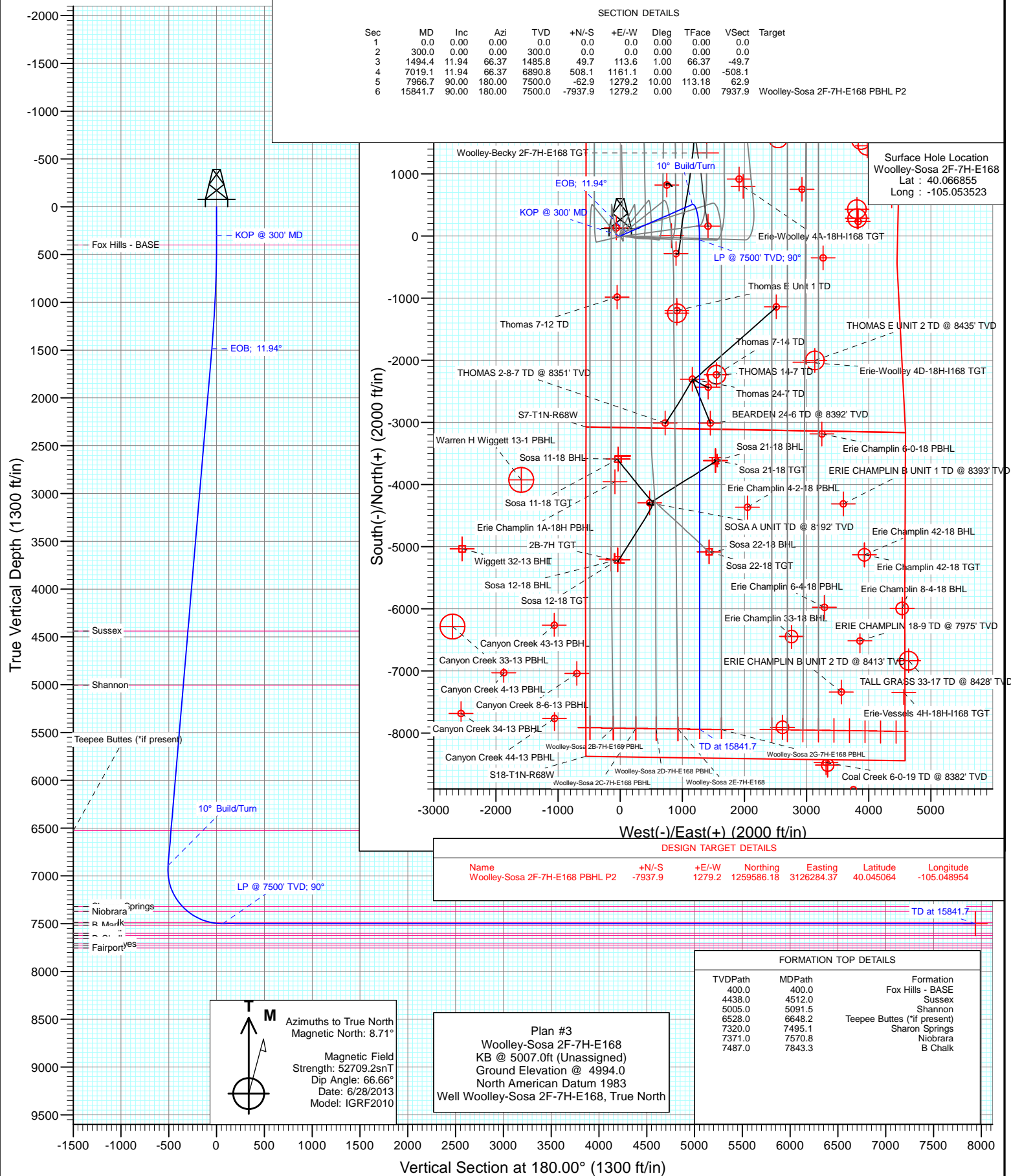




Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)
Well: Woolley-Sosa 2F-7H-E168
Wellbore: HZ
Design: Plan #3



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 2F-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,517.56 ft	Latitude:	40.066855
	+E/-W	0.0 ft	Easting:	3,124,965.24 ft	Longitude:	-105.053523
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) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,494.4	11.94	66.37	1,485.8	49.7	113.6	1.00	1.00	0.00	66.37	
7,019.1	11.94	66.37	6,890.8	508.1	1,161.1	0.00	0.00	0.00	0.00	
7,966.7	90.00	180.00	7,500.0	-62.9	1,279.2	10.00	8.24	11.99	113.18	
15,841.7	90.00	180.00	7,500.0	-7,937.9	1,279.2	0.00	0.00	0.00	0.00	Woolley-Sosa 2F-7H-

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	KOP @ 300' MD
400.0	1.00	66.37	400.0	0.3	0.8	-0.3	1.00	1.00	Fox Hills - BASE
500.0	2.00	66.37	500.0	1.4	3.2	-1.4	1.00	1.00	
600.0	3.00	66.37	599.9	3.1	7.2	-3.1	1.00	1.00	
700.0	4.00	66.37	699.7	5.6	12.8	-5.6	1.00	1.00	
800.0	5.00	66.37	799.4	8.7	20.0	-8.7	1.00	1.00	
900.0	6.00	66.37	898.9	12.6	28.8	-12.6	1.00	1.00	
1,000.0	7.00	66.37	998.3	17.1	39.1	-17.1	1.00	1.00	
1,100.0	8.00	66.37	1,097.4	22.4	51.1	-22.4	1.00	1.00	
1,200.0	9.00	66.37	1,196.3	28.3	64.6	-28.3	1.00	1.00	
1,300.0	10.00	66.37	1,294.9	34.9	79.7	-34.9	1.00	1.00	
1,400.0	11.00	66.37	1,393.3	42.2	96.4	-42.2	1.00	1.00	
1,494.4	11.94	66.37	1,485.8	49.7	113.6	-49.7	1.00	1.00	EOB; 11.94°
1,500.0	11.94	66.37	1,491.2	50.2	114.7	-50.2	0.00	0.00	
1,600.0	11.94	66.37	1,589.1	58.5	133.7	-58.5	0.00	0.00	
1,700.0	11.94	66.37	1,686.9	66.8	152.6	-66.8	0.00	0.00	
1,800.0	11.94	66.37	1,784.8	75.1	171.6	-75.1	0.00	0.00	
1,900.0	11.94	66.37	1,882.6	83.4	190.5	-83.4	0.00	0.00	
2,000.0	11.94	66.37	1,980.4	91.7	209.5	-91.7	0.00	0.00	
2,100.0	11.94	66.37	2,078.3	100.0	228.5	-100.0	0.00	0.00	
2,200.0	11.94	66.37	2,176.1	108.3	247.4	-108.3	0.00	0.00	
2,300.0	11.94	66.37	2,273.9	116.6	266.4	-116.6	0.00	0.00	
2,400.0	11.94	66.37	2,371.8	124.9	285.3	-124.9	0.00	0.00	
2,500.0	11.94	66.37	2,469.6	133.2	304.3	-133.2	0.00	0.00	
2,600.0	11.94	66.37	2,567.4	141.4	323.3	-141.4	0.00	0.00	
2,700.0	11.94	66.37	2,665.3	149.7	342.2	-149.7	0.00	0.00	
2,800.0	11.94	66.37	2,763.1	158.0	361.2	-158.0	0.00	0.00	
2,900.0	11.94	66.37	2,860.9	166.3	380.1	-166.3	0.00	0.00	
3,000.0	11.94	66.37	2,958.8	174.6	399.1	-174.6	0.00	0.00	
3,100.0	11.94	66.37	3,056.6	182.9	418.1	-182.9	0.00	0.00	
3,200.0	11.94	66.37	3,154.4	191.2	437.0	-191.2	0.00	0.00	
3,300.0	11.94	66.37	3,252.3	199.5	456.0	-199.5	0.00	0.00	
3,400.0	11.94	66.37	3,350.1	207.8	474.9	-207.8	0.00	0.00	
3,500.0	11.94	66.37	3,447.9	216.1	493.9	-216.1	0.00	0.00	
3,600.0	11.94	66.37	3,545.8	224.4	512.9	-224.4	0.00	0.00	
3,700.0	11.94	66.37	3,643.6	232.7	531.8	-232.7	0.00	0.00	
3,800.0	11.94	66.37	3,741.5	241.0	550.8	-241.0	0.00	0.00	
3,900.0	11.94	66.37	3,839.3	249.3	569.7	-249.3	0.00	0.00	
4,000.0	11.94	66.37	3,937.1	257.6	588.7	-257.6	0.00	0.00	
4,100.0	11.94	66.37	4,035.0	265.9	607.7	-265.9	0.00	0.00	
4,200.0	11.94	66.37	4,132.8	274.2	626.6	-274.2	0.00	0.00	
4,300.0	11.94	66.37	4,230.6	282.5	645.6	-282.5	0.00	0.00	
4,400.0	11.94	66.37	4,328.5	290.8	664.5	-290.8	0.00	0.00	
4,500.0	11.94	66.37	4,426.3	299.1	683.5	-299.1	0.00	0.00	
4,512.0	11.94	66.37	4,438.0	300.1	685.8	-300.1	0.00	0.00	Sussex
4,600.0	11.94	66.37	4,524.1	307.4	702.5	-307.4	0.00	0.00	
4,700.0	11.94	66.37	4,622.0	315.7	721.4	-315.7	0.00	0.00	
4,800.0	11.94	66.37	4,719.8	324.0	740.4	-324.0	0.00	0.00	
4,900.0	11.94	66.37	4,817.6	332.3	759.3	-332.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	11.94	66.37	4,915.5	340.6	778.3	-340.6	0.00	0.00	
5,091.5	11.94	66.37	5,005.0	348.2	795.7	-348.2	0.00	0.00	Shannon
5,100.0	11.94	66.37	5,013.3	348.9	797.3	-348.9	0.00	0.00	
5,200.0	11.94	66.37	5,111.1	357.2	816.2	-357.2	0.00	0.00	
5,300.0	11.94	66.37	5,209.0	365.4	835.2	-365.4	0.00	0.00	
5,400.0	11.94	66.37	5,306.8	373.7	854.1	-373.7	0.00	0.00	
5,500.0	11.94	66.37	5,404.6	382.0	873.1	-382.0	0.00	0.00	
5,600.0	11.94	66.37	5,502.5	390.3	892.1	-390.3	0.00	0.00	
5,700.0	11.94	66.37	5,600.3	398.6	911.0	-398.6	0.00	0.00	
5,800.0	11.94	66.37	5,698.2	406.9	930.0	-406.9	0.00	0.00	
5,900.0	11.94	66.37	5,796.0	415.2	948.9	-415.2	0.00	0.00	
6,000.0	11.94	66.37	5,893.8	423.5	967.9	-423.5	0.00	0.00	
6,100.0	11.94	66.37	5,991.7	431.8	986.9	-431.8	0.00	0.00	
6,200.0	11.94	66.37	6,089.5	440.1	1,005.8	-440.1	0.00	0.00	
6,300.0	11.94	66.37	6,187.3	448.4	1,024.8	-448.4	0.00	0.00	
6,400.0	11.94	66.37	6,285.2	456.7	1,043.7	-456.7	0.00	0.00	
6,500.0	11.94	66.37	6,383.0	465.0	1,062.7	-465.0	0.00	0.00	
6,600.0	11.94	66.37	6,480.8	473.3	1,081.7	-473.3	0.00	0.00	
6,648.2	11.94	66.37	6,528.0	477.3	1,090.8	-477.3	0.00	0.00	Teepee Buttes (*if present)
6,700.0	11.94	66.37	6,578.7	481.6	1,100.6	-481.6	0.00	0.00	
6,800.0	11.94	66.37	6,676.5	489.9	1,119.6	-489.9	0.00	0.00	
6,900.0	11.94	66.37	6,774.3	498.2	1,138.5	-498.2	0.00	0.00	
7,000.0	11.94	66.37	6,872.2	506.5	1,157.5	-506.5	0.00	0.00	
7,019.1	11.94	66.37	6,890.9	508.1	1,161.1	-508.1	0.00	0.00	10° Build/Turn
7,100.0	11.46	107.02	6,970.2	509.1	1,176.5	-509.1	10.00	-0.60	
7,200.0	17.20	141.24	7,067.2	494.6	1,195.3	-494.6	10.00	5.74	
7,300.0	25.65	156.20	7,160.3	463.2	1,213.3	-463.2	10.00	8.45	
7,400.0	34.89	163.87	7,246.6	415.8	1,230.1	-415.8	10.00	9.24	
7,495.1	43.96	168.41	7,320.0	357.2	1,244.3	-357.2	10.00	9.53	Sharon Springs
7,500.0	44.43	168.60	7,323.5	353.8	1,245.0	-353.8	10.00	9.62	
7,570.8	51.27	171.06	7,371.0	302.2	1,254.2	-302.2	10.00	9.66	Niobrara
7,600.0	54.11	171.94	7,388.7	279.2	1,257.6	-279.2	10.00	9.71	
7,700.0	63.86	174.54	7,440.2	194.2	1,267.6	-194.2	10.00	9.75	
7,800.0	73.65	176.74	7,476.4	101.4	1,274.6	-101.4	10.00	9.79	
7,843.3	77.89	177.62	7,487.0	59.6	1,276.7	-59.6	10.00	9.81	B Chalk
7,900.0	83.46	178.73	7,496.2	3.6	1,278.4	-3.6	10.00	9.81	
7,966.7	90.00	180.00	7,500.0	-62.9	1,279.2	62.9	10.00	9.81	LP @ 7500' TVD; 90°
8,000.0	90.00	180.00	7,500.0	-96.2	1,279.2	96.2	0.00	0.00	
8,100.0	90.00	180.00	7,500.0	-196.2	1,279.2	196.2	0.00	0.00	
8,200.0	90.00	180.00	7,500.0	-296.2	1,279.2	296.2	0.00	0.00	
8,300.0	90.00	180.00	7,500.0	-396.2	1,279.2	396.2	0.00	0.00	
8,400.0	90.00	180.00	7,500.0	-496.2	1,279.2	496.2	0.00	0.00	
8,500.0	90.00	180.00	7,500.0	-596.2	1,279.2	596.2	0.00	0.00	
8,600.0	90.00	180.00	7,500.0	-696.2	1,279.2	696.2	0.00	0.00	
8,700.0	90.00	180.00	7,500.0	-796.2	1,279.2	796.2	0.00	0.00	
8,800.0	90.00	180.00	7,500.0	-896.2	1,279.2	896.2	0.00	0.00	
8,900.0	90.00	180.00	7,500.0	-996.2	1,279.2	996.2	0.00	0.00	
9,000.0	90.00	180.00	7,500.0	-1,096.2	1,279.2	1,096.2	0.00	0.00	
9,100.0	90.00	180.00	7,500.0	-1,196.2	1,279.2	1,196.2	0.00	0.00	
9,200.0	90.00	180.00	7,500.0	-1,296.2	1,279.2	1,296.2	0.00	0.00	
9,300.0	90.00	180.00	7,500.0	-1,396.2	1,279.2	1,396.2	0.00	0.00	
9,400.0	90.00	180.00	7,500.0	-1,496.2	1,279.2	1,496.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	-1,596.2	1,279.2	1,596.2	0.00	0.00	
9,600.0	90.00	180.00	7,500.0	-1,696.2	1,279.2	1,696.2	0.00	0.00	
9,700.0	90.00	180.00	7,500.0	-1,796.2	1,279.2	1,796.2	0.00	0.00	
9,800.0	90.00	180.00	7,500.0	-1,896.2	1,279.2	1,896.2	0.00	0.00	
9,900.0	90.00	180.00	7,500.0	-1,996.2	1,279.2	1,996.2	0.00	0.00	
10,000.0	90.00	180.00	7,500.0	-2,096.2	1,279.2	2,096.2	0.00	0.00	
10,100.0	90.00	180.00	7,500.0	-2,196.2	1,279.2	2,196.2	0.00	0.00	
10,200.0	90.00	180.00	7,500.0	-2,296.2	1,279.2	2,296.2	0.00	0.00	
10,300.0	90.00	180.00	7,500.0	-2,396.2	1,279.2	2,396.2	0.00	0.00	
10,400.0	90.00	180.00	7,500.0	-2,496.2	1,279.2	2,496.2	0.00	0.00	
10,500.0	90.00	180.00	7,500.0	-2,596.2	1,279.2	2,596.2	0.00	0.00	
10,600.0	90.00	180.00	7,500.0	-2,696.2	1,279.2	2,696.2	0.00	0.00	
10,700.0	90.00	180.00	7,500.0	-2,796.2	1,279.2	2,796.2	0.00	0.00	
10,800.0	90.00	180.00	7,500.0	-2,896.2	1,279.2	2,896.2	0.00	0.00	
10,900.0	90.00	180.00	7,500.0	-2,996.2	1,279.2	2,996.2	0.00	0.00	
11,000.0	90.00	180.00	7,500.0	-3,096.2	1,279.2	3,096.2	0.00	0.00	
11,100.0	90.00	180.00	7,500.0	-3,196.2	1,279.2	3,196.2	0.00	0.00	
11,200.0	90.00	180.00	7,500.0	-3,296.2	1,279.2	3,296.2	0.00	0.00	
11,300.0	90.00	180.00	7,500.0	-3,396.2	1,279.2	3,396.2	0.00	0.00	
11,400.0	90.00	180.00	7,500.0	-3,496.2	1,279.2	3,496.2	0.00	0.00	
11,500.0	90.00	180.00	7,500.0	-3,596.2	1,279.2	3,596.2	0.00	0.00	
11,600.0	90.00	180.00	7,500.0	-3,696.2	1,279.2	3,696.2	0.00	0.00	
11,700.0	90.00	180.00	7,500.0	-3,796.2	1,279.2	3,796.2	0.00	0.00	
11,800.0	90.00	180.00	7,500.0	-3,896.2	1,279.2	3,896.2	0.00	0.00	
11,900.0	90.00	180.00	7,500.0	-3,996.2	1,279.2	3,996.2	0.00	0.00	
12,000.0	90.00	180.00	7,500.0	-4,096.2	1,279.2	4,096.2	0.00	0.00	
12,100.0	90.00	180.00	7,500.0	-4,196.2	1,279.2	4,196.2	0.00	0.00	
12,200.0	90.00	180.00	7,500.0	-4,296.2	1,279.2	4,296.2	0.00	0.00	
12,300.0	90.00	180.00	7,500.0	-4,396.2	1,279.2	4,396.2	0.00	0.00	
12,400.0	90.00	180.00	7,500.0	-4,496.2	1,279.2	4,496.2	0.00	0.00	
12,500.0	90.00	180.00	7,500.0	-4,596.2	1,279.2	4,596.2	0.00	0.00	
12,600.0	90.00	180.00	7,500.0	-4,696.2	1,279.2	4,696.2	0.00	0.00	
12,700.0	90.00	180.00	7,500.0	-4,796.2	1,279.2	4,796.2	0.00	0.00	
12,800.0	90.00	180.00	7,500.0	-4,896.2	1,279.2	4,896.2	0.00	0.00	
12,900.0	90.00	180.00	7,500.0	-4,996.2	1,279.2	4,996.2	0.00	0.00	
13,000.0	90.00	180.00	7,500.0	-5,096.2	1,279.2	5,096.2	0.00	0.00	
13,100.0	90.00	180.00	7,500.0	-5,196.2	1,279.2	5,196.2	0.00	0.00	
13,200.0	90.00	180.00	7,500.0	-5,296.2	1,279.2	5,296.2	0.00	0.00	
13,300.0	90.00	180.00	7,500.0	-5,396.2	1,279.2	5,396.2	0.00	0.00	
13,400.0	90.00	180.00	7,500.0	-5,496.2	1,279.2	5,496.2	0.00	0.00	
13,500.0	90.00	180.00	7,500.0	-5,596.2	1,279.2	5,596.2	0.00	0.00	
13,600.0	90.00	180.00	7,500.0	-5,696.2	1,279.2	5,696.2	0.00	0.00	
13,700.0	90.00	180.00	7,500.0	-5,796.2	1,279.2	5,796.2	0.00	0.00	
13,800.0	90.00	180.00	7,500.0	-5,896.2	1,279.2	5,896.2	0.00	0.00	
13,900.0	90.00	180.00	7,500.0	-5,996.2	1,279.2	5,996.2	0.00	0.00	
14,000.0	90.00	180.00	7,500.0	-6,096.2	1,279.2	6,096.2	0.00	0.00	
14,100.0	90.00	180.00	7,500.0	-6,196.2	1,279.2	6,196.2	0.00	0.00	
14,200.0	90.00	180.00	7,500.0	-6,296.2	1,279.2	6,296.2	0.00	0.00	
14,300.0	90.00	180.00	7,500.0	-6,396.2	1,279.2	6,396.2	0.00	0.00	
14,400.0	90.00	180.00	7,500.0	-6,496.2	1,279.2	6,496.2	0.00	0.00	
14,500.0	90.00	180.00	7,500.0	-6,596.2	1,279.2	6,596.2	0.00	0.00	
14,600.0	90.00	180.00	7,500.0	-6,696.2	1,279.2	6,696.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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
14,700.0	90.00	180.00	7,500.0	-6,796.2	1,279.2	6,796.2	0.00	0.00	
14,800.0	90.00	180.00	7,500.0	-6,896.2	1,279.2	6,896.2	0.00	0.00	
14,900.0	90.00	180.00	7,500.0	-6,996.2	1,279.2	6,996.2	0.00	0.00	
15,000.0	90.00	180.00	7,500.0	-7,096.2	1,279.2	7,096.2	0.00	0.00	
15,100.0	90.00	180.00	7,500.0	-7,196.2	1,279.2	7,196.2	0.00	0.00	
15,200.0	90.00	180.00	7,500.0	-7,296.2	1,279.2	7,296.2	0.00	0.00	
15,300.0	90.00	180.00	7,500.0	-7,396.2	1,279.2	7,396.2	0.00	0.00	
15,400.0	90.00	180.00	7,500.0	-7,496.2	1,279.2	7,496.2	0.00	0.00	
15,500.0	90.00	180.00	7,500.0	-7,596.2	1,279.2	7,596.2	0.00	0.00	
15,600.0	90.00	180.00	7,500.0	-7,696.2	1,279.2	7,696.2	0.00	0.00	
15,700.0	90.00	180.00	7,500.0	-7,796.2	1,279.2	7,796.2	0.00	0.00	
15,800.0	90.00	180.00	7,500.0	-7,896.2	1,279.2	7,896.2	0.00	0.00	
15,841.7	90.00	180.00	7,500.0	-7,937.9	1,279.2	7,937.9	0.00	0.00	TD at 15841.7

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Woolley-Sosa 2F-7H-E1 - plan misses target center by 247.0ft at 15841.7ft MD (7500.0 TVD, -7937.9 N, 1279.2 E) - Point	0.00	0.00	7,747.0	-7,939.4	1,280.3	1,259,584.73	3,126,285.49	40.045060	-105.048950
Woolley-Sosa 2F-7H-E1 - plan hits target center - Point	0.00	0.00	7,500.0	-7,937.9	1,279.2	1,259,586.18	3,126,284.37	40.045064	-105.048954

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
400.0	400.0	Fox Hills - BASE			
4,512.0	4,438.0	Sussex			
5,091.5	5,005.0	Shannon			
6,648.2	6,528.0	Teepee Buttes (*if present)			
7,495.1	7,320.0	Sharon Springs			
7,570.8	7,371.0	Niobrara			
7,843.3	7,487.0	B Chalk			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	KOP @ 300' MD
1,494.4	1,485.8	49.7	113.6	EOB; 11.94°
7,019.1	6,890.9	508.1	1,161.1	10° Build/Turn
7,966.7	7,500.0	-62.9	1,279.2	LP @ 7500' TVD; 90°
15,841.7	7,500.0	-7,937.9	1,279.2	TD at 15841.7

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Woolley-Sosa 2F-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 2F-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 2F-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	15,841.7	Plan #3 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	10,913.8	7,558.0	172.3	98.0	2.320	CC, ES, SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	7,966.2	9,708.3	1,161.4	1,109.5	22.364	CC
Morgan Hills 1A-7H-A168 - HZ - Plan #2	15,841.7	17,583.8	1,162.7	846.8	3.680	ES, SF
Morgan Hills 1B-7H-A168 - HZ - Plan #2	7,966.4	9,891.0	1,431.8	1,380.5	27.876	CC
Morgan Hills 1B-7H-A168 - HZ - Plan #2	15,841.7	17,766.3	1,433.1	1,121.5	4.599	ES, SF
Morgan Hills 1C-7H-A168 - HZ - Plan #2	15,841.7	17,485.9	1,662.8	1,346.7	5.261	CC, ES, SF
Morgan Hills 1D-7H-A168 - HZ - Plan #2	7,966.4	9,809.9	1,926.7	1,875.1	37.348	CC
Morgan Hills 1D-7H-A168 - HZ - Plan #2	15,841.7	17,685.2	1,928.0	1,614.5	6.149	ES, SF
Sosa 11-18 - DD - DD	11,500.0	7,598.2	1,308.5	1,224.4	15.559	ES, SF
Sosa 11-18 - DD - DD	11,506.5	7,598.2	1,308.4	1,224.4	15.564	CC
Sosa 12-18 - DD - DD	13,142.3	7,648.9	1,306.9	1,190.6	11.244	CC, ES
Sosa 12-18 - DD - DD	13,200.0	7,648.7	1,308.2	1,191.6	11.228	SF
Sosa 21-18 - DD (MWD) - DD	11,515.1	7,670.9	249.4	165.2	2.963	CC, ES, SF
Sosa 22-18 - DD - DD	13,003.7	7,657.3	167.0	55.0	1.491	Level 3, CC, ES, SF
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	12,200.0	7,545.2	816.8	725.4	8.934	ES, SF
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	12,201.0	7,545.2	816.8	725.4	8.935	CC
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,338.9	7,523.2	135.7	75.9	2.270	CC, ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,400.0	7,522.8	148.8	82.6	2.249	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,200.0	7,495.0	117.9	59.2	2.010	ES, SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,208.5	7,495.0	117.6	60.2	2.048	CC
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	10,900.0	7,568.7	557.2	483.2	7.530	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	10,913.0	7,568.7	557.1	483.2	7.542	CC, ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	9,044.0	7,782.5	1,232.8	1,182.2	24.361	CC, ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	9,400.0	7,783.2	1,283.2	1,228.5	23.458	SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	300.0	288.0	984.4	983.4	980.691	CC, ES
Thomas 7-12 (Existing) - Existing - NO SURVEYS	8,900.0	7,488.0	1,327.7	1,291.2	36.418	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,000.0	7,494.0	379.6	337.1	8.937	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,100.0	7,494.0	365.3	325.6	9.198	ES
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,102.9	7,494.0	365.3	325.7	9.221	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	300.0	388.0	144.6	143.5	122.750	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	600.0	687.9	145.0	142.8	64.706	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,494.4	1,573.8	192.7	186.8	32.761	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,047.2	6,929.5	1,068.2	1,032.0	29.449	CC
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,050.0	6,932.2	1,068.3	1,032.0	29.434	ES
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,150.0	7,024.7	1,077.8	1,040.9	29.165	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	7,756.3	7,738.9	145.9	103.7	3.459	CC, ES, SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	8,194.4	7,926.1	376.5	325.7	7.413	CC, ES, SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	5,845.2	5,776.0	461.8	430.7	14.863	CC
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	5,900.0	5,829.3	462.0	430.6	14.710	ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	6,400.0	6,318.2	477.7	443.8	14.100	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	521.1	521.2	7.4	5.6	4.107	CC, ES, SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	625.0	624.8	13.7	11.5	6.305	CC, ES, SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	850.2	848.9	16.1	13.0	5.334	CC, ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	900.0	898.5	16.5	13.2	5.106	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	877.1	874.8	26.7	23.6	8.643	CC
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	900.0	897.6	26.8	23.6	8.399	ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	1,100.0	1,096.6	31.2	27.1	7.548	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	807.9	804.8	40.2	37.4	14.350	CC
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	900.0	896.2	40.5	37.4	12.844	ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	1,500.0	1,492.9	60.4	53.9	9.258	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	300.0	300.0	52.6	51.6	52.527	CC
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	600.0	597.3	53.2	51.2	25.994	ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	7,500.0	7,499.3	109.5	74.6	3.136	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 2F-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 2F-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
Offset Well - Wellbore - Design						
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	203.3	203.3	59.9	59.2	90.155	CC
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	300.0	299.5	60.1	59.1	60.058	ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	8,200.0	7,522.4	432.0	388.3	9.881	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	200.0	200.0	67.5	66.8	103.339	CC, ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	1,800.0	1,772.7	141.3	133.2	17.484	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	200.0	200.0	37.5	36.9	57.455	CC, ES
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	15,841.7	15,949.8	1,781.3	1,501.1	6.356	SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	300.0	300.0	29.9	28.9	29.893	CC, ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	15,822.8	15,706.0	1,390.0	1,107.4	4.919	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	300.0	300.0	22.4	21.4	22.350	CC, ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	15,841.7	15,953.0	1,054.1	778.5	3.824	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	300.0	300.0	15.1	14.1	15.086	CC, ES
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	15,832.2	15,805.8	699.9	417.0	2.474	SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	300.0	300.0	7.6	6.6	7.543	CC, ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	15,837.4	16,084.2	424.4	188.7	1.801	SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	187.5	187.5	7.6	6.9	12.393	CC
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	200.0	200.0	7.6	6.9	11.571	ES
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	15,841.7	16,166.9	424.4	188.9	1.802	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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		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	153.23	-2,304.0	1,162.4	2,580.7					
100.0	100.0	85.0	85.0	0.2	0.1	153.23	-2,304.0	1,162.4	2,580.7	2,580.4	0.28		9,334.131	
200.0	200.0	185.0	185.0	0.3	0.3	153.23	-2,304.0	1,162.4	2,580.7	2,580.0	0.62		4,153.270	
300.0	300.0	285.0	285.0	0.5	0.5	153.23	-2,304.0	1,162.4	2,580.7	2,579.7	0.97		2,659.315	
400.0	400.0	385.0	385.0	0.7	0.6	86.88	-2,304.0	1,162.4	2,580.6	2,579.3	1.32		1,954.765	
500.0	500.0	485.0	485.0	0.9	0.8	86.94	-2,304.0	1,162.4	2,580.5	2,578.8	1.67		1,542.079	
600.0	599.9	584.9	584.9	1.0	1.0	87.04	-2,304.0	1,162.4	2,580.2	2,578.2	2.03		1,268.850	
700.0	699.7	684.7	684.7	1.2	1.2	87.18	-2,304.0	1,162.4	2,579.9	2,577.5	2.40		1,073.109	
800.0	799.4	784.4	784.4	1.4	1.3	87.35	-2,304.0	1,162.4	2,579.6	2,576.8	2.79		925.025	
900.0	898.9	883.9	883.9	1.7	1.5	87.57	-2,304.0	1,162.4	2,579.1	2,575.9	3.19		808.513	
1,000.0	998.3	983.3	983.3	1.9	1.7	87.82	-2,304.0	1,162.4	2,578.7	2,575.1	3.61		714.150	
1,100.0	1,097.4	1,082.4	1,082.4	2.2	1.9	88.12	-2,304.0	1,162.4	2,578.2	2,574.1	4.05		636.046	
1,200.0	1,196.3	1,181.3	1,181.3	2.5	2.0	88.45	-2,304.0	1,162.4	2,577.8	2,573.2	4.52		570.321	
1,300.0	1,294.9	1,279.9	1,279.9	2.8	2.2	88.81	-2,304.0	1,162.4	2,577.4	2,572.3	5.01		514.297	
1,400.0	1,393.3	1,378.3	1,378.3	3.2	2.4	89.21	-2,304.0	1,162.4	2,577.0	2,571.5	5.53		466.057	
1,494.4	1,485.8	1,470.8	1,470.8	3.5	2.5	89.62	-2,304.0	1,162.4	2,576.8	2,570.8	6.04		426.408	
1,500.0	1,491.2	1,476.3	1,476.3	3.5	2.5	89.65	-2,304.0	1,162.4	2,576.8	2,570.8	6.07		424.258	
1,526.6	1,517.2	1,500.0	1,500.0	3.6	2.6	89.76	-2,304.0	1,162.4	2,576.8	2,570.6	6.22		414.541	
1,600.0	1,589.1	1,539.0	1,539.0	3.9	2.7	89.94	-2,304.3	1,162.5	2,577.3	2,570.7	6.56		392.713	
1,700.0	1,686.9	1,600.0	1,600.0	4.3	2.8	90.22	-2,305.6	1,163.1	2,579.7	2,572.6	7.05		365.788	
1,800.0	1,784.8	1,641.9	1,641.8	4.7	2.8	90.41	-2,307.3	1,163.8	2,583.9	2,576.4	7.51		344.111	
1,900.0	1,882.6	1,700.0	1,699.8	5.1	2.9	90.68	-2,310.5	1,165.1	2,590.1	2,582.1	8.00		323.955	
2,000.0	1,980.4	1,744.4	1,744.1	5.5	3.0	90.88	-2,313.7	1,166.4	2,598.1	2,589.7	8.45		307.299	
2,100.0	2,078.3	1,800.0	1,799.5	5.9	3.1	91.14	-2,318.5	1,168.4	2,608.1	2,599.2	8.93		291.932	
2,200.0	2,176.1	1,846.2	1,845.4	6.3	3.2	91.35	-2,323.4	1,170.4	2,620.0	2,610.6	9.39		278.947	
2,300.0	2,273.9	1,900.0	1,898.7	6.7	3.3	91.59	-2,329.8	1,173.0	2,633.7	2,623.9	9.86		267.038	
2,400.0	2,371.8	1,947.1	1,945.3	7.1	3.5	91.80	-2,336.2	1,175.6	2,649.3	2,639.0	10.32		256.815	
2,500.0	2,469.6	2,000.0	1,997.5	7.5	3.6	92.03	-2,344.3	1,178.9	2,666.8	2,656.0	10.78		247.444	
2,600.0	2,567.4	2,046.9	2,043.6	7.9	3.7	92.24	-2,352.2	1,182.2	2,686.0	2,674.8	11.22		239.372	
2,700.0	2,665.3	2,116.4	2,111.7	8.3	3.9	92.54	-2,364.9	1,187.4	2,707.0	2,695.2	11.72		231.053	
2,800.0	2,763.1	2,212.1	2,205.5	8.7	4.2	92.95	-2,382.5	1,194.6	2,728.3	2,716.0	12.27		222.274	
2,900.0	2,860.9	2,307.9	2,299.4	9.1	4.5	93.35	-2,400.2	1,201.8	2,749.7	2,736.9	12.83		214.270	
3,000.0	2,958.8	2,403.7	2,393.2	9.5	4.8	93.75	-2,417.9	1,209.1	2,771.3	2,757.9	13.39		206.942	
3,100.0	3,056.6	2,499.4	2,487.1	9.9	5.1	94.14	-2,435.6	1,216.3	2,793.1	2,779.1	13.95		200.210	
3,200.0	3,154.4	2,595.2	2,580.9	10.3	5.4	94.52	-2,453.2	1,223.5	2,814.9	2,800.4	14.51		194.003	
3,300.0	3,252.3	2,691.0	2,674.8	10.7	5.7	94.90	-2,470.9	1,230.8	2,836.9	2,821.8	15.07		188.263	
3,400.0	3,350.1	2,786.8	2,768.6	11.1	6.1	95.28	-2,488.6	1,238.0	2,859.0	2,843.3	15.63		182.941	
3,500.0	3,447.9	2,882.5	2,862.5	11.5	6.4	95.64	-2,506.2	1,245.2	2,881.2	2,865.0	16.19		177.992	
3,600.0	3,545.8	2,978.3	2,956.3	11.9	6.7	96.01	-2,523.9	1,252.5	2,903.5	2,886.7	16.75		173.379	
3,700.0	3,643.6	3,074.1	3,050.2	12.3	7.1	96.36	-2,541.6	1,259.7	2,925.9	2,908.6	17.31		169.069	
3,800.0	3,741.5	3,169.8	3,144.0	12.7	7.4	96.71	-2,559.2	1,266.9	2,948.5	2,930.6	17.87		165.033	
3,900.0	3,839.3	3,265.6	3,237.9	13.1	7.8	97.06	-2,576.9	1,274.2	2,971.1	2,952.7	18.43		161.247	
4,000.0	3,937.1	3,361.4	3,331.7	13.5	8.1	97.40	-2,594.6	1,281.4	2,993.9	2,974.9	18.99		157.687	
4,100.0	4,035.0	3,457.2	3,425.6	13.9	8.5	97.74	-2,612.3	1,288.6	3,016.8	2,997.2	19.55		154.334	
4,200.0	4,132.8	3,552.9	3,519.4	14.3	8.8	98.07	-2,629.9	1,295.9	3,039.7	3,019.6	20.11		151.171	
4,300.0	4,230.6	3,648.7	3,613.3	14.7	9.2	98.40	-2,647.6	1,303.1	3,062.8	3,042.1	20.67		148.182	
4,400.0	4,328.5	3,744.5	3,707.1	15.1	9.6	98.72	-2,665.3	1,310.3	3,085.9	3,064.7	21.23		145.353	
4,500.0	4,426.3	3,840.3	3,801.0	15.5	9.9	99.04	-2,682.9	1,317.6	3,109.2	3,087.4	21.79		142.672	
4,600.0	4,524.1	3,936.0	3,894.8	15.9	10.3	99.35	-2,700.6	1,324.8	3,132.5	3,110.2	22.35		140.128	
4,700.0	4,622.0	4,031.8	3,988.7	16.3	10.6	99.66	-2,718.3	1,332.0	3,156.0	3,133.0	22.92		137.710	
4,800.0	4,719.8	4,127.6	4,082.5	16.7	11.0	99.96	-2,736.0	1,339.3	3,179.5	3,156.0	23.48		135.410	
4,900.0	4,817.6	4,223.3	4,176.4	17.2	11.4	100.26	-2,753.6	1,346.5	3,203.1	3,179.0	24.04		133.218	

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 2F-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 2F-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				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)				
5,000.0	4,915.5	4,319.1	4,270.2	17.6	11.7	100.56	-2,771.3	1,353.7	3,226.8	3,202.2	24.61	131.128		
5,100.0	5,013.3	4,414.9	4,364.1	18.0	12.1	100.85	-2,789.0	1,361.0	3,250.5	3,225.4	25.17	129.133		
5,200.0	5,111.1	4,510.7	4,457.9	18.4	12.5	101.13	-2,806.6	1,368.2	3,274.4	3,248.6	25.74	127.227		
5,300.0	5,209.0	4,606.4	4,551.8	18.8	12.8	101.42	-2,824.3	1,375.4	3,298.3	3,272.0	26.30	125.403		
5,400.0	5,306.8	4,702.2	4,645.6	19.2	13.2	101.70	-2,842.0	1,382.7	3,322.3	3,295.5	26.87	123.656		
5,500.0	5,404.6	4,798.0	4,739.5	19.6	13.6	101.97	-2,859.6	1,389.9	3,346.4	3,319.0	27.43	121.983		
5,600.0	5,502.5	4,893.7	4,833.3	20.0	13.9	102.24	-2,877.3	1,397.1	3,370.6	3,342.6	28.00	120.378		
5,700.0	5,600.3	4,989.5	4,927.2	20.4	14.3	102.51	-2,895.0	1,404.4	3,394.8	3,366.2	28.57	118.837		
5,800.0	5,698.2	5,085.3	5,021.0	20.8	14.7	102.77	-2,912.7	1,411.6	3,419.1	3,389.9	29.13	117.357		
5,900.0	5,796.0	5,181.1	5,114.9	21.2	15.0	103.03	-2,930.3	1,418.8	3,443.4	3,413.7	29.70	115.934		
6,000.0	5,893.8	5,278.9	5,212.7	21.6	15.4	103.29	-2,947.9	1,426.0	3,467.7	3,438.0	30.27	114.511		
6,100.0	5,991.7	5,376.7	5,310.5	22.0	15.8	103.55	-2,965.5	1,433.2	3,492.0	3,463.2	30.84	113.088		
6,200.0	6,089.5	5,474.5	5,408.3	22.4	16.2	103.81	-2,983.1	1,440.4	3,516.4	3,488.4	31.41	111.665		
6,300.0	6,187.3	5,572.3	5,506.1	22.8	16.6	104.07	-2,999.9	1,447.6	3,540.8	3,513.6	31.98	110.242		
6,400.0	6,285.2	5,670.1	5,603.9	23.2	17.0	104.33	-3,016.7	1,454.8	3,565.2	3,538.0	32.55	108.819		
6,500.0	6,383.0	5,767.9	5,701.7	23.6	17.4	104.59	-3,033.5	1,462.0	3,589.6	3,562.4	33.12	107.396		
6,600.0	6,480.8	5,865.7	5,799.5	24.0	17.8	104.85	-3,050.3	1,469.2	3,614.0	3,587.6	33.69	105.973		
6,700.0	6,578.7	5,963.5	5,897.3	24.4	18.2	105.11	-3,067.1	1,476.4	3,638.4	3,612.0	34.26	104.550		
6,800.0	6,676.5	6,061.3	5,995.1	24.8	18.6	105.37	-3,083.9	1,483.6	3,662.8	3,637.2	34.83	103.127		
6,900.0	6,774.3	6,159.1	6,092.9	25.2	19.0	105.63	-3,100.7	1,490.8	3,687.2	3,662.4	35.40	101.704		
7,000.0	6,872.2	6,256.9	6,190.7	25.6	19.4	105.89	-3,117.5	1,498.0	3,711.6	3,687.6	35.97	100.281		
7,019.1	6,890.8	6,275.1	6,208.9	25.8	19.6	106.03	-3,124.3	1,500.0	3,719.6	3,695.6	36.12	100.000		
7,050.0	6,921.1	6,306.4	6,239.2	26.0	19.8	106.17	-3,131.1	1,502.0	3,727.6	3,703.6	36.27	99.719		
7,100.0	6,970.2	6,355.3	6,288.1	26.4	20.2	106.43	-3,145.9	1,506.4	3,742.0	3,718.0	36.54	99.346		
7,150.0	7,019.0	6,404.2	6,337.0	26.8	20.6	106.69	-3,160.7	1,510.8	3,756.4	3,732.4	36.81	98.973		
7,200.0	7,067.2	6,453.0	6,385.8	27.2	21.0	106.95	-3,175.5	1,515.2	3,770.8	3,746.8	37.08	98.600		
7,250.0	7,114.4	6,501.8	6,434.6	27.6	21.4	107.21	-3,190.3	1,519.6	3,785.2	3,761.2	37.35	98.227		
7,300.0	7,160.3	6,550.7	6,483.5	28.0	21.8	107.47	-3,205.1	1,524.0	3,799.6	3,775.6	37.62	97.854		
7,350.0	7,204.5	6,599.5	6,527.3	28.4	22.2	107.73	-3,219.9	1,528.4	3,814.0	3,790.0	37.89	97.481		
7,400.0	7,246.6	6,648.4	6,569.4	28.8	22.6	107.99	-3,234.7	1,532.8	3,828.4	3,804.4	38.16	97.108		
7,450.0	7,286.4	6,697.2	6,618.2	29.2	23.0	108.25	-3,249.5	1,537.2	3,842.8	3,818.8	38.43	96.735		
7,500.0	7,323.5	6,746.1	6,667.1	29.6	23.4	108.51	-3,264.3	1,541.6	3,857.2	3,833.2	38.70	96.362		
7,550.0	7,357.7	6,794.9	6,715.9	30.0	23.8	108.77	-3,279.1	1,546.0	3,871.6	3,847.6	38.97	95.989		
7,600.0	7,388.7	6,843.8	6,764.8	30.4	24.2	109.03	-3,293.9	1,550.4	3,886.0	3,862.0	39.24	95.616		
7,650.0	7,416.3	6,892.6	6,813.6	30.8	24.6	109.29	-3,308.7	1,554.8	3,899.6	3,876.4	39.51	95.243		
7,700.0	7,440.2	6,941.5	6,862.5	31.2	25.0	109.55	-3,323.5	1,559.2	3,914.0	3,890.8	39.78	94.870		
7,750.0	7,460.3	6,990.3	6,911.3	31.6	25.4	109.81	-3,338.3	1,563.6	3,928.4	3,905.2	40.05	94.497		
7,800.0	7,476.4	7,039.2	6,960.2	32.0	25.8	110.07	-3,353.1	1,568.0	3,942.8	3,919.6	40.32	94.124		
7,850.0	7,488.4	7,088.0	7,009.2	32.4	26.2	110.33	-3,367.9	1,572.4	3,957.2	3,934.0	40.59	93.751		
7,900.0	7,496.2	7,136.9	7,058.1	32.8	26.6	110.59	-3,382.7	1,576.8	3,971.6	3,948.4	40.86	93.378		
7,950.0	7,499.8	7,185.7	7,107.0	33.2	27.0	110.85	-3,397.5	1,581.2	3,986.0	3,962.8	41.13	93.005		
7,966.7	7,500.0	7,194.6	7,115.9	33.4	27.2	110.99	-3,401.3	1,582.8	3,990.4	3,967.2	41.28	92.922		
8,000.0	7,500.0	7,243.5	7,164.8	33.8	27.6	111.25	-3,416.1	1,587.2	4,004.8	3,981.6	41.55	92.549		
8,100.0	7,500.0	7,292.4	7,213.7	34.2	28.0	111.51	-3,430.9	1,591.6	4,019.2	3,996.0	41.82	92.176		
8,200.0	7,500.0	7,341.3	7,262.6	34.6	28.4	111.77	-3,445.7	1,596.0	4,033.6	4,010.4	42.09	91.803		
8,300.0	7,500.0	7,390.2	7,311.5	35.0	28.8	112.03	-3,460.5	1,600.4	4,048.0	4,024.8	42.36	91.430		
8,400.0	7,500.0	7,439.1	7,360.4	35.4	29.2	112.29	-3,475.3	1,604.8	4,062.4	4,039.2	42.63	91.057		
8,500.0	7,500.0	7,488.0	7,409.3	35.8	29.6	112.55	-3,490.1	1,609.2	4,076.8	4,053.6	42.90	90.684		
8,600.0	7,500.0	7,536.9	7,458.2	36.2	30.0	112.81	-3,504.9	1,613.6	4,091.2	4,068.0	43.17	90.311		
8,700.0	7,500.0	7,585.8	7,507.1	36.6	30.4	113.07	-3,519.7	1,618.0	4,105.6	4,082.4	43.44	89.938		
8,800.0	7,500.0	7,634.7	7,556.0	37.0	30.8	113.33	-3,534.5	1,622.4	4,120.0	4,096.8	43.71	89.565		
8,900.0	7,500.0	7,683.6	7,604.9	37.4	31.2	113.59	-3,549.3	1,626.8	4,134.4	4,111.2	43.98	89.192		

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 2F-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 2F-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	
9,000.0	7,500.0	7,558.0	7,485.0	33.7	18.7	-90.00	-3,010.0	1,451.5	1,921.5	1,881.7	39.84	48.226		
9,100.0	7,500.0	7,558.0	7,485.0	34.8	18.7	-90.00	-3,010.0	1,451.5	1,821.9	1,782.2	39.71	45.882		
9,200.0	7,500.0	7,558.0	7,485.0	36.0	18.7	-90.00	-3,010.0	1,451.5	1,722.4	1,682.9	39.55	43.549		
9,300.0	7,500.0	7,558.0	7,485.0	37.2	18.7	-90.00	-3,010.0	1,451.5	1,622.9	1,583.6	39.36	41.229		
9,400.0	7,500.0	7,558.0	7,485.0	38.4	18.7	-90.00	-3,010.0	1,451.5	1,523.5	1,484.4	39.14	38.921		
9,500.0	7,500.0	7,558.0	7,485.0	39.7	18.7	-90.00	-3,010.0	1,451.5	1,424.2	1,385.4	38.89	36.626		
9,600.0	7,500.0	7,558.0	7,485.0	41.1	18.7	-90.00	-3,010.0	1,451.5	1,325.0	1,286.4	38.58	34.345		
9,700.0	7,500.0	7,558.0	7,485.0	42.4	18.7	-90.00	-3,010.0	1,451.5	1,225.9	1,187.7	38.22	32.078		
9,800.0	7,500.0	7,558.0	7,485.0	43.8	18.7	-90.00	-3,010.0	1,451.5	1,127.0	1,089.2	37.79	29.827		
9,900.0	7,500.0	7,558.0	7,485.0	45.2	18.7	-90.00	-3,010.0	1,451.5	1,028.3	991.0	37.27	27.592		
10,000.0	7,500.0	7,558.0	7,485.0	46.6	18.7	-90.00	-3,010.0	1,451.5	929.9	893.2	36.65	25.374		
10,100.0	7,500.0	7,558.0	7,485.0	48.1	18.7	-90.00	-3,010.0	1,451.5	831.8	795.9	35.90	23.173		
10,200.0	7,500.0	7,558.0	7,485.0	49.6	18.7	-90.00	-3,010.0	1,451.5	734.3	699.3	34.99	20.986		
10,300.0	7,500.0	7,558.0	7,485.0	51.1	18.7	-90.00	-3,010.0	1,451.5	637.5	603.6	33.92	18.797		
10,400.0	7,500.0	7,558.0	7,485.0	52.6	18.7	-90.00	-3,010.0	1,451.5	541.9	509.2	32.72	16.563		
10,500.0	7,500.0	7,558.0	7,485.0	54.1	18.7	-90.00	-3,010.0	1,451.5	448.2	416.5	31.68	14.149		
10,600.0	7,500.0	7,558.0	7,485.0	55.6	18.7	-90.00	-3,010.0	1,451.5	358.0	326.1	31.90	11.223		
10,700.0	7,500.0	7,558.0	7,485.0	57.2	18.7	-90.00	-3,010.0	1,451.5	274.6	238.0	36.55	7.512		
10,800.0	7,500.0	7,558.0	7,485.0	58.8	18.7	-90.00	-3,010.0	1,451.5	206.5	155.9	50.61	4.080		
10,900.0	7,500.0	7,558.0	7,485.0	60.3	18.7	-90.00	-3,010.0	1,451.5	172.8	100.9	71.89	2.404		
10,913.8	7,500.0	7,558.0	7,485.0	60.6	18.7	-90.00	-3,010.0	1,451.5	172.3	98.0	74.27	2.320 CC, ES, SF		
11,000.0	7,500.0	7,558.0	7,485.0	61.9	18.7	-90.00	-3,010.0	1,451.5	192.7	112.2	80.49	2.394		
11,100.0	7,500.0	7,558.0	7,485.0	63.5	18.7	-90.00	-3,010.0	1,451.5	253.7	177.9	75.82	3.346		
11,200.0	7,500.0	7,558.0	7,485.0	65.1	18.7	-90.00	-3,010.0	1,451.5	334.1	264.3	69.77	4.788		
11,300.0	7,500.0	7,558.0	7,485.0	66.7	18.7	-90.00	-3,010.0	1,451.5	422.9	357.7	65.21	6.486		
11,400.0	7,500.0	7,558.0	7,485.0	68.3	18.7	-90.00	-3,010.0	1,451.5	515.8	453.9	61.96	8.325		
11,500.0	7,500.0	7,558.0	7,485.0	70.0	18.7	-90.00	-3,010.0	1,451.5	611.0	551.4	59.63	10.248		
11,600.0	7,500.0	7,558.0	7,485.0	71.6	18.7	-90.00	-3,010.0	1,451.5	707.5	649.6	57.89	12.221		
11,700.0	7,500.0	7,558.0	7,485.0	73.2	18.7	-90.00	-3,010.0	1,451.5	804.9	748.3	56.57	14.227		
11,800.0	7,500.0	7,558.0	7,485.0	74.9	18.7	-90.00	-3,010.0	1,451.5	902.8	847.3	55.55	16.254		
11,900.0	7,500.0	7,558.0	7,485.0	76.5	18.7	-90.00	-3,010.0	1,451.5	1,001.2	946.4	54.73	18.293		
12,000.0	7,500.0	7,558.0	7,485.0	78.2	18.7	-90.00	-3,010.0	1,451.5	1,099.8	1,045.7	54.07	20.339		
12,100.0	7,500.0	7,558.0	7,485.0	79.8	18.7	-90.00	-3,010.0	1,451.5	1,198.7	1,145.1	53.54	22.390		
12,200.0	7,500.0	7,558.0	7,485.0	81.5	18.7	-90.00	-3,010.0	1,451.5	1,297.7	1,244.6	53.09	24.443		
12,300.0	7,500.0	7,558.0	7,485.0	83.1	18.7	-90.00	-3,010.0	1,451.5	1,396.9	1,344.2	52.72	26.494		
12,400.0	7,500.0	7,558.0	7,485.0	84.8	18.7	-90.00	-3,010.0	1,451.5	1,496.2	1,443.8	52.42	28.545		
12,500.0	7,500.0	7,558.0	7,485.0	86.5	18.7	-90.00	-3,010.0	1,451.5	1,595.6	1,543.4	52.16	30.592		
12,600.0	7,500.0	7,558.0	7,485.0	88.1	18.7	-90.00	-3,010.0	1,451.5	1,695.0	1,643.1	51.94	32.636		
12,700.0	7,500.0	7,558.0	7,485.0	89.8	18.7	-90.00	-3,010.0	1,451.5	1,794.5	1,742.8	51.75	34.675		
12,800.0	7,500.0	7,558.0	7,485.0	91.5	18.7	-90.00	-3,010.0	1,451.5	1,894.1	1,842.5	51.60	36.710		
12,900.0	7,500.0	7,558.0	7,485.0	93.2	18.7	-90.00	-3,010.0	1,451.5	1,993.7	1,942.2	51.46	38.740		
13,000.0	7,500.0	7,558.0	7,485.0	94.9	18.7	-90.00	-3,010.0	1,451.5	2,093.3	2,042.0	51.35	40.764		
13,100.0	7,500.0	7,558.0	7,485.0	96.5	18.7	-90.00	-3,010.0	1,451.5	2,193.0	2,141.7	51.26	42.782		
13,200.0	7,500.0	7,558.0	7,485.0	98.2	18.7	-90.00	-3,010.0	1,451.5	2,292.7	2,241.5	51.18	44.795		
13,300.0	7,500.0	7,558.0	7,485.0	99.9	18.7	-90.00	-3,010.0	1,451.5	2,392.4	2,341.3	51.12	46.801		
13,400.0	7,500.0	7,558.0	7,485.0	101.6	18.7	-90.00	-3,010.0	1,451.5	2,492.2	2,441.1	51.07	48.801		
13,500.0	7,500.0	7,558.0	7,485.0	103.3	18.7	-90.00	-3,010.0	1,451.5	2,592.0	2,540.9	51.03	50.795		
13,600.0	7,500.0	7,558.0	7,485.0	105.0	18.7	-90.00	-3,010.0	1,451.5	2,691.7	2,640.7	51.00	52.782		
13,700.0	7,500.0	7,558.0	7,485.0	106.7	18.7	-90.00	-3,010.0	1,451.5	2,791.5	2,740.6	50.97	54.763		
13,800.0	7,500.0	7,558.0	7,485.0	108.4	18.7	-90.00	-3,010.0	1,451.5	2,891.4	2,840.4	50.96	56.738		
13,900.0	7,500.0	7,558.0	7,485.0	110.1	18.7	-90.00	-3,010.0	1,451.5	2,991.2	2,940.2	50.95	58.705		
14,000.0	7,500.0	7,558.0	7,485.0	111.8	18.7	-90.00	-3,010.0	1,451.5	3,091.0	3,040.1	50.95	60.666		

