.85	3.952 SF	
7,850.0	7,499.5	7,512.6	7,483.6	16.5	14.7	82.23	56.0	413.0	112.5	85.5	27.02	4.163	
7,873.6	7,500.0	7,500.0	7,473.1	16.5	14.6	75.94	49.2	412.5	120.6	93.6	27.02	4.463	
7,900.0	7,500.0	7,488.8	7,463.5	16.5	14.6	71.33	43.3	412.1	132.7	105.6	27.17	4.884	
8,000.0	7,500.0	7,450.0	7,429.8	16.9	14.5	57.30	24.4	410.6	197.9	170.2	27.73	7.138	
8,100.0	7,500.0	7,417.3	7,400.3	17.4	14.4	48.03	10.2	409.2	278.3	250.1	28.19	9.873	
8,200.0	7,500.0	7,400.0	7,384.4	18.0	14.4	43.99	3.4	408.4	365.5	336.6	28.83	12.677	
8,300.0	7,500.0	7,371.5	7,357.8	18.8	14.3	38.43	-6.8	407.2	455.8	426.8	29.01	15.714	
8,400.0	7,500.0	7,350.0	7,337.4	19.7	14.3	35.01	-13.5	406.2	548.5	519.2	29.26	18.749	
8,500.0	7,500.0	7,350.0	7,337.4	20.7	14.3	35.01	-13.5	406.2	642.7	613.0	29.72	21.625	
8,600.0	7,500.0	7,327.6	7,315.9	21.9	14.3	31.98	-19.8	405.1	737.7	707.9	29.84	24.720	
8,700.0	7,500.0	7,317.0	7,305.7	23.1	14.2	30.71	-22.4	404.6	833.7	803.6	30.07	27.727	
8,800.0	7,500.0	7,300.0	7,289.2	24.3	14.2	28.88	-26.3	403.7	930.3	900.1	30.21	30.797	
8,900.0	7,500.0	7,300.0	7,289.2	25.6	14.2	28.88	-26.3	403.7	1,027.2	996.7	30.47	33.711	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,500.0	7,300.0	7,289.2	27.0	14.2	28.88	-26.3	403.7	1,124.6	1,093.9	30.71	36.626	
9,100.0	7,500.0	7,300.0	7,289.2	28.4	14.2	28.88	-26.3	403.7	1,222.5	1,191.6	30.92	39.537	
9,200.0	7,500.0	7,280.3	7,269.9	29.9	14.2	27.00	-30.2	402.7	1,320.2	1,289.2	31.00	42.583	
9,300.0	7,500.0	7,275.2	7,264.8	31.4	14.2	26.55	-31.1	402.5	1,418.4	1,387.2	31.17	45.504	
9,400.0	7,500.0	7,270.5	7,260.2	32.9	14.1	26.16	-31.8	402.2	1,516.7	1,485.4	31.33	48.407	
9,500.0	7,500.0	7,250.0	7,240.0	34.4	14.1	24.56	-34.8	401.2	1,615.6	1,584.2	31.41	51.439	
9,600.0	7,500.0	7,250.0	7,240.0	36.0	14.1	24.56	-34.8	401.2	1,714.1	1,682.5	31.59	54.265	
9,700.0	7,500.0	7,250.0	7,240.0	37.5	14.1	24.56	-34.8	401.2	1,812.8	1,781.0	31.76	57.075	
9,800.0	7,500.0	7,250.0	7,240.0	39.1	14.1	24.56	-34.8	401.2	1,911.6	1,879.6	31.93	59.868	
9,900.0	7,500.0	7,250.0	7,240.0	40.7	14.1	24.56	-34.8	401.2	2,010.5	1,978.4	32.09	62.643	
10,000.0	7,500.0	7,250.0	7,240.0	42.3	14.1	24.56	-34.8	401.2	2,109.5	2,077.3	32.26	65.400	
10,100.0	7,500.0	7,250.0	7,240.0	43.9	14.1	24.56	-34.8	401.2	2,208.6	2,176.2	32.41	68.139	
10,200.0	7,500.0	7,250.0	7,240.0	45.6	14.1	24.56	-34.8	401.2	2,307.8	2,275.3	32.57	70.859	
10,300.0	7,500.0	7,250.0	7,240.0	47.2	14.1	24.56	-34.8	401.2	2,407.1	2,374.4	32.72	73.560	
10,400.0	7,500.0	7,250.0	7,240.0	48.9	14.1	24.56	-34.8	401.2	2,506.4	2,473.6	32.87	76.242	
10,500.0	7,500.0	7,250.0	7,240.0	50.5	14.1	24.56	-34.8	401.2	2,605.8	2,572.8	33.02	78.905	
10,600.0	7,500.0	7,250.0	7,240.0	52.2	14.1	24.56	-34.8	401.2	2,705.2	2,672.0	33.17	81.550	
10,700.0	7,500.0	7,250.0	7,240.0	53.8	14.1	24.56	-34.8	401.2	2,804.7	2,771.4	33.32	84.175	
10,800.0	7,500.0	7,250.0	7,240.0	55.5	14.1	24.56	-34.8	401.2	2,904.2	2,870.7	33.47	86.782	
10,900.0	7,500.0	7,250.0	7,240.0	57.2	14.1	24.56	-34.8	401.2	3,003.7	2,970.1	33.61	89.371	
11,000.0	7,500.0	7,250.0	7,240.0	58.9	14.1	24.56	-34.8	401.2	3,103.3	3,069.5	33.75	91.941	
11,100.0	7,500.0	7,228.6	7,218.7	60.6	14.1	23.09	-37.1	400.1	3,202.4	3,168.6	33.82	94.693	
11,200.0	7,500.0	7,227.2	7,217.4	62.3	14.1	23.01	-37.2	400.0	3,301.9	3,268.0	33.96	97.241	
11,244.1	7,500.0	7,226.7	7,216.8	63.0	14.1	22.97	-37.3	400.0	3,345.9	3,311.9	34.02	98.360	
11,300.0	7,500.0	7,226.0	7,216.1	64.0	14.1	10.88	-37.3	399.9	3,401.5	3,367.4	34.10	99.762	
11,400.0	7,500.0	7,224.8	7,215.0	65.7	14.1	-12.93	-37.4	399.9	3,501.2	3,466.9	34.24	102.247	
11,444.1	7,500.0	7,224.3	7,214.5	66.4	14.1	-22.71	-37.5	399.8	3,545.2	3,510.9	34.30	103.346	
11,500.0	7,500.0	7,223.7	7,213.9	67.4	14.1	-22.66	-37.5	399.8	3,600.8	3,566.4	34.38	104.739	
11,600.0	7,500.0	7,222.7	7,212.9	69.1	14.1	-22.58	-37.6	399.7	3,700.5	3,665.9	34.51	107.220	
11,700.0	7,500.0	7,200.0	7,190.3	70.8	14.0	-20.87	-39.0	398.5	3,800.6	3,766.0	34.57	109.933	
11,800.0	7,500.0	7,200.0	7,190.3	72.5	14.0	-20.87	-39.0	398.5	3,900.2	3,865.5	34.71	112.370	
11,900.0	7,500.0	7,200.0	7,190.3	74.2	14.0	-20.87	-39.0	398.5	3,999.9	3,965.0	34.84	114.790	
12,000.0	7,500.0	7,200.0	7,190.3	76.0	14.0	-20.87	-39.0	398.5	4,099.5	4,064.5	34.98	117.194	
12,100.0	7,500.0	7,200.0	7,190.3	77.7	14.0	-20.87	-39.0	398.5	4,199.2	4,164.1	35.12	119.582	
12,194.1	7,500.0	7,200.0	7,190.3	79.3	14.0	-20.87	-39.0	398.5	4,293.1	4,257.8	35.24	121.815	
12,200.0	7,500.0	7,200.0	7,190.3	79.4	14.0	-19.44	-39.0	398.5	4,298.9	4,263.6	35.25	121.953	
12,300.0	7,500.0	7,200.0	7,190.3	81.1	14.0	7.73	-39.0	398.5	4,398.6	4,363.3	35.37	124.343	
12,387.3	7,500.0	7,200.0	7,190.3	82.6	14.0	29.76	-39.0	398.5	4,485.7	4,450.2	35.49	126.411	
12,400.0	7,500.0	7,200.0	7,190.3	82.9	14.0	29.76	-39.0	398.5	4,498.3	4,462.8	35.50	126.706	
12,500.0	7,500.0	7,200.0	7,190.3	84.6	14.0	29.76	-39.0	398.5	4,598.0	4,562.4	35.64	129.024	
12,600.0	7,500.0	7,200.0	7,190.3	86.3	14.0	29.76	-39.0	398.5	4,697.7	4,662.0	35.77	131.327	
12,700.0	7,500.0	7,200.0	7,190.3	88.0	14.0	29.76	-39.0	398.5	4,797.5	4,761.6	35.91	133.615	
12,800.0	7,500.0	7,200.0	7,190.3	89.7	14.0	29.76	-39.0	398.5	4,897.2	4,861.2	36.04	135.888	
12,900.0	7,500.0	7,200.0	7,190.3	91.5	14.0	29.76	-39.0	398.5	4,996.9	4,960.8	36.17	138.146	
13,000.0	7,500.0	7,200.0	7,190.3	93.2	14.0	29.76	-39.0	398.5	5,096.7	5,060.4	36.30	140.390	
13,100.0	7,500.0	7,200.0	7,190.3	94.9	14.0	29.76	-39.0	398.5	5,196.4	5,160.0	36.44	142.619	
13,200.0	7,500.0	7,200.0	7,190.3	96.6	14.0	29.76	-39.0	398.5	5,296.2	5,259.6	36.57	144.834	
13,300.0	7,500.0	7,200.0	7,190.3	98.4	14.0	29.76	-39.0	398.5	5,396.0	5,359.3	36.70	147.035	
13,400.0	7,500.0	7,200.0	7,190.3	100.1	14.0	29.76	-39.0	398.5	5,495.8	5,458.9	36.83	149.223	
13,500.0	7,500.0	7,200.0	7,190.3	101.8	14.0	29.76	-39.0	398.5	5,595.6	5,558.6	36.96	151.396	
13,600.0	7,500.0	7,200.0	7,190.3	103.5	14.0	29.76	-39.0	398.5	5,695.4	5,658.3	37.09	153.556	
13,700.0	7,500.0	7,200.0	7,190.3	105.3	14.0	29.76	-39.0	398.5	5,795.2	5,758.0	37.22	155.702	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5											Offset Site Error:		0.0 ft	
Survey Program: 0-Geolink MWD											Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,800.0	7,500.0	7,200.0	7,190.3	107.0	14.0	29.76	-39.0	398.5	5,895.0	5,857.6	37.35	157.836		
13,900.0	7,500.0	7,200.0	7,190.3	108.7	14.0	29.76	-39.0	398.5	5,994.8	5,957.3	37.48	159.956		
14,000.0	7,500.0	7,200.0	7,190.3	110.5	14.0	29.76	-39.0	398.5	6,094.6	6,057.0	37.61	162.063		
14,100.0	7,500.0	7,200.0	7,190.3	112.2	14.0	29.76	-39.0	398.5	6,194.5	6,156.7	37.73	164.157		
14,200.0	7,500.0	7,200.0	7,190.3	113.9	14.0	29.76	-39.0	398.5	6,294.3	6,256.4	37.86	166.239		
14,300.0	7,500.0	7,200.0	7,190.3	115.7	14.0	29.76	-39.0	398.5	6,394.1	6,356.1	37.99	168.308		
14,400.0	7,500.0	7,200.0	7,190.3	117.4	14.0	29.76	-39.0	398.5	6,494.0	6,455.9	38.12	170.364		
14,500.0	7,500.0	7,200.0	7,190.3	119.1	14.0	29.76	-39.0	398.5	6,593.8	6,555.6	38.25	172.409		
14,600.0	7,500.0	7,200.0	7,190.3	120.9	14.0	29.76	-39.0	398.5	6,693.7	6,655.3	38.37	174.441		
14,700.0	7,500.0	7,200.0	7,190.3	122.6	14.0	29.76	-39.0	398.5	6,793.6	6,755.1	38.50	176.461		
14,800.0	7,500.0	7,200.0	7,190.3	124.4	14.0	29.76	-39.0	398.5	6,893.4	6,854.8	38.63	178.470		
14,900.0	7,500.0	7,200.0	7,190.3	126.1	14.0	29.76	-39.0	398.5	6,993.3	6,954.5	38.75	180.466		
15,000.0	7,500.0	7,200.0	7,190.3	127.8	14.0	29.76	-39.0	398.5	7,093.2	7,054.3	38.88	182.451		
15,100.0	7,500.0	7,200.0	7,190.3	129.6	14.0	29.76	-39.0	398.5	7,193.0	7,154.0	39.00	184.425		
15,200.0	7,500.0	7,200.0	7,190.3	131.3	14.0	29.76	-39.0	398.5	7,292.9	7,253.8	39.13	186.387		
15,300.0	7,500.0	7,200.0	7,190.3	133.1	14.0	29.76	-39.0	398.5	7,392.8	7,353.5	39.25	188.337		
15,400.0	7,500.0	7,200.0	7,190.3	134.8	14.0	29.76	-39.0	398.5	7,492.7	7,453.3	39.38	190.277		
15,500.0	7,500.0	7,200.0	7,190.3	136.5	14.0	29.76	-39.0	398.5	7,592.6	7,553.1	39.50	192.206		
15,600.0	7,500.0	7,200.0	7,190.3	138.3	14.0	29.76	-39.0	398.5	7,692.5	7,652.8	39.63	194.124		
15,700.0	7,500.0	7,200.0	7,190.3	140.0	14.0	29.76	-39.0	398.5	7,792.3	7,752.6	39.75	196.030		
15,805.8	7,500.0	7,200.0	7,190.3	141.9	14.0	29.76	-39.0	398.5	7,898.0	7,858.1	39.88	198.036		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.41	-0.4	52.6	52.6					
100.0	100.0	100.0	100.0	0.2	0.2	90.41	-0.4	52.6	52.6	52.3	0.30	173.266		
200.0	200.0	200.0	200.0	0.3	0.3	90.41	-0.4	52.6	52.6	52.0	0.65	80.610		
300.0	300.0	300.0	300.0	0.5	0.5	90.41	-0.4	52.6	52.6	51.6	1.00	52.523		
400.0	400.0	400.0	400.0	0.7	0.7	90.41	-0.4	52.6	52.6	51.3	1.35	38.951		
500.0	500.0	500.0	500.0	0.8	0.8	90.41	-0.4	52.6	52.6	50.9	1.70	30.953 CC		
600.0	600.0	599.1	599.1	1.0	1.0	51.75	-0.5	53.5	52.9	50.9	2.05	25.853 ES		
700.0	700.0	698.1	698.1	1.2	1.2	54.14	-0.7	56.0	53.9	51.5	2.40	22.512		
800.0	799.9	797.1	797.0	1.4	1.4	57.91	-1.2	60.3	55.8	53.1	2.75	20.310		
900.0	899.7	896.0	895.6	1.6	1.6	62.74	-1.8	66.2	58.9	55.7	3.11	18.926		
1,000.0	999.4	994.6	994.0	1.8	1.8	68.20	-2.7	73.8	63.3	59.8	3.48	18.163		
1,100.0	1,098.9	1,093.6	1,092.6	2.0	2.0	73.93	-3.6	83.0	69.2	65.3	3.88	17.826		
1,201.3	1,199.5	1,194.4	1,192.9	2.2	2.2	80.02	-4.7	92.6	75.7	71.4	4.32	17.539		
1,300.0	1,297.5	1,292.6	1,290.6	2.5	2.4	85.64	-5.7	101.9	82.7	78.0	4.76	17.380		
1,400.0	1,396.8	1,392.0	1,389.6	2.7	2.7	90.40	-6.7	111.3	90.5	85.3	5.22	17.342		
1,500.0	1,496.0	1,491.5	1,488.6	3.0	2.9	94.39	-7.7	120.8	98.8	93.1	5.68	17.380		
1,600.0	1,595.3	1,590.9	1,587.6	3.3	3.1	97.75	-8.7	130.2	107.5	101.3	6.15	17.465		
1,700.0	1,694.5	1,690.3	1,686.6	3.5	3.3	100.60	-9.7	139.7	116.5	109.8	6.63	17.578		
1,800.0	1,793.8	1,789.8	1,785.5	3.8	3.6	103.04	-10.8	149.1	125.7	118.6	7.10	17.707		
1,900.0	1,893.0	1,889.2	1,884.5	4.0	3.8	105.14	-11.8	158.6	135.2	127.6	7.58	17.844		
2,000.0	1,992.3	1,988.7	1,983.5	4.3	4.0	106.97	-12.8	168.0	144.8	136.7	8.05	17.982		
2,100.0	2,091.5	2,088.1	2,082.5	4.6	4.3	108.57	-13.8	177.5	154.5	146.0	8.53	18.120		
2,200.0	2,190.8	2,187.5	2,181.5	4.8	4.5	109.97	-14.8	186.9	164.3	155.3	9.00	18.254		
2,300.0	2,290.0	2,287.0	2,280.5	5.1	4.8	111.22	-15.8	196.3	174.3	164.8	9.48	18.385		
2,400.0	2,389.3	2,386.4	2,379.5	5.4	5.0	112.34	-16.9	205.8	184.3	174.3	9.95	18.510		
2,500.0	2,488.5	2,485.8	2,478.4	5.7	5.2	113.34	-17.9	215.2	194.3	183.9	10.43	18.630		
2,600.0	2,587.8	2,585.3	2,577.4	5.9	5.5	114.24	-18.9	224.7	204.4	193.5	10.91	18.745		
2,700.0	2,687.0	2,684.7	2,676.4	6.2	5.7	115.05	-19.9	234.1	214.6	203.2	11.38	18.854		
2,800.0	2,786.3	2,784.2	2,775.4	6.5	5.9	115.79	-20.9	243.6	224.8	212.9	11.86	18.958		
2,900.0	2,885.5	2,883.6	2,874.4	6.7	6.2	116.47	-21.9	253.0	235.0	222.7	12.33	19.057		
3,000.0	2,984.8	2,983.0	2,973.4	7.0	6.4	117.09	-23.0	262.5	245.3	232.4	12.81	19.151		
3,100.0	3,084.0	3,082.5	3,072.3	7.3	6.7	117.66	-24.0	271.9	255.5	242.3	13.28	19.241		
3,200.0	3,183.3	3,181.9	3,171.3	7.6	6.9	118.19	-25.0	281.4	265.8	252.1	13.76	19.326		
3,300.0	3,282.5	3,281.4	3,270.3	7.8	7.1	118.67	-26.0	290.8	276.2	261.9	14.23	19.407		
3,400.0	3,381.8	3,380.8	3,369.3	8.1	7.4	119.13	-27.0	300.2	286.5	271.8	14.71	19.484		
3,500.0	3,481.1	3,480.2	3,468.3	8.4	7.6	119.55	-28.1	309.7	296.9	281.7	15.18	19.558		
3,600.0	3,580.3	3,579.7	3,567.3	8.7	7.8	119.94	-29.1	319.1	307.3	291.6	15.65	19.628		
3,700.0	3,679.6	3,679.1	3,666.2	8.9	8.1	120.31	-30.1	328.6	317.7	301.5	16.13	19.695		
3,800.0	3,778.8	3,778.6	3,765.2	9.2	8.3	120.65	-31.1	338.0	328.1	311.5	16.60	19.759		
3,900.0	3,878.1	3,878.0	3,864.2	9.5	8.6	120.97	-32.1	347.5	338.5	321.4	17.08	19.820		
4,000.0	3,977.3	3,977.4	3,963.2	9.8	8.8	121.27	-33.1	356.9	348.9	331.3	17.55	19.878		
4,100.0	4,076.6	4,076.9	4,062.2	10.0	9.0	121.56	-34.2	366.4	359.3	341.3	18.03	19.934		
4,200.0	4,175.8	4,176.3	4,161.2	10.3	9.3	121.83	-35.2	375.8	369.8	351.3	18.50	19.988		
4,300.0	4,275.1	4,275.7	4,260.1	10.6	9.5	122.08	-36.2	385.3	380.2	361.2	18.97	20.039		
4,400.0	4,374.3	4,375.2	4,359.1	10.9	9.8	122.32	-37.2	394.7	390.7	371.2	19.45	20.088		
4,500.0	4,473.6	4,474.6	4,458.1	11.1	10.0	122.55	-38.2	404.1	401.1	381.2	19.92	20.136		
4,600.0	4,572.8	4,574.1	4,557.1	11.4	10.2	122.77	-39.2	413.6	411.6	391.2	20.40	20.181		
4,700.0	4,672.1	4,673.5	4,656.1	11.7	10.5	122.98	-40.3	423.0	422.1	401.2	20.87	20.225		
4,800.0	4,771.3	4,772.9	4,755.1	12.0	10.7	123.17	-41.3	432.5	432.6	411.2	21.34	20.267		
4,900.0	4,870.6	4,872.4	4,854.0	12.2	11.0	123.36	-42.3	441.9	443.0	421.2	21.82	20.307		
5,000.0	4,969.8	4,971.8	4,953.0	12.5	11.2	123.54	-43.3	451.4	453.5	431.2	22.29	20.346		
5,100.0	5,069.1	5,071.3	5,052.0	12.8	11.4	123.71	-44.3	460.8	464.0	441.3	22.76	20.383		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5											Offset Site Error: 0.0 ft		
Survey Program: O-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,168.3	5,170.7	5,151.0	13.1	11.7	123.87	-45.3	470.3	474.5	451.3	23.24	20.420	
5,300.0	5,267.6	5,270.1	5,250.0	13.3	11.9	124.02	-46.4	479.7	485.0	461.3	23.71	20.455	
5,400.0	5,366.8	5,369.6	5,349.0	13.6	12.2	124.17	-47.4	489.2	495.5	471.3	24.19	20.488	
5,500.0	5,466.1	5,469.0	5,448.0	13.9	12.4	124.32	-48.4	498.6	506.0	481.4	24.66	20.521	
5,600.0	5,565.3	5,568.4	5,546.9	14.2	12.6	124.45	-49.4	508.1	516.5	491.4	25.13	20.552	
5,700.0	5,664.6	5,667.9	5,645.9	14.4	12.9	124.58	-50.4	517.5	527.0	501.4	25.61	20.583	
5,800.0	5,763.8	5,767.3	5,744.9	14.7	13.1	124.71	-51.4	526.9	537.6	511.5	26.08	20.612	
5,900.0	5,863.1	5,866.8	5,843.9	15.0	13.4	124.83	-52.5	536.4	548.1	521.5	26.55	20.641	
6,000.0	5,962.3	5,966.2	5,942.9	15.3	13.6	124.95	-53.5	545.8	558.6	531.6	27.03	20.668	
6,100.0	6,061.6	6,065.6	6,041.9	15.5	13.8	125.06	-54.5	555.3	569.1	541.6	27.50	20.695	
6,200.0	6,160.9	6,165.1	6,140.8	15.8	14.1	125.17	-55.5	564.7	579.6	551.7	27.97	20.721	
6,300.0	6,260.1	6,264.5	6,239.8	16.1	14.3	125.28	-56.5	574.2	590.2	561.7	28.45	20.746	
6,400.0	6,359.4	6,364.0	6,338.8	16.4	14.6	125.38	-57.5	583.6	600.7	571.8	28.92	20.770	
6,500.0	6,458.6	6,463.4	6,437.8	16.6	14.8	125.47	-58.6	593.1	611.2	581.8	29.39	20.794	
6,600.0	6,557.9	6,562.8	6,536.8	16.9	15.0	125.57	-59.6	602.5	621.8	591.9	29.87	20.817	
6,700.0	6,657.1	6,662.3	6,635.8	17.2	15.3	125.66	-60.6	612.0	632.3	602.0	30.34	20.839	
6,800.0	6,756.4	6,761.7	6,734.7	17.5	15.5	125.75	-61.6	621.4	642.8	612.0	30.81	20.861	
6,900.0	6,855.6	6,861.2	6,833.7	17.7	15.8	125.83	-62.6	630.8	653.4	622.1	31.29	20.882	
6,919.5	6,875.0	6,880.5	6,853.0	17.8	15.8	125.85	-62.8	632.7	655.4	624.0	31.38	20.886	
6,950.0	6,905.3	7,920.4	7,500.0	17.9	20.7	36.38	571.7	701.1	636.8	618.5	18.29	34.811	
7,000.0	6,955.1	7,920.3	7,500.0	17.9	20.7	-37.95	571.6	701.1	589.0	570.3	18.68	31.525	
7,050.0	7,004.8	7,915.9	7,500.0	17.9	20.7	-79.53	567.1	701.1	541.8	522.7	19.11	28.348	
7,100.0	7,053.8	7,907.1	7,500.0	17.9	20.6	-99.05	558.4	701.0	495.7	476.1	19.59	25.304	
7,150.0	7,101.9	7,894.1	7,500.0	17.9	20.5	-109.87	545.4	700.9	451.0	430.9	20.12	22.414	
7,200.0	7,148.7	7,876.9	7,500.0	17.8	20.3	-116.19	528.2	700.7	408.3	387.6	20.73	19.702	
7,250.0	7,193.8	7,853.4	7,500.0	17.7	20.1	-119.32	504.7	700.4	368.1	346.7	21.46	17.156	
7,300.0	7,236.9	7,805.0	7,497.6	17.5	19.6	-116.69	456.3	699.7	329.9	307.0	22.93	14.390	
7,350.0	7,277.7	7,762.7	7,492.2	17.4	19.3	-113.75	414.4	698.7	293.5	269.1	24.46	12.002	
7,400.0	7,315.7	7,724.4	7,484.7	17.2	19.0	-110.28	376.9	697.6	259.9	233.9	25.98	10.006	
7,450.0	7,350.9	7,688.9	7,475.5	17.1	18.7	-106.09	342.6	696.4	230.0	202.7	27.35	8.410	
7,500.0	7,382.8	7,655.3	7,464.8	16.9	18.4	-101.05	310.8	695.0	205.3	176.9	28.39	7.231	
7,550.0	7,411.3	7,623.1	7,452.9	16.7	18.2	-95.07	280.9	693.6	187.3	158.5	28.82	6.499	
7,600.0	7,436.1	7,592.0	7,439.8	16.6	18.0	-88.21	252.7	692.1	177.5	149.1	28.42	6.245 SF	
7,629.3	7,448.9	7,574.2	7,431.7	16.5	17.9	-83.84	236.9	691.1	176.0	148.1	27.86	6.316	
7,650.0	7,457.1	7,561.7	7,425.7	16.5	17.9	-80.64	226.0	690.4	176.7	149.4	27.35	6.460	
7,700.0	7,474.0	7,532.1	7,410.5	16.4	17.7	-72.67	200.7	688.7	184.3	158.2	26.13	7.055	
7,750.0	7,486.8	7,500.0	7,392.5	16.4	17.5	-64.05	174.1	686.7	198.8	173.6	25.20	7.889	
7,800.0	7,495.3	7,474.4	7,377.2	16.4	17.4	-57.15	153.7	685.0	218.0	193.0	25.02	8.712	
7,850.0	7,499.5	7,450.0	7,361.7	16.5	17.3	-50.87	134.9	683.4	240.3	214.9	25.43	9.448	
7,873.6	7,500.0	7,432.9	7,350.4	16.5	17.2	-47.31	122.1	682.1	251.4	225.9	25.51	9.855	
7,900.0	7,500.0	7,418.4	7,340.6	16.5	17.2	-45.30	111.6	681.1	264.6	238.7	25.84	10.238	
8,000.0	7,500.0	7,369.6	7,305.4	16.9	17.0	-38.96	77.9	677.4	322.1	294.8	27.32	11.793	
8,100.0	7,500.0	7,328.6	7,273.8	17.4	16.9	-34.26	52.1	674.1	389.4	360.7	28.74	13.549	
8,200.0	7,500.0	7,300.0	7,250.6	18.0	16.8	-31.31	35.4	671.7	463.7	433.6	30.09	15.411	
8,300.0	7,500.0	7,265.1	7,221.3	18.8	16.7	-28.09	16.7	668.7	542.9	512.0	30.87	17.585	
8,400.0	7,500.0	7,250.0	7,208.3	19.7	16.7	-26.81	9.2	667.4	626.1	594.3	31.82	19.674	
8,500.0	7,500.0	7,218.8	7,180.8	20.7	16.6	-24.37	-5.3	664.6	711.8	679.5	32.25	22.069	
8,600.0	7,500.0	7,200.0	7,163.9	21.9	16.5	-23.03	-13.3	662.9	799.8	767.1	32.74	24.431	
8,700.0	7,500.0	7,184.0	7,149.2	23.1	16.5	-21.96	-19.6	661.4	889.6	856.5	33.16	26.827	
8,800.0	7,500.0	7,169.7	7,136.0	24.3	16.5	-21.06	-25.0	660.1	980.8	947.2	33.52	29.256	
8,900.0	7,500.0	7,150.0	7,117.7	25.6	16.4	-19.89	-31.7	658.3	1,073.1	1,039.3	33.77	31.780	
9,000.0	7,500.0	7,150.0	7,117.7	27.0	16.4	-19.89	-31.7	658.3	1,166.3	1,132.1	34.17	34.132	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5													Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,100.0	7,500.0	7,150.0	7,117.7	28.4	16.4	-19.89	-31.7	658.3	1,260.5	1,226.0	34.51	36.522		
9,200.0	7,500.0	7,126.5	7,095.4	29.9	16.4	-18.59	-39.0	656.1	1,354.8	1,320.2	34.61	39.146		
9,300.0	7,500.0	7,118.3	7,087.6	31.4	16.4	-18.16	-41.3	655.3	1,450.0	1,415.2	34.82	41.638		
9,400.0	7,500.0	7,100.0	7,070.0	32.9	16.3	-17.26	-46.1	653.6	1,545.8	1,510.8	34.94	44.240		
9,500.0	7,500.0	7,100.0	7,070.0	34.4	16.3	-17.26	-46.1	653.6	1,641.7	1,606.5	35.18	46.659		
9,600.0	7,500.0	7,100.0	7,070.0	36.0	16.3	-17.26	-46.1	653.6	1,738.1	1,702.7	35.41	49.085		
9,700.0	7,500.0	7,100.0	7,070.0	37.5	16.3	-17.26	-46.1	653.6	1,834.9	1,799.2	35.62	51.512		
9,800.0	7,500.0	7,100.0	7,070.0	39.1	16.3	-17.26	-46.1	653.6	1,932.0	1,896.1	35.82	53.939		
9,900.0	7,500.0	7,100.0	7,070.0	40.7	16.3	-17.26	-46.1	653.6	2,029.3	1,993.3	36.00	56.364		
10,000.0	7,500.0	7,077.1	7,047.9	42.3	16.3	-16.21	-51.3	651.4	2,126.4	2,090.3	36.04	58.993		
10,100.0	7,500.0	7,072.9	7,043.7	43.9	16.3	-16.02	-52.1	651.0	2,224.0	2,187.8	36.20	61.443		
10,200.0	7,500.0	7,050.0	7,021.3	45.6	16.2	-15.06	-56.2	648.8	2,322.2	2,285.9	36.23	64.089		
10,300.0	7,500.0	7,050.0	7,021.3	47.2	16.2	-15.06	-56.2	648.8	2,419.9	2,383.5	36.40	66.478		
10,400.0	7,500.0	7,050.0	7,021.3	48.9	16.2	-15.06	-56.2	648.8	2,517.9	2,481.3	36.57	68.860		
10,500.0	7,500.0	7,050.0	7,021.3	50.5	16.2	-15.06	-56.2	648.8	2,616.0	2,579.3	36.73	71.233		
10,600.0	7,500.0	7,050.0	7,021.3	52.2	16.2	-15.06	-56.2	648.8	2,714.3	2,677.4	36.88	73.596		
10,700.0	7,500.0	7,050.0	7,021.3	53.8	16.2	-15.06	-56.2	648.8	2,812.7	2,775.6	37.03	75.950		
10,800.0	7,500.0	7,050.0	7,021.3	55.5	16.2	-15.06	-56.2	648.8	2,911.1	2,874.0	37.18	78.294		
10,900.0	7,500.0	7,050.0	7,021.3	57.2	16.2	-15.06	-56.2	648.8	3,009.7	2,972.4	37.33	80.628		
11,000.0	7,500.0	7,050.0	7,021.3	58.9	16.2	-15.06	-56.2	648.8	3,108.4	3,070.9	37.47	82.950		
11,100.0	7,500.0	7,050.0	7,021.3	60.6	16.2	-15.06	-56.2	648.8	3,207.2	3,169.6	37.62	85.262		
11,200.0	7,500.0	7,050.0	7,021.3	62.3	16.2	-15.06	-56.2	648.8	3,306.0	3,268.3	37.76	87.562		
11,244.1	7,500.0	7,050.0	7,021.3	63.0	16.2	-15.06	-56.2	648.8	3,349.7	3,311.8	37.82	88.574		
11,300.0	7,500.0	7,050.0	7,021.3	64.0	16.2	-22.06	-56.2	648.8	3,404.9	3,367.0	37.90	89.839		
11,400.0	7,500.0	7,050.0	7,021.3	65.7	16.2	-33.18	-56.2	648.8	3,503.6	3,465.6	38.05	92.076		
11,444.1	7,500.0	7,050.0	7,021.3	66.4	16.2	-37.45	-56.2	648.8	3,547.2	3,509.1	38.11	93.067		
11,500.0	7,500.0	7,050.0	7,021.3	67.4	16.2	-37.45	-56.2	648.8	3,602.2	3,564.0	38.19	94.326		
11,600.0	7,500.0	7,050.0	7,021.3	69.1	16.2	-37.45	-56.2	648.8	3,700.9	3,662.5	38.32	96.572		
11,700.0	7,500.0	7,050.0	7,021.3	70.8	16.2	-37.45	-56.2	648.8	3,799.6	3,761.1	38.45	98.808		
11,800.0	7,500.0	7,050.0	7,021.3	72.5	16.2	-37.45	-56.2	648.8	3,898.3	3,859.7	38.59	101.032		
11,900.0	7,500.0	7,050.0	7,021.3	74.2	16.2	-37.45	-56.2	648.8	3,997.1	3,958.4	38.72	103.245		
12,000.0	7,500.0	7,027.0	6,998.7	76.0	16.2	-35.99	-59.4	646.6	4,095.5	4,056.8	38.74	105.714		
12,100.0	7,500.0	7,025.6	6,997.3	77.7	16.1	-35.91	-59.6	646.5	4,194.4	4,155.5	38.86	107.923		
12,194.1	7,500.0	7,024.4	6,996.1	79.3	16.1	-35.84	-59.8	646.4	4,287.5	4,248.5	38.98	109.992		
12,200.0	7,500.0	7,024.3	6,996.0	79.4	16.1	-35.18	-59.8	646.4	4,293.3	4,254.3	38.99	110.121		
12,300.0	7,500.0	7,023.1	6,994.8	81.1	16.1	-22.07	-59.9	646.3	4,392.4	4,353.3	39.10	112.352		
12,387.3	7,500.0	7,000.0	6,971.9	82.6	16.1	-7.37	-62.1	644.1	4,479.6	4,440.5	39.10	114.583		
12,400.0	7,500.0	7,000.0	6,971.9	82.9	16.1	-7.37	-62.1	644.1	4,492.2	4,453.1	39.11	114.856		
12,500.0	7,500.0	7,000.0	6,971.9	84.6	16.1	-7.37	-62.1	644.1	4,591.5	4,552.2	39.24	117.007		
12,600.0	7,500.0	7,000.0	6,971.9	86.3	16.1	-7.37	-62.1	644.1	4,690.8	4,651.5	39.37	119.148		
12,700.0	7,500.0	7,000.0	6,971.9	88.0	16.1	-7.37	-62.1	644.1	4,790.2	4,750.7	39.50	121.277		
12,800.0	7,500.0	7,000.0	6,971.9	89.7	16.1	-7.37	-62.1	644.1	4,889.6	4,850.0	39.63	123.395		
12,900.0	7,500.0	7,000.0	6,971.9	91.5	16.1	-7.37	-62.1	644.1	4,989.0	4,949.3	39.75	125.501		
13,000.0	7,500.0	7,000.0	6,971.9	93.2	16.1	-7.37	-62.1	644.1	5,088.4	5,048.6	39.88	127.596		
13,100.0	7,500.0	7,000.0	6,971.9	94.9	16.1	-7.37	-62.1	644.1	5,187.9	5,147.9	40.01	129.680		
13,200.0	7,500.0	7,000.0	6,971.9	96.6	16.1	-7.37	-62.1	644.1	5,287.4	5,247.3	40.13	131.753		
13,300.0	7,500.0	7,000.0	6,971.9	98.4	16.1	-7.37	-62.1	644.1	5,386.9	5,346.6	40.26	133.816		
13,400.0	7,500.0	7,000.0	6,971.9	100.1	16.1	-7.37	-62.1	644.1	5,486.4	5,446.0	40.38	135.867		
13,500.0	7,500.0	7,000.0	6,971.9	101.8	16.1	-7.37	-62.1	644.1	5,585.9	5,545.4	40.51	137.907		
13,600.0	7,500.0	7,000.0	6,971.9	103.5	16.1	-7.37	-62.1	644.1	5,685.5	5,644.9	40.63	139.937		
13,700.0	7,500.0	7,000.0	6,971.9	105.3	16.1	-7.37	-62.1	644.1	5,785.1	5,744.3	40.75	141.955		
13,800.0	7,500.0	7,000.0	6,971.9	107.0	16.1	-7.37	-62.1	644.1	5,884.6	5,843.8	40.88	143.964		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	7,000.0	6,971.9	108.7	16.1	-7.37	-62.1	644.1	5,984.2	5,943.2	41.00	145.961		
14,000.0	7,500.0	7,000.0	6,971.9	110.5	16.1	-7.37	-62.1	644.1	6,083.9	6,042.7	41.12	147.949		
14,100.0	7,500.0	7,000.0	6,971.9	112.2	16.1	-7.37	-62.1	644.1	6,183.5	6,142.2	41.24	149.925		
14,200.0	7,500.0	7,000.0	6,971.9	113.9	16.1	-7.37	-62.1	644.1	6,283.1	6,241.7	41.37	151.892		
14,300.0	7,500.0	7,000.0	6,971.9	115.7	16.1	-7.37	-62.1	644.1	6,382.8	6,341.3	41.49	153.848		
14,400.0	7,500.0	7,000.0	6,971.9	117.4	16.1	-7.37	-62.1	644.1	6,482.4	6,440.8	41.61	155.795		
14,500.0	7,500.0	7,000.0	6,971.9	119.1	16.1	-7.37	-62.1	644.1	6,582.1	6,540.3	41.73	157.731		
14,600.0	7,500.0	7,000.0	6,971.9	120.9	16.1	-7.37	-62.1	644.1	6,681.8	6,639.9	41.85	159.657		
14,700.0	7,500.0	7,000.0	6,971.9	122.6	16.1	-7.37	-62.1	644.1	6,781.4	6,739.5	41.97	161.573		
14,800.0	7,500.0	7,000.0	6,971.9	124.4	16.1	-7.37	-62.1	644.1	6,881.1	6,839.0	42.09	163.480		