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 2F-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 2F-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		
14,100.0	7,500.0	7,558.0	7,485.0	113.5	18.7	-90.00	-3,010.0	1,451.5	3,190.9	3,139.9	50.96	62.621		
14,200.0	7,500.0	7,558.0	7,485.0	115.2	18.7	-90.00	-3,010.0	1,451.5	3,290.7	3,239.8	50.97	64.568		
14,300.0	7,500.0	7,558.0	7,485.0	116.9	18.7	-90.00	-3,010.0	1,451.5	3,390.6	3,339.6	50.98	66.509		
14,400.0	7,500.0	7,558.0	7,485.0	118.6	18.7	-90.00	-3,010.0	1,451.5	3,490.5	3,439.5	51.00	68.444		
14,500.0	7,500.0	7,558.0	7,485.0	120.4	18.7	-90.00	-3,010.0	1,451.5	3,590.4	3,539.3	51.02	70.371		
14,600.0	7,500.0	7,558.0	7,485.0	122.1	18.7	-90.00	-3,010.0	1,451.5	3,690.2	3,639.2	51.05	72.292		
14,700.0	7,500.0	7,558.0	7,485.0	123.8	18.7	-90.00	-3,010.0	1,451.5	3,790.1	3,739.1	51.08	74.206		
14,800.0	7,500.0	7,558.0	7,485.0	125.5	18.7	-90.00	-3,010.0	1,451.5	3,890.0	3,838.9	51.11	76.113		
14,900.0	7,500.0	7,558.0	7,485.0	127.2	18.7	-90.00	-3,010.0	1,451.5	3,989.9	3,938.8	51.14	78.014		
15,000.0	7,500.0	7,558.0	7,485.0	128.9	18.7	-90.00	-3,010.0	1,451.5	4,089.9	4,038.7	51.18	79.908		
15,100.0	7,500.0	7,558.0	7,485.0	130.6	18.7	-90.00	-3,010.0	1,451.5	4,189.8	4,138.5	51.22	81.795		
15,200.0	7,500.0	7,558.0	7,485.0	132.4	18.7	-90.00	-3,010.0	1,451.5	4,289.7	4,238.4	51.27	83.676		
15,300.0	7,500.0	7,558.0	7,485.0	134.1	18.7	-90.00	-3,010.0	1,451.5	4,389.6	4,338.3	51.31	85.549		
15,400.0	7,500.0	7,558.0	7,485.0	135.8	18.7	-90.00	-3,010.0	1,451.5	4,489.5	4,438.2	51.36	87.417		
15,500.0	7,500.0	7,558.0	7,485.0	137.5	18.7	-90.00	-3,010.0	1,451.5	4,589.5	4,538.1	51.41	89.277		
15,600.0	7,500.0	7,558.0	7,485.0	139.2	18.7	-90.00	-3,010.0	1,451.5	4,689.4	4,637.9	51.46	91.131		
15,700.0	7,500.0	7,558.0	7,485.0	141.0	18.7	-90.00	-3,010.0	1,451.5	4,789.3	4,737.8	51.51	92.978		
15,800.0	7,500.0	7,558.0	7,485.0	142.7	18.7	-90.00	-3,010.0	1,451.5	4,889.3	4,837.7	51.56	94.819		
15,841.7	7,500.0	7,558.0	7,485.0	143.4	18.7	-90.00	-3,010.0	1,451.5	4,930.9	4,879.3	51.59	95.584		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	65.56	1,870.2	4,114.8	4,519.8					
100.0	100.0	129.0	129.0	0.2	0.2	65.56	1,870.2	4,114.8	4,519.8	4,519.5	0.35	N/A		
200.0	200.0	277.8	277.8	0.3	0.5	65.55	1,870.3	4,114.2	4,519.7	4,518.9	0.79	5,730.671		
300.0	300.0	545.5	545.3	0.5	1.0	65.48	1,872.5	4,104.6	4,516.7	4,515.3	1.44	3,134.648		
400.0	400.0	811.5	810.3	0.7	1.5	-1.06	1,877.5	4,083.0	4,509.2	4,507.1	2.12	2,123.058		
500.0	500.0	1,074.1	1,070.7	0.9	2.3	-1.33	1,885.0	4,049.9	4,496.4	4,493.5	2.86	1,573.004		
600.0	599.9	1,331.6	1,324.3	1.0	3.1	-1.70	1,895.1	4,006.2	4,478.3	4,474.6	3.66	1,224.417		
700.0	699.7	1,582.7	1,569.3	1.2	4.2	-2.17	1,907.3	3,952.9	4,455.1	4,450.6	4.53	983.861		
800.0	799.4	1,725.0	1,707.1	1.4	4.8	-2.48	1,915.2	3,918.5	4,427.7	4,422.6	5.14	861.973		
900.0	898.9	1,819.3	1,798.4	1.7	5.3	-2.70	1,920.5	3,895.3	4,398.6	4,393.0	5.61	784.244		
1,000.0	998.3	1,913.2	1,889.3	1.9	5.7	-2.93	1,925.8	3,872.2	4,367.9	4,361.8	6.08	718.032		
1,100.0	1,097.4	2,006.5	1,979.6	2.2	6.1	-3.17	1,931.0	3,849.3	4,335.6	4,329.0	6.56	660.964		
1,200.0	1,196.3	2,099.2	2,069.3	2.5	6.6	-3.41	1,936.3	3,826.5	4,301.7	4,294.7	7.04	611.262		
1,300.0	1,294.9	2,191.3	2,158.4	2.8	7.0	-3.66	1,941.5	3,803.9	4,266.2	4,258.7	7.52	567.571		
1,400.0	1,393.3	2,282.8	2,246.9	3.2	7.5	-3.92	1,946.6	3,781.4	4,229.2	4,221.2	8.00	528.850		
1,494.4	1,485.8	2,368.5	2,329.9	3.5	7.9	-4.17	1,951.4	3,760.4	4,192.8	4,184.3	8.45	496.114		
1,500.0	1,491.2	2,373.6	2,334.8	3.5	7.9	-4.18	1,951.7	3,759.1	4,190.6	4,182.1	8.48	494.280		
1,600.0	1,589.1	2,464.1	2,422.3	3.9	8.3	-4.43	1,956.8	3,736.9	4,151.4	4,142.4	8.96	463.241		
1,700.0	1,686.9	2,554.5	2,509.9	4.3	8.7	-4.67	1,961.9	3,714.7	4,112.2	4,102.7	9.45	435.225		
1,800.0	1,784.8	2,645.0	2,597.5	4.7	9.2	-4.92	1,967.0	3,692.4	4,073.1	4,063.1	9.94	409.814		
1,900.0	1,882.6	2,735.5	2,685.0	5.1	9.6	-5.18	1,972.1	3,670.2	4,034.0	4,023.6	10.43	386.666		
2,000.0	1,980.4	2,826.0	2,772.6	5.5	10.1	-5.44	1,977.2	3,648.0	3,995.1	3,984.2	10.93	365.494		
2,100.0	2,078.3	2,916.5	2,860.2	5.9	10.5	-5.71	1,982.3	3,625.7	3,956.2	3,944.8	11.43	346.059		
2,200.0	2,176.1	3,007.0	2,947.7	6.3	10.9	-5.98	1,987.4	3,603.5	3,917.4	3,905.5	11.94	328.157		
2,300.0	2,273.9	3,097.4	3,035.3	6.7	11.4	-6.26	1,992.5	3,581.3	3,878.7	3,866.2	12.45	311.615		
2,400.0	2,371.8	3,187.9	3,122.9	7.1	11.8	-6.54	1,997.6	3,559.0	3,840.0	3,827.1	12.96	296.286		
2,500.0	2,469.6	3,278.4	3,210.4	7.5	12.2	-6.83	2,002.7	3,536.8	3,801.4	3,788.0	13.48	282.043		
2,600.0	2,567.4	3,368.9	3,298.0	7.9	12.7	-7.12	2,007.8	3,514.6	3,763.0	3,749.0	14.00	268.776		
2,700.0	2,665.3	3,459.4	3,385.5	8.3	13.1	-7.42	2,012.9	3,492.4	3,724.6	3,710.1	14.53	256.389		
2,800.0	2,763.1	3,549.9	3,473.1	8.7	13.5	-7.72	2,018.0	3,470.1	3,686.3	3,671.2	15.06	244.799		
2,900.0	2,860.9	3,640.4	3,560.7	9.1	14.0	-8.03	2,023.1	3,447.9	3,648.1	3,632.5	15.59	233.932		
3,000.0	2,958.8	3,730.8	3,648.2	9.5	14.4	-8.35	2,028.2	3,425.7	3,610.0	3,593.8	16.14	223.724		
3,100.0	3,056.6	3,821.3	3,735.8	9.9	14.8	-8.67	2,033.3	3,403.4	3,572.0	3,555.3	16.68	214.118		
3,200.0	3,154.4	3,911.8	3,823.4	10.3	15.3	-9.00	2,038.4	3,381.2	3,534.1	3,516.8	17.23	205.062		
3,300.0	3,252.3	4,002.3	3,910.9	10.7	15.7	-9.34	2,043.5	3,359.0	3,496.3	3,478.5	17.79	196.513		
3,400.0	3,350.1	4,092.8	3,998.5	11.1	16.2	-9.69	2,048.6	3,336.7	3,458.6	3,440.2	18.35	188.429		
3,500.0	3,447.9	4,183.3	4,086.1	11.5	16.6	-10.04	2,053.7	3,314.5	3,421.0	3,402.1	18.92	180.775		
3,600.0	3,545.8	4,273.8	4,173.6	11.9	17.0	-10.40	2,058.8	3,292.3	3,383.6	3,364.1	19.50	173.518		
3,700.0	3,643.6	4,364.2	4,261.2	12.3	17.5	-10.76	2,063.8	3,270.1	3,346.3	3,326.2	20.08	166.630		
3,800.0	3,741.5	4,454.7	4,348.8	12.7	17.9	-11.14	2,068.9	3,247.8	3,309.1	3,288.4	20.67	160.083		
3,900.0	3,839.3	4,545.2	4,436.3	13.1	18.3	-11.52	2,074.0	3,225.6	3,272.0	3,250.7	21.27	153.854		
4,000.0	3,937.1	4,635.7	4,523.9	13.5	18.8	-11.91	2,079.1	3,203.4	3,235.1	3,213.2	21.87	147.922		
4,100.0	4,035.0	4,726.2	4,611.4	13.9	19.2	-12.31	2,084.2	3,181.1	3,198.3	3,175.8	22.48	142.266		
4,200.0	4,132.8	4,816.7	4,699.0	14.3	19.7	-12.72	2,089.3	3,158.9	3,161.6	3,138.5	23.10	136.869		
4,300.0	4,230.6	4,907.2	4,786.6	14.7	20.1	-13.13	2,094.4	3,136.7	3,125.1	3,101.4	23.73	131.715		
4,400.0	4,328.5	4,997.6	4,874.1	15.1	20.5	-13.56	2,099.5	3,114.4	3,088.8	3,064.4	24.36	126.788		
4,500.0	4,426.3	5,088.1	4,961.7	15.5	21.0	-14.00	2,104.6	3,092.2	3,052.6	3,027.6	25.01	122.076		
4,600.0	4,524.1	5,178.6	5,049.3	15.9	21.4	-14.44	2,109.7	3,070.0	3,016.6	2,990.9	25.66	117.564		
4,700.0	4,622.0	5,269.1	5,136.8	16.3	21.9	-14.90	2,114.8	3,047.8	2,980.7	2,954.4	26.32	113.242		
4,800.0	4,719.8	5,359.6	5,224.4	16.7	22.3	-15.36	2,119.9	3,025.5	2,945.1	2,918.1	26.99	109.100		
4,900.0	4,817.6	5,450.1	5,312.0	17.2	22.7	-15.84	2,125.0	3,003.3	2,909.6	2,881.9	27.68	105.127		
5,000.0	4,915.5	5,540.6	5,399.5	17.6	23.2	-16.33	2,130.1	2,981.1	2,874.3	2,845.9	28.37	101.315		

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 2F-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 2F-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		
5,100.0	5,013.3	5,631.0	5,487.1	18.0	23.6	-16.83	2,135.2	2,958.8	2,839.2	2,810.2	29.07	97.654		
5,200.0	5,111.1	5,721.5	5,574.7	18.4	24.0	-17.34	2,140.3	2,936.6	2,804.4	2,774.6	29.79	94.138		
5,300.0	5,209.0	5,812.0	5,662.2	18.8	24.5	-17.86	2,145.4	2,914.4	2,769.7	2,739.2	30.52	90.760		
5,400.0	5,306.8	5,922.1	5,730.0	19.2	43.0	33.30	374.0	2,440.5	2,707.6	2,678.7	28.86	93.831		
5,500.0	5,404.6	9,263.8	7,530.0	19.6	42.9	32.89	382.3	2,440.5	2,617.5	2,588.2	29.32	89.275		
5,600.0	5,502.5	9,255.5	7,530.0	20.0	42.8	32.49	390.6	2,440.5	2,528.2	2,498.4	29.81	84.808		
5,700.0	5,600.3	9,247.2	7,530.0	20.4	42.7	32.08	398.9	2,440.5	2,439.7	2,409.3	30.33	80.436		
5,800.0	5,698.2	9,238.9	7,530.0	20.8	42.7	31.68	407.2	2,440.5	2,352.0	2,321.1	30.88	76.164		
5,900.0	5,796.0	9,230.6	7,530.0	21.2	42.6	31.27	415.5	2,440.5	2,265.4	2,233.9	31.46	71.996		
6,000.0	5,893.8	9,222.3	7,530.0	21.6	42.5	30.86	423.8	2,440.5	2,179.8	2,147.7	32.08	67.940		
6,100.0	5,991.7	9,214.0	7,530.0	22.0	42.4	30.46	432.1	2,440.5	2,095.5	2,062.8	32.74	64.002		
6,200.0	6,089.5	9,205.7	7,530.0	22.4	42.3	30.05	440.4	2,440.5	2,012.6	1,979.2	33.44	60.190		
6,300.0	6,187.3	9,197.4	7,530.0	22.8	42.2	29.64	448.6	2,440.5	1,931.3	1,897.1	34.18	56.511		
6,400.0	6,285.2	9,189.1	7,530.0	23.2	42.1	29.23	456.9	2,440.5	1,851.8	1,816.8	34.96	52.974		
6,500.0	6,383.0	9,180.8	7,530.0	23.7	42.0	28.82	465.2	2,440.5	1,774.3	1,738.5	35.78	49.591		
6,600.0	6,480.8	9,172.6	7,530.0	24.1	41.9	28.40	473.5	2,440.5	1,699.2	1,662.5	36.64	46.372		
6,700.0	6,578.7	9,164.3	7,530.0	24.5	41.8	27.99	481.8	2,440.5	1,626.6	1,589.1	37.54	43.329		
6,800.0	6,676.5	9,156.0	7,530.0	24.9	41.7	27.58	490.1	2,440.5	1,557.1	1,518.6	38.47	40.475		
6,900.0	6,774.3	9,147.7	7,530.0	25.3	41.7	27.17	498.4	2,440.5	1,491.0	1,451.6	39.42	37.824		
7,000.0	6,872.2	9,139.4	7,530.0	25.7	41.6	26.75	506.7	2,440.5	1,428.8	1,388.4	40.37	35.390		
7,019.1	6,890.8	9,137.8	7,530.0	25.8	41.6	26.67	508.3	2,440.5	1,417.4	1,376.9	40.55	34.952		
7,050.0	6,921.1	9,136.1	7,530.0	25.9	41.5	9.71	510.0	2,440.5	1,399.3	1,358.5	40.84	34.262		
7,100.0	6,970.2	9,136.8	7,530.0	26.0	41.5	-18.93	509.3	2,440.5	1,370.9	1,329.6	41.31	33.189		
7,150.0	7,019.0	9,141.9	7,530.0	26.2	41.6	-41.97	504.2	2,440.5	1,343.9	1,302.1	41.78	32.167		
7,200.0	7,067.2	9,151.3	7,530.0	26.3	41.7	-57.60	494.8	2,440.5	1,318.6	1,276.3	42.26	31.205		
7,250.0	7,114.4	9,164.9	7,530.0	26.4	41.8	-68.00	481.2	2,440.5	1,295.1	1,252.3	42.73	30.306		
7,300.0	7,160.3	9,182.7	7,530.0	26.4	42.0	-75.10	463.4	2,440.5	1,273.6	1,230.4	43.21	29.474		
7,350.0	7,204.5	9,204.5	7,530.0	26.5	42.3	-80.08	441.6	2,440.5	1,254.2	1,210.5	43.69	28.707		
7,400.0	7,246.6	9,230.1	7,530.0	26.5	42.6	-83.61	416.0	2,440.5	1,236.9	1,192.7	44.17	28.002		
7,450.0	7,286.4	9,259.4	7,530.0	26.5	42.9	-86.10	386.7	2,440.5	1,221.7	1,177.1	44.66	27.356		
7,500.0	7,323.5	9,292.0	7,530.0	26.5	43.3	-87.83	354.0	2,440.5	1,208.6	1,163.5	45.16	26.762		
7,550.0	7,357.7	9,327.9	7,530.0	26.5	43.7	-88.98	318.2	2,440.5	1,197.5	1,151.8	45.69	26.211		
7,600.0	7,388.7	9,366.6	7,530.0	26.5	44.1	-89.70	279.4	2,440.5	1,188.2	1,142.0	46.24	25.696		
7,650.0	7,416.3	9,408.0	7,530.0	26.5	44.6	-90.10	238.1	2,440.5	1,180.6	1,133.8	46.84	25.208		
7,700.0	7,440.2	9,451.7	7,530.0	26.5	45.1	-90.27	194.4	2,440.5	1,174.5	1,127.1	47.48	24.737		
7,750.0	7,460.3	9,497.3	7,530.0	26.5	45.7	-90.30	148.8	2,440.5	1,169.8	1,121.6	48.18	24.281		
7,800.0	7,476.4	9,544.5	7,530.0	26.5	46.2	-90.25	101.6	2,440.6	1,166.2	1,117.3	48.94	23.830		
7,850.0	7,488.4	9,592.9	7,530.0	26.6	46.8	-90.16	53.1	2,440.6	1,163.7	1,113.9	49.76	23.384		
7,900.0	7,496.2	9,642.3	7,530.0	26.6	47.5	-90.09	3.8	2,440.6	1,162.1	1,111.5	50.66	22.941		
7,950.0	7,499.8	9,692.1	7,530.0	26.7	48.1	-90.05	-46.1	2,440.6	1,161.4	1,109.8	51.61	22.504		
7,966.2	7,500.0	9,708.3	7,530.0	26.7	48.3	-90.05	-62.2	2,440.6	1,161.4	1,109.5	51.93	22.364 CC		
7,966.7	7,500.0	9,708.8	7,530.0	26.7	48.3	-90.05	-62.7	2,440.6	1,161.4	1,109.5	51.94	22.360		
8,000.0	7,500.0	9,742.1	7,530.0	26.8	48.7	-90.05	-96.0	2,440.6	1,161.4	1,108.8	52.62	22.070		
8,100.0	7,500.0	9,842.1	7,530.0	27.0	50.0	-90.05	-196.0	2,440.6	1,161.4	1,106.6	54.80	21.192		
8,200.0	7,500.0	9,942.1	7,530.0	27.4	51.4	-90.05	-296.0	2,440.6	1,161.4	1,104.3	57.18	20.313		
8,300.0	7,500.0	10,042.1	7,530.0	27.9	52.7	-90.05	-396.0	2,440.6	1,161.5	1,101.7	59.72	19.449		
8,400.0	7,500.0	10,142.1	7,530.0	28.5	54.1	-90.05	-496.0	2,440.7	1,161.5	1,099.1	62.40	18.613		
8,500.0	7,500.0	10,242.1	7,530.0	29.1	55.5	-90.05	-596.0	2,440.7	1,161.5	1,096.3	65.20	17.813		
8,600.0	7,500.0	10,342.1	7,530.0	29.9	56.9	-90.05	-696.0	2,440.7	1,161.5	1,093.4	68.10	17.055		
8,700.0	7,500.0	10,442.1	7,530.0	30.8	58.4	-90.05	-796.0	2,440.7	1,161.5	1,090.4	71.09	16.340		
8,800.0	7,500.0	10,542.1	7,530.0	31.7	59.8	-90.05	-896.0	2,440.7	1,161.5	1,087.4	74.14	15.668		
8,900.0	7,500.0	10,642.1	7,530.0	32.7	61.3	-90.05	-996.0	2,440.7	1,161.6	1,084.3	77.24	15.038		

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 2F-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 2F-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
9,000.0	7,500.0	10,742.1	7,530.0	33.7	62.8	-90.05	-1,096.0	2,440.8	1,161.6	1,081.2	80.40	14.448	
9,100.0	7,500.0	10,842.1	7,530.0	34.8	64.3	-90.05	-1,196.0	2,440.8	1,161.6	1,078.0	83.59	13.896	
9,200.0	7,500.0	10,942.1	7,530.0	36.0	65.8	-90.05	-1,296.0	2,440.8	1,161.6	1,074.8	86.82	13.380	
9,300.0	7,500.0	11,042.1	7,530.0	37.2	67.4	-90.05	-1,396.0	2,440.8	1,161.6	1,071.6	90.07	12.897	
9,400.0	7,500.0	11,142.1	7,530.0	38.4	68.9	-90.05	-1,496.0	2,440.8	1,161.6	1,068.3	93.35	12.444	
9,500.0	7,500.0	11,242.1	7,530.0	39.7	70.4	-90.05	-1,596.0	2,440.8	1,161.7	1,065.0	96.65	12.019	
9,600.0	7,500.0	11,342.1	7,530.0	41.1	72.0	-90.05	-1,696.0	2,440.9	1,161.7	1,061.7	99.97	11.620	
9,700.0	7,500.0	11,442.1	7,530.0	42.4	73.6	-90.05	-1,796.0	2,440.9	1,161.7	1,058.4	103.31	11.245	
9,800.0	7,500.0	11,542.1	7,530.0	43.8	75.2	-90.05	-1,896.0	2,440.9	1,161.7	1,055.1	106.66	10.892	
9,900.0	7,500.0	11,642.1	7,530.0	45.2	76.7	-90.05	-1,996.0	2,440.9	1,161.7	1,051.7	110.02	10.559	
10,000.0	7,500.0	11,742.1	7,530.0	46.6	78.3	-90.05	-2,096.0	2,440.9	1,161.7	1,048.3	113.39	10.245	
10,100.0	7,500.0	11,842.1	7,530.0	48.1	79.9	-90.05	-2,196.0	2,440.9	1,161.8	1,045.0	116.78	9.949	
10,200.0	7,500.0	11,942.1	7,530.0	49.6	81.5	-90.05	-2,296.0	2,441.0	1,161.8	1,041.6	120.17	9.668	
10,300.0	7,500.0	12,042.1	7,530.0	51.1	83.1	-90.05	-2,396.0	2,441.0	1,161.8	1,038.2	123.57	9.402	
10,400.0	7,500.0	12,142.1	7,530.0	52.6	84.8	-90.05	-2,496.0	2,441.0	1,161.8	1,034.8	126.97	9.150	
10,500.0	7,500.0	12,242.1	7,530.0	54.1	86.4	-90.05	-2,596.0	2,441.0	1,161.8	1,031.4	130.39	8.911	
10,600.0	7,500.0	12,342.1	7,530.0	55.6	88.0	-90.05	-2,696.0	2,441.0	1,161.8	1,028.0	133.81	8.683	
10,700.0	7,500.0	12,442.1	7,530.0	57.2	89.6	-90.05	-2,796.0	2,441.0	1,161.9	1,024.6	137.23	8.466	
10,800.0	7,500.0	12,542.1	7,530.0	58.8	91.3	-90.05	-2,896.0	2,441.1	1,161.9	1,021.2	140.66	8.260	
10,900.0	7,500.0	12,642.1	7,530.0	60.3	92.9	-90.05	-2,996.0	2,441.1	1,161.9	1,017.8	144.09	8.064	
11,000.0	7,500.0	12,742.1	7,530.0	61.9	94.6	-90.05	-3,096.0	2,441.1	1,161.9	1,014.4	147.53	7.876	
11,100.0	7,500.0	12,842.1	7,530.0	63.5	96.2	-90.05	-3,196.0	2,441.1	1,161.9	1,011.0	150.97	7.696	
11,200.0	7,500.0	12,942.1	7,530.0	65.1	97.9	-90.05	-3,296.0	2,441.1	1,161.9	1,007.5	154.42	7.525	
11,300.0	7,500.0	13,042.1	7,530.0	66.7	99.5	-90.05	-3,396.0	2,441.1	1,162.0	1,004.1	157.86	7.361	
11,400.0	7,500.0	13,142.1	7,530.0	68.3	101.2	-90.05	-3,496.0	2,441.2	1,162.0	1,000.7	161.31	7.203	
11,500.0	7,500.0	13,242.1	7,530.0	70.0	102.8	-90.05	-3,596.0	2,441.2	1,162.0	997.2	164.77	7.052	
11,600.0	7,500.0	13,342.1	7,530.0	71.6	104.5	-90.05	-3,696.0	2,441.2	1,162.0	993.8	168.22	6.908	
11,700.0	7,500.0	13,442.1	7,530.0	73.2	106.2	-90.05	-3,796.0	2,441.2	1,162.0	990.3	171.68	6.769	
11,800.0	7,500.0	13,542.1	7,530.0	74.9	107.9	-90.05	-3,896.0	2,441.2	1,162.0	986.9	175.14	6.635	
11,900.0	7,500.0	13,642.1	7,530.0	76.5	109.5	-90.05	-3,996.0	2,441.2	1,162.1	983.5	178.60	6.506	
12,000.0	7,500.0	13,742.1	7,530.0	78.2	111.2	-90.05	-4,096.0	2,441.3	1,162.1	980.0	182.07	6.383	
12,100.0	7,500.0	13,842.1	7,530.0	79.8	112.9	-90.05	-4,196.0	2,441.3	1,162.1	976.6	185.53	6.263	
12,200.0	7,500.0	13,942.1	7,530.0	81.5	114.6	-90.05	-4,296.0	2,441.3	1,162.1	973.1	189.00	6.149	
12,300.0	7,500.0	14,042.1	7,530.0	83.1	116.2	-90.05	-4,396.0	2,441.3	1,162.1	969.7	192.47	6.038	
12,400.0	7,500.0	14,142.1	7,530.0	84.8	117.9	-90.05	-4,496.0	2,441.3	1,162.1	966.2	195.94	5.931	
12,500.0	7,500.0	14,242.1	7,530.0	86.5	119.6	-90.05	-4,596.0	2,441.3	1,162.2	962.7	199.42	5.828	
12,600.0	7,500.0	14,342.1	7,530.0	88.1	121.3	-90.05	-4,696.0	2,441.4	1,162.2	959.3	202.89	5.728	
12,700.0	7,500.0	14,442.1	7,530.0	89.8	123.0	-90.05	-4,796.0	2,441.4	1,162.2	955.8	206.36	5.632	
12,800.0	7,500.0	14,542.1	7,530.0	91.5	124.7	-90.05	-4,896.0	2,441.4	1,162.2	952.4	209.84	5.539	
12,900.0	7,500.0	14,642.1	7,530.0	93.2	126.4	-90.05	-4,996.0	2,441.4	1,162.2	948.9	213.32	5.448	
13,000.0	7,500.0	14,742.1	7,530.0	94.9	128.1	-90.05	-5,096.0	2,441.4	1,162.2	945.4	216.80	5.361	
13,100.0	7,500.0	14,842.1	7,530.0	96.5	129.8	-90.05	-5,196.0	2,441.4	1,162.3	942.0	220.28	5.276	
13,200.0	7,500.0	14,942.1	7,530.0	98.2	131.5	-90.05	-5,296.0	2,441.5	1,162.3	938.5	223.76	5.194	
13,300.0	7,500.0	15,042.1	7,530.0	99.9	133.2	-90.05	-5,396.0	2,441.5	1,162.3	935.1	227.24	5.115	
13,400.0	7,500.0	15,142.1	7,530.0	101.6	134.9	-90.05	-5,496.0	2,441.5	1,162.3	931.6	230.72	5.038	
13,500.0	7,500.0	15,242.1	7,530.0	103.3	136.6	-90.05	-5,596.0	2,441.5	1,162.3	928.1	234.20	4.963	
13,600.0	7,500.0	15,342.1	7,530.0	105.0	138.3	-90.05	-5,696.0	2,441.5	1,162.3	924.7	237.69	4.890	
13,700.0	7,500.0	15,442.1	7,530.0	106.7	140.0	-90.05	-5,796.0	2,441.5	1,162.4	921.2	241.17	4.820	
13,800.0	7,500.0	15,542.1	7,530.0	108.4	141.7	-90.05	-5,896.0	2,441.6	1,162.4	917.7	244.65	4.751	
13,900.0	7,500.0	15,642.1	7,530.0	110.1	143.4	-90.05	-5,996.0	2,441.6	1,162.4	914.2	248.14	4.684	
14,000.0	7,500.0	15,742.1	7,530.0	111.8	145.1	-90.05	-6,096.0	2,441.6	1,162.4	910.8	251.63	4.620	
14,100.0	7,500.0	15,842.1	7,530.0	113.5	146.8	-90.05	-6,196.0	2,441.6	1,162.4	907.3	255.11	4.556	

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 2F-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 2F-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	
14,200.0	7,500.0	15,942.1	7,530.0	115.2	148.5	-90.05	-6,296.0	2,441.6	1,162.4	903.8	258.60	4.495	
14,300.0	7,500.0	16,042.1	7,530.0	116.9	150.3	-90.05	-6,396.0	2,441.6	1,162.5	900.4	262.09	4.435	
14,400.0	7,500.0	16,142.1	7,530.0	118.6	152.0	-90.05	-6,496.0	2,441.7	1,162.5	896.9	265.58	4.377	
14,500.0	7,500.0	16,242.1	7,530.0	120.4	153.7	-90.05	-6,596.0	2,441.7	1,162.5	893.4	269.07	4.320	
14,600.0	7,500.0	16,342.1	7,530.0	122.1	155.4	-90.05	-6,696.0	2,441.7	1,162.5	889.9	272.56	4.265	
14,700.0	7,500.0	16,442.1	7,530.0	123.8	157.1	-90.05	-6,796.0	2,441.7	1,162.5	886.5	276.05	4.211	
14,800.0	7,500.0	16,542.1	7,530.0	125.5	158.8	-90.05	-6,896.0	2,441.7	1,162.5	883.0	279.54	4.159	
14,900.0	7,500.0	16,642.1	7,530.0	127.2	160.5	-90.05	-6,996.0	2,441.7	1,162.6	879.5	283.03	4.108	
15,000.0	7,500.0	16,742.1	7,530.0	128.9	162.3	-90.05	-7,096.0	2,441.7	1,162.6	876.0	286.52	4.058	
15,100.0	7,500.0	16,842.1	7,530.0	130.6	164.0	-90.05	-7,196.0	2,441.8	1,162.6	872.6	290.01	4.009	
15,200.0	7,500.0	16,942.1	7,530.0	132.4	165.7	-90.05	-7,296.0	2,441.8	1,162.6	869.1	293.51	3.961	
15,300.0	7,500.0	17,042.1	7,530.0	134.1	167.4	-90.05	-7,396.0	2,441.8	1,162.6	865.6	297.00	3.915	
15,400.0	7,500.0	17,142.1	7,530.0	135.8	169.1	-90.05	-7,496.0	2,441.8	1,162.6	862.1	300.49	3.869	
15,500.0	7,500.0	17,242.1	7,530.0	137.5	170.9	-90.05	-7,596.0	2,441.8	1,162.7	858.7	303.99	3.825	
15,600.0	7,500.0	17,342.1	7,530.0	139.2	172.6	-90.05	-7,696.0	2,441.8	1,162.7	855.2	307.48	3.781	
15,700.0	7,500.0	17,442.1	7,530.0	141.0	174.3	-90.05	-7,796.0	2,441.9	1,162.7	851.7	310.97	3.739	
15,800.0	7,500.0	17,542.1	7,530.0	142.7	176.0	-90.05	-7,896.0	2,441.9	1,162.7	848.2	314.47	3.697	
15,841.7	7,500.0	17,583.8	7,530.0	143.4	176.8	-90.05	-7,937.7	2,441.9	1,162.7	846.8	315.93	3.680 ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 1B-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		
0.0	0.0	29.0	29.0	0.0	0.0	65.61	1,870.2	4,124.8	4,529.0					
100.0	100.0	129.0	129.0	0.2	0.2	65.61	1,870.2	4,124.8	4,529.0	4,528.6	0.35	N/A		
200.0	200.0	229.0	229.0	0.3	0.4	65.61	1,870.2	4,124.8	4,529.0	4,528.3	0.70	6,439.015		
300.0	300.0	453.1	453.0	0.5	0.8	65.58	1,871.1	4,121.4	4,527.9	4,526.6	1.27	3,562.141		
400.0	400.0	709.2	708.7	0.7	1.3	-0.91	1,874.9	4,107.1	4,522.6	4,520.7	1.91	2,363.107		
500.0	500.0	962.8	960.9	0.9	1.9	-1.12	1,881.6	4,082.1	4,512.1	4,509.5	2.60	1,738.040		
600.0	599.9	1,212.4	1,207.9	1.0	2.6	-1.43	1,891.0	4,046.9	4,496.5	4,493.2	3.33	1,349.174		
700.0	699.7	1,456.7	1,447.8	1.2	3.5	-1.83	1,902.9	4,002.5	4,476.0	4,471.9	4.14	1,082.458		
800.0	799.4	1,556.5	1,545.4	1.4	3.9	-2.02	1,908.3	3,982.3	4,452.2	4,447.6	4.59	970.816		
900.0	898.9	1,652.2	1,639.0	1.7	4.2	-2.21	1,913.5	3,962.9	4,426.8	4,421.7	5.03	880.057		
1,000.0	998.3	1,747.5	1,732.1	1.9	4.6	-2.40	1,918.7	3,943.5	4,399.7	4,394.2	5.48	803.413		
1,100.0	1,097.4	1,842.3	1,824.8	2.2	5.0	-2.60	1,923.8	3,924.3	4,370.9	4,365.0	5.92	737.843		
1,200.0	1,196.3	1,936.6	1,917.0	2.5	5.4	-2.80	1,928.9	3,905.1	4,340.6	4,334.2	6.37	681.109		
1,300.0	1,294.9	2,030.3	2,008.6	2.8	5.8	-3.01	1,934.0	3,886.1	4,308.6	4,301.8	6.82	631.524		
1,400.0	1,393.3	2,123.4	2,099.6	3.2	6.1	-3.23	1,939.1	3,867.2	4,275.0	4,267.8	7.27	587.801		
1,494.4	1,485.8	2,210.8	2,185.1	3.5	6.5	-3.44	1,943.8	3,849.5	4,241.9	4,234.2	7.70	550.997		
1,500.0	1,491.2	2,216.0	2,190.1	3.5	6.5	-3.45	1,944.1	3,848.4	4,239.9	4,232.2	7.72	548.939		
1,600.0	1,589.1	2,308.2	2,280.3	3.9	6.9	-3.66	1,949.1	3,829.7	4,204.0	4,195.9	8.18	514.194		
1,700.0	1,686.9	2,400.5	2,370.5	4.3	7.3	-3.87	1,954.1	3,811.0	4,168.3	4,159.6	8.63	482.958		
1,800.0	1,784.8	2,492.7	2,460.7	4.7	7.6	-4.08	1,959.1	3,792.3	4,132.5	4,123.4	9.09	454.727		
1,900.0	1,882.6	2,585.0	2,550.9	5.1	8.0	-4.30	1,964.1	3,773.6	4,096.8	4,087.3	9.55	429.094		
2,000.0	1,980.4	2,677.2	2,641.1	5.5	8.4	-4.52	1,969.2	3,754.8	4,061.2	4,051.2	10.01	405.718		
2,100.0	2,078.3	2,769.5	2,731.3	5.9	8.8	-4.74	1,974.2	3,736.1	4,025.6	4,015.1	10.47	384.316		
2,200.0	2,176.1	2,861.7	2,821.5	6.3	9.1	-4.97	1,979.2	3,717.4	3,990.1	3,979.2	10.94	364.650		
2,300.0	2,273.9	2,954.0	2,911.7	6.7	9.5	-5.20	1,984.2	3,698.7	3,954.6	3,943.2	11.41	346.518		
2,400.0	2,371.8	3,046.2	3,001.9	7.1	9.9	-5.43	1,989.2	3,679.9	3,919.2	3,907.4	11.89	329.750		
2,500.0	2,469.6	3,138.5	3,092.1	7.5	10.3	-5.67	1,994.2	3,661.2	3,883.9	3,871.5	12.36	314.197		
2,600.0	2,567.4	3,230.8	3,182.3	7.9	10.6	-5.92	1,999.2	3,642.5	3,848.6	3,835.8	12.84	299.734		
2,700.0	2,665.3	3,323.0	3,272.5	8.3	11.0	-6.17	2,004.2	3,623.8	3,813.4	3,800.1	13.32	286.250		
2,800.0	2,763.1	3,415.3	3,362.7	8.7	11.4	-6.42	2,009.2	3,605.1	3,778.2	3,764.4	13.81	273.651		
2,900.0	2,860.9	3,507.5	3,452.9	9.1	11.8	-6.68	2,014.2	3,586.3	3,743.2	3,728.9	14.29	261.852		
3,000.0	2,958.8	3,599.8	3,543.0	9.5	12.2	-6.94	2,019.2	3,567.6	3,708.1	3,693.4	14.79	250.780		
3,100.0	3,056.6	3,692.0	3,633.2	9.9	12.5	-7.21	2,024.2	3,548.9	3,673.2	3,657.9	15.28	240.371		
3,200.0	3,154.4	3,784.3	3,723.4	10.3	12.9	-7.48	2,029.3	3,530.2	3,638.3	3,622.6	15.78	230.568		
3,300.0	3,252.3	3,876.5	3,813.6	10.7	13.3	-7.76	2,034.3	3,511.4	3,603.5	3,587.3	16.28	221.320		
3,400.0	3,350.1	3,968.8	3,903.8	11.1	13.7	-8.04	2,039.3	3,492.7	3,568.8	3,552.0	16.79	212.581		
3,500.0	3,447.9	4,061.0	3,994.0	11.5	14.1	-8.33	2,044.3	3,474.0	3,534.2	3,516.9	17.30	204.311		
3,600.0	3,545.8	4,153.3	4,084.2	11.9	14.4	-8.62	2,049.3	3,455.3	3,499.6	3,481.8	17.81	196.475		
3,700.0	3,643.6	4,245.6	4,174.4	12.3	14.8	-8.92	2,054.3	3,436.6	3,465.2	3,446.8	18.33	189.038		
3,800.0	3,741.5	4,337.8	4,264.6	12.7	15.2	-9.22	2,059.3	3,417.8	3,430.8	3,411.9	18.85	181.972		
3,900.0	3,839.3	4,430.1	4,354.8	13.1	15.6	-9.53	2,064.3	3,399.1	3,396.5	3,377.1	19.38	175.251		
4,000.0	3,937.1	4,522.3	4,445.0	13.5	16.0	-9.85	2,069.3	3,380.4	3,362.3	3,342.4	19.91	168.850		
4,100.0	4,035.0	4,614.6	4,535.2	13.9	16.3	-10.17	2,074.3	3,361.7	3,328.2	3,307.8	20.45	162.748		
4,200.0	4,132.8	4,706.8	4,625.4	14.3	16.7	-10.50	2,079.3	3,342.9	3,294.2	3,273.2	20.99	156.924		
4,300.0	4,230.6	4,799.1	4,715.6	14.7	17.1	-10.84	2,084.3	3,324.2	3,260.3	3,238.8	21.54	151.361		
4,400.0	4,328.5	4,891.3	4,805.8	15.1	17.5	-11.18	2,089.4	3,305.5	3,226.5	3,204.4	22.09	146.042		
4,500.0	4,426.3	4,983.6	4,896.0	15.5	17.9	-11.53	2,094.4	3,286.8	3,192.8	3,170.2	22.65	140.952		
4,600.0	4,524.1	5,075.8	4,986.2	15.9	18.2	-11.89	2,099.4	3,268.1	3,159.3	3,136.1	23.22	136.077		
4,700.0	4,622.0	5,168.1	5,076.4	16.3	18.6	-12.25	2,104.4	3,249.3	3,125.8	3,102.0	23.79	131.404		
4,800.0	4,719.8	5,260.4	5,166.6	16.7	19.0	-12.63	2,109.4	3,230.6	3,092.5	3,068.1	24.37	126.922		
4,900.0	4,817.6	5,352.6	5,256.8	17.2	19.4	-13.00	2,114.4	3,211.9	3,059.3	3,034.3	24.95	122.619		
5,000.0	4,915.5	5,444.9	5,347.0	17.6	19.8	-13.39	2,119.4	3,193.2	3,026.2	3,000.7	25.54	118.486		

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 2F-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 2F-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 1B-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,013.3	5,537.1	5,437.2	18.0	20.1	-13.79	2,124.4	3,174.4	2,993.2	2,967.1	26.14	114.514	
5,200.0	5,111.1	5,629.4	5,527.4	18.4	20.5	-14.19	2,129.4	3,155.7	2,960.4	2,933.7	26.74	110.694	
5,300.0	5,209.0	5,721.6	5,617.5	18.8	20.9	-14.60	2,134.4	3,137.0	2,927.7	2,900.4	27.36	107.018	
5,400.0	5,306.8	5,813.9	5,707.7	19.2	21.3	-15.03	2,139.4	3,118.3	2,895.2	2,867.2	27.98	103.479	
5,500.0	5,404.6	5,906.1	5,797.9	19.6	21.7	-15.46	2,144.4	3,099.6	2,862.8	2,834.2	28.61	100.071	
5,600.0	5,502.5	5,998.4	5,888.1	20.0	22.0	-15.90	2,149.5	3,080.8	2,830.6	2,801.4	29.25	96.786	
5,700.0	5,600.3	6,092.7	7,770.0	20.4	39.9	31.76	398.9	2,690.5	2,783.7	2,752.9	30.78	90.448	
5,800.0	5,698.2	6,421.4	7,770.0	20.8	39.8	31.41	407.2	2,690.5	2,696.8	2,665.5	31.28	86.217	
5,900.0	5,796.0	6,413.1	7,770.0	21.2	39.7	31.06	415.5	2,690.5	2,610.8	2,579.0	31.81	82.083	
6,000.0	5,893.8	6,404.8	7,770.0	21.6	39.6	30.72	423.8	2,690.5	2,525.8	2,493.4	32.36	78.050	
6,100.0	5,991.7	6,396.5	7,770.0	22.0	39.5	30.37	432.1	2,690.5	2,441.8	2,408.9	32.94	74.122	
6,200.0	6,089.5	6,388.2	7,770.0	22.4	39.4	30.02	440.4	2,690.5	2,359.2	2,325.6	33.56	70.304	
6,300.0	6,187.3	6,379.9	7,770.0	22.8	39.3	29.67	448.7	2,690.5	2,277.8	2,243.6	34.20	66.604	
6,400.0	6,285.2	6,371.7	7,770.0	23.2	39.2	29.32	457.0	2,690.5	2,198.0	2,163.1	34.87	63.027	
6,500.0	6,383.0	6,363.4	7,770.0	23.7	39.1	28.97	465.3	2,690.5	2,119.9	2,084.3	35.58	59.581	
6,600.0	6,480.8	6,355.1	7,770.0	24.1	39.0	28.62	473.6	2,690.5	2,043.6	2,007.3	36.32	56.274	
6,700.0	6,578.7	6,346.8	7,770.0	24.5	38.9	28.27	481.9	2,690.5	1,969.4	1,932.4	37.08	53.113	
6,800.0	6,676.5	6,338.5	7,770.0	24.9	38.8	27.92	490.2	2,690.5	1,897.6	1,859.7	37.87	50.107	
6,900.0	6,774.3	6,330.2	7,770.0	25.3	38.7	27.57	498.4	2,690.5	1,828.4	1,789.7	38.68	47.265	
7,000.0	6,872.2	6,321.9	7,770.0	25.7	38.6	27.22	506.7	2,690.5	1,762.1	1,722.6	39.51	44.596	
7,019.1	6,890.8	6,320.3	7,770.0	25.8	38.6	27.15	508.3	2,690.5	1,749.8	1,710.1	39.67	44.108	
7,050.0	6,921.1	6,318.6	7,770.0	25.9	38.6	9.89	510.1	2,690.5	1,730.1	1,690.2	39.92	43.334	
7,100.0	6,970.2	6,319.3	7,770.0	26.0	38.6	-19.30	509.3	2,690.5	1,698.9	1,658.6	40.34	42.113	
7,150.0	7,019.0	6,324.4	7,770.0	26.2	38.7	-42.94	504.2	2,690.5	1,668.8	1,628.0	40.78	40.927	
7,200.0	7,067.2	6,333.8	7,770.0	26.3	38.8	-59.22	494.8	2,690.5	1,640.0	1,598.8	41.22	39.784	
7,250.0	7,114.4	6,347.4	7,770.0	26.4	38.9	-70.27	481.2	2,690.5	1,612.7	1,571.1	41.68	38.690	
7,300.0	7,160.3	6,365.2	7,770.0	26.4	39.2	-78.06	463.4	2,690.5	1,587.2	1,545.0	42.16	37.650	
7,350.0	7,204.5	6,387.0	7,770.0	26.5	39.4	-83.73	441.7	2,690.5	1,563.5	1,520.9	42.64	36.665	
7,400.0	7,246.6	6,412.6	7,770.0	26.5	39.7	-87.96	416.0	2,690.5	1,541.9	1,498.7	43.15	35.734	
7,450.0	7,286.4	6,441.9	7,770.0	26.5	40.1	-91.15	386.8	2,690.5	1,522.2	1,478.5	43.67	34.854	
7,500.0	7,323.5	6,474.6	7,770.0	26.5	40.5	-93.57	354.1	2,690.5	1,504.6	1,460.4	44.22	34.025	
7,550.0	7,357.7	6,510.4	7,770.0	26.5	40.9	-95.39	318.2	2,690.5	1,489.1	1,444.3	44.80	33.240	
7,600.0	7,388.7	6,549.2	7,770.0	26.5	41.4	-96.74	279.5	2,690.5	1,475.6	1,430.2	45.41	32.493	
7,650.0	7,416.3	6,590.5	7,770.0	26.5	41.9	-97.74	238.1	2,690.5	1,464.1	1,418.0	46.07	31.782	
7,700.0	7,440.2	6,634.2	7,770.0	26.5	42.5	-98.45	194.5	2,690.5	1,454.4	1,407.7	46.77	31.099	
7,750.0	7,460.3	6,679.8	7,770.0	26.5	43.0	-98.95	148.9	2,690.6	1,446.6	1,399.1	47.52	30.443	
7,800.0	7,476.4	6,727.0	7,770.0	26.5	43.7	-99.29	101.7	2,690.6	1,440.5	1,392.2	48.32	29.810	
7,850.0	7,488.4	6,775.4	7,770.0	26.6	44.3	-99.51	53.2	2,690.6	1,436.0	1,386.9	49.18	29.200	
7,900.0	7,496.2	6,824.8	7,770.0	26.6	45.0	-99.63	3.8	2,690.6	1,433.2	1,383.1	50.09	28.613	
7,950.0	7,499.8	6,874.6	7,770.0	26.7	45.6	-99.69	-46.0	2,690.6	1,431.9	1,380.9	51.04	28.053	
7,966.4	7,500.0	6,891.0	7,770.0	26.7	45.9	-99.69	-62.4	2,690.6	1,431.8	1,380.5	51.37	27.876 CC	
7,966.7	7,500.0	6,891.3	7,770.0	26.7	45.9	-99.69	-62.7	2,690.6	1,431.8	1,380.5	51.37	27.873	
8,000.0	7,500.0	6,924.6	7,770.0	26.8	46.3	-99.69	-96.0	2,690.6	1,431.8	1,379.8	52.04	27.514	
8,100.0	7,500.0	10,024.6	7,770.0	27.0	47.7	-99.69	-196.0	2,690.6	1,431.9	1,377.7	54.19	26.422	
8,200.0	7,500.0	10,124.6	7,770.0	27.4	49.1	-99.69	-296.0	2,690.6	1,431.9	1,375.3	56.53	25.328	
8,300.0	7,500.0	10,224.6	7,770.0	27.9	50.5	-99.69	-396.0	2,690.6	1,431.9	1,372.9	59.04	24.252	
8,400.0	7,500.0	10,324.6	7,770.0	28.5	52.0	-99.69	-496.0	2,690.7	1,431.9	1,370.2	61.69	23.211	
8,500.0	7,500.0	10,424.6	7,770.0	29.1	53.4	-99.69	-596.0	2,690.7	1,431.9	1,367.5	64.46	22.216	
8,600.0	7,500.0	10,524.6	7,770.0	29.9	54.9	-99.69	-696.0	2,690.7	1,431.9	1,364.6	67.32	21.271	
8,700.0	7,500.0	10,624.6	7,770.0	30.8	56.4	-99.69	-796.0	2,690.7	1,432.0	1,361.7	70.26	20.381	
8,800.0	7,500.0	10,724.6	7,770.0	31.7	57.9	-99.69	-896.0	2,690.7	1,432.0	1,358.7	73.27	19.544	
8,900.0	7,500.0	10,824.6	7,770.0	32.7	59.5	-99.69	-996.0	2,690.7	1,432.0	1,355.7	76.33	18.759	