14,900.0	7,500.0	7,000.0	6,971.9	126.1	16.1	-7.37	-62.1	644.1	6,980.8	6,938.6	42.21	165.377		
15,000.0	7,500.0	7,000.0	6,971.9	127.8	16.1	-7.37	-62.1	644.1	7,080.6	7,038.2	42.33	167.264		
15,100.0	7,500.0	7,000.0	6,971.9	129.6	16.1	-7.37	-62.1	644.1	7,180.3	7,137.8	42.45	169.141		
15,200.0	7,500.0	7,000.0	6,971.9	131.3	16.1	-7.37	-62.1	644.1	7,280.0	7,237.4	42.57	171.009		
15,300.0	7,500.0	7,000.0	6,971.9	133.1	16.1	-7.37	-62.1	644.1	7,379.7	7,337.1	42.69	172.868		
15,400.0	7,500.0	7,000.0	6,971.9	134.8	16.1	-7.37	-62.1	644.1	7,479.5	7,436.7	42.81	174.717		
15,500.0	7,500.0	7,000.0	6,971.9	136.5	16.1	-7.37	-62.1	644.1	7,579.2	7,536.3	42.93	176.557		
15,600.0	7,500.0	7,000.0	6,971.9	138.3	16.1	-7.37	-62.1	644.1	7,679.0	7,635.9	43.05	178.388		
15,700.0	7,500.0	7,000.0	6,971.9	140.0	16.1	-7.37	-62.1	644.1	7,778.8	7,735.6	43.16	180.210		
15,805.8	7,500.0	7,000.0	6,971.9	141.9	16.1	-7.37	-62.1	644.1	7,884.3	7,841.0	43.29	182.127		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.35	-0.4	60.2	60.2					
100.0	100.0	100.0	100.0	0.2	0.2	90.35	-0.4	60.2	60.2	59.9	0.30	198.148		
200.0	200.0	200.0	200.0	0.3	0.3	90.35	-0.4	60.2	60.2	59.5	0.65	92.187		
300.0	300.0	300.0	300.0	0.5	0.5	90.35	-0.4	60.2	60.2	59.2	1.00	60.066		
400.0	400.0	400.0	400.0	0.7	0.7	90.35	-0.4	60.2	60.2	58.8	1.35	44.545 CC, ES		
500.0	500.0	499.0	498.9	0.8	0.8	90.40	-0.4	61.0	61.0	59.3	1.70	35.947		
600.0	600.0	597.9	597.8	1.0	1.0	51.65	-0.6	63.6	63.1	61.0	2.04	30.847		
700.0	700.0	696.7	696.6	1.2	1.2	53.58	-0.9	67.8	65.8	63.4	2.39	27.499		
800.0	799.9	795.4	795.1	1.4	1.4	56.49	-1.3	73.8	69.3	66.6	2.74	25.267		
900.0	899.7	894.0	893.3	1.6	1.6	60.12	-1.8	81.4	73.9	70.8	3.10	23.807		
1,000.0	999.4	992.3	991.3	1.8	1.8	64.23	-2.4	90.7	79.6	76.1	3.48	22.906		
1,100.0	1,098.9	1,090.5	1,088.8	2.0	2.1	68.52	-3.2	101.6	86.7	82.9	3.87	22.418		
1,201.3	1,199.5	1,191.1	1,188.6	2.2	2.3	73.05	-4.0	113.9	94.8	90.5	4.30	22.039		
1,300.0	1,297.5	1,289.1	1,286.0	2.5	2.6	77.30	-4.8	125.8	103.0	98.3	4.75	21.706		
1,400.0	1,396.8	1,388.5	1,384.6	2.7	2.8	80.95	-5.6	137.9	111.8	106.6	5.21	21.458		
1,500.0	1,496.0	1,487.9	1,483.3	3.0	3.1	84.06	-6.5	149.9	121.0	115.3	5.69	21.275		
1,600.0	1,595.3	1,587.3	1,581.9	3.3	3.3	86.72	-7.3	162.0	130.5	124.3	6.17	21.139		
1,700.0	1,694.5	1,686.7	1,680.5	3.5	3.6	89.02	-8.1	174.1	140.2	133.6	6.67	21.039		
1,800.0	1,793.8	1,786.0	1,779.2	3.8	3.9	91.02	-8.9	186.2	150.2	143.0	7.16	20.966		
1,900.0	1,893.0	1,885.4	1,877.8	4.0	4.1	92.78	-9.7	198.3	160.2	152.6	7.66	20.912		
2,000.0	1,992.3	1,984.8	1,976.5	4.3	4.4	94.32	-10.6	210.3	170.5	162.3	8.17	20.874		
2,100.0	2,091.5	2,084.2	2,075.1	4.6	4.7	95.69	-11.4	222.4	180.8	172.1	8.67	20.847		
2,200.0	2,190.8	2,183.5	2,173.7	4.8	4.9	96.91	-12.2	234.5	191.2	182.0	9.18	20.830		
2,300.0	2,290.0	2,282.9	2,272.4	5.1	5.2	98.00	-13.0	246.6	201.7	192.0	9.69	20.819		
2,400.0	2,389.3	2,382.3	2,371.0	5.4	5.5	98.98	-13.9	258.7	212.3	202.1	10.20	20.813		
2,500.0	2,488.5	2,481.7	2,469.6	5.7	5.8	99.88	-14.7	270.8	222.9	212.2	10.71	20.812		
2,600.0	2,587.8	2,581.1	2,568.3	5.9	6.0	100.69	-15.5	282.8	233.5	222.3	11.22	20.814		
2,700.0	2,687.0	2,680.4	2,666.9	6.2	6.3	101.43	-16.3	294.9	244.2	232.5	11.73	20.819		
2,800.0	2,786.3	2,779.8	2,765.6	6.5	6.6	102.10	-17.1	307.0	255.0	242.7	12.24	20.825		
2,900.0	2,885.5	2,879.2	2,864.2	6.7	6.8	102.73	-18.0	319.1	265.7	253.0	12.76	20.833		
3,000.0	2,984.8	2,978.6	2,962.8	7.0	7.1	103.30	-18.8	331.2	276.5	263.3	13.27	20.842		
3,100.0	3,084.0	3,077.9	3,061.5	7.3	7.4	103.83	-19.6	343.2	287.4	273.6	13.78	20.852		
3,200.0	3,183.3	3,177.3	3,160.1	7.6	7.7	104.32	-20.4	355.3	298.2	283.9	14.30	20.862		
3,300.0	3,282.5	3,276.7	3,258.7	7.8	7.9	104.78	-21.2	367.4	309.1	294.3	14.81	20.873		
3,400.0	3,381.8	3,376.1	3,357.4	8.1	8.2	105.21	-22.1	379.5	320.0	304.7	15.32	20.884		
3,500.0	3,481.1	3,475.5	3,456.0	8.4	8.5	105.61	-22.9	391.6	330.9	315.1	15.84	20.895		
3,600.0	3,580.3	3,574.8	3,554.7	8.7	8.7	105.98	-23.7	403.6	341.8	325.5	16.35	20.907		
3,700.0	3,679.6	3,674.2	3,653.3	8.9	9.0	106.33	-24.5	415.7	352.7	335.9	16.86	20.918		
3,800.0	3,778.8	3,773.6	3,751.9	9.2	9.3	106.66	-25.3	427.8	363.7	346.3	17.38	20.929		
3,900.0	3,878.1	3,873.0	3,850.6	9.5	9.6	106.97	-26.2	439.9	374.6	356.8	17.89	20.940		
4,000.0	3,977.3	3,972.3	3,949.2	9.8	9.8	107.26	-27.0	452.0	385.6	367.2	18.41	20.952		
4,100.0	4,076.6	4,071.7	4,047.8	10.0	10.1	107.54	-27.8	464.1	396.6	377.7	18.92	20.962		
4,200.0	4,175.8	4,171.1	4,146.5	10.3	10.4	107.80	-28.6	476.1	407.6	388.1	19.43	20.973		
4,300.0	4,275.1	4,270.5	4,245.1	10.6	10.7	108.05	-29.4	488.2	418.6	398.6	19.95	20.984		
4,400.0	4,374.3	4,369.9	4,343.8	10.9	10.9	108.28	-30.3	500.3	429.6	409.1	20.46	20.994		
4,500.0	4,473.6	4,469.2	4,442.4	11.1	11.2	108.50	-31.1	512.4	440.6	419.6	20.98	21.004		
4,600.0	4,572.8	4,568.6	4,541.0	11.4	11.5	108.72	-31.9	524.5	451.6	430.1	21.49	21.014		
4,700.0	4,672.1	4,668.0	4,639.7	11.7	11.8	108.92	-32.7	536.5	462.6	440.6	22.00	21.024		
4,800.0	4,771.3	4,767.4	4,738.3	12.0	12.0	109.11	-33.6	548.6	473.6	451.1	22.52	21.034		
4,900.0	4,870.6	4,866.8	4,836.9	12.2	12.3	109.30	-34.4	560.7	484.7	461.6	23.03	21.043		
5,000.0	4,969.8	4,966.1	4,935.6	12.5	12.6	109.47	-35.2	572.8	495.7	472.2	23.55	21.052		
5,100.0	5,069.1	5,065.5	5,034.2	12.8	12.9	109.64	-36.0	584.9	506.7	482.7	24.06	21.061		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,200.0	5,168.3	5,164.9	5,132.9	13.1	13.1	109.80	-36.8	596.9	517.8	493.2	24.57	21.070		
5,300.0	5,267.6	5,264.3	5,231.5	13.3	13.4	109.95	-37.7	609.0	528.8	503.7	25.09	21.078		
5,400.0	5,366.8	5,363.6	5,330.1	13.6	13.7	110.10	-38.5	621.1	539.9	514.3	25.60	21.086		
5,500.0	5,466.1	5,463.0	5,428.8	13.9	13.9	110.24	-39.3	633.2	550.9	524.8	26.12	21.095		
5,600.0	5,565.3	5,562.4	5,527.4	14.2	14.2	110.38	-40.1	645.3	562.0	535.4	26.63	21.102		
5,700.0	5,664.6	5,661.8	5,626.0	14.4	14.5	110.51	-40.9	657.3	573.0	545.9	27.15	21.110		
5,800.0	5,763.8	5,761.2	5,724.7	14.7	14.8	110.64	-41.8	669.4	584.1	556.5	27.66	21.118		
5,900.0	5,863.1	5,860.5	5,823.3	15.0	15.0	110.76	-42.6	681.5	595.2	567.0	28.17	21.125		
6,000.0	5,962.3	5,959.9	5,922.0	15.3	15.3	110.88	-43.4	693.6	606.2	577.6	28.69	21.132		
6,100.0	6,061.6	6,059.3	6,020.6	15.5	15.6	110.99	-44.2	705.7	617.3	588.1	29.20	21.139		
6,200.0	6,160.9	6,158.7	6,119.2	15.8	15.9	111.10	-45.0	717.8	628.4	598.7	29.72	21.146		
6,300.0	6,260.1	6,258.0	6,217.9	16.1	16.1	111.20	-45.9	729.8	639.5	609.2	30.23	21.153		
6,400.0	6,359.4	6,357.4	6,316.5	16.4	16.4	111.30	-46.7	741.9	650.5	619.8	30.74	21.159		
6,500.0	6,458.6	6,456.8	6,415.1	16.6	16.7	111.40	-47.5	754.0	661.6	630.4	31.26	21.166		
6,600.0	6,557.9	6,556.2	6,513.8	16.9	17.0	111.50	-48.3	766.1	672.7	640.9	31.77	21.172		
6,700.0	6,657.1	6,655.6	6,612.4	17.2	17.2	111.59	-49.1	778.2	683.8	651.5	32.29	21.178		
6,800.0	6,756.4	6,754.9	6,711.1	17.5	17.5	111.68	-50.0	790.2	694.9	662.1	32.80	21.184		
6,900.0	6,855.6	6,854.3	6,809.7	17.7	17.8	111.76	-50.8	802.3	706.0	672.6	33.32	21.190		
6,919.5	6,875.0	6,873.7	6,828.9	17.8	17.8	111.78	-50.9	804.7	708.1	674.7	33.42	21.191		
6,950.0	6,905.3	6,904.1	6,859.1	17.9	17.9	89.32	-51.2	808.4	710.8	677.2	33.56	21.178		
7,000.0	6,955.1	6,954.0	6,908.6	17.9	18.1	30.98	-51.6	814.4	712.1	678.3	33.78	21.083		
7,050.0	7,004.8	7,003.8	6,958.0	17.9	18.2	1.53	-52.0	820.5	709.6	675.6	33.96	20.896		
7,100.0	7,053.8	7,053.0	7,006.9	17.9	18.3	-10.06	-52.4	826.5	703.3	669.2	34.10	20.623		
7,150.0	7,101.9	7,101.3	7,054.9	17.9	18.5	-16.43	-52.8	832.4	693.3	659.1	34.21	20.268		
7,200.0	7,148.7	7,148.3	7,101.5	17.8	18.6	-21.03	-53.2	838.1	679.8	645.6	34.27	19.840		
7,250.0	7,193.8	7,193.7	7,146.6	17.7	18.7	-25.02	-53.6	843.6	663.1	628.8	34.27	19.347		
7,300.0	7,236.9	7,236.9	7,189.7	17.5	19.7	-53.30	57.2	886.8	636.6	604.3	32.30	19.711		
7,350.0	7,277.7	7,277.7	7,230.7	17.4	20.1	-74.09	125.6	895.6	597.5	566.9	30.68	19.479		
7,400.0	7,315.7	7,315.7	7,268.7	17.2	20.1	-82.59	134.1	896.5	559.1	528.7	30.43	18.373		
7,450.0	7,350.9	7,350.9	7,303.9	17.1	20.1	-87.30	128.4	895.9	522.5	492.1	30.39	17.191		
7,500.0	7,382.8	7,382.8	7,335.8	16.9	20.0	-90.08	117.6	894.7	488.4	458.1	30.31	16.111		
7,550.0	7,411.3	7,411.3	7,364.3	16.7	20.0	-91.58	104.6	893.2	457.3	427.2	30.09	15.197		
7,600.0	7,436.1	7,436.1	7,389.1	16.6	19.9	-92.07	90.9	891.5	429.8	400.1	29.69	14.477		
7,650.0	7,457.1	7,457.1	7,410.1	16.5	19.8	-91.72	76.9	889.7	406.4	377.3	29.10	13.964		
7,700.0	7,474.0	7,474.0	7,427.0	16.4	19.8	-90.61	63.0	887.7	387.7	359.3	28.39	13.656		
7,750.0	7,486.8	7,486.8	7,439.8	16.4	19.7	-88.81	49.6	885.5	374.2	346.5	27.67	13.522		
7,800.0	7,495.3	7,495.3	7,448.3	16.4	19.6	-86.38	36.7	883.3	366.1	339.0	27.10	13.511 SF		
7,850.0	7,499.5	7,499.5	7,452.5	16.5	19.6	-83.37	24.4	881.0	363.4	336.6	26.83	13.548		
7,850.2	7,499.5	7,499.5	7,452.5	16.5	19.6	-83.36	24.4	881.0	363.4	336.6	26.83	13.548		
7,873.6	7,500.0	7,500.0	7,448.0	16.5	19.5	-81.77	18.9	879.8	364.0	337.2	26.83	13.565		
7,900.0	7,500.0	7,497.7	7,437.5	16.5	19.5	-80.11	13.1	878.6	366.0	339.0	26.96	13.577		
8,000.0	7,500.0	7,459.4	7,403.3	16.9	19.4	-74.75	-3.7	874.6	387.0	358.6	28.41	13.621		
8,100.0	7,500.0	7,429.9	7,376.3	17.4	19.3	-70.60	-15.0	871.4	427.5	396.9	30.63	13.958		
8,200.0	7,500.0	7,400.0	7,348.3	18.0	19.3	-66.45	-25.1	868.0	483.7	451.0	32.76	14.765		
8,300.0	7,500.0	7,387.8	7,336.7	18.8	19.2	-64.78	-28.8	866.6	551.1	516.4	34.63	15.912		
8,400.0	7,500.0	7,372.3	7,322.0	19.7	19.2	-62.70	-33.1	864.9	626.4	590.5	35.97	17.418		
8,500.0	7,500.0	7,350.0	7,300.6	20.7	19.1	-59.77	-38.6	862.3	707.5	670.7	36.85	19.198		
8,600.0	7,500.0	7,350.0	7,300.6	21.9	19.1	-59.77	-38.6	862.3	792.4	754.6	37.74	20.998		
8,700.0	7,500.0	7,350.0	7,300.6	23.1	19.1	-59.77	-38.6	862.3	880.4	842.0	38.40	22.924		
8,800.0	7,500.0	7,330.7	7,281.9	24.3	19.1	-57.32	-42.7	860.1	970.3	931.5	38.76	25.035		
8,900.0	7,500.0	7,323.6	7,274.9	25.6	19.1	-56.43	-44.1	859.2	1,061.9	1,022.8	39.13	27.137		
9,000.0	7,500.0	7,317.3	7,268.7	27.0	19.0	-55.66	-45.2	858.5	1,154.9	1,115.4	39.45	29.277		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
9,100.0	7,500.0	7,300.0	7,251.8	28.4	19.0	-53.58	-47.9	856.4	1,249.0	1,209.4	39.63	31.517		
9,200.0	7,500.0	7,300.0	7,251.8	29.9	19.0	-53.58	-47.9	856.4	1,343.6	1,303.7	39.91	33.669		
9,300.0	7,500.0	7,300.0	7,251.8	31.4	19.0	-53.58	-47.9	856.4	1,439.0	1,398.9	40.15	35.838		
9,400.0	7,500.0	7,300.0	7,251.8	32.9	19.0	-53.58	-47.9	856.4	1,535.0	1,494.6	40.37	38.019		
9,500.0	7,500.0	7,300.0	7,251.8	34.4	19.0	-53.58	-47.9	856.4	1,631.4	1,590.8	40.58	40.207		
9,600.0	7,500.0	7,300.0	7,251.8	36.0	19.0	-53.58	-47.9	856.4	1,728.3	1,687.5	40.76	42.400		
9,700.0	7,500.0	7,300.0	7,251.8	37.5	19.0	-53.58	-47.9	856.4	1,825.5	1,784.5	40.94	44.593		
9,800.0	7,500.0	7,300.0	7,251.8	39.1	19.0	-53.58	-47.9	856.4	1,922.9	1,881.8	41.10	46.786		
9,900.0	7,500.0	7,300.0	7,251.8	40.7	19.0	-53.58	-47.9	856.4	2,020.7	1,979.4	41.26	48.977		
10,000.0	7,500.0	7,280.1	7,232.2	42.3	19.0	-51.28	-50.4	854.0	2,118.2	2,076.9	41.29	51.296		
10,100.0	7,500.0	7,277.8	7,230.0	43.9	18.9	-51.02	-50.7	853.8	2,216.2	2,174.8	41.43	53.495		
10,200.0	7,500.0	7,275.7	7,227.9	45.6	18.9	-50.79	-50.9	853.5	2,314.4	2,272.8	41.56	55.688		
10,300.0	7,500.0	7,273.8	7,226.0	47.2	18.9	-50.57	-51.1	853.3	2,412.7	2,371.0	41.69	57.875		
10,400.0	7,500.0	7,272.0	7,224.2	48.9	18.9	-50.37	-51.2	853.1	2,511.1	2,469.3	41.81	60.054		
10,500.0	7,500.0	7,250.0	7,202.4	50.5	18.9	-47.99	-52.9	850.4	2,610.1	2,568.3	41.83	62.402		
10,600.0	7,500.0	7,250.0	7,202.4	52.2	18.9	-47.99	-52.9	850.4	2,708.7	2,666.8	41.96	64.554		
10,700.0	7,500.0	7,250.0	7,202.4	53.8	18.9	-47.99	-52.9	850.4	2,807.4	2,765.3	42.09	66.698		
10,800.0	7,500.0	7,250.0	7,202.4	55.5	18.9	-47.99	-52.9	850.4	2,906.2	2,864.0	42.22	68.834		
10,900.0	7,500.0	7,250.0	7,202.4	57.2	18.9	-47.99	-52.9	850.4	3,005.1	2,962.7	42.35	70.962		
11,000.0	7,500.0	7,250.0	7,202.4	58.9	18.9	-47.99	-52.9	850.4	3,104.0	3,061.5	42.47	73.082		
11,100.0	7,500.0	7,250.0	7,202.4	60.6	18.9	-47.99	-52.9	850.4	3,203.0	3,160.4	42.60	75.193		
11,200.0	7,500.0	7,250.0	7,202.4	62.3	18.9	-47.99	-52.9	850.4	3,302.1	3,259.3	42.72	77.295		
11,244.1	7,500.0	7,250.0	7,202.4	63.0	18.9	-47.99	-52.9	850.4	3,345.8	3,303.0	42.77	78.221		
11,300.0	7,500.0	7,250.0	7,202.4	64.0	18.9	-53.05	-52.9	850.4	3,401.1	3,358.3	42.85	79.377		
11,400.0	7,500.0	7,250.0	7,202.4	65.7	18.9	-59.96	-52.9	850.4	3,499.9	3,456.9	42.99	81.415		
11,444.1	7,500.0	7,250.0	7,202.4	66.4	18.9	-62.35	-52.9	850.4	3,543.3	3,500.3	43.04	82.317		
11,500.0	7,500.0	7,250.0	7,202.4	67.4	18.9	-62.35	-52.9	850.4	3,598.3	3,555.2	43.11	83.463		
11,600.0	7,500.0	7,250.0	7,202.4	69.1	18.9	-62.35	-52.9	850.4	3,696.7	3,653.5	43.23	85.509		
11,700.0	7,500.0	7,250.0	7,202.4	70.8	18.9	-62.35	-52.9	850.4	3,795.2	3,751.9	43.35	87.548		
11,800.0	7,500.0	7,250.0	7,202.4	72.5	18.9	-62.35	-52.9	850.4	3,893.8	3,850.4	43.47	89.579		
11,900.0	7,500.0	7,250.0	7,202.4	74.2	18.9	-62.35	-52.9	850.4	3,992.5	3,948.9	43.59	91.601		
12,000.0	7,500.0	7,250.0	7,202.4	76.0	18.9	-62.35	-52.9	850.4	4,091.2	4,047.5	43.70	93.616		
12,100.0	7,500.0	7,250.0	7,202.4	77.7	18.9	-62.35	-52.9	850.4	4,190.0	4,146.2	43.82	95.623		
12,194.1	7,500.0	7,250.0	7,202.4	79.3	18.9	-62.35	-52.9	850.4	4,283.1	4,239.2	43.93	97.505		
12,200.0	7,500.0	7,250.0	7,202.4	79.4	18.9	-61.98	-52.9	850.4	4,288.9	4,245.0	43.93	97.622		
12,300.0	7,500.0	7,250.0	7,202.4	81.1	18.9	-53.97	-52.9	850.4	4,388.0	4,344.0	44.03	99.658		
12,387.3	7,500.0	7,250.0	7,202.4	82.6	18.9	-42.71	-52.9	850.4	4,474.9	4,430.8	44.12	101.432		
12,400.0	7,500.0	7,250.0	7,202.4	82.9	18.9	-42.71	-52.9	850.4	4,487.5	4,443.4	44.13	101.684		
12,500.0	7,500.0	7,250.0	7,202.4	84.6	18.9	-42.71	-52.9	850.4	4,587.1	4,542.9	44.25	103.671		
12,600.0	7,500.0	7,250.0	7,202.4	86.3	18.9	-42.71	-52.9	850.4	4,686.7	4,642.4	44.36	105.649		
12,700.0	7,500.0	7,250.0	7,202.4	88.0	18.9	-42.71	-52.9	850.4	4,786.4	4,741.9	44.48	107.618		
12,800.0	7,500.0	7,250.0	7,202.4	89.7	18.9	-42.71	-52.9	850.4	4,886.0	4,841.4	44.59	109.578		
12,900.0	7,500.0	7,250.0	7,202.4	91.5	18.9	-42.71	-52.9	850.4	4,985.7	4,941.0	44.70	111.528		
13,000.0	7,500.0	7,250.0	7,202.4	93.2	18.9	-42.71	-52.9	850.4	5,085.3	5,040.5	44.82	113.470		
13,100.0	7,500.0	7,250.0	7,202.4	94.9	18.9	-42.71	-52.9	850.4	5,185.0	5,140.1	44.93	115.403		
13,200.0	7,500.0	7,250.0	7,202.4	96.6	18.9	-42.71	-52.9	850.4	5,284.7	5,239.7	45.04	117.326		
13,300.0	7,500.0	7,250.0	7,202.4	98.4	18.9	-42.71	-52.9	850.4	5,384.4	5,339.3	45.16	119.241		
13,400.0	7,500.0	7,250.0	7,202.4	100.1	18.9	-42.71	-52.9	850.4	5,484.2	5,438.9	45.27	121.147		
13,500.0	7,500.0	7,250.0	7,202.4	101.8	18.9	-42.71	-52.9	850.4	5,583.9	5,538.5	45.38	123.044		
13,600.0	7,500.0	7,250.0	7,202.4	103.5	18.9	-42.71	-52.9	850.4	5,683.6	5,638.1	45.49	124.933		
13,700.0	7,500.0	7,250.0	7,202.4	105.3	18.9	-42.71	-52.9	850.4	5,783.4	5,737.8	45.61	126.812		
13,800.0	7,500.0	7,250.0	7,202.4	107.0	18.9	-42.71	-52.9	850.4	5,883.1	5,837.4	45.72	128.684		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	7,250.0	7,202.4	108.7	18.9	-42.71	-52.9	850.4	5,982.9	5,937.1	45.83	130.546		
14,000.0	7,500.0	7,250.0	7,202.4	110.5	18.9	-42.71	-52.9	850.4	6,082.7	6,036.7	45.94	132.400		
14,100.0	7,500.0	7,250.0	7,202.4	112.2	18.9	-42.71	-52.9	850.4	6,182.5	6,136.4	46.05	134.246		
14,200.0	7,500.0	7,250.0	7,202.4	113.9	18.9	-42.71	-52.9	850.4	6,282.3	6,236.1	46.16	136.083		
14,300.0	7,500.0	7,250.0	7,202.4	115.7	18.9	-42.71	-52.9	850.4	6,382.1	6,335.8	46.28	137.912		
14,400.0	7,500.0	7,250.0	7,202.4	117.4	18.9	-42.71	-52.9	850.4	6,481.9	6,435.5	46.39	139.733		
14,500.0	7,500.0	7,250.0	7,202.4	119.1	18.9	-42.71	-52.9	850.4	6,581.7	6,535.2	46.50	141.545		
14,600.0	7,500.0	7,250.0	7,202.4	120.9	18.9	-42.71	-52.9	850.4	6,681.5	6,634.9	46.61	143.350		
14,700.0	7,500.0	7,250.0	7,202.4	122.6	18.9	-42.71	-52.9	850.4	6,781.3	6,734.6	46.72	145.146		
14,800.0	7,500.0	7,250.0	7,202.4	124.4	18.9	-42.71	-52.9	850.4	6,881.1	6,834.3	46.83	146.934		
14,900.0	7,500.0	7,250.0	7,202.4	126.1	18.9	-42.71	-52.9	850.4	6,981.0	6,934.0	46.94	148.714		
15,000.0	7,500.0	7,250.0	7,202.4	127.8	18.9	-42.71	-52.9	850.4	7,080.8	7,033.7	47.05	150.486		
15,100.0	7,500.0	7,250.0	7,202.4	129.6	18.9	-42.71	-52.9	850.4	7,180.6	7,133.5	47.16	152.250		
15,200.0	7,500.0	7,250.0	7,202.4	131.3	18.9	-42.71	-52.9	850.4	7,280.5	7,233.2	47.27	154.007		
15,300.0	7,500.0	7,250.0	7,202.4	133.1	18.9	-42.71	-52.9	850.4	7,380.3	7,332.9	47.38	155.755		
15,400.0	7,500.0	7,250.0	7,202.4	134.8	18.9	-42.71	-52.9	850.4	7,480.2	7,432.7	47.49	157.496		
15,500.0	7,500.0	7,250.0	7,202.4	136.5	18.9	-42.71	-52.9	850.4	7,580.0	7,532.4	47.60	159.229		
15,600.0	7,500.0	7,250.0	7,202.4	138.3	18.9	-42.71	-52.9	850.4	7,679.9	7,632.2	47.71	160.955		
15,700.0	7,500.0	7,250.0	7,202.4	140.0	18.9	-42.71	-52.9	850.4	7,779.7	7,731.9	47.82	162.673		
15,805.8	7,500.0	7,250.0	7,202.4	141.9	18.9	-42.71	-52.9	850.4	7,885.4	7,837.4	47.94	164.482		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	90.62	-0.7	67.7	67.7					
100.0	100.0	100.0	100.0	0.2	0.2	90.62	-0.7	67.7	67.7	67.4	0.30	223.041		
200.0	200.0	200.0	200.0	0.3	0.3	90.62	-0.7	67.7	67.7	67.1	0.65	103.768		
300.0	300.0	300.0	300.0	0.5	0.5	90.62	-0.7	67.7	67.7	66.7	1.00	67.612 CC, ES		
400.0	400.0	398.8	398.8	0.7	0.7	90.51	-0.6	68.6	68.6	67.2	1.35	50.854		
500.0	500.0	497.6	497.6	0.8	0.9	90.22	-0.3	71.1	71.1	69.5	1.70	41.968		
600.0	600.0	596.3	596.2	1.0	1.0	50.78	0.3	75.3	74.9	72.8	2.04	36.668		
700.0	700.0	694.9	694.6	1.2	1.2	51.59	1.1	81.2	79.2	76.8	2.39	33.141		
800.0	799.9	793.4	792.7	1.4	1.4	53.05	2.1	88.8	84.2	81.4	2.74	30.705		
900.0	899.7	891.7	890.6	1.6	1.7	55.01	3.4	98.0	89.9	86.8	3.10	28.982		
1,000.0	999.4	989.8	988.2	1.8	1.9	57.33	4.8	108.8	96.4	92.9	3.47	27.745		
1,100.0	1,098.9	1,087.8	1,085.3	2.0	2.2	59.89	6.5	121.3	103.8	99.9	3.87	26.843		
1,201.3	1,199.5	1,186.8	1,183.3	2.2	2.4	62.60	8.4	135.6	112.3	108.0	4.29	26.161		
1,300.0	1,297.5	1,283.1	1,278.3	2.5	2.8	65.00	10.5	151.1	122.0	117.3	4.73	25.802		
1,400.0	1,396.8	1,380.4	1,374.0	2.7	3.1	66.77	12.9	168.4	133.5	128.4	5.18	25.759		
1,500.0	1,496.0	1,478.0	1,469.8	3.0	3.4	68.00	15.4	187.2	146.6	141.0	5.65	25.935		
1,600.0	1,595.3	1,577.1	1,566.9	3.3	3.8	68.98	18.1	206.7	160.1	154.0	6.14	26.075		
1,700.0	1,694.5	1,676.1	1,663.9	3.5	4.2	69.81	20.7	226.2	173.6	167.0	6.64	26.169		
1,800.0	1,793.8	1,775.2	1,761.0	3.8	4.5	70.52	23.3	245.7	187.2	180.1	7.14	26.229		
1,900.0	1,893.0	1,874.3	1,858.1	4.0	4.9	71.13	26.0	265.2	200.8	193.1	7.64	26.267		
2,000.0	1,992.3	1,973.3	1,955.2	4.3	5.3	71.67	28.6	284.7	214.4	206.2	8.15	26.287		
2,100.0	2,091.5	2,072.4	2,052.2	4.6	5.7	72.14	31.2	304.2	228.0	219.3	8.67	26.295		
2,200.0	2,190.8	2,171.4	2,149.3	4.8	6.1	72.56	33.9	323.7	241.6	232.4	9.19	26.295		
2,300.0	2,290.0	2,270.5	2,246.4	5.1	6.4	72.93	36.5	343.2	255.2	245.5	9.71	26.289		
2,400.0	2,389.3	2,369.5	2,343.5	5.4	6.8	73.27	39.2	362.7	268.9	258.7	10.23	26.278		
2,500.0	2,488.5	2,468.6	2,440.6	5.7	7.2	73.57	41.8	382.2	282.6	271.8	10.76	26.264		
2,600.0	2,587.8	2,567.6	2,537.6	5.9	7.6	73.85	44.4	401.7	296.2	284.9	11.29	26.248		
2,700.0	2,687.0	2,666.7	2,634.7	6.2	8.0	74.10	47.1	421.2	309.9	298.1	11.81	26.231		
2,800.0	2,786.3	2,765.7	2,731.8	6.5	8.4	74.33	49.7	440.7	323.6	311.2	12.34	26.212		
2,900.0	2,885.5	2,864.8	2,828.9	6.7	8.7	74.54	52.3	460.3	337.2	324.4	12.88	26.193		
3,000.0	2,984.8	2,963.8	2,926.0	7.0	9.1	74.74	55.0	479.8	350.9	337.5	13.41	26.174		
3,100.0	3,084.0	3,062.9	3,023.0	7.3	9.5	74.92	57.6	499.3	364.6	350.7	13.94	26.155		
3,200.0	3,183.3	3,161.9	3,120.1	7.6	9.9	75.09	60.2	518.8	378.3	363.8	14.47	26.136		
3,300.0	3,282.5	3,261.0	3,217.2	7.8	10.3	75.24	62.9	538.3	392.0	377.0	15.01	26.118		
3,400.0	3,381.8	3,360.0	3,314.3	8.1	10.7	75.39	65.5	557.8	405.7	390.2	15.54	26.099		
3,500.0	3,481.1	3,459.1	3,411.3	8.4	11.1	75.52	68.1	577.3	419.4	403.3	16.08	26.081		
3,600.0	3,580.3	3,558.1	3,508.4	8.7	11.5	75.65	70.8	596.8	433.1	416.5	16.62	26.064		
3,700.0	3,679.6	3,657.2	3,605.5	8.9	11.8	75.77	73.4	616.3	446.8	429.6	17.15	26.047		
3,800.0	3,778.8	3,756.3	3,702.6	9.2	12.2	75.88	76.1	635.8	460.5	442.8	17.69	26.030		
3,900.0	3,878.1	3,855.3	3,799.7	9.5	12.6	75.99	78.7	655.3	474.2	456.0	18.23	26.014		
4,000.0	3,977.3	3,954.4	3,896.7	9.8	13.0	76.08	81.3	674.8	487.9	469.2	18.77	25.998		
4,100.0	4,076.6	4,053.4	3,993.8	10.0	13.4	76.18	84.0	694.3	501.6	482.3	19.31	25.983		
4,200.0	4,175.8	4,152.5	4,090.9	10.3	13.8	76.27	86.6	713.8	515.3	495.5	19.84	25.968		
4,300.0	4,275.1	4,251.5	4,188.0	10.6	14.2	76.35	89.2	733.3	529.1	508.7	20.38	25.954		
4,400.0	4,374.3	4,350.6	4,285.0	10.9	14.6	76.43	91.9	752.8	542.8	521.8	20.92	25.940		
4,500.0	4,473.6	4,449.6	4,382.1	11.1	15.0	76.51	94.5	772.3	556.5	535.0	21.46	25.927		
4,600.0	4,572.8	4,548.7	4,479.2	11.4	15.3	76.58	97.1	791.8	570.2	548.2	22.00	25.914		
4,700.0	4,672.1	4,647.7	4,576.3	11.7	15.7	76.65	99.8	811.3	583.9	561.4	22.54	25.902		
4,800.0	4,771.3	4,746.8	4,673.4	12.0	16.1	76.72	102.4	830.8	597.6	574.5	23.08	25.890		
4,900.0	4,870.6	4,845.8	4,770.4	12.2	16.5	76.78	105.1	850.3	611.3	587.7	23.62	25.878		
5,000.0	4,969.8	4,944.9	4,867.5	12.5	16.9	76.84	107.7	869.8	625.1	600.9	24.16	25.866		
5,100.0	5,069.1	5,043.9	4,964.6	12.8	17.3	76.90	110.3	889.3	638.8	614.1	24.71	25.855		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,168.3	5,143.0	5,061.7	13.1	17.7	76.95	113.0	908.8	652.5	627.3	25.25	25.845		
5,300.0	5,267.6	5,242.0	5,158.7	13.3	18.1	77.01	115.6	928.3	666.2	640.4	25.79	25.834		
5,400.0	5,366.8	5,341.1	5,255.8	13.6	18.5	77.06	118.2	947.8	679.9	653.6	26.33	25.824		
5,500.0	5,466.1	5,440.1	5,352.9	13.9	18.8	77.11	120.9	967.3	693.7	666.8	26.87	25.815		
5,600.0	5,565.3	5,539.2	5,450.0	14.2	19.2	77.15	123.5	986.8	707.4	680.0	27.41	25.805		
5,700.0	5,664.6	5,638.2	5,547.1	14.4	19.6	77.20	126.1	1,006.3	721.1	693.1	27.95	25.796		
5,800.0	5,763.8	5,737.3	5,644.1	14.7	20.0	77.24	128.8	1,025.8	734.8	706.3	28.50	25.787		
5,900.0	5,863.1	5,836.4	5,741.2	15.0	20.4	77.28	131.4	1,045.3	748.5	719.5	29.04	25.778		
6,000.0	5,962.3	5,935.4	5,838.3	15.3	20.8	77.33	134.1	1,064.8	762.3	732.7	29.58	25.770		
6,100.0	6,061.6	6,034.5	5,935.4	15.5	21.2	77.36	136.7	1,084.3	776.0	745.9	30.12	25.762		
6,200.0	6,160.9	6,133.5	6,032.5	15.8	21.6	77.40	139.3	1,103.8	789.7	759.1	30.66	25.754		
6,300.0	6,260.1	6,232.6	6,129.5	16.1	22.0	77.44	142.0	1,123.3	803.4	772.2	31.21	25.746		
6,400.0	6,359.4	6,331.6	6,226.6	16.4	22.4	77.47	144.6	1,142.8	817.2	785.4	31.75	25.739		
6,500.0	6,458.6	6,430.7	6,323.7	16.6	22.7	77.51	147.2	1,162.3	830.9	798.6	32.29	25.731		
6,600.0	6,557.9	6,529.7	6,420.8	16.9	23.1	77.54	149.9	1,181.8	844.6	811.8	32.83	25.724		
6,700.0	6,657.1	6,628.8	6,517.8	17.2	23.5	77.57	152.5	1,201.3	858.3	825.0	33.38	25.717		
6,800.0	6,756.4	6,727.8	6,614.9	17.5	23.9	77.60	155.1	1,220.8	872.1	838.1	33.92	25.711		
6,900.0	6,855.6	6,826.9	6,712.0	17.7	24.3	77.63	157.8	1,240.3	885.8	851.3	34.46	25.704		
6,919.5	6,875.0	6,846.2	6,730.9	17.8	24.4	77.64	158.3	1,244.1	888.5	853.9	34.57	25.703 SF		
6,950.0	6,905.3	6,876.4	6,760.6	17.9	24.5	55.36	159.1	1,250.0	892.3	857.6	34.70	25.712		
7,000.0	6,955.1	6,926.0	6,809.2	17.9	24.7	-2.75	160.4	1,259.8	896.9	862.1	34.83	25.754		
7,050.0	7,004.8	6,975.3	6,857.5	17.9	24.9	-32.02	161.7	1,269.5	899.6	864.7	34.84	25.822		
7,100.0	7,053.8	7,023.9	6,905.1	17.9	25.1	-43.47	163.0	1,279.1	900.3	865.6	34.73	25.922		
7,150.0	7,101.9	7,071.5	6,951.7	17.9	25.3	-49.69	164.3	1,288.4	899.3	864.8	34.51	26.061		
7,200.0	7,148.7	7,118.7	7,065.5	17.8	25.8	-56.56	178.8	1,311.4	895.0	860.6	34.41	26.011		
7,250.0	7,193.8	7,277.2	7,148.2	17.7	26.2	-63.09	205.3	1,328.2	887.1	853.2	33.89	26.177		
7,300.0	7,236.9	7,336.7	7,201.1	17.5	26.4	-68.51	230.3	1,339.0	877.9	844.7	33.14	26.493		
7,350.0	7,277.7	7,374.6	7,233.4	17.4	26.6	-72.62	249.1	1,345.7	869.1	836.8	32.27	26.929		
7,400.0	7,315.7	7,397.5	7,252.2	17.2	26.8	-75.53	261.4	1,349.6	861.7	830.3	31.34	27.498		
7,450.0	7,350.9	7,409.7	7,262.0	17.1	26.8	-77.41	268.3	1,351.6	856.3	825.9	30.37	28.196		
7,500.0	7,382.8	7,414.3	7,265.7	16.9	26.8	-78.45	271.0	1,352.4	853.2	823.8	29.40	29.020		
7,536.8	7,404.1	7,414.1	7,265.6	16.8	26.8	-78.75	270.9	1,352.3	852.6	823.9	28.72	29.688		
7,550.0	7,411.3	7,413.5	7,265.0	16.7	26.8	-78.78	270.5	1,352.2	852.7	824.2	28.48	29.940		
7,600.0	7,436.1	7,408.5	7,261.1	16.6	26.8	-78.52	267.7	1,351.4	854.5	826.9	27.65	30.904		
7,650.0	7,457.1	7,400.0	7,254.2	16.5	26.8	-77.73	262.8	1,350.0	858.8	831.8	26.97	31.844		
7,700.0	7,474.0	7,390.0	7,246.1	16.4	26.7	-76.59	257.3	1,348.3	865.2	838.7	26.48	32.669		
7,750.0	7,486.8	7,377.6	7,235.9	16.4	26.7	-75.07	250.6	1,346.2	873.7	847.4	26.22	33.318		
7,800.0	7,495.3	7,363.8	7,224.2	16.4	26.6	-73.26	243.5	1,343.8	883.8	857.6	26.19	33.741		
7,850.0	7,499.5	7,350.0	7,212.5	16.5	26.5	-71.31	236.6	1,341.4	895.5	869.1	26.41	33.910		
7,873.6	7,500.0	7,341.2	7,205.0	16.5	26.5	-70.21	232.4	1,339.9	901.4	874.8	26.57	33.922		
7,900.0	7,500.0	7,332.9	7,197.8	16.5	26.4	-69.73	228.5	1,338.4	908.4	881.6	26.82	33.875		
8,000.0	7,500.0	7,300.0	7,168.8	16.9	26.3	-67.82	214.2	1,332.4	940.6	912.5	28.12	33.449		
8,100.0	7,500.0	7,282.5	7,153.0	17.4	26.2	-66.79	207.3	1,329.2	980.8	950.8	29.96	32.741		
8,200.0	7,500.0	7,263.4	7,135.6	18.0	26.1	-65.66	200.3	1,325.7	1,028.4	996.5	31.94	32.194		
8,300.0	7,500.0	7,250.0	7,123.2	18.8	26.0	-64.87	195.8	1,323.1	1,082.7	1,048.7	33.97	31.870		
8,400.0	7,500.0	7,233.3	7,107.7	19.7	26.0	-63.88	190.5	1,320.0	1,142.7	1,106.8	35.84	31.878		
8,500.0	7,500.0	7,221.2	7,096.4	20.7	25.9	-63.16	187.0	1,317.7	1,207.6	1,170.0	37.59	32.124		
8,600.0	7,500.0	7,200.0	7,076.3	21.9	25.8	-61.90	181.5	1,313.6	1,277.0	1,237.9	39.08	32.676		
8,700.0	7,500.0	7,200.0	7,076.3	23.1	25.8	-61.90	181.5	1,313.6	1,349.8	1,309.3	40.57	33.275		
8,800.0	7,500.0	7,200.0	7,076.3	24.3	25.8	-61.90	181.5	1,313.6	1,425.9	1,384.1	41.88	34.051		
8,900.0	7,500.0	7,200.0	7,076.3	25.6	25.8	-61.90	181.5	1,313.6	1,504.8	1,461.8	43.03	34.969		
9,000.0	7,500.0	7,179.2	7,056.5	27.0	25.7	-60.68	176.8	1,309.6	1,585.7	1,541.8	43.89	36.126		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,100.0	7,500.0	7,173.3	7,050.8	28.4	25.7	-60.33	175.6	1,308.4	1,668.7	1,624.0	44.76	37.285	
9,200.0	7,500.0	7,150.0	7,028.3	29.9	25.6	-58.96	171.4	1,303.9	1,753.8	1,708.4	45.39	38.642	
9,300.0	7,500.0	7,150.0	7,028.3	31.4	25.6	-58.96	171.4	1,303.9	1,839.8	1,793.7	46.11	39.899	
9,400.0	7,500.0	7,150.0	7,028.3	32.9	25.6	-58.96	171.4	1,303.9	1,927.2	1,880.5	46.76	41.213	
9,500.0	7,500.0	7,150.0	7,028.3	34.4	25.6	-58.96	171.4	1,303.9	2,015.8	1,968.5	47.35	42.573	
9,600.0	7,500.0	7,150.0	7,028.3	36.0	25.6	-58.96	171.4	1,303.9	2,105.4	2,057.5	47.88	43.973	
9,700.0	7,500.0	7,150.0	7,028.3	37.5	25.6	-58.96	171.4	1,303.9	2,195.9	2,147.6	48.36	45.405	
9,800.0	7,500.0	7,150.0	7,028.3	39.1	25.6	-58.96	171.4	1,303.9	2,287.2	2,238.4	48.80	46.865	
9,900.0	7,500.0	7,150.0	7,028.3	40.7	25.6	-58.96	171.4	1,303.9	2,379.2	2,330.0	49.21	48.349	
10,000.0	7,500.0	7,150.0	7,028.3	42.3	25.6	-58.96	171.4	1,303.9	2,471.8	2,422.2	49.58	49.852	
10,100.0	7,500.0	7,150.0	7,028.3	43.9	25.6	-58.96	171.4	1,303.9	2,565.0	2,515.0	49.93	51.372	
10,200.0	7,500.0	7,150.0	7,028.3	45.6	25.6	-58.96	171.4	1,303.9	2,658.6	2,608.4	50.25	52.906	
10,300.0	7,500.0	7,150.0	7,028.3	47.2	25.6	-58.96	171.4	1,303.9	2,752.7	2,702.2	50.55	54.452	
10,400.0	7,500.0	7,128.3	7,007.3	48.9	25.5	-57.71	168.4	1,299.6	2,846.8	2,796.1	50.68	56.166	
10,500.0	7,500.0	7,126.3	7,005.3	50.5	25.5	-57.59	168.1	1,299.2	2,941.6	2,890.6	50.94	57.748	
10,600.0	7,500.0	7,124.3	7,003.4	52.2	25.5	-57.48	167.9	1,298.8	3,036.7	2,985.5	51.18	59.336	
10,700.0	7,500.0	7,122.5	7,001.6	53.8	25.5	-57.37	167.7	1,298.5	3,132.1	3,080.7	51.41	60.929	
10,800.0	7,500.0	7,100.0	6,979.6	55.5	25.4	-56.09	165.6	1,294.1	3,228.2	3,176.7	51.47	62.714	
10,900.0	7,500.0	7,100.0	6,979.6	57.2	25.4	-56.09	165.6	1,294.1	3,324.0	3,272.3	51.69	64.302	
11,000.0	7,500.0	7,100.0	6,979.6	58.9	25.4	-56.09	165.6	1,294.1	3,420.1	3,368.2	51.90	65.894	
11,100.0	7,500.0	7,100.0	6,979.6	60.6	25.4	-56.09	165.6	1,294.1	3,516.4	3,464.3	52.10	67.488	
11,200.0	7,500.0	7,100.0	6,979.6	62.3	25.4	-56.09	165.6	1,294.1	3,613.0	3,560.7	52.30	69.084	
11,244.1	7,500.0	7,100.0	6,979.6	63.0	25.4	-56.09	165.6	1,294.1	3,655.6	3,603.2	52.38	69.789	
11,300.0	7,500.0	7,100.0	6,979.6	64.0	25.4	-58.33	165.6	1,294.1	3,709.5	3,657.1	52.49	70.667	
11,400.0	7,500.0	7,100.0	6,979.6	65.7	25.4	-61.77	165.6	1,294.1	3,805.6	3,752.9	52.71	72.204	
11,444.1	7,500.0	7,100.0	6,979.6	66.4	25.4	-63.10	165.6	1,294.1	3,847.8	3,795.0	52.80	72.880	
11,500.0	7,500.0	7,100.0	6,979.6	67.4	25.4	-63.10	165.6	1,294.1	3,901.1	3,848.2	52.90	73.741	
11,600.0	7,500.0	7,100.0	6,979.6	69.1	25.4	-63.10	165.6	1,294.1	3,996.8	3,943.7	53.09	75.283	
11,700.0	7,500.0	7,100.0	6,979.6	70.8	25.4	-63.10	165.6	1,294.1	4,092.7	4,039.4	53.27	76.826	
11,800.0	7,500.0	7,100.0	6,979.6	72.5	25.4	-63.10	165.6	1,294.1	4,188.7	4,135.3	53.45	78.372	
11,900.0	7,500.0	7,100.0	6,979.6	74.2	25.4	-63.10	165.6	1,294.1	4,285.0	4,231.4	53.62	79.918	
12,000.0	7,500.0	7,100.0	6,979.6	76.0	25.4	-63.10	165.6	1,294.1	4,381.4	4,327.6	53.78	81.465	
12,100.0	7,500.0	7,100.0	6,979.6	77.7	25.4	-63.10	165.6	1,294.1	4,478.0	4,424.0	53.94	83.012	
12,194.1	7,500.0	7,100.0	6,979.6	79.3	25.4	-63.10	165.6	1,294.1	4,569.0	4,514.9	54.09	84.468	
12,200.0	7,500.0	7,100.0	6,979.6	79.4	25.4	-62.90	165.6	1,294.1	4,574.7	4,520.6	54.10	84.559	
12,300.0	7,500.0	7,100.0	6,979.6	81.1	25.4	-58.81	165.6	1,294.1	4,671.9	4,617.7	54.23	86.154	
12,387.3	7,500.0	7,100.0	6,979.6	82.6	25.4	-54.10	165.6	1,294.1	4,757.5	4,703.2	54.33	87.562	
12,400.0	7,500.0	7,100.0	6,979.6	82.9	25.4	-54.10	165.6	1,294.1	4,769.9	4,715.6	54.35	87.763	
12,500.0	7,500.0	7,100.0	6,979.6	84.6	25.4	-54.10	165.6	1,294.1	4,868.2	4,813.7	54.48	89.351	
12,600.0	7,500.0	7,100.0	6,979.6	86.3	25.4	-54.10	165.6	1,294.1	4,966.6	4,912.0	54.62	90.935	
12,700.0	7,500.0	7,100.0	6,979.6	88.0	25.4	-54.10	165.6	1,294.1	5,065.0	5,010.3	54.75	92.517	
12,800.0	7,500.0	7,100.0	6,979.6	89.7	25.4	-54.10	165.6	1,294.1	5,163.5	5,108.6	54.88	94.095	
12,900.0	7,500.0	7,100.0	6,979.6	91.5	25.4	-54.10	165.6	1,294.1	5,262.0	5,207.0	55.00	95.670	
13,000.0	7,500.0	7,100.0	6,979.6	93.2	25.4	-54.10	165.6	1,294.1	5,360.6	5,305.5	55.13	97.241	
13,100.0	7,500.0	7,100.0	6,979.6	94.9	25.4	-54.10	165.6	1,294.1	5,459.3	5,404.0	55.25	98.809	
13,200.0	7,500.0	7,100.0	6,979.6	96.6	25.4	-54.10	165.6	1,294.1	5,558.0	5,502.6	55.37	100.373	
13,300.0	7,500.0	7,100.0	6,979.6	98.4	25.4	-54.10	165.6	1,294.1	5,656.7	5,601.2	55.49	101.934	
13,400.0	7,500.0	7,100.0	6,979.6	100.1	25.4	-54.10	165.6	1,294.1	5,755.5	5,699.9	55.61	103.490	
13,500.0	7,500.0	7,100.0	6,979.6	101.8	25.4	-54.10	165.6	1,294.1	5,854.3	5,798.6	55.73	105.043	
13,600.0	7,500.0	7,100.0	6,979.6	103.5	25.4	-54.10	165.6	1,294.1	5,953.2	5,897.3	55.85	106.592	
13,700.0	7,500.0	7,100.0	6,979.6	105.3	25.4	-54.10	165.6	1,294.1	6,052.1	5,996.1	55.97	108.136	
13,800.0	7,500.0	7,100.0	6,979.6	107.0	25.4	-54.10	165.6	1,294.1	6,151.0	6,094.9	56.08	109.677	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	7,100.0	6,979.6	108.7	25.4	-54.10	165.6	1,294.1	6,250.0	6,193.8	56.20	111.214		
14,000.0	7,500.0	7,100.0	6,979.6	110.5	25.4	-54.10	165.6	1,294.1	6,349.0	6,292.7	56.31	112.746		
14,100.0	7,500.0	7,100.0	6,979.6	112.2	25.4	-54.10	165.6	1,294.1	6,448.0	6,391.6	56.43	114.275		
14,200.0	7,500.0	7,100.0	6,979.6	113.9	25.4	-54.10	165.6	1,294.1	6,547.1	6,490.5	56.54	115.799		
14,300.0	7,500.0	7,100.0	6,979.6	115.7	25.4	-54.10	165.6	1,294.1	6,646.2	6,589.5	56.65	117.320		
14,400.0	7,500.0	7,100.0	6,979.6	117.4	25.4	-54.10	165.6	1,294.1	6,745.3	6,688.5	56.76	118.836		
14,500.0	7,500.0	7,100.0	6,979.6	119.1	25.4	-54.10	165.6	1,294.1	6,844.4	6,787.6	56.87	120.348		
14,600.0	7,500.0	7,100.0	6,979.6	120.9	25.4	-54.10	165.6	1,294.1	6,943.6	6,886.6	56.98	121.855		
14,700.0	7,500.0	7,100.0	6,979.6	122.6	25.4	-54.10	165.6	1,294.1	7,042.8	6,985.7	57.09	123.359		
14,800.0	7,500.0	7,100.0	6,979.6	124.4	25.4	-54.10	165.6	1,294.1	7,142.0	7,084.8	57.20	124.858		
14,900.0	7,500.0	7,100.0	6,979.6	126.1	25.4	-54.10	165.6	1,294.1	7,241.2	7,183.9	57.31	126.353		
15,000.0	7,500.0	7,100.0	6,979.6	127.8	25.4	-54.10	165.6	1,294.1	7,340.5	7,283.1	57.42	127.843		
15,100.0	7,500.0	7,100.0	6,979.6	129.6	25.4	-54.10	165.6	1,294.1	7,439.8	7,382.2	57.53	129.330		
15,200.0	7,500.0	7,100.0	6,979.6	131.3	25.4	-54.10	165.6	1,294.1	7,539.1	7,481.4	57.63	130.812		
15,300.0	7,500.0	7,087.7	6,967.6	133.1	25.3	-53.38	164.9	1,291.6	7,638.2	7,580.6	57.66	132.473		
15,400.0	7,500.0	7,087.4	6,967.3	134.8	25.3	-53.36	164.9	1,291.6	7,737.6	7,679.8	57.76	133.953		
15,500.0	7,500.0	7,087.0	6,966.9	136.5	25.3	-53.34	164.8	1,291.5	7,836.9	7,779.0	57.87	135.429		
15,600.0	7,500.0	7,086.7	6,966.6	138.3	25.3	-53.33	164.8	1,291.4	7,936.3	7,878.3	57.97	136.900		
15,700.0	7,500.0	7,086.4	6,966.3	140.0	25.3	-53.31	164.8	1,291.4	8,035.6	7,977.6	58.07	138.367		
15,805.8	7,500.0	7,074.0	6,954.2	141.9	25.3	-52.59	164.4	1,288.9	8,140.9	8,082.8	58.10	140.107		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.56	-0.7	75.0	75.0					
100.0	100.0	100.0	100.0	0.2	0.2	90.56	-0.7	75.0	75.0	74.7	0.30	247.001		
200.0	200.0	200.0	200.0	0.3	0.3	90.56	-0.7	75.0	75.0	74.4	0.65	114.915		
203.3	203.3	203.3	203.3	0.3	0.3	90.56	-0.7	75.0	75.0	74.3	0.66	112.901 CC		
300.0	300.0	299.4	299.4	0.5	0.5	90.59	-0.8	75.2	75.2	74.2	1.00	75.172 ES		
400.0	400.0	398.1	398.0	0.7	0.7	90.79	-1.1	76.9	76.9	75.6	1.35	57.095		
500.0	500.0	496.7	496.6	0.8	0.9	91.18	-1.7	80.2	80.3	78.6	1.69	47.431		
600.0	600.0	595.1	594.9	1.0	1.0	92.65	-2.5	85.2	84.9	82.9	2.04	41.627		
700.0	700.0	693.5	693.0	1.2	1.2	94.50	-3.7	91.9	90.2	87.8	2.39	37.790		
800.0	799.9	791.6	790.8	1.4	1.5	97.05	-5.2	100.2	96.3	93.6	2.74	35.195		
900.0	899.7	889.5	888.2	1.6	1.7	101.1	-6.9	110.1	103.4	100.3	3.09	33.446		
1,000.0	999.4	987.1	985.1	1.8	1.9	103.49	-9.0	121.6	111.7	108.3	3.46	32.294		
1,100.0	1,098.9	1,084.4	1,081.4	2.0	2.2	107.01	-11.3	134.7	121.4	117.6	3.85	31.565		
1,201.3	1,199.5	1,182.5	1,178.4	2.2	2.5	110.59	-13.9	149.6	132.7	128.5	4.26	31.128		
1,300.0	1,297.5	1,277.8	1,272.3	2.5	2.8	113.79	-16.7	165.6	145.6	140.9	4.69	31.042		
1,400.0	1,396.8	1,374.0	1,366.8	2.7	3.2	116.33	-19.8	183.2	160.6	155.4	5.14	31.267		
1,500.0	1,496.0	1,469.7	1,460.5	3.0	3.5	118.26	-23.2	202.4	177.4	171.8	5.59	31.717		
1,600.0	1,595.3	1,564.9	1,553.4	3.3	3.9	119.70	-26.8	222.9	196.0	189.9	6.06	32.333		
1,700.0	1,694.5	1,659.6	1,645.4	3.5	4.4	120.73	-30.7	244.9	216.1	209.6	6.53	33.073		
1,800.0	1,793.8	1,753.9	1,736.7	3.8	4.8	121.44	-34.8	268.3	237.8	230.8	7.01	33.912		
1,900.0	1,893.0	1,853.4	1,832.8	4.0	5.3	121.82	-38.4	293.7	259.8	252.3	7.54	34.484		
2,000.0	1,992.3	1,953.2	1,929.2	4.3	5.7	121.81	-40.2	319.4	281.1	273.0	8.06	34.862		
2,100.0	2,091.5	2,055.0	2,027.7	4.6	6.2	121.63	-40.7	345.3	301.4	292.8	8.60	35.056		
2,200.0	2,190.8	2,157.7	2,127.4	4.8	6.6	121.62	-41.2	369.7	320.2	311.1	9.14	35.042		
2,300.0	2,290.0	2,256.0	2,223.1	5.1	7.1	121.67	-41.6	392.3	338.4	328.8	9.66	35.027		
2,400.0	2,389.3	2,354.3	2,318.8	5.4	7.5	121.72	-42.0	415.0	356.6	346.4	10.19	35.007		
2,500.0	2,488.5	2,452.7	2,414.5	5.7	7.9	121.77	-42.4	437.6	374.8	364.1	10.71	34.981		
2,600.0	2,587.8	2,551.0	2,510.2	5.9	8.4	121.81	-42.8	460.2	393.0	381.7	11.24	34.953		
2,700.0	2,687.0	2,649.3	2,605.8	6.2	8.8	121.85	-43.2	482.9	411.1	399.4	11.77	34.923		
2,800.0	2,786.3	2,747.7	2,701.5	6.5	9.2	121.88	-43.6	505.5	429.3	417.0	12.30	34.892		
2,900.0	2,885.5	2,846.0	2,797.2	6.7	9.7	121.91	-44.0	528.1	447.5	434.7	12.84	34.861		
3,000.0	2,984.8	2,944.3	2,892.9	7.0	10.1	121.94	-44.4	550.8	465.7	452.3	13.37	34.829		
3,100.0	3,084.0	3,042.7	2,988.6	7.3	10.6	121.97	-44.9	573.4	483.9	470.0	13.90	34.798		
3,200.0	3,183.3	3,141.0	3,084.3	7.6	11.0	121.99	-45.3	596.1	502.0	487.6	14.44	34.767		
3,300.0	3,282.5	3,239.3	3,180.0	7.8	11.4	122.01	-45.7	618.7	520.2	505.2	14.98	34.737		
3,400.0	3,381.8	3,337.6	3,275.7	8.1	11.9	122.04	-46.1	641.3	538.4	522.9	15.51	34.707		
3,500.0	3,481.1	3,436.0	3,371.4	8.4	12.3	122.06	-46.5	664.0	556.6	540.5	16.05	34.679		
3,600.0	3,580.3	3,534.3	3,467.1	8.7	12.7	122.08	-46.9	686.6	574.8	558.2	16.59	34.651		
3,700.0	3,679.6	3,632.6	3,562.8	8.9	13.2	122.09	-47.3	709.2	592.9	575.8	17.13	34.624		
3,800.0	3,778.8	3,731.0	3,658.5	9.2	13.6	122.11	-47.7	731.9	611.1	593.5	17.66	34.597		
3,900.0	3,878.1	3,829.3	3,754.1	9.5	14.0	122.13	-48.1	754.5	629.3	611.1	18.20	34.572		
4,000.0	3,977.3	3,927.6	3,849.8	9.8	14.5	122.14	-48.5	777.1	647.5	628.8	18.74	34.547		
4,100.0	4,076.6	4,026.0	3,945.5	10.0	14.9	122.15	-48.9	799.8	665.7	646.4	19.28	34.523		
4,200.0	4,175.8	4,124.3	4,041.2	10.3	15.4	122.17	-49.4	822.4	683.9	664.0	19.82	34.500		
4,300.0	4,275.1	4,222.6	4,136.9	10.6	15.8	122.18	-49.8	845.0	702.0	681.7	20.36	34.478		
4,400.0	4,374.3	4,321.0	4,232.6	10.9	16.2	122.19	-50.2	867.7	720.2	699.3	20.90	34.457		
4,500.0	4,473.6	4,419.3	4,328.3	11.1	16.7	122.20	-50.6	890.3	738.4	717.0	21.44	34.436		
4,600.0	4,572.8	4,517.6	4,424.0	11.4	17.1	122.21	-51.0	913.0	756.6	734.6	21.98	34.416		
4,700.0	4,672.1	4,616.0	4,519.7	11.7	17.6	122.22	-51.4	935.6	774.8	752.2	22.52	34.396		
4,800.0	4,771.3	4,714.3	4,615.4	12.0	18.0	122.23	-51.8	958.2	792.9	769.9	23.07	34.378		
4,900.0	4,870.6	4,812.6	4,711.1	12.2	18.4	122.24	-52.2	980.9	811.1	787.5	23.61	34.359		
5,000.0	4,969.8	4,911.0	4,806.8	12.5	18.9	122.25	-52.6	1,003.5	829.3	805.2	24.15	34.342		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,069.1	5,009.3	4,902.4	12.8	19.3	82.26	-53.0	1,026.1	847.5	822.8	24.69	34.325		
5,200.0	5,168.3	5,107.6	4,998.1	13.1	19.7	82.27	-53.4	1,048.8	865.7	840.4	25.23	34.308		
5,300.0	5,267.6	5,206.0	5,093.8	13.3	20.2	82.28	-53.9	1,071.4	883.9	858.1	25.77	34.292		
5,400.0	5,366.8	5,304.3	5,189.5	13.6	20.6	82.28	-54.3	1,094.0	902.0	875.7	26.32	34.277		
5,500.0	5,466.1	5,402.6	5,285.2	13.9	21.1	82.29	-54.7	1,116.7	920.2	893.4	26.86	34.262		
5,600.0	5,565.3	5,501.0	5,380.9	14.2	21.5	82.30	-55.1	1,139.3	938.4	911.0	27.40	34.247		
5,700.0	5,664.6	5,599.3	5,476.6	14.4	21.9	82.31	-55.5	1,162.0	956.6	928.6	27.94	34.233		
5,800.0	5,763.8	5,697.6	5,572.3	14.7	22.4	82.31	-55.9	1,184.6	974.8	946.3	28.49	34.220		
5,900.0	5,863.1	5,796.0	5,668.0	15.0	22.8	82.32	-56.3	1,207.2	992.9	963.9	29.03	34.206		
6,000.0	5,962.3	5,894.3	5,763.7	15.3	23.3	82.32	-56.7	1,229.9	1,011.1	981.6	29.57	34.194		
6,100.0	6,061.6	5,992.6	5,859.4	15.5	23.7	82.33	-57.1	1,252.5	1,029.3	999.2	30.11	34.181		
6,200.0	6,160.9	6,091.0	5,955.0	15.8	24.1	82.34	-57.5	1,275.1	1,047.5	1,016.8	30.66	34.169		
6,300.0	6,260.1	6,189.3	6,050.7	16.1	24.6	82.34	-57.9	1,297.8	1,065.7	1,034.5	31.20	34.157		
6,400.0	6,359.4	6,287.6	6,146.4	16.4	25.0	82.35	-58.4	1,320.4	1,083.9	1,052.1	31.74	34.146		
6,500.0	6,458.6	6,386.0	6,242.1	16.6	25.5	82.35	-58.8	1,343.0	1,102.0	1,069.8	32.29	34.135		
6,600.0	6,557.9	6,484.3	6,337.8	16.9	25.9	82.36	-59.2	1,365.7	1,120.2	1,087.4	32.83	34.124		
6,700.0	6,657.1	6,582.6	6,433.5	17.2	26.3	82.36	-59.6	1,388.3	1,138.4	1,105.0	33.37	34.113		
6,800.0	6,756.4	6,681.0	6,529.2	17.5	26.8	82.37	-60.0	1,410.9	1,156.6	1,122.7	33.91	34.103		
6,900.0	6,855.6	6,779.3	6,624.9	17.7	27.2	82.37	-60.4	1,433.6	1,174.8	1,140.3	34.46	34.093		
6,919.5	6,875.0	6,798.5	6,643.5	17.8	27.3	82.37	-60.5	1,438.0	1,178.3	1,143.7	34.56	34.091		
6,950.0	6,905.3	6,828.5	6,672.8	17.9	27.4	60.19	-60.6	1,444.9	1,183.4	1,148.7	34.70	34.102		
7,000.0	6,955.1	6,877.9	6,720.9	17.9	27.7	2.29	-60.8	1,456.3	1,190.0	1,155.1	34.84	34.151		
7,050.0	7,004.8	6,927.1	6,768.7	17.9	27.9	-26.73	-61.0	1,467.6	1,194.2	1,159.3	34.89	34.231		
7,100.0	7,053.8	6,975.8	6,816.1	17.9	28.1	-37.89	-61.2	1,478.8	1,196.1	1,161.3	34.83	34.343		
7,150.0	7,101.9	7,023.5	6,862.5	17.9	28.3	-43.78	-61.4	1,489.8	1,195.8	1,161.2	34.67	34.495		
7,200.0	7,148.7	7,070.0	6,907.7	17.8	28.5	-47.79	-61.6	1,500.5	1,193.5	1,159.1	34.40	34.691		
7,250.0	7,193.8	7,114.8	6,951.3	17.7	28.7	-51.01	-61.8	1,510.8	1,189.3	1,155.3	34.04	34.940		
7,300.0	7,236.9	7,157.6	6,993.0	17.5	28.9	-53.90	-62.0	1,520.7	1,183.4	1,149.9	33.57	35.249		
7,350.0	7,277.7	7,198.1	7,032.4	17.4	29.1	-56.65	-62.1	1,530.0	1,176.2	1,143.1	33.01	35.627		
7,400.0	7,315.7	7,236.0	7,069.3	17.2	29.3	-59.33	-62.3	1,538.7	1,167.7	1,135.4	32.37	36.079		
7,450.0	7,350.9	7,271.0	7,103.3	17.1	29.4	-61.97	-62.4	1,546.8	1,158.5	1,126.9	31.65	36.609		
7,500.0	7,382.8	7,302.8	7,134.3	16.9	29.6	-64.54	-62.6	1,554.1	1,148.8	1,117.9	30.87	37.214		
7,550.0	7,411.3	7,331.2	7,161.9	16.7	29.7	-67.01	-62.7	1,560.6	1,138.9	1,108.9	30.06	37.885		
7,600.0	7,436.1	7,365.3	7,195.2	16.6	29.8	-69.75	-62.6	1,568.5	1,129.2	1,099.9	29.30	38.541		
7,650.0	7,457.1	7,404.7	7,233.4	16.5	30.0	-72.78	-60.3	1,577.5	1,119.7	1,091.1	28.58	39.172		
7,700.0	7,474.0	7,425.8	7,253.9	16.4	30.1	-74.86	-58.0	1,582.3	1,111.1	1,083.2	27.90	39.822		
7,750.0	7,486.8	7,435.3	7,262.9	16.4	30.1	-76.19	-56.7	1,584.5	1,103.7	1,076.4	27.32	40.399		
7,800.0	7,495.3	7,436.8	7,264.4	16.4	30.1	-76.92	-56.4	1,584.8	1,097.8	1,070.9	26.90	40.809		
7,850.0	7,499.5	7,433.0	7,260.7	16.5	30.1	-77.18	-57.0	1,584.0	1,093.6	1,066.9	26.68	40.981		
7,873.6	7,500.0	7,429.8	7,257.6	16.5	30.1	-77.16	-57.4	1,583.2	1,092.1	1,065.4	26.66	40.966		
7,900.0	7,500.0	7,425.9	7,253.9	16.5	30.1	-76.96	-58.0	1,582.4	1,091.0	1,064.3	26.69	40.875		
7,933.7	7,500.0	7,421.5	7,249.7	16.6	30.1	-76.73	-58.5	1,581.4	1,090.5	1,063.6	26.85	40.614		
8,000.0	7,500.0	7,414.2	7,242.6	16.9	30.1	-76.35	-59.4	1,579.7	1,092.5	1,065.1	27.40	39.871		
8,100.0	7,500.0	7,405.7	7,234.3	17.4	30.0	-75.90	-60.2	1,577.7	1,102.9	1,074.0	28.94	38.117		
8,200.0	7,500.0	7,400.0	7,228.9	18.0	30.0	-75.61	-60.7	1,576.4	1,122.2	1,091.1	31.07	36.115		
8,300.0	7,500.0	7,400.0	7,228.9	18.8	30.0	-75.61	-60.7	1,576.4	1,149.9	1,116.3	33.57	34.249		
8,400.0	7,500.0	7,400.0	7,228.9	19.7	30.0	-75.61	-60.7	1,576.4	1,185.3	1,149.1	36.19	32.749		
8,500.0	7,500.0	7,386.6	7,215.8	20.7	29.9	-74.90	-61.7	1,573.4	1,227.8	1,189.1	38.70	31.725		
8,600.0	7,500.0	7,383.7	7,213.0	21.9	29.9	-74.75	-61.9	1,572.7	1,276.7	1,235.6	41.13	31.043		
8,700.0	7,500.0	7,381.3	7,210.7	23.1	29.9	-74.63	-62.0	1,572.2	1,331.4	1,288.1	43.37	30.701		
8,800.0	7,500.0	7,379.2	7,208.7	24.3	29.9	-74.52	-62.1	1,571.7	1,391.1	1,345.7	45.39	30.646 SF		
8,900.0	7,500.0	7,377.4	7,206.9	25.6	29.9	-74.42	-62.2	1,571.3	1,455.3	1,408.0	47.21	30.827		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: O-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,000.0	7,500.0	7,375.8	7,205.4	27.0	29.9	-74.34	-62.3	1,570.9	1,523.3	1,474.4	48.82	31.202	
9,100.0	7,500.0	7,374.4	7,204.0	28.4	29.9	-74.27	-62.3	1,570.6	1,594.6	1,544.4	50.24	31.737	
9,200.0	7,500.0	7,373.2	7,202.8	29.9	29.9	-74.20	-62.4	1,570.3	1,668.9	1,617.4	51.50	32.403	
9,300.0	7,500.0	7,372.1	7,201.7	31.4	29.9	-74.14	-62.4	1,570.0	1,745.8	1,693.2	52.62	33.179	
9,400.0	7,500.0	7,371.0	7,200.7	32.9	29.9	-74.09	-62.4	1,569.8	1,824.9	1,771.3	53.60	34.045	
9,500.0	7,500.0	7,370.1	7,199.8	34.4	29.9	-74.04	-62.5	1,569.6	1,906.0	1,851.5	54.48	34.987	
9,600.0	7,500.0	7,369.3	7,199.0	36.0	29.9	-74.00	-62.5	1,569.4	1,988.8	1,933.5	55.25	35.993	
9,700.0	7,500.0	7,368.5	7,198.3	37.5	29.9	-73.96	-62.5	1,569.2	2,073.1	2,017.1	55.95	37.054	
9,800.0	7,500.0	7,349.2	7,179.4	39.1	29.8	-72.94	-62.8	1,564.8	2,159.1	2,102.7	56.43	38.262	
9,900.0	7,500.0	7,349.2	7,179.4	40.7	29.8	-72.94	-62.8	1,564.8	2,245.9	2,188.9	56.99	39.407	
10,000.0	7,500.0	7,349.2	7,179.4	42.3	29.8	-72.94	-62.8	1,564.8	2,333.8	2,276.3	57.50	40.587	
10,100.0	7,500.0	7,349.2	7,179.4	43.9	29.8	-72.94	-62.8	1,564.8	2,422.6	2,364.6	57.96	41.795	
10,200.0	7,500.0	7,349.2	7,179.4	45.6	29.8	-72.94	-62.8	1,564.8	2,512.2	2,453.9	58.38	43.030	
10,300.0	7,500.0	7,349.2	7,179.4	47.2	29.8	-72.94	-62.8	1,564.8	2,602.6	2,543.9	58.77	44.286	
10,400.0	7,500.0	7,349.2	7,179.4	48.9	29.8	-72.94	-62.8	1,564.8	2,693.7	2,634.6	59.12	45.561	
10,500.0	7,500.0	7,349.2	7,179.4	50.5	29.8	-72.94	-62.8	1,564.8	2,785.4	2,726.0	59.45	46.853	
10,600.0	7,500.0	7,349.2	7,179.4	52.2	29.8	-72.94	-62.8	1,564.8	2,877.7	2,817.9	59.75	48.160	
10,700.0	7,500.0	7,349.2	7,179.4	53.8	29.8	-72.94	-62.8	1,564.8	2,970.4	2,910.4	60.03	49.479	
10,800.0	7,500.0	7,349.2	7,179.4	55.5	29.8	-72.94	-62.8	1,564.8	3,063.6	3,003.3	60.30	50.808	
10,900.0	7,500.0	7,349.2	7,179.4	57.2	29.8	-72.94	-62.8	1,564.8	3,157.3	3,096.7	60.54	52.148	
11,000.0	7,500.0	7,349.2	7,179.4	58.9	29.8	-72.94	-62.8	1,564.8	3,251.3	3,190.5	60.78	53.496	
11,100.0	7,500.0	7,349.2	7,179.4	60.6	29.8	-72.94	-62.8	1,564.8	3,345.6	3,284.6	60.99	54.851	
11,200.0	7,500.0	7,349.2	7,179.4	62.3	29.8	-72.94	-62.8	1,564.8	3,440.3	3,379.1	61.20	56.212	
11,244.1	7,500.0	7,349.2	7,179.4	63.0	29.8	-72.94	-62.8	1,564.8	3,482.2	3,420.9	61.29	56.815	
11,300.0	7,500.0	7,349.2	7,179.4	64.0	29.8	-73.89	-62.8	1,564.8	3,535.1	3,473.7	61.41	57.567	
11,400.0	7,500.0	7,349.2	7,179.4	65.7	29.8	-75.36	-62.8	1,564.8	3,629.2	3,567.6	61.63	58.887	
11,444.1	7,500.0	7,349.2	7,179.4	66.4	29.8	-75.94	-62.8	1,564.8	3,670.5	3,608.7	61.72	59.468	
11,500.0	7,500.0	7,349.2	7,179.4	67.4	29.8	-75.94	-62.8	1,564.8	3,722.6	3,660.8	61.83	60.207	
11,600.0	7,500.0	7,349.2	7,179.4	69.1	29.8	-75.94	-62.8	1,564.8	3,816.3	3,754.3	62.02	61.534	
11,700.0	7,500.0	7,349.2	7,179.4	70.8	29.8	-75.94	-62.8	1,564.8	3,910.3	3,848.1	62.20	62.868	
11,800.0	7,500.0	7,349.2	7,179.4	72.5	29.8	-75.94	-62.8	1,564.8	4,004.6	3,942.2	62.37	64.206	
11,900.0	7,500.0	7,349.2	7,179.4	74.2	29.8	-75.94	-62.8	1,564.8	4,099.1	4,036.6	62.54	65.548	
12,000.0	7,500.0	7,349.2	7,179.4	76.0	29.8	-75.94	-62.8	1,564.8	4,193.9	4,131.2	62.69	66.895	
12,100.0	7,500.0	7,349.2	7,179.4	77.7	29.8	-75.94	-62.8	1,564.8	4,289.0	4,226.1	62.85	68.245	
12,194.1	7,500.0	7,349.2	7,179.4	79.3	29.8	-75.94	-62.8	1,564.8	4,378.6	4,315.7	62.99	69.518	
12,200.0	7,500.0	7,349.2	7,179.4	79.4	29.8	-75.85	-62.8	1,564.8	4,384.2	4,321.2	62.99	69.597	
12,300.0	7,500.0	7,349.2	7,179.4	81.1	29.8	-74.06	-62.8	1,564.8	4,480.2	4,417.1	63.11	70.991	
12,387.3	7,500.0	7,349.2	7,179.4	82.6	29.8	-72.04	-62.8	1,564.8	4,564.9	4,501.7	63.20	72.224	
12,400.0	7,500.0	7,349.2	7,179.4	82.9	29.8	-72.04	-62.8	1,564.8	4,577.2	4,514.0	63.22	72.401	
12,500.0	7,500.0	7,349.2	7,179.4	84.6	29.8	-72.04	-62.8	1,564.8	4,674.7	4,611.3	63.34	73.798	
12,600.0	7,500.0	7,349.2	7,179.4	86.3	29.8	-72.04	-62.8	1,564.8	4,772.2	4,708.8	63.47	75.194	
12,700.0	7,500.0	7,349.2	7,179.4	88.0	29.8	-72.04	-62.8	1,564.8	4,869.9	4,806.3	63.58	76.589	
12,800.0	7,500.0	7,349.2	7,179.4	89.7	29.8	-72.04	-62.8	1,564.8	4,967.6	4,903.9	63.70	77.983	
12,900.0	7,500.0	7,349.2	7,179.4	91.5	29.8	-72.04	-62.8	1,564.8	5,065.5	5,001.6	63.82	79.376	