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 2F-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 2F-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 1B-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		
9,000.0	7,500.0	10,924.6	7,770.0	33.7	61.0	-99.69	-1,096.0	2,690.8	1,432.0	1,352.6	79.45	18.025		
9,100.0	7,500.0	11,024.6	7,770.0	34.8	62.6	-99.69	-1,196.0	2,690.8	1,432.0	1,349.4	82.59	17.338		
9,200.0	7,500.0	11,124.6	7,770.0	36.0	64.1	-99.69	-1,296.0	2,690.8	1,432.0	1,346.3	85.78	16.695		
9,300.0	7,500.0	11,224.6	7,770.0	37.2	65.7	-99.69	-1,396.0	2,690.8	1,432.1	1,343.1	88.99	16.093		
9,400.0	7,500.0	11,324.6	7,770.0	38.4	67.3	-99.69	-1,496.0	2,690.8	1,432.1	1,339.9	92.22	15.529		
9,500.0	7,500.0	11,424.6	7,770.0	39.7	68.9	-99.69	-1,596.0	2,690.8	1,432.1	1,336.6	95.48	14.999		
9,600.0	7,500.0	11,524.6	7,770.0	41.1	70.5	-99.69	-1,696.0	2,690.9	1,432.1	1,333.4	98.75	14.503		
9,700.0	7,500.0	11,624.6	7,770.0	42.4	72.1	-99.69	-1,796.0	2,690.9	1,432.1	1,330.1	102.04	14.035		
9,800.0	7,500.0	11,724.6	7,770.0	43.8	73.7	-99.69	-1,896.0	2,690.9	1,432.1	1,326.8	105.34	13.595		
9,900.0	7,500.0	11,824.6	7,770.0	45.2	75.3	-99.69	-1,996.0	2,690.9	1,432.2	1,323.5	108.65	13.181		
10,000.0	7,500.0	11,924.6	7,770.0	46.6	76.9	-99.69	-2,096.0	2,690.9	1,432.2	1,320.2	111.98	12.790		
10,100.0	7,500.0	12,024.6	7,770.0	48.1	78.5	-99.69	-2,196.0	2,690.9	1,432.2	1,316.9	115.31	12.420		
10,200.0	7,500.0	12,124.6	7,770.0	49.6	80.2	-99.69	-2,296.0	2,691.0	1,432.2	1,313.5	118.66	12.070		
10,300.0	7,500.0	12,224.6	7,770.0	51.1	81.8	-99.69	-2,396.0	2,691.0	1,432.2	1,310.2	122.01	11.739		
10,400.0	7,500.0	12,324.6	7,770.0	52.6	83.5	-99.69	-2,496.0	2,691.0	1,432.2	1,306.9	125.37	11.424		
10,500.0	7,500.0	12,424.6	7,770.0	54.1	85.1	-99.69	-2,596.0	2,691.0	1,432.3	1,303.5	128.73	11.126		
10,600.0	7,500.0	12,524.6	7,770.0	55.6	86.8	-99.69	-2,696.0	2,691.0	1,432.3	1,300.2	132.10	10.842		
10,700.0	7,500.0	12,624.6	7,770.0	57.2	88.4	-99.69	-2,796.0	2,691.0	1,432.3	1,296.8	135.48	10.572		
10,800.0	7,500.0	12,724.6	7,770.0	58.8	90.1	-99.69	-2,896.0	2,691.1	1,432.3	1,293.4	138.86	10.315		
10,900.0	7,500.0	12,824.6	7,770.0	60.3	91.7	-99.69	-2,996.0	2,691.1	1,432.3	1,290.1	142.24	10.070		
11,000.0	7,500.0	12,924.6	7,770.0	61.9	93.4	-99.69	-3,096.0	2,691.1	1,432.3	1,286.7	145.63	9.836		
11,100.0	7,500.0	13,024.6	7,770.0	63.5	95.1	-99.69	-3,196.0	2,691.1	1,432.4	1,283.3	149.02	9.612		
11,200.0	7,500.0	13,124.6	7,770.0	65.1	96.7	-99.69	-3,296.0	2,691.1	1,432.4	1,280.0	152.42	9.398		
11,300.0	7,500.0	13,224.6	7,770.0	66.7	98.4	-99.69	-3,396.0	2,691.1	1,432.4	1,276.6	155.81	9.193		
11,400.0	7,500.0	13,324.6	7,770.0	68.3	100.1	-99.69	-3,496.0	2,691.2	1,432.4	1,273.2	159.22	8.997		
11,500.0	7,500.0	13,424.6	7,770.0	70.0	101.8	-99.69	-3,596.0	2,691.2	1,432.4	1,269.8	162.62	8.808		
11,600.0	7,500.0	13,524.6	7,770.0	71.6	103.5	-99.69	-3,696.0	2,691.2	1,432.4	1,266.4	166.03	8.628		
11,700.0	7,500.0	13,624.6	7,770.0	73.2	105.2	-99.69	-3,796.0	2,691.2	1,432.5	1,263.0	169.44	8.454		
11,800.0	7,500.0	13,724.6	7,770.0	74.9	106.8	-99.69	-3,896.0	2,691.2	1,432.5	1,259.6	172.85	8.288		
11,900.0	7,500.0	13,824.6	7,770.0	76.5	108.5	-99.69	-3,996.0	2,691.2	1,432.5	1,256.2	176.26	8.127		
12,000.0	7,500.0	13,924.6	7,770.0	78.2	110.2	-99.69	-4,096.0	2,691.3	1,432.5	1,252.8	179.68	7.973		
12,100.0	7,500.0	14,024.6	7,770.0	79.8	111.9	-99.69	-4,196.0	2,691.3	1,432.5	1,249.4	183.09	7.824		
12,200.0	7,500.0	14,124.6	7,770.0	81.5	113.6	-99.69	-4,296.0	2,691.3	1,432.5	1,246.0	186.51	7.681		
12,300.0	7,500.0	14,224.6	7,770.0	83.1	115.3	-99.68	-4,396.0	2,691.3	1,432.6	1,242.6	189.93	7.543		
12,400.0	7,500.0	14,324.6	7,770.0	84.8	117.0	-99.68	-4,496.0	2,691.3	1,432.6	1,239.2	193.35	7.409		
12,500.0	7,500.0	14,424.6	7,770.0	86.5	118.7	-99.68	-4,596.0	2,691.3	1,432.6	1,235.8	196.78	7.280		
12,600.0	7,500.0	14,524.6	7,770.0	88.1	120.4	-99.68	-4,696.0	2,691.4	1,432.6	1,232.4	200.20	7.156		
12,700.0	7,500.0	14,624.6	7,770.0	89.8	122.1	-99.68	-4,796.0	2,691.4	1,432.6	1,229.0	203.62	7.036		
12,800.0	7,500.0	14,724.6	7,770.0	91.5	123.8	-99.68	-4,896.0	2,691.4	1,432.6	1,225.6	207.05	6.919		
12,900.0	7,500.0	14,824.6	7,770.0	93.2	125.5	-99.68	-4,996.0	2,691.4	1,432.7	1,222.2	210.48	6.807		
13,000.0	7,500.0	14,924.6	7,770.0	94.9	127.2	-99.68	-5,096.0	2,691.4	1,432.7	1,218.8	213.91	6.698		
13,100.0	7,500.0	15,024.6	7,770.0	96.5	129.0	-99.68	-5,196.0	2,691.4	1,432.7	1,215.3	217.34	6.592		
13,200.0	7,500.0	15,124.6	7,770.0	98.2	130.7	-99.68	-5,296.0	2,691.5	1,432.7	1,211.9	220.77	6.490		
13,300.0	7,500.0	15,224.6	7,770.0	99.9	132.4	-99.68	-5,396.0	2,691.5	1,432.7	1,208.5	224.20	6.390		
13,400.0	7,500.0	15,324.6	7,770.0	101.6	134.1	-99.68	-5,496.0	2,691.5	1,432.7	1,205.1	227.63	6.294		
13,500.0	7,500.0	15,424.6	7,770.0	103.3	135.8	-99.68	-5,596.0	2,691.5	1,432.7	1,201.7	231.07	6.201		
13,600.0	7,500.0	15,524.6	7,770.0	105.0	137.5	-99.68	-5,696.0	2,691.5	1,432.8	1,198.3	234.50	6.110		
13,700.0	7,500.0	15,624.6	7,770.0	106.7	139.2	-99.68	-5,796.0	2,691.5	1,432.8	1,194.8	237.94	6.022		
13,800.0	7,500.0	15,724.6	7,770.0	108.4	140.9	-99.68	-5,896.0	2,691.6	1,432.8	1,191.4	241.37	5.936		
13,900.0	7,500.0	15,824.6	7,770.0	110.1	142.7	-99.68	-5,996.0	2,691.6	1,432.8	1,188.0	244.81	5.853		
14,000.0	7,500.0	15,924.6	7,770.0	111.8	144.4	-99.68	-6,096.0	2,691.6	1,432.8	1,184.6	248.25	5.772		
14,100.0	7,500.0	16,024.6	7,770.0	113.5	146.1	-99.68	-6,196.0	2,691.6	1,432.8	1,181.2	251.68	5.693		

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 2F-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 2F-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 1B-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		
14,200.0	7,500.0	16,124.6	7,770.0	115.2	147.8	-99.68	-6,296.0	2,691.6	1,432.9	1,177.7	255.12	5.616		
14,300.0	7,500.0	16,224.6	7,770.0	116.9	149.5	-99.68	-6,396.0	2,691.6	1,432.9	1,174.3	258.56	5.542		
14,400.0	7,500.0	16,324.6	7,770.0	118.6	151.3	-99.68	-6,496.0	2,691.7	1,432.9	1,170.9	262.00	5.469		
14,500.0	7,500.0	16,424.6	7,770.0	120.4	153.0	-99.68	-6,596.0	2,691.7	1,432.9	1,167.5	265.44	5.398		
14,600.0	7,500.0	16,524.6	7,770.0	122.1	154.7	-99.68	-6,696.0	2,691.7	1,432.9	1,164.0	268.88	5.329		
14,700.0	7,500.0	16,624.6	7,770.0	123.8	156.4	-99.68	-6,796.0	2,691.7	1,432.9	1,160.6	272.32	5.262		
14,800.0	7,500.0	16,724.6	7,770.0	125.5	158.2	-99.68	-6,896.0	2,691.7	1,433.0	1,157.2	275.76	5.196		
14,900.0	7,500.0	16,824.6	7,770.0	127.2	159.9	-99.68	-6,996.0	2,691.7	1,433.0	1,153.8	279.20	5.132		
15,000.0	7,500.0	16,924.6	7,770.0	128.9	161.6	-99.68	-7,096.0	2,691.8	1,433.0	1,150.3	282.65	5.070		
15,100.0	7,500.0	17,024.6	7,770.0	130.6	163.3	-99.68	-7,196.0	2,691.8	1,433.0	1,146.9	286.09	5.009		
15,200.0	7,500.0	17,124.6	7,770.0	132.4	165.1	-99.68	-7,296.0	2,691.8	1,433.0	1,143.5	289.53	4.949		
15,300.0	7,500.0	17,224.6	7,770.0	134.1	166.8	-99.68	-7,396.0	2,691.8	1,433.0	1,140.1	292.98	4.891		
15,400.0	7,500.0	17,324.6	7,770.0	135.8	168.5	-99.68	-7,496.0	2,691.8	1,433.1	1,136.6	296.42	4.835		
15,500.0	7,500.0	17,424.6	7,770.0	137.5	170.2	-99.68	-7,596.0	2,691.8	1,433.1	1,133.2	299.86	4.779		
15,600.0	7,500.0	17,524.6	7,770.0	139.2	172.0	-99.68	-7,696.0	2,691.9	1,433.1	1,129.8	303.31	4.725		
15,700.0	7,500.0	17,624.6	7,770.0	141.0	173.7	-99.68	-7,796.0	2,691.9	1,433.1	1,126.4	306.75	4.672		
15,800.0	7,500.0	17,724.6	7,770.0	142.7	175.4	-99.68	-7,896.0	2,691.9	1,433.1	1,122.9	310.20	4.620		
15,841.7	7,500.0	17,766.3	7,770.0	143.4	176.2	-99.68	-7,937.7	2,691.9	1,433.1	1,121.5	311.63	4.599 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 1C-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				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	28.0	28.0	0.0	0.0	65.67	1,869.8	4,134.9	4,538.0					
100.0	100.0	128.0	128.0	0.2	0.2	65.67	1,869.8	4,134.9	4,538.0	4,537.7	0.35	N/A		
200.0	200.0	228.0	228.0	0.3	0.4	65.67	1,869.8	4,134.9	4,538.0	4,537.3	0.70	6,467.900		
300.0	300.0	366.6	366.6	0.5	0.6	65.66	1,869.9	4,134.5	4,537.9	4,536.8	1.12	4,058.102		
400.0	400.0	604.1	604.0	0.7	1.0	-0.77	1,872.4	4,127.3	4,534.7	4,533.0	1.71	2,644.941		
500.0	500.0	840.1	839.3	0.9	1.5	-0.92	1,877.9	4,110.8	4,526.7	4,524.3	2.34	1,937.680		
600.0	599.9	1,073.4	1,071.0	1.0	2.1	-1.16	1,886.5	4,085.5	4,514.0	4,511.0	3.00	1,504.701		
700.0	699.7	1,302.7	1,297.6	1.2	2.8	-1.49	1,897.8	4,052.0	4,496.7	4,493.0	3.72	1,209.075		
800.0	799.4	1,407.4	1,400.6	1.4	3.2	-1.66	1,903.7	4,034.5	4,476.1	4,472.0	4.16	1,075.714		
900.0	898.9	1,504.1	1,495.8	1.7	3.5	-1.83	1,909.1	4,018.3	4,453.9	4,449.3	4.59	970.954		
1,000.0	998.3	1,600.4	1,590.7	1.9	3.8	-2.00	1,914.5	4,002.2	4,430.0	4,425.0	5.02	883.293		
1,100.0	1,097.4	1,696.3	1,685.0	2.2	4.1	-2.17	1,919.9	3,986.2	4,404.4	4,399.0	5.45	808.890		
1,200.0	1,196.3	1,791.7	1,779.0	2.5	4.5	-2.35	1,925.3	3,970.2	4,377.2	4,371.4	5.88	744.958		
1,300.0	1,294.9	1,886.7	1,872.4	2.8	4.8	-2.53	1,930.7	3,954.4	4,348.4	4,342.1	6.31	689.424		
1,400.0	1,393.3	1,981.1	1,965.3	3.2	5.1	-2.72	1,936.0	3,938.6	4,317.9	4,311.2	6.74	640.719		
1,494.4	1,485.8	2,069.7	2,052.6	3.5	5.4	-2.90	1,941.0	3,923.8	4,287.7	4,280.5	7.15	599.914		
1,500.0	1,491.2	2,074.9	2,057.7	3.5	5.5	-2.91	1,941.3	3,922.9	4,285.9	4,278.7	7.17	597.639		
1,600.0	1,589.1	2,168.5	2,149.8	3.9	5.8	-3.10	1,946.5	3,907.3	4,253.1	4,245.5	7.60	559.293		
1,700.0	1,686.9	2,262.1	2,242.0	4.3	6.1	-3.28	1,951.8	3,891.6	4,220.3	4,212.3	8.04	524.963		
1,800.0	1,784.8	2,355.7	2,334.1	4.7	6.4	-3.46	1,957.1	3,876.0	4,187.6	4,179.2	8.48	494.054		
1,900.0	1,882.6	2,449.3	2,426.2	5.1	6.8	-3.65	1,962.4	3,860.3	4,155.0	4,146.1	8.91	466.083		
2,000.0	1,980.4	2,542.9	2,518.4	5.5	7.1	-3.85	1,967.6	3,844.7	4,122.4	4,113.0	9.36	440.653		
2,100.0	2,078.3	2,636.5	2,610.5	5.9	7.4	-4.04	1,972.9	3,829.0	4,089.8	4,080.0	9.80	417.435		
2,200.0	2,176.1	2,730.1	2,702.6	6.3	7.8	-4.24	1,978.2	3,813.4	4,057.3	4,047.0	10.24	396.155		
2,300.0	2,273.9	2,823.7	2,794.8	6.7	8.1	-4.44	1,983.4	3,797.8	4,024.8	4,014.1	10.69	376.581		
2,400.0	2,371.8	2,917.3	2,886.9	7.1	8.4	-4.64	1,988.7	3,782.1	3,992.3	3,981.2	11.14	358.517		
2,500.0	2,469.6	3,010.9	2,979.0	7.5	8.8	-4.85	1,994.0	3,766.5	3,959.9	3,948.3	11.59	341.795		
2,600.0	2,567.4	3,104.5	3,071.1	7.9	9.1	-5.06	1,999.3	3,750.8	3,927.6	3,915.5	12.04	326.273		
2,700.0	2,665.3	3,198.1	3,163.3	8.3	9.4	-5.28	2,004.5	3,735.2	3,895.3	3,882.8	12.49	311.826		
2,800.0	2,763.1	3,291.7	3,255.4	8.7	9.8	-5.50	2,009.8	3,719.5	3,863.0	3,850.1	12.95	298.347		
2,900.0	2,860.9	3,385.3	3,347.5	9.1	10.1	-5.72	2,015.1	3,703.9	3,830.9	3,817.4	13.41	285.742		
3,000.0	2,958.8	3,478.9	3,439.7	9.5	10.4	-5.94	2,020.4	3,688.2	3,798.7	3,784.8	13.87	273.929		
3,100.0	3,056.6	3,572.5	3,531.8	9.9	10.8	-6.17	2,025.6	3,672.6	3,766.6	3,752.3	14.33	262.837		
3,200.0	3,154.4	3,666.1	3,623.9	10.3	11.1	-6.40	2,030.9	3,656.9	3,734.6	3,719.8	14.80	252.402		
3,300.0	3,252.3	3,759.7	3,716.1	10.7	11.4	-6.64	2,036.2	3,641.3	3,702.6	3,687.4	15.26	242.567		
3,400.0	3,350.1	3,853.3	3,808.2	11.1	11.7	-6.88	2,041.4	3,625.7	3,670.7	3,655.0	15.74	233.282		
3,500.0	3,447.9	3,946.9	3,900.3	11.5	12.1	-7.13	2,046.7	3,610.0	3,638.9	3,622.7	16.21	224.504		
3,600.0	3,545.8	4,040.5	3,992.5	11.9	12.4	-7.37	2,052.0	3,594.4	3,607.1	3,590.4	16.68	216.191		
3,700.0	3,643.6	4,134.1	4,084.6	12.3	12.7	-7.63	2,057.3	3,578.7	3,575.4	3,558.2	17.16	208.308		
3,800.0	3,741.5	4,227.7	4,176.7	12.7	13.1	-7.89	2,062.5	3,563.1	3,543.7	3,526.0	17.65	200.823		
3,900.0	3,839.3	4,321.3	4,268.9	13.1	13.4	-8.15	2,067.8	3,547.4	3,512.1	3,494.0	18.13	193.707		
4,000.0	3,937.1	4,414.9	4,361.0	13.5	13.7	-8.41	2,073.1	3,531.8	3,480.6	3,462.0	18.62	186.933		
4,100.0	4,035.0	4,508.5	4,453.1	13.9	14.1	-8.69	2,078.4	3,516.1	3,449.1	3,430.0	19.11	180.477		
4,200.0	4,132.8	4,602.1	4,545.3	14.3	14.4	-8.96	2,083.6	3,500.5	3,417.8	3,398.1	19.61	174.319		
4,300.0	4,230.6	4,695.7	4,637.4	14.7	14.8	-9.24	2,088.9	3,484.9	3,386.4	3,366.3	20.11	168.438		
4,400.0	4,328.5	4,789.3	4,729.5	15.1	15.1	-9.53	2,094.2	3,469.2	3,355.2	3,334.6	20.61	162.816		
4,500.0	4,426.3	4,882.9	4,821.7	15.5	15.4	-9.82	2,099.4	3,453.6	3,324.1	3,303.0	21.11	157.436		
4,600.0	4,524.1	4,976.5	4,913.8	15.9	15.8	-10.12	2,104.7	3,437.9	3,293.0	3,271.4	21.62	152.284		
4,700.0	4,622.0	5,070.1	5,005.9	16.3	16.1	-10.42	2,110.0	3,422.3	3,262.0	3,239.9	22.14	147.346		
4,800.0	4,719.8	5,163.7	5,098.0	16.7	16.4	-10.73	2,115.3	3,406.6	3,231.1	3,208.5	22.66	142.610		
4,900.0	4,817.6	5,257.3	5,190.2	17.2	16.8	-11.04	2,120.5	3,391.0	3,200.3	3,177.2	23.18	138.062		
5,000.0	4,915.5	5,350.9	5,282.3	17.6	17.1	-11.36	2,125.8	3,375.3	3,169.6	3,145.9	23.71	133.693		

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 2F-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 2F-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 1C-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				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	5,013.3	5,444.5	5,374.4	18.0	17.4	-11.69	2,131.1	3,359.7	3,139.0	3,114.8	24.24	129.493		
5,200.0	5,111.1	5,538.1	5,466.6	18.4	17.8	-12.02	2,136.4	3,344.0	3,108.5	3,083.7	24.78	125.452		
5,300.0	5,209.0	5,631.7	5,558.7	18.8	18.1	-12.36	2,141.6	3,328.4	3,078.1	3,052.7	25.32	121.562		
5,400.0	5,306.8	5,725.3	5,650.8	19.2	18.4	-12.71	2,146.9	3,312.8	3,047.7	3,021.9	25.87	117.816		
5,500.0	5,404.6	5,818.9	5,743.4	19.6	37.0	30.49	371.3	2,984.1	2,975.8	2,943.1	32.71	90.988		
5,600.0	5,502.5	5,915.7	5,840.2	20.0	36.9	30.21	379.7	2,984.1	2,894.0	2,860.7	33.23	87.096		
5,700.0	5,600.3	6,015.3	5,940.0	20.4	36.8	29.93	388.1	2,984.2	2,813.3	2,779.5	33.77	83.308		
5,800.0	5,698.2	6,114.9	6,043.6	20.8	36.7	29.64	396.5	2,984.2	2,733.8	2,699.5	34.33	79.630		
5,900.0	5,796.0	6,214.5	6,142.2	21.2	36.6	29.36	404.9	2,984.3	2,655.8	2,620.9	34.91	76.065		
6,000.0	5,893.8	6,314.1	6,240.8	21.6	36.5	29.08	413.3	2,984.3	2,579.2	2,543.7	35.52	72.619		
6,100.0	5,991.7	6,413.7	6,338.4	22.0	36.4	28.79	421.7	2,984.4	2,504.2	2,468.1	36.14	69.296		
6,200.0	6,089.5	6,513.3	6,438.0	22.4	36.3	28.51	430.1	2,984.4	2,431.1	2,394.3	36.78	66.100		
6,300.0	6,187.3	6,612.9	6,537.6	22.8	36.2	28.23	438.5	2,984.4	2,359.8	2,322.4	37.43	63.038		
6,400.0	6,285.2	6,712.5	6,637.2	23.2	36.0	27.94	446.9	2,984.5	2,290.7	2,252.6	38.11	60.114		
6,500.0	6,383.0	6,812.1	6,736.8	23.7	35.9	27.66	455.3	2,984.5	2,223.9	2,185.1	38.79	57.335		
6,600.0	6,480.8	6,911.7	6,836.4	24.1	35.8	27.37	463.7	2,984.6	2,159.6	2,120.1	39.48	54.707		
6,700.0	6,578.7	7,011.3	6,936.0	24.5	35.7	27.09	472.0	2,984.6	2,098.1	2,057.9	40.17	52.237		
6,800.0	6,676.5	7,110.9	7,035.6	24.9	35.6	26.80	480.4	2,984.7	2,039.6	1,998.8	40.85	49.932		
6,900.0	6,774.3	7,210.5	7,135.2	25.3	35.5	26.52	488.8	2,984.7	1,984.4	1,942.9	41.52	47.798		
7,000.0	6,872.2	7,310.1	7,234.8	25.7	35.4	26.23	497.2	2,984.7	1,932.8	1,890.6	42.16	45.842		
7,019.1	6,890.8	7,310.1	7,234.8	25.8	35.4	26.18	498.8	2,984.7	1,923.3	1,881.1	42.28	45.490		
7,050.0	6,921.1	7,310.1	7,234.8	25.9	35.4	9.77	500.6	2,984.8	1,908.3	1,865.9	42.47	44.938		
7,100.0	6,970.2	7,310.1	7,234.8	26.0	35.4	-18.11	499.9	2,984.8	1,884.8	1,842.1	42.77	44.074		
7,150.0	7,019.0	7,310.1	7,234.8	26.2	35.4	-40.52	494.9	2,984.7	1,862.5	1,819.4	43.07	43.240		
7,200.0	7,067.2	7,310.1	7,234.8	26.3	35.5	-55.69	485.5	2,984.7	1,841.5	1,798.1	43.39	42.441		
7,250.0	7,114.4	7,310.1	7,234.8	26.4	35.7	-65.77	471.9	2,984.6	1,821.9	1,778.2	43.71	41.678		
7,300.0	7,160.3	7,310.1	7,234.8	26.4	35.9	-72.69	454.2	2,984.5	1,803.9	1,759.8	44.05	40.954		
7,350.0	7,204.5	7,310.1	7,234.8	26.5	36.2	-77.61	432.5	2,984.4	1,787.5	1,743.1	44.39	40.264		
7,400.0	7,246.6	7,310.1	7,234.8	26.5	36.6	-81.19	406.9	2,984.3	1,772.7	1,728.0	44.76	39.603		
7,450.0	7,286.4	7,310.1	7,234.8	26.5	37.0	-83.82	377.7	2,984.1	1,759.6	1,714.5	45.15	38.971		
7,500.0	7,323.5	7,310.1	7,234.8	26.5	37.4	-85.74	345.0	2,984.0	1,748.2	1,702.6	45.57	38.360		
7,550.0	7,357.7	7,310.1	7,234.8	26.5	37.9	-87.15	309.2	2,983.8	1,738.2	1,692.2	46.03	37.761		
7,600.0	7,388.7	7,310.1	7,234.8	26.5	38.4	-88.15	270.5	2,983.6	1,729.7	1,683.2	46.54	37.170		
7,650.0	7,416.3	7,310.1	7,234.8	26.5	39.0	-88.85	229.2	2,983.4	1,722.6	1,675.5	47.09	36.581		
7,700.0	7,440.2	7,310.1	7,234.8	26.5	39.6	-89.32	185.5	2,983.2	1,716.7	1,669.0	47.71	35.985		
7,750.0	7,460.3	7,310.1	7,234.8	26.5	40.2	-89.63	140.0	2,982.9	1,712.0	1,663.6	48.38	35.383		
7,800.0	7,476.4	7,310.1	7,234.8	26.5	40.9	-89.83	92.8	2,982.7	1,708.3	1,659.2	49.13	34.769		
7,850.0	7,488.4	7,310.1	7,234.8	26.6	41.6	-89.94	44.3	2,982.4	1,705.6	1,655.6	49.95	34.147		
7,900.0	7,496.2	7,310.1	7,234.8	26.6	42.3	-90.02	-5.0	2,982.2	1,703.8	1,653.0	50.84	33.516		
7,950.0	7,499.8	7,310.1	7,234.8	26.7	43.0	-90.06	-54.9	2,981.9	1,702.8	1,651.1	51.78	32.884		
7,966.7	7,500.0	7,310.1	7,234.8	26.7	43.2	-90.07	-71.5	2,981.9	1,702.7	1,650.6	52.11	32.674		
8,000.0	7,500.0	7,310.1	7,234.8	26.8	43.7	-90.07	-104.9	2,981.7	1,702.5	1,649.7	52.79	32.252		
8,100.0	7,500.0	7,310.1	7,234.8	27.0	45.2	-90.07	-204.9	2,981.2	1,702.0	1,647.1	54.96	30.969		
8,200.0	7,500.0	7,310.1	7,234.8	27.4	46.7	-90.07	-304.9	2,980.7	1,701.5	1,644.2	57.32	29.683		
8,300.0	7,500.0	7,310.1	7,234.8	27.9	48.2	-90.07	-404.9	2,980.2	1,701.0	1,641.2	59.86	28.418		
8,400.0	7,500.0	7,310.1	7,234.8	28.5	49.7	-90.07	-504.9	2,979.7	1,700.5	1,638.0	62.53	27.194		
8,500.0	7,500.0	7,310.1	7,234.8	29.1	51.2	-90.07	-604.9	2,979.2	1,700.0	1,634.7	65.33	26.022		
8,600.0	7,500.0	7,310.1	7,234.8	29.9	52.8	-90.07	-704.9	2,978.6	1,699.5	1,631.3	68.22	24.910		
8,700.0	7,500.0	7,310.1	7,234.8	30.8	54.4	-90.07	-804.9	2,978.1	1,699.0	1,627.8	71.20	23.861		
8,800.0	7,500.0	7,310.1	7,234.8	31.7	55.9	-90.07	-904.9	2,977.6	1,698.5	1,624.2	74.25	22.875		
8,900.0	7,500.0	7,310.1	7,234.8	32.7	57.5	-90.07	-1,004.8	2,977.1	1,698.0	1,620.6	77.35	21.951		
9,000.0	7,500.0	7,310.1	7,234.8	33.7	59.1	-90.07	-1,104.8	2,976.6	1,697.5	1,617.0	80.51	21.085		

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 2F-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 2F-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 1C-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,100.0	7,500.0	10,744.3	7,530.0	34.8	60.7	-90.07	-1,204.8	2,976.1	1,697.0	1,613.3	83.70	20.275		
9,200.0	7,500.0	10,844.3	7,530.0	36.0	62.3	-90.07	-1,304.8	2,975.6	1,696.5	1,609.5	86.92	19.517		
9,300.0	7,500.0	10,944.3	7,530.0	37.2	64.0	-90.07	-1,404.8	2,975.1	1,695.9	1,605.8	90.18	18.807		
9,400.0	7,500.0	11,044.3	7,530.0	38.4	65.6	-90.07	-1,504.8	2,974.6	1,695.4	1,602.0	93.46	18.141		
9,500.0	7,500.0	11,144.3	7,530.0	39.7	67.2	-90.07	-1,604.8	2,974.1	1,694.9	1,598.2	96.76	17.517		
9,600.0	7,500.0	11,244.3	7,530.0	41.1	68.9	-90.07	-1,704.8	2,973.6	1,694.4	1,594.3	100.08	16.931		
9,700.0	7,500.0	11,344.3	7,530.0	42.4	70.5	-90.07	-1,804.8	2,973.1	1,693.9	1,590.5	103.41	16.380		
9,800.0	7,500.0	11,444.3	7,530.0	43.8	72.2	-90.07	-1,904.8	2,972.6	1,693.4	1,586.6	106.76	15.861		
9,900.0	7,500.0	11,544.3	7,530.0	45.2	73.8	-90.07	-2,004.8	2,972.1	1,692.9	1,582.8	110.13	15.373		
10,000.0	7,500.0	11,644.3	7,530.0	46.6	75.5	-90.07	-2,104.8	2,971.6	1,692.4	1,578.9	113.50	14.911		
10,100.0	7,500.0	11,744.3	7,530.0	48.1	77.1	-90.07	-2,204.8	2,971.0	1,691.9	1,575.0	116.88	14.475		
10,200.0	7,500.0	11,844.3	7,530.0	49.6	78.8	-90.07	-2,304.8	2,970.5	1,691.4	1,571.1	120.27	14.063		
10,300.0	7,500.0	11,944.3	7,530.0	51.1	80.5	-90.07	-2,404.8	2,970.0	1,690.9	1,567.2	123.67	13.672		
10,400.0	7,500.0	12,044.3	7,530.0	52.6	82.2	-90.07	-2,504.8	2,969.5	1,690.4	1,563.3	127.08	13.302		
10,500.0	7,500.0	12,144.3	7,530.0	54.1	83.8	-90.07	-2,604.8	2,969.0	1,689.9	1,559.4	130.49	12.950		
10,600.0	7,500.0	12,244.3	7,530.0	55.6	85.5	-90.07	-2,704.8	2,968.5	1,689.4	1,555.4	133.91	12.615		
10,700.0	7,500.0	12,344.3	7,530.0	57.2	87.2	-90.07	-2,804.8	2,968.0	1,688.8	1,551.5	137.34	12.297		
10,800.0	7,500.0	12,444.3	7,530.0	58.8	88.9	-90.07	-2,904.8	2,967.5	1,688.3	1,547.6	140.76	11.994		
10,900.0	7,500.0	12,544.3	7,530.0	60.3	90.6	-90.07	-3,004.8	2,967.0	1,687.8	1,543.6	144.20	11.705		
11,000.0	7,500.0	12,644.3	7,530.0	61.9	92.3	-90.07	-3,104.8	2,966.5	1,687.3	1,539.7	147.64	11.429		
11,100.0	7,500.0	12,744.3	7,530.0	63.5	94.0	-90.07	-3,204.8	2,966.0	1,686.8	1,535.7	151.08	11.165		
11,200.0	7,500.0	12,844.2	7,530.0	65.1	95.7	-90.07	-3,304.8	2,965.5	1,686.3	1,531.8	154.52	10.913		
11,300.0	7,500.0	12,944.2	7,530.0	66.7	97.4	-90.07	-3,404.8	2,965.0	1,685.8	1,527.8	157.97	10.672		
11,400.0	7,500.0	13,044.2	7,530.0	68.3	99.1	-90.07	-3,504.8	2,964.5	1,685.3	1,523.9	161.42	10.440		
11,500.0	7,500.0	13,144.2	7,530.0	70.0	100.8	-90.07	-3,604.8	2,963.9	1,684.8	1,519.9	164.87	10.219		
11,600.0	7,500.0	13,244.2	7,530.0	71.6	102.5	-90.07	-3,704.8	2,963.4	1,684.3	1,516.0	168.33	10.006		
11,700.0	7,500.0	13,344.2	7,530.0	73.2	104.2	-90.07	-3,804.8	2,962.9	1,683.8	1,512.0	171.79	9.802		
11,800.0	7,500.0	13,444.2	7,530.0	74.9	105.9	-90.07	-3,904.8	2,962.4	1,683.3	1,508.0	175.25	9.605		
11,900.0	7,500.0	13,544.2	7,530.0	76.5	107.6	-90.07	-4,004.8	2,961.9	1,682.8	1,504.1	178.71	9.416		
12,000.0	7,500.0	13,644.2	7,530.0	78.2	109.3	-90.07	-4,104.8	2,961.4	1,682.3	1,500.1	182.18	9.234		
12,100.0	7,500.0	13,744.2	7,530.0	79.8	111.0	-90.07	-4,204.8	2,960.9	1,681.7	1,496.1	185.64	9.059		
12,200.0	7,500.0	13,844.2	7,530.0	81.5	112.7	-90.07	-4,304.8	2,960.4	1,681.2	1,492.1	189.11	8.890		
12,300.0	7,500.0	13,944.2	7,530.0	83.1	114.4	-90.07	-4,404.8	2,959.9	1,680.7	1,488.2	192.58	8.728		
12,400.0	7,500.0	14,044.2	7,530.0	84.8	116.2	-90.07	-4,504.8	2,959.4	1,680.2	1,484.2	196.05	8.570		
12,500.0	7,500.0	14,144.2	7,530.0	86.5	117.9	-90.07	-4,604.8	2,958.9	1,679.7	1,480.2	199.52	8.419		
12,600.0	7,500.0	14,244.2	7,530.0	88.1	119.6	-90.07	-4,704.8	2,958.4	1,679.2	1,476.2	203.00	8.272		
12,700.0	7,500.0	14,344.2	7,530.0	89.8	121.3	-90.07	-4,804.8	2,957.9	1,678.7	1,472.2	206.47	8.130		
12,800.0	7,500.0	14,444.2	7,530.0	91.5	123.0	-90.07	-4,904.7	2,957.4	1,678.2	1,468.3	209.95	7.993		
12,900.0	7,500.0	14,544.2	7,530.0	93.2	124.8	-90.07	-5,004.7	2,956.8	1,677.7	1,464.3	213.43	7.861		
13,000.0	7,500.0	14,644.2	7,530.0	94.9	126.5	-90.07	-5,104.7	2,956.3	1,677.2	1,460.3	216.90	7.732		
13,100.0	7,500.0	14,744.2	7,530.0	96.5	128.2	-90.07	-5,204.7	2,955.8	1,676.7	1,456.3	220.38	7.608		
13,200.0	7,500.0	14,844.2	7,530.0	98.2	129.9	-90.07	-5,304.7	2,955.3	1,676.2	1,452.3	223.86	7.487		
13,300.0	7,500.0	14,944.2	7,530.0	99.9	131.6	-90.07	-5,404.7	2,954.8	1,675.7	1,448.3	227.34	7.371		
13,400.0	7,500.0	15,044.2	7,530.0	101.6	133.4	-90.07	-5,504.7	2,954.3	1,675.2	1,444.3	230.83	7.257		
13,500.0	7,500.0	15,144.2	7,530.0	103.3	135.1	-90.07	-5,604.7	2,953.8	1,674.7	1,440.3	234.31	7.147		
13,600.0	7,500.0	15,244.2	7,530.0	105.0	136.8	-90.07	-5,704.7	2,953.3	1,674.1	1,436.4	237.79	7.040		
13,700.0	7,500.0	15,344.2	7,530.0	106.7	138.5	-90.07	-5,804.7	2,952.8	1,673.6	1,432.4	241.28	6.937		
13,800.0	7,500.0	15,444.2	7,530.0	108.4	140.3	-90.07	-5,904.7	2,952.3	1,673.1	1,428.4	244.76	6.836		
13,900.0	7,500.0	15,544.2	7,530.0	110.1	142.0	-90.07	-6,004.7	2,951.8	1,672.6	1,424.4	248.25	6.738		
14,000.0	7,500.0	15,644.2	7,530.0	111.8	143.7	-90.07	-6,104.7	2,951.3	1,672.1	1,420.4	251.74	6.642		
14,100.0	7,500.0	15,744.2	7,530.0	113.5	145.5	-90.07	-6,204.7	2,950.8	1,671.6	1,416.4	255.22	6.550		
14,200.0	7,500.0	15,844.2	7,530.0	115.2	147.2	-90.07	-6,304.7	2,950.3	1,671.1	1,412.4	258.71	6.459		

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 2F-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 2F-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 1C-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		
14,300.0	7,500.0	15,944.2	7,530.0	116.9	148.9	-90.07	-6,404.7	2,949.8	1,670.6	1,408.4	262.20	6.371		
14,400.0	7,500.0	16,044.2	7,530.0	118.6	150.7	-90.07	-6,504.7	2,949.2	1,670.1	1,404.4	265.69	6.286		
14,500.0	7,500.0	16,144.2	7,530.0	120.4	152.4	-90.07	-6,604.7	2,948.7	1,669.6	1,400.4	269.18	6.203		
14,600.0	7,500.0	16,244.2	7,530.0	122.1	154.1	-90.07	-6,704.7	2,948.2	1,669.1	1,396.4	272.67	6.121		
14,700.0	7,500.0	16,344.2	7,530.0	123.8	155.9	-90.07	-6,804.7	2,947.7	1,668.6	1,392.4	276.16	6.042		
14,800.0	7,500.0	16,444.2	7,530.0	125.5	157.6	-90.07	-6,904.7	2,947.2	1,668.1	1,388.4	279.65	5.965		
14,900.0	7,500.0	16,544.2	7,530.0	127.2	159.3	-90.07	-7,004.7	2,946.7	1,667.6	1,384.4	283.14	5.890		
15,000.0	7,500.0	16,644.2	7,530.0	128.9	161.1	-90.07	-7,104.7	2,946.2	1,667.0	1,380.4	286.63	5.816		
15,100.0	7,500.0	16,744.2	7,530.0	130.6	162.8	-90.07	-7,204.7	2,945.7	1,666.5	1,376.4	290.12	5.744		
15,200.0	7,500.0	16,844.2	7,530.0	132.4	164.5	-90.07	-7,304.7	2,945.2	1,666.0	1,372.4	293.62	5.674		
15,300.0	7,500.0	16,944.2	7,530.0	134.1	166.3	-90.07	-7,404.7	2,944.7	1,665.5	1,368.4	297.11	5.606		
15,400.0	7,500.0	17,044.2	7,530.0	135.8	168.0	-90.07	-7,504.7	2,944.2	1,665.0	1,364.4	300.60	5.539		
15,500.0	7,500.0	17,144.2	7,530.0	137.5	169.7	-90.07	-7,604.7	2,943.7	1,664.5	1,360.4	304.10	5.474		
15,600.0	7,500.0	17,244.2	7,530.0	139.2	171.5	-90.07	-7,704.7	2,943.2	1,664.0	1,356.4	307.59	5.410		
15,700.0	7,500.0	17,344.2	7,530.0	141.0	173.2	-90.07	-7,804.7	2,942.7	1,663.5	1,352.4	311.08	5.347		
15,800.0	7,500.0	17,444.2	7,530.0	142.7	174.9	-90.07	-7,904.7	2,942.1	1,663.0	1,348.4	314.58	5.286		
15,841.7	7,500.0	17,485.9	7,530.0	143.4	175.7	-90.07	-7,946.3	2,941.9	1,662.8	1,346.7	316.04	5.261 CC, ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 1D-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				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	28.0	28.0	0.0	0.0	65.72	1,869.8	4,144.7	4,547.0					
100.0	100.0	128.0	128.0	0.2	0.2	65.72	1,869.8	4,144.7	4,547.0	4,546.6	0.35	N/A		
200.0	200.0	228.0	228.0	0.3	0.4	65.72	1,869.8	4,144.7	4,547.0	4,546.3	0.70	6,480.624		
300.0	300.0	328.0	328.0	0.5	0.5	65.72	1,869.8	4,144.7	4,547.0	4,545.9	1.05	4,327.594		
400.0	400.0	523.3	523.2	0.7	0.9	-0.67	1,870.8	4,142.3	4,545.3	4,543.7	1.57	2,899.884		
500.0	500.0	744.6	744.3	0.9	1.3	-0.78	1,874.9	4,132.1	4,539.2	4,537.1	2.14	2,117.544		
600.0	599.9	964.0	962.8	1.0	1.8	-0.96	1,882.0	4,114.2	4,528.8	4,526.0	2.75	1,647.074		
700.0	699.7	1,180.4	1,177.5	1.2	2.4	-1.22	1,892.2	4,088.9	4,514.0	4,510.6	3.40	1,327.962		
800.0	799.4	1,281.0	1,277.0	1.4	2.6	-1.36	1,897.6	4,075.4	4,496.2	4,492.4	3.81	1,180.251		
900.0	898.9	1,378.5	1,373.5	1.7	2.9	-1.50	1,902.9	4,062.2	4,476.8	4,472.6	4.22	1,061.728		
1,000.0	998.3	1,475.7	1,469.6	1.9	3.2	-1.65	1,908.1	4,049.1	4,455.6	4,451.0	4.63	963.275		
1,100.0	1,097.4	1,572.4	1,565.4	2.2	3.5	-1.80	1,913.3	4,036.1	4,432.8	4,427.7	5.04	880.241		
1,200.0	1,196.3	1,668.8	1,660.7	2.5	3.8	-1.95	1,918.6	4,023.1	4,408.3	4,402.8	5.45	809.277		
1,300.0	1,294.9	1,764.7	1,755.6	2.8	4.1	-2.10	1,923.7	4,010.1	4,382.1	4,376.3	5.86	747.925		
1,400.0	1,393.3	1,860.1	1,850.0	3.2	4.3	-2.26	1,928.9	3,997.3	4,354.3	4,348.0	6.27	694.339		
1,494.4	1,485.8	1,949.7	1,938.7	3.5	4.6	-2.42	1,933.7	3,985.2	4,326.5	4,319.9	6.66	649.606		
1,500.0	1,491.2	1,955.0	1,943.9	3.5	4.6	-2.43	1,934.0	3,984.5	4,324.8	4,318.2	6.68	647.115		
1,600.0	1,589.1	2,049.7	2,037.6	3.9	4.9	-2.58	1,939.1	3,971.7	4,294.7	4,287.6	7.10	605.224		
1,700.0	1,686.9	2,144.4	2,131.3	4.3	5.2	-2.74	1,944.3	3,958.9	4,264.5	4,257.0	7.51	567.839		
1,800.0	1,784.8	2,239.1	2,224.9	4.7	5.5	-2.90	1,949.4	3,946.2	4,234.4	4,226.5	7.93	534.276		
1,900.0	1,882.6	2,333.8	2,318.6	5.1	5.8	-3.06	1,954.5	3,933.4	4,204.3	4,196.0	8.34	503.982		
2,000.0	1,980.4	2,428.5	2,412.3	5.5	6.1	-3.22	1,959.6	3,920.6	4,174.3	4,165.5	8.76	476.504		
2,100.0	2,078.3	2,523.1	2,506.0	5.9	6.4	-3.38	1,964.7	3,907.8	4,144.3	4,135.1	9.18	451.470		
2,200.0	2,176.1	2,617.8	2,599.7	6.3	6.6	-3.55	1,969.8	3,895.1	4,114.3	4,104.7	9.60	428.569		
2,300.0	2,273.9	2,712.5	2,693.4	6.7	6.9	-3.72	1,975.0	3,882.3	4,084.3	4,074.3	10.02	407.540		
2,400.0	2,371.8	2,807.2	2,787.0	7.1	7.2	-3.90	1,980.1	3,869.5	4,054.4	4,044.0	10.45	388.165		
2,500.0	2,469.6	2,901.9	2,880.7	7.5	7.5	-4.07	1,985.2	3,856.8	4,024.5	4,013.6	10.87	370.257		
2,600.0	2,567.4	2,996.6	2,974.4	7.9	7.8	-4.25	1,990.3	3,844.0	3,994.7	3,983.4	11.30	353.655		
2,700.0	2,665.3	3,091.3	3,068.1	8.3	8.1	-4.43	1,995.4	3,831.2	3,964.9	3,953.1	11.72	338.223		
2,800.0	2,763.1	3,186.0	3,161.8	8.7	8.4	-4.61	2,000.5	3,818.4	3,935.1	3,922.9	12.15	323.841		
2,900.0	2,860.9	3,280.6	3,255.5	9.1	8.7	-4.80	2,005.7	3,805.7	3,905.3	3,892.8	12.58	310.406		
3,000.0	2,958.8	3,375.3	3,349.1	9.5	9.0	-4.99	2,010.8	3,792.9	3,875.6	3,862.6	13.01	297.828		
3,100.0	3,056.6	3,470.0	3,442.8	9.9	9.3	-5.18	2,015.9	3,780.1	3,846.0	3,832.5	13.45	286.027		
3,200.0	3,154.4	3,564.7	3,536.5	10.3	9.6	-5.37	2,021.0	3,767.4	3,816.4	3,802.5	13.88	274.935		
3,300.0	3,252.3	3,659.4	3,630.2	10.7	9.8	-5.57	2,026.1	3,754.6	3,786.8	3,772.5	14.32	264.489		
3,400.0	3,350.1	3,754.1	3,723.9	11.1	10.1	-5.77	2,031.2	3,741.8	3,757.2	3,742.5	14.76	254.634		
3,500.0	3,447.9	3,848.8	3,817.5	11.5	10.4	-5.97	2,036.4	3,729.0	3,727.7	3,712.6	15.20	245.322		
3,600.0	3,545.8	3,943.5	3,911.2	11.9	10.7	-6.18	2,041.5	3,716.3	3,698.3	3,682.7	15.64	236.510		
3,700.0	3,643.6	4,038.1	4,004.9	12.3	11.0	-6.39	2,046.6	3,703.5	3,668.9	3,652.8	16.08	228.158		
3,800.0	3,741.5	4,132.8	4,098.6	12.7	11.3	-6.60	2,051.7	3,690.7	3,639.5	3,623.0	16.53	220.231		
3,900.0	3,839.3	4,227.5	4,192.3	13.1	11.6	-6.82	2,056.8	3,678.0	3,610.2	3,593.3	16.97	212.698		
4,000.0	3,937.1	4,322.2	4,286.0	13.5	11.9	-7.04	2,061.9	3,665.2	3,581.0	3,563.5	17.42	205.531		
4,100.0	4,035.0	4,416.9	4,379.6	13.9	12.2	-7.26	2,067.1	3,652.4	3,551.8	3,533.9	17.87	198.702		
4,200.0	4,132.8	4,511.6	4,473.3	14.3	12.5	-7.49	2,072.2	3,639.6	3,522.6	3,504.3	18.33	192.190		
4,300.0	4,230.6	4,606.3	4,567.0	14.7	12.8	-7.72	2,077.3	3,626.9	3,493.5	3,474.7	18.78	185.973		
4,400.0	4,328.5	4,701.0	4,660.7	15.1	13.1	-7.96	2,082.4	3,614.1	3,464.4	3,445.2	19.24	180.030		
4,500.0	4,426.3	4,795.6	4,754.4	15.5	13.4	-8.20	2,087.5	3,601.3	3,435.4	3,415.7	19.70	174.346		
4,600.0	4,524.1	4,890.3	4,848.1	15.9	13.6	-8.44	2,092.7	3,588.6	3,406.5	3,386.3	20.17	168.902		
4,700.0	4,622.0	4,985.0	4,941.7	16.3	13.9	-8.69	2,097.8	3,575.8	3,377.6	3,357.0	20.63	163.685		
4,800.0	4,719.8	5,079.7	5,035.4	16.7	14.2	-8.94	2,102.9	3,563.0	3,348.8	3,327.7	21.10	158.681		
4,900.0	4,817.6	5,174.4	5,129.1	17.2	14.5	-9.19	2,108.0	3,550.2	3,320.0	3,298.5	21.58	153.876		
5,000.0	4,915.5	5,269.1	5,222.8	17.6	14.8	-9.45	2,113.1	3,537.5	3,291.4	3,269.3	22.05	149.260		