13,000.0	7,500.0	7,349.2	7,179.4	93.2	29.8	-72.04	-62.8	1,564.8	5,163.4	5,099.4	63.93	80.767	
13,100.0	7,500.0	7,349.2	7,179.4	94.9	29.8	-72.04	-62.8	1,564.8	5,261.4	5,197.3	64.04	82.157	
13,200.0	7,500.0	7,349.2	7,179.4	96.6	29.8	-72.04	-62.8	1,564.8	5,359.4	5,295.3	64.15	83.545	
13,300.0	7,500.0	7,349.2	7,179.4	98.4	29.8	-72.04	-62.8	1,564.8	5,457.6	5,393.3	64.26	84.932	
13,400.0	7,500.0	7,349.2	7,179.4	100.1	29.8	-72.04	-62.8	1,564.8	5,555.8	5,491.4	64.36	86.317	
13,500.0	7,500.0	7,349.2	7,179.4	101.8	29.8	-72.04	-62.8	1,564.8	5,654.0	5,589.5	64.47	87.700	
13,600.0	7,500.0	7,349.2	7,179.4	103.5	29.8	-72.04	-62.8	1,564.8	5,752.3	5,687.8	64.57	89.081	
13,700.0	7,500.0	7,349.2	7,179.4	105.3	29.8	-72.04	-62.8	1,564.8	5,850.7	5,786.0	64.68	90.459	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,800.0	7,500.0	7,349.2	7,179.4	107.0	29.8	-72.04	-62.8	1,564.8	5,949.2	5,884.4	64.78	91.836		
13,900.0	7,500.0	7,349.2	7,179.4	108.7	29.8	-72.04	-62.8	1,564.8	6,047.6	5,982.8	64.88	93.210		
14,000.0	7,500.0	7,349.2	7,179.4	110.5	29.8	-72.04	-62.8	1,564.8	6,146.2	6,081.2	64.98	94.582		
14,100.0	7,500.0	7,349.2	7,179.4	112.2	29.8	-72.04	-62.8	1,564.8	6,244.8	6,179.7	65.08	95.952		
14,200.0	7,500.0	7,349.2	7,179.4	113.9	29.8	-72.04	-62.8	1,564.8	6,343.4	6,278.2	65.18	97.319		
14,300.0	7,500.0	7,349.2	7,179.4	115.7	29.8	-72.04	-62.8	1,564.8	6,442.1	6,376.8	65.28	98.684		
14,400.0	7,500.0	7,349.2	7,179.4	117.4	29.8	-72.04	-62.8	1,564.8	6,540.8	6,475.4	65.38	100.046		
14,500.0	7,500.0	7,349.2	7,179.4	119.1	29.8	-72.04	-62.8	1,564.8	6,639.5	6,574.0	65.47	101.406		
14,600.0	7,500.0	7,349.2	7,179.4	120.9	29.8	-72.04	-62.8	1,564.8	6,738.3	6,672.7	65.57	102.763		
14,700.0	7,500.0	7,349.2	7,179.4	122.6	29.8	-72.04	-62.8	1,564.8	6,837.1	6,771.4	65.67	104.117		
14,800.0	7,500.0	7,349.2	7,179.4	124.4	29.8	-72.04	-62.8	1,564.8	6,936.0	6,870.2	65.76	105.469		
14,900.0	7,500.0	7,349.2	7,179.4	126.1	29.8	-72.04	-62.8	1,564.8	7,034.9	6,969.0	65.86	106.818		
15,000.0	7,500.0	7,349.2	7,179.4	127.8	29.8	-72.04	-62.8	1,564.8	7,133.8	7,067.8	65.95	108.164		
15,100.0	7,500.0	7,349.2	7,179.4	129.6	29.8	-72.04	-62.8	1,564.8	7,232.7	7,166.7	66.05	109.507		
15,200.0	7,500.0	7,349.2	7,179.4	131.3	29.8	-72.04	-62.8	1,564.8	7,331.7	7,265.6	66.14	110.848		
15,300.0	7,500.0	7,349.2	7,179.4	133.1	29.8	-72.04	-62.8	1,564.8	7,430.7	7,364.5	66.24	112.186		
15,400.0	7,500.0	7,349.2	7,179.4	134.8	29.8	-72.04	-62.8	1,564.8	7,529.7	7,463.4	66.33	113.521		
15,500.0	7,500.0	7,349.2	7,179.4	136.5	29.8	-72.04	-62.8	1,564.8	7,628.8	7,562.4	66.42	114.853		
15,600.0	7,500.0	7,349.2	7,179.4	138.3	29.8	-72.04	-62.8	1,564.8	7,727.9	7,661.3	66.52	116.182		
15,700.0	7,500.0	7,349.2	7,179.4	140.0	29.8	-72.04	-62.8	1,564.8	7,827.0	7,760.4	66.61	117.508		
15,805.8	7,500.0	7,349.2	7,179.4	141.9	29.8	-72.04	-62.8	1,564.8	7,931.8	7,865.1	66.71	118.908		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.51	-0.7	82.6	82.6					
100.0	100.0	100.0	100.0	0.2	0.2	90.51	-0.7	82.6	82.6	82.3	0.30	271.884		
200.0	200.0	200.0	200.0	0.3	0.3	90.51	-0.7	82.6	82.6	81.9	0.65	126.491	CC, ES	
300.0	300.0	298.6	298.6	0.5	0.5	90.52	-0.8	83.4	83.4	82.4	1.00	83.491		
400.0	400.0	397.1	397.0	0.7	0.7	90.56	-0.8	86.0	86.0	84.7	1.35	63.928		
500.0	500.0	495.5	495.3	0.8	0.9	90.61	-1.0	90.2	90.3	88.6	1.69	53.404		
600.0	600.0	593.7	593.4	1.0	1.1	51.57	-1.1	96.1	95.8	93.7	2.04	47.036		
700.0	700.0	691.8	691.2	1.2	1.3	52.70	-1.4	103.7	101.9	99.5	2.38	42.772		
800.0	799.9	789.7	788.7	1.4	1.5	54.41	-1.7	112.9	108.7	106.0	2.73	39.809		
900.0	899.7	887.4	885.8	1.6	1.7	56.53	-2.0	123.7	116.4	113.3	3.09	37.701		
1,000.0	999.4	984.9	982.4	1.8	2.0	58.96	-2.4	136.2	125.0	121.6	3.46	36.176		
1,100.0	1,098.9	1,082.0	1,078.6	2.0	2.3	61.57	-2.8	150.3	134.7	130.8	3.84	35.053		
1,201.3	1,199.5	1,180.1	1,175.4	2.2	2.6	64.31	-3.3	166.2	145.6	141.4	4.26	34.190		
1,300.0	1,297.5	1,275.4	1,269.1	2.5	2.9	66.82	-3.8	183.1	157.9	153.2	4.68	33.698		
1,400.0	1,396.8	1,371.6	1,363.4	2.7	3.3	68.83	-4.4	201.9	172.1	167.0	5.13	33.549	SF	
1,500.0	1,496.0	1,467.3	1,457.0	3.0	3.7	70.37	-5.1	222.1	188.1	182.5	5.59	33.668		
1,600.0	1,595.3	1,562.5	1,549.7	3.3	4.1	71.52	-5.7	243.7	205.7	199.7	6.05	33.995		
1,700.0	1,694.5	1,657.3	1,641.6	3.5	4.5	72.33	-6.4	266.8	225.0	218.5	6.52	34.485		
1,800.0	1,793.8	1,751.5	1,732.6	3.8	5.0	72.89	-7.2	291.2	245.8	238.8	7.00	35.110		
1,900.0	1,893.0	1,845.0	1,822.5	4.0	5.5	73.23	-8.0	317.0	268.1	260.6	7.48	35.845		
2,000.0	1,992.3	1,938.0	1,911.4	4.3	6.0	73.40	-8.8	344.0	291.8	283.9	7.96	36.674		
2,100.0	2,091.5	2,030.2	1,999.2	4.6	6.5	73.44	-9.7	372.3	317.1	308.6	8.44	37.589		
2,200.0	2,190.8	2,125.4	2,089.5	4.8	7.0	73.41	-10.7	402.5	343.4	334.4	8.93	38.435		
2,300.0	2,290.0	2,221.8	2,180.9	5.1	7.6	73.37	-11.6	433.2	369.7	360.3	9.44	39.152		
2,400.0	2,389.3	2,318.3	2,272.4	5.4	8.2	73.34	-12.6	463.8	396.0	386.1	9.95	39.788		
2,500.0	2,488.5	2,414.8	2,363.8	5.7	8.8	73.31	-13.5	494.5	422.4	411.9	10.47	40.355		
2,600.0	2,587.8	2,511.2	2,455.3	5.9	9.3	73.29	-14.5	525.2	448.7	437.7	10.98	40.863		
2,700.0	2,687.0	2,607.7	2,546.7	6.2	9.9	73.27	-15.4	555.9	475.1	463.6	11.50	41.322		
2,800.0	2,786.3	2,704.2	2,638.2	6.5	10.5	73.25	-16.4	586.6	501.4	489.4	12.01	41.738		
2,900.0	2,885.5	2,800.6	2,729.6	6.7	11.1	73.23	-17.3	617.3	527.8	515.2	12.53	42.116		
3,000.0	2,984.8	2,897.1	2,821.1	7.0	11.6	73.22	-18.3	648.0	554.1	541.0	13.05	42.461		
3,100.0	3,084.0	2,993.6	2,912.5	7.3	12.2	73.20	-19.2	678.6	580.4	566.9	13.57	42.777		
3,200.0	3,183.3	3,090.0	3,004.0	7.6	12.8	73.19	-20.2	709.3	606.8	592.7	14.09	43.069		
3,300.0	3,282.5	3,186.5	3,095.4	7.8	13.4	73.18	-21.1	740.0	633.1	618.5	14.61	43.337		
3,400.0	3,381.8	3,283.0	3,186.9	8.1	14.0	73.17	-22.1	770.7	659.5	644.3	15.13	43.586		
3,500.0	3,481.1	3,379.4	3,278.3	8.4	14.5	73.16	-23.0	801.4	685.8	670.2	15.65	43.817		
3,600.0	3,580.3	3,475.9	3,369.8	8.7	15.1	73.15	-24.0	832.1	712.2	696.0	16.17	44.032		
3,700.0	3,679.6	3,572.4	3,461.2	8.9	15.7	73.14	-24.9	862.7	738.5	721.8	16.70	44.232		
3,800.0	3,778.8	3,668.8	3,552.7	9.2	16.3	73.13	-25.9	893.4	764.8	747.6	17.22	44.420		
3,900.0	3,878.1	3,765.3	3,644.2	9.5	16.9	73.13	-26.8	924.1	791.2	773.4	17.74	44.595		
4,000.0	3,977.3	3,861.8	3,735.6	9.8	17.5	73.12	-27.8	954.8	817.5	799.3	18.26	44.760		
4,100.0	4,076.6	3,958.2	3,827.1	10.0	18.0	73.11	-28.7	985.5	843.9	825.1	18.79	44.915		
4,200.0	4,175.8	4,054.7	3,918.5	10.3	18.6	73.11	-29.7	1,016.2	870.2	850.9	19.31	45.061		
4,300.0	4,275.1	4,151.2	4,010.0	10.6	19.2	73.10	-30.7	1,046.9	896.6	876.7	19.84	45.199		
4,400.0	4,374.3	4,247.6	4,101.4	10.9	19.8	73.10	-31.6	1,077.5	922.9	902.5	20.36	45.329		
4,500.0	4,473.6	4,344.1	4,192.9	11.1	20.4	73.09	-32.6	1,108.2	949.2	928.4	20.88	45.452		
4,600.0	4,572.8	4,440.6	4,284.3	11.4	21.0	73.09	-33.5	1,138.9	975.6	954.2	21.41	45.569		
4,700.0	4,672.1	4,537.0	4,375.8	11.7	21.5	73.08	-34.5	1,169.6	1,001.9	980.0	21.93	45.680		
4,800.0	4,771.3	4,633.5	4,467.2	12.0	22.1	73.08	-35.4	1,200.3	1,028.3	1,005.8	22.46	45.785		
4,900.0	4,870.6	4,730.0	4,558.7	12.2	22.7	73.07	-36.4	1,231.0	1,054.6	1,031.6	22.98	45.886		
5,000.0	4,969.8	4,826.5	4,650.1	12.5	23.3	73.07	-37.3	1,261.7	1,081.0	1,057.4	23.51	45.981		
5,100.0	5,069.1	4,922.9	4,741.6	12.8	23.9	73.06	-38.3	1,292.3	1,107.3	1,083.3	24.03	46.072		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4											Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,168.3	5,019.4	4,833.0	13.1	24.5	73.06	-39.2	1,323.0	1,133.6	1,109.1	24.56	46.159		
5,300.0	5,267.6	5,115.9	4,924.5	13.3	25.1	73.06	-40.2	1,353.7	1,160.0	1,134.9	25.08	46.243		
5,400.0	5,366.8	5,212.3	5,015.9	13.6	25.6	73.05	-41.1	1,384.4	1,186.3	1,160.7	25.61	46.322		
5,500.0	5,466.1	5,308.8	5,107.4	13.9	26.2	73.05	-42.1	1,415.1	1,212.7	1,186.5	26.14	46.398		
5,600.0	5,565.3	5,405.3	5,198.8	14.2	26.8	73.05	-43.0	1,445.8	1,239.0	1,212.3	26.66	46.471		
5,700.0	5,664.6	5,501.7	5,290.3	14.4	27.4	73.05	-44.0	1,476.4	1,265.4	1,238.2	27.19	46.542		
5,800.0	5,763.8	5,598.2	5,381.7	14.7	28.0	73.04	-44.9	1,507.1	1,291.7	1,264.0	27.71	46.609		
5,900.0	5,863.1	5,694.7	5,473.2	15.0	28.6	73.04	-45.9	1,537.8	1,318.0	1,289.8	28.24	46.674		
6,000.0	5,962.3	5,791.1	5,564.7	15.3	29.2	73.04	-46.8	1,568.5	1,344.4	1,315.6	28.77	46.736		
6,100.0	6,061.6	5,887.6	5,656.1	15.5	29.7	73.04	-47.8	1,599.2	1,370.7	1,341.4	29.29	46.796		
6,200.0	6,160.9	5,984.1	5,747.6	15.8	30.3	73.03	-48.7	1,629.9	1,397.1	1,367.3	29.82	46.853		
6,300.0	6,260.1	6,080.5	5,839.0	16.1	30.9	73.03	-49.7	1,660.6	1,423.4	1,393.1	30.34	46.909		
6,400.0	6,359.4	6,177.0	5,930.5	16.4	31.5	73.03	-50.6	1,691.2	1,449.8	1,418.9	30.87	46.962		
6,500.0	6,458.6	6,273.5	6,021.9	16.6	32.1	73.03	-51.6	1,721.9	1,476.1	1,444.7	31.40	47.014		
6,600.0	6,557.9	6,369.9	6,113.4	16.9	32.7	73.02	-52.6	1,752.6	1,502.4	1,470.5	31.92	47.064		
6,700.0	6,657.1	6,466.4	6,204.8	17.2	33.3	73.02	-53.5	1,783.3	1,528.8	1,496.3	32.45	47.112		
6,800.0	6,756.4	6,562.9	6,296.3	17.5	33.8	73.02	-54.5	1,814.0	1,555.1	1,522.1	32.98	47.159		
6,900.0	6,855.6	6,659.3	6,387.7	17.7	34.4	73.02	-55.4	1,844.7	1,581.5	1,548.0	33.50	47.204		
6,919.5	6,875.0	6,678.1	6,405.5	17.8	34.5	73.02	-55.6	1,850.6	1,586.6	1,553.0	33.61	47.212		
6,950.0	6,905.3	6,707.6	6,433.5	17.9	34.7	51.14	-55.9	1,860.0	1,594.3	1,560.6	33.74	47.257		
7,000.0	6,955.1	6,756.1	6,479.5	17.9	35.0	-6.22	-56.4	1,875.5	1,605.6	1,571.8	33.86	47.425		
7,050.0	7,004.8	6,804.5	6,525.3	17.9	35.3	-34.65	-56.8	1,890.8	1,615.2	1,581.4	33.87	47.693		
7,100.0	7,053.8	6,852.3	6,570.6	17.9	35.6	-45.14	-57.3	1,906.0	1,623.1	1,589.3	33.77	48.063		
7,150.0	7,101.9	6,899.2	6,615.1	17.9	35.9	-50.32	-57.8	1,921.0	1,629.2	1,595.6	33.57	48.538		
7,200.0	7,148.7	6,944.9	6,658.4	17.8	36.2	-53.53	-58.2	1,935.5	1,633.7	1,600.4	33.26	49.121		
7,250.0	7,193.8	6,989.0	6,700.2	17.7	36.4	-55.91	-58.7	1,949.5	1,636.6	1,603.8	32.85	49.816		
7,300.0	7,236.9	7,031.1	6,740.2	17.5	36.7	-57.88	-59.1	1,962.9	1,638.2	1,605.8	32.36	50.627		
7,350.0	7,277.7	7,071.1	6,778.1	17.4	36.9	-59.65	-59.5	1,975.6	1,638.4	1,606.6	31.78	51.552		
7,400.0	7,315.7	7,108.5	6,813.5	17.2	37.2	-61.30	-59.8	1,987.5	1,637.5	1,606.4	31.14	52.589		
7,450.0	7,350.9	7,143.0	6,846.2	17.1	37.4	-62.89	-60.2	1,998.5	1,635.8	1,605.3	30.45	53.727		
7,500.0	7,382.8	7,174.4	6,876.1	16.9	37.6	-64.40	-60.5	2,008.5	1,633.3	1,603.6	29.73	54.947		
7,550.0	7,411.3	7,202.6	6,902.7	16.7	37.7	-65.82	-60.8	2,017.5	1,630.3	1,601.3	29.00	56.216		
7,600.0	7,436.1	7,227.1	6,926.0	16.6	37.9	-67.15	-61.0	2,025.3	1,627.1	1,598.8	28.30	57.489		
7,650.0	7,457.1	7,282.0	6,978.0	16.5	38.2	-69.47	-59.7	2,042.5	1,623.5	1,595.7	27.79	58.424		
7,700.0	7,474.0	7,320.4	7,014.4	16.4	38.4	-71.31	-55.8	2,054.3	1,619.8	1,592.5	27.30	59.341		
7,750.0	7,486.8	7,333.9	7,027.1	16.4	38.5	-72.22	-53.8	2,058.4	1,616.4	1,589.6	26.86	60.186		
7,800.0	7,495.3	7,334.6	7,027.8	16.4	38.5	-72.59	-53.7	2,058.6	1,613.6	1,587.0	26.54	60.787		
7,850.0	7,499.5	7,328.1	7,021.6	16.5	38.5	-72.62	-54.7	2,056.6	1,611.3	1,584.9	26.39	61.048		
7,873.6	7,500.0	7,323.3	7,017.1	16.5	38.4	-72.54	-55.4	2,055.2	1,610.4	1,584.0	26.38	61.037		
7,900.0	7,500.0	7,317.9	7,012.0	16.5	38.4	-72.35	-56.1	2,053.6	1,609.6	1,583.2	26.42	60.920		
7,932.0	7,500.0	7,312.2	7,006.6	16.6	38.4	-72.15	-56.8	2,051.8	1,609.3	1,582.8	26.56	60.586		
8,000.0	7,500.0	7,302.5	6,997.5	16.9	38.3	-71.81	-57.9	2,048.9	1,610.7	1,583.7	27.05	59.542		
8,100.0	7,500.0	7,292.3	6,987.8	17.4	38.3	-71.44	-58.9	2,045.8	1,618.0	1,589.6	28.37	57.026		
8,200.0	7,500.0	7,285.1	6,980.9	18.0	38.2	-71.19	-59.5	2,043.5	1,631.2	1,601.0	30.24	53.935		
8,300.0	7,500.0	7,279.6	6,975.8	18.8	38.2	-70.99	-59.9	2,041.8	1,650.4	1,617.9	32.51	50.767		
8,400.0	7,500.0	7,275.4	6,971.8	19.7	38.2	-70.84	-60.1	2,040.5	1,675.4	1,640.4	35.02	47.840		
8,500.0	7,500.0	7,272.0	6,968.5	20.7	38.1	-70.72	-60.3	2,039.4	1,705.8	1,668.2	37.65	45.307		
8,600.0	7,500.0	7,269.2	6,965.9	21.9	38.1	-70.62	-60.5	2,038.6	1,741.5	1,701.2	40.30	43.209		
8,700.0	7,500.0	7,266.9	6,963.7	23.1	38.1	-70.54	-60.6	2,037.9	1,782.0	1,739.1	42.91	41.528		
8,800.0	7,500.0	7,265.0	6,961.9	24.3	38.1	-70.47	-60.7	2,037.2	1,827.1	1,781.7	45.43	40.223		
8,900.0	7,500.0	7,250.0	6,947.7	25.6	38.0	-69.94	-61.1	2,032.5	1,876.6	1,828.9	47.73	39.315		
9,000.0	7,500.0	7,250.0	6,947.7	27.0	38.0	-69.94	-61.1	2,032.5	1,929.9	1,879.9	49.99	38.608		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,100.0	7,500.0	7,250.0	6,947.7	28.4	38.0	-69.94	-61.1	2,032.5	1,986.8	1,934.7	52.09	38.141	
9,200.0	7,500.0	7,250.0	6,947.7	29.9	38.0	-69.94	-61.1	2,032.5	2,046.9	1,992.9	54.04	37.877	
9,300.0	7,500.0	7,250.0	6,947.7	31.4	38.0	-69.94	-61.1	2,032.5	2,110.2	2,054.3	55.85	37.786	
9,400.0	7,500.0	7,250.0	6,947.7	32.9	38.0	-69.94	-61.1	2,032.5	2,176.1	2,118.6	57.51	37.841	
9,500.0	7,500.0	7,250.0	6,947.7	34.4	38.0	-69.94	-61.1	2,032.5	2,244.6	2,185.6	59.03	38.022	
9,600.0	7,500.0	7,250.0	6,947.7	36.0	38.0	-69.94	-61.1	2,032.5	2,315.4	2,255.0	60.44	38.311	
9,700.0	7,500.0	7,250.0	6,947.7	37.5	38.0	-69.94	-61.1	2,032.5	2,388.3	2,326.5	61.72	38.692	
9,800.0	7,500.0	7,250.0	6,947.7	39.1	38.0	-69.94	-61.1	2,032.5	2,463.0	2,400.1	62.91	39.154	
9,900.0	7,500.0	7,250.0	6,947.7	40.7	38.0	-69.94	-61.1	2,032.5	2,539.5	2,475.6	63.99	39.686	
10,000.0	7,500.0	7,250.0	6,947.7	42.3	38.0	-69.94	-61.1	2,032.5	2,617.6	2,552.7	64.99	40.279	
10,100.0	7,500.0	7,250.0	6,947.7	43.9	38.0	-69.94	-61.1	2,032.5	2,697.2	2,631.3	65.90	40.926	
10,200.0	7,500.0	7,250.0	6,947.7	45.6	38.0	-69.94	-61.1	2,032.5	2,778.1	2,711.3	66.75	41.620	
10,300.0	7,500.0	7,250.0	6,947.7	47.2	38.0	-69.94	-61.1	2,032.5	2,860.1	2,792.6	67.53	42.356	
10,400.0	7,500.0	7,250.0	6,947.7	48.9	38.0	-69.94	-61.1	2,032.5	2,943.3	2,875.1	68.25	43.128	
10,500.0	7,500.0	7,250.0	6,947.7	50.5	38.0	-69.94	-61.1	2,032.5	3,027.5	2,958.6	68.91	43.934	
10,600.0	7,500.0	7,250.0	6,947.7	52.2	38.0	-69.94	-61.1	2,032.5	3,112.7	3,043.1	69.53	44.769	
10,700.0	7,500.0	7,250.0	6,947.7	53.8	38.0	-69.94	-61.1	2,032.5	3,198.7	3,128.5	70.10	45.630	
10,800.0	7,500.0	7,250.0	6,947.7	55.5	38.0	-69.94	-61.1	2,032.5	3,285.4	3,214.8	70.63	46.514	
10,900.0	7,500.0	7,250.0	6,947.7	57.2	38.0	-69.94	-61.1	2,032.5	3,373.0	3,301.8	71.13	47.420	
11,000.0	7,500.0	7,250.0	6,947.7	58.9	38.0	-69.94	-61.1	2,032.5	3,461.2	3,389.6	71.59	48.344	
11,100.0	7,500.0	7,250.0	6,947.7	60.6	38.0	-69.94	-61.1	2,032.5	3,550.0	3,478.0	72.03	49.286	
11,200.0	7,500.0	7,250.0	6,947.7	62.3	38.0	-69.94	-61.1	2,032.5	3,639.4	3,567.0	72.44	50.243	
11,244.1	7,500.0	7,250.0	6,947.7	63.0	38.0	-69.94	-61.1	2,032.5	3,679.0	3,606.4	72.61	50.670	
11,300.0	7,500.0	7,250.0	6,947.7	64.0	38.0	-70.70	-61.1	2,032.5	3,729.1	3,656.3	72.83	51.204	
11,400.0	7,500.0	7,250.0	6,947.7	65.7	38.0	-71.95	-61.1	2,032.5	3,818.0	3,744.8	73.23	52.136	
11,444.1	7,500.0	7,250.0	6,947.7	66.4	38.0	-72.45	-61.1	2,032.5	3,857.0	3,783.6	73.40	52.545	
11,500.0	7,500.0	7,250.0	6,947.7	67.4	38.0	-72.45	-61.1	2,032.5	3,906.2	3,832.6	73.61	53.066	
11,600.0	7,500.0	7,250.0	6,947.7	69.1	38.0	-72.45	-61.1	2,032.5	3,994.8	3,920.8	73.96	54.010	
11,700.0	7,500.0	7,250.0	6,947.7	70.8	38.0	-72.45	-61.1	2,032.5	4,083.9	4,009.6	74.30	54.967	
11,800.0	7,500.0	7,250.0	6,947.7	72.5	38.0	-72.45	-61.1	2,032.5	4,173.6	4,098.9	74.61	55.936	
11,900.0	7,500.0	7,250.0	6,947.7	74.2	38.0	-72.45	-61.1	2,032.5	4,263.6	4,188.7	74.91	56.916	
12,000.0	7,500.0	7,250.0	6,947.7	76.0	38.0	-72.45	-61.1	2,032.5	4,354.1	4,279.0	75.19	57.906	
12,100.0	7,500.0	7,250.0	6,947.7	77.7	38.0	-72.45	-61.1	2,032.5	4,445.1	4,369.6	75.46	58.904	
12,194.1	7,500.0	7,250.0	6,947.7	79.3	38.0	-72.45	-61.1	2,032.5	4,531.0	4,455.3	75.70	59.852	
12,200.0	7,500.0	7,250.0	6,947.7	79.4	38.0	-72.37	-61.1	2,032.5	4,536.4	4,460.6	75.72	59.911	
12,300.0	7,500.0	7,250.0	6,947.7	81.1	38.0	-70.85	-61.1	2,032.5	4,628.7	4,552.8	75.93	60.961	
12,387.3	7,500.0	7,250.0	6,947.7	82.6	38.0	-69.24	-61.1	2,032.5	4,710.6	4,634.6	76.10	61.902	
12,400.0	7,500.0	7,250.0	6,947.7	82.9	38.0	-69.24	-61.1	2,032.5	4,722.6	4,646.5	76.12	62.038	
12,500.0	7,500.0	7,250.0	6,947.7	84.6	38.0	-69.24	-61.1	2,032.5	4,817.1	4,740.8	76.33	63.113	
12,600.0	7,500.0	7,250.0	6,947.7	86.3	38.0	-69.24	-61.1	2,032.5	4,911.8	4,835.3	76.52	64.192	
12,700.0	7,500.0	7,250.0	6,947.7	88.0	38.0	-69.24	-61.1	2,032.5	5,006.8	4,930.1	76.70	65.275	
12,800.0	7,500.0	7,250.0	6,947.7	89.7	38.0	-69.24	-61.1	2,032.5	5,101.9	5,025.0	76.88	66.360	
12,900.0	7,500.0	7,250.0	6,947.7	91.5	38.0	-69.24	-61.1	2,032.5	5,197.2	5,120.2	77.05	67.449	
13,000.0	7,500.0	7,250.0	6,947.7	93.2	38.0	-69.24	-61.1	2,032.5	5,292.7	5,215.5	77.22	68.539	
13,100.0	7,500.0	7,250.0	6,947.7	94.9	38.0	-69.24	-61.1	2,032.5	5,388.4	5,311.0	77.38	69.632	
13,200.0	7,500.0	7,250.0	6,947.7	96.6	38.0	-69.24	-61.1	2,032.5	5,484.2	5,406.6	77.54	70.727	
13,300.0	7,500.0	7,250.0	6,947.7	98.4	38.0	-69.24	-61.1	2,032.5	5,580.1	5,502.4	77.69	71.823	
13,400.0	7,500.0	7,250.0	6,947.7	100.1	38.0	-69.24	-61.1	2,032.5	5,676.2	5,598.4	77.84	72.921	
13,500.0	7,500.0	7,250.0	6,947.7	101.8	38.0	-69.24	-61.1	2,032.5	5,772.4	5,694.4	77.99	74.020	
13,600.0	7,500.0	7,250.0	6,947.7	103.5	38.0	-69.24	-61.1	2,032.5	5,868.8	5,790.7	78.13	75.120	
13,700.0	7,500.0	7,250.0	6,947.7	105.3	38.0	-69.24	-61.1	2,032.5	5,965.3	5,887.0	78.26	76.221	
13,800.0	7,500.0	7,250.0	6,947.7	107.0	38.0	-69.24	-61.1	2,032.5	6,061.8	5,983.4	78.40	77.323	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
13,900.0	7,500.0	7,250.0	6,947.7	108.7	38.0	-69.24	-61.1	2,032.5	6,158.5	6,080.0	78.53	78.425		
14,000.0	7,500.0	7,250.0	6,947.7	110.5	38.0	-69.24	-61.1	2,032.5	6,255.3	6,176.7	78.66	79.528		
14,100.0	7,500.0	7,250.0	6,947.7	112.2	38.0	-69.24	-61.1	2,032.5	6,352.2	6,273.4	78.78	80.631		
14,200.0	7,500.0	7,250.0	6,947.7	113.9	38.0	-69.24	-61.1	2,032.5	6,449.2	6,370.3	78.90	81.735		
14,300.0	7,500.0	7,250.0	6,947.7	115.7	38.0	-69.24	-61.1	2,032.5	6,546.3	6,467.3	79.02	82.838		
14,400.0	7,500.0	7,250.0	6,947.7	117.4	38.0	-69.24	-61.1	2,032.5	6,643.5	6,564.3	79.14	83.942		
14,500.0	7,500.0	7,250.0	6,947.7	119.1	38.0	-69.24	-61.1	2,032.5	6,740.7	6,661.5	79.26	85.046		
14,600.0	7,500.0	7,250.0	6,947.7	120.9	38.0	-69.24	-61.1	2,032.5	6,838.1	6,758.7	79.37	86.149		
14,700.0	7,500.0	7,250.0	6,947.7	122.6	38.0	-69.24	-61.1	2,032.5	6,935.5	6,856.0	79.49	87.252		
14,800.0	7,500.0	7,250.0	6,947.7	124.4	38.0	-69.24	-61.1	2,032.5	7,032.9	6,953.3	79.60	88.355		
14,900.0	7,500.0	7,250.0	6,947.7	126.1	38.0	-69.24	-61.1	2,032.5	7,130.5	7,050.8	79.71	89.457		
15,000.0	7,500.0	7,250.0	6,947.7	127.8	38.0	-69.24	-61.1	2,032.5	7,228.1	7,148.3	79.82	90.559		
15,100.0	7,500.0	7,250.0	6,947.7	129.6	38.0	-69.24	-61.1	2,032.5	7,325.8	7,245.9	79.92	91.661		
15,200.0	7,500.0	7,250.0	6,947.7	131.3	38.0	-69.24	-61.1	2,032.5	7,423.5	7,343.5	80.03	92.762		
15,300.0	7,500.0	7,250.0	6,947.7	133.1	38.0	-69.24	-61.1	2,032.5	7,521.3	7,441.2	80.13	93.862		
15,400.0	7,500.0	7,250.0	6,947.7	134.8	38.0	-69.24	-61.1	2,032.5	7,619.2	7,539.0	80.24	94.961		
15,500.0	7,500.0	7,250.0	6,947.7	136.5	38.0	-69.24	-61.1	2,032.5	7,717.1	7,636.8	80.34	96.059		
15,600.0	7,500.0	7,250.0	6,947.7	138.3	38.0	-69.24	-61.1	2,032.5	7,815.1	7,734.6	80.44	97.157		
15,700.0	7,500.0	7,250.0	6,947.7	140.0	38.0	-69.24	-61.1	2,032.5	7,913.1	7,832.6	80.54	98.254		
15,805.8	7,500.0	7,250.0	6,947.7	141.9	38.0	-69.24	-61.1	2,032.5	8,016.8	7,936.2	80.64	99.413		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.01	0.0	-22.4	22.4					
100.0	100.0	100.0	100.0	0.2	0.2	-90.01	0.0	-22.4	22.4	22.1	0.30	73.728	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-22.4	22.4	21.7	0.65	34.301		
300.0	300.0	299.7	299.7	0.5	0.5	-88.32	0.7	-22.9	22.9	21.9	1.00	22.905		
400.0	400.0	399.4	399.4	0.7	0.7	-83.74	2.7	-24.6	24.7	23.4	1.35	18.280		
500.0	500.0	499.0	498.9	0.8	0.9	-77.48	6.1	-27.3	28.0	26.3	1.71	16.412		
600.0	600.0	598.4	598.1	1.0	1.1	-111.74	10.8	-31.1	33.3	31.2	2.06	16.165		
700.0	700.0	697.5	696.9	1.2	1.3	-109.07	16.8	-36.0	40.8	38.4	2.42	16.893		
800.0	799.9	796.7	795.6	1.4	1.5	-108.20	24.0	-41.8	50.3	47.6	2.78	18.094		
900.0	899.7	896.1	894.6	1.6	1.7	-108.98	31.6	-47.9	60.7	57.6	3.16	19.198		
1,000.0	999.4	995.5	993.5	1.8	2.0	-110.82	39.2	-54.1	71.7	68.2	3.56	20.144		
1,100.0	1,098.9	1,094.7	1,092.2	2.0	2.2	-113.25	46.7	-60.2	83.5	79.5	3.98	20.985		
1,201.3	1,199.5	1,195.1	1,192.1	2.2	2.4	-116.03	54.3	-66.3	96.2	91.8	4.42	21.780		
1,300.0	1,297.5	1,292.9	1,289.4	2.5	2.7	-118.60	61.8	-72.3	109.3	104.4	4.86	22.507		
1,400.0	1,396.8	1,391.9	1,388.0	2.7	2.9	-120.64	69.3	-78.4	122.7	117.4	5.30	23.142		
1,500.0	1,496.0	1,490.9	1,486.5	3.0	3.2	-122.28	76.8	-84.5	136.2	130.4	5.75	23.693		
1,600.0	1,595.3	1,589.9	1,585.0	3.3	3.4	-123.63	84.3	-90.6	149.8	143.6	6.19	24.175		
1,700.0	1,694.5	1,688.9	1,683.6	3.5	3.6	-124.75	91.9	-96.7	163.4	156.8	6.64	24.600		
1,800.0	1,793.8	1,787.9	1,782.1	3.8	3.9	-125.69	99.4	-102.7	177.1	170.0	7.09	24.976		
1,900.0	1,893.0	1,886.9	1,880.7	4.0	4.1	-126.50	106.9	-108.8	190.9	183.3	7.54	25.311		
2,000.0	1,992.3	1,986.0	1,979.2	4.3	4.3	-127.20	114.4	-114.9	204.7	196.7	7.99	25.612		
2,100.0	2,091.5	2,085.0	2,077.7	4.6	4.6	-127.82	122.0	-121.0	218.5	210.0	8.44	25.883		
2,200.0	2,190.8	2,184.0	2,176.3	4.8	4.8	-128.36	129.5	-127.1	232.3	223.4	8.89	26.128		
2,300.0	2,290.0	2,283.0	2,274.8	5.1	5.1	-128.84	137.0	-133.2	246.2	236.8	9.34	26.351		
2,400.0	2,389.3	2,382.0	2,373.4	5.4	5.3	-129.27	144.5	-139.3	260.0	250.3	9.79	26.555		
2,500.0	2,488.5	2,481.0	2,471.9	5.7	5.6	-129.65	152.1	-145.3	273.9	263.7	10.24	26.742		
2,600.0	2,587.8	2,580.1	2,570.5	5.9	5.8	-130.00	159.6	-151.4	287.8	277.1	10.69	26.914		
2,700.0	2,687.0	2,679.1	2,669.0	6.2	6.0	-130.31	167.1	-157.5	301.7	290.6	11.14	27.073		
2,800.0	2,786.3	2,778.1	2,767.5	6.5	6.3	-130.60	174.6	-163.6	315.6	304.0	11.60	27.220		
2,900.0	2,885.5	2,877.1	2,866.1	6.7	6.5	-130.87	182.2	-169.7	329.5	317.5	12.05	27.357		
3,000.0	2,984.8	2,976.1	2,964.6	7.0	6.8	-131.11	189.7	-175.8	343.5	331.0	12.50	27.484		
3,100.0	3,084.0	3,075.1	3,063.2	7.3	7.0	-131.33	197.2	-181.8	357.4	344.5	12.95	27.602		
3,200.0	3,183.3	3,174.2	3,161.7	7.6	7.2	-131.54	204.7	-187.9	371.3	357.9	13.40	27.713		
3,300.0	3,282.5	3,273.2	3,260.2	7.8	7.5	-131.73	212.3	-194.0	385.3	371.4	13.85	27.817		
3,400.0	3,381.8	3,372.2	3,358.8	8.1	7.7	-131.91	219.8	-200.1	399.2	384.9	14.30	27.915		
3,500.0	3,481.1	3,471.2	3,457.3	8.4	8.0	-132.08	227.3	-206.2	413.2	398.4	14.75	28.006		
3,600.0	3,580.3	3,570.2	3,555.9	8.7	8.2	-132.23	234.9	-212.3	427.1	411.9	15.20	28.093		
3,700.0	3,679.6	3,669.2	3,654.4	8.9	8.4	-132.38	242.4	-218.4	441.1	425.4	15.65	28.175		
3,800.0	3,778.8	3,768.3	3,753.0	9.2	8.7	-132.51	249.9	-224.4	455.0	438.9	16.11	28.252		
3,900.0	3,878.1	3,867.3	3,851.5	9.5	8.9	-132.64	257.4	-230.5	469.0	452.4	16.56	28.325		
4,000.0	3,977.3	3,966.3	3,950.0	9.8	9.2	-132.76	265.0	-236.6	482.9	465.9	17.01	28.394		
4,100.0	4,076.6	4,065.3	4,048.6	10.0	9.4	-132.88	272.5	-242.7	496.9	479.4	17.46	28.460		
4,200.0	4,175.8	4,164.3	4,147.1	10.3	9.7	-132.99	280.0	-248.8	510.9	492.9	17.91	28.523		
4,300.0	4,275.1	4,263.3	4,245.7	10.6	9.9	-133.09	287.5	-254.9	524.8	506.5	18.36	28.582		
4,400.0	4,374.3	4,362.3	4,344.2	10.9	10.1	-133.18	295.1	-260.9	538.8	520.0	18.81	28.639		
4,500.0	4,473.6	4,461.4	4,442.8	11.1	10.4	-133.28	302.6	-267.0	552.8	533.5	19.26	28.693		
4,600.0	4,572.8	4,560.4	4,541.3	11.4	10.6	-133.36	310.1	-273.1	566.7	547.0	19.72	28.745		