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 2F-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 2F-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 1D-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				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	5,013.3	5,363.8	5,316.5	18.0	15.1	-9.72	2,118.2	3,524.7	3,262.7	3,240.2	22.53	144.822		
5,200.0	5,111.1	5,458.5	5,410.2	18.4	15.4	-9.98	2,123.4	3,511.9	3,234.2	3,211.1	23.01	140.551		
5,300.0	5,209.0	5,553.2	5,503.8	18.8	15.7	-10.26	2,128.5	3,499.2	3,205.7	3,182.2	23.50	136.440		
5,400.0	5,306.8	5,647.8	5,597.5	19.2	16.0	-10.54	2,133.6	3,486.4	3,177.2	3,153.2	23.98	132.478		
5,500.0	5,404.6	5,742.5	5,691.2	19.6	16.3	-10.82	2,138.7	3,473.6	3,148.9	3,124.4	24.47	128.658		
5,600.0	5,502.5	5,837.2	5,784.9	20.0	16.6	-11.11	2,143.8	3,460.8	3,120.6	3,095.6	24.97	124.974		
5,700.0	5,600.3	5,931.9	5,878.6	20.4	16.9	-11.40	2,148.9	3,448.1	3,092.4	3,066.9	25.47	121.417		
5,800.0	5,698.2	5,940.3	5,770.0	20.8	16.9	-11.40	2,148.9	3,448.1	3,092.4	3,066.9	25.47	121.417		
5,800.0	5,698.2	5,940.3	5,770.0	20.8	16.9	-11.40	2,148.9	3,448.1	3,092.4	3,066.9	25.47	121.417		
5,800.0	5,698.2	5,940.3	5,770.0	20.8	16.9	-11.40	2,148.9	3,448.1	3,092.4	3,066.9	25.47	121.417		
5,900.0	5,796.0	5,932.0	5,770.0	21.2	16.8	-11.40	2,148.9	3,448.1	3,092.4	3,066.9	25.47	121.417		
6,000.0	5,893.8	5,923.7	5,770.0	21.6	16.8	-11.40	2,148.9	3,448.1	3,092.4	3,066.9	25.47	121.417		
6,100.0	5,991.7	5,915.4	5,770.0	22.0	16.6	-11.11	2,143.8	3,460.8	3,120.6	3,095.6	24.97	124.974		
6,200.0	6,089.5	5,907.1	5,770.0	22.4	16.5	-11.11	2,143.8	3,460.8	3,120.6	3,095.6	24.97	124.974		
6,300.0	6,187.3	5,998.8	5,770.0	22.8	16.3	-10.82	2,138.7	3,473.6	3,148.9	3,124.4	24.47	128.658		
6,400.0	6,285.2	5,990.5	5,770.0	23.2	16.2	-10.54	2,133.6	3,486.4	3,177.2	3,153.2	23.98	132.478		
6,500.0	6,383.0	5,982.2	5,770.0	23.6	16.1	-10.26	2,128.5	3,499.2	3,205.7	3,182.2	23.50	136.440		
6,600.0	6,480.8	5,973.9	5,770.0	24.0	16.0	-9.98	2,123.4	3,511.9	3,234.2	3,211.1	23.01	140.551		
6,700.0	6,578.7	5,965.6	5,770.0	24.4	15.9	-9.72	2,118.2	3,524.7	3,262.7	3,240.2	22.53	144.822		
6,800.0	6,676.5	5,957.3	5,770.0	24.8	15.8	-9.44	2,113.1	3,537.9	3,293.9	3,271.1	22.01	141.117		
6,900.0	6,774.3	5,949.0	5,770.0	25.2	15.7	-9.16	2,108.0	3,551.1	3,324.1	3,301.1	21.50	137.440		
7,000.0	6,872.2	5,940.7	5,770.0	25.6	15.6	-8.88	2,102.9	3,564.3	3,354.3	3,331.1	21.01	133.551		
7,019.1	6,890.8	5,939.2	5,770.0	25.8	15.5	-8.60	2,097.8	3,577.5	3,384.5	3,361.1	20.50	129.662		
7,050.0	6,921.1	5,937.4	5,770.0	25.9	15.4	-8.32	2,092.7	3,590.7	3,414.7	3,391.1	20.01	125.773		
7,100.0	6,970.2	5,938.2	5,770.0	26.0	15.3	-8.04	2,087.6	3,603.9	3,444.9	3,421.1	19.50	121.884		
7,150.0	7,019.0	5,943.2	5,770.0	26.2	15.2	-7.76	2,082.5	3,617.1	3,475.1	3,451.1	19.01	117.995		
7,200.0	7,067.2	5,952.6	5,770.0	26.3	15.1	-7.48	2,077.4	3,630.3	3,505.3	3,481.1	18.50	114.106		
7,250.0	7,114.4	5,966.3	5,770.0	26.4	15.0	-7.20	2,072.3	3,643.5	3,535.5	3,511.1	18.01	110.217		
7,300.0	7,160.3	5,984.0	5,770.0	26.4	14.9	-6.92	2,067.2	3,656.7	3,565.7	3,541.1	17.50	106.328		
7,350.0	7,204.5	5,995.8	5,770.0	26.5	14.8	-6.64	2,062.1	3,669.9	3,595.9	3,571.1	17.01	102.439		
7,400.0	7,246.6	5,993.4	5,770.0	26.5	14.7	-6.36	2,057.0	3,683.1	3,626.1	3,601.1	16.50	98.550		
7,450.0	7,286.4	5,960.7	5,770.0	26.5	14.6	-6.08	2,051.9	3,696.3	3,656.3	3,631.1	16.01	94.661		
7,500.0	7,323.5	5,939.4	5,770.0	26.5	14.5	-5.80	2,046.8	3,709.5	3,686.5	3,661.1	15.50	90.772		
7,550.0	7,357.7	5,929.2	5,770.0	26.5	14.4	-5.52	2,041.7	3,722.7	3,716.7	3,691.1	15.01	86.883		
7,600.0	7,388.7	5,948.0	5,770.0	26.5	14.3	-5.24	2,036.6	3,735.9	3,746.9	3,721.1	14.50	82.994		
7,650.0	7,416.3	5,950.4	5,770.0	26.5	14.2	-4.96	2,031.5	3,749.1	3,777.1	3,751.1	14.01	79.105		
7,700.0	7,440.2	5,953.0	5,770.0	26.5	14.1	-4.68	2,026.4	3,762.3	3,807.3	3,781.1	13.50	75.216		
7,750.0	7,460.3	5,958.6	5,770.0	26.5	14.0	-4.40	2,021.3	3,775.5	3,837.5	3,811.1	13.01	71.327		
7,800.0	7,476.4	5,964.8	5,770.0	26.5	13.9	-4.12	2,016.2	3,788.7	3,867.7	3,841.1	12.50	67.438		
7,850.0	7,488.4	5,964.3	5,770.0	26.6	13.8	-3.84	2,011.1	3,801.9	3,897.9	3,871.1	12.01	63.549		
7,900.0	7,496.2	5,974.6	5,770.0	26.6	13.7	-3.56	2,006.0	3,815.1	3,928.1	3,901.1	11.50	59.660		
7,950.0	7,499.8	5,979.3	5,770.0	26.7	13.6	-3.28	2,000.9	3,828.3	3,958.3	3,931.1	11.01	55.771		
7,966.4	7,500.0	5,980.9	5,770.0	26.7	13.5	-3.00	1,995.8	3,841.5	3,988.5	3,961.1	10.50	51.882		
7,966.7	7,500.0	5,981.0	5,770.0	26.7	13.4	-2.72	1,990.7	3,854.7	4,018.7	3,991.1	10.01	47.993		
8,000.0	7,500.0	5,984.3	5,770.0	26.8	13.3	-2.44	1,985.6	3,867.9	4,048.9	4,021.1	9.50	44.104		
8,100.0	7,500.0	5,943.5	5,770.0	27.0	13.2	-2.16	1,980.5	3,881.1	4,079.1	4,051.1	9.01	40.215		
8,200.0	7,500.0	10,043.5	7,770.0	27.4	13.1	-1.88	1,975.4	3,894.3	4,109.3	4,081.1	8.50	36.326		
8,300.0	7,500.0	10,143.5	7,770.0	27.9	13.0	-1.60	1,970.3	3,907.5	4,139.5	4,111.1	8.01	32.437		
8,400.0	7,500.0	10,243.5	7,770.0	28.5	12.9	-1.32	1,965.2	3,920.7	4,169.7	4,141.1	7.50	28.548		
8,500.0	7,500.0	10,343.5	7,770.0	29.1	12.8	-1.04	1,960.1	3,933.9	4,199.9	4,171.1	7.01	24.659		
8,600.0	7,500.0	10,443.5	7,770.0	29.9	12.7	-0.76	1,955.0	3,947.1	4,230.1	4,201.1	6.50	20.770		
8,700.0	7,500.0	10,543.5	7,770.0	30.8	12.6	-0.48	1,949.9	3,960.3	4,260.3	4,231.1	6.01	16.881		
8,800.0	7,500.0	10,643.5	7,770.0	31.7	12.5	-0.20	1,944.8	3,973.5	4,290.5	4,261.1	5.50	12.992		
8,900.0	7,500.0	10,743.5	7,770.0	32.7	12.4	-0.12	1,939.7	3,986.7	4,320.7	4,291.1	5.01	9.103		

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 2F-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 2F-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 1D-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				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)				
9,000.0	7,500.0	10,843.5	7,770.0	33.7	58.0	-97.21	-1,095.9	3,190.8	1,926.9	1,847.0	79.85	24.131		
9,100.0	7,500.0	10,943.5	7,770.0	34.8	59.6	-97.21	-1,195.9	3,190.8	1,926.9	1,843.9	83.02	23.210		
9,200.0	7,500.0	11,043.5	7,770.0	36.0	61.2	-97.21	-1,295.9	3,190.8	1,926.9	1,840.7	86.22	22.348		
9,300.0	7,500.0	11,143.5	7,770.0	37.2	62.9	-97.21	-1,395.9	3,190.8	1,926.9	1,837.5	89.46	21.541		
9,400.0	7,500.0	11,243.5	7,770.0	38.4	64.5	-97.21	-1,495.9	3,190.9	1,926.9	1,834.2	92.71	20.784		
9,500.0	7,500.0	11,343.5	7,770.0	39.7	66.2	-97.21	-1,595.9	3,190.9	1,926.9	1,831.0	95.99	20.075		
9,600.0	7,500.0	11,443.5	7,770.0	41.1	67.8	-97.21	-1,695.9	3,190.9	1,927.0	1,827.7	99.28	19.409		
9,700.0	7,500.0	11,543.5	7,770.0	42.4	69.5	-97.21	-1,795.9	3,190.9	1,927.0	1,824.4	102.59	18.783		
9,800.0	7,500.0	11,643.5	7,770.0	43.8	71.2	-97.21	-1,895.9	3,190.9	1,927.0	1,821.1	105.91	18.194		
9,900.0	7,500.0	11,743.5	7,770.0	45.2	72.8	-97.21	-1,995.9	3,190.9	1,927.0	1,817.8	109.25	17.638		
10,000.0	7,500.0	11,843.5	7,770.0	46.6	74.5	-97.21	-2,095.9	3,191.0	1,927.0	1,814.4	112.60	17.114		
10,100.0	7,500.0	11,943.5	7,770.0	48.1	76.2	-97.21	-2,195.9	3,191.0	1,927.0	1,811.1	115.95	16.619		
10,200.0	7,500.0	12,043.5	7,770.0	49.6	77.9	-97.21	-2,295.9	3,191.0	1,927.1	1,807.7	119.32	16.150		
10,300.0	7,500.0	12,143.5	7,770.0	51.1	79.6	-97.21	-2,395.9	3,191.0	1,927.1	1,804.4	122.69	15.707		
10,400.0	7,500.0	12,243.5	7,770.0	52.6	81.3	-97.21	-2,495.9	3,191.0	1,927.1	1,801.0	126.07	15.286		
10,500.0	7,500.0	12,343.5	7,770.0	54.1	83.0	-97.21	-2,595.9	3,191.0	1,927.1	1,797.7	129.46	14.886		
10,600.0	7,500.0	12,443.5	7,770.0	55.6	84.6	-97.21	-2,695.9	3,191.1	1,927.1	1,794.3	132.85	14.506		
10,700.0	7,500.0	12,543.5	7,770.0	57.2	86.3	-97.21	-2,795.9	3,191.1	1,927.1	1,790.9	136.25	14.144		
10,800.0	7,500.0	12,643.5	7,770.0	58.8	88.0	-97.21	-2,895.9	3,191.1	1,927.2	1,787.5	139.65	13.800		
10,900.0	7,500.0	12,743.5	7,770.0	60.3	89.7	-97.21	-2,995.9	3,191.1	1,927.2	1,784.1	143.06	13.471		
11,000.0	7,500.0	12,843.5	7,770.0	61.9	91.4	-97.21	-3,095.9	3,191.1	1,927.2	1,780.7	146.47	13.158		
11,100.0	7,500.0	12,943.5	7,770.0	63.5	93.2	-97.21	-3,195.9	3,191.1	1,927.2	1,777.3	149.88	12.858		
11,200.0	7,500.0	13,043.5	7,770.0	65.1	94.9	-97.21	-3,295.9	3,191.2	1,927.2	1,773.9	153.30	12.572		
11,300.0	7,500.0	13,143.5	7,770.0	66.7	96.6	-97.21	-3,395.9	3,191.2	1,927.2	1,770.5	156.72	12.297		
11,400.0	7,500.0	13,243.5	7,770.0	68.3	98.3	-97.21	-3,495.9	3,191.2	1,927.3	1,767.1	160.14	12.035		
11,500.0	7,500.0	13,343.5	7,770.0	70.0	100.0	-97.21	-3,595.9	3,191.2	1,927.3	1,763.7	163.57	11.783		
11,600.0	7,500.0	13,443.5	7,770.0	71.6	101.7	-97.21	-3,695.9	3,191.2	1,927.3	1,760.3	167.00	11.541		
11,700.0	7,500.0	13,543.5	7,770.0	73.2	103.4	-97.21	-3,795.9	3,191.2	1,927.3	1,756.9	170.43	11.309		
11,800.0	7,500.0	13,643.5	7,770.0	74.9	105.1	-97.21	-3,895.9	3,191.3	1,927.3	1,753.5	173.86	11.085		
11,900.0	7,500.0	13,743.5	7,770.0	76.5	106.9	-97.21	-3,995.9	3,191.3	1,927.3	1,750.0	177.30	10.871		
12,000.0	7,500.0	13,843.5	7,770.0	78.2	108.6	-97.21	-4,095.9	3,191.3	1,927.4	1,746.6	180.73	10.664		
12,100.0	7,500.0	13,943.5	7,770.0	79.8	110.3	-97.21	-4,195.9	3,191.3	1,927.4	1,743.2	184.17	10.465		
12,200.0	7,500.0	14,043.5	7,770.0	81.5	112.0	-97.21	-4,295.9	3,191.3	1,927.4	1,739.8	187.61	10.273		
12,300.0	7,500.0	14,143.5	7,770.0	83.1	113.7	-97.21	-4,395.9	3,191.3	1,927.4	1,736.4	191.05	10.088		
12,400.0	7,500.0	14,243.5	7,770.0	84.8	115.5	-97.21	-4,495.9	3,191.4	1,927.4	1,732.9	194.50	9.910		
12,500.0	7,500.0	14,343.5	7,770.0	86.5	117.2	-97.21	-4,595.9	3,191.4	1,927.4	1,729.5	197.94	9.737		
12,600.0	7,500.0	14,443.5	7,770.0	88.1	118.9	-97.21	-4,695.9	3,191.4	1,927.5	1,726.1	201.39	9.571		
12,700.0	7,500.0	14,543.5	7,770.0	89.8	120.6	-97.21	-4,795.9	3,191.4	1,927.5	1,722.6	204.84	9.410		
12,800.0	7,500.0	14,643.5	7,770.0	91.5	122.4	-97.21	-4,895.9	3,191.4	1,927.5	1,719.2	208.29	9.254		
12,900.0	7,500.0	14,743.5	7,770.0	93.2	124.1	-97.21	-4,995.9	3,191.4	1,927.5	1,715.8	211.74	9.103		
13,000.0	7,500.0	14,843.5	7,770.0	94.9	125.8	-97.21	-5,095.9	3,191.5	1,927.5	1,712.3	215.19	8.957		
13,100.0	7,500.0	14,943.5	7,770.0	96.5	127.5	-97.21	-5,195.9	3,191.5	1,927.5	1,708.9	218.64	8.816		
13,200.0	7,500.0	15,043.5	7,770.0	98.2	129.3	-97.21	-5,295.9	3,191.5	1,927.6	1,705.5	222.09	8.679		
13,300.0	7,500.0	15,143.5	7,770.0	99.9	131.0	-97.21	-5,395.9	3,191.5	1,927.6	1,702.0	225.54	8.546		
13,400.0	7,500.0	15,243.5	7,770.0	101.6	132.7	-97.21	-5,495.9	3,191.5	1,927.6	1,698.6	229.00	8.417		
13,500.0	7,500.0	15,343.5	7,770.0	103.3	134.5	-97.21	-5,595.9	3,191.5	1,927.6	1,695.2	232.45	8.292		
13,600.0	7,500.0	15,443.5	7,770.0	105.0	136.2	-97.21	-5,695.9	3,191.6	1,927.6	1,691.7	235.91	8.171		
13,700.0	7,500.0	15,543.5	7,770.0	106.7	137.9	-97.21	-5,795.9	3,191.6	1,927.6	1,688.3	239.37	8.053		
13,800.0	7,500.0	15,643.5	7,770.0	108.4	139.7	-97.21	-5,895.9	3,191.6	1,927.7	1,684.8	242.83	7.938		
13,900.0	7,500.0	15,743.5	7,770.0	110.1	141.4	-97.21	-5,995.9	3,191.6	1,927.7	1,681.4	246.28	7.827		
14,000.0	7,500.0	15,843.5	7,770.0	111.8	143.1	-97.21	-6,095.9	3,191.6	1,927.7	1,677.9	249.74	7.719		
14,100.0	7,500.0	15,943.5	7,770.0	113.5	144.9	-97.21	-6,195.9	3,191.6	1,927.7	1,674.5	253.20	7.613		

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 2F-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 2F-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 1D-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		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)						
14,200.0	7,500.0	16,043.5	7,770.0	115.2	146.6	-97.21	-6,295.9	3,191.7	1,927.7	1,671.1	256.66	7.511		
14,300.0	7,500.0	16,143.5	7,770.0	116.9	148.3	-97.21	-6,395.9	3,191.7	1,927.7	1,667.6	260.12	7.411		
14,400.0	7,500.0	16,243.5	7,770.0	118.6	150.1	-97.21	-6,495.9	3,191.7	1,927.8	1,664.2	263.59	7.314		
14,500.0	7,500.0	16,343.5	7,770.0	120.4	151.8	-97.21	-6,595.9	3,191.7	1,927.8	1,660.7	267.05	7.219		
14,600.0	7,500.0	16,443.5	7,770.0	122.1	153.5	-97.21	-6,695.9	3,191.7	1,927.8	1,657.3	270.51	7.127		
14,700.0	7,500.0	16,543.5	7,770.0	123.8	155.3	-97.21	-6,795.9	3,191.7	1,927.8	1,653.8	273.97	7.036		
14,800.0	7,500.0	16,643.5	7,770.0	125.5	157.0	-97.21	-6,895.9	3,191.8	1,927.8	1,650.4	277.44	6.949		
14,900.0	7,500.0	16,743.5	7,770.0	127.2	158.7	-97.21	-6,995.9	3,191.8	1,927.8	1,646.9	280.90	6.863		
15,000.0	7,500.0	16,843.5	7,770.0	128.9	160.5	-97.21	-7,095.9	3,191.8	1,927.9	1,643.5	284.36	6.780		
15,100.0	7,500.0	16,943.5	7,770.0	130.6	162.2	-97.21	-7,195.9	3,191.8	1,927.9	1,640.0	287.83	6.698		
15,200.0	7,500.0	17,043.5	7,770.0	132.4	164.0	-97.21	-7,295.9	3,191.8	1,927.9	1,636.6	291.29	6.618		
15,300.0	7,500.0	17,143.5	7,770.0	134.1	165.7	-97.21	-7,395.9	3,191.8	1,927.9	1,633.1	294.76	6.541		
15,400.0	7,500.0	17,243.5	7,770.0	135.8	167.4	-97.21	-7,495.9	3,191.9	1,927.9	1,629.7	298.22	6.465		
15,500.0	7,500.0	17,343.5	7,770.0	137.5	169.2	-97.21	-7,595.9	3,191.9	1,927.9	1,626.2	301.69	6.390		
15,600.0	7,500.0	17,443.5	7,770.0	139.2	170.9	-97.21	-7,695.9	3,191.9	1,928.0	1,622.8	305.16	6.318		
15,700.0	7,500.0	17,543.5	7,770.0	141.0	172.7	-97.21	-7,795.9	3,191.9	1,928.0	1,619.3	308.62	6.247		
15,800.0	7,500.0	17,643.5	7,770.0	142.7	174.4	-97.21	-7,895.9	3,191.9	1,928.0	1,615.9	312.09	6.178		
15,841.7	7,500.0	17,685.2	7,770.0	143.4	175.1	-97.21	-7,937.6	3,191.9	1,928.0	1,614.5	313.54	6.149 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	173.26	-4,267.5	504.7	4,297.3					
100.0	100.0	140.4	140.4	0.2	0.2	173.26	-4,267.3	504.6	4,297.0	4,296.6	0.39	N/A		
200.0	200.0	253.6	253.6	0.3	0.4	173.26	-4,266.7	504.4	4,296.5	4,295.7	0.76	5,642.106		
300.0	300.0	366.8	366.8	0.5	0.6	173.26	-4,265.8	504.1	4,295.6	4,294.5	1.13	3,800.660		
400.0	400.0	480.0	480.0	0.7	0.8	106.92	-4,264.5	503.6	4,294.8	4,293.3	1.50	2,864.025		
500.0	500.0	593.2	593.2	0.9	1.0	106.97	-4,262.9	503.0	4,294.1	4,292.2	1.87	2,293.835		
600.0	599.9	706.3	706.2	1.0	1.2	107.04	-4,261.0	502.3	4,293.6	4,291.3	2.25	1,907.607		
700.0	699.7	847.4	847.4	1.2	1.5	107.17	-4,258.0	501.1	4,293.3	4,290.6	2.69	1,596.737		
800.0	799.4	1,373.9	1,370.6	1.4	2.7	108.16	-4,217.1	465.4	4,284.3	4,280.4	3.90	1,099.251		
900.0	898.9	1,600.1	1,593.0	1.7	3.5	108.87	-4,186.3	438.4	4,271.7	4,267.0	4.63	922.945		
1,000.0	998.3	1,641.2	1,633.3	1.9	3.6	109.10	-4,180.6	433.0	4,260.2	4,255.2	4.97	856.786		
1,100.0	1,097.4	1,829.0	1,818.1	2.2	4.3	109.79	-4,155.3	410.6	4,250.6	4,244.9	5.67	749.875		
1,200.0	1,196.3	1,909.2	1,896.8	2.5	4.5	110.17	-4,143.0	401.0	4,239.2	4,233.0	6.15	688.936		
1,300.0	1,294.9	1,988.0	1,974.1	2.8	4.8	110.55	-4,131.5	391.2	4,229.0	4,222.4	6.66	635.050		
1,400.0	1,393.3	2,102.6	2,086.6	3.2	5.2	111.07	-4,114.7	377.3	4,219.8	4,212.5	7.27	580.293		
1,494.4	1,485.8	2,185.2	2,167.7	3.5	5.5	111.48	-4,102.3	367.4	4,211.5	4,203.7	7.82	538.421		
1,500.0	1,491.2	2,189.8	2,172.2	3.5	5.6	111.50	-4,101.7	366.8	4,211.1	4,203.2	7.85	536.163		
1,600.0	1,589.1	2,246.0	2,227.3	3.9	5.8	111.74	-4,093.5	359.7	4,203.3	4,194.9	8.37	502.198		
1,700.0	1,686.9	2,321.8	2,301.9	4.3	6.0	112.06	-4,083.4	350.5	4,196.7	4,187.8	8.93	469.772		
1,800.0	1,784.8	2,496.0	2,473.2	4.7	6.7	112.76	-4,058.3	331.0	4,189.4	4,179.7	9.72	430.792		
1,900.0	1,882.6	2,560.0	2,536.1	5.1	6.9	113.02	-4,048.9	323.8	4,182.1	4,171.8	10.26	407.426		
2,000.0	1,980.4	2,665.8	2,640.1	5.5	7.3	113.46	-4,033.8	311.6	4,175.4	4,164.5	10.91	382.546		
2,100.0	2,078.3	2,753.5	2,726.1	5.9	7.6	113.83	-4,020.6	300.9	4,168.1	4,156.6	11.52	361.685		
2,200.0	2,176.1	2,818.3	2,789.8	6.3	7.8	114.10	-4,011.4	293.5	4,161.9	4,149.8	12.08	344.596		
2,300.0	2,273.9	2,935.9	2,905.4	6.7	8.2	114.59	-3,994.6	279.9	4,155.9	4,143.1	12.76	325.702		
2,400.0	2,371.8	3,037.0	3,004.7	7.1	8.6	115.01	-3,980.1	268.0	4,149.9	4,136.5	13.41	309.535		
2,500.0	2,469.6	3,110.3	3,076.8	7.5	8.9	115.32	-3,969.5	259.4	4,144.2	4,130.2	13.99	296.284		
2,600.0	2,567.4	3,219.3	3,183.9	7.9	9.3	115.78	-3,954.0	246.7	4,138.7	4,124.1	14.65	282.417		
2,700.0	2,665.3	3,290.0	3,253.4	8.3	9.5	116.08	-3,943.8	238.4	4,133.5	4,118.3	15.23	271.362		
2,800.0	2,763.1	3,367.9	3,329.9	8.7	9.8	116.41	-3,932.9	229.4	4,128.9	4,113.1	15.82	260.935		
2,900.0	2,860.9	3,506.8	3,466.5	9.1	10.3	117.00	-3,913.6	213.2	4,124.5	4,108.0	16.57	248.929		
3,000.0	2,958.8	3,588.0	3,546.4	9.5	10.6	117.34	-3,902.0	203.8	4,120.0	4,102.8	17.17	239.914		
3,100.0	3,056.6	3,683.5	3,640.3	9.9	11.0	117.74	-3,888.4	192.8	4,115.8	4,098.0	17.81	231.093		
3,200.0	3,154.4	3,777.0	3,732.3	10.3	11.3	118.14	-3,875.3	182.3	4,111.9	4,093.5	18.44	222.983		
3,300.0	3,252.3	3,896.6	3,849.8	10.7	11.7	118.65	-3,858.1	168.3	4,108.0	4,088.9	19.14	214.597		
3,400.0	3,350.1	4,001.0	3,952.4	11.1	12.1	119.09	-3,842.4	156.5	4,103.7	4,083.9	19.80	207.291		
3,500.0	3,447.9	4,082.4	4,032.4	11.5	12.4	119.43	-3,830.5	147.8	4,099.9	4,079.5	20.39	201.026		
3,600.0	3,545.8	4,169.6	4,118.1	11.9	12.7	119.79	-3,817.9	138.6	4,096.5	4,075.5	21.01	194.985		
3,700.0	3,643.6	4,243.0	4,190.3	12.3	13.0	120.11	-3,807.5	130.1	4,093.6	4,072.0	21.60	189.494		
3,800.0	3,741.5	4,309.0	4,255.3	12.7	13.2	120.39	-3,798.5	122.2	4,091.6	4,069.4	22.17	184.550		
3,900.0	3,839.3	4,406.9	4,351.6	13.1	13.6	120.81	-3,785.8	111.1	4,090.3	4,067.5	22.81	179.324		
4,000.0	3,937.1	4,481.4	4,425.0	13.5	13.8	121.12	-3,776.1	103.0	4,089.2	4,065.8	23.39	174.837		
4,100.0	4,035.0	4,577.6	4,520.0	13.9	14.1	121.52	-3,764.2	92.7	4,089.0	4,064.9	24.02	170.223		
4,200.0	4,132.8	4,671.7	4,612.7	14.3	14.5	121.92	-3,752.0	82.2	4,088.3	4,063.6	24.65	165.854		
4,223.4	4,155.7	4,687.0	4,627.8	14.4	14.5	121.98	-3,750.0	80.5	4,088.3	4,063.5	24.78	164.982		
4,300.0	4,230.6	4,764.1	4,703.8	14.7	14.8	122.30	-3,740.5	72.3	4,088.3	4,063.1	25.26	161.843		
4,400.0	4,328.5	4,846.2	4,784.9	15.1	15.0	122.63	-3,730.2	64.1	4,088.5	4,062.7	25.84	158.209		
4,500.0	4,426.3	4,913.7	4,851.7	15.5	15.2	122.90	-3,722.4	57.9	4,089.6	4,063.2	26.38	155.009		
4,600.0	4,524.1	5,037.0	4,973.7	15.9	15.6	123.37	-3,708.2	47.4	4,090.9	4,063.9	27.03	151.336		
4,700.0	4,622.0	5,100.0	5,036.1	16.3	15.8	123.61	-3,701.1	42.3	4,092.4	4,064.9	27.55	148.539		
4,800.0	4,719.8	5,164.0	5,099.5	16.7	16.0	123.85	-3,694.5	36.9	4,095.1	4,067.0	28.08	145.846		
4,900.0	4,817.6	5,287.9	5,222.2	17.2	16.4	124.33	-3,681.1	25.7	4,097.6	4,068.9	28.74	142.599		

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 2F-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 2F-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	4,915.5	5,357.9	5,291.5	17.6	16.6	124.60	-3,673.6	19.4	4,100.4	4,071.2	29.27	140.087		
5,100.0	5,013.3	5,457.9	5,390.6	18.0	16.9	124.98	-3,663.4	10.7	4,103.9	4,074.0	29.86	137.417		
5,200.0	5,111.1	5,530.1	5,462.1	18.4	17.1	125.25	-3,656.0	4.8	4,107.4	4,077.1	30.39	135.147		
5,300.0	5,209.0	5,637.4	5,568.6	18.8	17.4	125.65	-3,645.5	-3.8	4,111.5	4,080.5	30.99	132.680		
5,400.0	5,306.8	5,706.0	5,636.7	19.2	17.6	125.90	-3,638.8	-8.9	4,115.7	4,084.2	31.50	130.671		
5,500.0	5,404.6	5,785.3	5,715.4	19.6	17.8	126.18	-3,631.6	-14.5	4,120.6	4,088.6	32.02	128.700		
5,600.0	5,502.5	5,839.7	5,769.5	20.0	17.9	126.37	-3,627.2	-18.2	4,126.5	4,094.0	32.48	127.046		
5,700.0	5,600.3	5,897.0	5,826.6	20.4	18.0	126.56	-3,623.3	-21.8	4,133.6	4,100.7	32.94	125.480		
5,800.0	5,698.2	5,960.0	5,889.4	20.8	18.2	126.76	-3,619.5	-25.3	4,141.6	4,108.2	33.40	124.002		
5,900.0	5,796.0	6,035.5	5,964.7	21.2	18.3	126.99	-3,615.7	-28.4	4,150.3	4,116.4	33.86	122.574		
6,000.0	5,893.8	6,120.0	6,049.1	21.6	18.4	127.22	-3,612.4	-30.3	4,159.6	4,125.3	34.30	121.259		
6,100.0	5,991.7	6,171.9	6,101.0	22.0	18.5	127.35	-3,610.9	-30.7	4,169.7	4,135.0	34.70	120.170		
6,200.0	6,089.5	6,232.0	6,161.1	22.4	18.6	127.50	-3,609.9	-31.3	4,180.9	4,145.8	35.10	119.113		
6,300.0	6,187.3	6,352.5	6,281.6	22.8	18.7	127.79	-3,608.0	-32.5	4,192.5	4,156.9	35.58	117.820		
6,400.0	6,285.2	6,433.7	6,362.7	23.2	18.8	127.97	-3,606.9	-32.2	4,203.9	4,167.9	35.99	116.801		
6,500.0	6,383.0	6,499.4	6,428.4	23.7	18.9	128.11	-3,606.4	-31.2	4,215.9	4,179.5	36.38	115.877		
6,600.0	6,480.8	6,566.0	6,495.1	24.1	18.9	128.26	-3,606.6	-31.2	4,228.9	4,192.2	36.78	114.982		
6,700.0	6,578.7	6,669.3	6,598.4	24.5	19.0	128.49	-3,607.0	-31.8	4,242.5	4,205.3	37.22	113.979		
6,800.0	6,676.5	6,777.2	6,706.2	24.9	19.2	128.73	-3,606.9	-31.9	4,255.5	4,217.9	37.67	112.976		
6,900.0	6,774.3	6,905.9	6,834.9	25.3	19.3	129.01	-3,606.2	-31.7	4,268.1	4,229.9	38.14	111.900		
7,000.0	6,872.2	7,003.0	6,932.0	25.7	19.4	129.22	-3,605.4	-31.4	4,280.5	4,241.9	38.57	110.984		
7,019.1	6,890.8	7,021.5	6,950.5	25.8	19.4	129.26	-3,605.3	-31.3	4,282.8	4,244.2	38.65	110.812		
7,050.0	6,921.1	7,047.9	6,977.0	25.9	19.5	114.60	-3,605.1	-31.2	4,285.9	4,247.1	38.78	110.509		
7,100.0	6,970.2	7,089.4	7,018.4	26.0	19.5	89.42	-3,604.9	-31.0	4,287.5	4,248.5	39.01	109.900		
7,150.0	7,019.0	7,136.7	7,065.7	26.2	19.6	69.53	-3,604.7	-30.8	4,285.1	4,245.8	39.27	109.128		
7,200.0	7,067.2	7,203.0	7,132.0	26.3	19.6	56.76	-3,604.2	-30.5	4,278.4	4,238.8	39.56	108.145		
7,250.0	7,114.4	7,249.5	7,178.5	26.4	19.7	48.85	-3,603.8	-30.3	4,267.5	4,227.7	39.84	107.106		
7,300.0	7,160.3	7,290.5	7,219.6	26.4	19.7	43.91	-3,603.5	-30.1	4,252.7	4,212.6	40.13	105.969		
7,350.0	7,204.5	7,330.1	7,259.1	26.5	19.8	40.86	-3,603.2	-30.0	4,234.1	4,193.6	40.43	104.727		
7,400.0	7,246.6	7,366.9	7,296.0	26.5	19.8	39.09	-3,603.0	-29.9	4,211.7	4,171.0	40.73	103.396		
7,450.0	7,286.4	7,401.3	7,330.3	26.5	19.9	38.26	-3,602.8	-29.8	4,185.9	4,144.9	41.05	101.983		
7,500.0	7,323.5	7,433.5	7,362.5	26.5	19.9	38.23	-3,602.7	-29.7	4,156.9	4,115.5	41.36	100.497		
7,550.0	7,357.7	7,463.1	7,392.1	26.5	19.9	38.91	-3,602.7	-29.6	4,124.7	4,083.0	41.69	98.948		
7,600.0	7,388.7	7,490.0	7,419.1	26.5	20.0	40.33	-3,602.6	-29.5	4,089.7	4,047.7	42.01	97.348		
7,650.0	7,416.3	7,514.0	7,443.1	26.5	20.0	42.55	-3,602.6	-29.5	4,052.1	4,009.8	42.34	95.708		
7,700.0	7,440.2	7,534.9	7,464.0	26.5	20.0	45.72	-3,602.6	-29.4	4,012.3	3,969.6	42.67	94.039		
7,750.0	7,460.3	7,552.5	7,481.6	26.5	20.0	50.06	-3,602.6	-29.4	3,970.4	3,927.4	42.99	92.352		
7,800.0	7,476.4	7,566.7	7,495.7	26.5	20.0	55.88	-3,602.7	-29.3	3,926.9	3,883.6	43.32	90.658		
7,850.0	7,488.4	7,577.4	7,506.4	26.6	20.1	63.54	-3,602.7	-29.3	3,882.0	3,838.4	43.63	88.969		
7,900.0	7,496.2	7,584.3	7,513.4	26.6	20.1	73.37	-3,602.7	-29.3	3,836.1	3,792.2	43.94	87.295		
7,950.0	7,499.8	7,587.6	7,516.6	26.7	20.1	85.33	-3,602.7	-29.3	3,789.5	3,745.3	44.25	85.645		
7,966.7	7,500.0	7,587.9	7,516.9	26.7	20.1	89.69	-3,602.7	-29.3	3,773.9	3,729.6	44.35	85.100		
8,000.0	7,500.0	7,587.9	7,517.0	26.8	20.1	89.69	-3,602.7	-29.3	3,742.7	3,698.1	44.55	84.015		
8,100.0	7,500.0	7,588.2	7,517.2	27.0	20.1	89.70	-3,602.7	-29.3	3,649.1	3,604.0	45.17	80.791		
8,200.0	7,500.0	7,588.5	7,517.5	27.4	20.1	89.71	-3,602.7	-29.3	3,556.0	3,510.2	45.81	77.620		
8,300.0	7,500.0	7,588.7	7,517.7	27.9	20.1	89.73	-3,602.7	-29.3	3,463.2	3,416.7	46.49	74.500		
8,400.0	7,500.0	7,589.0	7,518.0	28.5	20.1	89.74	-3,602.7	-29.3	3,370.8	3,323.6	47.19	71.433		
8,500.0	7,500.0	7,589.3	7,518.3	29.1	20.1	89.75	-3,602.7	-29.3	3,278.9	3,231.0	47.92	68.421		
8,600.0	7,500.0	7,589.5	7,518.5	29.9	20.1	89.76	-3,602.7	-29.3	3,187.4	3,138.7	48.69	65.463		
8,700.0	7,500.0	7,589.8	7,518.8	30.8	20.1	89.77	-3,602.7	-29.3	3,096.5	3,047.0	49.50	62.561		
8,800.0	7,500.0	7,590.1	7,519.1	31.7	20.1	89.78	-3,602.7	-29.3	3,006.2	2,955.8	50.34	59.717		
8,900.0	7,500.0	7,590.3	7,519.4	32.7	20.1	89.80	-3,602.7	-29.3	2,916.5	2,865.3	51.23	56.932		

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 2F-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 2F-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	7,590.6	7,519.6	33.7	20.1	89.81	-3,602.7	-29.3	2,827.5	2,775.3	52.16	54.208		
9,100.0	7,500.0	7,590.9	7,519.9	34.8	20.1	89.82	-3,602.7	-29.3	2,739.2	2,686.1	53.14	51.546		
9,200.0	7,500.0	7,591.2	7,520.2	36.0	20.1	89.83	-3,602.7	-29.3	2,651.8	2,597.6	54.17	48.950		
9,300.0	7,500.0	7,591.5	7,520.5	37.2	20.1	89.85	-3,602.7	-29.3	2,565.3	2,510.0	55.26	46.422		
9,400.0	7,500.0	7,591.7	7,520.8	38.4	20.1	89.86	-3,602.7	-29.3	2,479.8	2,423.4	56.41	43.964		
9,500.0	7,500.0	7,592.0	7,521.1	39.7	20.1	89.87	-3,602.7	-29.3	2,395.4	2,337.8	57.61	41.578		
9,600.0	7,500.0	7,592.3	7,521.3	41.1	20.1	89.88	-3,602.7	-29.3	2,312.3	2,253.4	58.88	39.269		
9,700.0	7,500.0	7,592.6	7,521.6	42.4	20.1	89.90	-3,602.7	-29.3	2,230.6	2,170.4	60.22	37.039		
9,800.0	7,500.0	7,592.9	7,521.9	43.8	20.1	89.91	-3,602.7	-29.3	2,150.4	2,088.8	61.63	34.892		
9,900.0	7,500.0	7,593.2	7,522.2	45.2	20.1	89.92	-3,602.7	-29.3	2,071.9	2,008.8	63.11	32.832		
10,000.0	7,500.0	7,593.5	7,522.5	46.6	20.1	89.93	-3,602.7	-29.3	1,995.4	1,930.7	64.65	30.862		
10,100.0	7,500.0	7,593.8	7,522.8	48.1	20.1	89.95	-3,602.7	-29.3	1,921.0	1,854.7	66.27	28.988		
10,200.0	7,500.0	7,594.1	7,523.1	49.6	20.1	89.96	-3,602.7	-29.3	1,849.0	1,781.1	67.95	27.214		
10,300.0	7,500.0	7,594.4	7,523.4	51.1	20.1	89.97	-3,602.7	-29.3	1,779.8	1,710.1	69.68	25.544		
10,400.0	7,500.0	7,594.7	7,523.7	52.6	20.1	89.99	-3,602.7	-29.3	1,713.6	1,642.1	71.45	23.984		
10,500.0	7,500.0	7,595.0	7,524.0	54.1	20.1	90.00	-3,602.7	-29.3	1,650.8	1,577.5	73.24	22.539		
10,600.0	7,500.0	7,595.3	7,524.3	55.6	20.1	90.01	-3,602.7	-29.3	1,591.8	1,516.8	75.04	21.214		
10,700.0	7,500.0	7,595.6	7,524.6	57.2	20.1	90.03	-3,602.7	-29.3	1,537.0	1,460.2	76.80	20.015		
10,800.0	7,500.0	7,595.9	7,525.0	58.8	20.1	90.04	-3,602.7	-29.3	1,487.0	1,408.5	78.48	18.946		
10,900.0	7,500.0	7,596.3	7,525.3	60.3	20.1	90.06	-3,602.8	-29.3	1,442.2	1,362.1	80.06	18.015		
11,000.0	7,500.0	7,596.6	7,525.6	61.9	20.1	90.07	-3,602.8	-29.3	1,403.1	1,321.6	81.46	17.225		
11,100.0	7,500.0	7,596.9	7,525.9	63.5	20.1	90.08	-3,602.8	-29.3	1,370.1	1,287.5	82.63	16.582		
11,200.0	7,500.0	7,597.2	7,526.2	65.1	20.1	90.10	-3,602.8	-29.3	1,343.9	1,260.3	83.52	16.090		
11,300.0	7,500.0	7,597.5	7,526.6	66.7	20.1	90.11	-3,602.8	-29.3	1,324.6	1,240.6	84.08	15.754		
11,400.0	7,500.0	7,597.9	7,526.9	68.3	20.1	90.13	-3,602.8	-29.3	1,312.8	1,228.5	84.28	15.576		
11,500.0	7,500.0	7,598.2	7,527.2	70.0	20.1	90.14	-3,602.8	-29.3	1,308.5	1,224.4	84.10	15.559 ES, SF		
11,506.5	7,500.0	7,598.2	7,527.2	70.1	20.1	90.14	-3,602.8	-29.3	1,308.4	1,224.4	84.07	15.564 CC		
11,600.0	7,500.0	7,598.5	7,527.6	71.6	20.1	90.16	-3,602.8	-29.3	1,311.8	1,228.2	83.53	15.705		
11,700.0	7,500.0	7,598.9	7,527.9	73.2	20.1	90.17	-3,602.8	-29.3	1,322.7	1,240.1	82.60	16.013		
11,800.0	7,500.0	7,599.2	7,528.2	74.9	20.1	90.18	-3,602.8	-29.3	1,341.0	1,259.6	81.36	16.483		
11,900.0	7,500.0	7,599.6	7,528.6	76.5	20.1	90.20	-3,602.8	-29.3	1,366.3	1,286.5	79.85	17.111		
12,000.0	7,500.0	7,599.9	7,528.9	78.2	20.1	90.21	-3,602.8	-29.3	1,398.4	1,320.3	78.15	17.894		
12,100.0	7,500.0	7,600.2	7,529.3	79.8	20.1	90.23	-3,602.8	-29.3	1,436.7	1,360.4	76.31	18.828		
12,200.0	7,500.0	7,600.6	7,529.6	81.5	20.1	90.25	-3,602.8	-29.3	1,480.9	1,406.5	74.40	19.905		
12,300.0	7,500.0	7,600.9	7,530.0	83.1	20.1	90.26	-3,602.8	-29.3	1,530.2	1,457.8	72.46	21.118		
12,400.0	7,500.0	7,601.3	7,530.3	84.8	20.1	90.28	-3,602.8	-29.3	1,584.4	1,513.9	70.54	22.461		
12,500.0	7,500.0	7,601.7	7,530.7	86.5	20.1	90.29	-3,602.8	-29.3	1,642.9	1,574.2	68.67	23.924		
12,600.0	7,500.0	7,602.0	7,531.0	88.1	20.1	90.31	-3,602.8	-29.2	1,705.2	1,638.3	66.87	25.499		
12,700.0	7,500.0	7,602.4	7,531.4	89.8	20.1	90.32	-3,602.8	-29.2	1,771.0	1,705.8	65.16	27.177		
12,800.0	7,500.0	7,602.7	7,531.8	91.5	20.1	90.34	-3,602.8	-29.2	1,839.9	1,776.3	63.55	28.950		
12,900.0	7,500.0	7,603.1	7,532.1	93.2	20.1	90.36	-3,602.8	-29.2	1,911.5	1,849.4	62.04	30.810		
13,000.0	7,500.0	7,603.5	7,532.5	94.9	20.1	90.37	-3,602.8	-29.2	1,985.6	1,924.9	60.63	32.748		
13,100.0	7,500.0	7,603.9	7,532.9	96.5	20.1	90.39	-3,602.8	-29.2	2,061.8	2,002.5	59.32	34.757		
13,200.0	7,500.0	7,604.2	7,533.3	98.2	20.1	90.40	-3,602.8	-29.2	2,140.1	2,082.0	58.11	36.828		
13,300.0	7,500.0	7,604.6	7,533.6	99.9	20.1	90.42	-3,602.8	-29.2	2,220.0	2,163.0	56.99	38.956		
13,400.0	7,500.0	7,605.0	7,534.0	101.6	20.1	90.44	-3,602.8	-29.2	2,301.6	2,245.6	55.95	41.133		
13,500.0	7,500.0	7,605.4	7,534.4	103.3	20.1	90.46	-3,602.8	-29.2	2,384.5	2,329.5	55.00	43.353		
13,600.0	7,500.0	7,605.8	7,534.8	105.0	20.1	90.47	-3,602.8	-29.2	2,468.7	2,414.6	54.13	45.611		
13,700.0	7,500.0	7,606.2	7,535.2	106.7	20.1	90.49	-3,602.8	-29.2	2,554.1	2,500.8	53.32	47.900		
13,800.0	7,500.0	7,606.6	7,535.6	108.4	20.1	90.51	-3,602.8	-29.2	2,640.5	2,587.9	52.58	50.217		
13,900.0	7,500.0	7,607.0	7,536.0	110.1	20.1	90.52	-3,602.8	-29.2	2,727.8	2,675.9	51.90	52.556		
14,000.0	7,500.0	7,607.4	7,536.4	111.8	20.1	90.54	-3,602.8	-29.2	2,815.9	2,764.6	51.28	54.914		

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 2F-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 2F-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		
14,100.0	7,500.0	7,607.8	7,536.8	113.5	20.1	90.56	-3,602.8	-29.2	2,904.8	2,854.1	50.71	57.286		
14,200.0	7,500.0	7,608.2	7,537.2	115.2	20.1	90.58	-3,602.8	-29.2	2,994.5	2,944.3	50.18	59.669		
14,300.0	7,500.0	7,608.6	7,537.6	116.9	20.1	90.60	-3,602.8	-29.2	3,084.7	3,035.0	49.71	62.060		
14,400.0	7,500.0	7,609.0	7,538.0	118.6	20.1	90.61	-3,602.8	-29.2	3,175.6	3,126.3	49.27	64.456		
14,500.0	7,500.0	7,609.4	7,538.5	120.4	20.1	90.63	-3,602.8	-29.2	3,266.9	3,218.1	48.87	66.854		
14,600.0	7,500.0	7,609.9	7,538.9	122.1	20.1	90.65	-3,602.8	-29.2	3,358.8	3,310.3	48.50	69.252		
14,700.0	7,500.0	7,610.3	7,539.3	123.8	20.1	90.67	-3,602.8	-29.2	3,451.1	3,403.0	48.17	71.648		
14,800.0	7,500.0	7,610.7	7,539.7	125.5	20.1	90.69	-3,602.8	-29.2	3,543.9	3,496.0	47.86	74.041		
14,900.0	7,500.0	7,611.2	7,540.2	127.2	20.1	90.71	-3,602.8	-29.2	3,637.0	3,589.4	47.59	76.427		
15,000.0	7,500.0	7,611.6	7,540.6	128.9	20.1	90.73	-3,602.8	-29.2	3,730.5	3,683.1	47.34	78.807		
15,100.0	7,500.0	7,612.0	7,541.1	130.6	20.1	90.75	-3,602.8	-29.2	3,824.3	3,777.2	47.11	81.179		
15,200.0	7,500.0	7,612.5	7,541.5	132.4	20.1	90.77	-3,602.8	-29.2	3,918.4	3,871.5	46.90	83.541		
15,300.0	7,500.0	7,612.9	7,542.0	134.1	20.1	90.79	-3,602.8	-29.2	4,012.8	3,966.1	46.72	85.893		
15,400.0	7,500.0	7,613.4	7,542.4	135.8	20.1	90.81	-3,602.8	-29.2	4,107.4	4,060.9	46.55	88.233		
15,500.0	7,500.0	7,613.8	7,542.9	137.5	20.1	90.83	-3,602.8	-29.2	4,202.3	4,155.9	46.40	90.562		
15,600.0	7,500.0	7,614.3	7,543.3	139.2	20.1	90.85	-3,602.8	-29.2	4,297.5	4,251.2	46.27	92.878		
15,700.0	7,500.0	7,614.8	7,543.8	141.0	20.1	90.87	-3,602.8	-29.2	4,392.8	4,346.7	46.15	95.182		
15,800.0	7,500.0	7,615.2	7,544.3	142.7	20.1	90.89	-3,602.8	-29.2	4,488.4	4,442.4	46.05	97.471		
15,841.7	7,500.0	7,615.4	7,544.5	143.4	20.1	90.90	-3,602.8	-29.2	4,528.3	4,482.3	46.01	98.421		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	17.2	17.2	0.0	0.0	172.85	-4,267.5	535.5	4,301.0							
100.0	100.0	98.9	98.9	0.2	0.1	172.86	-4,268.0	534.6	4,301.4	4,301.1	0.30	N/A				
200.0	200.0	196.0	196.0	0.3	0.3	172.88	-4,268.7	533.3	4,302.0	4,301.3	0.65	6,666.452				
300.0	300.0	267.8	267.8	0.5	0.4	172.89	-4,269.5	532.6	4,302.9	4,302.0	0.95	4,550.391				
400.0	400.0	339.3	339.3	0.7	0.6	106.52	-4,270.6	532.1	4,304.7	4,303.5	1.25	3,454.927				
500.0	500.0	396.2	396.1	0.9	0.7	106.52	-4,272.1	531.6	4,308.0	4,306.4	1.52	2,826.379				
600.0	599.9	450.0	449.9	1.0	0.8	106.51	-4,274.1	531.1	4,312.7	4,310.9	1.80	2,391.139				
700.0	699.7	490.3	490.2	1.2	0.9	106.49	-4,276.1	530.6	4,319.2	4,317.2	2.07	2,087.956				
800.0	799.4	547.1	546.9	1.4	1.0	106.48	-4,279.6	530.0	4,327.4	4,325.1	2.38	1,820.975				
900.0	898.9	606.0	605.6	1.7	1.1	106.48	-4,283.7	529.0	4,336.9	4,334.2	2.70	1,604.074				
1,000.0	998.3	668.0	667.4	1.9	1.2	106.49	-4,288.5	527.8	4,347.7	4,344.7	3.05	1,423.232				
1,100.0	1,097.4	762.4	761.4	2.2	1.4	106.57	-4,296.6	525.6	4,359.8	4,356.3	3.49	1,250.334				
1,200.0	1,196.3	858.1	856.8	2.5	1.6	106.67	-4,304.5	523.2	4,372.1	4,368.2	3.94	1,108.684				
1,300.0	1,294.9	917.2	915.6	2.8	1.8	106.69	-4,309.9	521.7	4,385.8	4,381.4	4.35	1,007.102				
1,400.0	1,393.3	966.9	965.1	3.2	1.9	106.68	-4,314.8	520.3	4,400.9	4,396.1	4.77	922.185				
1,494.4	1,485.8	1,004.0	1,001.9	3.5	2.0	106.64	-4,319.0	519.2	4,416.8	4,411.6	5.17	854.566				
1,500.0	1,491.2	1,004.0	1,001.9	3.5	2.0	106.64	-4,319.0	519.2	4,417.8	4,412.6	5.19	851.582				
1,600.0	1,589.1	1,068.0	1,065.3	3.9	2.2	106.84	-4,327.0	517.1	4,436.2	4,430.5	5.66	783.696				
1,700.0	1,686.9	1,092.1	1,089.2	4.3	2.2	106.92	-4,330.4	516.4	4,455.7	4,449.7	6.06	735.719				
1,800.0	1,784.8	1,133.0	1,129.6	4.7	2.4	107.05	-4,336.4	515.0	4,476.7	4,470.2	6.49	690.212				
1,900.0	1,882.6	1,179.6	1,175.6	5.1	2.5	107.20	-4,343.9	513.3	4,498.8	4,491.9	6.93	649.258				
2,000.0	1,980.4	1,226.2	1,221.4	5.5	2.7	107.36	-4,351.9	511.1	4,522.1	4,514.7	7.37	613.232				
2,100.0	2,078.3	1,280.9	1,275.1	5.9	2.9	107.55	-4,361.9	507.7	4,546.4	4,538.6	7.84	579.852				
2,200.0	2,176.1	1,378.5	1,370.5	6.3	3.2	107.94	-4,380.2	498.4	4,571.4	4,563.0	8.43	542.577				
2,300.0	2,273.9	1,449.8	1,440.0	6.7	3.5	108.24	-4,393.5	489.8	4,596.4	4,587.4	8.95	513.623				
2,400.0	2,371.8	1,516.0	1,504.4	7.1	3.8	108.52	-4,406.7	481.7	4,622.5	4,613.1	9.46	488.733				
2,500.0	2,469.6	1,589.6	1,575.9	7.5	4.1	108.82	-4,421.6	472.9	4,649.3	4,639.3	9.99	465.534				
2,600.0	2,567.4	1,642.0	1,626.9	7.9	4.3	109.04	-4,432.1	466.7	4,676.3	4,665.9	10.45	447.306				
2,700.0	2,665.3	1,697.2	1,680.5	8.3	4.6	109.26	-4,443.6	460.1	4,704.3	4,693.3	10.93	430.371				
2,800.0	2,763.1	1,738.0	1,720.0	8.7	4.8	109.43	-4,452.6	455.2	4,733.5	4,722.1	11.36	416.640				
2,900.0	2,860.9	1,831.4	1,810.2	9.1	5.2	109.81	-4,473.7	443.3	4,763.4	4,751.4	11.95	398.716				
3,000.0	2,958.8	1,994.4	1,968.1	9.5	5.9	110.47	-4,509.0	423.5	4,792.4	4,779.6	12.72	376.721				
3,100.0	3,056.6	2,100.2	2,070.7	9.9	6.4	110.88	-4,531.1	410.7	4,821.0	4,807.7	13.34	361.479				
3,200.0	3,154.4	2,174.6	2,142.9	10.3	6.7	111.17	-4,546.7	401.3	4,849.9	4,836.0	13.86	349.963				
3,300.0	3,252.3	2,307.7	2,272.1	10.7	7.3	111.68	-4,574.2	385.3	4,878.7	4,864.1	14.54	335.615				
3,400.0	3,350.1	2,426.6	2,387.8	11.1	7.8	112.13	-4,598.1	371.7	4,907.2	4,892.0	15.18	323.210				
3,500.0	3,447.9	2,565.9	2,523.1	11.5	8.4	112.68	-4,624.7	351.9	4,934.9	4,919.0	15.91	310.247				
3,600.0	3,545.8	2,666.1	2,620.7	11.9	8.9	113.06	-4,643.0	338.9	4,962.1	4,945.6	16.48	301.015				
3,700.0	3,643.6	2,724.0	2,677.2	12.3	9.1	113.27	-4,654.0	332.2	4,990.1	4,973.2	16.93	294.675				
3,800.0	3,741.5	2,764.9	2,716.9	12.7	9.3	113.41	-4,662.2	327.4	5,019.0	5,001.7	17.34	289.487				
3,900.0	3,839.3	2,819.0	2,769.5	13.1	9.5	113.61	-4,673.3	320.7	5,048.9	5,031.1	17.78	284.032				
4,000.0	3,937.1	2,883.0	2,831.5	13.5	9.8	113.84	-4,686.9	312.4	5,079.5	5,061.2	18.24	278.492				
4,100.0	4,035.0	2,989.2	2,934.3	13.9	10.3	114.23	-4,709.6	298.8	5,110.3	5,091.5	18.82	271.481				
4,200.0	4,132.8	3,115.1	3,056.4	14.3	10.9	114.68	-4,735.5	282.4	5,140.7	5,121.2	19.47	264.046				
4,300.0	4,230.6	3,225.4	3,163.5	14.7	11.4	115.07	-4,757.8	268.2	5,170.8	5,150.8	20.06	257.772				
4,400.0	4,328.5	3,335.2	3,270.3	15.1	11.9	115.45	-4,779.8	254.6	5,201.0	5,180.3	20.64	251.974				
4,500.0	4,426.3	3,423.0	3,355.6	15.5	12.3	115.74	-4,797.2	244.0	5,231.0	5,209.9	21.15	247.304				
4,600.0	4,524.1	3,487.0	3,417.8	15.9	12.6	115.96	-4,810.2	236.1	5,261.6	5,240.0	21.60	243.644				
4,700.0	4,622.0	3,614.0	3,541.2	16.3	13.1	116.38	-4,835.5	220.0	5,292.2	5,269.9	22.22	238.172				
4,800.0	4,719.8	3,678.0	3,603.4	16.7	13.4	116.59	-4,848.4	211.9	5,322.9	5,300.2	22.66	234.935				
4,900.0	4,817.6	3,730.3	3,654.1	17.2	13.7	116.77	-4,859.1	205.2	5,354.3	5,331.2	23.05	232.245				
5,000.0	4,915.5	3,871.3	3,791.1	17.6	14.3	117.23	-4,887.2	187.3	5,385.0	5,361.2	23.71	227.102				

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

Anticollision Report

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Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2F-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	Separation Factor		
5,100.0	5,013.3	4,041.7	3,957.0	18.0	15.0	117.76	-4,920.2	166.6	5,415.6	5,391.1	24.44	221.571		
5,200.0	5,111.1	4,119.6	4,033.0	18.4	15.4	118.01	-4,934.6	157.1	5,445.4	5,420.5	24.91	218.642		
5,300.0	5,209.0	4,186.0	4,097.6	18.8	15.7	118.21	-4,947.5	148.9	5,476.1	5,450.7	25.33	216.162		
5,400.0	5,306.8	4,296.4	4,205.1	19.2	16.1	118.55	-4,968.8	135.6	5,506.9	5,481.1	25.88	212.803		
5,500.0	5,404.6	4,378.0	4,284.6	19.6	16.5	118.80	-4,984.4	125.7	5,537.7	5,511.3	26.35	210.191		
5,600.0	5,502.5	4,601.2	4,502.8	20.0	17.4	119.45	-5,023.6	100.2	5,566.5	5,539.3	27.19	204.695		
5,700.0	5,600.3	4,669.3	4,569.4	20.4	17.7	119.65	-5,035.3	92.4	5,595.5	5,567.9	27.62	202.626		
5,800.0	5,698.2	4,759.0	4,657.1	20.8	18.0	119.91	-5,050.6	81.4	5,624.9	5,596.8	28.10	200.167		
5,900.0	5,796.0	4,830.5	4,727.0	21.2	18.3	120.12	-5,063.1	72.8	5,654.5	5,626.0	28.52	198.278		
6,000.0	5,893.8	5,172.8	5,063.5	21.6	19.5	121.00	-5,117.0	41.0	5,682.1	5,652.5	29.61	191.866		
6,100.0	5,991.7	5,322.5	5,211.3	22.0	20.0	121.37	-5,137.1	28.4	5,707.7	5,677.5	30.21	188.906		
6,200.0	6,089.5	5,500.2	5,387.1	22.4	20.6	121.81	-5,159.0	13.8	5,732.5	5,701.6	30.87	185.668		
6,300.0	6,187.3	5,552.0	5,438.4	22.8	20.7	121.93	-5,164.9	9.9	5,756.5	5,725.3	31.24	184.289		
6,400.0	6,285.2	5,617.9	5,503.6	23.2	20.9	122.08	-5,173.0	5.2	5,781.1	5,749.5	31.63	182.799		
6,500.0	6,383.0	5,902.0	5,785.3	23.7	21.7	122.72	-5,204.4	-13.7	5,804.0	5,771.5	32.50	178.580		
6,600.0	6,480.8	6,597.2	6,478.4	24.1	22.9	124.06	-5,242.1	-34.8	5,823.5	5,789.5	33.99	171.342		
6,700.0	6,578.7	6,741.5	6,622.7	24.5	23.0	124.28	-5,242.8	-33.2	5,835.7	5,801.2	34.49	169.219		
6,800.0	6,676.5	6,855.3	6,736.5	24.9	23.1	124.46	-5,242.3	-31.9	5,846.8	5,811.9	34.94	167.324		
6,900.0	6,774.3	6,959.1	6,840.3	25.3	23.2	124.63	-5,241.9	-30.8	5,858.2	5,822.8	35.39	165.526		
7,000.0	6,872.2	7,052.1	6,933.3	25.7	23.3	124.78	-5,241.4	-30.2	5,869.4	5,833.6	35.83	163.835		
7,019.1	6,890.8	7,069.0	6,950.2	25.8	23.3	124.81	-5,241.3	-30.1	5,871.6	5,835.7	35.91	163.522		
7,050.0	6,921.1	7,092.9	6,974.1	25.9	23.3	110.16	-5,241.2	-30.0	5,874.3	5,838.3	36.04	163.002		
7,100.0	6,970.2	7,129.6	7,010.8	26.0	23.3	84.96	-5,241.1	-29.7	5,875.4	5,839.1	36.26	162.041		
7,150.0	7,019.0	7,171.0	7,052.2	26.2	23.4	65.02	-5,241.1	-29.4	5,872.3	5,835.8	36.49	160.906		
7,200.0	7,067.2	7,247.7	7,128.9	26.3	23.4	52.17	-5,241.0	-28.7	5,864.9	5,828.1	36.79	159.399		
7,250.0	7,114.4	7,306.0	7,187.1	26.4	23.5	44.16	-5,240.6	-28.4	5,853.1	5,816.0	37.07	157.879		
7,300.0	7,160.3	7,350.2	7,231.3	26.4	23.5	39.09	-5,240.2	-28.3	5,837.2	5,799.8	37.34	156.323		
7,350.0	7,204.5	7,388.6	7,269.7	26.5	23.5	35.84	-5,239.9	-28.2	5,817.4	5,779.8	37.61	154.692		
7,400.0	7,246.6	7,424.7	7,305.9	26.5	23.6	33.83	-5,239.7	-28.2	5,793.9	5,756.0	37.87	152.977		
7,450.0	7,286.4	7,459.3	7,340.5	26.5	23.6	32.72	-5,239.5	-28.2	5,766.8	5,728.6	38.14	151.183		
7,500.0	7,323.5	7,500.5	7,381.7	26.5	23.6	32.38	-5,239.3	-28.1	5,736.3	5,697.9	38.43	149.277		
7,550.0	7,357.7	7,538.4	7,419.6	26.5	23.7	32.72	-5,239.1	-28.1	5,702.6	5,663.9	38.71	147.326		
7,600.0	7,388.7	7,568.1	7,449.2	26.5	23.7	33.71	-5,238.9	-28.0	5,666.0	5,627.0	38.98	145.368		
7,650.0	7,416.3	7,591.7	7,472.9	26.5	23.7	35.44	-5,238.7	-27.9	5,626.8	5,587.5	39.24	143.402		
7,700.0	7,440.2	7,612.2	7,493.4	26.5	23.7	38.12	-5,238.6	-27.8	5,585.3	5,545.8	39.49	141.423		
7,750.0	7,460.3	7,629.5	7,510.7	26.5	23.8	42.04	-5,238.6	-27.8	5,541.7	5,502.0	39.74	139.443		
7,800.0	7,476.4	7,643.4	7,524.5	26.5	23.8	47.75	-5,238.5	-27.7	5,496.5	5,456.5	39.98	137.474		
7,850.0	7,488.4	7,653.7	7,534.9	26.6	23.8	56.05	-5,238.5	-27.7	5,449.9	5,409.7	40.21	135.529		
7,900.0	7,496.2	7,660.4	7,541.5	26.6	23.8	68.06	-5,238.5	-27.6	5,402.4	5,361.9	40.43	133.618		
7,950.0	7,499.8	7,663.4	7,544.5	26.7	23.8	84.55	-5,238.5	-27.6	5,354.2	5,313.5	40.64	131.754		
7,966.7	7,500.0	7,663.5	7,544.7	26.7	23.8	90.91	-5,238.4	-27.6	5,338.0	5,297.3	40.70	131.140		
8,000.0	7,500.0	7,663.4	7,544.6	26.8	23.8	90.90	-5,238.5	-27.6	5,305.7	5,264.9	40.84	129.917		
8,100.0	7,500.0	7,663.2	7,544.4	27.0	23.8	90.89	-5,238.5	-27.6	5,208.8	5,167.6	41.25	126.274		
8,200.0	7,500.0	7,663.0	7,544.1	27.4	23.8	90.88	-5,238.5	-27.6	5,112.1	5,070.4	41.67	122.671		
8,300.0	7,500.0	7,662.7	7,543.9	27.9	23.8	90.87	-5,238.5	-27.6	5,015.5	4,973.4	42.11	119.108		
8,400.0	7,500.0	7,662.5	7,543.7	28.5	23.8	90.86	-5,238.5	-27.6	4,919.0	4,876.5	42.56	115.584		
8,500.0	7,500.0	7,662.2	7,543.4	29.1	23.8	90.85	-5,238.5	-27.6	4,822.7	4,779.7	43.02	112.099		
8,600.0	7,500.0	7,662.0	7,543.2	29.9	23.8	90.84	-5,238.5	-27.6	4,726.5	4,683.0	43.50	108.654		
8,700.0	7,500.0	7,661.7	7,542.9	30.8	23.8	90.83	-5,238.5	-27.6	4,630.5	4,586.5	44.00	105.248		
8,800.0	7,500.0	7,661.5	7,542.7	31.7	23.8	90.82	-5,238.5	-27.6	4,534.6	4,490.1	44.51	101.881		
8,900.0	7,500.0	7,661.2	7,542.4	32.7	23.8	90.81	-5,238.5	-27.6	4,439.0	4,393.9	45.04	98.554		
9,000.0	7,500.0	7,661.0	7,542.1	33.7	23.8	90.80	-5,238.5	-27.6	4,343.5	4,297.9	45.59	95.266		

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 2F-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 2F-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		
9,100.0	7,500.0	7,660.7	7,541.9	34.8	23.8	90.78	-5,238.5	-27.6	4,248.2	4,202.1	46.17	92.019		
9,200.0	7,500.0	7,660.5	7,541.6	36.0	23.8	90.77	-5,238.5	-27.6	4,153.2	4,106.4	46.76	88.811		
9,300.0	7,500.0	7,660.2	7,541.4	37.2	23.8	90.76	-5,238.5	-27.6	4,058.4	4,011.0	47.39	85.645		
9,400.0	7,500.0	7,659.9	7,541.1	38.4	23.8	90.75	-5,238.5	-27.6	3,963.9	3,915.8	48.04	82.519		
9,500.0	7,500.0	7,659.7	7,540.9	39.7	23.8	90.74	-5,238.5	-27.6	3,869.6	3,820.9	48.71	79.435		
9,600.0	7,500.0	7,659.4	7,540.6	41.1	23.8	90.73	-5,238.5	-27.6	3,775.6	3,726.2	49.42	76.394		
9,700.0	7,500.0	7,659.1	7,540.3	42.4	23.8	90.72	-5,238.5	-27.6	3,682.0	3,631.8	50.17	73.396		
9,800.0	7,500.0	7,658.9	7,540.1	43.8	23.8	90.70	-5,238.5	-27.6	3,588.7	3,537.7	50.94	70.442		
9,900.0	7,500.0	7,658.6	7,539.8	45.2	23.8	90.69	-5,238.5	-27.6	3,495.7	3,444.0	51.76	67.533		
10,000.0	7,500.0	7,658.3	7,539.5	46.6	23.8	90.68	-5,238.5	-27.6	3,403.2	3,350.5	52.62	64.670		
10,100.0	7,500.0	7,658.1	7,539.2	48.1	23.8	90.67	-5,238.5	-27.6	3,311.1	3,257.5	53.53	61.855		
10,200.0	7,500.0	7,657.8	7,539.0	49.6	23.8	90.66	-5,238.5	-27.6	3,219.4	3,164.9	54.48	59.088		
10,300.0	7,500.0	7,657.5	7,538.7	51.1	23.8	90.64	-5,238.5	-27.6	3,128.3	3,072.8	55.49	56.372		
10,400.0	7,500.0	7,657.2	7,538.4	52.6	23.8	90.63	-5,238.5	-27.6	3,037.7	2,981.2	56.56	53.707		
10,500.0	7,500.0	7,657.0	7,538.1	54.1	23.8	90.62	-5,238.5	-27.6	2,947.8	2,890.1	57.69	51.095		
10,600.0	7,500.0	7,656.7	7,537.9	55.6	23.8	90.61	-5,238.5	-27.6	2,858.5	2,799.6	58.89	48.539		
10,700.0	7,500.0	7,656.4	7,537.6	57.2	23.8	90.59	-5,238.5	-27.6	2,769.9	2,709.8	60.16	46.040		
10,800.0	7,500.0	7,656.1	7,537.3	58.8	23.8	90.58	-5,238.5	-27.7	2,682.2	2,620.7	61.52	43.601		
10,900.0	7,500.0	7,655.8	7,537.0	60.3	23.8	90.57	-5,238.5	-27.7	2,595.3	2,532.3	62.96	41.224		
11,000.0	7,500.0	7,655.5	7,536.7	61.9	23.8	90.56	-5,238.5	-27.7	2,509.4	2,444.9	64.49	38.911		
11,100.0	7,500.0	7,655.2	7,536.4	63.5	23.8	90.54	-5,238.5	-27.7	2,424.6	2,358.5	66.13	36.665		
11,200.0	7,500.0	7,655.0	7,536.1	65.1	23.8	90.53	-5,238.5	-27.7	2,341.0	2,273.1	67.87	34.490		
11,300.0	7,500.0	7,654.7	7,535.8	66.7	23.8	90.52	-5,238.5	-27.7	2,258.7	2,189.0	69.74	32.388		
11,400.0	7,500.0	7,654.4	7,535.5	68.3	23.8	90.51	-5,238.5	-27.7	2,177.9	2,106.2	71.73	30.362		
11,500.0	7,500.0	7,654.1	7,535.2	70.0	23.8	90.49	-5,238.5	-27.7	2,098.8	2,024.9	73.86	28.417		
11,600.0	7,500.0	7,653.8	7,534.9	71.6	23.8	90.48	-5,238.5	-27.7	2,021.5	1,945.4	76.12	26.556		
11,700.0	7,500.0	7,653.5	7,534.6	73.2	23.8	90.47	-5,238.5	-27.7	1,946.3	1,867.7	78.54	24.782		
11,800.0	7,500.0	7,653.2	7,534.3	74.9	23.8	90.45	-5,238.5	-27.7	1,873.4	1,792.3	81.10	23.100		
11,900.0	7,500.0	7,652.9	7,534.0	76.5	23.8	90.44	-5,238.5	-27.7	1,803.1	1,719.3	83.81	21.514		
12,000.0	7,500.0	7,652.5	7,533.7	78.2	23.8	90.43	-5,238.5	-27.7	1,735.7	1,649.0	86.66	20.028		
12,100.0	7,500.0	7,652.2	7,533.4	79.8	23.8	90.41	-5,238.5	-27.7	1,671.6	1,581.9	89.65	18.647		
12,200.0	7,500.0	7,651.9	7,533.1	81.5	23.8	90.40	-5,238.5	-27.7	1,611.1	1,518.4	92.74	17.373		
12,300.0	7,500.0	7,651.6	7,532.8	83.1	23.8	90.39	-5,238.5	-27.7	1,554.8	1,458.9	95.90	16.212		
12,400.0	7,500.0	7,651.3	7,532.5	84.8	23.8	90.37	-5,238.5	-27.7	1,503.0	1,403.9	99.10	15.166		
12,500.0	7,500.0	7,651.0	7,532.2	86.5	23.8	90.36	-5,238.5	-27.7	1,456.2	1,353.9	102.26	14.240		
12,600.0	7,500.0	7,650.7	7,531.8	88.1	23.8	90.34	-5,238.5	-27.7	1,414.9	1,309.6	105.32	13.434		
12,700.0	7,500.0	7,650.3	7,531.5	89.8	23.8	90.33	-5,238.5	-27.7	1,379.7	1,271.5	108.19	12.753		
12,800.0	7,500.0	7,650.0	7,531.2	91.5	23.8	90.32	-5,238.5	-27.7	1,350.9	1,240.2	110.77	12.196		
12,900.0	7,500.0	7,649.7	7,530.9	93.2	23.8	90.30	-5,238.5	-27.7	1,329.1	1,216.2	112.97	11.766		
13,000.0	7,500.0	7,649.4	7,530.5	94.9	23.8	90.29	-5,238.5	-27.7	1,314.6	1,199.9	114.70	11.461		
13,100.0	7,500.0	7,649.0	7,530.2	96.5	23.8	90.27	-5,238.5	-27.7	1,307.6	1,191.7	115.90	11.282		
13,142.3	7,500.0	7,648.9	7,530.1	97.3	23.8	90.27	-5,238.5	-27.7	1,306.9	1,190.6	116.23	11.244 CC, ES		
13,200.0	7,500.0	7,648.7	7,529.9	98.2	23.8	90.26	-5,238.5	-27.7	1,308.2	1,191.6	116.51	11.228 SF		
13,300.0	7,500.0	7,648.4	7,529.5	99.9	23.8	90.24	-5,238.5	-27.7	1,316.4	1,199.8	116.53	11.296		
13,400.0	7,500.0	7,648.0	7,529.2	101.6	23.8	90.23	-5,238.5	-27.7	1,332.1	1,216.1	115.98	11.485		
13,500.0	7,500.0	7,647.7	7,528.9	103.3	23.8	90.21	-5,238.5	-27.7	1,355.0	1,240.1	114.90	11.792		
13,600.0	7,500.0	7,647.3	7,528.5	105.0	23.8	90.20	-5,238.5	-27.7	1,384.7	1,271.4	113.36	12.215		
13,700.0	7,500.0	7,647.0	7,528.2	106.7	23.8	90.18	-5,238.5	-27.7	1,420.9	1,309.5	111.45	12.749		
13,800.0	7,500.0	7,646.6	7,527.8	108.4	23.8	90.17	-5,238.5	-27.7	1,463.1	1,353.8	109.25	13.392		
13,900.0	7,500.0	7,646.3	7,527.5	110.1	23.8	90.15	-5,238.5	-27.7	1,510.7	1,403.8	106.84	14.139		
14,000.0	7,500.0	7,645.9	7,527.1	111.8	23.8	90.14	-5,238.5	-27.7	1,563.2	1,458.9	104.31	14.987		
14,100.0	7,500.0	7,645.6	7,526.8	113.5	23.8	90.12	-5,238.5	-27.7	1,620.2	1,518.5	101.70	15.931		

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 2F-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 2F-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		
14,200.0	7,500.0	7,645.2	7,526.4	115.2	23.8	90.11	-5,238.5	-27.7	1,681.3	1,582.2	99.09	16.968		
14,300.0	7,500.0	7,644.9	7,526.1	116.9	23.8	90.09	-5,238.5	-27.7	1,745.9	1,649.4	96.50	18.092		
14,400.0	7,500.0	7,644.5	7,525.7	118.6	23.8	90.07	-5,238.5	-27.7	1,813.8	1,719.8	93.97	19.301		
14,500.0	7,500.0	7,644.1	7,525.3	120.4	23.8	90.06	-5,238.5	-27.7	1,884.5	1,793.0	91.53	20.589		
14,600.0	7,500.0	7,643.8	7,525.0	122.1	23.8	90.04	-5,238.5	-27.7	1,957.8	1,868.6	89.18	21.953		
14,700.0	7,500.0	7,643.4	7,524.6	123.8	23.8	90.03	-5,238.5	-27.7	2,033.3	1,946.4	86.94	23.387		
14,800.0	7,500.0	7,643.0	7,524.2	125.5	23.8	90.01	-5,238.5	-27.7	2,110.9	2,026.1	84.82	24.888		
14,900.0	7,500.0	7,642.7	7,523.8	127.2	23.8	89.99	-5,238.5	-27.7	2,190.3	2,107.5	82.80	26.452		
15,000.0	7,500.0	7,642.3	7,523.5	128.9	23.8	89.98	-5,238.5	-27.7	2,271.4	2,190.5	80.90	28.075		
15,100.0	7,500.0	7,641.9	7,523.1	130.6	23.8	89.96	-5,238.5	-27.7	2,353.9	2,274.7	79.11	29.753		
15,200.0	7,500.0	7,641.5	7,522.7	132.4	23.8	89.94	-5,238.5	-27.7	2,437.7	2,360.2	77.43	31.481		
15,300.0	7,500.0	7,641.1	7,522.3	134.1	23.8	89.93	-5,238.5	-27.7	2,522.6	2,446.8	75.85	33.257		
15,400.0	7,500.0	7,640.7	7,521.9	135.8	23.8	89.91	-5,238.5	-27.7	2,608.7	2,534.3	74.37	35.077		
15,500.0	7,500.0	7,640.3	7,521.5	137.5	23.8	89.89	-5,238.5	-27.7	2,695.7	2,622.7	72.98	36.937		
15,600.0	7,500.0	7,640.0	7,521.1	139.2	23.8	89.87	-5,238.5	-27.7	2,783.6	2,711.9	71.68	38.834		
15,700.0	7,500.0	7,639.6	7,520.7	141.0	23.8	89.86	-5,238.5	-27.7	2,872.3	2,801.8	70.46	40.765		
15,800.0	7,500.0	7,639.2	7,520.3	142.7	23.8	89.84	-5,238.5	-27.7	2,961.7	2,892.3	69.32	42.726		
15,841.7	7,500.0	7,639.0	7,520.2	143.4	23.8	89.83	-5,238.5	-27.7	2,999.1	2,930.3	68.86	43.552		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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		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	23.2	23.2	0.0	0.0	173.07	-4,267.5	518.7	4,298.9					
100.0	100.0	123.9	123.9	0.2	0.2	173.07	-4,267.5	518.7	4,298.9	4,298.6	0.36	N/A		
200.0	200.0	224.7	224.7	0.3	0.4	173.07	-4,267.5	518.7	4,298.9	4,298.2	0.71	6,043.214		
300.0	300.0	325.5	325.5	0.5	0.6	173.07	-4,267.4	518.8	4,298.8	4,297.8	1.06	4,061.179		
311.8	311.8	337.4	337.4	0.5	0.6	106.70	-4,267.4	518.8	4,298.8	4,297.7	1.10	3,909.302		
400.0	400.0	426.2	426.2	0.7	0.7	106.71	-4,267.4	518.8	4,299.0	4,297.6	1.41	3,056.965		
500.0	500.0	527.0	527.0	0.9	0.9	106.74	-4,267.3	518.8	4,299.7	4,297.9	1.76	2,446.796		
600.0	599.9	627.6	627.6	1.0	1.1	106.78	-4,267.2	518.9	4,300.9	4,298.7	2.11	2,033.854		
700.0	699.7	728.2	728.2	1.2	1.2	106.84	-4,267.0	519.0	4,302.5	4,300.0	2.48	1,733.756		
800.0	799.4	828.6	828.6	1.4	1.4	106.92	-4,266.9	519.1	4,304.7	4,301.8	2.86	1,504.265		
900.0	898.9	1,138.7	1,138.0	1.7	2.0	107.07	-4,258.8	535.4	4,306.7	4,303.1	3.66	1,176.157		
1,000.0	998.3	1,274.2	1,272.3	1.9	2.3	107.06	-4,249.3	551.0	4,304.3	4,300.1	4.22	1,020.784		
1,100.0	1,097.4	1,543.9	1,536.7	2.2	3.2	106.91	-4,222.4	595.9	4,299.8	4,294.5	5.27	815.235		
1,200.0	1,196.3	1,780.1	1,765.2	2.5	4.2	106.70	-4,190.6	646.6	4,293.7	4,287.2	6.47	663.654		
1,300.0	1,294.9	1,879.4	1,860.7	2.8	4.7	106.66	-4,175.1	668.7	4,285.5	4,278.3	7.20	595.564		
1,400.0	1,393.3	1,939.0	1,918.1	3.2	4.9	106.67	-4,166.1	682.3	4,278.4	4,270.6	7.79	549.164		
1,494.4	1,485.8	2,024.0	2,000.0	3.5	5.3	106.67	-4,153.8	701.5	4,272.8	4,264.3	8.50	502.898		
1,500.0	1,491.2	2,024.0	2,000.0	3.5	5.3	106.67	-4,153.8	701.5	4,272.5	4,264.0	8.52	501.634		
1,600.0	1,589.1	2,150.3	2,121.8	3.9	5.9	106.60	-4,135.2	729.5	4,266.4	4,256.9	9.43	452.422		
1,700.0	1,686.9	2,228.9	2,197.4	4.3	6.3	106.54	-4,123.7	747.4	4,260.5	4,250.3	10.16	419.453		
1,800.0	1,784.8	2,334.0	2,298.7	4.7	6.8	106.48	-4,108.4	770.9	4,254.6	4,243.6	10.99	387.024		
1,900.0	1,882.6	2,406.0	2,368.2	5.1	7.2	106.44	-4,098.2	786.8	4,249.2	4,237.5	11.69	363.424		
2,000.0	1,980.4	2,500.4	2,459.4	5.5	7.6	106.40	-4,085.3	807.5	4,244.1	4,231.6	12.49	339.923		
2,100.0	2,078.3	2,578.5	2,534.9	5.9	8.0	106.36	-4,074.7	824.4	4,239.3	4,226.0	13.21	320.824		
2,200.0	2,176.1	2,702.5	2,654.7	6.3	8.6	106.29	-4,058.5	851.8	4,234.9	4,220.8	14.15	299.278		
2,300.0	2,273.9	2,814.3	2,762.6	6.7	9.1	106.23	-4,042.7	876.5	4,229.5	4,214.4	15.04	281.274		
2,400.0	2,371.8	2,905.1	2,850.2	7.1	9.6	106.19	-4,030.1	896.6	4,224.3	4,208.4	15.84	266.730		
2,500.0	2,469.6	3,031.8	2,972.5	7.5	10.2	106.11	-4,012.2	924.7	4,219.0	4,202.2	16.80	251.200		
2,600.0	2,567.4	3,158.4	3,094.3	7.9	10.9	106.03	-3,993.2	953.3	4,212.6	4,194.8	17.78	236.993		
2,700.0	2,665.3	3,232.0	3,165.2	8.3	11.2	105.99	-3,982.4	970.0	4,206.7	4,188.2	18.51	227.293		
2,800.0	2,763.1	3,305.3	3,235.8	8.7	11.6	105.94	-3,972.1	986.7	4,201.4	4,182.2	19.25	218.256		
2,900.0	2,860.9	3,382.9	3,310.6	9.1	12.0	105.89	-3,961.5	1,004.3	4,196.5	4,176.5	20.00	209.826		
3,000.0	2,958.8	3,516.6	3,439.8	9.5	12.6	105.82	-3,943.3	1,033.5	4,191.6	4,170.6	20.99	199.678		
3,100.0	3,056.6	3,599.2	3,519.5	9.9	13.0	105.77	-3,931.8	1,052.0	4,186.5	4,164.7	21.77	192.260		
3,200.0	3,154.4	3,702.6	3,619.0	10.3	13.6	105.70	-3,917.4	1,076.2	4,181.4	4,158.8	22.67	184.454		
3,300.0	3,252.3	3,788.1	3,701.4	10.7	14.0	105.64	-3,905.6	1,095.7	4,176.5	4,153.1	23.45	178.079		
3,400.0	3,350.1	3,866.3	3,777.1	11.1	14.4	105.60	-3,895.4	1,112.6	4,172.0	4,147.8	24.20	172.414		
3,500.0	3,447.9	3,948.2	3,856.4	11.5	14.8	105.57	-3,885.0	1,130.2	4,168.1	4,143.1	24.96	167.001		
3,600.0	3,545.8	4,058.4	3,963.1	11.9	15.3	105.52	-3,871.2	1,154.1	4,164.2	4,138.3	25.85	161.073		
3,700.0	3,643.6	4,248.0	4,146.1	12.3	16.2	105.41	-3,844.2	1,195.7	4,158.3	4,131.2	27.10	153.416		
3,800.0	3,741.5	4,340.4	4,235.2	12.7	16.7	105.36	-3,830.5	1,215.9	4,152.2	4,124.3	27.93	148.688		
3,900.0	3,839.3	4,411.7	4,304.0	13.1	17.0	105.33	-3,820.1	1,231.3	4,146.5	4,117.8	28.65	144.726		
4,000.0	3,937.1	4,468.8	4,359.2	13.5	17.3	105.30	-3,812.4	1,243.5	4,141.7	4,112.3	29.31	141.319		
4,100.0	4,035.0	4,548.7	4,436.8	13.9	17.7	105.27	-3,802.5	1,260.4	4,137.8	4,107.7	30.06	137.657		
4,200.0	4,132.8	4,685.0	4,568.8	14.3	18.3	105.21	-3,784.9	1,289.1	4,133.4	4,102.4	31.05	133.114		
4,300.0	4,230.6	4,757.0	4,638.7	14.7	18.7	105.19	-3,775.5	1,303.9	4,129.0	4,097.2	31.76	130.007		
4,400.0	4,328.5	4,845.2	4,724.5	15.1	19.0	105.18	-3,764.5	1,320.9	4,125.0	4,092.5	32.50	126.934		
4,500.0	4,426.3	4,930.9	4,808.2	15.5	19.4	105.18	-3,754.5	1,336.3	4,121.5	4,088.3	33.22	124.072		
4,600.0	4,524.1	5,023.1	4,898.4	15.9	19.7	105.20	-3,744.0	1,352.4	4,118.2	4,084.3	33.96	121.281		
4,700.0	4,622.0	5,111.2	4,984.7	16.3	20.1	105.22	-3,734.3	1,367.4	4,115.2	4,080.5	34.67	118.699		
4,800.0	4,719.8	5,201.1	5,072.8	16.7	20.4	105.24	-3,724.7	1,382.1	4,112.5	4,077.1	35.38	116.221		
4,900.0	4,817.6	5,305.4	5,175.0	17.2	20.8	105.27	-3,713.5	1,399.9	4,109.8	4,073.6	36.16	113.661		

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 2F-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 2F-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
5,000.0	4,915.5	5,393.0	5,260.9	17.6	21.2	105.30	-3,704.2	1,413.9	4,107.1	4,070.3	36.85	111.461			
5,100.0	5,013.3	5,466.4	5,333.1	18.0	21.4	105.33	-3,696.9	1,425.1	4,105.0	4,067.5	37.48	109.516			
5,200.0	5,111.1	5,537.1	5,402.7	18.4	21.7	105.37	-3,690.4	1,435.9	4,103.5	4,065.4	38.11	107.679			
5,300.0	5,209.0	5,685.9	5,549.0	18.8	22.2	105.44	-3,676.1	1,458.9	4,101.7	4,062.7	39.00	105.168			
5,400.0	5,306.8	5,749.4	5,611.5	19.2	22.5	105.47	-3,670.0	1,468.4	4,099.8	4,060.2	39.59	103.546			
5,500.0	5,404.6	5,820.4	5,681.6	19.6	22.7	105.52	-3,663.9	1,478.2	4,098.8	4,058.6	40.20	101.970			
5,600.0	5,502.5	5,900.0	5,760.1	20.0	23.0	105.58	-3,657.6	1,489.1	4,098.4	4,057.6	40.83	100.387			
5,670.2	5,571.1	5,963.0	5,822.4	20.3	23.2	105.63	-3,652.8	1,497.6	4,098.4	4,057.1	41.28	99.280			
5,700.0	5,600.3	5,984.0	5,843.1	20.4	23.2	105.65	-3,651.2	1,500.3	4,098.4	4,056.9	41.45	98.874			
5,800.0	5,698.2	6,073.9	5,932.2	20.8	23.5	105.75	-3,645.2	1,510.5	4,099.0	4,056.9	42.05	97.476			
5,900.0	5,796.0	6,166.6	6,024.4	21.2	23.7	105.89	-3,639.2	1,518.6	4,099.4	4,056.8	42.62	96.185			
6,000.0	5,893.8	6,232.6	6,090.1	21.6	23.8	105.99	-3,635.5	1,523.5	4,100.5	4,057.4	43.11	95.108			
6,100.0	5,991.7	6,283.0	6,140.3	22.0	23.9	106.08	-3,633.0	1,526.9	4,102.5	4,058.9	43.57	94.162			
6,200.0	6,089.5	6,354.2	6,211.4	22.4	24.0	106.22	-3,630.3	1,530.8	4,105.3	4,061.3	44.02	93.258			
6,300.0	6,187.3	6,457.1	6,314.2	22.8	24.1	106.47	-3,627.6	1,533.5	4,109.0	4,064.5	44.46	92.423			
6,400.0	6,285.2	6,506.0	6,363.1	23.2	24.2	106.60	-3,626.3	1,533.5	4,112.6	4,067.8	44.83	91.738			
6,500.0	6,383.0	6,571.0	6,428.1	23.7	24.2	106.79	-3,625.5	1,532.7	4,117.5	4,072.3	45.20	91.098			
6,600.0	6,480.8	6,641.2	6,498.3	24.1	24.3	106.99	-3,625.7	1,532.0	4,123.7	4,078.1	45.59	90.462			
6,700.0	6,578.7	6,758.8	6,615.8	24.5	24.4	107.31	-3,625.6	1,532.4	4,129.9	4,083.8	46.03	89.717			
6,800.0	6,676.5	6,868.4	6,725.4	24.9	24.5	107.60	-3,625.0	1,533.0	4,135.7	4,089.2	46.47	89.004			
6,900.0	6,774.3	6,976.5	6,833.6	25.3	24.6	107.89	-3,624.2	1,533.3	4,141.4	4,094.5	46.90	88.306			
7,000.0	6,872.2	7,094.9	6,951.9	25.7	24.7	108.21	-3,622.8	1,533.5	4,146.8	4,099.5	47.34	87.604			
7,019.1	6,890.8	7,117.2	6,974.3	25.8	24.7	108.27	-3,622.5	1,533.5	4,147.8	4,100.4	47.42	87.473			
7,050.0	6,921.1	7,154.2	7,011.3	25.9	24.8	93.74	-3,622.0	1,533.4	4,148.5	4,101.0	47.55	87.247			
7,100.0	6,970.2	7,217.4	7,074.5	26.0	24.8	68.65	-3,620.8	1,533.2	4,146.1	4,098.3	47.76	86.813			
7,150.0	7,019.0	7,268.2	7,125.2	26.2	24.9	48.63	-3,619.8	1,533.0	4,139.2	4,091.3	47.95	86.318			
7,200.0	7,067.2	7,315.1	7,172.1	26.3	24.9	35.49	-3,618.9	1,532.9	4,128.2	4,080.0	48.14	85.755			
7,250.0	7,114.4	7,375.2	7,232.2	26.4	25.0	27.11	-3,617.6	1,532.7	4,112.8	4,064.5	48.33	85.101			
7,300.0	7,160.3	7,424.2	7,281.2	26.4	25.0	21.50	-3,616.5	1,532.4	4,093.3	4,044.8	48.50	84.402			
7,350.0	7,204.5	7,465.6	7,322.6	26.5	25.1	17.53	-3,615.5	1,532.0	4,069.9	4,021.2	48.65	83.654			
7,400.0	7,246.6	7,504.2	7,361.1	26.5	25.1	14.58	-3,614.7	1,531.5	4,042.8	3,994.0	48.79	82.854			
7,450.0	7,286.4	7,538.8	7,395.7	26.5	25.1	12.27	-3,614.0	1,531.0	4,012.1	3,963.2	48.92	82.008			
7,500.0	7,323.5	7,571.0	7,427.9	26.5	25.2	10.36	-3,613.3	1,530.4	3,978.2	3,929.2	49.04	81.117			
7,550.0	7,357.7	7,604.5	7,461.4	26.5	25.2	8.69	-3,612.7	1,529.8	3,941.3	3,892.2	49.15	80.183			
7,600.0	7,388.7	7,635.5	7,492.4	26.5	25.2	7.12	-3,612.1	1,529.2	3,901.6	3,852.4	49.25	79.215			
7,650.0	7,416.3	7,662.9	7,519.8	26.5	25.2	5.50	-3,611.5	1,528.7	3,859.4	3,810.1	49.34	78.220			
7,700.0	7,440.2	7,686.5	7,543.4	26.5	25.3	3.65	-3,611.1	1,528.3	3,815.1	3,765.7	49.41	77.205			
7,750.0	7,460.3	7,704.0	7,560.9	26.5	25.3	1.22	-3,610.7	1,527.9	3,768.9	3,719.4	49.47	76.178			
7,800.0	7,476.4	7,718.8	7,575.7	26.5	25.3	-2.44	-3,610.4	1,527.6	3,721.3	3,671.7	49.52	75.144			
7,850.0	7,488.4	7,728.3	7,585.2	26.6	25.3	-9.22	-3,610.3	1,527.4	3,672.5	3,623.0	49.55	74.111			
7,900.0	7,496.2	7,734.2	7,591.1	26.6	25.3	-26.29	-3,610.1	1,527.3	3,623.0	3,573.5	49.57	73.085			
7,950.0	7,499.8	7,736.5	7,593.4	26.7	25.3	-82.21	-3,610.1	1,527.3	3,573.2	3,523.6	49.58	72.073			
7,966.7	7,500.0	7,736.5	7,593.3	26.7	25.3	-105.82	-3,610.1	1,527.3	3,556.6	3,507.0	49.58	71.738			
8,000.0	7,500.0	7,735.9	7,592.8	26.8	25.3	-105.71	-3,610.1	1,527.3	3,523.3	3,473.7	49.58	71.069			
8,100.0	7,500.0	7,734.3	7,591.2	27.0	25.3	-105.36	-3,610.1	1,527.3	3,423.6	3,374.0	49.57	69.066			
8,200.0	7,500.0	7,732.7	7,589.6	27.4	25.3	-105.01	-3,610.2	1,527.4	3,323.9	3,274.3	49.56	67.070			
8,300.0	7,500.0	7,731.1	7,587.9	27.9	25.3	-104.66	-3,610.2	1,527.4	3,224.2	3,174.6	49.54	65.079			
8,400.0	7,500.0	7,729.4	7,586.3	28.5	25.3	-104.30	-3,610.2	1,527.4	3,124.5	3,075.0	49.52	63.096			
8,500.0	7,500.0	7,727.8	7,584.6	29.1	25.3	-103.94	-3,610.3	1,527.4	3,024.9	2,975.4	49.49	61.118			
8,600.0	7,500.0	7,726.1	7,583.0	29.9	25.3	-103.58	-3,610.3	1,527.5	2,925.2	2,875.8	49.46	59.147			
8,700.0	7,500.0	7,724.4	7,581.3	30.8	25.3	-103.21	-3,610.3	1,527.5	2,825.6	2,776.2	49.41	57.183			
8,800.0	7,500.0	7,722.7	7,579.6	31.7	25.3	-102.83	-3,610.4	1,527.5	2,726.1	2,676.7	49.36	55.225			

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 2F-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 2F-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
8,900.0	7,500.0	7,721.0	7,577.9	32.7	25.3	-102.46	-3,610.4	1,527.6	2,626.5	2,577.2	49.30	53.274	
9,000.0	7,500.0	7,719.3	7,576.2	33.7	25.3	-102.08	-3,610.4	1,527.6	2,527.0	2,477.8	49.23	51.329	
9,100.0	7,500.0	7,717.5	7,574.4	34.8	25.3	-101.69	-3,610.5	1,527.7	2,427.5	2,378.4	49.15	49.391	
9,200.0	7,500.0	7,715.8	7,572.7	36.0	25.3	-101.30	-3,610.5	1,527.7	2,328.1	2,279.0	49.05	47.460	
9,300.0	7,500.0	7,714.0	7,570.9	37.2	25.3	-100.91	-3,610.5	1,527.7	2,228.7	2,179.8	48.94	45.536	
9,400.0	7,500.0	7,712.3	7,569.1	38.4	25.3	-100.51	-3,610.6	1,527.8	2,129.4	2,080.6	48.82	43.618	
9,500.0	7,500.0	7,710.5	7,567.3	39.7	25.3	-100.11	-3,610.6	1,527.8	2,030.1	1,981.5	48.67	41.708	
9,600.0	7,500.0	7,708.6	7,565.5	41.1	25.3	-99.70	-3,610.6	1,527.8	1,930.9	1,882.4	48.51	39.805	
9,700.0	7,500.0	7,704.0	7,560.9	42.4	25.3	-98.66	-3,610.7	1,527.9	1,831.8	1,783.5	48.32	37.910	
9,800.0	7,500.0	7,704.0	7,560.9	43.8	25.3	-98.66	-3,610.7	1,527.9	1,732.9	1,684.7	48.11	36.021	
9,900.0	7,500.0	7,703.1	7,559.9	45.2	25.3	-98.44	-3,610.7	1,527.9	1,634.0	1,586.1	47.86	34.140	
10,000.0	7,500.0	7,701.0	7,557.9	46.6	25.3	-97.99	-3,610.8	1,528.0	1,535.2	1,487.7	47.58	32.266	
10,100.0	7,500.0	7,699.0	7,555.9	48.1	25.3	-97.53	-3,610.8	1,528.0	1,436.7	1,389.4	47.26	30.399	
10,200.0	7,500.0	7,697.0	7,553.9	49.6	25.3	-97.08	-3,610.9	1,528.1	1,338.3	1,291.4	46.90	28.539	
10,300.0	7,500.0	7,695.0	7,551.9	51.1	25.3	-96.62	-3,610.9	1,528.1	1,240.2	1,193.8	46.48	26.683	
10,400.0	7,500.0	7,693.0	7,549.9	52.6	25.3	-96.17	-3,610.9	1,528.1	1,142.5	1,096.5	46.01	24.829	
10,500.0	7,500.0	7,691.0	7,547.9	54.1	25.3	-95.71	-3,611.0	1,528.2	1,045.1	999.6	45.49	22.973	
10,600.0	7,500.0	7,689.0	7,545.9	55.6	25.3	-95.26	-3,611.0	1,528.2	948.4	903.4	44.93	21.106	
10,700.0	7,500.0	7,687.0	7,543.9	57.2	25.3	-94.80	-3,611.1	1,528.3	852.3	807.9	44.37	19.210	
10,800.0	7,500.0	7,685.1	7,542.0	58.8	25.3	-94.35	-3,611.1	1,528.3	757.3	713.4	43.89	17.253	
10,900.0	7,500.0	7,683.1	7,540.0	60.3	25.3	-93.89	-3,611.1	1,528.3	663.7	619.9	43.73	15.177	
11,000.0	7,500.0	7,681.1	7,538.0	61.9	25.3	-93.44	-3,611.2	1,528.4	572.3	527.9	44.34	12.905	
11,100.0	7,500.0	7,679.1	7,536.0	63.5	25.3	-92.98	-3,611.2	1,528.4	484.2	437.6	46.61	10.389	
11,200.0	7,500.0	7,677.1	7,534.0	65.1	25.2	-92.53	-3,611.3	1,528.4	401.9	350.1	51.72	7.770	
11,300.0	7,500.0	7,675.2	7,532.0	66.7	25.2	-92.08	-3,611.3	1,528.5	329.4	268.7	60.67	5.429	
11,400.0	7,500.0	7,673.2	7,530.1	68.3	25.2	-91.62	-3,611.3	1,528.5	274.7	201.9	72.82	3.772	
11,500.0	7,500.0	7,671.2	7,528.1	70.0	25.2	-91.17	-3,611.4	1,528.6	249.9	166.7	83.23	3.002	
11,515.1	7,500.0	7,670.9	7,527.8	70.2	25.2	-91.10	-3,611.4	1,528.6	249.4	165.2	84.18	2.963 CC, ES, SF	
11,600.0	7,500.0	7,669.2	7,526.1	71.6	25.2	-90.72	-3,611.4	1,528.6	263.5	177.6	85.87	3.068	
11,700.0	7,500.0	7,667.3	7,524.2	73.2	25.2	-90.27	-3,611.5	1,528.6	310.4	227.2	83.28	3.728	
11,800.0	7,500.0	7,665.3	7,522.2	74.9	25.2	-89.81	-3,611.5	1,528.7	378.6	298.9	79.74	4.748	
11,900.0	7,500.0	7,663.3	7,520.2	76.5	25.2	-89.36	-3,611.5	1,528.7	458.6	382.1	76.47	5.997	
12,000.0	7,500.0	7,661.4	7,518.3	78.2	25.2	-88.91	-3,611.6	1,528.7	545.2	471.4	73.76	7.392	
12,100.0	7,500.0	7,659.4	7,516.3	79.8	25.2	-88.47	-3,611.6	1,528.8	635.7	564.1	71.58	8.882	
12,200.0	7,500.0	7,657.5	7,514.4	81.5	25.2	-88.02	-3,611.6	1,528.8	728.7	658.9	69.83	10.435	
12,300.0	7,500.0	7,655.5	7,512.4	83.1	25.2	-87.57	-3,611.7	1,528.9	823.4	755.0	68.43	12.032	
12,400.0	7,500.0	7,653.6	7,510.5	84.8	25.2	-87.12	-3,611.7	1,528.9	919.2	851.9	67.30	13.658	
12,500.0	7,500.0	7,651.6	7,508.5	86.5	25.2	-86.68	-3,611.8	1,528.9	1,015.8	949.4	66.37	15.305	
12,600.0	7,500.0	7,649.7	7,506.6	88.1	25.2	-86.24	-3,611.8	1,529.0	1,113.0	1,047.4	65.60	16.967	
12,700.0	7,500.0	7,647.7	7,504.6	89.8	25.2	-85.79	-3,611.8	1,529.0	1,210.6	1,145.7	64.95	18.639	
12,800.0	7,500.0	7,645.8	7,502.7	91.5	25.2	-85.35	-3,611.9	1,529.0	1,308.6	1,244.2	64.41	20.318	
12,900.0	7,500.0	7,643.8	7,500.8	93.2	25.2	-84.91	-3,611.9	1,529.1	1,406.9	1,342.9	63.94	22.001	
13,000.0	7,500.0	7,641.9	7,498.8	94.9	25.2	-84.47	-3,611.9	1,529.1	1,505.4	1,441.8	63.55	23.688	
13,100.0	7,500.0	7,640.0	7,496.9	96.5	25.2	-84.03	-3,612.0	1,529.2	1,604.1	1,540.9	63.21	25.375	
13,200.0	7,500.0	7,638.0	7,495.0	98.2	25.2	-83.60	-3,612.0	1,529.2	1,702.9	1,640.0	62.92	27.063	
13,300.0	7,500.0	7,636.1	7,493.0	99.9	25.2	-83.16	-3,612.1	1,529.2	1,801.9	1,739.2	62.67	28.751	
13,400.0	7,500.0	7,634.2	7,491.1	101.6	25.2	-82.73	-3,612.1	1,529.3	1,900.9	1,838.5	62.45	30.437	
13,500.0	7,500.0	7,632.3	7,489.2	103.3	25.2	-82.30	-3,612.1	1,529.3	2,000.1	1,937.8	62.27	32.122	
13,600.0	7,500.0	7,630.3	7,487.3	105.0	25.2	-81.87	-3,612.2	1,529.3	2,099.3	2,037.2	62.10	33.804	
13,700.0	7,500.0	7,628.4	7,485.3	106.7	25.2	-81.44	-3,612.2	1,529.4	2,198.6	2,136.7	61.96	35.484	
13,800.0	7,500.0	7,626.5	7,483.4	108.4	25.2	-81.01	-3,612.2	1,529.4	2,298.0	2,236.2	61.84	37.161	
13,900.0	7,500.0	7,624.6	7,481.5	110.1	25.2	-80.59	-3,612.3	1,529.4	2,397.4	2,335.7	61.73	38.835	