4,700.0	4,672.1	4,659.4	4,639.8	11.7	10.9	-133.45	317.6	-279.2	580.7	560.5	20.17	28.795		
4,800.0	4,771.3	4,758.4	4,738.4	12.0	11.1	-133.53	325.2	-285.3	594.7	574.0	20.62	28.842		
4,900.0	4,870.6	4,857.4	4,836.9	12.2	11.3	-133.60	332.7	-291.4	608.6	587.6	21.07	28.887		
5,000.0	4,969.8	4,956.4	4,935.5	12.5	11.6	-133.68	340.2	-297.5	622.6	601.1	21.52	28.931		
5,100.0	5,069.1	5,055.5	5,034.0	12.8	11.8	-133.74	347.7	-303.5	636.6	614.6	21.97	28.973		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,168.3	5,154.5	5,132.5	13.1	12.1	-133.81	355.3	-309.6	650.6	628.1	22.42	29.013	
5,300.0	5,267.6	5,253.5	5,231.1	13.3	12.3	-133.87	362.8	-315.7	664.5	641.7	22.87	29.051	
5,400.0	5,366.8	5,352.5	5,329.6	13.6	12.6	-133.93	370.3	-321.8	678.5	655.2	23.33	29.089	
5,500.0	5,466.1	5,451.5	5,428.2	13.9	12.8	-133.99	377.8	-327.9	692.5	668.7	23.78	29.124	
5,600.0	5,565.3	5,550.5	5,526.7	14.2	13.0	-134.05	385.4	-334.0	706.5	682.2	24.23	29.159	
5,700.0	5,664.6	5,649.6	5,625.3	14.4	13.3	-134.10	392.9	-340.0	720.4	695.8	24.68	29.192	
5,800.0	5,763.8	5,748.6	5,723.8	14.7	13.5	-134.15	400.4	-346.1	734.4	709.3	25.13	29.224	
5,900.0	5,863.1	5,847.6	5,822.3	15.0	13.8	-134.20	407.9	-352.2	748.4	722.8	25.58	29.255	
6,000.0	5,962.3	5,946.6	5,920.9	15.3	14.0	-134.25	415.5	-358.3	762.4	736.3	26.03	29.285	
6,100.0	6,061.6	6,045.6	6,019.4	15.5	14.2	-134.30	423.0	-364.4	776.4	749.9	26.48	29.313	
6,200.0	6,160.9	6,144.6	6,118.0	15.8	14.5	-134.34	430.5	-370.5	790.3	763.4	26.94	29.341	
6,300.0	6,260.1	6,243.7	6,216.5	16.1	14.7	-134.39	438.0	-376.6	804.3	776.9	27.39	29.368	
6,400.0	6,359.4	6,342.7	6,315.0	16.4	15.0	-134.43	445.6	-382.6	818.3	790.5	27.84	29.394	
6,500.0	6,458.6	6,441.7	6,413.6	16.6	15.2	-134.47	453.1	-388.7	832.3	804.0	28.29	29.420	
6,600.0	6,557.9	6,540.7	6,512.1	16.9	15.5	-134.51	460.6	-394.8	846.3	817.5	28.74	29.444	
6,700.0	6,657.1	6,639.7	6,610.7	17.2	15.7	-134.55	468.2	-400.9	860.3	831.1	29.19	29.468	
6,800.0	6,756.4	6,738.7	6,709.2	17.5	15.9	-134.58	475.7	-407.0	874.2	844.6	29.64	29.491	
6,900.0	6,855.6	6,837.7	6,807.8	17.7	16.2	-134.62	483.2	-413.1	888.2	858.1	30.10	29.513	
6,919.5	6,875.0	6,857.0	6,827.0	17.8	16.2	-134.62	484.7	-414.2	890.9	860.8	30.18	29.518	
6,950.0	6,905.3	6,887.3	6,857.0	17.9	16.3	-157.59	487.0	-416.1	895.1	864.8	30.31	29.537	
7,000.0	6,955.1	6,936.6	6,906.1	17.9	16.4	143.78	490.7	-419.1	901.7	871.2	30.47	29.596	
7,050.0	7,004.8	6,985.4	6,954.7	17.9	16.5	114.70	494.4	-422.1	907.9	877.3	30.59	29.680	
7,100.0	7,053.8	7,033.3	7,002.4	17.9	16.7	104.11	498.1	-425.1	913.8	883.1	30.67	29.792	
7,150.0	7,101.9	7,080.0	7,048.8	17.9	16.8	99.35	501.6	-427.9	919.5	888.8	30.71	29.938	
7,200.0	7,148.7	7,125.0	7,093.6	17.8	16.9	96.97	505.0	-430.7	925.2	894.5	30.71	30.125	
7,250.0	7,193.8	7,168.0	7,136.5	17.7	17.0	95.78	508.2	-433.4	931.2	900.5	30.66	30.372	
7,300.0	7,236.9	7,211.3	7,179.7	17.5	17.0	95.22	508.9	-436.0	937.5	907.0	30.54	30.701	
7,350.0	7,277.7	7,256.4	7,224.6	17.4	17.1	95.04	506.3	-438.8	944.3	913.9	30.36	31.106	
7,400.0	7,315.7	7,303.8	7,271.3	17.2	17.1	95.14	499.7	-441.7	951.4	921.3	30.12	31.586	
7,450.0	7,350.9	7,353.7	7,319.9	17.1	17.1	95.45	488.5	-444.7	958.8	929.0	29.83	32.140	
7,500.0	7,382.8	7,406.6	7,370.1	16.9	17.0	95.93	472.1	-447.8	966.5	937.0	29.50	32.763	
7,550.0	7,411.3	7,463.2	7,421.9	16.7	16.9	96.54	449.6	-451.0	974.4	945.3	29.13	33.451	
7,600.0	7,436.1	7,524.1	7,474.8	16.6	16.7	97.30	419.7	-454.2	982.3	953.6	28.73	34.192	
7,650.0	7,457.1	7,590.0	7,528.2	16.5	16.6	98.17	381.2	-457.5	990.1	961.8	28.31	34.969	
7,700.0	7,474.0	7,661.8	7,580.9	16.4	16.4	99.14	332.7	-460.8	997.5	969.6	27.90	35.749	
7,750.0	7,486.8	7,740.1	7,631.0	16.4	16.2	100.19	272.6	-463.9	1,004.4	976.9	27.53	36.478	
7,800.0	7,495.3	7,825.6	7,675.8	16.4	16.0	101.27	199.9	-466.7	1,010.4	983.2	27.26	37.061	
7,850.0	7,499.5	7,918.5	7,711.6	16.5	16.0	102.31	114.4	-468.9	1,015.3	988.1	27.16	37.381	
7,873.6	7,500.0	7,964.6	7,724.2	16.5	16.0	102.76	70.0	-469.6	1,017.0	989.8	27.19	37.402	
7,900.0	7,500.0	8,018.2	7,734.2	16.5	16.0	103.31	17.4	-470.3	1,018.5	991.2	27.30	37.306	
8,000.0	7,500.0	8,160.7	7,740.0	16.9	16.4	103.62	-124.9	-470.6	1,019.3	991.1	28.16	36.194	
8,100.0	7,500.0	8,260.7	7,740.0	17.4	17.0	103.62	-224.9	-470.6	1,019.3	990.0	29.29	34.795	
8,200.0	7,500.0	8,360.7	7,740.0	18.0	17.6	103.62	-324.9	-470.6	1,019.3	988.5	30.76	33.131	
8,300.0	7,500.0	8,460.7	7,740.0	18.8	18.4	103.62	-424.9	-470.6	1,019.3	986.8	32.53	31.336	
8,400.0	7,500.0	8,560.7	7,740.0	19.7	19.4	103.62	-524.9	-470.6	1,019.3	984.7	34.54	29.511	
8,500.0	7,500.0	8,660.7	7,740.0	20.7	20.4	103.62	-624.9	-470.6	1,019.3	982.5	36.76	27.730	
8,600.0	7,500.0	8,760.7	7,740.0	21.9	21.6	103.62	-724.9	-470.6	1,019.3	980.1	39.15	26.037	
8,700.0	7,500.0	8,860.7	7,740.0	23.1	22.8	103.62	-824.9	-470.6	1,019.3	977.6	41.68	24.455	
8,800.0	7,500.0	8,960.7	7,740.0	24.3	24.1	103.62	-924.9	-470.6	1,019.3	974.9	44.33	22.993	
8,900.0	7,500.0	9,060.7	7,740.0	25.6	25.4	103.62	-1,024.9	-470.6	1,019.3	972.2	47.08	21.651	
9,000.0	7,500.0	9,160.7	7,740.0	27.0	26.8	103.62	-1,124.9	-470.6	1,019.3	969.4	49.91	20.423	
9,100.0	7,500.0	9,260.7	7,740.0	28.4	28.2	103.62	-1,224.9	-470.6	1,019.3	966.5	52.81	19.302	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,200.0	7,500.0	9,360.7	7,740.0	29.9	29.7	103.62	-1,324.9	-470.6	1,019.3	963.5	55.76	18.278	
9,300.0	7,500.0	9,460.7	7,740.0	31.4	31.2	103.62	-1,424.9	-470.6	1,019.3	960.5	58.77	17.343	
9,400.0	7,500.0	9,560.7	7,740.0	32.9	32.7	103.62	-1,524.9	-470.6	1,019.3	957.5	61.82	16.488	
9,500.0	7,500.0	9,660.7	7,740.0	34.4	34.2	103.62	-1,624.9	-470.6	1,019.3	954.4	64.90	15.705	
9,600.0	7,500.0	9,760.7	7,740.0	36.0	35.8	103.62	-1,724.9	-470.6	1,019.3	951.3	68.02	14.985	
9,700.0	7,500.0	9,860.7	7,740.0	37.5	37.4	103.62	-1,824.9	-470.6	1,019.3	948.1	71.16	14.323	
9,800.0	7,500.0	9,960.7	7,740.0	39.1	39.0	103.62	-1,924.9	-470.6	1,019.3	945.0	74.33	13.713	
9,900.0	7,500.0	10,060.7	7,740.0	40.7	40.6	103.62	-2,024.9	-470.6	1,019.3	941.8	77.52	13.149	
10,000.0	7,500.0	10,160.7	7,740.0	42.3	42.2	103.62	-2,124.9	-470.6	1,019.3	938.6	80.72	12.627	
10,100.0	7,500.0	10,260.7	7,740.0	43.9	43.8	103.62	-2,224.9	-470.6	1,019.3	935.3	83.94	12.143	
10,200.0	7,500.0	10,360.7	7,740.0	45.6	45.5	103.62	-2,324.9	-470.6	1,019.3	932.1	87.18	11.692	
10,300.0	7,500.0	10,460.7	7,740.0	47.2	47.1	103.62	-2,424.9	-470.6	1,019.3	928.9	90.43	11.272	
10,400.0	7,500.0	10,560.7	7,740.0	48.9	48.8	103.62	-2,524.9	-470.6	1,019.3	925.6	93.69	10.880	
10,500.0	7,500.0	10,660.7	7,740.0	50.5	50.4	103.62	-2,624.9	-470.6	1,019.3	922.3	96.96	10.513	
10,600.0	7,500.0	10,760.7	7,740.0	52.2	52.1	103.62	-2,724.9	-470.6	1,019.3	919.0	100.24	10.169	
10,700.0	7,500.0	10,860.7	7,740.0	53.8	53.8	103.62	-2,824.9	-470.6	1,019.3	915.8	103.53	9.846	
10,800.0	7,500.0	10,960.7	7,740.0	55.5	55.4	103.62	-2,924.9	-470.6	1,019.3	912.5	106.82	9.542	
10,900.0	7,500.0	11,060.7	7,740.0	57.2	57.1	103.62	-3,024.9	-470.6	1,019.3	909.2	110.13	9.256	
11,000.0	7,500.0	11,160.7	7,740.0	58.9	58.8	103.62	-3,124.9	-470.6	1,019.3	905.8	113.43	8.986	
11,100.0	7,500.0	11,260.7	7,740.0	60.6	60.5	103.62	-3,224.9	-470.6	1,019.3	902.5	116.75	8.730	
11,200.0	7,500.0	11,360.7	7,740.0	62.3	62.2	103.62	-3,324.9	-470.6	1,019.3	899.2	120.07	8.489	
11,244.1	7,500.0	11,404.9	7,740.0	63.0	62.9	103.62	-3,369.0	-470.6	1,019.3	897.7	121.54	8.387	
11,300.0	7,500.0	11,460.7	7,740.0	64.0	63.9	103.61	-3,424.9	-470.6	1,019.8	896.4	123.40	8.264	
11,400.0	7,500.0	11,560.7	7,740.0	65.7	65.6	103.58	-3,524.8	-470.6	1,023.4	896.7	126.75	8.074	
11,444.1	7,500.0	11,604.7	7,740.0	66.4	66.3	103.56	-3,568.8	-470.6	1,026.1	897.8	128.24	8.001	
11,500.0	7,500.0	11,660.4	7,740.0	67.4	67.3	103.51	-3,624.6	-470.6	1,029.9	899.7	130.12	7.915	
11,600.0	7,500.0	11,760.2	7,740.0	69.1	69.0	103.42	-3,724.3	-470.6	1,036.6	903.1	133.50	7.765	
11,700.0	7,500.0	11,860.0	7,740.0	70.8	70.7	103.33	-3,824.1	-470.6	1,043.4	906.5	136.88	7.623	
11,800.0	7,500.0	11,959.7	7,740.0	72.5	72.4	103.24	-3,923.8	-470.6	1,050.2	909.9	140.27	7.487	
11,900.0	7,500.0	12,059.5	7,740.0	74.2	74.1	103.15	-4,023.6	-470.6	1,057.0	913.3	143.67	7.357	
12,000.0	7,500.0	12,159.2	7,740.0	76.0	75.8	103.07	-4,123.3	-470.6	1,063.8	916.7	147.06	7.234	
12,100.0	7,500.0	12,259.0	7,740.0	77.7	77.5	102.98	-4,223.1	-470.6	1,070.6	920.1	150.47	7.115	
12,194.1	7,500.0	12,352.9	7,740.0	79.3	79.1	102.91	-4,317.0	-470.6	1,077.0	923.3	153.67	7.008	
12,200.0	7,500.0	12,358.7	7,740.0	79.4	79.2	102.90	-4,322.9	-470.6	1,077.4	923.5	153.87	7.002	
12,300.0	7,500.0	12,458.6	7,740.0	81.1	81.0	102.82	-4,422.7	-470.6	1,082.3	925.0	157.27	6.882	
12,387.3	7,500.0	12,545.9	7,740.0	82.6	82.5	102.79	-4,510.1	-470.6	1,083.8	923.6	160.23	6.764	
12,400.0	7,500.0	12,558.6	7,740.0	82.9	82.7	102.79	-4,522.7	-470.6	1,083.8	923.2	160.66	6.746	
12,500.0	7,500.0	12,658.6	7,740.0	84.6	84.4	102.79	-4,622.7	-470.6	1,084.1	920.0	164.03	6.609	
12,600.0	7,500.0	12,758.6	7,740.0	86.3	86.1	102.79	-4,722.7	-470.6	1,084.3	916.9	167.41	6.477	
12,700.0	7,500.0	12,858.6	7,740.0	88.0	87.8	102.79	-4,822.7	-470.6	1,084.5	913.7	170.79	6.350	
12,800.0	7,500.0	12,958.6	7,740.0	89.7	89.6	102.78	-4,922.7	-470.6	1,084.8	910.6	174.17	6.228	
12,900.0	7,500.0	13,058.6	7,740.0	91.5	91.3	102.78	-5,022.7	-470.6	1,085.0	907.4	177.56	6.111	
13,000.0	7,500.0	13,158.6	7,740.0	93.2	93.0	102.78	-5,122.7	-470.6	1,085.2	904.3	180.94	5.998	
13,100.0	7,500.0	13,258.6	7,740.0	94.9	94.7	102.77	-5,222.7	-470.6	1,085.4	901.1	184.33	5.889	
13,200.0	7,500.0	13,358.6	7,740.0	96.6	96.5	102.77	-5,322.7	-470.6	1,085.7	898.0	187.71	5.784	
13,300.0	7,500.0	13,458.6	7,740.0	98.4	98.2	102.77	-5,422.7	-470.6	1,085.9	894.8	191.10	5.682	
13,400.0	7,500.0	13,558.6	7,740.0	100.1	99.9	102.77	-5,522.7	-470.6	1,086.1	891.6	194.49	5.584	
13,500.0	7,500.0	13,658.6	7,740.0	101.8	101.7	102.76	-5,622.7	-470.6	1,086.4	888.5	197.89	5.490	
13,600.0	7,500.0	13,758.6	7,740.0	103.5	103.4	102.76	-5,722.7	-470.6	1,086.6	885.3	201.28	5.399	
13,700.0	7,500.0	13,858.6	7,740.0	105.3	105.1	102.76	-5,822.7	-470.6	1,086.8	882.2	204.67	5.310	
13,800.0	7,500.0	13,958.6	7,740.0	107.0	106.9	102.75	-5,922.7	-470.6	1,087.1	879.0	208.07	5.225	
13,900.0	7,500.0	14,058.6	7,740.0	108.7	108.6	102.75	-6,022.7	-470.6	1,087.3	875.8	211.46	5.142	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,500.0	14,158.6	7,740.0	110.5	110.3	102.75	-6,122.7	-470.6	1,087.5	872.7	214.86	5.062		
14,100.0	7,500.0	14,258.6	7,740.0	112.2	112.1	102.75	-6,222.7	-470.6	1,087.8	869.5	218.26	4.984		
14,200.0	7,500.0	14,358.6	7,740.0	113.9	113.8	102.74	-6,322.7	-470.6	1,088.0	866.3	221.66	4.908		
14,300.0	7,500.0	14,458.6	7,740.0	115.7	115.6	102.74	-6,422.7	-470.6	1,088.2	863.2	225.06	4.835		
14,400.0	7,500.0	14,558.6	7,740.0	117.4	117.3	102.74	-6,522.7	-470.6	1,088.5	860.0	228.46	4.764		
14,500.0	7,500.0	14,658.6	7,740.0	119.1	119.0	102.74	-6,622.7	-470.6	1,088.7	856.8	231.86	4.695		
14,600.0	7,500.0	14,758.6	7,740.0	120.9	120.8	102.73	-6,722.7	-470.6	1,088.9	853.7	235.26	4.629		
14,700.0	7,500.0	14,858.6	7,740.0	122.6	122.5	102.73	-6,822.7	-470.6	1,089.1	850.5	238.66	4.564		
14,800.0	7,500.0	14,958.6	7,740.0	124.4	124.2	102.73	-6,922.7	-470.6	1,089.4	847.3	242.07	4.500		
14,900.0	7,500.0	15,058.6	7,740.0	126.1	126.0	102.72	-7,022.7	-470.6	1,089.6	844.1	245.47	4.439		
15,000.0	7,500.0	15,158.6	7,740.0	127.8	127.7	102.72	-7,122.7	-470.6	1,089.8	841.0	248.88	4.379		
15,100.0	7,500.0	15,258.6	7,740.0	129.6	129.5	102.72	-7,222.7	-470.6	1,090.1	837.8	252.28	4.321		
15,200.0	7,500.0	15,358.6	7,740.0	131.3	131.2	102.72	-7,322.7	-470.6	1,090.3	834.6	255.69	4.264		
15,300.0	7,500.0	15,458.6	7,740.0	133.1	132.9	102.71	-7,422.7	-470.6	1,090.5	831.4	259.10	4.209		
15,400.0	7,500.0	15,558.6	7,740.0	134.8	134.7	102.71	-7,522.7	-470.6	1,090.8	828.3	262.50	4.155		
15,500.0	7,500.0	15,658.6	7,740.0	136.5	136.4	102.71	-7,622.7	-470.6	1,091.0	825.1	265.91	4.103		
15,600.0	7,500.0	15,758.6	7,740.0	138.3	138.2	102.71	-7,722.7	-470.6	1,091.2	821.9	269.32	4.052		
15,700.0	7,500.0	15,858.6	7,740.0	140.0	139.9	102.70	-7,822.7	-470.6	1,091.5	818.7	272.73	4.002		
15,701.6	7,500.0	15,860.2	7,740.0	140.0	139.9	102.70	-7,824.3	-470.6	1,091.5	818.7	272.78	4.001		
15,805.8	7,500.0	15,949.8	7,740.0	141.9	141.5	102.70	-7,913.9	-470.6	1,091.8	815.8	276.03	3.955 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-14.8	14.8					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-14.8	14.8	14.5	0.30	48.845	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-14.8	14.8	14.2	0.65	22.725		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-14.8	14.8	13.8	1.00	14.807		
400.0	400.0	399.8	399.8	0.7	0.7	-87.52	0.7	-15.4	15.4	14.1	1.35	11.406		
500.0	500.0	499.6	499.5	0.8	0.9	-81.13	2.7	-17.1	17.3	15.6	1.70	10.159		
600.0	600.0	599.2	599.1	1.0	1.0	-114.85	6.0	-19.9	21.1	19.1	2.05	10.284		
700.0	700.0	698.7	698.4	1.2	1.2	-112.38	10.6	-23.7	27.2	24.8	2.41	11.294		
800.0	799.9	798.4	797.8	1.4	1.4	-112.70	16.0	-28.2	34.7	31.9	2.77	12.521		
900.0	899.7	898.1	897.2	1.6	1.6	-115.04	21.3	-32.7	42.9	39.8	3.15	13.642		
1,000.0	999.4	997.6	996.5	1.8	1.8	-118.31	26.6	-37.1	52.0	48.5	3.54	14.712		
1,100.0	1,098.9	1,097.0	1,095.7	2.0	2.0	-121.96	31.9	-41.6	62.1	58.2	3.94	15.782		
1,201.3	1,199.5	1,197.6	1,196.0	2.2	2.3	-125.73	37.3	-46.1	73.6	69.2	4.35	16.898		
1,300.0	1,297.5	1,296.5	1,294.7	2.5	2.5	-128.59	43.1	-50.0	84.9	80.1	4.77	17.794		
1,400.0	1,396.8	1,397.1	1,395.0	2.7	2.7	-130.11	50.2	-52.6	95.3	90.1	5.21	18.301		
1,500.0	1,496.0	1,497.4	1,494.9	3.0	2.9	-130.75	58.4	-54.0	104.5	98.9	5.65	18.508		
1,600.0	1,595.3	1,596.9	1,594.2	3.3	3.1	-131.20	66.7	-55.3	113.5	107.5	6.09	18.651		
1,700.0	1,694.5	1,696.5	1,693.4	3.5	3.3	-131.58	75.0	-56.5	122.6	116.1	6.53	18.768		
1,800.0	1,793.8	1,796.1	1,792.6	3.8	3.5	-131.91	83.3	-57.8	131.6	124.7	6.98	18.867		
1,900.0	1,893.0	1,895.7	1,891.9	4.0	3.8	-132.19	91.6	-59.0	140.7	133.3	7.42	18.951		
2,000.0	1,992.3	1,995.3	1,991.1	4.3	4.0	-132.44	99.9	-60.2	149.7	141.9	7.87	19.023		
2,100.0	2,091.5	2,094.9	2,090.3	4.6	4.2	-132.67	108.2	-61.5	158.8	150.5	8.32	19.086		
2,200.0	2,190.8	2,194.5	2,189.6	4.8	4.4	-132.87	116.5	-62.7	167.9	159.1	8.77	19.141		
2,300.0	2,290.0	2,294.1	2,288.8	5.1	4.7	-133.04	124.9	-64.0	176.9	167.7	9.22	19.189		
2,400.0	2,389.3	2,393.6	2,388.0	5.4	4.9	-133.21	133.2	-65.2	186.0	176.3	9.67	19.232		
2,500.0	2,488.5	2,493.2	2,487.3	5.7	5.1	-133.35	141.5	-66.5	195.0	184.9	10.12	19.270		
2,600.0	2,587.8	2,592.8	2,586.5	5.9	5.3	-133.48	149.8	-67.7	204.1	193.5	10.57	19.305		
2,700.0	2,687.0	2,692.4	2,685.7	6.2	5.5	-133.61	158.1	-69.0	213.2	202.1	11.02	19.336		
2,800.0	2,786.3	2,792.0	2,785.0	6.5	5.8	-133.72	166.4	-70.2	222.2	210.8	11.48	19.364		
2,900.0	2,885.5	2,891.6	2,884.2	6.7	6.0	-133.82	174.7	-71.4	231.3	219.4	11.93	19.390		
3,000.0	2,984.8	2,991.2	2,983.4	7.0	6.2	-133.92	183.0	-72.7	240.4	228.0	12.38	19.414		
3,100.0	3,084.0	3,090.8	3,082.7	7.3	6.4	-134.00	191.3	-73.9	249.4	236.6	12.83	19.435		
3,200.0	3,183.3	3,190.3	3,181.9	7.6	6.7	-134.09	199.6	-75.2	258.5	245.2	13.29	19.455		
3,300.0	3,282.5	3,289.9	3,281.1	7.8	6.9	-134.16	207.9	-76.4	267.6	253.8	13.74	19.474		
3,400.0	3,381.8	3,389.5	3,380.4	8.1	7.1	-134.24	216.2	-77.7	276.6	262.4	14.19	19.491		
3,500.0	3,481.1	3,489.1	3,479.6	8.4	7.3	-134.30	224.5	-78.9	285.7	271.1	14.65	19.507		
3,600.0	3,580.3	3,588.7	3,578.8	8.7	7.6	-134.36	232.8	-80.2	294.8	279.7	15.10	19.522		
3,700.0	3,679.6	3,688.3	3,678.1	8.9	7.8	-134.42	241.1	-81.4	303.9	288.3	15.55	19.535		
3,800.0	3,778.8	3,787.9	3,777.3	9.2	8.0	-134.48	249.4	-82.6	312.9	296.9	16.01	19.548		
3,900.0	3,878.1	3,887.5	3,876.5	9.5	8.3	-134.53	257.7	-83.9	322.0	305.5	16.46	19.561		
4,000.0	3,977.3	3,987.0	3,975.8	9.8	8.5	-134.58	266.0	-85.1	331.1	314.2	16.92	19.572		
4,100.0	4,076.6	4,086.6	4,075.0	10.0	8.7	-134.63	274.3	-86.4	340.1	322.8	17.37	19.583		
4,200.0	4,175.8	4,186.2	4,174.2	10.3	8.9	-134.67	282.6	-87.6	349.2	331.4	17.82	19.593		
4,300.0	4,275.1	4,285.8	4,273.5	10.6	9.2	-134.72	290.9	-88.9	358.3	340.0	18.28	19.602		
4,400.0	4,374.3	4,385.4	4,372.7	10.9	9.4	-134.76	299.2	-90.1	367.4	348.6	18.73	19.612		
4,500.0	4,473.6	4,485.0	4,471.9	11.1	9.6	-134.79	307.5	-91.3	376.4	357.2	19.19	19.620		
4,600.0	4,572.8	4,584.6	4,571.2	11.4	9.8	-134.83	315.8	-92.6	385.5	365.9	19.64	19.628		
4,700.0	4,672.1	4,684.2	4,670.4	11.7	10.1	-134.87	324.1	-93.8	394.6	374.5	20.09	19.636		
4,800.0	4,771.3	4,783.7	4,769.6	12.0	10.3	-134.90	332.4	-95.1	403.6	383.1	20.55	19.643		
4,900.0	4,870.6	4,883.3	4,868.9	12.2	10.5	-134.93	340.7	-96.3	412.7	391.7	21.00	19.650		
5,000.0	4,969.8	4,982.9	4,968.1	12.5	10.7	-134.96	349.0	-97.6	421.8	400.3	21.46	19.657		
5,100.0	5,069.1	5,082.5	5,067.3	12.8	11.0	-134.99	357.3	-98.8	430.9	409.0	21.91	19.664		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,168.3	5,182.1	5,166.6	13.1	11.2	-135.02	365.7	-100.1	439.9	417.6	22.37	19.670		
5,300.0	5,267.6	5,281.7	5,265.8	13.3	11.4	-135.05	374.0	-101.3	449.0	426.2	22.82	19.675		
5,400.0	5,366.8	5,381.3	5,365.0	13.6	11.6	-135.07	382.3	-102.5	458.1	434.8	23.28	19.681		
5,500.0	5,466.1	5,480.9	5,464.2	13.9	11.9	-135.10	390.6	-103.8	467.2	443.4	23.73	19.686		
5,600.0	5,565.3	5,580.4	5,563.5	14.2	12.1	-135.12	398.9	-105.0	476.2	452.1	24.18	19.692		
5,700.0	5,664.6	5,680.0	5,662.7	14.4	12.3	-135.14	407.2	-106.3	485.3	460.7	24.64	19.697		
5,800.0	5,763.8	5,779.6	5,761.9	14.7	12.6	-135.16	415.5	-107.5	494.4	469.3	25.09	19.701		
5,900.0	5,863.1	5,879.2	5,861.2	15.0	12.8	-135.19	423.8	-108.8	503.5	477.9	25.55	19.706		
6,000.0	5,962.3	5,978.8	5,960.4	15.3	13.0	-135.21	432.1	-110.0	512.5	486.5	26.00	19.710		
6,100.0	6,061.6	6,078.4	6,059.6	15.5	13.2	-135.23	440.4	-111.3	521.6	495.1	26.46	19.714		
6,200.0	6,160.9	6,178.0	6,158.9	15.8	13.5	-135.25	448.7	-112.5	530.7	503.8	26.91	19.718		
6,300.0	6,260.1	6,277.5	6,258.1	16.1	13.7	-135.26	457.0	-113.7	539.8	512.4	27.37	19.722		
6,400.0	6,359.4	6,377.1	6,357.3	16.4	13.9	-135.28	465.3	-115.0	548.8	521.0	27.82	19.726		
6,500.0	6,458.6	6,476.7	6,456.6	16.6	14.1	-135.30	473.6	-116.2	557.9	529.6	28.28	19.730		
6,600.0	6,557.9	6,576.3	6,555.8	16.9	14.4	-135.32	481.9	-117.5	567.0	538.2	28.73	19.733		
6,700.0	6,657.1	6,675.9	6,655.0	17.2	14.6	-135.33	490.2	-118.7	576.1	546.9	29.19	19.737		
6,800.0	6,756.4	6,775.5	6,754.3	17.5	14.8	-135.35	498.5	-120.0	585.1	555.5	29.64	19.740		
6,900.0	6,855.6	6,875.1	6,853.5	17.7	15.0	-135.36	506.8	-121.2	594.2	564.1	30.10	19.743		
6,919.5	6,875.0	6,894.5	6,872.8	17.8	15.1	-135.37	508.4	-121.5	596.0	565.8	30.18	19.744		
6,950.0	6,905.3	6,922.5	6,900.8	17.9	15.1	-158.19	510.4	-121.8	598.7	568.4	30.28	19.771		
7,000.0	6,955.1	6,967.3	6,945.6	17.9	15.2	143.18	510.7	-122.4	603.2	572.8	30.37	19.860		
7,050.0	7,004.8	7,012.2	6,990.3	17.9	15.2	113.85	507.5	-122.9	607.5	577.1	30.39	19.994		
7,100.0	7,053.8	7,057.1	7,034.7	17.9	15.2	102.79	500.8	-123.5	611.8	581.5	30.33	20.172		
7,150.0	7,101.9	7,100.0	7,076.5	17.9	15.1	97.36	491.1	-124.0	616.0	585.8	30.21	20.389		
7,200.0	7,148.7	7,147.3	7,121.7	17.8	15.0	94.21	476.9	-124.6	620.0	590.0	30.02	20.651		
7,250.0	7,193.8	7,192.7	7,163.7	17.7	14.9	92.17	459.8	-125.1	623.8	594.1	29.78	20.946		
7,300.0	7,236.9	7,238.3	7,204.4	17.5	14.8	90.78	439.4	-125.6	627.5	598.0	29.50	21.271		
7,350.0	7,277.7	7,284.1	7,243.5	17.4	14.6	89.80	415.6	-126.1	630.9	601.7	29.18	21.619		
7,400.0	7,315.7	7,330.1	7,280.9	17.2	14.5	89.12	388.7	-126.6	634.0	605.2	28.84	21.983		
7,450.0	7,350.9	7,376.5	7,316.1	17.1	14.3	88.66	358.6	-127.0	637.0	608.5	28.49	22.354		
7,500.0	7,382.8	7,423.2	7,349.1	16.9	14.2	88.36	325.6	-127.4	639.6	611.4	28.15	22.721		
7,550.0	7,411.3	7,470.2	7,379.4	16.7	14.0	88.21	289.7	-127.8	641.9	614.1	27.83	23.068		
7,600.0	7,436.1	7,517.6	7,406.9	16.6	13.9	88.18	251.1	-128.1	644.0	616.4	27.54	23.382		
7,650.0	7,457.1	7,565.4	7,431.3	16.5	13.7	88.26	210.0	-128.5	645.7	618.4	27.31	23.645		
7,700.0	7,474.0	7,613.6	7,452.4	16.4	13.7	88.44	166.6	-128.7	647.1	619.9	27.14	23.840		
7,750.0	7,486.8	7,662.3	7,469.9	16.4	13.6	88.70	121.2	-128.9	648.1	621.1	27.06	23.951		
7,800.0	7,495.3	7,711.4	7,483.6	16.4	13.6	89.04	74.1	-129.1	648.8	621.8	27.07	23.965		
7,850.0	7,499.5	7,761.0	7,493.3	16.5	13.7	89.46	25.4	-129.2	649.2	622.0	27.19	23.875		
7,873.6	7,500.0	7,784.6	7,496.4	16.5	13.7	89.68	2.1	-129.3	649.3	622.0	27.29	23.794		
7,900.0	7,500.0	7,811.2	7,498.8	16.5	13.8	89.89	-24.4	-129.3	649.3	621.9	27.42	23.680		
8,000.0	7,500.0	7,911.7	7,500.0	16.9	14.2	90.00	-124.9	-129.3	649.3	621.1	28.20	23.026		
8,100.0	7,500.0	8,011.7	7,500.0	17.4	14.8	90.00	-224.9	-129.3	649.3	619.9	29.37	22.107		
8,200.0	7,500.0	8,111.7	7,500.0	18.0	15.5	90.00	-324.9	-129.3	649.3	618.4	30.90	21.014		
8,300.0	7,500.0	8,211.7	7,500.0	18.8	16.4	90.00	-424.9	-129.3	649.3	616.6	32.73	19.837		
8,400.0	7,500.0	8,311.7	7,500.0	19.7	17.5	90.00	-524.9	-129.3	649.3	614.5	34.82	18.646		
8,500.0	7,500.0	8,411.7	7,500.0	20.7	18.6	90.00	-624.9	-129.3	649.3	612.2	37.13	17.488		
8,600.0	7,500.0	8,511.7	7,500.0	21.9	19.9	90.00	-724.9	-129.3	649.3	609.7	39.61	16.392		
8,700.0	7,500.0	8,611.7	7,500.0	23.1	21.2	90.00	-824.9	-129.3	649.3	607.1	42.24	15.372		
8,800.0	7,500.0	8,711.7	7,500.0	24.3	22.5	90.00	-924.9	-129.3	649.3	604.3	44.99	14.433		
8,900.0	7,500.0	8,811.7	7,500.0	25.6	24.0	90.00	-1,024.9	-129.3	649.3	601.5	47.84	13.573		
9,000.0	7,500.0	8,911.7	7,500.0	27.0	25.4	90.00	-1,124.9	-129.3	649.3	598.5	50.77	12.790		
9,100.0	7,500.0	9,011.7	7,500.0	28.4	26.9	90.00	-1,224.9	-129.3	649.3	595.5	53.77	12.076		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis		
9,200.0	7,500.0	9,111.7	7,500.0	29.9	28.5	90.00	-1,324.9	-129.3	649.3	592.5	56.83	11.426	
9,300.0	7,500.0	9,211.7	7,500.0	31.4	30.0	90.00	-1,424.9	-129.3	649.3	589.4	59.93	10.834	
9,400.0	7,500.0	9,311.7	7,500.0	32.9	31.6	90.00	-1,524.9	-129.3	649.3	586.2	63.08	10.293	
9,500.0	7,500.0	9,411.7	7,500.0	34.4	33.2	90.00	-1,624.9	-129.3	649.3	583.0	66.27	9.798	
9,600.0	7,500.0	9,511.7	7,500.0	36.0	34.8	90.00	-1,724.9	-129.3	649.3	579.8	69.49	9.345	
9,700.0	7,500.0	9,611.7	7,500.0	37.5	36.4	90.00	-1,824.9	-129.3	649.3	576.6	72.73	8.928	
9,800.0	7,500.0	9,711.7	7,500.0	39.1	38.0	90.00	-1,924.9	-129.3	649.3	573.3	76.00	8.544	
9,900.0	7,500.0	9,811.7	7,500.0	40.7	39.7	90.00	-2,024.9	-129.3	649.3	570.0	79.28	8.190	
10,000.0	7,500.0	9,911.7	7,500.0	42.3	41.3	90.00	-2,124.9	-129.3	649.3	566.7	82.59	7.862	
10,100.0	7,500.0	10,011.7	7,500.0	43.9	43.0	90.00	-2,224.9	-129.3	649.3	563.4	85.91	7.558	
10,200.0	7,500.0	10,111.7	7,500.0	45.6	44.6	90.00	-2,324.9	-129.3	649.3	560.1	89.25	7.275	
10,300.0	7,500.0	10,211.7	7,500.0	47.2	46.3	90.00	-2,424.9	-129.3	649.3	556.7	92.60	7.012	
10,400.0	7,500.0	10,311.7	7,500.0	48.9	48.0	90.00	-2,524.9	-129.3	649.3	553.4	95.96	6.767	
10,500.0	7,500.0	10,411.7	7,500.0	50.5	49.7	90.00	-2,624.9	-129.3	649.3	550.0	99.33	6.537	
10,600.0	7,500.0	10,511.7	7,500.0	52.2	51.4	90.00	-2,724.9	-129.3	649.3	546.6	102.71	6.322	
10,700.0	7,500.0	10,611.7	7,500.0	53.8	53.1	90.00	-2,824.9	-129.3	649.3	543.2	106.10	6.120	
10,800.0	7,500.0	10,711.7	7,500.0	55.5	54.8	90.00	-2,924.9	-129.3	649.3	539.8	109.49	5.930	
10,900.0	7,500.0	10,811.7	7,500.0	57.2	56.5	90.00	-3,024.9	-129.3	649.3	536.4	112.89	5.752	
11,000.0	7,500.0	10,911.7	7,500.0	58.9	58.2	90.00	-3,124.9	-129.3	649.3	533.0	116.30	5.583	
11,100.0	7,500.0	11,011.7	7,500.0	60.6	59.9	90.00	-3,224.9	-129.3	649.3	529.6	119.72	5.424	