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 2F-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 2F-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		
14,000.0	7,500.0	7,622.7	7,479.6	111.8	25.2	-80.16	-3,612.3	1,529.5	2,496.9	2,435.2	61.64	40.505		
14,100.0	7,500.0	7,620.8	7,477.7	113.5	25.2	-79.74	-3,612.4	1,529.5	2,596.4	2,534.8	61.57	42.172		
14,200.0	7,500.0	7,618.9	7,475.8	115.2	25.2	-79.32	-3,612.4	1,529.5	2,695.9	2,634.4	61.50	43.836		
14,300.0	7,500.0	7,617.0	7,473.9	116.9	25.2	-78.90	-3,612.4	1,529.6	2,795.5	2,734.0	61.45	45.495		
14,400.0	7,500.0	7,615.1	7,472.0	118.6	25.2	-78.48	-3,612.5	1,529.6	2,895.1	2,833.7	61.40	47.151		
14,500.0	7,500.0	7,613.2	7,470.1	120.4	25.2	-78.07	-3,612.5	1,529.6	2,994.7	2,933.3	61.36	48.803		
14,600.0	7,500.0	7,611.3	7,468.2	122.1	25.2	-77.65	-3,612.5	1,529.7	3,094.3	3,033.0	61.33	50.450		
14,700.0	7,500.0	7,609.4	7,466.3	123.8	25.2	-77.24	-3,612.6	1,529.7	3,194.0	3,132.7	61.31	52.094		
14,800.0	7,500.0	7,607.5	7,464.4	125.5	25.2	-76.83	-3,612.6	1,529.8	3,293.7	3,232.4	61.30	53.733		
14,900.0	7,500.0	7,605.6	7,462.5	127.2	25.2	-76.43	-3,612.7	1,529.8	3,393.4	3,332.1	61.29	55.368		
15,000.0	7,500.0	7,603.7	7,460.6	128.9	25.2	-76.02	-3,612.7	1,529.8	3,493.1	3,431.8	61.28	56.999		
15,100.0	7,500.0	7,601.8	7,458.7	130.6	25.2	-75.62	-3,612.7	1,529.9	3,592.9	3,531.6	61.28	58.626		
15,200.0	7,500.0	7,599.9	7,456.8	132.4	25.2	-75.22	-3,612.8	1,529.9	3,692.6	3,631.3	61.29	60.248		
15,300.0	7,500.0	7,598.0	7,455.0	134.1	25.2	-74.82	-3,612.8	1,529.9	3,792.4	3,731.1	61.30	61.866		
15,400.0	7,500.0	7,596.2	7,453.1	135.8	25.2	-74.42	-3,612.8	1,530.0	3,892.1	3,830.8	61.31	63.479		
15,500.0	7,500.0	7,594.3	7,451.2	137.5	25.2	-74.03	-3,612.9	1,530.0	3,991.9	3,930.6	61.33	65.089		
15,600.0	7,500.0	7,592.4	7,449.3	139.2	25.2	-73.63	-3,612.9	1,530.0	4,091.7	4,030.3	61.35	66.693		
15,700.0	7,500.0	7,590.5	7,447.5	141.0	25.2	-73.24	-3,612.9	1,530.1	4,191.5	4,130.1	61.37	68.294		
15,800.0	7,500.0	7,588.7	7,445.6	142.7	25.2	-72.85	-3,613.0	1,530.1	4,291.3	4,229.9	61.40	69.890		
15,841.7	7,500.0	7,587.9	7,444.8	143.4	25.2	-72.69	-3,613.0	1,530.1	4,332.9	4,271.5	61.41	70.553		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	172.66	-4,267.5	549.5	4,302.7					
100.0	100.0	118.0	118.0	0.2	0.2	172.66	-4,267.4	549.7	4,302.6	4,302.3	0.33	N/A		
200.0	200.0	178.0	178.0	0.3	0.3	172.65	-4,267.9	550.4	4,303.4	4,302.8	0.61	7,035.284		
300.0	300.0	207.9	207.9	0.5	0.3	172.64	-4,268.5	551.0	4,305.4	4,304.6	0.84	5,121.503		
400.0	400.0	270.0	269.9	0.7	0.5	106.23	-4,270.4	553.2	4,309.0	4,307.9	1.13	3,819.089		
500.0	500.0	298.8	298.6	0.9	0.5	106.17	-4,271.6	554.5	4,314.3	4,312.9	1.36	3,167.108		
600.0	599.9	362.0	361.6	1.0	0.7	106.10	-4,275.0	558.3	4,321.4	4,319.7	1.67	2,588.835		
700.0	699.7	362.0	361.6	1.2	0.7	106.01	-4,275.0	558.3	4,330.3	4,328.4	1.86	2,326.025		
800.0	799.4	426.5	425.8	1.4	0.8	105.91	-4,279.6	563.2	4,340.8	4,338.6	2.20	1,970.139		
900.0	898.9	454.0	453.1	1.7	0.9	105.80	-4,282.0	565.6	4,353.3	4,350.8	2.48	1,754.746		
1,000.0	998.3	512.5	511.1	1.9	1.1	105.68	-4,287.7	571.3	4,367.4	4,364.6	2.85	1,530.733		
1,100.0	1,097.4	546.0	544.1	2.2	1.2	105.54	-4,291.3	574.8	4,383.4	4,380.2	3.19	1,375.841		
1,200.0	1,196.3	600.7	598.1	2.5	1.4	105.39	-4,297.8	581.4	4,400.9	4,397.3	3.61	1,219.808		
1,300.0	1,294.9	642.0	638.6	2.8	1.5	105.22	-4,303.2	587.1	4,420.2	4,416.2	4.02	1,100.768		
1,400.0	1,393.3	702.3	697.6	3.2	1.8	105.05	-4,311.6	596.1	4,440.9	4,436.4	4.51	984.002		
1,494.4	1,485.8	830.9	823.4	3.5	2.3	104.96	-4,329.7	615.9	4,461.1	4,455.9	5.21	856.530		
1,500.0	1,491.2	835.4	827.8	3.5	2.3	104.96	-4,330.4	616.6	4,462.3	4,457.1	5.24	851.500		
1,600.0	1,589.1	904.9	895.9	3.9	2.6	105.03	-4,340.0	626.6	4,483.6	4,477.8	5.79	773.970		
1,700.0	1,686.9	940.0	930.2	4.3	2.7	105.06	-4,345.1	632.0	4,505.8	4,499.6	6.25	720.929		
1,800.0	1,784.8	1,004.0	992.6	4.7	3.0	105.11	-4,355.0	642.5	4,529.0	4,522.2	6.81	665.272		
1,900.0	1,882.6	1,051.8	1,038.9	5.1	3.2	105.14	-4,362.9	650.8	4,553.3	4,546.0	7.32	622.066		
2,000.0	1,980.4	1,126.0	1,110.8	5.5	3.5	105.18	-4,375.8	664.3	4,578.4	4,570.5	7.93	577.361		
2,100.0	2,078.3	1,211.7	1,193.5	5.9	4.0	105.22	-4,390.8	680.3	4,603.8	4,595.3	8.58	536.376		
2,200.0	2,176.1	1,394.4	1,370.5	6.3	4.8	105.31	-4,421.8	713.8	4,628.8	4,619.2	9.58	482.990		
2,300.0	2,273.9	1,484.1	1,457.6	6.7	5.2	105.35	-4,436.1	730.2	4,652.5	4,642.3	10.26	453.661		
2,400.0	2,371.8	1,572.4	1,543.3	7.1	5.6	105.40	-4,450.4	746.0	4,676.6	4,665.6	10.92	428.299		
2,500.0	2,469.6	1,641.0	1,609.8	7.5	5.9	105.44	-4,461.7	758.2	4,700.9	4,689.4	11.51	408.318		
2,600.0	2,567.4	1,732.4	1,698.3	7.9	6.4	105.48	-4,477.1	774.9	4,725.6	4,713.4	12.20	387.321		
2,700.0	2,665.3	1,811.5	1,774.9	8.3	6.8	105.51	-4,490.6	789.7	4,750.5	4,737.7	12.84	369.894		
2,800.0	2,763.1	1,952.2	1,911.0	8.7	7.4	105.57	-4,514.1	816.4	4,775.1	4,761.4	13.73	347.896		
2,900.0	2,860.9	2,030.1	1,986.4	9.1	7.8	105.60	-4,527.0	831.0	4,799.6	4,785.2	14.36	334.146		
3,000.0	2,958.8	2,117.0	2,070.6	9.5	8.2	105.64	-4,541.4	847.1	4,824.1	4,809.1	15.03	320.878		
3,100.0	3,056.6	2,190.5	2,141.7	9.9	8.6	105.67	-4,553.9	860.6	4,849.0	4,833.4	15.65	309.781		
3,200.0	3,154.4	2,354.3	2,300.5	10.3	9.3	105.75	-4,581.7	889.7	4,873.9	4,857.3	16.60	293.553		
3,300.0	3,252.3	2,440.7	2,384.3	10.7	9.7	105.79	-4,595.5	905.5	4,897.8	4,880.5	17.28	283.445		
3,400.0	3,350.1	2,497.0	2,438.8	11.1	10.0	105.81	-4,604.9	916.2	4,922.4	4,904.5	17.84	275.907		
3,500.0	3,447.9	2,629.3	2,566.9	11.5	10.6	105.87	-4,627.2	940.1	4,947.1	4,928.5	18.68	264.896		
3,600.0	3,545.8	2,720.6	2,655.6	11.9	11.0	105.92	-4,642.4	955.9	4,971.5	4,952.1	19.35	256.908		
3,700.0	3,643.6	2,845.8	2,777.2	12.3	11.6	105.99	-4,663.1	977.7	4,995.8	4,975.7	20.17	247.722		
3,800.0	3,741.5	2,919.7	2,848.8	12.7	12.0	106.02	-4,674.8	991.3	5,019.7	4,998.9	20.79	241.432		
3,900.0	3,839.3	2,975.0	2,902.4	13.1	12.2	106.04	-4,684.2	1,001.4	5,044.5	5,023.2	21.34	236.391		
4,000.0	3,937.1	3,024.7	2,950.4	13.5	12.5	106.06	-4,693.1	1,010.5	5,070.1	5,048.3	21.86	231.927		
4,100.0	4,035.0	3,135.0	3,057.0	13.9	13.0	106.11	-4,713.3	1,030.4	5,096.4	5,073.8	22.62	225.310		
4,200.0	4,132.8	3,201.6	3,121.4	14.3	13.3	106.14	-4,725.4	1,042.4	5,122.4	5,099.2	23.21	220.710		
4,300.0	4,230.6	3,373.4	3,287.5	14.7	14.2	106.21	-4,755.8	1,074.1	5,148.0	5,123.7	24.23	212.453		
4,400.0	4,328.5	3,515.6	3,425.1	15.1	14.8	106.25	-4,778.9	1,101.3	5,172.1	5,147.0	25.15	205.678		
4,500.0	4,426.3	3,591.7	3,498.7	15.5	15.2	106.28	-4,791.3	1,115.9	5,196.4	5,170.6	25.79	201.506		
4,600.0	4,524.1	3,684.8	3,588.9	15.9	15.7	106.30	-4,806.7	1,133.7	5,220.9	5,194.4	26.49	197.057		
4,700.0	4,622.0	3,784.2	3,685.2	16.3	16.1	106.34	-4,823.2	1,151.7	5,245.4	5,218.2	27.22	192.737		
4,800.0	4,719.8	3,886.9	3,784.8	16.7	16.6	106.39	-4,840.3	1,169.9	5,269.9	5,242.0	27.94	188.589		
4,900.0	4,817.6	4,014.2	3,908.5	17.2	17.2	106.45	-4,860.8	1,192.2	5,293.8	5,265.1	28.78	183.962		
5,000.0	4,915.5	4,135.5	4,026.3	17.6	17.7	106.50	-4,880.1	1,213.8	5,317.6	5,288.1	29.58	179.771		

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 2F-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 2F-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				
5,100.0	5,013.3	4,213.0	4,101.7	18.0	18.1	106.54	-4,892.2	1,227.0	5,341.0	5,310.8	30.21	176.820				
5,200.0	5,111.1	4,296.2	4,182.6	18.4	18.4	106.58	-4,905.5	1,240.7	5,364.8	5,333.9	30.84	173.980				
5,300.0	5,209.0	4,623.6	4,503.4	18.8	19.7	106.84	-4,951.4	1,287.4	5,385.6	5,353.3	32.30	166.760				
5,400.0	5,306.8	4,711.3	4,589.5	19.2	20.0	106.91	-4,962.3	1,299.3	5,405.5	5,372.5	32.94	164.121				
5,500.0	5,404.6	4,786.0	4,662.9	19.6	20.3	106.97	-4,971.8	1,309.8	5,425.8	5,392.3	33.53	161.828				
5,600.0	5,502.5	4,856.8	4,732.4	20.0	20.6	107.03	-4,981.3	1,319.5	5,446.7	5,412.6	34.10	159.733				
5,700.0	5,600.3	5,150.0	5,021.6	20.4	21.5	107.32	-5,014.9	1,353.9	5,464.8	5,429.5	35.34	154.652				
5,800.0	5,698.2	5,232.1	5,102.7	20.8	21.8	107.39	-5,023.2	1,363.7	5,482.4	5,446.4	35.94	152.533				
5,900.0	5,796.0	5,325.8	5,195.1	21.2	22.1	107.48	-5,032.9	1,375.2	5,500.3	5,463.7	36.58	150.356				
6,000.0	5,893.8	5,579.3	5,446.3	21.6	22.8	107.75	-5,055.6	1,401.5	5,516.3	5,478.7	37.63	146.602				
6,100.0	5,991.7	5,684.0	5,550.3	22.0	23.1	107.89	-5,063.5	1,410.4	5,531.2	5,492.9	38.25	144.595				
6,200.0	6,089.5	5,755.6	5,621.3	22.4	23.3	107.98	-5,069.3	1,416.4	5,546.5	5,507.7	38.79	142.971				
6,300.0	6,187.3	6,207.7	6,072.0	22.8	24.1	108.66	-5,093.9	1,441.7	5,559.7	5,519.7	40.03	138.887				
6,400.0	6,285.2	6,466.4	6,330.6	23.2	24.3	109.19	-5,096.4	1,441.1	5,567.4	5,526.7	40.69	136.830				
6,500.0	6,383.0	6,564.3	6,428.5	23.7	24.4	109.40	-5,096.1	1,440.3	5,573.9	5,532.7	41.20	135.303				
6,600.0	6,480.8	6,643.3	6,507.5	24.1	24.4	109.56	-5,095.8	1,440.0	5,580.7	5,539.0	41.69	133.867				
6,700.0	6,578.7	6,729.7	6,593.9	24.5	24.5	109.73	-5,096.0	1,439.9	5,587.9	5,545.7	42.19	132.446				
6,800.0	6,676.5	6,839.1	6,703.3	24.9	24.6	109.95	-5,095.9	1,440.1	5,595.0	5,552.3	42.72	130.970				
6,900.0	6,774.3	6,934.2	6,798.4	25.3	24.7	110.13	-5,095.9	1,440.6	5,602.2	5,559.0	43.24	129.574				
7,000.0	6,872.2	7,016.2	6,880.4	25.7	24.8	110.29	-5,095.9	1,441.2	5,609.6	5,565.8	43.74	128.252				
7,019.1	6,890.8	7,029.3	6,893.5	25.8	24.8	110.32	-5,095.9	1,441.3	5,611.0	5,567.2	43.83	128.013				
7,050.0	6,921.1	7,050.5	6,914.7	25.9	24.8	95.73	-5,096.0	1,441.5	5,612.6	5,568.6	43.98	127.613				
7,100.0	6,970.2	7,092.5	6,956.7	26.0	24.8	70.56	-5,096.3	1,441.9	5,611.7	5,567.5	44.23	126.880				
7,150.0	7,019.0	7,152.7	7,016.9	26.2	24.9	50.56	-5,096.6	1,442.5	5,606.5	5,562.0	44.49	126.010				
7,200.0	7,067.2	7,200.8	7,065.0	26.3	25.0	37.43	-5,096.7	1,442.8	5,596.9	5,552.1	44.73	125.112				
7,250.0	7,114.4	7,243.0	7,107.2	26.4	25.0	29.04	-5,096.9	1,443.1	5,583.1	5,538.1	44.96	124.168				
7,300.0	7,160.3	7,282.2	7,146.4	26.4	25.0	23.46	-5,097.2	1,443.3	5,565.2	5,520.0	45.18	123.169				
7,350.0	7,204.5	7,317.6	7,181.8	26.5	25.1	19.56	-5,097.4	1,443.4	5,543.4	5,498.1	45.39	122.124				
7,400.0	7,246.6	7,351.5	7,215.7	26.5	25.1	16.70	-5,097.7	1,443.7	5,517.9	5,472.3	45.59	121.033				
7,450.0	7,286.4	7,392.3	7,256.5	26.5	25.1	14.53	-5,098.1	1,443.9	5,488.8	5,443.0	45.79	119.866				
7,500.0	7,323.5	7,433.9	7,298.1	26.5	25.2	12.82	-5,098.5	1,444.3	5,456.2	5,410.2	45.98	118.655				
7,550.0	7,357.7	7,472.2	7,336.3	26.5	25.2	11.40	-5,098.8	1,444.6	5,420.4	5,374.3	46.16	117.423				
7,600.0	7,388.7	7,506.9	7,371.0	26.5	25.3	10.17	-5,099.1	1,444.8	5,381.7	5,335.4	46.32	116.177				
7,650.0	7,416.3	7,537.7	7,401.9	26.5	25.3	9.03	-5,099.3	1,445.1	5,340.4	5,293.9	46.47	114.927				
7,700.0	7,440.2	7,564.5	7,428.7	26.5	25.3	7.88	-5,099.5	1,445.3	5,296.8	5,250.2	46.59	113.678				
7,750.0	7,460.3	7,587.1	7,451.2	26.5	25.3	6.56	-5,099.6	1,445.5	5,251.2	5,204.5	46.70	112.438				
7,800.0	7,476.4	7,605.2	7,469.3	26.5	25.4	4.78	-5,099.7	1,445.7	5,204.0	5,157.2	46.79	111.216				
7,850.0	7,488.4	7,618.7	7,482.9	26.6	25.4	1.83	-5,099.8	1,445.8	5,155.6	5,108.7	46.86	110.019				
7,900.0	7,496.2	7,627.6	7,491.8	26.6	25.4	-5.06	-5,099.8	1,445.9	5,106.2	5,059.3	46.91	108.853				
7,950.0	7,499.8	7,631.8	7,496.0	26.7	25.4	-39.04	-5,099.8	1,445.9	5,056.4	5,009.5	46.94	107.726				
7,966.7	7,500.0	7,632.2	7,496.4	26.7	25.4	-80.92	-5,099.8	1,445.9	5,039.8	4,992.8	46.94	107.357				
8,000.0	7,500.0	7,632.4	7,496.5	26.8	25.4	-80.98	-5,099.8	1,445.9	5,006.4	4,959.5	46.96	106.622				
8,100.0	7,500.0	7,632.9	7,497.1	27.0	25.4	-81.16	-5,099.8	1,445.9	4,906.5	4,859.5	46.99	104.421				
8,200.0	7,500.0	7,633.5	7,497.6	27.4	25.4	-81.35	-5,099.8	1,445.9	4,806.6	4,759.5	47.02	102.228				
8,300.0	7,500.0	7,634.0	7,498.2	27.9	25.4	-81.53	-5,099.8	1,445.9	4,706.6	4,659.6	47.05	100.042				
8,400.0	7,500.0	7,634.5	7,498.7	28.5	25.4	-81.71	-5,099.8	1,445.9	4,606.7	4,559.6	47.07	97.864				
8,500.0	7,500.0	7,635.1	7,499.3	29.1	25.4	-81.89	-5,099.9	1,446.0	4,506.8	4,459.7	47.10	95.693				
8,600.0	7,500.0	7,635.6	7,499.8	29.9	25.4	-82.07	-5,099.9	1,446.0	4,406.8	4,359.7	47.12	93.530				
8,700.0	7,500.0	7,636.1	7,500.3	30.8	25.4	-82.25	-5,099.9	1,446.0	4,306.9	4,259.8	47.14	91.374				
8,800.0	7,500.0	7,636.7	7,500.9	31.7	25.4	-82.43	-5,099.9	1,446.0	4,207.0	4,159.8	47.15	89.225				
8,900.0	7,500.0	7,637.2	7,501.4	32.7	25.4	-82.61	-5,099.9	1,446.0	4,107.1	4,059.9	47.16	87.084				
9,000.0	7,500.0	7,637.7	7,501.9	33.7	25.4	-82.79	-5,099.9	1,446.0	4,007.2	3,960.0	47.17	84.950				

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 2F-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 2F-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
9,100.0	7,500.0	7,638.3	7,502.4	34.8	25.4	-82.97	-5,099.9	1,446.0	3,907.2	3,860.1	47.18	82.823				
9,200.0	7,500.0	7,638.8	7,503.0	36.0	25.4	-83.15	-5,099.9	1,446.0	3,807.3	3,760.2	47.18	80.704				
9,300.0	7,500.0	7,639.3	7,503.5	37.2	25.4	-83.32	-5,099.9	1,446.0	3,707.4	3,660.3	47.17	78.593				
9,400.0	7,500.0	7,639.8	7,504.0	38.4	25.4	-83.50	-5,099.9	1,446.0	3,607.5	3,560.4	47.16	76.488				
9,500.0	7,500.0	7,640.3	7,504.5	39.7	25.4	-83.67	-5,099.9	1,446.0	3,507.7	3,460.5	47.15	74.392				
9,600.0	7,500.0	7,640.9	7,505.0	41.1	25.4	-83.85	-5,099.9	1,446.0	3,407.8	3,360.6	47.13	72.302				
9,700.0	7,500.0	7,641.4	7,505.5	42.4	25.4	-84.02	-5,099.9	1,446.0	3,307.9	3,260.8	47.11	70.220				
9,800.0	7,500.0	7,641.9	7,506.1	43.8	25.4	-84.20	-5,099.9	1,446.0	3,208.0	3,161.0	47.08	68.145				
9,900.0	7,500.0	7,642.4	7,506.6	45.2	25.4	-84.37	-5,099.9	1,446.0	3,108.2	3,061.1	47.04	66.078				
10,000.0	7,500.0	7,642.9	7,507.1	46.6	25.4	-84.54	-5,099.9	1,446.0	3,008.3	2,961.3	46.99	64.018				
10,100.0	7,500.0	7,643.4	7,507.6	48.1	25.4	-84.72	-5,099.9	1,446.0	2,908.5	2,861.5	46.94	61.966				
10,200.0	7,500.0	7,643.9	7,508.1	49.6	25.4	-84.89	-5,099.9	1,446.0	2,808.7	2,761.8	46.87	59.921				
10,300.0	7,500.0	7,644.4	7,508.6	51.1	25.4	-85.06	-5,099.9	1,446.0	2,708.8	2,662.0	46.80	57.883				
10,400.0	7,500.0	7,644.9	7,509.1	52.6	25.4	-85.23	-5,099.9	1,446.0	2,609.0	2,562.3	46.71	55.854				
10,500.0	7,500.0	7,645.4	7,509.6	54.1	25.4	-85.40	-5,099.9	1,446.0	2,509.3	2,462.6	46.61	53.831				
10,600.0	7,500.0	7,645.9	7,510.1	55.6	25.4	-85.57	-5,099.9	1,446.0	2,409.5	2,363.0	46.50	51.817				
10,700.0	7,500.0	7,646.4	7,510.6	57.2	25.4	-85.74	-5,099.9	1,446.1	2,309.7	2,263.4	46.37	49.810				
10,800.0	7,500.0	7,646.9	7,511.1	58.8	25.4	-85.91	-5,099.9	1,446.1	2,210.0	2,163.8	46.22	47.811				
10,900.0	7,500.0	7,647.4	7,511.6	60.3	25.4	-86.07	-5,099.9	1,446.1	2,110.3	2,064.3	46.06	45.820				
11,000.0	7,500.0	7,647.9	7,512.0	61.9	25.4	-86.24	-5,099.9	1,446.1	2,010.6	1,964.8	45.87	43.836				
11,100.0	7,500.0	7,648.4	7,512.5	63.5	25.4	-86.41	-5,099.9	1,446.1	1,911.0	1,865.4	45.65	41.861				
11,200.0	7,500.0	7,648.8	7,513.0	65.1	25.4	-86.57	-5,099.9	1,446.1	1,811.4	1,766.0	45.41	39.894				
11,300.0	7,500.0	7,649.3	7,513.5	66.7	25.4	-86.74	-5,099.9	1,446.1	1,711.9	1,666.7	45.13	37.934				
11,400.0	7,500.0	7,649.8	7,514.0	68.3	25.4	-86.90	-5,099.9	1,446.1	1,612.4	1,567.6	44.81	35.983				
11,500.0	7,500.0	7,650.3	7,514.5	70.0	25.4	-87.07	-5,099.9	1,446.1	1,512.9	1,468.5	44.45	34.039				
11,600.0	7,500.0	7,650.8	7,514.9	71.6	25.4	-87.23	-5,099.9	1,446.1	1,413.6	1,369.6	44.03	32.103				
11,700.0	7,500.0	7,651.2	7,515.4	73.2	25.4	-87.39	-5,099.9	1,446.1	1,314.4	1,270.8	43.56	30.174				
11,800.0	7,500.0	7,651.7	7,515.9	74.9	25.4	-87.56	-5,099.9	1,446.1	1,215.2	1,172.2	43.02	28.249				
11,900.0	7,500.0	7,652.2	7,516.4	76.5	25.4	-87.72	-5,099.9	1,446.1	1,116.3	1,073.9	42.40	26.327				
12,000.0	7,500.0	7,652.7	7,516.8	78.2	25.4	-87.88	-5,099.9	1,446.1	1,017.5	975.8	41.70	24.402				
12,100.0	7,500.0	7,653.1	7,517.3	79.8	25.4	-88.04	-5,099.9	1,446.1	919.0	878.1	40.91	22.464				
12,200.0	7,500.0	7,653.6	7,517.8	81.5	25.4	-88.20	-5,099.9	1,446.1	820.9	780.8	40.06	20.493				
12,300.0	7,500.0	7,654.1	7,518.2	83.1	25.4	-88.36	-5,099.9	1,446.1	723.2	684.0	39.20	18.450				
12,400.0	7,500.0	7,654.5	7,518.7	84.8	25.4	-88.52	-5,099.9	1,446.1	626.4	587.9	38.52	16.262				
12,500.0	7,500.0	7,655.0	7,519.2	86.5	25.4	-88.68	-5,099.9	1,446.1	530.7	492.2	38.44	13.805				
12,600.0	7,500.0	7,655.4	7,519.6	88.1	25.4	-88.83	-5,099.9	1,446.1	436.9	396.9	39.93	10.940				
12,700.0	7,500.0	7,655.9	7,520.1	89.8	25.4	-88.99	-5,099.9	1,446.1	346.6	301.7	44.88	7.723				
12,800.0	7,500.0	7,656.4	7,520.5	91.5	25.4	-89.15	-5,100.0	1,446.1	263.4	206.8	56.57	4.657				
12,900.0	7,500.0	7,656.8	7,521.0	93.2	25.4	-89.31	-5,100.0	1,446.2	196.6	116.3	80.25	2.449				
13,000.0	7,500.0	7,657.3	7,521.4	94.9	25.4	-89.46	-5,100.0	1,446.2	167.0	55.8	111.19	1.502				
13,003.7	7,500.0	7,657.3	7,521.5	94.9	25.4	-89.47	-5,100.0	1,446.2	167.0	55.0	112.03	1.491 Level 3, CC, ES, SF				
13,100.0	7,500.0	7,657.7	7,521.9	96.5	25.4	-89.62	-5,100.0	1,446.2	192.8	75.2	117.52	1.640				
13,200.0	7,500.0	7,658.2	7,522.3	98.2	25.4	-89.77	-5,100.0	1,446.2	257.7	151.8	105.89	2.434				
13,300.0	7,500.0	7,658.6	7,522.8	99.9	25.4	-89.92	-5,100.0	1,446.2	340.1	245.4	94.67	3.593				
13,400.0	7,500.0	7,659.1	7,523.2	101.6	25.4	-90.08	-5,100.0	1,446.2	430.0	343.4	86.66	4.962				
13,500.0	7,500.0	7,659.5	7,523.7	103.3	25.4	-90.23	-5,100.0	1,446.2	523.6	442.6	81.06	6.459				
13,600.0	7,500.0	7,660.0	7,524.1	105.0	25.4	-90.38	-5,100.0	1,446.2	619.2	542.2	77.04	8.037				
13,700.0	7,500.0	7,660.4	7,524.6	106.7	25.4	-90.53	-5,100.0	1,446.2	716.0	642.0	74.06	9.669				
13,800.0	7,500.0	7,660.8	7,525.0	108.4	25.4	-90.69	-5,100.0	1,446.2	813.6	741.8	71.78	11.335				
13,900.0	7,500.0	7,661.3	7,525.4	110.1	25.4	-90.84	-5,100.0	1,446.2	911.7	841.7	69.99	13.026				
14,000.0	7,500.0	7,661.7	7,525.9	111.8	25.4	-90.99	-5,100.0	1,446.2	1,010.2	941.6	68.56	14.734				
14,100.0	7,500.0	7,662.1	7,526.3	113.5	25.4	-91.14	-5,100.0	1,446.2	1,108.9	1,041.5	67.40	16.452				

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 2F-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 2F-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		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)						
14,200.0	7,500.0	7,662.6	7,526.8	115.2	25.4	-91.28	-5,100.0	1,446.2	1,207.9	1,141.4	66.44	18.179		
14,300.0	7,500.0	7,663.0	7,527.2	116.9	25.4	-91.43	-5,100.0	1,446.2	1,307.0	1,241.3	65.65	19.910		
14,400.0	7,500.0	7,663.4	7,527.6	118.6	25.4	-91.58	-5,100.0	1,446.2	1,406.2	1,341.2	64.97	21.644		
14,500.0	7,500.0	7,663.9	7,528.0	120.4	25.4	-91.73	-5,100.0	1,446.2	1,505.6	1,441.2	64.40	23.379		
14,600.0	7,500.0	7,664.3	7,528.5	122.1	25.4	-91.87	-5,100.0	1,446.2	1,605.0	1,541.1	63.91	25.113		
14,700.0	7,500.0	7,664.7	7,528.9	123.8	25.4	-92.02	-5,100.0	1,446.2	1,704.5	1,641.0	63.49	26.847		
14,800.0	7,500.0	7,665.2	7,529.3	125.5	25.4	-92.17	-5,100.0	1,446.2	1,804.0	1,740.9	63.12	28.580		
14,900.0	7,500.0	7,665.6	7,529.8	127.2	25.4	-92.31	-5,100.0	1,446.2	1,903.6	1,840.8	62.81	30.310		
15,000.0	7,500.0	7,666.0	7,530.2	128.9	25.4	-92.46	-5,100.0	1,446.2	2,003.2	1,940.7	62.53	32.037		
15,100.0	7,500.0	7,666.4	7,530.6	130.6	25.4	-92.60	-5,100.0	1,446.2	2,102.9	2,040.6	62.29	33.761		
15,200.0	7,500.0	7,666.8	7,531.0	132.4	25.4	-92.74	-5,100.0	1,446.2	2,202.6	2,140.5	62.08	35.482		
15,300.0	7,500.0	7,667.3	7,531.4	134.1	25.4	-92.89	-5,100.0	1,446.2	2,302.3	2,240.4	61.89	37.198		
15,400.0	7,500.0	7,667.7	7,531.8	135.8	25.4	-93.03	-5,100.0	1,446.3	2,402.1	2,340.3	61.73	38.911		
15,500.0	7,500.0	7,668.1	7,532.3	137.5	25.4	-93.17	-5,100.0	1,446.3	2,501.8	2,440.2	61.59	40.620		
15,600.0	7,500.0	7,668.5	7,532.7	139.2	25.4	-93.31	-5,100.0	1,446.3	2,601.6	2,540.2	61.47	42.325		
15,700.0	7,500.0	7,668.9	7,533.1	141.0	25.4	-93.45	-5,100.0	1,446.3	2,701.4	2,640.1	61.36	44.025		
15,800.0	7,500.0	7,669.3	7,533.5	142.7	25.4	-93.59	-5,100.0	1,446.3	2,801.2	2,740.0	61.27	45.721		
15,841.7	7,500.0	7,669.5	7,533.7	143.4	25.4	-93.65	-5,100.0	1,446.3	2,842.8	2,781.6	61.23	46.426		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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							
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	172.87	-4,325.8	541.1	4,359.5					
100.0	100.0	83.2	83.2	0.2	0.1	172.87	-4,326.0	541.3	4,359.8	4,359.5	0.30	N/A		
200.0	200.0	163.7	163.7	0.3	0.3	172.86	-4,326.5	541.6	4,360.5	4,359.9	0.61	7,123.356		
300.0	300.0	270.6	270.6	0.5	0.5	172.87	-4,327.6	541.6	4,361.5	4,360.5	0.97	4,481.623		
400.0	400.0	368.8	368.8	0.7	0.6	106.51	-4,328.4	541.2	4,362.5	4,361.1	1.32	3,305.366		
500.0	500.0	475.3	475.3	0.9	0.8	106.53	-4,329.2	541.1	4,364.0	4,362.3	1.68	2,591.364		
600.0	599.9	599.4	599.4	1.0	1.0	106.59	-4,329.9	540.5	4,365.7	4,363.6	2.09	2,093.041		
700.0	699.7	690.6	690.6	1.2	1.2	106.65	-4,330.1	540.1	4,367.7	4,365.2	2.44	1,790.223		
800.0	799.4	799.9	799.8	1.4	1.4	106.74	-4,330.5	539.2	4,370.2	4,367.3	2.84	1,539.473		
900.0	898.9	897.2	897.2	1.7	1.6	106.85	-4,330.7	538.2	4,373.1	4,369.8	3.23	1,352.908		
1,000.0	998.3	987.6	987.5	1.9	1.7	106.95	-4,331.1	537.2	4,376.6	4,373.0	3.63	1,204.883		
1,100.0	1,097.4	1,102.4	1,102.4	2.2	1.9	107.13	-4,331.5	535.4	4,380.7	4,376.6	4.10	1,069.481		
1,200.0	1,196.3	1,202.9	1,202.8	2.5	2.1	107.29	-4,331.7	533.8	4,385.1	4,380.6	4.56	962.373		
1,300.0	1,294.9	1,298.0	1,297.9	2.8	2.3	107.46	-4,331.9	531.9	4,390.1	4,385.1	5.03	872.436		
1,400.0	1,393.3	1,410.3	1,410.2	3.2	2.5	107.70	-4,332.0	529.1	4,395.6	4,390.0	5.56	790.193		
1,494.4	1,485.8	1,492.1	1,492.0	3.5	2.6	107.87	-4,332.0	527.5	4,401.3	4,395.2	6.04	728.442		
1,500.0	1,491.2	1,500.0	1,499.9	3.5	2.6	107.89	-4,332.0	527.3	4,401.6	4,395.5	6.08	724.432		
1,600.0	1,589.1	1,618.3	1,618.1	3.9	2.8	108.22	-4,331.8	525.1	4,407.8	4,401.1	6.65	663.171		
1,700.0	1,686.9	1,700.0	1,699.8	4.3	3.0	108.45	-4,331.7	523.4	4,414.1	4,406.9	7.16	616.860		
1,800.0	1,784.8	1,825.8	1,825.6	4.7	3.2	108.81	-4,331.2	520.3	4,420.2	4,412.5	7.75	570.525		
1,900.0	1,882.6	1,914.6	1,914.4	5.1	3.4	109.07	-4,330.8	517.9	4,426.3	4,418.1	8.28	534.895		
2,000.0	1,980.4	2,000.0	1,999.7	5.5	3.5	109.31	-4,330.6	515.6	4,432.9	4,424.1	8.80	503.862		
2,100.0	2,078.3	2,100.0	2,099.7	5.9	3.7	109.60	-4,330.3	513.0	4,439.4	4,430.1	9.35	474.954		
2,200.0	2,176.1	2,181.2	2,180.9	6.3	3.8	109.83	-4,330.2	510.9	4,446.2	4,436.4	9.86	450.801		
2,300.0	2,273.9	2,299.8	2,299.4	6.7	4.1	110.17	-4,330.2	507.5	4,453.4	4,442.9	10.45	426.241		
2,400.0	2,371.8	2,391.9	2,391.4	7.1	4.2	110.44	-4,330.0	504.4	4,460.3	4,449.3	10.99	406.030		
2,500.0	2,469.6	2,528.9	2,528.4	7.5	4.5	110.84	-4,329.1	499.7	4,466.8	4,455.2	11.60	384.952		
2,600.0	2,567.4	2,618.1	2,617.5	7.9	4.6	111.10	-4,328.2	496.7	4,473.2	4,461.1	12.13	368.645		
2,700.0	2,665.3	2,700.0	2,699.4	8.3	4.8	111.33	-4,327.6	494.6	4,480.0	4,467.4	12.65	354.179		
2,800.0	2,763.1	2,790.2	2,789.6	8.7	4.9	111.57	-4,327.2	492.7	4,487.2	4,474.0	13.18	340.495		
2,900.0	2,860.9	2,897.6	2,896.9	9.1	5.1	111.86	-4,326.6	490.7	4,494.4	4,480.7	13.74	327.218		
3,000.0	2,958.8	3,000.0	2,999.3	9.5	5.3	112.13	-4,325.9	489.2	4,501.6	4,487.3	14.28	315.170		
3,100.0	3,056.6	3,087.4	3,086.7	9.9	5.5	112.37	-4,325.3	487.7	4,508.8	4,494.0	14.80	304.563		
3,200.0	3,154.4	3,183.9	3,183.2	10.3	5.6	112.62	-4,324.8	485.9	4,516.4	4,501.0	15.34	294.419		
3,300.0	3,252.3	3,263.0	3,262.2	10.7	5.8	112.83	-4,324.6	484.7	4,524.2	4,508.3	15.84	285.567		
3,400.0	3,350.1	3,354.3	3,353.6	11.1	5.9	113.06	-4,324.6	483.6	4,532.4	4,516.1	16.37	276.953		
3,500.0	3,447.9	3,449.1	3,448.3	11.5	6.1	113.30	-4,324.6	482.9	4,540.7	4,523.9	16.89	268.794		
3,600.0	3,545.8	3,540.2	3,539.5	11.9	6.3	113.53	-4,324.8	482.1	4,549.3	4,531.9	17.41	261.252		
3,700.0	3,643.6	3,644.1	3,643.3	12.3	6.4	113.79	-4,325.0	481.2	4,558.0	4,540.1	17.96	253.854		
3,800.0	3,741.5	3,745.8	3,745.1	12.7	6.6	114.04	-4,325.0	480.5	4,566.6	4,548.1	18.49	246.952		
3,900.0	3,839.3	3,840.5	3,839.7	13.1	6.8	114.27	-4,325.1	480.0	4,575.3	4,556.3	19.02	240.611		
4,000.0	3,937.1	3,935.4	3,934.7	13.5	7.0	114.51	-4,325.2	478.8	4,584.1	4,564.6	19.54	234.609		
4,100.0	4,035.0	4,030.6	4,029.9	13.9	7.1	114.75	-4,325.4	477.3	4,593.1	4,573.0	20.06	228.931		
4,200.0	4,132.8	4,140.6	4,139.8	14.3	7.3	115.04	-4,325.4	475.1	4,602.1	4,581.5	20.61	223.263		
4,300.0	4,230.6	4,249.5	4,248.7	14.7	7.5	115.32	-4,325.1	472.9	4,610.8	4,589.7	21.16	217.903		
4,400.0	4,328.5	4,344.8	4,343.9	15.1	7.7	115.57	-4,324.7	470.4	4,619.6	4,597.9	21.68	213.062		
4,500.0	4,426.3	4,437.0	4,436.1	15.5	7.9	115.82	-4,324.5	467.9	4,628.6	4,606.4	22.20	208.533		
4,600.0	4,524.1	4,527.7	4,526.8	15.9	8.0	116.05	-4,324.4	466.1	4,637.8	4,615.1	22.71	204.261		
4,700.0	4,622.0	4,630.8	4,629.9	16.3	8.2	116.31	-4,324.4	464.2	4,647.2	4,623.9	23.24	200.003		
4,800.0	4,719.8	4,743.7	4,742.8	16.7	8.4	116.60	-4,323.8	462.1	4,656.1	4,632.3	23.78	195.778		
4,900.0	4,817.6	4,829.9	4,828.9	17.2	8.6	116.81	-4,323.5	460.3	4,665.4	4,641.1	24.28	192.146		
5,000.0	4,915.5	4,956.9	4,955.9	17.6	8.8	117.13	-4,322.8	457.7	4,674.5	4,649.7	24.85	188.120		

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 2F-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 2F-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,013.3	5,061.6	5,060.7	18.0	9.0	117.39	-4,321.8	456.5	4,683.2	4,657.8	25.38	184.557		
5,200.0	5,111.1	5,174.5	5,173.5	18.4	9.2	117.66	-4,320.6	455.1	4,692.0	4,666.1	25.92	181.051		
5,300.0	5,209.0	5,293.9	5,292.9	18.8	9.4	117.94	-4,318.7	453.9	4,700.3	4,673.8	26.46	177.612		
5,400.0	5,306.8	5,381.8	5,380.8	19.2	9.5	118.15	-4,317.2	453.2	4,708.6	4,681.6	26.96	174.670		
5,500.0	5,404.6	5,466.3	5,465.3	19.6	9.7	118.35	-4,316.1	452.5	4,717.2	4,689.8	27.44	171.887		
5,600.0	5,502.5	5,577.1	5,576.0	20.0	9.9	118.61	-4,314.6	451.4	4,726.0	4,698.1	27.97	168.947		
5,700.0	5,600.3	5,662.8	5,661.7	20.4	10.0	118.80	-4,313.3	450.9	4,734.7	4,706.3	28.46	166.372		
5,800.0	5,698.2	5,758.9	5,757.9	20.8	10.2	119.02	-4,312.2	450.4	4,743.8	4,714.8	28.96	163.801		
5,900.0	5,796.0	5,881.8	5,880.7	21.2	10.4	119.30	-4,310.5	449.8	4,752.7	4,723.1	29.51	161.067		
6,000.0	5,893.8	5,960.5	5,959.4	21.6	10.5	119.48	-4,309.2	449.6	4,761.4	4,731.4	29.98	158.839		
6,100.0	5,991.7	6,032.7	6,031.6	22.0	10.7	119.63	-4,308.5	449.5	4,770.8	4,740.4	30.43	156.766		
6,200.0	6,089.5	6,100.0	6,098.9	22.4	10.8	119.78	-4,308.1	449.2	4,780.7	4,749.9	30.88	154.826		
6,300.0	6,187.3	6,173.2	6,172.1	22.8	10.9	119.95	-4,308.1	448.6	4,791.3	4,760.0	31.33	152.916		
6,400.0	6,285.2	6,268.2	6,267.1	23.2	11.1	120.17	-4,308.5	447.6	4,802.4	4,770.6	31.82	150.903		
6,500.0	6,383.0	6,419.5	6,418.4	23.7	11.3	120.50	-4,308.3	446.8	4,813.0	4,780.6	32.42	148.471		
6,600.0	6,480.8	6,515.9	6,514.7	24.1	11.5	120.71	-4,307.6	446.2	4,823.0	4,790.1	32.91	146.555		
6,700.0	6,578.7	6,609.8	6,608.7	24.5	11.7	120.92	-4,307.0	445.4	4,833.3	4,799.9	33.40	144.726		
6,800.0	6,676.5	6,726.9	6,725.8	24.9	11.9	121.18	-4,306.1	444.6	4,843.4	4,809.5	33.92	142.779		
6,900.0	6,774.3	6,846.9	6,845.7	25.3	12.1	121.44	-4,304.5	443.7	4,853.1	4,818.7	34.45	140.865		
7,000.0	6,872.2	6,946.8	6,945.6	25.7	12.3	121.66	-4,303.0	443.1	4,862.7	4,827.8	34.95	139.153		
7,019.1	6,890.8	6,964.7	6,963.6	25.8	12.3	121.70	-4,302.7	443.1	4,864.5	4,829.5	35.04	138.841		
7,050.0	6,921.1	6,993.8	6,992.7	25.9	12.3	107.09	-4,302.3	443.0	4,866.7	4,831.5	35.19	138.300		
7,100.0	6,970.2	7,037.6	7,036.4	26.0	12.4	81.96	-4,301.7	443.1	4,866.8	4,831.3	35.44	137.329		
7,150.0	7,019.0	7,080.7	7,079.5	26.2	12.5	62.03	-4,301.2	443.3	4,862.6	4,826.9	35.69	136.229		
7,200.0	7,067.2	7,133.9	7,132.7	26.3	12.6	49.13	-4,300.7	443.7	4,854.2	4,818.2	35.97	134.938		
7,250.0	7,114.4	7,194.9	7,193.7	26.4	12.7	41.10	-4,300.0	444.7	4,841.5	4,805.2	36.27	133.477		
7,300.0	7,160.3	7,284.7	7,283.4	26.4	12.8	36.08	-4,298.7	447.9	4,824.5	4,787.8	36.62	131.739		
7,350.0	7,204.5	7,325.5	7,324.1	26.5	12.9	32.76	-4,298.0	450.2	4,803.2	4,766.3	36.89	130.187		
7,400.0	7,246.6	7,354.9	7,353.5	26.5	12.9	30.60	-4,297.6	451.9	4,778.3	4,741.2	37.15	128.612		
7,450.0	7,286.4	7,382.7	7,381.3	26.5	13.0	29.32	-4,297.4	453.7	4,749.9	4,712.5	37.41	126.966		
7,500.0	7,323.5	7,400.0	7,398.5	26.5	13.0	28.69	-4,297.3	454.9	4,718.2	4,680.6	37.65	125.309		
7,550.0	7,357.7	7,431.0	7,429.5	26.5	13.1	28.75	-4,297.1	456.9	4,683.5	4,645.6	37.92	123.512		
7,600.0	7,388.7	7,451.6	7,450.1	26.5	13.1	29.39	-4,297.1	458.2	4,645.9	4,607.8	38.17	121.725		
7,650.0	7,416.3	7,470.1	7,468.4	26.5	13.1	30.72	-4,297.0	459.3	4,605.8	4,567.4	38.41	119.911		
7,700.0	7,440.2	7,500.0	7,498.3	26.5	13.2	33.08	-4,297.1	461.0	4,563.5	4,524.8	38.67	118.011		
7,750.0	7,460.3	7,500.0	7,498.3	26.5	13.2	36.34	-4,297.1	461.0	4,519.1	4,480.2	38.88	116.246		
7,800.0	7,476.4	7,512.6	7,510.9	26.5	13.2	41.62	-4,297.1	461.7	4,473.1	4,434.0	39.10	114.407		
7,850.0	7,488.4	7,522.4	7,520.7	26.6	13.2	49.88	-4,297.1	462.2	4,425.8	4,386.5	39.31	112.587		
7,900.0	7,496.2	7,528.9	7,527.1	26.6	13.2	63.11	-4,297.2	462.5	4,377.6	4,338.1	39.51	110.796		
7,950.0	7,499.8	7,531.9	7,530.2	26.7	13.2	83.49	-4,297.2	462.6	4,328.7	4,289.0	39.70	109.047		
7,966.7	7,500.0	7,532.1	7,530.4	26.7	13.2	91.78	-4,297.2	462.6	4,312.3	4,272.6	39.76	108.471		
8,000.0	7,500.0	7,532.2	7,530.5	26.8	13.2	91.79	-4,297.2	462.6	4,279.6	4,239.7	39.88	107.323		
8,100.0	7,500.0	7,532.5	7,530.8	27.0	13.2	91.81	-4,297.2	462.7	4,181.5	4,141.3	40.25	103.901		
8,200.0	7,500.0	7,532.8	7,531.0	27.4	13.2	91.83	-4,297.2	462.7	4,083.5	4,042.9	40.63	100.513		
8,300.0	7,500.0	7,533.0	7,531.3	27.9	13.2	91.85	-4,297.2	462.7	3,985.5	3,944.5	41.02	97.159		
8,400.0	7,500.0	7,533.3	7,531.6	28.5	13.2	91.87	-4,297.2	462.7	3,887.7	3,846.3	41.43	93.838		
8,500.0	7,500.0	7,533.6	7,531.9	29.1	13.2	91.89	-4,297.2	462.7	3,790.0	3,748.2	41.85	90.552		
8,600.0	7,500.0	7,533.9	7,532.2	29.9	13.2	91.91	-4,297.2	462.7	3,692.4	3,650.1	42.30	87.300		
8,700.0	7,500.0	7,534.2	7,532.5	30.8	13.2	91.93	-4,297.2	462.7	3,595.0	3,552.2	42.76	84.082		
8,800.0	7,500.0	7,534.5	7,532.7	31.7	13.2	91.95	-4,297.2	462.8	3,497.7	3,454.4	43.24	80.898		
8,900.0	7,500.0	7,534.8	7,533.0	32.7	13.2	91.97	-4,297.2	462.8	3,400.5	3,356.8	43.74	77.750		
9,000.0	7,500.0	7,535.0	7,533.3	33.7	13.2	91.99	-4,297.2	462.8	3,303.5	3,259.3	44.26	74.638		

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 2F-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 2F-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							
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	7,535.3	7,533.6	34.8	13.2	92.01	-4,297.2	462.8	3,206.7	3,161.9	44.81	71.561	
9,200.0	7,500.0	7,535.6	7,533.9	36.0	13.2	92.03	-4,297.2	462.8	3,110.1	3,064.7	45.39	68.521	
9,300.0	7,500.0	7,535.9	7,534.2	37.2	13.2	92.05	-4,297.2	462.8	3,013.8	2,967.8	46.00	65.519	
9,400.0	7,500.0	7,536.2	7,534.5	38.4	13.2	92.07	-4,297.2	462.8	2,917.6	2,871.0	46.64	62.556	
9,500.0	7,500.0	7,536.5	7,534.8	39.7	13.2	92.09	-4,297.2	462.9	2,821.8	2,774.4	47.32	59.632	
9,600.0	7,500.0	7,536.8	7,535.1	41.1	13.2	92.11	-4,297.2	462.9	2,726.2	2,678.2	48.04	56.749	
9,700.0	7,500.0	7,537.1	7,535.4	42.4	13.2	92.13	-4,297.2	462.9	2,631.0	2,582.2	48.80	53.908	
9,800.0	7,500.0	7,537.4	7,535.7	43.8	13.2	92.15	-4,297.2	462.9	2,536.1	2,486.5	49.62	51.112	
9,900.0	7,500.0	7,537.7	7,536.0	45.2	13.2	92.18	-4,297.2	462.9	2,441.6	2,391.2	50.49	48.361	
10,000.0	7,500.0	7,538.0	7,536.3	46.6	13.2	92.20	-4,297.2	462.9	2,347.6	2,296.2	51.42	45.658	
10,100.0	7,500.0	7,538.3	7,536.6	48.1	13.2	92.22	-4,297.2	462.9	2,254.2	2,201.7	52.41	43.006	
10,200.0	7,500.0	7,538.7	7,536.9	49.6	13.2	92.24	-4,297.2	463.0	2,161.3	2,107.8	53.49	40.408	
10,300.0	7,500.0	7,539.0	7,537.2	51.1	13.2	92.26	-4,297.2	463.0	2,069.0	2,014.4	54.64	37.866	
10,400.0	7,500.0	7,539.3	7,537.6	52.6	13.2	92.28	-4,297.2	463.0	1,977.5	1,921.6	55.89	35.384	
10,500.0	7,500.0	7,539.6	7,537.9	54.1	13.2	92.31	-4,297.2	463.0	1,886.9	1,829.7	57.24	32.966	
10,600.0	7,500.0	7,539.9	7,538.2	55.6	13.2	92.33	-4,297.2	463.0	1,797.3	1,738.6	58.70	30.616	
10,700.0	7,500.0	7,540.2	7,538.5	57.2	13.2	92.35	-4,297.2	463.0	1,708.8	1,648.5	60.30	28.341	
10,800.0	7,500.0	7,540.5	7,538.8	58.8	13.2	92.37	-4,297.2	463.0	1,621.7	1,559.7	62.03	26.145	
10,900.0	7,500.0	7,540.9	7,539.1	60.3	13.2	92.40	-4,297.2	463.1	1,536.1	1,472.2	63.91	24.035	
11,000.0	7,500.0	7,541.2	7,539.5	61.9	13.2	92.42	-4,297.2	463.1	1,452.4	1,386.5	65.96	22.019	
11,100.0	7,500.0	7,541.5	7,539.8	63.5	13.2	92.44	-4,297.2	463.1	1,370.9	1,302.7	68.19	20.104	
11,200.0	7,500.0	7,541.8	7,540.1	65.1	13.2	92.46	-4,297.2	463.1	1,291.9	1,221.3	70.60	18.300	
11,300.0	7,500.0	7,542.2	7,540.4	66.7	13.2	92.49	-4,297.2	463.1	1,216.1	1,142.9	73.19	16.616	
11,400.0	7,500.0	7,542.5	7,540.8	68.3	13.2	92.51	-4,297.2	463.1	1,144.0	1,068.1	75.94	15.064	
11,500.0	7,500.0	7,542.8	7,541.1	70.0	13.2	92.53	-4,297.2	463.2	1,076.4	997.5	78.83	13.655	
11,600.0	7,500.0	7,543.2	7,541.4	71.6	13.2	92.56	-4,297.2	463.2	1,014.1	932.3	81.77	12.402	
11,700.0	7,500.0	7,543.5	7,541.8	73.2	13.2	92.58	-4,297.2	463.2	958.2	873.6	84.65	11.320	
11,800.0	7,500.0	7,543.8	7,542.1	74.9	13.2	92.60	-4,297.2	463.2	909.9	822.6	87.32	10.421	
11,900.0	7,500.0	7,544.2	7,542.4	76.5	13.2	92.63	-4,297.2	463.2	870.5	780.9	89.56	9.720	
12,000.0	7,500.0	7,544.5	7,542.8	78.2	13.2	92.65	-4,297.2	463.2	841.2	750.1	91.13	9.231	
12,100.0	7,500.0	7,544.8	7,543.1	79.8	13.2	92.67	-4,297.2	463.2	823.0	731.2	91.80	8.966	
12,200.0	7,500.0	7,545.2	7,543.5	81.5	13.2	92.70	-4,297.2	463.3	816.8	725.4	91.42	8.934 ES, SF	
12,201.0	7,500.0	7,545.2	7,543.5	81.5	13.2	92.70	-4,297.2	463.3	816.8	725.4	91.42	8.935 CC	
12,300.0	7,500.0	7,545.5	7,543.8	83.1	13.2	92.72	-4,297.2	463.3	822.8	732.8	89.97	9.145	
12,400.0	7,500.0	7,545.9	7,544.1	84.8	13.2	92.75	-4,297.2	463.3	840.7	753.2	87.57	9.601	
12,500.0	7,500.0	7,546.2	7,544.5	86.5	13.2	92.77	-4,297.2	463.3	869.8	785.4	84.42	10.303	
12,600.0	7,500.0	7,546.6	7,544.8	88.1	13.2	92.80	-4,297.2	463.3	909.1	828.3	80.82	11.249	
12,700.0	7,500.0	7,546.9	7,545.2	89.8	13.2	92.82	-4,297.2	463.3	957.2	880.2	77.01	12.430	
12,800.0	7,500.0	7,547.3	7,545.6	91.5	13.2	92.85	-4,297.2	463.4	1,012.9	939.7	73.20	13.838	
12,900.0	7,500.0	7,547.6	7,545.9	93.2	13.2	92.87	-4,297.2	463.4	1,075.1	1,005.6	69.54	15.459	
13,000.0	7,500.0	7,548.0	7,546.3	94.9	13.2	92.90	-4,297.2	463.4	1,142.6	1,076.5	66.13	17.279	
13,100.0	7,500.0	7,548.4	7,546.6	96.5	13.2	92.92	-4,297.2	463.4	1,214.7	1,151.7	63.00	19.282	
13,200.0	7,500.0	7,548.7	7,547.0	98.2	13.3	92.95	-4,297.2	463.4	1,290.4	1,230.3	60.16	21.449	
13,300.0	7,500.0	7,549.1	7,547.4	99.9	13.3	92.97	-4,297.2	463.4	1,369.3	1,311.7	57.62	23.763	
13,400.0	7,500.0	7,549.5	7,547.7	101.6	13.3	93.00	-4,297.2	463.5	1,450.8	1,395.4	55.36	26.205	
13,500.0	7,500.0	7,549.8	7,548.1	103.3	13.3	93.02	-4,297.2	463.5	1,534.5	1,481.1	53.36	28.758	
13,600.0	7,500.0	7,550.2	7,548.5	105.0	13.3	93.05	-4,297.2	463.5	1,620.0	1,568.4	51.59	31.402	
13,700.0	7,500.0	7,550.6	7,548.8	106.7	13.3	93.08	-4,297.2	463.5	1,707.1	1,657.1	50.03	34.121	
13,800.0	7,500.0	7,550.9	7,549.2	108.4	13.3	93.10	-4,297.2	463.5	1,795.6	1,746.9	48.66	36.900	
13,900.0	7,500.0	7,551.3	7,549.6	110.1	13.3	93.13	-4,297.2	463.5	1,885.2	1,837.7	47.46	39.725	
14,000.0	7,500.0	7,551.7	7,550.0	111.8	13.3	93.16	-4,297.2	463.6	1,975.8	1,929.4	46.40	42.581	
14,100.0	7,500.0	7,552.1	7,550.3	113.5	13.3	93.18	-4,297.2	463.6	2,067.2	2,021.8	45.48	45.457	

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 2F-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 2F-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	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)				
14,200.0	7,500.0	7,552.5	7,550.7	115.2	13.3	93.21	-4,297.2	463.6	2,159.5	2,114.8	44.67	48.343		
14,300.0	7,500.0	7,552.9	7,551.1	116.9	13.3	93.24	-4,297.2	463.6	2,252.3	2,208.4	43.96	51.231		
14,400.0	7,500.0	7,553.2	7,551.5	118.6	13.3	93.26	-4,297.2	463.6	2,345.8	2,302.5	43.35	54.113		
14,500.0	7,500.0	7,553.6	7,551.9	120.4	13.3	93.29	-4,297.2	463.7	2,439.8	2,397.0	42.82	56.982		
14,600.0	7,500.0	7,554.0	7,552.3	122.1	13.3	93.32	-4,297.2	463.7	2,534.3	2,491.9	42.35	59.834		
14,700.0	7,500.0	7,554.4	7,552.7	123.8	13.3	93.35	-4,297.3	463.7	2,629.1	2,587.2	41.96	62.664		
14,800.0	7,500.0	7,554.8	7,553.1	125.5	13.3	93.37	-4,297.3	463.7	2,724.3	2,682.7	41.61	65.470		
14,900.0	7,500.0	7,555.2	7,553.5	127.2	13.3	93.40	-4,297.3	463.7	2,819.9	2,778.6	41.32	68.248		
15,000.0	7,500.0	7,555.6	7,553.9	128.9	13.3	93.43	-4,297.3	463.7	2,915.8	2,874.7	41.07	70.998		
15,100.0	7,500.0	7,556.0	7,554.3	130.6	13.3	93.46	-4,297.3	463.8	3,011.9	2,971.0	40.86	73.717		
15,200.0	7,500.0	7,556.4	7,554.7	132.4	13.3	93.49	-4,297.3	463.8	3,108.3	3,067.6	40.68	76.406		
15,300.0	7,500.0	7,556.8	7,555.1	134.1	13.3	93.52	-4,297.3	463.8	3,204.8	3,164.3	40.54	79.064		
15,400.0	7,500.0	7,557.3	7,555.5	135.8	13.3	93.54	-4,297.3	463.8	3,301.6	3,261.2	40.42	81.690		
15,500.0	7,500.0	7,557.7	7,555.9	137.5	13.3	93.57	-4,297.3	463.8	3,398.6	3,358.3	40.32	84.285		
15,600.0	7,500.0	7,558.1	7,556.3	139.2	13.3	93.60	-4,297.3	463.9	3,495.8	3,455.5	40.25	86.849		
15,700.0	7,500.0	7,558.5	7,556.8	141.0	13.3	93.63	-4,297.3	463.9	3,593.1	3,552.9	40.20	89.383		
15,800.0	7,500.0	7,558.9	7,557.2	142.7	13.3	93.66	-4,297.3	463.9	3,690.5	3,650.4	40.16	91.887		
15,841.7	7,500.0	7,559.1	7,557.4	143.4	13.3	93.67	-4,297.3	463.9	3,731.2	3,691.0	40.15	92.922		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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			
0.0	0.0	11.3	11.3	0.0	0.0	153.23	-2,304.0	1,162.4	2,580.7					
100.0	100.0	114.1	114.1	0.2	0.2	153.23	-2,304.0	1,162.4	2,580.6	2,580.3	0.35	7,410.564		
200.0	200.0	216.9	216.9	0.3	0.4	153.22	-2,303.8	1,162.5	2,580.4	2,579.7	0.70	3,688.042		
300.0	300.0	319.7	319.7	0.5	0.6	153.22	-2,303.4	1,162.5	2,580.1	2,579.1	1.05	2,454.682		
400.0	400.0	422.5	422.5	0.7	0.7	86.87	-2,303.0	1,162.5	2,579.7	2,578.3	1.40	1,838.417		
500.0	500.0	525.3	525.3	0.9	0.9	86.93	-2,302.4	1,162.5	2,579.1	2,577.3	1.76	1,466.384		
600.0	599.9	628.0	628.0	1.0	1.1	87.03	-2,301.7	1,162.5	2,578.2	2,576.1	2.12	1,215.393		
700.0	699.7	730.6	730.6	1.2	1.3	87.18	-2,300.8	1,162.5	2,577.2	2,574.7	2.49	1,033.231		
800.0	799.4	833.2	833.1	1.4	1.4	87.36	-2,299.9	1,162.5	2,576.0	2,573.1	2.88	894.091		
900.0	898.9	935.5	935.5	1.7	1.6	87.58	-2,298.8	1,162.5	2,574.6	2,571.3	3.28	783.796		
1,000.0	998.3	1,033.6	1,033.6	1.9	1.8	87.83	-2,297.7	1,162.6	2,573.1	2,569.4	3.70	695.203		
1,100.0	1,097.4	1,104.4	1,104.3	2.2	1.9	88.03	-2,297.2	1,162.8	2,572.2	2,568.1	4.09	628.168		
1,127.2	1,124.3	1,123.0	1,123.0	2.3	1.9	88.09	-2,297.2	1,163.0	2,572.2	2,568.0	4.21	611.398		
1,200.0	1,196.3	1,183.0	1,183.0	2.5	2.0	88.27	-2,297.5	1,163.8	2,572.5	2,568.0	4.53	568.345		
1,300.0	1,294.9	1,243.0	1,243.0	2.8	2.2	88.47	-2,298.3	1,164.9	2,574.0	2,569.0	4.95	519.984		
1,400.0	1,393.3	1,321.0	1,320.9	3.2	2.3	88.74	-2,300.0	1,166.6	2,576.5	2,571.0	5.43	474.292		
1,494.4	1,485.8	1,401.1	1,401.0	3.5	2.4	89.05	-2,302.2	1,168.5	2,579.4	2,573.5	5.92	435.402		
1,500.0	1,491.2	1,405.8	1,405.7	3.5	2.4	89.07	-2,302.4	1,168.6	2,579.6	2,573.7	5.95	433.295		
1,600.0	1,589.1	1,488.3	1,488.1	3.9	2.6	89.42	-2,304.8	1,171.2	2,583.5	2,577.0	6.48	398.809		
1,700.0	1,686.9	1,564.0	1,563.7	4.3	2.7	89.72	-2,307.3	1,174.4	2,588.1	2,581.1	7.00	369.970		
1,800.0	1,784.8	1,641.1	1,640.6	4.7	2.9	90.01	-2,310.0	1,178.9	2,593.7	2,586.2	7.52	344.805		
1,900.0	1,882.6	1,723.9	1,723.1	5.1	3.0	90.30	-2,313.1	1,184.9	2,600.2	2,592.1	8.06	322.471		
2,000.0	1,980.4	1,819.0	1,817.9	5.5	3.2	90.62	-2,317.0	1,192.1	2,607.2	2,598.6	8.63	302.016		
2,100.0	2,078.3	1,915.9	1,914.4	5.9	3.4	90.94	-2,321.0	1,199.5	2,614.3	2,605.1	9.21	283.879		
2,200.0	2,176.1	2,021.9	2,019.9	6.3	3.6	91.30	-2,325.2	1,207.6	2,621.4	2,611.6	9.81	267.321		
2,300.0	2,273.9	2,102.1	2,099.9	6.7	3.8	91.57	-2,328.6	1,213.6	2,628.7	2,618.4	10.35	253.911		
2,400.0	2,371.8	2,185.9	2,183.3	7.1	4.0	91.84	-2,332.6	1,220.3	2,636.9	2,626.0	10.91	241.736		
2,500.0	2,469.6	2,272.0	2,269.1	7.5	4.2	92.12	-2,337.1	1,227.4	2,645.5	2,634.1	11.47	230.630		
2,600.0	2,567.4	2,375.8	2,372.3	7.9	4.4	92.45	-2,342.7	1,236.4	2,654.7	2,642.6	12.07	219.922		
2,700.0	2,665.3	2,517.5	2,513.5	8.3	4.7	92.94	-2,349.6	1,246.3	2,662.8	2,650.0	12.75	208.846		
2,800.0	2,763.1	2,621.3	2,617.0	8.7	4.9	93.29	-2,353.4	1,253.5	2,669.9	2,656.5	13.35	199.943		
2,900.0	2,860.9	2,702.4	2,697.7	9.1	5.1	93.55	-2,356.6	1,259.5	2,677.4	2,663.5	13.91	192.523		
3,000.0	2,958.8	2,798.5	2,793.5	9.5	5.3	93.86	-2,360.9	1,266.6	2,685.6	2,671.1	14.49	185.295		
3,100.0	3,056.6	2,915.1	2,909.7	9.9	5.5	94.25	-2,365.8	1,274.7	2,693.5	2,678.3	15.12	178.091		
3,200.0	3,154.4	3,016.5	3,010.8	10.3	5.8	94.59	-2,369.6	1,281.6	2,701.0	2,685.2	15.72	171.779		
3,300.0	3,252.3	3,105.7	3,099.7	10.7	6.0	94.88	-2,373.1	1,287.9	2,708.7	2,692.4	16.30	166.228		
3,400.0	3,350.1	3,197.4	3,191.1	11.1	6.2	95.17	-2,376.9	1,294.4	2,716.9	2,700.0	16.88	160.995		
3,500.0	3,447.9	3,317.3	3,310.6	11.5	6.4	95.55	-2,381.6	1,303.1	2,724.8	2,707.3	17.52	155.545		
3,600.0	3,545.8	3,404.0	3,397.0	11.9	6.6	95.82	-2,384.7	1,309.7	2,732.7	2,714.6	18.09	151.045		
3,700.0	3,643.6	3,496.4	3,489.0	12.3	6.8	96.09	-2,388.2	1,316.9	2,741.0	2,722.3	18.67	146.786		
3,800.0	3,741.5	3,590.0	3,582.3	12.7	7.0	96.39	-2,392.2	1,323.7	2,749.6	2,730.3	19.26	142.784		
3,900.0	3,839.3	3,702.0	3,693.9	13.1	7.3	96.72	-2,396.6	1,332.4	2,758.0	2,738.1	19.89	138.653		
4,000.0	3,937.1	3,802.9	3,794.4	13.5	7.5	97.01	-2,400.0	1,340.6	2,766.2	2,745.7	20.50	134.947		
4,100.0	4,035.0	3,885.5	3,876.6	13.9	7.7	97.26	-2,403.2	1,347.0	2,774.8	2,753.7	21.06	131.770		
4,200.0	4,132.8	3,978.8	3,969.6	14.3	7.9	97.53	-2,407.2	1,354.4	2,783.8	2,762.2	21.65	128.593		
4,300.0	4,230.6	4,079.4	4,069.8	14.7	8.1	97.81	-2,411.4	1,362.8	2,793.0	2,770.7	22.26	125.493		
4,400.0	4,328.5	4,166.0	4,156.0	15.1	8.3	98.06	-2,415.1	1,370.0	2,802.3	2,779.5	22.83	122.753		
4,500.0	4,426.3	4,261.0	4,250.5	15.5	8.6	98.32	-2,419.5	1,378.1	2,812.1	2,788.7	23.43	120.046		
4,600.0	4,524.1	4,367.8	4,356.9	15.9	8.8	98.62	-2,424.5	1,386.9	2,821.9	2,797.9	24.04	117.364		
4,700.0	4,622.0	4,490.6	4,479.1	16.3	9.1	98.97	-2,429.5	1,396.5	2,831.2	2,806.5	24.71	114.598		
4,800.0	4,719.8	4,610.5	4,598.7	16.7	9.4	99.31	-2,433.6	1,405.6	2,839.7	2,814.3	25.35	111.999		
4,900.0	4,817.6	4,721.0	4,708.8	17.2	9.6	99.64	-2,436.7	1,412.9	2,847.6	2,821.6	25.97	109.634		

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 2F-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 2F-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							
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	
5,000.0	4,915.5	4,833.0	4,820.6	17.6	9.8	100.00	-2,439.9	1,419.0	2,855.3	2,828.7	26.58	107.422		
5,100.0	5,013.3	4,987.1	4,974.7	18.0	10.1	100.58	-2,443.7	1,422.5	2,862.1	2,834.9	27.24	105.087		
5,200.0	5,111.1	5,117.0	5,104.5	18.4	10.3	101.11	-2,444.8	1,422.7	2,866.8	2,839.0	27.83	103.003		
5,300.0	5,209.0	5,220.7	5,208.2	18.8	10.4	101.53	-2,445.4	1,422.6	2,871.6	2,843.2	28.38	101.168		
5,400.0	5,306.8	5,340.0	5,327.5	19.2	10.6	102.03	-2,445.5	1,422.0	2,875.9	2,847.0	28.96	99.318		
5,500.0	5,404.6	5,435.0	5,422.5	19.6	10.8	102.42	-2,445.3	1,421.4	2,880.1	2,850.6	29.49	97.664		
5,600.0	5,502.5	5,536.5	5,524.1	20.0	10.9	102.84	-2,445.2	1,420.6	2,884.4	2,854.4	30.03	96.052		
5,700.0	5,600.3	5,636.8	5,624.3	20.4	11.1	103.26	-2,444.9	1,419.8	2,888.8	2,858.2	30.57	94.506		
5,800.0	5,698.2	5,730.6	5,718.2	20.8	11.2	103.65	-2,444.7	1,419.1	2,893.3	2,862.2	31.09	93.051		
5,900.0	5,796.0	5,836.6	5,824.1	21.2	11.3	104.08	-2,444.4	1,418.3	2,897.9	2,866.3	31.64	91.601		
6,000.0	5,893.8	5,942.5	5,930.0	21.6	11.5	104.52	-2,443.7	1,417.3	2,902.3	2,870.2	32.18	90.204		
6,100.0	5,991.7	6,041.3	6,028.8	22.0	11.6	104.93	-2,443.0	1,416.2	2,906.8	2,874.1	32.70	88.891		
6,200.0	6,089.5	6,133.6	6,121.1	22.4	11.8	105.31	-2,442.4	1,415.2	2,911.5	2,878.3	33.22	87.640		
6,300.0	6,187.3	6,230.4	6,217.9	22.8	11.9	105.69	-2,441.7	1,415.3	2,916.5	2,882.7	33.75	86.417		
6,400.0	6,285.2	6,332.9	6,320.4	23.2	12.1	106.09	-2,441.0	1,415.3	2,921.5	2,887.2	34.28	85.217		
6,500.0	6,383.0	6,428.0	6,415.5	23.7	12.3	106.46	-2,440.2	1,415.2	2,926.6	2,891.8	34.80	84.087		
6,600.0	6,480.8	6,524.3	6,511.8	24.1	12.4	106.83	-2,439.5	1,415.2	2,931.9	2,896.6	35.32	83.000		
6,700.0	6,578.7	6,617.7	6,605.2	24.5	12.5	107.19	-2,439.0	1,415.0	2,937.5	2,901.6	35.84	81.967		
6,800.0	6,676.5	6,707.2	6,694.7	24.9	12.7	107.54	-2,438.6	1,414.8	2,943.4	2,907.0	36.34	80.991		
6,900.0	6,774.3	6,801.0	6,788.5	25.3	12.8	107.90	-2,438.5	1,414.6	2,949.6	2,912.8	36.85	80.043		
7,000.0	6,872.2	6,896.5	6,884.0	25.7	13.0	108.27	-2,438.4	1,414.4	2,956.1	2,918.8	37.36	79.123		
7,019.1	6,890.8	6,914.7	6,902.2	25.8	13.0	108.34	-2,438.4	1,414.3	2,957.4	2,919.9	37.46	78.952		
7,050.0	6,921.1	6,944.4	6,931.9	25.9	13.1	93.83	-2,438.4	1,414.3	2,958.6	2,921.0	37.61	78.657		
7,100.0	6,970.2	6,992.8	6,980.3	26.0	13.1	68.76	-2,438.5	1,414.3	2,957.1	2,919.2	37.86	78.104		
7,150.0	7,019.0	7,042.2	7,029.7	26.2	13.2	48.80	-2,438.5	1,414.2	2,951.3	2,913.2	38.10	77.452		
7,200.0	7,067.2	7,092.9	7,080.4	26.3	13.3	35.73	-2,438.5	1,414.2	2,941.2	2,902.9	38.35	76.704		
7,250.0	7,114.4	7,148.1	7,135.6	26.4	13.4	27.40	-2,438.4	1,414.3	2,926.9	2,888.3	38.59	75.851		
7,300.0	7,160.3	7,206.6	7,194.1	26.4	13.5	21.89	-2,438.0	1,414.4	2,908.3	2,869.4	38.83	74.902		
7,350.0	7,204.5	7,259.4	7,246.9	26.5	13.6	18.03	-2,437.5	1,414.5	2,885.5	2,846.5	39.05	73.892		
7,400.0	7,246.6	7,308.0	7,295.5	26.5	13.7	15.18	-2,436.9	1,414.6	2,858.9	2,819.7	39.26	72.822		
7,450.0	7,286.4	7,340.6	7,328.0	26.5	13.7	12.94	-2,436.5	1,414.7	2,828.7	2,789.3	39.43	71.734		
7,500.0	7,323.5	7,370.3	7,357.8	26.5	13.8	11.11	-2,436.2	1,414.7	2,795.3	2,755.7	39.60	70.598		
7,550.0	7,357.7	7,399.7	7,387.2	26.5	13.8	9.55	-2,436.0	1,414.8	2,758.9	2,719.1	39.75	69.413		
7,600.0	7,388.7	7,430.7	7,418.2	26.5	13.9	8.14	-2,435.8	1,414.8	2,719.6	2,679.8	39.89	68.181		
7,650.0	7,416.3	7,458.2	7,445.7	26.5	13.9	6.73	-2,435.6	1,414.8	2,677.9	2,637.8	40.02	66.921		
7,700.0	7,440.2	7,482.0	7,469.5	26.5	13.9	5.18	-2,435.4	1,414.8	2,633.9	2,593.7	40.12	65.642		
7,750.0	7,460.3	7,500.8	7,488.3	26.5	14.0	3.21	-2,435.3	1,414.9	2,588.0	2,547.8	40.21	64.355		
7,800.0	7,476.4	7,515.6	7,503.0	26.5	14.0	0.34	-2,435.2	1,414.9	2,540.6	2,500.3	40.28	63.065		
7,850.0	7,488.4	7,526.5	7,514.0	26.6	14.0	-4.78	-2,435.2	1,414.9	2,492.0	2,451.6	40.34	61.780		
7,900.0	7,496.2	7,533.5	7,521.0	26.6	14.0	-17.27	-2,435.1	1,414.9	2,442.6	2,402.2	40.37	60.508		
7,950.0	7,499.8	7,536.6	7,524.1	26.7	14.0	-65.85	-2,435.1	1,414.9	2,392.7	2,352.4	40.38	59.258		
7,966.7	7,500.0	7,536.7	7,524.2	26.7	14.0	-95.55	-2,435.1	1,414.9	2,376.1	2,335.7	40.38	58.845		
8,000.0	7,500.0	7,536.6	7,524.0	26.8	14.0	-95.48	-2,435.1	1,414.9	2,342.8	2,302.4	40.38	58.023		
8,100.0	7,500.0	7,536.0	7,523.5	27.0	14.0	-95.25	-2,435.1	1,414.9	2,243.0	2,202.6	40.37	55.562		
8,200.0	7,500.0	7,535.5	7,522.9	27.4	14.0	-95.02	-2,435.1	1,414.9	2,143.2	2,102.8	40.35	53.111		
8,300.0	7,500.0	7,534.9	7,522.4	27.9	14.0	-94.80	-2,435.1	1,414.9	2,043.4	2,003.1	40.33	50.671		
8,400.0	7,500.0	7,534.4	7,521.8	28.5	14.0	-94.57	-2,435.1	1,414.9	1,943.6	1,903.3	40.29	48.242		
8,500.0	7,500.0	7,533.8	7,521.3	29.1	14.0	-94.33	-2,435.1	1,414.9	1,843.9	1,803.7	40.24	45.823		
8,600.0	7,500.0	7,533.3	7,520.7	29.9	14.0	-94.10	-2,435.1	1,414.9	1,744.2	1,704.0	40.18	43.415		
8,700.0	7,500.0	7,532.7	7,520.2	30.8	14.0	-93.87	-2,435.1	1,414.9	1,644.5	1,604.4	40.09	41.018		
8,800.0	7,500.0	7,532.1	7,519.6	31.7	14.0	-93.63	-2,435.1	1,414.9	1,544.9	1,504.9	39.99	38.633		
8,900.0	7,500.0	7,531.6	7,519.1	32.7	14.0	-93.39	-2,435.1	1,414.9	1,445.3	1,405.4	39.86	36.259		

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 2F-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 2F-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							
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	7,531.0	7,518.5	33.7	14.0	-93.16	-2,435.1	1,414.9	1,345.8	1,306.1	39.70	33.898		
9,100.0	7,500.0	7,530.4	7,517.9	34.8	14.0	-92.92	-2,435.1	1,414.9	1,246.3	1,206.8	39.50	31.550		
9,200.0	7,500.0	7,529.9	7,517.4	36.0	14.0	-92.68	-2,435.1	1,414.9	1,147.0	1,107.7	39.26	29.215		
9,300.0	7,500.0	7,529.3	7,516.8	37.2	14.0	-92.44	-2,435.1	1,414.9	1,047.7	1,008.8	38.95	26.896		
9,400.0	7,500.0	7,528.7	7,516.2	38.4	14.0	-92.19	-2,435.1	1,414.9	948.7	910.1	38.57	24.594		
9,500.0	7,500.0	7,528.2	7,515.6	39.7	14.0	-91.95	-2,435.1	1,414.9	849.8	811.7	38.09	22.311		
9,600.0	7,500.0	7,527.6	7,515.0	41.1	14.0	-91.70	-2,435.1	1,414.9	751.3	713.8	37.47	20.050		
9,700.0	7,500.0	7,527.0	7,514.5	42.4	14.0	-91.46	-2,435.1	1,414.9	653.2	616.5	36.66	17.815		
9,800.0	7,500.0	7,526.4	7,513.9	43.8	14.0	-91.21	-2,435.2	1,414.9	555.7	520.1	35.60	15.612		
9,900.0	7,500.0	7,525.8	7,513.3	45.2	14.0	-90.96	-2,435.2	1,414.9	459.4	425.2	34.19	13.439		
10,000.0	7,500.0	7,525.2	7,512.7	46.6	14.0	-90.71	-2,435.2	1,414.9	365.1	332.7	32.42	11.262		
10,100.0	7,500.0	7,524.6	7,512.1	48.1	14.0	-90.46	-2,435.2	1,414.9	274.8	243.7	31.04	8.851		
10,200.0	7,500.0	7,524.0	7,511.5	49.6	14.0	-90.21	-2,435.2	1,414.9	194.2	159.5	34.75	5.588		
10,300.0	7,500.0	7,523.4	7,510.9	51.1	14.0	-89.95	-2,435.2	1,414.9	141.2	89.3	51.89	2.721		
10,338.9	7,500.0	7,523.2	7,510.7	51.7	14.0	-89.86	-2,435.2	1,414.9	135.7	75.9	59.79	2.270 CC, ES		
10,400.0	7,500.0	7,522.8	7,510.3	52.6	14.0	-89.70	-2,435.2	1,414.9	148.8	82.6	66.17	2.249 SF		
10,500.0	7,500.0	7,522.2	7,509.7	54.1	14.0	-89.44	-2,435.2	1,414.9	210.6	146.6	64.05	3.288		
10,600.0	7,500.0	7,521.6	7,509.1	55.6	14.0	-89.19	-2,435.2	1,414.9	294.2	234.5	59.72	4.927		
10,700.0	7,500.0	7,521.0	7,508.5	57.2	14.0	-88.93	-2,435.2	1,414.9	385.7	329.1	56.61	6.814		
10,800.0	7,500.0	7,520.4	7,507.9	58.8	14.0	-88.67	-2,435.2	1,414.9	480.6	426.1	54.51	8.818		
10,900.0	7,500.0	7,519.8	7,507.2	60.3	14.0	-88.41	-2,435.2	1,414.9	577.2	524.2	53.05	10.882		
11,000.0	7,500.0	7,519.1	7,506.6	61.9	14.0	-88.14	-2,435.2	1,414.9	674.8	622.9	51.99	12.979		
11,100.0	7,500.0	7,518.5	7,506.0	63.5	14.0	-87.88	-2,435.2	1,414.9	773.1	721.8	51.21	15.095		
11,200.0	7,500.0	7,517.9	7,505.4	65.1	14.0	-87.62	-2,435.2	1,414.9	871.7	821.1	50.62	17.221		
11,300.0	7,500.0	7,517.2	7,504.7	66.7	14.0	-87.35	-2,435.2	1,414.9	970.6	920.4	50.16	19.351		
11,400.0	7,500.0	7,516.6	7,504.1	68.3	14.0	-87.08	-2,435.2	1,414.9	1,069.7	1,019.9	49.79	21.482		
11,500.0	7,500.0	7,516.0	7,503.5	70.0	14.0	-86.81	-2,435.2	1,414.9	1,169.0	1,119.4	49.50	23.613		
11,600.0	7,500.0	7,515.3	7,502.8	71.6	14.0	-86.54	-2,435.2	1,414.9	1,268.3	1,219.1	49.27	25.741		
11,700.0	7,500.0	7,514.7	7,502.2	73.2	14.0	-86.27	-2,435.2	1,414.9	1,367.8	1,318.7	49.09	27.865		
11,800.0	7,500.0	7,514.0	7,501.5	74.9	14.0	-86.00	-2,435.2	1,414.9	1,467.3	1,418.4	48.94	29.984		
11,900.0	7,500.0	7,513.4	7,500.9	76.5	14.0	-85.73	-2,435.2	1,414.9	1,566.9	1,518.1	48.82	32.098		
12,000.0	7,500.0	7,512.7	7,500.2	78.2	14.0	-85.45	-2,435.2	1,414.9	1,666.6	1,617.9	48.72	34.207		
12,100.0	7,500.0	7,512.1	7,499.6	79.8	14.0	-85.18	-2,435.2	1,414.9	1,766.3	1,717.6	48.65	36.309		
12,200.0	7,500.0	7,511.4	7,498.9	81.5	14.0	-84.90	-2,435.2	1,414.9	1,866.0	1,817.4	48.59	38.405		
12,300.0	7,500.0	7,510.8	7,498.2	83.1	14.0	-84.62	-2,435.2	1,414.9	1,965.7	1,917.2	48.54	40.494		
12,400.0	7,500.0	7,510.1	7,497.6	84.8	14.0	-84.34	-2,435.3	1,414.9	2,065.5	2,017.0	48.51	42.577		
12,500.0	7,500.0	7,509.4	7,496.9	86.5	14.0	-84.06	-2,435.3	1,414.9	2,165.3	2,116.8	48.49	44.653		
12,600.0	7,500.0	7,508.7	7,496.2	88.1	14.0	-83.78	-2,435.3	1,414.9	2,265.1	2,216.6	48.48	46.721		
12,700.0	7,500.0	7,508.1	7,495.6	89.8	14.0	-83.50	-2,435.3	1,414.9	2,364.9	2,316.4	48.48	48.783		
12,800.0	7,500.0	7,507.4	7,494.9	91.5	14.0	-83.22	-2,435.3	1,414.9	2,464.8	2,416.3	48.48	50.838		
12,900.0	7,500.0	7,506.7	7,494.2	93.2	14.0	-82.93	-2,435.3	1,414.9	2,564.6	2,516.1	48.49	52.885		
13,000.0	7,500.0	7,506.0	7,493.5	94.9	14.0	-82.65	-2,435.3	1,414.9	2,664.5	2,616.0	48.51	54.926		
13,100.0	7,500.0	7,505.3	7,492.8	96.5	14.0	-82.36	-2,435.3	1,414.9	2,764.3	2,715.8	48.53	56.959		
13,200.0	7,500.0	7,504.6	7,492.1	98.2	14.0	-82.07	-2,435.3	1,414.9	2,864.2	2,815.7	48.56	58.984		
13,300.0	7,500.0	7,503.9	7,491.4	99.9	14.0	-81.78	-2,435.3	1,414.9	2,964.1	2,915.5	48.59	61.003		
13,400.0	7,500.0	7,503.2	7,490.7	101.6	14.0	-81.49	-2,435.3	1,414.9	3,064.0	3,015.4	48.62	63.015		
13,500.0	7,500.0	7,502.5	7,490.0	103.3	14.0	-81.20	-2,435.3	1,414.9	3,163.9	3,115.3	48.66	65.019		
13,600.0	7,500.0	7,501.8	7,489.3	105.0	14.0	-80.91	-2,435.3	1,414.9	3,263.8	3,215.1	48.70	67.016		
13,700.0	7,500.0	7,501.1	7,488.6	106.7	14.0	-80.61	-2,435.3	1,414.9	3,363.7	3,315.0	48.75	69.005		
13,800.0	7,500.0	7,500.4	7,487.9	108.4	14.0	-80.32	-2,435.3	1,414.9	3,463.7	3,414.9	48.79	70.988		
13,900.0	7,500.0	7,499.7	7,487.1	110.1	14.0	-80.02	-2,435.3	1,414.9	3,563.6	3,514.7	48.84	72.963		
14,000.0	7,500.0	7,498.9	7,486.4	111.8	14.0	-79.73	-2,435.3	1,414.9	3,663.5	3,614.6	48.89	74.931		

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 2F-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 2F-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		
14,100.0	7,500.0	7,498.2	7,485.7	113.5	14.0	-79.43	-2,435.3	1,414.9	3,763.4	3,714.5	48.94	76.892		
14,200.0	7,500.0	7,497.5	7,485.0	115.2	14.0	-79.13	-2,435.3	1,414.9	3,863.4	3,814.4	49.00	78.846		
14,300.0	7,500.0	7,496.7	7,484.2	116.9	14.0	-78.83	-2,435.3	1,414.9	3,963.3	3,914.3	49.06	80.793		
14,400.0	7,500.0	7,496.0	7,483.5	118.6	14.0	-78.53	-2,435.3	1,414.8	4,063.3	4,014.1	49.11	82.733		
14,500.0	7,500.0	7,495.3	7,482.7	120.4	14.0	-78.23	-2,435.4	1,414.8	4,163.2	4,114.0	49.17	84.665		
14,600.0	7,500.0	7,494.5	7,482.0	122.1	14.0	-77.93	-2,435.4	1,414.8	4,263.1	4,213.9	49.23	86.591		
14,700.0	7,500.0	7,493.8	7,481.2	123.8	14.0	-77.62	-2,435.4	1,414.8	4,363.1	4,313.8	49.30	88.509		
14,800.0	7,500.0	7,493.0	7,480.5	125.5	14.0	-77.32	-2,435.4	1,414.8	4,463.0	4,413.7	49.36	90.421		
14,900.0	7,500.0	7,492.2	7,479.7	127.2	14.0	-77.01	-2,435.4	1,414.8	4,563.0	4,513.6	49.42	92.325		
15,000.0	7,500.0	7,491.5	7,479.0	128.9	14.0	-76.71	-2,435.4	1,414.8	4,662.9	4,613.5	49.49	94.223		
15,100.0	7,500.0	7,490.7	7,478.2	130.6	13.9	-76.40	-2,435.4	1,414.8	4,762.9	4,713.4	49.56	96.113		
15,200.0	7,500.0	7,489.9	7,477.4	132.4	13.9	-76.09	-2,435.4	1,414.8	4,862.9	4,813.2	49.62	97.997		
15,300.0	7,500.0	7,489.2	7,476.6	134.1	13.9	-75.78	-2,435.4	1,414.8	4,962.8	4,913.1	49.69	99.874		
15,400.0	7,500.0	7,488.4	7,475.9	135.8	13.9	-75.47	-2,435.4	1,414.8	5,062.8	5,013.0	49.76	101.744		
15,500.0	7,500.0	7,487.6	7,475.1	137.5	13.9	-75.16	-2,435.4	1,414.8	5,162.7	5,112.9	49.83	103.608		
15,600.0	7,500.0	7,487.0	7,474.5	139.2	13.9	-74.93	-2,435.4	1,414.8	5,262.7	5,212.8	49.90	105.463		
15,700.0	7,500.0	7,486.1	7,473.6	141.0	13.9	-74.59	-2,435.4	1,414.8	5,362.7	5,312.7	49.97	107.313		
15,800.0	7,500.0	7,485.4	7,472.9	142.7	13.9	-74.32	-2,435.4	1,414.8	5,462.6	5,412.6	50.04	109.156		
15,841.7	7,500.0	7,485.2	7,472.6	143.4	13.9	-74.21	-2,435.4	1,414.8	5,504.3	5,454.2	50.07	109.922		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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			
0.0	0.0	0.0	0.0	0.0	0.0	153.25	-2,304.8	1,161.6	2,580.9					
100.0	100.0	95.0	95.0	0.2	0.2	153.25	-2,304.8	1,161.6	2,580.9	2,580.6	0.32	8,120.032		
200.0	200.0	195.0	195.0	0.3	0.3	153.25	-2,304.8	1,161.6	2,580.9	2,580.3	0.67	3,869.982		
300.0	300.0	295.0	295.0	0.5	0.5	153.25	-2,304.8	1,161.6	2,580.9	2,579.9	1.02	2,540.353		
400.0	400.0	395.0	395.0	0.7	0.7	86.90	-2,304.8	1,161.6	2,580.9	2,579.5	1.37	1,889.771		
500.0	500.0	495.0	495.0	0.9	0.9	86.96	-2,304.8	1,161.6	2,580.7	2,579.0	1.72	1,501.379		
600.0	599.9	594.9	594.9	1.0	1.0	87.06	-2,304.8	1,161.6	2,580.5	2,578.4	2.08	1,241.189		
700.0	699.7	694.7	694.7	1.2	1.2	87.20	-2,304.8	1,161.6	2,580.2	2,577.8	2.45	1,053.274		
800.0	799.4	794.4	794.4	1.4	1.4	87.38	-2,304.8	1,161.6	2,579.8	2,577.0	2.83	910.262		
900.0	898.9	893.9	893.9	1.7	1.6	87.59	-2,304.8	1,161.6	2,579.4	2,576.2	3.24	797.223		
1,000.0	998.3	993.3	993.3	1.9	1.7	87.85	-2,304.8	1,161.6	2,579.0	2,575.3	3.66	705.336		
1,100.0	1,097.4	1,092.4	1,092.4	2.2	1.9	88.14	-2,304.8	1,161.6	2,578.5	2,574.4	4.10	629.053		
1,200.0	1,196.3	1,191.3	1,191.3	2.5	2.1	88.47	-2,304.8	1,161.6	2,578.1	2,573.5	4.57	564.700		
1,300.0	1,294.9	1,289.9	1,289.9	2.8	2.3	88.83	-2,304.8	1,161.6	2,577.7	2,572.6	5.06	509.729		
1,400.0	1,393.3	1,388.3	1,388.3	3.2	2.4	89.24	-2,304.8	1,161.6	2,577.4	2,571.8	5.57	462.308		
1,494.4	1,485.8	1,480.8	1,480.8	3.5	2.6	89.65	-2,304.8	1,161.6	2,577.2	2,571.1	6.09	423.274		
1,500.0	1,491.2	1,486.2	1,486.2	3.5	2.6	89.67	-2,304.8	1,161.6	2,577.2	2,571.0	6.12	421.156		
1,572.9	1,562.5	1,557.5	1,557.5	3.8	2.7	90.00	-2,304.8	1,161.6	2,577.1	2,570.6	6.52	395.235		
1,600.0	1,589.1	1,584.1	1,584.1	3.9	2.8	90.12	-2,304.8	1,161.6	2,577.1	2,570.5	6.67	386.378		
1,700.0	1,686.9	1,681.9	1,681.9	4.3	2.9	90.57	-2,304.8	1,161.6	2,577.3	2,570.0	7.23	356.689		
1,800.0	1,784.8	1,779.8	1,779.8	4.7	3.1	91.02	-2,304.8	1,161.6	2,577.5	2,569.8	7.78	331.111		
1,900.0	1,882.6	1,877.6	1,877.6	5.1	3.3	91.47	-2,304.8	1,161.6	2,578.0	2,569.7	8.35	308.883		
2,000.0	1,980.4	1,975.4	1,975.4	5.5	3.4	91.92	-2,304.8	1,161.6	2,578.6	2,569.7	8.91	289.414		
2,100.0	2,078.3	2,073.3	2,073.3	5.9	3.6	92.37	-2,304.8	1,161.6	2,579.4	2,570.0	9.47	272.239		
2,200.0	2,176.1	2,171.1	2,171.1	6.3	3.8	92.82	-2,304.8	1,161.6	2,580.4	2,570.3	10.04	256.988		
2,300.0	2,273.9	2,268.9	2,268.9	6.7	4.0	93.27	-2,304.8	1,161.6	2,581.5	2,570.9	10.61	243.364		
2,400.0	2,371.8	2,366.8	2,366.8	7.1	4.1	93.72	-2,304.8	1,161.6	2,582.8	2,571.6	11.17	231.129		
2,500.0	2,469.6	2,464.6	2,464.6	7.5	4.3	94.17	-2,304.8	1,161.6	2,584.3	2,572.5	11.74	220.086		
2,600.0	2,567.4	2,562.4	2,562.4	7.9	4.5	94.61	-2,304.8	1,161.6	2,585.9	2,573.6	12.31	210.074		
2,700.0	2,665.3	2,660.3	2,660.3	8.3	4.6	95.06	-2,304.8	1,161.6	2,587.7	2,574.8	12.88	200.960		
2,800.0	2,763.1	2,758.1	2,758.1	8.7	4.8	95.51	-2,304.8	1,161.6	2,589.6	2,576.2	13.44	192.631		
2,900.0	2,860.9	2,855.9	2,855.9	9.1	5.0	95.95	-2,304.8	1,161.6	2,591.7	2,577.7	14.01	184.994		
3,000.0	2,958.8	2,953.8	2,953.8	9.5	5.2	96.40	-2,304.8	1,161.6	2,594.0	2,579.4	14.58	177.968		
3,100.0	3,056.6	3,051.6	3,051.6	9.9	5.3	96.84	-2,304.8	1,161.6	2,596.4	2,581.3	15.14	171.485		
3,200.0	3,154.4	3,149.4	3,149.4	10.3	5.5	97.29	-2,304.8	1,161.6	2,599.0	2,583.3	15.71	165.488		
3,300.0	3,252.3	3,247.3	3,247.3	10.7	5.7	97.73	-2,304.8	1,161.6	2,601.8	2,585.5	16.27	159.924		
3,400.0	3,350.1	3,345.1	3,345.1	11.1	5.8	98.17	-2,304.8	1,161.6	2,604.7	2,587.9	16.83	154.752		
3,500.0	3,447.9	3,442.9	3,442.9	11.5	6.0	98.61	-2,304.8	1,161.6	2,607.8	2,590.4	17.39	149.932		
3,600.0	3,545.8	3,540.8	3,540.8	11.9	6.2	99.05	-2,304.8	1,161.6	2,611.0	2,593.1	17.95	145.431		
3,700.0	3,643.6	3,638.6	3,638.6	12.3	6.4	99.49	-2,304.8	1,161.6	2,614.4	2,595.9	18.51	141.220		
3,800.0	3,741.5	3,736.5	3,736.5	12.7	6.5	99.93	-2,304.8	1,161.6	2,618.0	2,598.9	19.07	137.274		
3,900.0	3,839.3	3,834.3	3,834.3	13.1	6.7	100.36	-2,304.8	1,161.6	2,621.7	2,602.1	19.63	133.568		
4,000.0	3,937.1	3,932.1	3,932.1	13.5	6.9	100.80	-2,304.8	1,161.6	2,625.6	2,605.4	20.18	130.084		
4,100.0	4,035.0	4,030.0	4,030.0	13.9	7.0	101.23	-2,304.8	1,161.6	2,629.7	2,608.9	20.74	126.802		
4,200.0	4,132.8	4,127.8	4,127.8	14.3	7.2	101.66	-2,304.8	1,161.6	2,633.8	2,612.6	21.29	123.707		
4,300.0	4,230.6	4,225.6	4,225.6	14.7	7.4	102.09	-2,304.8	1,161.6	2,638.2	2,616.4	21.84	120.784		
4,400.0	4,328.5	4,323.5	4,323.5	15.1	7.5	102.52	-2,304.8	1,161.6	2,642.7	2,620.3	22.39	118.020		
4,500.0	4,426.3	4,421.3	4,421.3	15.5	7.7	102.95	-2,304.8	1,161.6	2,647.4	2,624.4	22.94	115.403		
4,600.0	4,524.1	4,519.1	4,519.1	15.9	7.9	103.38	-2,304.8	1,161.6	2,652.2	2,628.7	23.49	112.923		
4,700.0	4,622.0	4,617.0	4,617.0	16.3	8.1	103.80	-2,304.8	1,161.6	2,657.1	2,633.1	24.03	110.570		
4,800.0	4,719.8	4,714.8	4,714.8	16.7	8.2	104.23	-2,304.8	1,161.6	2,662.3	2,637.7	24.57	108.335		
4,900.0	4,817.6	4,812.6	4,812.6	17.2	8.4	104.65	-2,304.8	1,161.6	2,667.5	2,642.4	25.12	106.210		

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 2F-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 2F-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	
5,000.0	4,915.5	4,910.5	4,910.5	17.6	8.6	105.07	-2,304.8	1,161.6	2,672.9	2,647.3	25.65	104.188	
5,100.0	5,013.3	5,008.3	5,008.3	18.0	8.7	105.49	-2,304.8	1,161.6	2,678.5	2,652.3	26.19	102.262	
5,200.0	5,111.1	5,106.1	5,106.1	18.4	8.9	105.91	-2,304.8	1,161.6	2,684.2	2,657.5	26.73	100.426	
5,300.0	5,209.0	5,204.0	5,204.0	18.8	9.1	106.32	-2,304.8	1,161.6	2,690.1	2,662.8	27.26	98.675	
5,400.0	5,306.8	5,301.8	5,301.8	19.2	9.3	106.74	-2,304.8	1,161.6	2,696.1	2,668.3	27.79	97.003	
5,500.0	5,404.6	5,399.6	5,399.6	19.6	9.4	107.15	-2,304.8	1,161.6	2,702.2	2,673.9	28.32	95.405	
5,600.0	5,502.5	5,497.5	5,497.5	20.0	9.6	107.56	-2,304.8	1,161.6	2,708.5	2,679.7	28.85	93.878	
5,700.0	5,600.3	5,595.3	5,595.3	20.4	9.8	107.97	-2,304.8	1,161.6	2,715.0	2,685.6	29.38	92.416	
5,800.0	5,698.2	5,693.2	5,693.2	20.8	9.9	108.37	-2,304.8	1,161.6	2,721.6	2,691.7	29.90	91.018	
5,900.0	5,796.0	5,791.0	5,791.0	21.2	10.1	108.78	-2,304.8	1,161.6	2,728.3	2,697.9	30.42	89.678	
6,000.0	5,893.8	5,888.8	5,888.8	21.6	10.3	109.18	-2,304.8	1,161.6	2,735.1	2,704.2	30.94	88.393	
6,100.0	5,991.7	5,986.7	5,986.7	22.0	10.4	109.58	-2,304.8	1,161.6	2,742.1	2,710.7	31.46	87.162	
6,200.0	6,089.5	6,084.5	6,084.5	22.4	10.6	109.98	-2,304.8	1,161.6	2,749.3	2,717.3	31.98	85.980	
6,300.0	6,187.3	6,182.3	6,182.3	22.8	10.8	110.37	-2,304.8	1,161.6	2,756.6	2,724.1	32.49	84.846	
6,400.0	6,285.2	6,280.2	6,280.2	23.2	11.0	110.77	-2,304.8	1,161.6	2,764.0	2,731.0	33.00	83.756	
6,500.0	6,383.0	6,378.0	6,378.0	23.7	11.1	111.16	-2,304.8	1,161.6	2,771.5	2,738.0	33.51	82.709	
6,600.0	6,480.8	6,475.8	6,475.8	24.1	11.3	111.55	-2,304.8	1,161.6	2,779.2	2,745.2	34.02	81.703	
6,700.0	6,578.7	6,573.7	6,573.7	24.5	11.5	111.94	-2,304.8	1,161.6	2,787.0	2,752.5	34.52	80.735	
6,800.0	6,676.5	6,671.5	6,671.5	24.9	11.6	112.33	-2,304.8	1,161.6	2,795.0	2,759.9	35.02	79.804	
6,900.0	6,774.3	6,769.3	6,769.3	25.3	11.8	112.71	-2,304.8	1,161.6	2,803.0	2,767.5	35.52	78.907	
7,000.0	6,872.2	6,867.2	6,867.2	25.7	12.0	113.09	-2,304.8	1,161.6	2,811.2	2,775.2	36.02	78.044	
7,019.1	6,890.8	6,885.8	6,885.8	25.8	12.0	113.17	-2,304.8	1,161.6	2,812.8	2,776.7	36.12	77.883	
7,050.0	6,921.1	6,916.1	6,916.1	25.9	12.1	98.65	-2,304.8	1,161.6	2,814.6	2,778.3	36.27	77.601	
7,100.0	6,970.2	6,965.2	6,965.2	26.0	12.2	73.60	-2,304.8	1,161.6	2,813.9	2,777.4	36.52	77.054	
7,150.0	7,019.0	7,014.0	7,014.0	26.2	12.2	53.70	-2,304.8	1,161.6	2,808.9	2,772.1	36.77	76.398	
7,200.0	7,067.2	7,062.2	7,062.2	26.3	12.3	40.74	-2,304.8	1,161.6	2,799.6	2,762.5	37.01	75.640	
7,250.0	7,114.4	7,109.4	7,109.4	26.4	12.4	32.55	-2,304.8	1,161.6	2,786.0	2,748.8	37.25	74.784	
7,300.0	7,160.3	7,155.3	7,155.3	26.4	12.5	27.22	-2,304.8	1,161.6	2,768.4	2,730.9	37.49	73.839	
7,350.0	7,204.5	7,199.5	7,199.5	26.5	12.6	23.61	-2,304.8	1,161.6	2,746.8	2,709.1	37.73	72.809	
7,400.0	7,246.6	7,241.6	7,241.6	26.5	12.6	21.12	-2,304.8	1,161.6	2,721.4	2,683.5	37.95	71.703	
7,450.0	7,286.4	7,281.4	7,281.4	26.5	12.7	19.37	-2,304.8	1,161.6	2,692.4	2,654.2	38.17	70.529	
7,500.0	7,323.5	7,318.5	7,318.5	26.5	12.8	18.18	-2,304.8	1,161.6	2,659.9	2,621.5	38.39	69.294	
7,550.0	7,357.7	7,352.7	7,352.7	26.5	12.8	17.42	-2,304.8	1,161.6	2,624.3	2,585.7	38.59	68.007	
7,600.0	7,388.7	7,383.7	7,383.7	26.5	12.9	17.05	-2,304.8	1,161.6	2,585.8	2,547.0	38.78	66.677	
7,650.0	7,416.3	7,411.3	7,411.3	26.5	12.9	17.04	-2,304.8	1,161.6	2,544.7	2,505.7	38.96	65.312	
7,700.0	7,440.2	7,435.2	7,435.2	26.5	13.0	17.45	-2,304.8	1,161.6	2,501.2	2,462.1	39.13	63.920	
7,750.0	7,460.3	7,455.3	7,455.3	26.5	13.0	18.43	-2,304.8	1,161.6	2,455.8	2,416.6	39.29	62.512	
7,800.0	7,476.4	7,471.4	7,471.4	26.5	13.0	20.31	-2,304.8	1,161.6	2,408.8	2,369.4	39.43	61.095	
7,850.0	7,488.4	7,483.4	7,483.4	26.6	13.1	23.99	-2,304.8	1,161.6	2,360.5	2,321.0	39.55	59.680	
7,900.0	7,496.2	7,491.2	7,491.2	26.6	13.1	32.61	-2,304.8	1,161.6	2,311.3	2,271.7	39.66	58.274	
7,950.0	7,499.8	7,494.8	7,494.8	26.7	13.1	63.62	-2,304.8	1,161.6	2,261.6	2,221.8	39.76	56.886	
7,966.7	7,500.0	7,495.0	7,495.0	26.7	13.1	90.00	-2,304.8	1,161.6	2,244.9	2,205.1	39.78	56.428	
8,000.0	7,500.0	7,495.0	7,495.0	26.8	13.1	90.00	-2,304.8	1,161.6	2,211.6	2,171.8	39.84	55.512	
8,100.0	7,500.0	7,495.0	7,495.0	27.0	13.1	90.00	-2,304.8	1,161.6	2,111.8	2,071.8	40.01	52.776	
8,200.0	7,500.0	7,495.0	7,495.0	27.4	13.1	90.00	-2,304.8	1,161.6	2,012.0	1,971.8	40.20	50.054	
8,300.0	7,500.0	7,495.0	7,495.0	27.9	13.1	90.00	-2,304.8	1,161.6	1,912.1	1,871.7	40.39	47.346	
8,400.0	7,500.0	7,495.0	7,495.0	28.5	13.1	90.00	-2,304.8	1,161.6	1,812.3	1,771.7	40.59	44.653	
8,500.0	7,500.0	7,495.0	7,495.0	29.1	13.1	90.00	-2,304.8	1,161.6	1,712.6	1,671.8	40.80	41.974	
8,600.0	7,500.0	7,495.0	7,495.0	29.9	13.1	90.00	-2,304.8	1,161.6	1,612.8	1,571.8	41.03	39.310	
8,700.0	7,500.0	7,495.0	7,495.0	30.8	13.1	90.00	-2,304.8	1,161.6	1,513.1	1,471.8	41.27	36.661	
8,800.0	7,500.0	7,495.0	7,495.0	31.7	13.1	90.00	-2,304.8	1,161.6	1,413.4	1,371.9	41.54	34.026	
8,900.0	7,500.0	7,495.0	7,495.0	32.7	13.1	90.00	-2,304.8	1,161.6	1,313.8	1,272.0	41.83	31.407	