11,200.0	7,500.0	11,111.7	7,500.0	62.3	61.6	90.00	-3,324.9	-129.3	649.3	526.2	123.14	5.273	
11,244.1	7,500.0	11,155.8	7,500.0	63.0	62.3	90.00	-3,369.0	-129.3	649.3	524.7	124.65	5.209	
11,300.0	7,500.0	11,211.7	7,500.0	64.0	63.3	90.00	-3,424.9	-129.3	649.3	523.3	126.56	5.135	
11,400.0	7,500.0	11,311.6	7,500.0	65.7	65.0	90.00	-3,524.8	-129.3	653.6	523.6	129.99	5.028	
11,444.1	7,500.0	11,355.7	7,500.0	66.4	65.8	90.00	-3,568.8	-129.3	656.3	524.8	131.50	4.991	
11,500.0	7,500.0	11,411.4	7,500.0	67.4	66.7	90.00	-3,624.6	-129.3	660.2	526.8	133.41	4.949	
11,600.0	7,500.0	11,511.1	7,500.0	69.1	68.4	90.00	-3,724.3	-129.3	667.2	530.3	136.84	4.876	
11,700.0	7,500.0	11,610.9	7,500.0	70.8	70.2	90.00	-3,824.1	-129.3	674.1	533.9	140.27	4.806	
11,800.0	7,500.0	11,710.6	7,500.0	72.5	71.9	90.00	-3,923.8	-129.3	681.1	537.4	143.71	4.740	
11,900.0	7,500.0	11,810.4	7,500.0	74.2	73.6	90.00	-4,023.6	-129.3	688.1	540.9	147.15	4.676	
12,000.0	7,500.0	11,910.2	7,500.0	76.0	75.3	90.00	-4,123.3	-129.3	695.1	544.5	150.59	4.616	
12,100.0	7,500.0	12,009.9	7,500.0	77.7	77.0	90.00	-4,223.1	-129.3	702.0	548.0	154.03	4.558	
12,194.1	7,500.0	12,103.8	7,500.0	79.3	78.7	90.00	-4,317.0	-129.3	708.6	551.3	157.28	4.505	
12,200.0	7,500.0	12,109.7	7,500.0	79.4	78.8	90.00	-4,322.9	-129.3	709.0	551.5	157.48	4.502	
12,300.0	7,500.0	12,209.5	7,500.0	81.1	80.5	90.00	-4,422.7	-129.3	714.0	553.1	160.93	4.437	
12,387.3	7,500.0	12,296.9	7,500.0	82.6	82.0	90.00	-4,510.1	-129.3	715.6	551.6	163.96	4.364	
12,400.0	7,500.0	12,309.5	7,500.0	82.9	82.2	90.00	-4,522.7	-129.3	715.6	551.2	164.39	4.353	
12,500.0	7,500.0	12,409.5	7,500.0	84.6	83.9	90.00	-4,622.7	-129.3	715.9	548.0	167.85	4.265	
12,600.0	7,500.0	12,509.5	7,500.0	86.3	85.7	90.00	-4,722.7	-129.3	716.1	544.8	171.32	4.180	
12,700.0	7,500.0	12,609.5	7,500.0	88.0	87.4	90.00	-4,822.7	-129.3	716.3	541.5	174.78	4.098	
12,800.0	7,500.0	12,709.5	7,500.0	89.7	89.1	90.00	-4,922.7	-129.3	716.6	538.3	178.25	4.020	
12,900.0	7,500.0	12,809.5	7,500.0	91.5	90.9	90.00	-5,022.7	-129.3	716.8	535.1	181.72	3.945	
13,000.0	7,500.0	12,909.5	7,500.0	93.2	92.6	90.00	-5,122.7	-129.3	717.0	531.8	185.19	3.872	
13,100.0	7,500.0	13,012.8	7,500.0	94.9	94.4	90.00	-5,226.0	-129.3	717.2	528.5	188.75	3.800	
13,200.0	7,500.0	13,118.5	7,500.0	96.6	96.2	90.00	-5,331.7	-128.1	716.4	524.0	192.37	3.724	
13,300.0	7,500.0	13,218.5	7,500.0	98.4	98.0	90.00	-5,431.7	-126.9	715.4	519.5	195.85	3.653	
13,400.0	7,500.0	13,318.5	7,500.0	100.1	99.7	90.00	-5,531.6	-125.6	714.3	515.0	199.32	3.584	
13,500.0	7,500.0	13,418.5	7,500.0	101.8	101.4	90.00	-5,631.6	-124.4	713.3	510.5	202.80	3.517	
13,600.0	7,500.0	13,518.5	7,500.0	103.5	103.2	90.00	-5,731.6	-123.1	712.3	506.0	206.27	3.453	
13,700.0	7,500.0	13,618.5	7,500.0	105.3	104.9	90.00	-5,831.6	-121.9	711.3	501.5	209.75	3.391	
13,800.0	7,500.0	13,718.5	7,500.0	107.0	106.7	90.00	-5,931.6	-120.6	710.3	497.1	213.23	3.331	
13,900.0	7,500.0	13,818.5	7,500.0	108.7	108.4	90.00	-6,031.6	-119.4	709.3	492.6	216.71	3.273	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,500.0	13,918.4	7,500.0	110.5	110.1	90.00	-6,131.6	-118.1	708.3	488.1	220.19	3.217		
14,100.0	7,500.0	14,018.4	7,500.0	112.2	111.9	90.00	-6,231.6	-116.9	707.2	483.6	223.67	3.162		
14,200.0	7,500.0	14,118.4	7,500.0	113.9	113.6	90.00	-6,331.5	-115.6	706.2	479.1	227.16	3.109		
14,300.0	7,500.0	14,218.4	7,500.0	115.7	115.4	90.00	-6,431.5	-114.4	705.2	474.6	230.64	3.058		
14,400.0	7,500.0	14,318.4	7,500.0	117.4	117.1	90.00	-6,531.5	-113.1	704.2	470.1	234.12	3.008		
14,500.0	7,500.0	14,418.4	7,500.0	119.1	118.8	90.00	-6,631.5	-111.9	703.2	465.6	237.61	2.959		
14,600.0	7,500.0	14,518.4	7,500.0	120.9	120.6	90.00	-6,731.5	-110.6	702.2	461.1	241.09	2.912		
14,700.0	7,500.0	14,618.4	7,500.0	122.6	122.3	90.00	-6,831.5	-109.4	701.2	456.6	244.58	2.867		
14,800.0	7,500.0	14,718.4	7,500.0	124.4	124.1	90.00	-6,931.5	-108.1	700.1	452.1	248.07	2.822		
14,900.0	7,500.0	14,818.4	7,500.0	126.1	125.8	90.00	-7,031.4	-106.9	699.1	447.6	251.55	2.779		
15,000.0	7,500.0	14,918.4	7,500.0	127.8	127.6	90.00	-7,131.4	-105.6	698.1	443.1	255.04	2.737		
15,100.0	7,500.0	15,018.4	7,500.0	129.6	129.3	90.00	-7,231.4	-104.4	697.1	438.6	258.53	2.696		
15,200.0	7,500.0	15,118.4	7,500.0	131.3	131.0	90.00	-7,331.4	-103.1	696.1	434.1	262.02	2.657		
15,300.0	7,500.0	15,218.4	7,500.0	133.1	132.8	90.00	-7,431.4	-101.8	695.1	429.6	265.51	2.618		
15,400.0	7,500.0	15,318.4	7,500.0	134.8	134.5	90.00	-7,531.4	-100.6	694.1	425.1	269.00	2.580		
15,500.0	7,500.0	15,418.4	7,500.0	136.5	136.3	90.00	-7,631.4	-99.3	693.1	420.6	272.49	2.543		
15,600.0	7,500.0	15,518.4	7,500.0	138.3	138.0	90.00	-7,731.4	-98.1	692.0	416.1	275.98	2.508		
15,700.0	7,500.0	15,618.4	7,500.0	140.0	139.8	90.00	-7,831.3	-96.8	691.0	411.6	279.47	2.473		
15,794.7	7,500.0	15,706.0	7,500.0	141.7	141.3	90.00	-7,919.0	-95.7	690.1	407.5	282.59	2.442 SF		
15,805.8	7,500.0	15,706.0	7,500.0	141.9	141.3	90.00	-7,919.0	-95.7	690.2	407.6	282.61	2.442		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-7.3	7.3					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-7.3	7.3	7.0	0.30	23.962		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-7.3	7.3	6.6	0.65	11.148		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-7.3	7.3	6.3	1.00	7.264		
400.0	400.0	400.0	400.0	0.7	0.7	-90.00	0.0	-7.3	7.3	5.9	1.35	5.387		
500.0	500.0	500.0	500.0	0.8	0.9	-83.52	0.8	-6.9	6.9	5.2	1.70	4.077		
572.7	572.7	572.8	572.8	1.0	1.0	-112.34	2.3	-6.1	6.7	4.8	1.96	3.430 CC		
600.0	600.0	600.1	600.0	1.0	1.0	-108.12	3.1	-5.7	6.7	4.7	2.05	3.285 ES		
700.0	700.0	700.0	699.9	1.2	1.2	-93.60	7.0	-3.8	7.4	5.0	2.42	3.071		
800.0	799.9	800.0	799.6	1.4	1.4	-82.73	12.5	-1.1	8.9	6.1	2.79	3.178		
900.0	899.7	899.9	899.3	1.6	1.6	-75.86	19.5	2.4	10.9	7.7	3.18	3.433		
1,000.0	999.4	999.9	998.8	1.8	1.8	-75.22	27.3	6.3	13.0	9.4	3.58	3.624		
1,100.0	1,098.9	1,099.8	1,098.4	2.0	2.0	-81.33	35.1	10.1	14.7	10.7	4.02	3.653		
1,201.3	1,199.5	1,201.1	1,199.3	2.2	2.3	-92.33	43.0	14.0	16.5	12.0	4.50	3.675		
1,300.0	1,297.5	1,299.7	1,297.5	2.5	2.5	-103.28	50.7	17.9	19.0	14.0	4.96	3.830		
1,400.0	1,396.8	1,399.6	1,397.0	2.7	2.7	-111.59	58.6	21.7	22.0	16.6	5.40	4.077		
1,500.0	1,496.0	1,499.5	1,496.6	3.0	2.9	-117.81	66.4	25.6	25.4	19.6	5.83	4.358		
1,600.0	1,595.3	1,599.4	1,596.1	3.3	3.2	-122.53	74.2	29.4	29.0	22.7	6.24	4.644		
1,700.0	1,694.5	1,699.3	1,695.6	3.5	3.4	-126.19	82.0	33.3	32.7	26.1	6.65	4.922		
1,800.0	1,793.8	1,799.2	1,795.2	3.8	3.6	-129.08	89.8	37.2	36.6	29.5	7.05	5.185		
1,900.0	1,893.0	1,899.1	1,894.7	4.0	3.8	-131.43	97.6	41.0	40.5	33.1	7.46	5.432		
2,000.0	1,992.3	1,999.0	1,994.2	4.3	4.1	-133.35	105.4	44.9	44.5	36.6	7.86	5.660		
2,100.0	2,091.5	2,099.0	2,093.8	4.6	4.3	-134.96	113.2	48.8	48.5	40.3	8.26	5.872		
2,200.0	2,190.8	2,198.9	2,193.3	4.8	4.5	-136.32	121.0	52.6	52.6	43.9	8.66	6.069		
2,300.0	2,290.0	2,298.8	2,292.8	5.1	4.8	-137.48	128.8	56.5	56.7	47.6	9.07	6.250		
2,400.0	2,389.3	2,398.7	2,392.4	5.4	5.0	-138.49	136.6	60.4	60.8	51.3	9.47	6.419		
2,500.0	2,488.5	2,498.6	2,491.9	5.7	5.2	-139.37	144.4	64.2	64.9	55.0	9.87	6.576		
2,600.0	2,587.8	2,598.5	2,591.4	5.9	5.4	-140.14	152.2	68.1	69.0	58.8	10.27	6.722		
2,700.0	2,687.0	2,698.4	2,690.9	6.2	5.7	-140.83	160.0	71.9	73.2	62.5	10.67	6.858		
2,800.0	2,786.3	2,798.3	2,790.5	6.5	5.9	-141.44	167.8	75.8	77.3	66.3	11.07	6.984		
2,900.0	2,885.5	2,898.2	2,890.0	6.7	6.1	-141.99	175.6	79.7	81.5	70.0	11.47	7.103		
3,000.0	2,984.8	2,998.2	2,989.5	7.0	6.4	-142.49	183.4	83.5	85.7	73.8	11.87	7.214		
3,100.0	3,084.0	3,098.1	3,089.1	7.3	6.6	-142.94	191.2	87.4	89.8	77.6	12.27	7.319		
3,200.0	3,183.3	3,198.0	3,188.6	7.6	6.8	-143.35	199.0	91.3	94.0	81.3	12.68	7.417		
3,300.0	3,282.5	3,297.9	3,288.1	7.8	7.1	-143.73	206.8	95.1	98.2	85.1	13.08	7.509		
3,400.0	3,381.8	3,397.8	3,387.7	8.1	7.3	-144.07	214.6	99.0	102.4	88.9	13.48	7.596		
3,500.0	3,481.1	3,497.7	3,487.2	8.4	7.5	-144.39	222.4	102.9	106.6	92.7	13.88	7.679		
3,600.0	3,580.3	3,597.6	3,586.7	8.7	7.7	-144.68	230.2	106.7	110.8	96.5	14.28	7.757		
3,700.0	3,679.6	3,697.5	3,686.2	8.9	8.0	-144.96	238.0	110.6	115.0	100.3	14.68	7.831		
3,800.0	3,778.8	3,797.4	3,785.8	9.2	8.2	-145.21	245.8	114.4	119.2	104.1	15.08	7.901		
3,900.0	3,878.1	3,897.3	3,885.3	9.5	8.4	-145.45	253.6	118.3	123.4	107.9	15.49	7.967		
4,000.0	3,977.3	3,997.3	3,984.8	9.8	8.7	-145.67	261.4	122.2	127.6	111.7	15.89	8.030		
4,100.0	4,076.6	4,097.2	4,084.4	10.0	8.9	-145.87	269.2	126.0	131.8	115.5	16.29	8.091		
4,200.0	4,175.8	4,197.1	4,183.9	10.3	9.1	-146.07	277.0	129.9	136.0	119.3	16.69	8.148		
4,300.0	4,275.1	4,297.0	4,283.4	10.6	9.4	-146.25	284.8	133.8	140.2	123.1	17.09	8.203		
4,400.0	4,374.3	4,396.9	4,383.0	10.9	9.6	-146.42	292.6	137.6	144.4	126.9	17.49	8.255		
4,500.0	4,473.6	4,496.8	4,482.5	11.1	9.8	-146.58	300.4	141.5	148.6	130.7	17.90	8.305		
4,600.0	4,572.8	4,596.7	4,582.0	11.4	10.1	-146.73	308.2	145.3	152.8	134.5	18.30	8.353		
4,700.0	4,672.1	4,696.6	4,681.6	11.7	10.3	-146.88	316.0	149.2	157.1	138.4	18.70	8.399		
4,800.0	4,771.3	4,796.5	4,781.1	12.0	10.5	-147.02	323.8	153.1	161.3	142.2	19.10	8.443		
4,900.0	4,870.6	4,896.4	4,880.6	12.2	10.7	-147.15	331.6	156.9	165.5	146.0	19.50	8.485		
5,000.0	4,969.8	4,996.4	4,980.1	12.5	11.0	-147.27	339.4	160.8	169.7	149.8	19.90	8.526		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,069.1	5,096.3	5,079.7	12.8	11.2	-147.39	347.2	164.7	173.9	153.6	20.31	8.565	
5,200.0	5,168.3	5,196.2	5,179.2	13.1	11.4	-147.50	355.0	168.5	178.1	157.4	20.71	8.602	
5,300.0	5,267.6	5,296.1	5,278.7	13.3	11.7	-147.61	362.8	172.4	182.4	161.2	21.11	8.639	
5,400.0	5,366.8	5,396.0	5,378.3	13.6	11.9	-147.71	370.6	176.3	186.6	165.1	21.51	8.673	
5,500.0	5,466.1	5,495.9	5,477.8	13.9	12.1	-147.80	378.4	180.1	190.8	168.9	21.91	8.707	
5,600.0	5,565.3	5,595.8	5,577.3	14.2	12.4	-147.90	386.2	184.0	195.0	172.7	22.31	8.739	
5,700.0	5,664.6	5,695.7	5,676.9	14.4	12.6	-147.99	394.0	187.8	199.2	176.5	22.72	8.770	
5,800.0	5,763.8	5,795.6	5,776.4	14.7	12.8	-148.07	401.8	191.7	203.5	180.3	23.12	8.801	
5,900.0	5,863.1	5,895.6	5,875.9	15.0	13.1	-148.16	409.6	195.6	207.7	184.2	23.52	8.830	
6,000.0	5,962.3	5,995.5	5,975.4	15.3	13.3	-148.23	417.4	199.4	211.9	188.0	23.92	8.858	
6,100.0	6,061.6	6,095.4	6,075.0	15.5	13.5	-148.31	425.3	203.3	216.1	191.8	24.32	8.885	
6,200.0	6,160.9	6,195.3	6,174.5	15.8	13.7	-148.38	433.1	207.2	220.3	195.6	24.73	8.911	
6,300.0	6,260.1	6,295.2	6,274.0	16.1	14.0	-148.45	440.9	211.0	224.6	199.4	25.13	8.937	
6,400.0	6,359.4	6,395.1	6,373.6	16.4	14.2	-148.52	448.7	214.9	228.8	203.3	25.53	8.962	
6,500.0	6,458.6	6,495.0	6,473.1	16.6	14.4	-148.59	456.5	218.8	233.0	207.1	25.93	8.986	
6,600.0	6,557.9	6,594.9	6,572.6	16.9	14.7	-148.65	464.3	222.6	237.2	210.9	26.33	9.009	
6,700.0	6,657.1	6,694.8	6,672.2	17.2	14.9	-148.71	472.1	226.5	241.5	214.7	26.74	9.032	
6,800.0	6,756.4	6,794.7	6,771.7	17.5	15.1	-148.77	479.9	230.3	245.7	218.6	27.14	9.053	
6,900.0	6,855.6	6,894.7	6,871.2	17.7	15.4	-148.82	487.7	234.2	249.9	222.4	27.54	9.075	
6,919.5	6,875.0	6,914.1	6,890.6	17.8	15.4	-148.83	489.2	235.0	250.7	223.1	27.62	9.079	
6,950.0	6,905.3	6,944.6	6,921.0	17.9	15.5	-171.36	491.6	236.1	251.8	224.0	27.75	9.071	
7,000.0	6,955.1	6,994.4	6,970.6	17.9	15.6	131.33	495.5	238.1	252.3	224.3	28.06	8.993	
7,050.0	7,004.8	7,043.6	7,019.6	17.9	15.7	104.29	499.3	240.0	251.7	223.3	28.47	8.841	
7,100.0	7,053.8	7,092.0	7,067.8	17.9	15.8	96.43	503.1	241.8	250.4	221.4	28.99	8.636	
7,150.0	7,101.9	7,139.0	7,114.6	17.9	15.9	95.02	506.7	243.7	248.9	219.3	29.61	8.408	
7,196.9	7,145.9	7,180.4	7,155.9	17.8	16.0	96.00	509.0	245.3	248.3	218.1	30.18	8.225	
7,200.0	7,148.7	7,183.1	7,158.6	17.8	16.0	96.10	509.1	245.4	248.3	218.1	30.22	8.215	
7,250.0	7,193.8	7,227.9	7,203.4	17.7	16.0	98.29	508.0	247.1	249.1	218.4	30.74	8.105	
7,300.0	7,236.9	7,274.2	7,249.4	17.5	16.0	101.07	503.2	248.9	251.6	220.5	31.12	8.084	
7,350.0	7,277.7	7,322.2	7,296.5	17.4	16.0	104.17	494.4	250.7	255.6	224.3	31.34	8.157	
7,400.0	7,315.7	7,372.0	7,344.5	17.2	16.0	107.42	481.1	252.6	261.2	229.8	31.36	8.329	
7,450.0	7,350.9	7,423.9	7,393.0	17.1	15.9	110.70	462.8	254.5	268.1	236.9	31.16	8.604	
7,500.0	7,382.8	7,478.2	7,441.8	16.9	15.7	113.93	439.1	256.4	276.2	245.5	30.74	8.986	
7,550.0	7,411.3	7,535.2	7,490.3	16.7	15.6	117.05	409.4	258.2	285.3	255.2	30.10	9.478	
7,600.0	7,436.1	7,595.1	7,537.9	16.6	15.4	120.03	373.1	260.1	295.0	265.8	29.27	10.080	
7,650.0	7,457.1	7,658.2	7,583.6	16.5	15.2	122.82	329.7	261.9	305.1	276.8	28.27	10.791	
7,700.0	7,474.0	7,724.8	7,626.4	16.4	15.0	125.40	278.7	263.5	315.1	287.9	27.17	11.597	
7,750.0	7,486.8	7,795.0	7,664.8	16.4	14.8	127.75	220.0	265.0	324.6	298.6	26.04	12.465	
7,800.0	7,495.3	7,868.9	7,697.2	16.4	14.7	129.82	153.7	266.3	333.4	308.3	25.03	13.319	
7,850.0	7,499.5	7,946.3	7,721.6	16.5	14.7	131.59	80.2	267.2	340.9	316.7	24.28	14.044	
7,873.6	7,500.0	7,984.0	7,729.9	16.5	14.7	132.32	43.5	267.5	344.0	319.9	24.06	14.295	
7,900.0	7,500.0	8,027.1	7,736.3	16.5	14.8	133.14	0.9	267.8	346.6	322.6	23.98	14.452	
8,000.0	7,500.0	8,153.0	7,740.0	16.9	15.2	133.60	-124.9	267.9	348.0	323.4	24.63	14.132	
8,100.0	7,500.0	8,253.0	7,740.0	17.4	15.8	133.60	-224.9	267.9	348.0	322.5	25.53	13.633	
8,200.0	7,500.0	8,353.0	7,740.0	18.0	16.5	133.60	-324.9	267.9	348.0	321.4	26.65	13.062	
8,300.0	7,500.0	8,453.0	7,740.0	18.8	17.4	133.60	-424.9	267.9	348.0	320.1	27.95	12.451	
8,400.0	7,500.0	8,553.0	7,740.0	19.7	18.4	133.60	-524.9	267.9	348.0	318.6	29.42	11.829	
8,500.0	7,500.0	8,653.0	7,740.0	20.7	19.5	133.60	-624.9	267.9	348.0	317.0	31.03	11.215	
8,600.0	7,500.0	8,753.0	7,740.0	21.9	20.7	133.60	-724.9	267.9	348.0	315.3	32.77	10.622	
8,700.0	7,500.0	8,853.0	7,740.0	23.1	21.9	133.60	-824.9	267.9	348.0	313.4	34.60	10.059	
8,800.0	7,500.0	8,953.0	7,740.0	24.3	23.2	133.60	-924.9	267.9	348.0	311.5	36.52	9.530	
8,900.0	7,500.0	9,053.0	7,740.0	25.6	24.6	133.60	-1,024.9	267.9	348.0	309.5	38.52	9.036	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,500.0	9,153.0	7,740.0	27.0	26.1	133.60	-1,124.9	267.9	348.0	307.5	40.57	8.578	
9,100.0	7,500.0	9,253.0	7,740.0	28.4	27.5	133.60	-1,224.9	267.9	348.0	305.4	42.69	8.154	
9,200.0	7,500.0	9,353.0	7,740.0	29.9	29.0	133.60	-1,324.9	267.9	348.0	303.2	44.84	7.761	
9,300.0	7,500.0	9,453.0	7,740.0	31.4	30.5	133.60	-1,424.9	267.9	348.0	301.0	47.04	7.399	
9,400.0	7,500.0	9,553.0	7,740.0	32.9	32.1	133.60	-1,524.9	267.9	348.0	298.8	49.27	7.064	
9,500.0	7,500.0	9,653.0	7,740.0	34.4	33.7	133.60	-1,624.9	267.9	348.0	296.5	51.53	6.754	
9,600.0	7,500.0	9,753.0	7,740.0	36.0	35.2	133.60	-1,724.9	267.9	348.0	294.2	53.82	6.467	
9,700.0	7,500.0	9,853.0	7,740.0	37.5	36.9	133.60	-1,824.9	267.9	348.0	291.9	56.13	6.200	
9,800.0	7,500.0	9,953.0	7,740.0	39.1	38.5	133.60	-1,924.9	267.9	348.0	289.6	58.47	5.953	
9,900.0	7,500.0	10,053.0	7,740.0	40.7	40.1	133.60	-2,024.9	267.9	348.0	287.2	60.82	5.723	
10,000.0	7,500.0	10,153.0	7,740.0	42.3	41.7	133.60	-2,124.9	267.9	348.0	284.9	63.18	5.509	
10,100.0	7,500.0	10,253.0	7,740.0	43.9	43.4	133.60	-2,224.9	267.9	348.0	282.5	65.56	5.309	
10,200.0	7,500.0	10,353.0	7,740.0	45.6	45.0	133.60	-2,324.9	267.9	348.0	280.1	67.95	5.122	
10,300.0	7,500.0	10,453.0	7,740.0	47.2	46.7	133.60	-2,424.9	267.9	348.0	277.7	70.36	4.947	
10,400.0	7,500.0	10,553.0	7,740.0	48.9	48.4	133.60	-2,524.9	267.9	348.0	275.3	72.77	4.783	
10,500.0	7,500.0	10,653.0	7,740.0	50.5	50.0	133.60	-2,624.9	267.9	348.0	272.9	75.19	4.629	
10,600.0	7,500.0	10,753.0	7,740.0	52.2	51.7	133.60	-2,724.9	267.9	348.0	270.4	77.63	4.484	
10,700.0	7,500.0	10,853.0	7,740.0	53.8	53.4	133.60	-2,824.9	267.9	348.0	268.0	80.07	4.347	
10,800.0	7,500.0	10,953.0	7,740.0	55.5	55.1	133.60	-2,924.9	267.9	348.0	265.5	82.51	4.218	
10,900.0	7,500.0	11,053.0	7,740.0	57.2	56.8	133.60	-3,024.9	267.9	348.0	263.1	84.96	4.096	
11,000.0	7,500.0	11,153.0	7,740.0	58.9	58.5	133.60	-3,124.9	267.9	348.0	260.6	87.42	3.981	
11,100.0	7,500.0	11,253.0	7,740.0	60.6	60.2	133.60	-3,224.9	267.9	348.0	258.2	89.89	3.872	
11,200.0	7,500.0	11,353.0	7,740.0	62.3	61.9	133.60	-3,324.9	267.9	348.0	255.7	92.36	3.769	
11,244.1	7,500.0	11,397.1	7,740.0	63.0	62.6	133.60	-3,369.0	267.9	348.0	254.6	93.45	3.725	
11,300.0	7,500.0	11,453.0	7,740.0	64.0	63.6	133.54	-3,424.9	267.9	348.4	253.5	94.91	3.671	
11,400.0	7,500.0	11,552.9	7,740.0	65.7	65.3	133.16	-3,524.8	267.9	351.1	253.2	97.98	3.584	
11,444.1	7,500.0	11,597.0	7,740.0	66.4	66.0	132.88	-3,568.8	267.9	353.1	253.6	99.51	3.549	
11,500.0	7,500.0	11,652.7	7,740.0	67.4	67.0	132.46	-3,624.6	267.9	356.0	254.5	101.52	3.507	
11,600.0	7,500.0	11,752.4	7,740.0	69.1	68.7	131.71	-3,724.3	267.9	361.2	256.1	105.13	3.436	
11,700.0	7,500.0	11,852.2	7,740.0	70.8	70.4	130.99	-3,824.1	267.9	366.4	257.7	108.76	3.369	
11,800.0	7,500.0	11,952.0	7,740.0	72.5	72.1	130.28	-3,923.8	267.9	371.7	259.3	112.41	3.307	
11,900.0	7,500.0	12,051.7	7,740.0	74.2	73.8	129.60	-4,023.6	267.9	377.1	261.0	116.07	3.249	
12,000.0	7,500.0	12,151.5	7,740.0	76.0	75.6	128.93	-4,123.3	267.9	382.5	262.8	119.74	3.194	
12,100.0	7,500.0	12,251.2	7,740.0	77.7	77.3	128.29	-4,223.1	267.9	387.9	264.5	123.42	3.143	
12,194.1	7,500.0	12,345.1	7,740.0	79.3	78.9	127.69	-4,317.0	267.9	393.1	266.2	126.89	3.098	
12,200.0	7,500.0	12,351.0	7,740.0	79.4	79.0	127.65	-4,322.9	267.9	393.4	266.3	127.11	3.095	
12,300.0	7,500.0	12,450.9	7,740.0	81.1	80.7	127.16	-4,422.7	267.9	397.4	266.9	130.55	3.044	
12,387.3	7,500.0	12,538.2	7,740.0	82.6	82.2	127.01	-4,510.1	267.9	398.7	265.5	133.17	2.994	
12,400.0	7,500.0	12,550.8	7,740.0	82.9	82.4	127.01	-4,522.7	267.9	398.7	265.2	133.52	2.986	
12,500.0	7,500.0	12,650.8	7,740.0	84.6	84.2	126.99	-4,622.7	267.9	398.9	262.6	136.32	2.926	
12,600.0	7,500.0	12,750.8	7,740.0	86.3	85.9	126.97	-4,722.7	267.9	399.1	260.0	139.12	2.869	
12,700.0	7,500.0	12,850.8	7,740.0	88.0	87.6	126.95	-4,822.7	267.9	399.3	257.3	141.92	2.813	
12,800.0	7,500.0	12,950.8	7,740.0	89.7	89.3	126.93	-4,922.7	267.9	399.5	254.7	144.73	2.760	
12,900.0	7,500.0	13,050.8	7,740.0	91.5	91.1	126.91	-5,022.7	267.9	399.6	252.1	147.54	2.709	
13,000.0	7,500.0	13,150.8	7,740.0	93.2	92.8	126.89	-5,122.7	267.9	399.8	249.5	150.36	2.659	
13,100.0	7,500.0	13,250.8	7,740.0	94.9	94.5	126.87	-5,222.7	267.9	400.0	246.8	153.17	2.612	
13,200.0	7,500.0	13,350.8	7,740.0	96.6	96.3	126.85	-5,322.7	267.9	400.2	244.2	155.99	2.566	
13,300.0	7,500.0	13,450.8	7,740.0	98.4	98.0	126.83	-5,422.7	267.9	400.4	241.6	158.81	2.521	
13,400.0	7,500.0	13,550.8	7,740.0	100.1	99.7	126.81	-5,522.7	267.9	400.6	239.0	161.64	2.478	
13,500.0	7,500.0	13,650.8	7,740.0	101.8	101.5	126.79	-5,622.7	267.9	400.8	236.3	164.46	2.437	
13,600.0	7,500.0	13,750.8	7,740.0	103.5	103.2	126.77	-5,722.7	267.9	401.0	233.7	167.29	2.397	
13,700.0	7,500.0	13,850.8	7,740.0	105.3	105.0	126.75	-5,822.7	267.9	401.2	231.0	170.12	2.358	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,800.0	7,500.0	13,950.8	7,740.0	107.0	106.7	126.73	-5,922.7	267.9	401.4	228.4	172.96	2.321		
13,900.0	7,500.0	14,050.8	7,740.0	108.7	108.4	126.71	-6,022.7	267.9	401.5	225.7	175.79	2.284		
14,000.0	7,500.0	14,150.8	7,740.0	110.5	110.2	126.69	-6,122.7	267.9	401.7	223.1	178.63	2.249		
14,100.0	7,500.0	14,250.8	7,740.0	112.2	111.9	126.66	-6,222.7	267.9	401.9	220.4	181.47	2.215		
14,200.0	7,500.0	14,350.8	7,740.0	113.9	113.6	126.64	-6,322.7	267.9	402.1	217.8	184.32	2.182		
14,300.0	7,500.0	14,450.8	7,740.0	115.7	115.4	126.62	-6,422.7	267.9	402.3	215.1	187.16	2.150		
14,400.0	7,500.0	14,550.8	7,740.0	117.4	117.1	126.60	-6,522.7	267.9	402.5	212.5	190.01	2.118		
14,500.0	7,500.0	14,650.8	7,740.0	119.1	118.9	126.58	-6,622.7	267.9	402.7	209.8	192.86	2.088		
14,600.0	7,500.0	14,750.8	7,740.0	120.9	120.6	126.56	-6,722.7	267.9	402.9	207.2	195.71	2.059		
14,700.0	7,500.0	14,850.8	7,740.0	122.6	122.3	126.54	-6,822.7	267.9	403.1	204.5	198.56	2.030		
14,800.0	7,500.0	14,950.8	7,740.0	124.4	124.1	126.52	-6,922.7	267.9	403.3	201.8	201.42	2.002		
14,900.0	7,500.0	15,050.8	7,740.0	126.1	125.8	126.50	-7,022.7	267.9	403.4	199.2	204.27	1.975		
15,000.0	7,500.0	15,150.8	7,740.0	127.8	127.6	126.48	-7,122.7	267.9	403.6	196.5	207.13	1.949		
15,100.0	7,500.0	15,250.8	7,740.0	129.6	129.3	126.46	-7,222.7	267.9	403.8	193.8	210.00	1.923		
15,200.0	7,500.0	15,350.8	7,740.0	131.3	131.1	126.44	-7,322.7	267.9	404.0	191.2	212.86	1.898		
15,300.0	7,500.0	15,450.8	7,740.0	133.1	132.8	126.42	-7,422.7	267.9	404.2	188.5	215.72	1.874		
15,400.0	7,500.0	15,550.8	7,740.0	134.8	134.5	126.40	-7,522.7	267.9	404.4	185.8	218.59	1.850		
15,500.0	7,500.0	15,650.8	7,740.0	136.5	136.3	126.38	-7,622.7	267.9	404.6	183.1	221.46	1.827		
15,600.0	7,500.0	15,750.8	7,740.0	138.3	138.0	126.36	-7,722.7	267.9	404.8	180.5	224.33	1.804		
15,700.0	7,500.0	15,850.8	7,740.0	140.0	139.8	126.34	-7,822.7	267.9	405.0	177.8	227.20	1.782		
15,700.0	7,500.0	15,850.8	7,740.0	140.0	139.8	126.34	-7,822.7	267.9	405.0	177.8	227.20	1.782		
15,805.8	7,500.0	15,953.0	7,740.0	141.9	141.6	126.32	-7,924.8	267.9	405.2	175.1	230.06	1.761 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	89.94	0.0	7.6	7.6					
100.0	100.0	100.0	100.0	0.2	0.2	89.94	0.0	7.6	7.6	7.3	0.30	24.883		
200.0	200.0	200.0	200.0	0.3	0.3	89.94	0.0	7.6	7.6	6.9	0.65	11.577		
300.0	300.0	300.0	300.0	0.5	0.5	89.94	0.0	7.6	7.6	6.6	1.00	7.543		
400.0	400.0	400.0	400.0	0.7	0.7	89.94	0.0	7.6	7.6	6.2	1.35	5.594		
500.0	500.0	500.0	500.0	0.8	0.8	89.94	0.0	7.6	7.6	5.9	1.70	4.445		
600.0	600.0	600.0	600.0	1.0	1.0	55.95	0.0	7.6	7.0	5.0	2.05	3.432		
700.0	700.0	700.0	700.0	1.2	1.2	77.24	0.0	7.6	6.0	3.6	2.40	2.488		
734.8	734.7	734.7	734.7	1.3	1.3	90.00	0.0	7.6	5.8	3.3	2.53	2.307 CC, ES		
800.0	799.9	799.9	799.9	1.4	1.4	117.53	0.0	7.6	6.6	3.8	2.76	2.385		
900.0	899.7	899.7	899.7	1.6	1.5	147.43	0.0	7.6	10.8	7.7	3.10	3.494		
1,000.0	999.4	999.4	999.4	1.8	1.7	161.00	0.0	7.6	18.0	14.5	3.45	5.206		
1,100.0	1,098.9	1,099.3	1,099.3	2.0	1.9	166.82	0.5	8.2	26.4	22.6	3.80	6.957		
1,201.3	1,199.5	1,200.7	1,200.7	2.2	2.1	169.24	2.2	10.3	35.2	31.1	4.15	8.487		
1,300.0	1,297.5	1,299.7	1,299.6	2.5	2.3	170.03	4.9	13.7	43.1	38.6	4.50	9.586		
1,400.0	1,396.8	1,400.3	1,400.0	2.7	2.4	169.85	8.7	18.5	49.5	44.7	4.85	10.203		
1,500.0	1,496.0	1,501.0	1,500.4	3.0	2.6	169.00	13.7	24.7	54.3	49.1	5.21	10.418		
1,600.0	1,595.3	1,601.9	1,600.8	3.3	2.8	167.58	19.7	32.2	57.4	51.9	5.57	10.306		
1,700.0	1,694.5	1,702.8	1,701.0	3.5	3.1	165.57	26.9	41.2	59.1	53.1	5.95	9.929		
1,800.0	1,793.8	1,803.6	1,801.0	3.8	3.3	162.85	35.1	51.5	59.2	52.9	6.34	9.335		
1,900.0	1,893.0	1,904.5	1,900.7	4.0	3.6	159.24	44.5	63.2	58.0	51.2	6.77	8.567		
2,000.0	1,992.3	2,004.4	1,999.4	4.3	3.9	154.87	54.4	75.7	56.1	48.9	7.24	7.753		
2,100.0	2,091.5	2,104.3	2,098.0	4.6	4.1	150.23	64.3	88.1	54.6	46.9	7.76	7.042		
2,200.0	2,190.8	2,204.2	2,196.6	4.8	4.4	145.37	74.2	100.5	53.5	45.2	8.32	6.428		
2,300.0	2,290.0	2,304.1	2,295.3	5.1	4.7	140.33	84.1	112.9	52.8	43.8	8.93	5.907		
2,400.0	2,389.3	2,404.0	2,393.9	5.4	5.0	135.19	94.0	125.4	52.5	42.9	9.59	5.472		
2,422.5	2,411.6	2,426.5	2,416.1	5.4	5.1	134.03	96.3	128.2	52.4	42.7	9.74	5.386		
2,500.0	2,488.5	2,503.9	2,492.5	5.7	5.3	130.04	104.0	137.8	52.6	42.3	10.27	5.119		
2,600.0	2,587.8	2,603.8	2,591.1	5.9	5.6	124.95	113.9	150.2	53.1	42.1	10.97	4.840		
2,700.0	2,687.0	2,703.7	2,689.7	6.2	5.9	119.99	123.8	162.6	54.1	42.4	11.68	4.628		
2,800.0	2,786.3	2,803.5	2,788.3	6.5	6.2	115.25	133.7	175.0	55.4	43.0	12.39	4.473		
2,900.0	2,885.5	2,903.4	2,887.0	6.7	6.6	110.75	143.6	187.5	57.1	44.0	13.08	4.367		