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 2F-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 2F-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		
9,000.0	7,500.0	7,495.0	7,495.0	33.7	13.1	90.00	-2,304.8	1,161.6	1,214.2	1,172.1	42.15	28.804		
9,100.0	7,500.0	7,495.0	7,495.0	34.8	13.1	90.00	-2,304.8	1,161.6	1,114.7	1,072.2	42.52	26.218		
9,200.0	7,500.0	7,495.0	7,495.0	36.0	13.1	90.00	-2,304.8	1,161.6	1,015.3	972.4	42.93	23.649		
9,300.0	7,500.0	7,495.0	7,495.0	37.2	13.1	90.00	-2,304.8	1,161.6	916.1	872.7	43.42	21.099		
9,400.0	7,500.0	7,495.0	7,495.0	38.4	13.1	90.00	-2,304.8	1,161.6	817.0	773.0	44.00	18.570		
9,500.0	7,500.0	7,495.0	7,495.0	39.7	13.1	90.00	-2,304.8	1,161.6	718.2	673.5	44.71	16.065		
9,600.0	7,500.0	7,495.0	7,495.0	41.1	13.1	90.00	-2,304.8	1,161.6	619.8	574.2	45.60	13.591		
9,700.0	7,500.0	7,495.0	7,495.0	42.4	13.1	90.00	-2,304.8	1,161.6	521.9	475.1	46.79	11.156		
9,800.0	7,500.0	7,495.0	7,495.0	43.8	13.1	90.00	-2,304.8	1,161.6	425.1	376.7	48.43	8.777		
9,900.0	7,500.0	7,495.0	7,495.0	45.2	13.1	90.00	-2,304.8	1,161.6	330.2	279.3	50.87	6.491		
10,000.0	7,500.0	7,495.0	7,495.0	46.6	13.1	90.00	-2,304.8	1,161.6	239.4	184.7	54.69	4.377		
10,100.0	7,500.0	7,495.0	7,495.0	48.1	13.1	90.00	-2,304.8	1,161.6	160.0	99.8	60.20	2.658		
10,200.0	7,500.0	7,495.0	7,495.0	49.6	13.1	90.00	-2,304.8	1,161.6	117.9	59.2	58.65	2.010 ES, SF		
10,208.5	7,500.0	7,495.0	7,495.0	49.7	13.1	90.00	-2,304.8	1,161.6	117.6	60.2	57.40	2.048 CC		
10,300.0	7,500.0	7,495.0	7,495.0	51.1	13.1	90.00	-2,304.8	1,161.6	149.0	109.4	39.57	3.765		
10,400.0	7,500.0	7,495.0	7,495.0	52.6	13.1	90.00	-2,304.8	1,161.6	224.7	193.1	31.59	7.112		
10,500.0	7,500.0	7,495.0	7,495.0	54.1	13.1	90.00	-2,304.8	1,161.6	314.3	282.6	31.73	9.905		
10,600.0	7,500.0	7,495.0	7,495.0	55.6	13.1	90.00	-2,304.8	1,161.6	408.8	375.6	33.12	12.343		
10,700.0	7,500.0	7,495.0	7,495.0	57.2	13.1	90.00	-2,304.8	1,161.6	505.4	471.0	34.37	14.702		
10,800.0	7,500.0	7,495.0	7,495.0	58.8	13.1	90.00	-2,304.8	1,161.6	603.1	567.7	35.38	17.047		
10,900.0	7,500.0	7,495.0	7,495.0	60.3	13.1	90.00	-2,304.8	1,161.6	701.4	665.2	36.18	19.389		
11,000.0	7,500.0	7,495.0	7,495.0	61.9	13.1	90.00	-2,304.8	1,161.6	800.2	763.3	36.83	21.728		
11,100.0	7,500.0	7,495.0	7,495.0	63.5	13.1	90.00	-2,304.8	1,161.6	899.2	861.8	37.37	24.064		
11,200.0	7,500.0	7,495.0	7,495.0	65.1	13.1	90.00	-2,304.8	1,161.6	998.4	960.6	37.83	26.394		
11,300.0	7,500.0	7,495.0	7,495.0	66.7	13.1	90.00	-2,304.8	1,161.6	1,097.8	1,059.6	38.23	28.719		
11,400.0	7,500.0	7,495.0	7,495.0	68.3	13.1	90.00	-2,304.8	1,161.6	1,197.3	1,158.7	38.58	31.036		
11,500.0	7,500.0	7,495.0	7,495.0	70.0	13.1	90.00	-2,304.8	1,161.6	1,296.8	1,257.9	38.89	33.345		
11,600.0	7,500.0	7,495.0	7,495.0	71.6	13.1	90.00	-2,304.8	1,161.6	1,396.4	1,357.3	39.18	35.646		
11,700.0	7,500.0	7,495.0	7,495.0	73.2	13.1	90.00	-2,304.8	1,161.6	1,496.1	1,456.7	39.44	37.938		
11,800.0	7,500.0	7,495.0	7,495.0	74.9	13.1	90.00	-2,304.8	1,161.6	1,595.8	1,556.1	39.68	40.221		
11,900.0	7,500.0	7,495.0	7,495.0	76.5	13.1	90.00	-2,304.8	1,161.6	1,695.6	1,655.7	39.90	42.495		
12,000.0	7,500.0	7,495.0	7,495.0	78.2	13.1	90.00	-2,304.8	1,161.6	1,795.3	1,755.2	40.11	44.759		
12,100.0	7,500.0	7,495.0	7,495.0	79.8	13.1	90.00	-2,304.8	1,161.6	1,895.1	1,854.8	40.31	47.014		
12,200.0	7,500.0	7,495.0	7,495.0	81.5	13.1	90.00	-2,304.8	1,161.6	1,995.0	1,954.5	40.50	49.260		
12,300.0	7,500.0	7,495.0	7,495.0	83.1	13.1	90.00	-2,304.8	1,161.6	2,094.8	2,054.1	40.68	51.496		
12,400.0	7,500.0	7,495.0	7,495.0	84.8	13.1	90.00	-2,304.8	1,161.6	2,194.6	2,153.8	40.85	53.722		
12,500.0	7,500.0	7,495.0	7,495.0	86.5	13.1	90.00	-2,304.8	1,161.6	2,294.5	2,253.5	41.02	55.938		
12,600.0	7,500.0	7,495.0	7,495.0	88.1	13.1	90.00	-2,304.8	1,161.6	2,394.4	2,353.2	41.18	58.145		
12,700.0	7,500.0	7,495.0	7,495.0	89.8	13.1	90.00	-2,304.8	1,161.6	2,494.3	2,452.9	41.34	60.342		
12,800.0	7,500.0	7,495.0	7,495.0	91.5	13.1	90.00	-2,304.8	1,161.6	2,594.2	2,552.7	41.49	62.530		
12,900.0	7,500.0	7,495.0	7,495.0	93.2	13.1	90.00	-2,304.8	1,161.6	2,694.1	2,652.4	41.63	64.708		
13,000.0	7,500.0	7,495.0	7,495.0	94.9	13.1	90.00	-2,304.8	1,161.6	2,794.0	2,752.2	41.78	66.877		
13,100.0	7,500.0	7,495.0	7,495.0	96.5	13.1	90.00	-2,304.8	1,161.6	2,893.9	2,852.0	41.92	69.036		
13,200.0	7,500.0	7,495.0	7,495.0	98.2	13.1	90.00	-2,304.8	1,161.6	2,993.8	2,951.7	42.06	71.185		
13,300.0	7,500.0	7,495.0	7,495.0	99.9	13.1	90.00	-2,304.8	1,161.6	3,093.7	3,051.5	42.19	73.325		
13,400.0	7,500.0	7,495.0	7,495.0	101.6	13.1	90.00	-2,304.8	1,161.6	3,193.7	3,151.3	42.32	75.456		
13,500.0	7,500.0	7,495.0	7,495.0	103.3	13.1	90.00	-2,304.8	1,161.6	3,293.6	3,251.1	42.46	77.577		
13,600.0	7,500.0	7,495.0	7,495.0	105.0	13.1	90.00	-2,304.8	1,161.6	3,393.5	3,350.9	42.58	79.689		
13,700.0	7,500.0	7,495.0	7,495.0	106.7	13.1	90.00	-2,304.8	1,161.6	3,493.5	3,450.8	42.71	81.792		
13,800.0	7,500.0	7,495.0	7,495.0	108.4	13.1	90.00	-2,304.8	1,161.6	3,593.4	3,550.6	42.84	83.885		
13,900.0	7,500.0	7,495.0	7,495.0	110.1	13.1	90.00	-2,304.8	1,161.6	3,693.4	3,650.4	42.96	85.970		
14,000.0	7,500.0	7,495.0	7,495.0	111.8	13.1	90.00	-2,304.8	1,161.6	3,793.3	3,750.2	43.08	88.045		

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 2F-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 2F-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	
14,100.0	7,500.0	7,495.0	7,495.0	113.5	13.1	90.00	-2,304.8	1,161.6	3,893.3	3,850.1	43.21	90.111	
14,200.0	7,500.0	7,495.0	7,495.0	115.2	13.1	90.00	-2,304.8	1,161.6	3,993.2	3,949.9	43.33	92.168	
14,300.0	7,500.0	7,495.0	7,495.0	116.9	13.1	90.00	-2,304.8	1,161.6	4,093.2	4,049.7	43.44	94.216	
14,400.0	7,500.0	7,495.0	7,495.0	118.6	13.1	90.00	-2,304.8	1,161.6	4,193.1	4,149.6	43.56	96.255	
14,500.0	7,500.0	7,495.0	7,495.0	120.4	13.1	90.00	-2,304.8	1,161.6	4,293.1	4,249.4	43.68	98.285	
14,600.0	7,500.0	7,495.0	7,495.0	122.1	13.1	90.00	-2,304.8	1,161.6	4,393.1	4,349.3	43.80	100.307	
14,700.0	7,500.0	7,495.0	7,495.0	123.8	13.1	90.00	-2,304.8	1,161.6	4,493.0	4,449.1	43.91	102.319	
14,800.0	7,500.0	7,495.0	7,495.0	125.5	13.1	90.00	-2,304.8	1,161.6	4,593.0	4,549.0	44.03	104.323	
14,900.0	7,500.0	7,495.0	7,495.0	127.2	13.1	90.00	-2,304.8	1,161.6	4,693.0	4,648.8	44.14	106.318	
15,000.0	7,500.0	7,495.0	7,495.0	128.9	13.1	90.00	-2,304.8	1,161.6	4,792.9	4,748.7	44.25	108.305	
15,100.0	7,500.0	7,495.0	7,495.0	130.6	13.1	90.00	-2,304.8	1,161.6	4,892.9	4,848.5	44.37	110.283	
15,200.0	7,500.0	7,495.0	7,495.0	132.4	13.1	90.00	-2,304.8	1,161.6	4,992.9	4,948.4	44.48	112.253	
15,300.0	7,500.0	7,495.0	7,495.0	134.1	13.1	90.00	-2,304.8	1,161.6	5,092.8	5,048.3	44.59	114.214	
15,400.0	7,500.0	7,495.0	7,495.0	135.8	13.1	90.00	-2,304.8	1,161.6	5,192.8	5,148.1	44.70	116.166	
15,500.0	7,500.0	7,495.0	7,495.0	137.5	13.1	90.00	-2,304.8	1,161.6	5,292.8	5,248.0	44.81	118.111	
15,600.0	7,500.0	7,495.0	7,495.0	139.2	13.1	90.00	-2,304.8	1,161.6	5,392.8	5,347.8	44.92	120.047	
15,700.0	7,500.0	7,495.0	7,495.0	141.0	13.1	90.00	-2,304.8	1,161.6	5,492.7	5,447.7	45.03	121.974	
15,800.0	7,500.0	7,495.0	7,495.0	142.7	13.1	90.00	-2,304.8	1,161.6	5,592.7	5,547.6	45.14	123.894	
15,841.7	7,500.0	7,495.0	7,495.0	143.4	13.1	90.00	-2,304.8	1,161.6	5,634.4	5,589.2	45.19	124.691	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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			
0.0	0.0	11.7	11.7	0.0	0.0	153.52	-2,333.2	1,162.4	2,606.7					
100.0	100.0	118.2	118.2	0.2	0.2	153.52	-2,333.1	1,162.3	2,606.6	2,606.2	0.36	7,309.006		
200.0	200.0	224.7	224.7	0.3	0.4	153.53	-2,332.8	1,161.8	2,606.2	2,605.4	0.72	3,641.865		
300.0	300.0	331.1	331.1	0.5	0.6	153.54	-2,332.5	1,161.0	2,605.5	2,604.4	1.07	2,424.681		
400.0	400.0	437.6	437.6	0.7	0.8	87.22	-2,331.9	1,160.0	2,604.6	2,603.1	1.43	1,816.059		
500.0	500.0	543.9	543.9	0.9	1.0	87.31	-2,331.2	1,158.6	2,603.3	2,601.5	1.80	1,448.525		
600.0	599.9	650.2	650.2	1.0	1.1	87.45	-2,330.4	1,156.9	2,601.7	2,599.6	2.17	1,200.546		
700.0	699.7	756.3	756.3	1.2	1.3	87.64	-2,329.4	1,155.0	2,599.8	2,597.3	2.55	1,020.575		
800.0	799.4	853.9	853.8	1.4	1.5	87.86	-2,328.4	1,153.0	2,597.7	2,594.7	2.93	887.323		
900.0	898.9	908.4	908.3	1.7	1.6	88.00	-2,328.2	1,152.3	2,596.5	2,593.2	3.25	798.761		
931.9	930.6	932.0	931.9	1.8	1.6	88.06	-2,328.3	1,152.3	2,596.4	2,593.1	3.37	770.379		
1,000.0	998.3	984.3	984.2	1.9	1.7	88.20	-2,328.8	1,151.9	2,596.6	2,593.0	3.63	714.827		
1,100.0	1,097.4	1,060.0	1,059.9	2.2	1.9	88.45	-2,330.9	1,150.6	2,597.9	2,593.8	4.04	643.144		
1,200.0	1,196.3	1,111.2	1,111.0	2.5	2.0	88.64	-2,333.2	1,149.3	2,600.5	2,596.0	4.43	586.866		
1,300.0	1,294.9	1,176.5	1,176.1	2.8	2.1	88.92	-2,337.3	1,147.2	2,604.6	2,599.7	4.87	534.696		
1,400.0	1,393.3	1,254.7	1,254.1	3.2	2.2	89.29	-2,343.3	1,144.2	2,609.8	2,604.4	5.37	485.894		
1,494.4	1,485.8	1,360.4	1,359.4	3.5	2.4	89.86	-2,351.2	1,139.7	2,614.6	2,608.7	5.94	440.531		
1,500.0	1,491.2	1,364.8	1,363.7	3.5	2.4	89.89	-2,351.6	1,139.5	2,614.9	2,609.0	5.96	438.378		
1,600.0	1,589.1	1,455.6	1,454.1	3.9	2.6	90.44	-2,358.9	1,135.2	2,620.7	2,614.1	6.53	401.421		
1,700.0	1,686.9	1,546.1	1,544.2	4.3	2.8	90.99	-2,366.1	1,131.0	2,626.7	2,619.6	7.10	370.156		
1,800.0	1,784.8	1,623.6	1,621.4	4.7	3.0	91.47	-2,372.7	1,127.4	2,633.5	2,625.9	7.64	344.530		
1,900.0	1,882.6	1,696.5	1,693.9	5.1	3.2	91.93	-2,379.7	1,123.4	2,641.4	2,633.2	8.19	322.690		
2,000.0	1,980.4	1,770.4	1,767.2	5.5	3.3	92.40	-2,387.5	1,119.3	2,650.4	2,641.6	8.73	303.502		
2,100.0	2,078.3	1,857.0	1,853.1	5.9	3.6	92.97	-2,397.4	1,113.7	2,660.1	2,650.8	9.32	285.416		
2,200.0	2,176.1	1,923.8	1,919.2	6.3	3.8	93.42	-2,405.6	1,108.8	2,670.9	2,661.0	9.86	270.870		
2,300.0	2,273.9	1,996.9	1,991.4	6.7	4.0	93.92	-2,415.6	1,103.3	2,683.0	2,672.6	10.42	257.478		
2,400.0	2,371.8	2,072.1	2,065.5	7.1	4.2	94.45	-2,426.5	1,097.1	2,696.1	2,685.1	10.99	245.334		
2,500.0	2,469.6	2,143.0	2,135.3	7.5	4.4	94.96	-2,437.6	1,090.8	2,710.5	2,698.9	11.55	234.716		
2,600.0	2,567.4	2,248.6	2,239.2	7.9	4.7	95.71	-2,454.2	1,081.7	2,725.4	2,713.2	12.20	223.377		
2,700.0	2,665.3	2,352.3	2,341.3	8.3	5.1	96.42	-2,469.9	1,073.0	2,740.2	2,727.4	12.85	213.302		
2,800.0	2,763.1	2,453.6	2,441.1	8.7	5.4	97.12	-2,485.0	1,064.0	2,755.1	2,741.6	13.49	204.270		
2,900.0	2,860.9	2,548.1	2,534.1	9.1	5.7	97.78	-2,499.0	1,055.1	2,770.2	2,756.1	14.11	196.297		
3,000.0	2,958.8	2,637.9	2,622.4	9.5	6.0	98.41	-2,512.6	1,045.9	2,785.7	2,771.0	14.72	189.278		
3,100.0	3,056.6	2,721.1	2,704.3	9.9	6.3	98.98	-2,525.1	1,038.1	2,801.8	2,786.5	15.29	183.218		
3,200.0	3,154.4	2,810.5	2,792.2	10.3	6.6	99.57	-2,538.9	1,030.4	2,818.7	2,802.8	15.88	177.519		
3,300.0	3,252.3	2,915.8	2,896.0	10.7	6.9	100.25	-2,554.7	1,021.5	2,835.5	2,819.0	16.51	171.774		
3,400.0	3,350.1	3,012.0	2,990.7	11.1	7.3	100.87	-2,569.0	1,013.4	2,852.7	2,835.6	17.11	166.770		
3,500.0	3,447.9	3,107.2	3,084.5	11.5	7.6	101.48	-2,583.0	1,005.0	2,869.9	2,852.2	17.70	162.167		
3,600.0	3,545.8	3,204.7	3,180.6	11.9	7.9	102.09	-2,597.5	996.6	2,887.7	2,869.4	18.29	157.882		
3,700.0	3,643.6	3,314.4	3,288.8	12.3	8.3	102.77	-2,613.0	987.2	2,905.1	2,886.2	18.91	153.628		
3,800.0	3,741.5	3,396.8	3,370.1	12.7	8.5	103.26	-2,624.6	980.6	2,922.8	2,903.4	19.45	150.297		
3,900.0	3,839.3	3,472.4	3,444.6	13.1	8.8	103.73	-2,635.8	974.0	2,941.4	2,921.5	19.96	147.332		
4,000.0	3,937.1	3,548.3	3,519.2	13.5	9.1	104.20	-2,647.6	966.8	2,960.9	2,940.4	20.48	144.573		
4,100.0	4,035.0	3,672.3	3,641.2	13.9	9.5	104.95	-2,666.4	955.4	2,980.4	2,959.3	21.13	141.034		
4,200.0	4,132.8	3,781.1	3,748.5	14.3	9.8	105.59	-2,682.0	945.8	2,999.5	2,977.8	21.73	138.058		
4,300.0	4,230.6	3,885.0	3,851.0	14.7	10.2	106.18	-2,696.4	937.5	3,018.6	2,996.3	22.30	135.340		
4,400.0	4,328.5	3,974.9	3,939.7	15.1	10.5	106.70	-2,708.8	929.4	3,037.7	3,014.9	22.84	133.012		
4,500.0	4,426.3	4,054.8	4,018.5	15.5	10.8	107.16	-2,720.1	922.2	3,057.4	3,034.1	23.34	130.985		
4,600.0	4,524.1	4,130.4	4,092.9	15.9	11.0	107.60	-2,731.2	914.6	3,078.0	3,054.1	23.83	129.157		
4,700.0	4,622.0	4,209.8	4,171.0	16.3	11.3	108.06	-2,743.4	906.8	3,099.3	3,075.0	24.32	127.436		
4,800.0	4,719.8	4,328.8	4,288.0	16.7	11.7	108.72	-2,761.5	895.7	3,121.0	3,096.0	24.93	125.201		
4,900.0	4,817.6	4,465.0	4,422.4	17.2	12.2	109.47	-2,779.7	883.4	3,140.8	3,115.2	25.57	122.811		

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 2F-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 2F-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	
5,000.0	4,915.5	4,534.2	4,490.7	17.6	12.4	109.84	-2,789.0	877.0	3,161.3	3,135.3	26.02	121.490	
5,100.0	5,013.3	4,646.6	4,601.6	18.0	12.8	110.44	-2,804.5	866.9	3,182.3	3,155.7	26.59	119.691	
5,200.0	5,111.1	4,707.0	4,661.2	18.4	13.0	110.75	-2,812.9	861.5	3,203.7	3,176.7	27.00	118.662	
5,300.0	5,209.0	4,783.0	4,735.9	18.8	13.3	111.15	-2,824.4	854.3	3,226.4	3,199.0	27.45	117.520	
5,400.0	5,306.8	4,932.9	4,883.7	19.2	13.8	111.93	-2,845.6	840.3	3,248.5	3,220.4	28.12	115.518	
5,500.0	5,404.6	5,026.4	4,976.0	19.6	14.1	112.40	-2,858.0	831.8	3,270.0	3,241.4	28.62	114.263	
5,600.0	5,502.5	5,120.4	5,068.7	20.0	14.4	112.87	-2,870.5	823.1	3,291.7	3,262.6	29.11	113.089	
5,700.0	5,600.3	5,209.6	5,156.8	20.4	14.7	113.30	-2,882.4	815.7	3,313.7	3,284.1	29.57	112.050	
5,800.0	5,698.2	5,326.8	5,272.6	20.8	15.0	113.84	-2,898.0	807.0	3,335.9	3,305.8	30.12	110.772	
5,900.0	5,796.0	5,441.2	5,385.7	21.2	15.4	114.37	-2,912.2	797.8	3,357.3	3,326.7	30.65	109.526	
6,000.0	5,893.8	5,511.1	5,454.9	21.6	15.6	114.70	-2,920.9	791.7	3,379.1	3,348.0	31.06	108.797	
6,100.0	5,991.7	5,587.3	5,530.1	22.0	15.9	115.05	-2,930.9	785.2	3,401.7	3,370.3	31.48	108.056	
6,200.0	6,089.5	5,690.9	5,632.3	22.4	16.2	115.52	-2,944.7	776.0	3,424.8	3,392.8	31.98	107.103	
6,300.0	6,187.3	5,854.3	5,794.0	22.8	16.7	116.25	-2,964.6	762.6	3,446.9	3,414.3	32.63	105.634	
6,400.0	6,285.2	5,931.8	5,870.8	23.2	16.9	116.58	-2,973.4	756.4	3,468.3	3,435.2	33.04	104.957	
6,500.0	6,383.0	6,041.3	5,979.2	23.7	17.2	117.04	-2,986.1	748.2	3,490.1	3,456.6	33.54	104.072	
6,600.0	6,480.8	6,508.6	6,444.8	24.1	18.1	118.71	-3,015.3	730.4	3,506.6	3,471.9	34.73	100.955	
6,700.0	6,578.7	6,666.2	6,602.5	24.5	18.3	119.19	-3,016.0	729.7	3,517.2	3,482.0	35.26	99.763	
6,800.0	6,676.5	6,773.4	6,709.6	24.9	18.4	119.51	-3,015.4	729.5	3,527.0	3,491.3	35.71	98.780	
6,900.0	6,774.3	6,884.0	6,820.3	25.3	18.5	119.84	-3,014.5	729.3	3,536.7	3,500.5	36.16	97.807	
7,000.0	6,872.2	6,985.6	6,921.9	25.7	18.6	120.14	-3,013.4	728.9	3,546.1	3,509.5	36.60	96.882	
7,019.1	6,890.8	7,003.8	6,940.1	25.8	18.7	120.20	-3,013.2	728.8	3,547.9	3,511.2	36.68	96.713	
7,050.0	6,921.1	7,032.8	6,969.0	25.9	18.7	105.62	-3,012.8	728.7	3,550.0	3,513.2	36.82	96.412	
7,100.0	6,970.2	7,079.3	7,015.6	26.0	18.7	80.53	-3,012.3	728.4	3,550.0	3,512.9	37.05	95.822	
7,150.0	7,019.0	7,125.5	7,061.8	26.2	18.8	60.65	-3,011.9	728.1	3,545.7	3,508.4	37.28	95.114	
7,200.0	7,067.2	7,166.5	7,102.7	26.3	18.8	47.75	-3,011.5	727.8	3,537.2	3,499.7	37.51	94.307	
7,250.0	7,114.4	7,205.2	7,141.4	26.4	18.9	39.67	-3,011.2	727.5	3,524.6	3,486.9	37.74	93.401	
7,300.0	7,160.3	7,247.7	7,184.0	26.4	18.9	34.54	-3,011.0	727.0	3,508.1	3,470.1	37.98	92.376	
7,350.0	7,204.5	7,299.1	7,235.3	26.5	19.0	31.28	-3,010.6	726.2	3,487.5	3,449.3	38.23	91.217	
7,400.0	7,246.6	7,341.9	7,278.1	26.5	19.1	29.18	-3,010.3	725.5	3,463.1	3,424.6	38.48	90.001	
7,450.0	7,286.4	7,375.4	7,311.7	26.5	19.1	27.91	-3,010.0	724.9	3,435.1	3,396.4	38.71	88.736	
7,500.0	7,323.5	7,406.8	7,343.1	26.5	19.1	27.32	-3,009.8	724.4	3,403.7	3,364.8	38.94	87.404	
7,550.0	7,357.7	7,437.6	7,373.8	26.5	19.2	27.35	-3,009.7	723.9	3,369.3	3,330.1	39.17	86.010	
7,600.0	7,388.7	7,467.5	7,403.7	26.5	19.2	28.00	-3,009.6	723.5	3,331.9	3,292.5	39.40	84.562	
7,650.0	7,416.3	7,494.0	7,430.3	26.5	19.2	29.34	-3,009.5	723.1	3,291.9	3,252.3	39.63	83.077	
7,700.0	7,440.2	7,517.1	7,453.3	26.5	19.3	31.54	-3,009.4	722.8	3,249.6	3,209.8	39.84	81.564	
7,750.0	7,460.3	7,536.7	7,472.9	26.5	19.3	34.92	-3,009.4	722.5	3,205.3	3,165.3	40.05	80.035	
7,800.0	7,476.4	7,552.4	7,488.6	26.5	19.3	40.11	-3,009.3	722.3	3,159.4	3,119.1	40.25	78.498	
7,850.0	7,488.4	7,564.1	7,500.3	26.6	19.3	48.24	-3,009.3	722.2	3,112.1	3,071.6	40.44	76.963	
7,900.0	7,496.2	7,571.6	7,507.8	26.6	19.3	61.29	-3,009.3	722.1	3,063.8	3,023.2	40.61	75.440	
7,950.0	7,499.8	7,575.0	7,511.2	26.7	19.3	81.66	-3,009.3	722.1	3,014.9	2,974.2	40.78	73.937	
7,966.7	7,500.0	7,575.2	7,511.4	26.7	19.3	90.04	-3,009.3	722.1	2,998.6	2,957.7	40.83	73.440	
8,000.0	7,500.0	7,575.2	7,511.4	26.8	19.3	90.04	-3,009.3	722.1	2,965.8	2,924.9	40.94	72.449	
8,100.0	7,500.0	7,575.0	7,511.2	27.0	19.3	90.02	-3,009.3	722.1	2,867.7	2,826.4	41.27	69.491	
8,200.0	7,500.0	7,574.7	7,510.9	27.4	19.3	89.99	-3,009.3	722.1	2,769.6	2,728.0	41.61	66.557	
8,300.0	7,500.0	7,574.5	7,510.7	27.9	19.3	89.97	-3,009.3	722.1	2,671.8	2,629.8	41.98	63.649	
8,400.0	7,500.0	7,574.3	7,510.5	28.5	19.3	89.95	-3,009.3	722.1	2,574.0	2,531.7	42.36	60.766	
8,500.0	7,500.0	7,574.1	7,510.3	29.1	19.3	89.93	-3,009.3	722.1	2,476.5	2,433.7	42.77	57.909	
8,600.0	7,500.0	7,573.9	7,510.1	29.9	19.3	89.90	-3,009.3	722.1	2,379.2	2,336.0	43.20	55.078	
8,700.0	7,500.0	7,573.7	7,509.9	30.8	19.3	89.88	-3,009.3	722.1	2,282.1	2,238.4	43.66	52.275	
8,800.0	7,500.0	7,573.4	7,509.6	31.7	19.3	89.86	-3,009.3	722.1	2,185.2	2,141.1	44.15	49.500	
8,900.0	7,500.0	7,573.2	7,509.4	32.7	19.3	89.84	-3,009.3	722.1	2,088.7	2,044.0	44.67	46.755	

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 2F-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 2F-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		
9,000.0	7,500.0	7,573.0	7,509.2	33.7	19.3	89.81	-3,009.3	722.1	1,992.5	1,947.3	45.24	44.040		
9,100.0	7,500.0	7,572.8	7,509.0	34.8	19.3	89.79	-3,009.3	722.1	1,896.7	1,850.8	45.86	41.359		
9,200.0	7,500.0	7,572.6	7,508.8	36.0	19.3	89.77	-3,009.3	722.1	1,801.3	1,754.8	46.53	38.712		
9,300.0	7,500.0	7,572.3	7,508.5	37.2	19.3	89.75	-3,009.3	722.1	1,706.5	1,659.3	47.27	36.104		
9,400.0	7,500.0	7,572.1	7,508.3	38.4	19.3	89.72	-3,009.3	722.1	1,612.3	1,564.3	48.08	33.536		
9,500.0	7,500.0	7,571.9	7,508.1	39.7	19.3	89.70	-3,009.3	722.1	1,518.9	1,469.9	48.98	31.013		
9,600.0	7,500.0	7,571.7	7,507.9	41.1	19.3	89.68	-3,009.3	722.1	1,426.3	1,376.4	49.98	28.541		
9,700.0	7,500.0	7,571.4	7,507.7	42.4	19.3	89.65	-3,009.3	722.1	1,334.8	1,283.7	51.10	26.124		
9,800.0	7,500.0	7,571.2	7,507.4	43.8	19.3	89.63	-3,009.3	722.1	1,244.7	1,192.3	52.36	23.772		
9,900.0	7,500.0	7,571.0	7,507.2	45.2	19.3	89.61	-3,009.3	722.1	1,156.1	1,102.3	53.79	21.493		
10,000.0	7,500.0	7,570.8	7,507.0	46.6	19.3	89.59	-3,009.3	722.1	1,069.6	1,014.1	55.42	19.299		
10,100.0	7,500.0	7,570.5	7,506.7	48.1	19.3	89.56	-3,009.3	722.1	985.6	928.3	57.28	17.206		
10,200.0	7,500.0	7,570.3	7,506.5	49.6	19.3	89.54	-3,009.3	722.1	904.9	845.5	59.40	15.233		
10,300.0	7,500.0	7,570.1	7,506.3	51.1	19.3	89.52	-3,009.3	722.1	828.3	766.5	61.80	13.403		
10,400.0	7,500.0	7,569.9	7,506.1	52.6	19.3	89.49	-3,009.3	722.1	757.3	692.9	64.47	11.746		
10,500.0	7,500.0	7,569.6	7,505.8	54.1	19.3	89.47	-3,009.3	722.1	693.5	626.2	67.33	10.300		
10,600.0	7,500.0	7,569.4	7,505.6	55.6	19.3	89.44	-3,009.3	722.1	639.0	568.8	70.17	9.107		
10,700.0	7,500.0	7,569.2	7,505.4	57.2	19.3	89.42	-3,009.3	722.1	596.4	523.8	72.60	8.216		
10,800.0	7,500.0	7,568.9	7,505.1	58.8	19.3	89.40	-3,009.3	722.1	568.4	494.4	74.05	7.676		
10,900.0	7,500.0	7,568.7	7,504.9	60.3	19.3	89.37	-3,009.3	722.1	557.2	483.2	74.00	7.530 SF		
10,913.0	7,500.0	7,568.7	7,504.9	60.5	19.3	89.37	-3,009.3	722.1	557.1	483.2	73.86	7.542 CC, ES		
11,000.0	7,500.0	7,568.5	7,504.7	61.9	19.3	89.35	-3,009.3	722.1	563.8	491.6	72.20	7.809		
11,100.0	7,500.0	7,568.2	7,504.4	63.5	19.3	89.32	-3,009.3	722.1	587.6	518.7	68.93	8.525		
11,200.0	7,500.0	7,568.0	7,504.2	65.1	19.3	89.30	-3,009.3	722.1	626.7	561.9	64.79	9.672		
11,300.0	7,500.0	7,567.8	7,504.0	66.7	19.3	89.28	-3,009.3	722.1	678.3	617.9	60.43	11.224		
11,400.0	7,500.0	7,567.5	7,503.7	68.3	19.3	89.25	-3,009.3	722.1	739.9	683.6	56.31	13.139		
11,500.0	7,500.0	7,567.3	7,503.5	70.0	19.3	89.23	-3,009.3	722.1	809.2	756.6	52.68	15.362		
11,600.0	7,500.0	7,567.1	7,503.3	71.6	19.3	89.20	-3,009.3	722.1	884.5	834.9	49.60	17.831		
11,700.0	7,500.0	7,566.8	7,503.0	73.2	19.3	89.18	-3,009.3	722.1	964.2	917.1	47.07	20.483		
11,800.0	7,500.0	7,566.6	7,502.8	74.9	19.3	89.15	-3,009.3	722.1	1,047.4	1,002.4	45.04	23.257		
11,900.0	7,500.0	7,566.3	7,502.6	76.5	19.3	89.13	-3,009.3	722.1	1,133.3	1,089.9	43.42	26.101		
12,000.0	7,500.0	7,566.1	7,502.3	78.2	19.3	89.11	-3,009.3	722.2	1,221.4	1,179.2	42.16	28.974		
12,100.0	7,500.0	7,565.9	7,502.1	79.8	19.3	89.08	-3,009.3	722.2	1,311.2	1,270.0	41.18	31.843		
12,200.0	7,500.0	7,565.6	7,501.8	81.5	19.3	89.06	-3,009.3	722.2	1,402.4	1,361.9	40.43	34.686		
12,300.0	7,500.0	7,565.4	7,501.6	83.1	19.3	89.03	-3,009.3	722.2	1,494.7	1,454.8	39.87	37.491		
12,400.0	7,500.0	7,565.1	7,501.3	84.8	19.3	89.01	-3,009.3	722.2	1,587.9	1,548.4	39.45	40.248		
12,500.0	7,500.0	7,564.9	7,501.1	86.5	19.3	88.98	-3,009.3	722.2	1,681.9	1,642.7	39.15	42.957		
12,600.0	7,500.0	7,564.7	7,500.9	88.1	19.3	88.96	-3,009.3	722.2	1,776.6	1,737.6	38.95	45.615		
12,700.0	7,500.0	7,564.4	7,500.6	89.8	19.3	88.93	-3,009.3	722.2	1,871.8	1,833.0	38.81	48.225		
12,800.0	7,500.0	7,564.2	7,500.4	91.5	19.3	88.91	-3,009.3	722.2	1,967.5	1,928.7	38.74	50.789		
12,900.0	7,500.0	7,563.9	7,500.1	93.2	19.3	88.88	-3,009.3	722.2	2,063.6	2,024.9	38.71	53.310		
13,000.0	7,500.0	7,563.7	7,499.9	94.9	19.3	88.85	-3,009.3	722.2	2,160.0	2,121.3	38.72	55.792		
13,100.0	7,500.0	7,563.4	7,499.6	96.5	19.3	88.83	-3,009.3	722.2	2,256.8	2,218.0	38.75	58.238		
13,200.0	7,500.0	7,563.2	7,499.4	98.2	19.3	88.80	-3,009.3	722.2	2,353.8	2,315.0	38.81	60.650		
13,300.0	7,500.0	7,562.9	7,499.1	99.9	19.3	88.78	-3,009.3	722.2	2,451.1	2,412.2	38.89	63.031		
13,400.0	7,500.0	7,562.7	7,498.9	101.6	19.3	88.75	-3,009.3	722.2	2,548.6	2,509.6	38.98	65.384		
13,500.0	7,500.0	7,562.4	7,498.6	103.3	19.3	88.73	-3,009.3	722.2	2,646.3	2,607.2	39.08	67.710		
13,600.0	7,500.0	7,562.2	7,498.4	105.0	19.3	88.70	-3,009.3	722.2	2,744.1	2,704.9	39.20	70.011		
13,700.0	7,500.0	7,561.9	7,498.1	106.7	19.3	88.67	-3,009.3	722.2	2,842.1	2,802.8	39.32	72.290		
13,800.0	7,500.0	7,561.7	7,497.9	108.4	19.3	88.65	-3,009.3	722.2	2,940.2	2,900.8	39.44	74.547		
13,900.0	7,500.0	7,561.4	7,497.6	110.1	19.3	88.62	-3,009.3	722.2	3,038.5	2,998.9	39.57	76.784		
14,000.0	7,500.0	7,561.2	7,497.4	111.8	19.3	88.60	-3,009.3	722.2	3,136.8	3,097.1	39.71	79.002		

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 2F-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 2F-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		
14,100.0	7,500.0	7,560.9	7,497.1	113.5	19.3	88.57	-3,009.3	722.2	3,235.3	3,195.4	39.84	81.202		
14,200.0	7,500.0	7,560.6	7,496.8	115.2	19.3	88.54	-3,009.3	722.2	3,333.8	3,293.8	39.98	83.384		
14,300.0	7,500.0	7,560.4	7,496.6	116.9	19.3	88.52	-3,009.3	722.2	3,432.5	3,392.3	40.12	85.551		
14,400.0	7,500.0	7,560.1	7,496.3	118.6	19.3	88.49	-3,009.3	722.2	3,531.2	3,490.9	40.26	87.701		
14,500.0	7,500.0	7,559.9	7,496.1	120.4	19.3	88.46	-3,009.3	722.2	3,630.0	3,589.6	40.41	89.837		
14,600.0	7,500.0	7,559.6	7,495.8	122.1	19.3	88.44	-3,009.3	722.2	3,728.8	3,688.3	40.55	91.958		
14,700.0	7,500.0	7,559.3	7,495.6	123.8	19.3	88.41	-3,009.3	722.2	3,827.7	3,787.0	40.69	94.065		
14,800.0	7,500.0	7,559.1	7,495.3	125.5	19.3	88.38	-3,009.3	722.2	3,926.7	3,885.8	40.84	96.159		
14,900.0	7,500.0	7,558.8	7,495.0	127.2	19.3	88.36	-3,009.3	722.2	4,025.7	3,984.7	40.98	98.239		
15,000.0	7,500.0	7,558.6	7,494.8	128.9	19.3	88.33	-3,009.3	722.2	4,124.7	4,083.6	41.12	100.307		
15,100.0	7,500.0	7,558.3	7,494.5	130.6	19.3	88.30	-3,009.3	722.2	4,223.9	4,182.6	41.26	102.362		
15,200.0	7,500.0	7,558.0	7,494.2	132.4	19.3	88.27	-3,009.3	722.2	4,323.0	4,281.6	41.41	104.405		
15,300.0	7,500.0	7,557.8	7,494.0	134.1	19.3	88.25	-3,009.3	722.2	4,422.2	4,380.6	41.55	106.436		
15,400.0	7,500.0	7,557.5	7,493.7	135.8	19.3	88.22	-3,009.3	722.3	4,521.4	4,479.7	41.69	108.455		
15,500.0	7,500.0	7,557.2	7,493.4	137.5	19.3	88.19	-3,009.3	722.3	4,620.7	4,578.8	41.83	110.463		
15,600.0	7,500.0	7,557.0	7,493.2	139.2	19.3	88.16	-3,009.3	722.3	4,719.9	4,678.0	41.97	112.461		
15,700.0	7,500.0	7,556.7	7,492.9	141.0	19.3	88.14	-3,009.3	722.3	4,819.3	4,777.1	42.11	114.447		
15,800.0	7,500.0	7,556.4	7,492.6	142.7	19.3	88.11	-3,009.3	722.3	4,918.6	4,876.4	42.25	116.422		
15,841.7	7,500.0	7,556.3	7,492.5	143.4	19.3	88.10	-3,009.3	722.3	4,960.0	4,917.7	42.31	117.242		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 33-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error: 0.0 ft			
Survey Program: 59-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	153.37	-2,318.6	1,162.4	2,593.7					
100.0	100.0	74.3	74.3	0.2	0.1	153.36	-2,318.9	1,163.0	2,594.4	2,594.2	0.26	N/A		
200.0	200.0	175.5	175.5	0.3	0.3	153.31	-2,319.3	1,165.8	2,596.0	2,595.4	0.61	4,240.050		
300.0	300.0	332.3	331.9	0.5	0.6	153.10	-2,315.3	1,174.8	2,596.4	2,595.3	1.10	2,351.166		
400.0	400.0	464.1	462.9	0.7	0.9	86.46	-2,307.1	1,186.3	2,594.7	2,593.1	1.60	1,617.730		
500.0	500.0	580.4	577.8	0.9	1.3	86.16	-2,296.4	1,201.0	2,592.1	2,590.0	2.14	1,210.891		
600.0	599.9	706.0	700.8	1.0	1.8	85.75	-2,281.2	1,221.7	2,588.7	2,585.9	2.80	923.151		
700.0	699.7	818.7	810.0	1.2	2.3	85.33	-2,264.5	1,243.7	2,584.3	2,580.8	3.50	739.200		
800.0	799.4	922.3	910.5	1.4	2.7	84.99	-2,249.1	1,264.0	2,579.8	2,575.7	4.18	617.816		
900.0	898.9	1,126.1	1,105.6	1.7	3.8	84.21	-2,209.9	1,307.6	2,571.7	2,566.2	5.48	469.693		
1,000.0	998.3	1,235.1	1,208.6	1.9	4.5	83.78	-2,185.4	1,333.6	2,562.6	2,556.2	6.36	402.616		
1,100.0	1,097.4	1,319.1	1,287.9	2.2	5.0	83.51	-2,166.6	1,353.7	2,553.5	2,546.4	7.12	358.714		
1,200.0	1,196.3	1,394.2	1,359.2	2.5	5.4	83.32	-2,150.8	1,370.9	2,545.2	2,537.4	7.84	324.551		
1,300.0	1,294.9	1,468.0	1,429.2	2.8	5.9	83.13	-2,135.5	1,388.9	2,537.7	2,529.1	8.61	294.786		
1,400.0	1,393.3	1,586.6	1,541.3	3.2	6.6	82.82	-2,110.9	1,418.5	2,530.3	2,520.7	9.66	261.815		
1,494.4	1,485.8	1,698.8	1,647.2	3.5	7.3	82.55	-2,086.2	1,446.6	2,522.3	2,511.6	10.69	235.882		
1,500.0	1,491.2	1,705.1	1,653.1	3.5	7.3	82.53	-2,084.9	1,448.1	2,521.8	2,511.1	10.75	234.551		
1,600.0	1,589.1	1,797.3	1,740.2	3.9	7.9	82.28	-2,064.8	1,470.8	2,513.2	2,501.5	11.68	215.105		
1,700.0	1,686.9	1,904.1	1,841.2	4.3	8.5	81.98	-2,041.6	1,496.6	2,504.4	2,491.7	12.71	197.116		
1,800.0	1,784.8	1,997.8	1,929.7	4.7	9.1	81.72	-2,021.1	1,519.3	2,495.7	2,482.0	13.64	182.906		
1,900.0	1,882.6	2,082.1	2,009.8	5.1	9.6	81.51	-2,003.5	1,539.0	2,487.4	2,472.9	14.52	171.286		
2,000.0	1,980.4	2,180.9	2,103.7	5.5	10.2	81.26	-1,983.2	1,562.4	2,479.6	2,464.1	15.50	159.944		
2,100.0	2,078.3	2,279.4	2,196.9	5.9	10.8	80.99	-1,962.4	1,586.5	2,471.7	2,455.2	16.49	149.915		
2,200.0	2,176.1	2,374.4	2,286.8	6.3	11.3	80.73	-1,942.4	1,609.8	2,464.0	2,446.6	17.45	141.194		
2,300.0	2,273.9	2,480.4	2,387.1	6.7	12.0	80.44	-1,920.3	1,635.5	2,456.4	2,438.0	18.46	133.037		
2,400.0	2,371.8	2,570.7	2,473.0	7.1	12.5	80.21	-1,901.8	1,656.6	2,448.7	2,429.3	19.39	126.295		
2,500.0	2,469.6	2,692.9	2,589.0	7.5	13.2	79.89	-1,876.7	1,685.7	2,441.3	2,420.8	20.49	119.147		
2,600.0	2,567.4	2,771.4	2,663.5	7.9	13.7	79.68	-1,860.2	1,704.1	2,433.3	2,411.9	21.36	113.904		
2,700.0	2,665.3	2,896.0	2,781.3	8.3	14.4	79.31	-1,833.6	1,734.9	2,425.8	2,403.3	22.51	107.743		
2,800.0	2,763.1	2,973.4	2,854.5	8.7	14.9	79.08	-1,816.8	1,753.8	2,417.8	2,394.4	23.38	103.420		
2,900.0	2,860.9	3,086.0	2,961.0	9.1	15.6	78.75	-1,792.9	1,781.1	2,410.3	2,385.9	24.45	98.583		
3,000.0	2,958.8	3,193.3	3,062.3	9.5	16.3	78.42	-1,769.1	1,807.4	2,402.1	2,376.6	25.51	94.168		
3,100.0	3,056.6	3,276.0	3,140.2	9.9	16.8	78.15	-1,750.8	1,828.1	2,394.4	2,367.9	26.42	90.611		
3,200.0	3,154.4	3,371.0	3,230.0	10.3	17.3	77.86	-1,730.4	1,851.5	2,387.0	2,359.6	27.38	87.170		
3,300.0	3,252.3	3,458.3	3,313.0	10.7	17.8	77.63	-1,712.6	1,872.2	2,380.0	2,351.7	28.28	84.145		
3,400.0	3,350.1	3,581.6	3,430.1	11.1	18.6	77.29	-1,687.2	1,901.1	2,372.7	2,343.3	29.39	80.723		
3,500.0	3,447.9	3,673.2	3,517.1	11.5	19.1	77.04	-1,668.2	1,922.4	2,365.3	2,335.0	30.32	78.009		
3,600.0	3,545.8	3,771.4	3,610.3	11.9	19.7	76.76	-1,647.6	1,945.5	2,358.0	2,326.7	31.30	75.339		
3,700.0	3,643.6	3,849.9	3,684.6	12.3	20.2	76.52	-1,631.2	1,964.8	2,351.3	2,319.1	32.18	73.076		
3,800.0	3,741.5	3,969.7	3,797.7	12.7	20.9	76.13	-1,605.4	1,994.9	2,344.5	2,311.2	33.30	70.405		
3,900.0	3,839.3	4,072.5	3,894.6	13.1	21.6	75.79	-1,582.8	2,020.3	2,337.3	2,303.0	34.32	68.102		
4,000.0	3,937.1	4,164.6	3,981.6	13.5	22.1	75.49	-1,562.7	2,043.3	2,330.4	2,295.1	35.28	66.062		
4,100.0	4,035.0	4,263.3	4,075.0	13.9	22.7	75.18	-1,541.8	2,067.3	2,323.6	2,287.4	36.25	64.098		
4,200.0	4,132.8	4,366.1	4,172.5	14.3	23.3	74.87	-1,520.3	2,091.8	2,316.8	2,279.6	37.24	62.214		
4,300.0	4,230.6	4,463.0	4,264.6	14.7	23.9	74.60	-1,500.5	2,114.3	2,310.1	2,271.9	38.18	60.499		
4,400.0	4,328.5	4,570.1	4,366.6	15.1	24.5	74.31	-1,478.9	2,138.6	2,303.4	2,264.2	39.17	58.806		
4,500.0	4,426.3	4,664.7	4,456.7	15.5	25.1	74.05	-1,459.5	2,160.1	2,296.4	2,256.3	40.11	57.251		
4,600.0	4,524.1	4,757.4	4,544.7	15.9	25.6	73.77	-1,440.3	2,182.2	2,289.9	2,248.9	41.03	55.813		
4,700.0	4,622.0	4,862.0	4,644.1	16.3	26.2	73.46	-1,418.6	2,206.6	2,283.3	2,241.3	42.04	54.313		
4,800.0	4,719.8	4,955.5	4,732.7	16.7	26.8	73.18	-1,399.1	2,228.9	2,276.9	2,234.0	42.96	52.998		
4,900.0	4,817.6	5,068.6	4,840.2	17.2	27.4	72.84	-1,375.7	2,255.1	2,270.4	2,226.4	43.98	51.624		
5,000.0	4,915.5	5,182.1	4,948.4	17.6	28.1	72.53	-1,352.3	2,280.4	2,263.3	2,218.3	44.99	50.306		

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 2F-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 2F-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 33-7 (EXISTING) - ENCANA WELL - SU												Offset Site Error:	0.0 ft
Survey Program: 59-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	5,013.3	5,273.4	5,035.2	18.0	28.6	72.26	-1,332.9	2,301.0	2,256.0	2,210.1	45.89	49.157	
5,200.0	5,111.1	5,382.6	5,139.3	18.4	29.2	71.95	-1,310.3	2,325.3	2,249.0	2,202.1	46.86	47.989	
5,300.0	5,209.0	5,470.7	5,223.8	18.8	29.7	71.76	-1,293.5	2,343.2	2,242.0	2,194.3	47.70	47.001	
5,400.0	5,306.8	5,539.6	5,290.1	19.2	30.0	71.62	-1,281.0	2,357.3	2,235