3,000.0	2,984.8	3,003.3	2,985.6	7.0	6.9	106.54	153.6	199.9	59.1	45.4	13.75	4.302		
3,100.0	3,084.0	3,103.2	3,084.2	7.3	7.2	102.63	163.5	212.3	61.5	47.1	14.39	4.271		
3,200.0	3,183.3	3,203.1	3,182.8	7.6	7.5	99.02	173.4	224.7	64.1	49.0	15.01	4.267		
3,300.0	3,282.5	3,303.0	3,281.4	7.8	7.8	95.70	183.3	237.2	66.9	51.3	15.61	4.284		
3,400.0	3,381.8	3,402.9	3,380.0	8.1	8.1	92.66	193.2	249.6	69.9	53.7	16.19	4.319		
3,500.0	3,481.1	3,502.8	3,478.6	8.4	8.5	89.88	203.1	262.0	73.1	56.4	16.75	4.368		
3,600.0	3,580.3	3,602.6	3,577.3	8.7	8.8	87.34	213.1	274.4	76.5	59.2	17.29	4.426		
3,700.0	3,679.6	3,702.5	3,675.9	8.9	9.1	85.01	223.0	286.9	80.0	62.2	17.81	4.492		
3,800.0	3,778.8	3,802.4	3,774.5	9.2	9.4	82.89	232.9	299.3	83.6	65.3	18.33	4.565		
3,900.0	3,878.1	3,902.3	3,873.1	9.5	9.7	80.94	242.8	311.7	87.4	68.6	18.83	4.641		
4,000.0	3,977.3	4,002.2	3,971.7	9.8	10.1	79.16	252.7	324.1	91.2	71.9	19.32	4.720		
4,100.0	4,076.6	4,102.1	4,070.3	10.0	10.4	77.52	262.7	336.6	95.1	75.3	19.81	4.801		
4,200.0	4,175.8	4,202.0	4,168.9	10.3	10.7	76.01	272.6	349.0	99.1	78.8	20.29	4.883		
4,300.0	4,275.1	4,301.9	4,267.6	10.6	11.0	74.62	282.5	361.4	103.1	82.4	20.77	4.966		
4,400.0	4,374.3	4,401.8	4,366.2	10.9	11.3	73.33	292.4	373.8	107.2	86.0	21.24	5.049		
4,500.0	4,473.6	4,501.6	4,464.8	11.1	11.7	72.14	302.3	386.3	111.4	89.7	21.71	5.131		
4,600.0	4,572.8	4,601.5	4,563.4	11.4	12.0	71.04	312.2	398.7	115.6	93.4	22.18	5.212		
4,700.0	4,672.1	4,701.4	4,662.0	11.7	12.3	70.01	322.2	411.1	119.8	97.2	22.64	5.292		
4,800.0	4,771.3	4,801.3	4,760.6	12.0	12.6	69.06	332.1	423.5	124.1	101.0	23.10	5.371		
4,900.0	4,870.6	4,901.2	4,859.2	12.2	13.0	68.16	342.0	435.9	128.4	104.8	23.56	5.449		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,000.0	4,969.8	5,001.1	4,957.9	12.5	13.3	67.33	351.9	448.4	132.7	108.7	24.02	5.525		
5,100.0	5,069.1	5,101.0	5,056.5	12.8	13.6	66.55	361.8	460.8	137.1	112.6	24.48	5.600		
5,200.0	5,168.3	5,200.9	5,155.1	13.1	13.9	65.81	371.7	473.2	141.5	116.5	24.94	5.673		
5,300.0	5,267.6	5,300.7	5,253.7	13.3	14.3	65.12	381.7	485.6	145.9	120.5	25.40	5.744		
5,400.0	5,366.8	5,400.6	5,352.3	13.6	14.6	64.47	391.6	498.1	150.3	124.4	25.85	5.814		
5,500.0	5,466.1	5,500.5	5,450.9	13.9	14.9	63.86	401.5	510.5	154.7	128.4	26.31	5.882		
5,600.0	5,565.3	5,600.4	5,549.6	14.2	15.3	63.28	411.4	522.9	159.2	132.4	26.76	5.949		
5,700.0	5,664.6	5,700.3	5,648.2	14.4	15.6	62.74	421.3	535.3	163.7	136.5	27.22	6.014		
5,800.0	5,763.8	5,800.2	5,746.8	14.7	15.9	62.22	431.3	547.8	168.2	140.5	27.67	6.077		
5,900.0	5,863.1	5,900.1	5,845.4	15.0	16.2	61.73	441.2	560.2	172.7	144.5	28.13	6.139		
6,000.0	5,962.3	6,000.0	5,944.0	15.3	16.6	61.27	451.1	572.6	177.2	148.6	28.58	6.199		
6,100.0	6,061.6	6,099.9	6,042.6	15.5	16.9	60.82	461.0	585.0	181.7	152.7	29.03	6.258		
6,200.0	6,160.9	6,199.7	6,141.2	15.8	17.2	60.40	470.9	597.5	186.2	156.7	29.49	6.316		
6,300.0	6,260.1	6,299.6	6,239.9	16.1	17.5	60.00	480.8	609.9	190.8	160.8	29.94	6.372		
6,400.0	6,359.4	6,399.5	6,338.5	16.4	17.9	59.62	490.8	622.3	195.3	164.9	30.40	6.426		
6,500.0	6,458.6	6,499.4	6,437.1	16.6	18.2	59.26	500.7	634.7	199.9	169.0	30.85	6.480		
6,600.0	6,557.9	6,599.3	6,535.7	16.9	18.5	58.91	510.6	647.2	204.5	173.2	31.30	6.532		
6,700.0	6,657.1	6,699.2	6,634.3	17.2	18.9	58.58	520.5	659.6	209.0	177.3	31.76	6.582		
6,800.0	6,756.4	6,799.1	6,732.9	17.5	19.2	58.26	530.4	672.0	213.6	181.4	32.21	6.632		
6,900.0	6,855.6	6,899.0	6,831.5	17.7	19.5	57.95	540.4	684.4	218.2	185.5	32.66	6.680		
6,919.5	6,875.0	6,918.4	6,850.8	17.8	19.6	57.89	542.3	686.8	219.1	186.3	32.75	6.689		
6,950.0	6,905.3	6,948.9	6,880.8	17.9	19.7	57.89	545.3	690.6	220.4	187.6	32.83	6.714		
7,000.0	6,955.1	6,998.5	6,929.9	17.9	19.8	-24.32	550.2	696.8	222.1	189.4	32.71	6.791		
7,050.0	7,004.8	7,047.6	6,978.3	17.9	20.0	-55.59	555.1	702.9	223.7	191.4	32.29	6.927		
7,100.0	7,053.8	7,095.6	7,025.7	17.9	20.2	-69.56	559.9	708.9	225.5	194.0	31.57	7.144		
7,150.0	7,101.9	7,142.3	7,071.8	17.9	20.3	-78.64	564.5	714.7	228.5	197.9	30.57	7.473		
7,200.0	7,148.7	7,187.2	7,116.1	17.8	20.5	-85.95	569.0	720.3	233.3	203.9	29.36	7.946		
7,250.0	7,193.8	7,233.5	7,161.9	17.7	20.6	-92.44	572.1	726.2	240.7	212.5	28.15	8.551		
7,300.0	7,236.9	7,282.0	7,210.0	17.5	20.7	-98.11	571.3	732.6	250.4	223.3	27.17	9.218		
7,350.0	7,277.7	7,333.0	7,260.2	17.4	20.7	-103.11	566.1	739.6	262.3	235.8	26.48	9.905		
7,400.0	7,315.7	7,386.6	7,312.2	17.2	20.8	-107.55	555.9	747.3	275.8	249.7	26.06	10.584		
7,450.0	7,350.9	7,443.4	7,366.1	17.1	20.8	-111.49	539.7	755.6	290.6	264.8	25.84	11.248		
7,500.0	7,382.8	7,503.9	7,421.2	16.9	20.8	-114.96	516.6	764.5	306.3	280.6	25.72	11.910		
7,550.0	7,411.3	7,568.6	7,477.1	16.7	20.7	-118.00	485.6	774.1	322.4	296.8	25.62	12.586		
7,600.0	7,436.1	7,637.9	7,532.7	16.6	20.6	-120.62	445.6	784.3	338.4	312.9	25.45	13.298		
7,650.0	7,457.1	7,712.3	7,586.5	16.5	20.5	-122.81	395.3	795.0	353.7	328.6	25.18	14.051		
7,700.0	7,474.0	7,792.2	7,636.5	16.4	20.4	-124.57	334.0	805.9	368.0	343.2	24.80	14.835		
7,750.0	7,486.8	7,877.6	7,679.8	16.4	20.3	-125.85	261.4	816.8	380.5	356.1	24.39	15.600		
7,800.0	7,495.3	7,968.0	7,713.5	16.4	20.3	-126.62	178.2	827.1	390.9	366.9	24.03	16.263		
7,850.0	7,499.5	8,062.6	7,734.3	16.5	20.3	-126.84	86.5	836.2	398.7	374.8	23.87	16.702		
7,873.6	7,500.0	8,108.2	7,738.9	16.5	20.4	-126.74	41.3	840.0	401.3	377.4	23.90	16.795		
7,900.0	7,500.0	8,151.9	7,740.0	16.5	20.5	-126.60	-2.3	843.2	403.2	379.2	24.02	16.786		
8,000.0	7,500.0	8,251.7	7,740.0	16.9	20.8	-126.01	-101.8	850.2	408.8	383.9	24.97	16.373		
8,100.0	7,500.0	8,351.4	7,740.0	17.4	21.3	-125.45	-201.3	857.1	414.5	388.3	26.20	15.822		
8,200.0	7,500.0	8,451.7	7,740.0	18.0	21.9	-124.89	-301.3	864.1	420.2	392.5	27.67	15.187		
8,300.0	7,500.0	8,557.9	7,740.0	18.8	22.6	-124.41	-407.4	870.4	425.1	395.8	29.26	14.527		
8,400.0	7,500.0	8,664.4	7,740.0	19.7	23.4	-124.08	-513.8	874.7	428.4	397.4	30.97	13.832		
8,500.0	7,500.0	8,771.0	7,740.0	20.7	24.4	-123.91	-620.3	877.1	430.2	397.5	32.79	13.122		
8,600.0	7,500.0	8,875.5	7,740.0	21.9	25.4	-123.87	-724.9	877.5	430.6	395.9	34.73	12.398		
8,700.0	7,500.0	8,975.5	7,740.0	23.1	26.4	-123.87	-824.9	877.5	430.6	393.7	36.90	11.669		
8,800.0	7,500.0	9,075.5	7,740.0	24.3	27.5	-123.87	-924.9	877.5	430.6	391.4	39.17	10.994		
8,900.0	7,500.0	9,175.5	7,740.0	25.6	28.7	-123.87	-1,024.9	877.5	430.6	389.1	41.51	10.372		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,500.0	9,275.5	7,740.0	27.0	29.9	-123.87	-1,124.9	877.5	430.6	386.7	43.93	9.802	
9,000.0	7,500.0	9,275.6	7,740.0	27.0	29.9	-123.87	-1,124.9	877.5	430.6	386.7	43.93	9.802	
9,100.0	7,500.0	9,373.7	7,740.0	28.4	31.2	-123.87	-1,223.0	877.6	430.7	384.2	46.47	9.268	
9,200.0	7,500.0	9,472.0	7,740.0	29.9	32.5	-123.80	-1,321.3	878.5	431.4	382.4	49.09	8.790	
9,300.0	7,500.0	9,572.0	7,740.0	31.4	33.9	-123.73	-1,421.3	879.5	432.3	380.6	51.69	8.363	
9,400.0	7,500.0	9,672.0	7,740.0	32.9	35.3	-123.65	-1,521.3	880.5	433.1	378.8	54.34	7.971	
9,500.0	7,500.0	9,772.0	7,740.0	34.4	36.7	-123.58	-1,621.3	881.5	433.9	376.9	57.02	7.610	
9,600.0	7,500.0	9,872.0	7,740.0	36.0	38.2	-123.51	-1,721.3	882.5	434.8	375.0	59.73	7.279	
9,700.0	7,500.0	9,971.9	7,740.0	37.5	39.7	-123.44	-1,821.2	883.5	435.6	373.1	62.47	6.973	
9,800.0	7,500.0	10,071.9	7,740.0	39.1	41.2	-123.36	-1,921.2	884.5	436.4	371.2	65.23	6.690	
9,900.0	7,500.0	10,171.9	7,740.0	40.7	42.7	-123.29	-2,021.2	885.5	437.2	369.2	68.02	6.428	
10,000.0	7,500.0	10,271.9	7,740.0	42.3	44.3	-123.22	-2,121.2	886.5	438.1	367.3	70.83	6.185	
10,100.0	7,500.0	10,371.9	7,740.0	43.9	45.8	-123.15	-2,221.2	887.5	438.9	365.3	73.65	5.959	
10,200.0	7,500.0	10,471.9	7,740.0	45.6	47.4	-123.08	-2,321.2	888.5	439.7	363.3	76.50	5.749	
10,300.0	7,500.0	10,571.9	7,740.0	47.2	49.0	-123.01	-2,421.2	889.5	440.6	361.2	79.36	5.552	
10,400.0	7,500.0	10,671.9	7,740.0	48.9	50.6	-122.94	-2,521.2	890.5	441.4	359.2	82.23	5.368	
10,500.0	7,500.0	10,771.9	7,740.0	50.5	52.2	-122.87	-2,621.2	891.5	442.3	357.1	85.11	5.196	
10,600.0	7,500.0	10,871.9	7,740.0	52.2	53.8	-122.80	-2,721.2	892.4	443.1	355.1	88.01	5.034	
10,700.0	7,500.0	10,971.9	7,740.0	53.8	55.4	-122.73	-2,821.1	893.4	443.9	353.0	90.92	4.883	
10,800.0	7,500.0	11,071.9	7,740.0	55.5	57.0	-122.66	-2,921.1	894.4	444.8	350.9	93.84	4.740	
10,900.0	7,500.0	11,171.9	7,740.0	57.2	58.7	-122.59	-3,021.1	895.4	445.6	348.8	96.77	4.605	
11,000.0	7,500.0	11,271.9	7,740.0	58.9	60.3	-122.52	-3,121.1	896.4	446.4	346.7	99.71	4.477	
11,100.0	7,500.0	11,371.9	7,740.0	60.6	62.0	-122.45	-3,221.1	897.4	447.3	344.6	102.66	4.357	
11,200.0	7,500.0	11,471.9	7,740.0	62.3	63.6	-122.38	-3,321.1	898.4	448.1	342.5	105.62	4.243	
11,244.1	7,500.0	11,516.0	7,740.0	63.0	64.4	-122.35	-3,365.2	898.9	448.5	341.6	106.93	4.194	
11,300.0	7,500.0	11,571.9	7,740.0	64.0	65.3	-122.35	-3,421.1	899.4	448.5	340.0	108.55	4.132	
11,400.0	7,500.0	11,671.8	7,740.0	65.7	67.0	-122.56	-3,521.0	900.4	446.2	335.0	111.24	4.012	
11,444.1	7,500.0	11,715.9	7,740.0	66.4	67.7	-122.74	-3,565.1	900.8	444.3	332.0	112.33	3.955	
11,500.0	7,500.0	11,771.7	7,740.0	67.4	68.6	-122.98	-3,620.9	901.4	441.5	327.8	113.67	3.884	
11,600.0	7,500.0	11,871.5	7,740.0	69.1	70.3	-123.40	-3,720.7	902.4	436.5	320.4	116.03	3.762	
11,700.0	7,500.0	11,971.3	7,740.0	70.8	72.0	-123.84	-3,820.5	903.4	431.5	313.1	118.35	3.646	
11,800.0	7,500.0	12,071.1	7,740.0	72.5	73.7	-124.29	-3,920.3	904.4	426.5	305.9	120.63	3.536	
11,900.0	7,500.0	12,171.0	7,740.0	74.2	75.3	-124.75	-4,020.1	905.4	421.6	298.7	122.86	3.432	
12,000.0	7,500.0	12,270.8	7,740.0	76.0	77.0	-125.22	-4,120.0	906.4	416.7	291.7	125.03	3.333	
12,100.0	7,500.0	12,370.6	7,740.0	77.7	78.7	-125.70	-4,219.8	907.4	411.8	284.7	127.16	3.239	
12,194.1	7,500.0	12,464.6	7,740.0	79.3	80.3	-126.16	-4,313.7	908.3	407.3	278.1	129.11	3.154	
12,200.0	7,500.0	12,470.4	7,740.0	79.4	80.4	-126.18	-4,319.6	908.4	407.0	277.7	129.23	3.149	
12,300.0	7,500.0	12,570.3	7,740.0	81.1	82.1	-126.48	-4,419.5	909.4	403.7	272.2	131.50	3.070	
12,365.6	7,500.0	12,635.9	7,740.0	82.3	83.2	-126.54	-4,485.1	910.0	403.1	269.9	133.23	3.026	
12,387.3	7,500.0	12,657.7	7,740.0	82.6	83.6	-126.53	-4,506.8	910.2	403.2	269.3	133.84	3.012	
12,400.0	7,500.0	12,670.3	7,740.0	82.9	83.8	-126.52	-4,519.5	910.3	403.3	269.1	134.21	3.005	
12,500.0	7,500.0	12,770.3	7,740.0	84.6	85.5	-126.46	-4,619.5	911.3	403.9	266.8	137.10	2.946	
12,600.0	7,500.0	12,870.3	7,740.0	86.3	87.2	-126.40	-4,719.5	912.3	404.5	264.5	139.99	2.889	
12,700.0	7,500.0	12,970.3	7,740.0	88.0	88.9	-126.33	-4,819.5	913.3	405.1	262.2	142.90	2.835	
12,800.0	7,500.0	13,070.3	7,740.0	89.7	90.6	-126.27	-4,919.5	914.3	405.7	259.9	145.80	2.783	
12,900.0	7,500.0	13,170.3	7,740.0	91.5	92.3	-126.21	-5,019.4	915.3	406.3	257.6	148.72	2.732	
13,000.0	7,500.0	13,270.3	7,740.0	93.2	94.0	-126.14	-5,119.4	916.3	406.9	255.3	151.63	2.684	
13,100.0	7,500.0	13,370.3	7,740.0	94.9	95.8	-126.08	-5,219.4	917.3	407.5	253.0	154.56	2.637	
13,200.0	7,500.0	13,470.3	7,740.0	96.6	97.5	-126.02	-5,319.4	918.3	408.2	250.7	157.49	2.592	
13,300.0	7,500.0	13,570.3	7,740.0	98.4	99.2	-125.95	-5,419.4	919.3	408.8	248.3	160.42	2.548	
13,400.0	7,500.0	13,670.3	7,740.0	100.1	100.9	-125.89	-5,519.4	920.3	409.4	246.0	163.36	2.506	
13,500.0	7,500.0	13,770.3	7,740.0	101.8	102.6	-125.83	-5,619.4	921.3	410.0	243.7	166.30	2.465	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore	Centre	Between	Between	Total	Separation	Warning	
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Uncertainty Axis	Factor		
13,600.0	7,500.0	13,870.3	7,740.0	103.5	104.3	-125.77	-5,719.4	922.3	410.6	241.4	169.25	2.426		
13,700.0	7,500.0	13,970.3	7,740.0	105.3	106.1	-125.71	-5,819.4	923.3	411.2	239.0	172.20	2.388		
13,800.0	7,500.0	14,070.3	7,740.0	107.0	107.8	-125.64	-5,919.4	924.3	411.8	236.7	175.16	2.351		
13,900.0	7,500.0	14,170.3	7,740.0	108.7	109.5	-125.58	-6,019.4	925.3	412.5	234.3	178.12	2.316		
14,000.0	7,500.0	14,270.3	7,740.0	110.5	111.2	-125.52	-6,119.4	926.3	413.1	232.0	181.09	2.281		
14,100.0	7,500.0	14,370.3	7,740.0	112.2	112.9	-125.46	-6,219.4	927.3	413.7	229.6	184.06	2.248		
14,200.0	7,500.0	14,470.3	7,740.0	113.9	114.7	-125.40	-6,319.3	928.3	414.3	227.3	187.04	2.215		
14,300.0	7,500.0	14,570.3	7,740.0	115.7	116.4	-125.34	-6,419.3	929.3	414.9	224.9	190.02	2.184		
14,400.0	7,500.0	14,670.3	7,740.0	117.4	118.1	-125.28	-6,519.3	930.3	415.5	222.5	193.00	2.153		
14,500.0	7,500.0	14,770.3	7,740.0	119.1	119.8	-125.22	-6,619.3	931.3	416.2	220.2	195.99	2.123		
14,600.0	7,500.0	14,870.3	7,740.0	120.9	121.6	-125.16	-6,719.3	932.3	416.8	217.8	198.98	2.095		
14,700.0	7,500.0	14,970.3	7,740.0	122.6	123.3	-125.10	-6,819.3	933.2	417.4	215.4	201.98	2.067		
14,800.0	7,500.0	15,070.3	7,740.0	124.4	125.0	-125.04	-6,919.3	934.2	418.0	213.0	204.98	2.039		
14,900.0	7,500.0	15,170.3	7,740.0	126.1	126.8	-124.98	-7,019.3	935.2	418.7	210.7	207.99	2.013		
15,000.0	7,500.0	15,270.2	7,740.0	127.8	128.5	-124.92	-7,119.3	936.2	419.3	208.3	211.00	1.987		
15,100.0	7,500.0	15,370.2	7,740.0	129.6	130.2	-124.86	-7,219.3	937.2	419.9	205.9	214.01	1.962		
15,200.0	7,500.0	15,470.2	7,740.0	131.3	132.0	-124.80	-7,319.3	938.2	420.5	203.5	217.03	1.938		
15,300.0	7,500.0	15,570.2	7,740.0	133.1	133.7	-124.74	-7,419.3	939.2	421.1	201.1	220.05	1.914		
15,400.0	7,500.0	15,670.2	7,740.0	134.8	135.4	-124.68	-7,519.2	940.2	421.8	198.7	223.07	1.891		
15,500.0	7,500.0	15,770.2	7,740.0	136.5	137.2	-124.63	-7,619.2	941.2	422.4	196.3	226.10	1.868		
15,600.0	7,500.0	15,870.2	7,740.0	138.3	138.9	-124.57	-7,719.2	942.2	423.0	193.9	229.13	1.846		
15,700.0	7,500.0	15,970.2	7,740.0	140.0	140.6	-124.51	-7,819.2	943.2	423.6	191.5	232.17	1.825		
15,805.8	7,500.0	16,076.0	7,740.0	141.9	142.5	-124.45	-7,925.0	944.3	424.3	188.9	235.38	1.803 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	89.97	0.0	15.1	15.1					
100.0	100.0	100.0	100.0	0.2	0.2	89.97	0.0	15.1	15.1	14.8	0.30	49.767		
200.0	200.0	200.0	200.0	0.3	0.3	89.97	0.0	15.1	15.1	14.5	0.65	23.153		
300.0	300.0	300.0	300.0	0.5	0.5	89.97	0.0	15.1	15.1	14.1	1.00	15.086	CC, ES	
400.0	400.0	399.7	399.7	0.7	0.7	88.72	0.4	15.9	15.9	14.6	1.35	11.785		
500.0	500.0	499.4	499.4	0.8	0.9	85.62	1.4	18.3	18.4	16.7	1.70	10.804		
600.0	600.0	599.0	598.9	1.0	1.0	44.02	3.1	22.3	21.9	19.8	2.05	10.682		
700.0	700.0	698.6	698.2	1.2	1.2	44.05	5.6	27.8	25.8	23.4	2.40	10.761		
800.0	799.9	798.0	797.4	1.4	1.4	45.39	8.7	34.9	30.2	27.4	2.75	10.951		
900.0	899.7	897.4	896.3	1.6	1.7	47.49	12.5	43.6	35.0	31.8	3.12	11.209		
1,000.0	999.4	996.6	994.9	1.8	1.9	50.01	17.0	53.9	40.2	36.8	3.50	11.504		
1,100.0	1,098.9	1,095.7	1,093.2	2.0	2.2	52.71	22.1	65.7	46.1	42.2	3.90	11.814		
1,201.3	1,199.5	1,196.0	1,192.4	2.2	2.5	55.48	28.0	79.2	52.7	48.3	4.34	12.120		
1,300.0	1,297.5	1,293.6	1,288.6	2.5	2.8	57.50	34.5	93.8	60.1	55.3	4.80	12.538		
1,400.0	1,396.8	1,392.2	1,385.6	2.7	3.1	58.33	41.6	110.2	69.2	63.9	5.26	13.158		
1,500.0	1,496.0	1,490.6	1,482.0	3.0	3.5	58.31	49.4	128.0	79.7	74.0	5.72	13.933		
1,600.0	1,595.3	1,589.9	1,579.2	3.3	3.9	57.99	57.7	146.9	91.0	84.8	6.19	14.702		
1,700.0	1,694.5	1,689.2	1,676.4	3.5	4.2	57.74	65.9	165.7	102.4	95.7	6.67	15.354		
1,800.0	1,793.8	1,788.6	1,773.6	3.8	4.6	57.54	74.1	184.5	113.7	106.5	7.14	15.912		
1,900.0	1,893.0	1,888.0	1,870.8	4.0	5.0	57.38	82.4	203.4	125.0	117.4	7.62	16.396		
2,000.0	1,992.3	1,987.3	1,968.0	4.3	5.4	57.25	90.6	222.2	136.3	128.2	8.11	16.818		
2,100.0	2,091.5	2,086.7	2,065.2	4.6	5.8	57.13	98.9	241.0	147.6	139.0	8.59	17.190		
2,200.0	2,190.8	2,186.0	2,162.4	4.8	6.2	57.03	107.1	259.9	159.0	149.9	9.07	17.519		
2,300.0	2,290.0	2,285.4	2,259.6	5.1	6.6	56.95	115.4	278.7	170.3	160.7	9.56	17.813		
2,400.0	2,389.3	2,384.7	2,356.8	5.4	7.0	56.87	123.6	297.6	181.6	171.6	10.05	18.077		
2,500.0	2,488.5	2,484.1	2,454.0	5.7	7.4	56.81	131.8	316.4	192.9	182.4	10.53	18.315		
2,600.0	2,587.8	2,583.5	2,551.2	5.9	7.8	56.75	140.1	335.2	204.2	193.2	11.02	18.531		
2,700.0	2,687.0	2,682.8	2,648.5	6.2	8.2	56.69	148.3	354.1	215.6	204.1	11.51	18.727		
2,800.0	2,786.3	2,782.2	2,745.7	6.5	8.6	56.65	156.6	372.9	226.9	214.9	12.00	18.906		
2,900.0	2,885.5	2,881.5	2,842.9	6.7	9.0	56.60	164.8	391.8	238.2	225.7	12.49	19.071		
3,000.0	2,984.8	2,980.9	2,940.1	7.0	9.4	56.56	173.1	410.6	249.5	236.6	12.98	19.222		
3,100.0	3,084.0	3,080.2	3,037.3	7.3	9.8	56.53	181.3	429.4	260.9	247.4	13.47	19.362		
3,200.0	3,183.3	3,179.6	3,134.5	7.6	10.2	56.50	189.5	448.3	272.2	258.2	13.96	19.491		
3,300.0	3,282.5	3,279.0	3,231.7	7.8	10.6	56.47	197.8	467.1	283.5	269.1	14.46	19.612		
3,400.0	3,381.8	3,378.3	3,328.9	8.1	11.0	56.44	206.0	485.9	294.8	279.9	14.95	19.724		
3,500.0	3,481.1	3,477.7	3,426.1	8.4	11.4	56.41	214.3	504.8	306.2	290.7	15.44	19.828		
3,600.0	3,580.3	3,577.0	3,523.3	8.7	11.8	56.39	222.5	523.6	317.5	301.6	15.93	19.926		
3,700.0	3,679.6	3,676.4	3,620.5	8.9	12.2	56.37	230.8	542.5	328.8	312.4	16.43	20.017		
3,800.0	3,778.8	3,775.7	3,717.7	9.2	12.6	56.35	239.0	561.3	340.1	323.2	16.92	20.104		
3,900.0	3,878.1	3,875.1	3,814.9	9.5	13.0	56.33	247.2	580.1	351.5	334.0	17.41	20.185		
4,000.0	3,977.3	3,974.4	3,912.1	9.8	13.4	56.31	255.5	599.0	362.8	344.9	17.91	20.261		
4,100.0	4,076.6	4,073.8	4,009.3	10.0	13.8	56.29	263.7	617.8	374.1	355.7	18.40	20.333		
4,200.0	4,175.8	4,173.2	4,106.5	10.3	14.2	56.28	272.0	636.6	385.4	366.5	18.89	20.401		
4,300.0	4,275.1	4,272.5	4,203.7	10.6	14.6	56.26	280.2	655.5	396.8	377.4	19.39	20.466		
4,400.0	4,374.3	4,371.9	4,300.9	10.9	15.0	56.25	288.5	674.3	408.1	388.2	19.88	20.527		
4,500.0	4,473.6	4,471.2	4,398.2	11.1	15.4	56.23	296.7	693.2	419.4	399.0	20.37	20.585		
4,600.0	4,572.8	4,570.6	4,495.4	11.4	15.8	56.22	304.9	712.0	430.7	409.9	20.87	20.640		
4,700.0	4,672.1	4,669.9	4,592.6	11.7	16.2	56.21	313.2	730.8	442.1	420.7	21.36	20.693		
4,800.0	4,771.3	4,769.3	4,689.8	12.0	16.6	56.20	321.4	749.7	453.4	431.5	21.86	20.743		
4,900.0	4,870.6	4,868.7	4,787.0	12.2	17.0	56.18	329.7	768.5	464.7	442.4	22.35	20.791		
5,000.0	4,969.8	4,968.0	4,884.2	12.5	17.4	56.17	337.9	787.4	476.0	453.2	22.85	20.837		
5,100.0	5,069.1	5,067.4	4,981.4	12.8	17.8	56.16	346.2	806.2	487.4	464.0	23.34	20.881		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,168.3	5,166.7	5,078.6	13.1	18.2	56.15	354.4	825.0	498.7	474.8	23.83	20.922		
5,300.0	5,267.6	5,266.1	5,175.8	13.3	18.6	56.15	362.6	843.9	510.0	485.7	24.33	20.962		
5,400.0	5,366.8	5,365.4	5,273.0	13.6	19.0	56.14	370.9	862.7	521.3	496.5	24.82	21.001		
5,500.0	5,466.1	5,464.8	5,370.2	13.9	19.4	56.13	379.1	881.5	532.7	507.3	25.32	21.038		
5,600.0	5,565.3	5,564.2	5,467.4	14.2	19.8	56.12	387.4	900.4	544.0	518.2	25.81	21.073		
5,700.0	5,664.6	5,663.5	5,564.6	14.4	20.3	56.11	395.6	919.2	555.3	529.0	26.31	21.107		
5,800.0	5,763.8	5,762.9	5,661.8	14.7	20.7	56.11	403.9	938.1	566.6	539.8	26.80	21.140		
5,900.0	5,863.1	5,862.2	5,759.0	15.0	21.1	56.10	412.1	956.9	578.0	550.7	27.30	21.172		
6,000.0	5,962.3	5,961.6	5,856.2	15.3	21.5	56.09	420.3	975.7	589.3	561.5	27.79	21.202		
6,100.0	6,061.6	6,060.9	5,953.4	15.5	21.9	56.08	428.6	994.6	600.6	572.3	28.29	21.231		
6,200.0	6,160.9	6,160.3	6,050.6	15.8	22.3	56.08	436.8	1,013.4	611.9	583.1	28.78	21.260		
6,300.0	6,260.1	6,259.7	6,147.9	16.1	22.7	56.07	445.1	1,032.2	623.3	594.0	29.28	21.287		
6,400.0	6,359.4	6,359.0	6,245.1	16.4	23.1	56.07	453.3	1,051.1	634.6	604.8	29.77	21.313		
6,500.0	6,458.6	6,458.4	6,342.3	16.6	23.5	56.06	461.6	1,069.9	645.9	615.6	30.27	21.339		
6,600.0	6,557.9	6,557.7	6,439.5	16.9	23.9	56.06	469.8	1,088.8	657.2	626.5	30.76	21.363		
6,700.0	6,657.1	6,657.1	6,536.7	17.2	24.3	56.05	478.0	1,107.6	668.6	637.3	31.26	21.387		
6,800.0	6,756.4	6,756.4	6,633.9	17.5	24.7	56.05	486.3	1,126.4	679.9	648.1	31.75	21.410		
6,900.0	6,855.6	6,855.8	6,731.1	17.7	25.1	56.04	494.5	1,145.3	691.2	659.0	32.25	21.433		
6,919.5	6,875.0	6,875.1	6,750.0	17.8	25.2	56.04	496.1	1,148.9	693.4	661.1	32.35	21.437		
6,950.0	6,905.3	6,905.5	6,779.7	17.9	25.3	33.73	498.7	1,154.7	696.8	664.3	32.46	21.467		
7,000.0	6,955.1	6,954.9	6,828.1	17.9	25.5	-24.41	502.8	1,164.1	702.0	669.5	32.50	21.597		
7,050.0	7,004.8	7,003.9	6,876.0	17.9	25.7	-53.68	506.8	1,173.4	706.8	674.4	32.39	21.823		
7,100.0	7,053.8	7,050.0	6,921.1	17.9	25.9	-64.94	509.8	1,182.1	711.3	679.2	32.11	22.155		
7,150.0	7,101.9	7,093.8	6,964.1	17.9	26.0	-70.59	509.4	1,190.4	716.0	684.3	31.71	22.581		
7,200.0	7,148.7	7,139.2	7,008.6	17.8	26.1	-74.08	505.5	1,199.1	720.7	689.5	31.24	23.069		
7,250.0	7,193.8	7,185.6	7,053.4	17.7	26.2	-76.52	497.8	1,207.8	725.5	694.8	30.73	23.613		
7,300.0	7,236.9	7,233.1	7,098.6	17.5	26.3	-78.40	486.1	1,216.5	730.3	700.1	30.18	24.200		
7,350.0	7,277.7	7,281.6	7,143.6	17.4	26.4	-79.93	470.2	1,225.2	735.1	705.5	29.62	24.818		
7,400.0	7,315.7	7,331.4	7,188.3	17.2	26.4	-81.25	450.0	1,233.9	739.9	710.8	29.08	25.446		
7,450.0	7,350.9	7,382.6	7,232.2	17.1	26.5	-82.42	425.2	1,242.4	744.5	716.0	28.56	26.065		
7,500.0	7,382.8	7,435.2	7,274.8	16.9	26.5	-83.49	395.6	1,250.7	749.1	721.0	28.11	26.651		
7,550.0	7,411.3	7,489.3	7,315.8	16.7	26.5	-84.48	361.1	1,258.6	753.5	725.8	27.72	27.181		
7,600.0	7,436.1	7,545.1	7,354.5	16.6	26.5	-85.41	321.7	1,266.1	757.6	730.2	27.42	27.633		
7,650.0	7,457.1	7,602.5	7,390.2	16.5	26.5	-86.28	277.2	1,273.0	761.5	734.3	27.21	27.990		
7,700.0	7,474.0	7,661.7	7,422.2	16.4	26.5	-87.11	227.8	1,279.2	765.0	737.9	27.10	28.233		
7,750.0	7,486.8	7,722.7	7,449.8	16.4	26.5	-87.88	173.8	1,284.6	768.1	741.0	27.08	28.362		
7,800.0	7,495.3	7,785.4	7,472.1	16.4	26.5	-88.60	115.4	1,288.9	770.7	743.5	27.16	28.378		
7,850.0	7,499.5	7,849.7	7,488.3	16.5	26.6	-89.25	53.3	1,292.0	772.7	745.3	27.31	28.288		
7,873.6	7,500.0	7,880.5	7,493.7	16.5	26.6	-89.53	22.9	1,293.1	773.4	746.0	27.43	28.192		
7,900.0	7,500.0	7,915.6	7,497.8	16.5	26.6	-89.83	-11.9	1,293.9	774.0	746.4	27.56	28.080		
8,000.0	7,500.0	8,028.6	7,500.0	16.9	26.8	-90.00	-124.9	1,294.3	774.3	745.9	28.35	27.313		
8,100.0	7,500.0	8,128.6	7,500.0	17.4	27.1	-90.00	-224.9	1,294.3	774.3	744.8	29.52	26.234		
8,200.0	7,500.0	8,228.6	7,500.0	18.0	27.5	-90.00	-324.9	1,294.3	774.3	743.3	31.04	24.948		
8,300.0	7,500.0	8,328.6	7,500.0	18.8	28.0	-90.00	-424.9	1,294.3	774.3	741.4	32.86	23.562		
8,400.0	7,500.0	8,428.6	7,500.0	19.7	28.7	-90.00	-524.9	1,294.3	774.3	739.3	34.95	22.157		
8,500.0	7,500.0	8,528.6	7,500.0	20.7	29.4	-90.00	-624.9	1,294.3	774.3	737.0	37.24	20.789		
8,600.0	7,500.0	8,628.6	7,500.0	21.9	30.1	-90.00	-724.9	1,294.3	774.3	734.6	39.72	19.493		
8,700.0	7,500.0	8,728.6	7,500.0	23.1	31.0	-90.00	-824.9	1,294.3	774.3	731.9	42.34	18.286		
8,800.0	7,500.0	8,828.6	7,500.0	24.3	31.9	-90.00	-924.9	1,294.3	774.3	729.2	45.09	17.174		
8,900.0	7,500.0	8,928.6	7,500.0	25.6	33.0	-90.00	-1,024.9	1,294.3	774.3	726.4	47.93	16.155		
9,000.0	7,500.0	9,028.6	7,500.0	27.0	34.0	-90.00	-1,124.9	1,294.3	774.3	723.4	50.85	15.226		
9,100.0	7,500.0	9,128.6	7,500.0	28.4	35.1	-90.00	-1,224.9	1,294.3	774.3	720.4	53.85	14.379		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: O-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,200.0	7,500.0	9,228.6	7,500.0	29.9	36.3	-90.00	-1,324.9	1,294.3	774.3	717.4	56.90	13.607	
9,300.0	7,500.0	9,328.6	7,500.0	31.4	37.5	-90.00	-1,424.9	1,294.3	774.3	714.3	60.01	12.903	
9,400.0	7,500.0	9,428.6	7,500.0	32.9	38.8	-90.00	-1,524.9	1,294.3	774.3	711.1	63.16	12.260	
9,500.0	7,500.0	9,528.6	7,500.0	34.4	40.1	-90.00	-1,624.9	1,294.3	774.3	708.0	66.34	11.672	
9,600.0	7,500.0	9,628.6	7,500.0	36.0	41.4	-90.00	-1,724.9	1,294.3	774.3	704.7	69.55	11.133	
9,700.0	7,500.0	9,728.6	7,500.0	37.5	42.8	-90.00	-1,824.9	1,294.3	774.3	701.5	72.79	10.637	
9,800.0	7,500.0	9,828.6	7,500.0	39.1	44.2	-90.00	-1,924.9	1,294.3	774.3	698.2	76.06	10.180	
9,900.0	7,500.0	9,928.6	7,500.0	40.7	45.6	-90.00	-2,024.9	1,294.3	774.3	694.9	79.34	9.759	
10,000.0	7,500.0	10,028.6	7,500.0	42.3	47.1	-90.00	-2,124.9	1,294.3	774.3	691.6	82.65	9.369	
10,100.0	7,500.0	10,128.6	7,500.0	43.9	48.5	-90.00	-2,224.9	1,294.3	774.3	688.3	85.97	9.007	
10,200.0	7,500.0	10,228.6	7,500.0	45.6	50.0	-90.00	-2,324.9	1,294.3	774.3	685.0	89.30	8.670	
10,300.0	7,500.0	10,328.6	7,500.0	47.2	51.5	-90.00	-2,424.9	1,294.3	774.3	681.6	92.65	8.357	
10,400.0	7,500.0	10,428.6	7,500.0	48.9	53.0	-90.00	-2,524.9	1,294.3	774.3	678.3	96.01	8.065	
10,500.0	7,500.0	10,528.6	7,500.0	50.5	54.5	-90.00	-2,624.9	1,294.3	774.3	674.9	99.38	7.791	
10,600.0	7,500.0	10,628.6	7,500.0	52.2	56.1	-90.00	-2,724.9	1,294.3	774.3	671.5	102.76	7.535	
10,700.0	7,500.0	10,728.6	7,500.0	53.8	57.6	-90.00	-2,824.9	1,294.3	774.3	668.2	106.14	7.295	
10,800.0	7,500.0	10,828.6	7,500.0	55.5	59.2	-90.00	-2,924.9	1,294.3	774.3	664.8	109.54	7.069	
10,900.0	7,500.0	10,928.6	7,500.0	57.2	60.8	-90.00	-3,024.9	1,294.3	774.3	661.4	112.94	6.856	
11,000.0	7,500.0	11,028.6	7,500.0	58.9	62.4	-90.00	-3,124.9	1,294.3	774.3	657.9	116.35	6.655	
11,100.0	7,500.0	11,128.6	7,500.0	60.6	64.0	-90.00	-3,224.9	1,294.3	774.3	654.5	119.76	6.465	
11,200.0	7,500.0	11,228.6	7,500.0	62.3	65.6	-90.00	-3,324.9	1,294.3	774.3	651.1	123.18	6.286	
11,244.1	7,500.0	11,272.8	7,500.0	63.0	66.3	-90.00	-3,369.0	1,294.3	774.3	649.6	124.69	6.210	
11,300.0	7,500.0	11,328.6	7,500.0	64.0	67.2	-90.00	-3,424.9	1,294.3	773.7	647.1	126.60	6.112	
11,400.0	7,500.0	11,428.6	7,500.0	65.7	68.8	-90.00	-3,524.8	1,294.3	770.1	640.0	130.03	5.922	
11,444.1	7,500.0	11,472.6	7,500.0	66.4	69.5	-90.00	-3,568.8	1,294.3	767.3	635.8	131.54	5.833	
11,500.0	7,500.0	11,528.3	7,500.0	67.4	70.4	-90.00	-3,624.6	1,294.3	763.4	630.0	133.45	5.721	
11,600.0	7,500.0	11,628.1	7,500.0	69.1	72.0	-90.00	-3,724.3	1,294.3	756.4	619.6	136.88	5.526	
11,700.0	7,500.0	11,727.8	7,500.0	70.8	73.7	-90.00	-3,824.1	1,294.3	749.5	609.2	140.31	5.342	
11,800.0	7,500.0	11,827.6	7,500.0	72.5	75.3	-90.00	-3,923.8	1,294.3	742.5	598.7	143.74	5.165	
11,900.0	7,500.0	11,927.4	7,500.0	74.2	77.0	-90.00	-4,023.6	1,294.3	735.5	588.3	147.18	4.997	
12,000.0	7,500.0	12,027.1	7,500.0	76.0	78.6	-90.00	-4,123.3	1,294.3	728.5	577.9	150.62	4.837	
12,100.0	7,500.0	12,126.9	7,500.0	77.7	80.3	-90.00	-4,223.1	1,294.3	721.6	567.5	154.07	4.683	
12,194.1	7,500.0	12,220.8	7,500.0	79.3	81.8	-90.00	-4,317.0	1,294.3	715.0	557.7	157.31	4.545	
12,200.0	7,500.0	12,226.6	7,500.0	79.4	81.9	-90.00	-4,322.9	1,294.3	714.6	557.1	157.51	4.537	
12,300.0	7,500.0	12,326.5	7,500.0	81.1	83.6	-90.00	-4,422.7	1,294.3	709.6	548.6	160.97	4.408	
12,387.3	7,500.0	12,413.8	7,500.0	82.6	85.0	-90.00	-4,510.1	1,294.3	708.0	544.0	163.99	4.318	
12,400.0	7,500.0	12,426.5	7,500.0	82.9	85.2	-90.00	-4,522.7	1,294.3	708.0	543.6	164.43	4.306	
12,500.0	7,500.0	12,526.5	7,500.0	84.6	86.9	-90.00	-4,622.7	1,294.3	707.8	539.9	167.89	4.216	
12,600.0	7,500.0	12,626.5	7,500.0	86.3	88.6	-90.00	-4,722.7	1,294.3	707.5	536.2	171.35	4.129	
12,700.0	7,500.0	12,726.5	7,500.0	88.0	90.3	-90.00	-4,822.7	1,294.3	707.3	532.5	174.81	4.046	
12,800.0	7,500.0	12,826.5	7,500.0	89.7	91.9	-90.00	-4,922.7	1,294.3	707.0	528.8	178.28	3.966	
12,900.0	7,500.0	12,926.5	7,500.0	91.5	93.6	-90.00	-5,022.7	1,294.3	706.8	525.1	181.75	3.889	
13,000.0	7,500.0	13,026.5	7,500.0	93.2	95.3	-90.00	-5,122.7	1,294.3	706.6	521.4	185.22	3.815	
13,100.0	7,500.0	13,126.5	7,500.0	94.9	97.0	-90.00	-5,222.7	1,294.3	706.3	517.7	188.69	3.743	
13,200.0	7,500.0	13,226.5	7,500.0	96.6	98.7	-90.00	-5,322.7	1,294.3	706.1	513.9	192.16	3.675	
13,300.0	7,500.0	13,326.5	7,500.0	98.4	100.4	-90.00	-5,422.7	1,294.3	705.9	510.2	195.63	3.608	
13,400.0	7,500.0	13,426.5	7,500.0	100.1	102.1	-90.00	-5,522.7	1,294.3	705.6	506.5	199.11	3.544	
13,500.0	7,500.0	13,526.5	7,500.0	101.8	103.8	-90.00	-5,622.7	1,294.3	705.4	502.8	202.58	3.482	
13,600.0	7,500.0	13,626.5	7,500.0	103.5	105.5	-90.00	-5,722.7	1,294.3	705.2	499.1	206.06	3.422	
13,700.0	7,500.0	13,726.5	7,500.0	105.3	107.2	-90.00	-5,822.7	1,294.3	704.9	495.4	209.54	3.364	
13,800.0	7,500.0	13,826.5	7,500.0	107.0	108.9	-90.00	-5,922.7	1,294.3	704.7	491.7	213.02	3.308	
13,900.0	7,500.0	13,926.5	7,500.0	108.7	110.6	-90.00	-6,022.7	1,294.3	704.4	487.9	216.50	3.254	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference				Offset			Semi Major Axis			Distance				Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,500.0	14,026.5	7,500.0	110.5	112.3	-90.00	-6,122.7	1,294.3	704.2	484.2	219.98	3.201		
14,100.0	7,500.0	14,126.5	7,500.0	112.2	114.0	-90.00	-6,222.7	1,294.3	704.0	480.5	223.46	3.150		
14,200.0	7,500.0	14,226.5	7,500.0	113.9	115.7	-90.00	-6,322.7	1,294.3	703.7	476.8	226.94	3.101		
14,300.0	7,500.0	14,326.5	7,500.0	115.7	117.4	-90.00	-6,422.7	1,294.3	703.5	473.1	230.42	3.053		
14,400.0	7,500.0	14,426.5	7,500.0	117.4	119.1	-90.00	-6,522.7	1,294.3	703.3	469.3	233.91	3.007		
14,500.0	7,500.0	14,526.5	7,500.0	119.1	120.8	-90.00	-6,622.7	1,294.3	703.0	465.6	237.39	2.961		
14,600.0	7,500.0	14,626.5	7,500.0	120.9	122.5	-90.00	-6,722.7	1,294.3	702.8	461.9	240.88	2.918		
14,700.0	7,500.0	14,726.5	7,500.0	122.6	124.2	-90.00	-6,822.7	1,294.3	702.5	458.2	244.36	2.875		
14,800.0	7,500.0	14,826.5	7,500.0	124.4	126.0	-90.00	-6,922.7	1,294.3	702.3	454.5	247.85	2.834		
14,900.0	7,500.0	14,926.5	7,500.0	126.1	127.7	-90.00	-7,022.7	1,294.3	702.1	450.7	251.34	2.793		
15,000.0	7,500.0	15,026.5	7,500.0	127.8	129.4	-90.00	-7,122.7	1,294.3	701.8	447.0	254.83	2.754		
15,100.0	7,500.0	15,126.5	7,500.0	129.6	131.1	-90.00	-7,222.7	1,294.3	701.6	443.3	258.31	2.716		
15,200.0	7,500.0	15,226.5	7,500.0	131.3	132.8	-90.00	-7,322.7	1,294.3	701.4	439.6	261.80	2.679		
15,300.0	7,500.0	15,326.5	7,500.0	133.1	134.5	-90.00	-7,422.7	1,294.3	701.1	435.8	265.29	2.643		
15,400.0	7,500.0	15,426.5	7,500.0	134.8	136.3	-90.00	-7,522.7	1,294.3	700.9	432.1	268.78	2.608		
15,500.0	7,500.0	15,526.5	7,500.0	136.5	138.0	-90.00	-7,622.7	1,294.3	700.6	428.4	272.27	2.573		
15,600.0	7,500.0	15,626.5	7,500.0	138.3	139.7	-90.00	-7,722.7	1,294.3	700.4	424.6	275.76	2.540		
15,700.0	7,500.0	15,726.5	7,500.0	140.0	141.4	-90.00	-7,822.7	1,294.3	700.2	420.9	279.25	2.507		
15,805.8	7,500.0	15,832.2	7,500.0	141.9	143.3	-90.00	-7,928.5	1,294.3	699.9	417.0	282.95	2.474 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.91	-0.4	22.7	22.7					
100.0	100.0	100.0	100.0	0.2	0.2	90.91	-0.4	22.7	22.7	22.4	0.30	74.659		
187.1	187.1	187.1	187.1	0.3	0.3	90.00	0.0	22.7	22.7	22.1	0.61	37.270 CC		
200.0	200.0	200.0	200.0	0.3	0.3	89.26	0.3	22.7	22.7	22.0	0.65	34.691 ES		
300.0	300.0	299.7	299.6	0.5	0.5	76.53	5.4	22.7	23.3	22.3	1.02	22.872		
400.0	400.0	399.0	398.6	0.7	0.7	62.52	12.4	23.8	26.9	25.5	1.38	19.450		
500.0	500.0	498.3	497.6	0.8	0.9	53.99	19.4	26.7	33.1	31.4	1.73	19.101		
600.0	600.0	597.5	596.5	1.0	1.2	10.50	26.5	31.3	40.3	38.2	2.08	19.399		
700.0	700.0	696.7	695.2	1.2	1.4	9.38	33.6	37.6	47.2	44.7	2.42	19.511		
800.0	799.9	795.8	793.7	1.4	1.6	10.00	40.7	45.6	53.7	50.9	2.76	19.452		
900.0	899.7	894.8	892.0	1.6	1.9	11.81	47.9	55.3	59.9	56.8	3.11	19.282		
1,000.0	999.4	993.7	990.0	1.8	2.2	14.48	55.0	66.6	65.8	62.4	3.45	19.058		
1,100.0	1,098.9	1,092.4	1,087.6	2.0	2.5	17.83	62.3	79.7	71.7	67.9	3.81	18.818		
1,201.3	1,199.5	1,192.3	1,186.0	2.2	2.8	21.74	69.6	94.6	77.8	73.6	4.19	18.583		
1,300.0	1,297.5	1,289.3	1,281.4	2.5	3.1	25.71	76.8	110.7	84.8	80.2	4.57	18.559		
1,400.0	1,396.8	1,387.3	1,377.5	2.7	3.5	29.44	84.0	128.7	93.8	88.8	4.97	18.870		
1,500.0	1,496.0	1,484.9	1,472.9	3.0	3.9	32.76	91.3	148.2	104.8	99.4	5.39	19.447		
1,600.0	1,595.3	1,582.1	1,567.5	3.3	4.3	35.63	98.5	169.2	117.8	111.9	5.82	20.231		
1,700.0	1,694.5	1,680.0	1,662.5	3.5	4.7	38.07	105.9	191.7	132.3	126.0	6.27	21.103		
1,800.0	1,793.8	1,778.8	1,758.3	3.8	5.2	40.04	113.3	214.6	147.2	140.5	6.73	21.866		
1,900.0	1,893.0	1,877.6	1,854.1	4.0	5.6	41.66	120.7	237.5	162.3	155.1	7.20	22.534		
2,000.0	1,992.3	1,976.3	1,949.8	4.3	6.1	43.00	128.1	260.4	177.4	169.8	7.67	23.121		
2,100.0	2,091.5	2,075.1	2,045.6	4.6	6.5	44.12	135.4	283.3	192.7	184.5	8.15	23.641		
2,200.0	2,190.8	2,173.9	2,141.4	4.8	6.9	45.09	142.8	306.2	208.0	199.3	8.63	24.103		
2,300.0	2,290.0	2,272.6	2,237.2	5.1	7.4	45.92	150.2	329.1	223.3	214.2	9.11	24.515		
2,400.0	2,389.3	2,371.4	2,333.0	5.4	7.9	46.64	157.6	352.0	238.7	229.1	9.59	24.886		
2,500.0	2,488.5	2,470.2	2,428.8	5.7	8.3	47.28	165.0	374.9	254.1	244.0	10.08	25.220		
2,600.0	2,587.8	2,568.9	2,524.6	5.9	8.8	47.84	172.4	397.8	269.6	259.0	10.56	25.523		
2,700.0	2,687.0	2,667.7	2,620.4	6.2	9.2	48.34	179.8	420.7	285.0	274.0	11.05	25.798		
2,800.0	2,786.3	2,766.5	2,716.2	6.5	9.7	48.79	187.2	443.6	300.5	289.0	11.54	26.050		
2,900.0	2,885.5	2,865.2	2,812.0	6.7	10.1	49.20	194.6	466.5	316.0	304.0	12.03	26.280		
3,000.0	2,984.8	2,964.0	2,907.8	7.0	10.6	49.57	202.0	489.3	331.5	319.0	12.51	26.492		
3,100.0	3,084.0	3,062.8	3,003.6	7.3	11.1	49.90	209.4	512.2	347.1	334.1	13.01	26.688		
3,200.0	3,183.3	3,161.5	3,099.4	7.6	11.5	50.21	216.8	535.1	362.6	349.1	13.50	26.869		
3,300.0	3,282.5	3,260.3	3,195.1	7.8	12.0	50.49	224.2	558.0	378.2	364.2	13.99	27.036		
3,400.0	3,381.8	3,359.1	3,290.9	8.1	12.4	50.75	231.6	580.9	393.7	379.3	14.48	27.192		
3,500.0	3,481.1	3,457.8	3,386.7	8.4	12.9	50.99	239.0	603.8	409.3	394.3	14.97	27.338		
3,600.0	3,580.3	3,556.6	3,482.5	8.7	13.4	51.21	246.3	626.7	424.9	409.4	15.46	27.474		
3,700.0	3,679.6	3,655.4	3,578.3	8.9	13.8	51.42	253.7	649.6	440.5	424.5	15.96	27.601		
3,800.0	3,778.8	3,754.1	3,674.1	9.2	14.3	51.61	261.1	672.5	456.0	439.6	16.45	27.720		
3,900.0	3,878.1	3,852.9	3,769.9	9.5	14.7	51.79	268.5	695.4	471.6	454.7	16.95	27.832		
4,000.0	3,977.3	3,951.7	3,865.7	9.8	15.2	51.96	275.9	718.3	487.2	469.8	17.44	27.938		
4,100.0	4,076.6	4,050.4	3,961.5	10.0	15.7	52.12	283.3	741.2	502.8	484.9	17.93	28.038		
4,200.0	4,175.8	4,149.2	4,057.3	10.3	16.1	52.26	290.7	764.1	518.4	500.0	18.43	28.132		
4,300.0	4,275.1	4,248.0	4,153.1	10.6	16.6	52.40	298.1	787.0	534.0	515.1	18.92	28.221		
4,400.0	4,374.3	4,346.7	4,248.9	10.9	17.0	52.53	305.5	809.9	549.6	530.2	19.42	28.305		
4,500.0	4,473.6	4,445.5	4,344.6	11.1	17.5	52.66	312.9	832.8	565.2	545.3	19.91	28.385		
4,600.0	4,572.8	4,544.3	4,440.4	11.4	18.0	52.78	320.3	855.7	580.8	560.4	20.41	28.461		
4,700.0	4,672.1	4,643.0	4,536.2	11.7	18.4	52.89	327.7	878.6	596.5	575.6	20.90	28.534		
4,800.0	4,771.3	4,741.8	4,632.0	12.0	18.9	52.99	335.1	901.4	612.1	590.7	21.40	28.603		
4,900.0	4,870.6	4,840.6	4,727.8	12.2	19.4	53.09	342.5	924.3	627.7	605.8	21.89	28.668		
5,000.0	4,969.8	4,939.3	4,823.6	12.5	19.8	53.19	349.9	947.2	643.3	620.9	22.39	28.731		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,069.1	5,038.1	4,919.4	12.8	20.3	53.28	357.3	970.1	658.9	636.0	22.89	28.791	
5,200.0	5,168.3	5,136.9	5,015.2	13.1	20.7	53.37	364.6	993.0	674.6	651.2	23.38	28.848	
5,300.0	5,267.6	5,235.6	5,111.0	13.3	21.2	53.45	372.0	1,015.9	690.2	666.3	23.88	28.903	
5,400.0	5,366.8	5,334.4	5,206.8	13.6	21.7	53.53	379.4	1,038.8	705.8	681.4	24.38	28.956	
5,500.0	5,466.1	5,433.2	5,302.6	13.9	22.1	53.61	386.8	1,061.7	721.4	696.6	24.87	29.006	
5,600.0	5,565.3	5,531.9	5,398.4	14.2	22.6	53.68	394.2	1,084.6	737.1	711.7	25.37	29.054	
5,700.0	5,664.6	5,630.7	5,494.2	14.4	23.1	53.75	401.6	1,107.5	752.7	726.8	25.86	29.101	
5,800.0	5,763.8	5,729.5	5,589.9	14.7	23.5	53.81	409.0	1,130.4	768.3	742.0	26.36	29.146	
5,900.0	5,863.1	5,828.3	5,685.7	15.0	24.0	53.88	416.4	1,153.3	784.0	757.1	26.86	29.189	
6,000.0	5,962.3	5,927.0	5,781.5	15.3	24.5	53.94	423.8	1,176.2	799.6	772.2	27.35	29.230	
6,100.0	6,061.6	6,025.8	5,877.3	15.5	24.9	54.00	431.2	1,199.1	815.2	787.4	27.85	29.270	
6,200.0	6,160.9	6,124.6	5,973.1	15.8	25.4	54.06	438.6	1,222.0	830.8	802.5	28.35	29.308	
6,300.0	6,260.1	6,223.3	6,068.9	16.1	25.8	54.11	446.0	1,244.9	846.5	817.6	28.85	29.345	
6,400.0	6,359.4	6,322.1	6,164.7	16.4	26.3	54.16	453.4	1,267.8	862.1	832.8	29.34	29.381	
6,500.0	6,458.6	6,420.9	6,260.5	16.6	26.8	54.22	460.8	1,290.6	877.8	847.9	29.84	29.416	
6,600.0	6,557.9	6,519.6	6,356.3	16.9	27.2	54.26	468.2	1,313.5	893.4	863.1	30.34	29.449	
6,700.0	6,657.1	6,618.4	6,452.1	17.2	27.7	54.31	475.6	1,336.4	909.0	878.2	30.83	29.481	
6,800.0	6,756.4	6,717.2	6,547.9	17.5	28.2	54.36	482.9	1,359.3	924.7	893.3	31.33	29.513	
6,900.0	6,855.6	6,815.9	6,643.7	17.7	28.6	54.40	490.3	1,382.2	940.3	908.5	31.83	29.543	
6,919.5	6,875.0	6,835.2	6,662.3	17.8	28.7	54.41	491.8	1,386.7	943.4	911.4	31.93	29.549	
6,950.0	6,905.3	6,865.3	6,691.6	17.9	28.9	32.27	494.0	1,393.7	948.1	916.0	32.04	29.589	
7,000.0	6,955.1	6,914.5	6,739.3	17.9	29.1	-25.51	497.7	1,405.1	955.5	923.4	32.10	29.763	
7,050.0	7,004.8	6,963.2	6,786.5	17.9	29.3	-54.33	501.4	1,416.4	962.6	930.6	32.02	30.059	
7,100.0	7,053.8	7,011.0	6,832.9	17.9	29.5	-65.17	504.9	1,427.5	969.5	937.7	31.81	30.480	
7,150.0	7,101.9	7,057.6	6,878.0	17.9	29.8	-70.64	508.4	1,438.2	976.2	944.7	31.46	31.030	
7,200.0	7,148.7	7,102.5	6,921.6	17.8	30.0	-74.06	511.8	1,448.7	982.9	951.9	30.99	31.713	
7,250.0	7,193.8	7,145.5	6,963.3	17.7	30.2	-76.54	515.0	1,458.6	989.8	959.4	30.43	32.529	
7,300.0	7,236.9	7,186.2	7,002.8	17.5	30.4	-78.46	518.1	1,468.1	997.1	967.3	29.79	33.475	
7,350.0	7,277.7	7,224.3	7,039.7	17.4	30.5	-80.01	520.9	1,476.9	1,005.1	976.0	29.10	34.541	
7,400.0	7,315.7	7,259.5	7,073.9	17.2	30.7	-81.25	523.5	1,485.1	1,013.9	985.5	28.40	35.702	
7,450.0	7,350.9	7,291.6	7,105.0	17.1	30.9	-82.17	525.9	1,492.5	1,023.8	996.1	27.73	36.922	
7,500.0	7,382.8	7,320.3	7,132.8	16.9	31.0	-82.77	528.1	1,499.1	1,035.0	1,007.9	27.13	38.143	
7,550.0	7,411.3	7,355.9	7,167.4	16.7	31.1	-83.51	530.1	1,507.4	1,047.6	1,020.9	26.69	39.244	
7,600.0	7,436.1	7,399.4	7,209.7	16.6	31.3	-84.44	529.7	1,517.5	1,061.3	1,034.9	26.45	40.128	
7,650.0	7,457.1	7,449.1	7,257.9	16.5	31.5	-85.48	525.1	1,529.0	1,076.1	1,049.7	26.40	40.758	
7,700.0	7,474.0	7,508.6	7,314.7	16.4	31.7	-86.79	514.0	1,542.6	1,091.7	1,065.2	26.55	41.123	
7,750.0	7,486.8	7,584.8	7,385.3	16.4	31.9	-88.65	491.1	1,559.5	1,108.0	1,081.1	26.85	41.271	
7,800.0	7,495.3	7,691.9	7,478.3	16.4	32.0	-91.54	443.1	1,581.7	1,124.2	1,097.0	27.19	41.343	
7,850.0	7,499.5	7,860.8	7,602.8	16.5	32.2	-96.04	333.9	1,611.5	1,139.0	1,111.7	27.36	41.629	
7,873.6	7,500.0	7,976.9	7,667.9	16.5	32.2	-98.62	239.3	1,627.0	1,144.6	1,117.3	27.30	41.921	
7,900.0	7,500.0	8,143.7	7,726.2	16.5	32.3	-101.41	84.3	1,640.9	1,148.7	1,121.5	27.22	42.204	
8,000.0	7,500.0	8,353.9	7,740.0	16.9	32.6	-102.05	-124.9	1,644.3	1,149.6	1,121.6	28.00	41.061	
8,100.0	7,500.0	8,453.9	7,740.0	17.4	32.8	-102.05	-224.9	1,644.3	1,149.6	1,120.4	29.15	39.439	
8,200.0	7,500.0	8,553.9	7,740.0	18.0	33.2	-102.05	-324.9	1,644.3	1,149.6	1,118.9	30.64	37.517	
8,300.0	7,500.0	8,653.9	7,740.0	18.8	33.6	-102.05	-424.9	1,644.3	1,149.6	1,117.2	32.43	35.447	
8,400.0	7,500.0	8,753.9	7,740.0	19.7	34.1	-102.05	-524.9	1,644.3	1,149.6	1,115.1	34.47	33.350	
8,500.0	7,500.0	8,853.9	7,740.0	20.7	34.7	-102.05	-624.9	1,644.3	1,149.6	1,112.9	36.72	31.309	
8,600.0	7,500.0	8,953.9	7,740.0	21.9	35.4	-102.05	-724.9	1,644.3	1,149.6	1,110.4	39.14	29.373	
8,700.0	7,500.0	9,053.9	7,740.0	23.1	36.1	-102.05	-824.9	1,644.3	1,149.6	1,107.9	41.70	27.568	
8,800.0	7,500.0	9,153.9	7,740.0	24.3	36.9	-102.05	-924.9	1,644.3	1,149.6	1,105.2	44.38	25.903	
8,900.0	7,500.0	9,253.9	7,740.0	25.6	37.8	-102.05	-1,024.9	1,644.3	1,149.6	1,102.4	47.16	24.378	
9,000.0	7,500.0	9,353.9	7,740.0	27.0	38.7	-102.05	-1,124.9	1,644.3	1,149.6	1,099.6	50.02	22.984	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
9,100.0	7,500.0	9,453.9	7,740.0	28.4	39.7	-102.05	-1,224.9	1,644.3	1,149.6	1,096.6	52.94	21.714	
9,200.0	7,500.0	9,553.9	7,740.0	29.9	40.7	-102.05	-1,324.9	1,644.3	1,149.6	1,093.7	55.93	20.555	
9,300.0	7,500.0	9,653.9	7,740.0	31.4	41.8	-102.05	-1,424.9	1,644.3	1,149.6	1,090.6	58.96	19.497	
9,400.0	7,500.0	9,753.9	7,740.0	32.9	42.9	-102.05	-1,524.9	1,644.3	1,149.6	1,087.5	62.04	18.531	
9,500.0	7,500.0	9,853.9	7,740.0	34.4	44.1	-102.05	-1,624.9	1,644.3	1,149.6	1,084.4	65.15	17.646	
9,600.0	7,500.0	9,953.9	7,740.0	36.0	45.3	-102.05	-1,724.9	1,644.3	1,149.6	1,081.3	68.29	16.835	
9,700.0	7,500.0	10,053.9	7,740.0	37.5	46.6	-102.05	-1,824.9	1,644.3	1,149.6	1,078.1	71.46	16.088	
9,800.0	7,500.0	10,153.9	7,740.0	39.1	47.8	-102.05	-1,924.9	1,644.3	1,149.6	1,074.9	74.65	15.400	
9,900.0	7,500.0	10,253.9	7,740.0	40.7	49.1	-102.05	-2,024.9	1,644.3	1,149.6	1,071.7	77.86	14.765	
10,000.0	7,500.0	10,353.9	7,740.0	42.3	50.5	-102.05	-2,124.9	1,644.3	1,149.6	1,068.5	81.09	14.177	
10,100.0	7,500.0	10,453.9	7,740.0	43.9	51.8	-102.05	-2,224.9	1,644.3	1,149.6	1,065.3	84.33	13.631	
10,200.0	7,500.0	10,553.9	7,740.0	45.6	53.2	-102.05	-2,324.9	1,644.3	1,149.6	1,062.0	87.59	13.124	
10,300.0	7,500.0	10,653.9	7,740.0	47.2	54.6	-102.05	-2,424.9	1,644.3	1,149.6	1,058.7	90.87	12.651	
10,400.0	7,500.0	10,753.9	7,740.0	48.9	56.1	-102.05	-2,524.9	1,644.3	1,149.6	1,055.4	94.15	12.210	
10,500.0	7,500.0	10,853.9	7,740.0	50.5	57.5	-102.05	-2,624.9	1,644.3	1,149.6	1,052.1	97.44	11.797	
10,600.0	7,500.0	10,953.9	7,740.0	52.2	59.0	-102.05	-2,724.9	1,644.3	1,149.6	1,048.8	100.75	11.410	
10,700.0	7,500.0	11,053.9	7,740.0	53.8	60.5	-102.05	-2,824.9	1,644.3	1,149.6	1,045.5	104.06	11.047	
10,800.0	7,500.0	11,153.9	7,740.0	55.5	62.0	-102.05	-2,924.9	1,644.3	1,149.6	1,042.2	107.38	10.706	
10,900.0	7,500.0	11,253.9	7,740.0	57.2	63.5	-102.05	-3,024.9	1,644.3	1,149.6	1,038.9	110.71	10.384	
11,000.0	7,500.0	11,353.9	7,740.0	58.9	65.0	-102.05	-3,124.9	1,644.3	1,149.6	1,035.5	114.04	10.081	
11,100.0	7,500.0	11,453.9	7,740.0	60.6	66.5	-102.05	-3,224.9	1,644.3	1,149.6	1,032.2	117.38	9.794	
11,200.0	7,500.0	11,553.9	7,740.0	62.3	68.1	-102.05	-3,324.9	1,644.3	1,149.6	1,028.9	120.72	9.523	
11,244.1	7,500.0	11,598.0	7,740.0	63.0	68.7	-102.05	-3,369.0	1,644.3	1,149.6	1,027.4	122.20	9.408	
11,300.0	7,500.0	11,653.9	7,740.0	64.0	69.6	-102.06	-3,424.9	1,644.3	1,149.1	1,025.0	124.06	9.262	
11,400.0	7,500.0	11,753.8	7,740.0	65.7	71.2	-102.11	-3,524.8	1,644.3	1,145.4	1,018.0	127.40	8.991	
11,444.1	7,500.0	11,797.9	7,740.0	66.4	71.9	-102.15	-3,568.8	1,644.3	1,142.8	1,013.9	128.86	8.868	
11,500.0	7,500.0	11,853.6	7,740.0	67.4	72.7	-102.19	-3,624.6	1,644.3	1,139.0	1,008.2	130.71	8.714	
11,600.0	7,500.0	11,953.4	7,740.0	69.1	74.3	-102.27	-3,724.3	1,644.3	1,132.1	998.1	134.03	8.447	
11,700.0	7,500.0	12,053.1	7,740.0	70.8	75.9	-102.34	-3,824.1	1,644.3	1,125.3	988.0	137.34	8.194	
11,800.0	7,500.0	12,152.9	7,740.0	72.5	77.5	-102.42	-3,923.8	1,644.3	1,118.5	977.8	140.66	7.952	
11,900.0	7,500.0	12,252.6	7,740.0	74.2	79.1	-102.50	-4,023.6	1,644.3	1,111.7	967.7	143.98	7.721	
12,000.0	7,500.0	12,352.4	7,740.0	76.0	80.7	-102.58	-4,123.3	1,644.3	1,104.9	957.6	147.29	7.501	
12,100.0	7,500.0	12,452.1	7,740.0	77.7	82.3	-102.65	-4,223.1	1,644.3	1,098.1	947.5	150.61	7.291	
12,194.1	7,500.0	12,546.0	7,740.0	79.3	83.8	-102.73	-4,317.0	1,644.3	1,091.7	937.9	153.73	7.101	
12,200.0	7,500.0	12,551.9	7,740.0	79.4	83.9	-102.73	-4,322.9	1,644.3	1,091.3	937.3	153.93	7.090	
12,300.0	7,500.0	12,651.8	7,740.0	81.1	85.5	-102.77	-4,422.7	1,644.3	1,086.4	929.1	157.26	6.908	
12,387.3	7,500.0	12,739.1	7,740.0	82.6	87.0	-102.78	-4,510.1	1,644.3	1,084.9	924.7	160.20	6.772	
12,400.0	7,500.0	12,751.7	7,740.0	82.9	87.2	-102.78	-4,522.7	1,644.3	1,084.8	924.2	160.62	6.754	
12,500.0	7,500.0	12,851.7	7,740.0	84.6	88.8	-102.78	-4,622.7	1,644.3	1,084.6	920.6	164.00	6.614	
12,600.0	7,500.0	12,951.7	7,740.0	86.3	90.4	-102.79	-4,722.7	1,644.3	1,084.4	917.0	167.37	6.479	
12,700.0	7,500.0	13,051.7	7,740.0	88.0	92.1	-102.79	-4,822.7	1,644.3	1,084.1	913.4	170.75	6.349	
12,800.0	7,500.0	13,151.7	7,740.0	89.7	93.7	-102.79	-4,922.7	1,644.3	1,083.9	909.8	174.13	6.225	
12,900.0	7,500.0	13,251.7	7,740.0	91.5	95.4	-102.80	-5,022.7	1,644.3	1,083.7	906.2	177.51	6.105	
13,000.0	7,500.0	13,351.7	7,740.0	93.2	97.0	-102.80	-5,122.7	1,644.3	1,083.5	902.6	180.89	5.989	
13,100.0	7,500.0	13,451.7	7,740.0	94.9	98.7	-102.80	-5,222.7	1,644.3	1,083.2	898.9	184.28	5.878	
13,200.0	7,500.0	13,551.7	7,740.0	96.6	100.4	-102.80	-5,322.7	1,644.3	1,083.0	895.3	187.66	5.771	
13,300.0	7,500.0	13,651.7	7,740.0	98.4	102.0	-102.81	-5,422.7	1,644.3	1,082.8	891.7	191.05	5.668	
13,400.0	7,500.0	13,751.7	7,740.0	100.1	103.7	-102.81	-5,522.7	1,644.3	1,082.5	888.1	194.43	5.568	
13,500.0	7,500.0	13,851.7	7,740.0	101.8	105.4	-102.81	-5,622.7	1,644.3	1,082.3	884.5	197.82	5.471	
13,600.0	7,500.0	13,951.7	7,740.0	103.5	107.0	-102.81	-5,722.7	1,644.3	1,082.1	880.9	201.21	5.378	
13,700.0	7,500.0	14,051.7	7,740.0	105.3	108.7	-102.82	-5,822.7	1,644.3	1,081.8	877.2	204.60	5.288	
13,800.0	7,500.0	14,151.7	7,740.0	107.0	110.4	-102.82	-5,922.7	1,644.3	1,081.6	873.6	207.99	5.200	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,500.0	14,251.7	7,740.0	108.7	112.1	-102.82	-6,022.7	1,644.3	1,081.4	870.0	211.38	5.116		
14,000.0	7,500.0	14,351.7	7,740.0	110.5	113.8	-102.83	-6,122.7	1,644.3	1,081.1	866.4	214.77	5.034		
14,100.0	7,500.0	14,451.7	7,740.0	112.2	115.4	-102.83	-6,222.7	1,644.3	1,080.9	862.7	218.17	4.955		
14,200.0	7,500.0	14,551.7	7,740.0	113.9	117.1	-102.83	-6,322.7	1,644.3	1,080.7	859.1	221.56	4.878		
14,300.0	7,500.0	14,651.7	7,740.0	115.7	118.8	-102.83	-6,422.7	1,644.3	1,080.4	855.5	224.95	4.803		
14,400.0	7,500.0	14,751.7	7,740.0	117.4	120.5	-102.84	-6,522.7	1,644.3	1,080.2	851.9	228.35	4.731		
14,500.0	7,500.0	14,851.7	7,740.0	119.1	122.2	-102.84	-6,622.7	1,644.3	1,080.0	848.2	231.74	4.660		
14,600.0	7,500.0	14,951.7	7,740.0	120.9	123.9	-102.84	-6,722.7	1,644.3	1,079.8	844.6	235.14	4.592		
14,700.0	7,500.0	15,051.7	7,740.0	122.6	125.6	-102.85	-6,822.7	1,644.3	1,079.5	841.0	238.54	4.526		
14,800.0	7,500.0	15,151.7	7,740.0	124.4	127.3	-102.85	-6,922.7	1,644.3	1,079.3	837.4	241.94	4.461		
14,900.0	7,500.0	15,251.7	7,740.0	126.1	129.0	-102.85	-7,022.7	1,644.3	1,079.1	833.7	245.33	4.398		
15,000.0	7,500.0	15,351.7	7,740.0	127.8	130.7	-102.85	-7,122.7	1,644.3	1,078.8	830.1	248.73	4.337		
15,100.0	7,500.0	15,451.7	7,740.0	129.6	132.4	-102.86	-7,222.7	1,644.3	1,078.6	826.5	252.13	4.278		
15,200.0	7,500.0	15,551.7	7,740.0	131.3	134.1	-102.86	-7,322.7	1,644.3	1,078.4	822.8	255.53	4.220		
15,300.0	7,500.0	15,651.7	7,740.0	133.1	135.8	-102.86	-7,422.7	1,644.3	1,078.1	819.2	258.93	4.164		
15,400.0	7,500.0	15,751.7	7,740.0	134.8	137.5	-102.87	-7,522.7	1,644.3	1,077.9	815.6	262.33	4.109		
15,500.0	7,500.0	15,851.7	7,740.0	136.5	139.2	-102.87	-7,622.7	1,644.3	1,077.7	811.9	265.73	4.056		
15,600.0	7,500.0	15,951.7	7,740.0	138.3	140.9	-102.87	-7,722.7	1,644.3	1,077.4	808.3	269.13	4.003		
15,700.0	7,500.0	16,051.7	7,740.0	140.0	142.6	-102.87	-7,822.7	1,644.3	1,077.2	804.7	272.53	3.953		
15,805.8	7,500.0	16,157.5	7,740.0	141.9	144.4	-102.88	-7,928.5	1,644.3	1,077.0	800.8	276.13	3.900 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2D-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2D-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 5007.0ft (Unassigned)

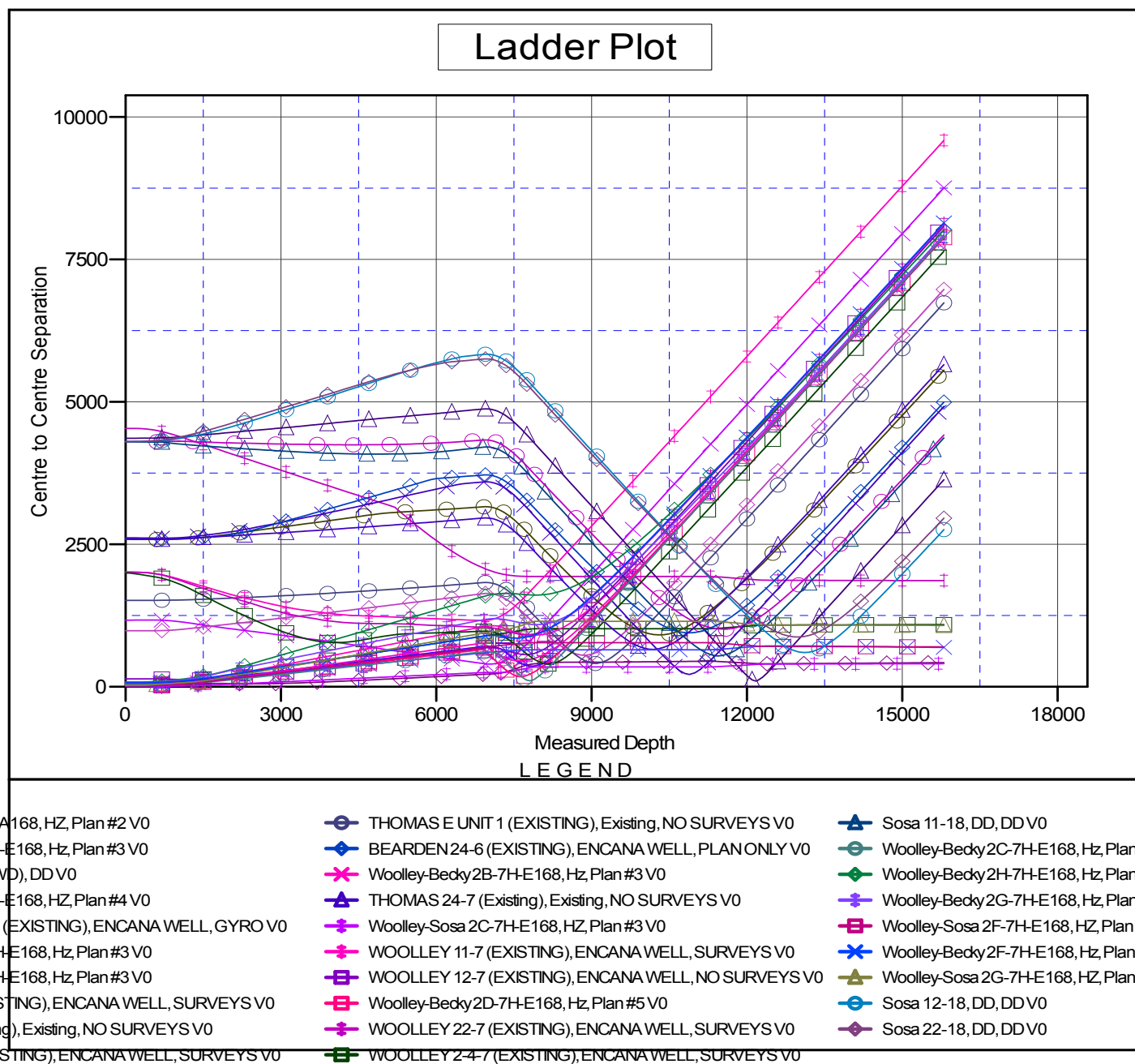
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Woolley-Sosa 2D-7H-E168

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.29°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation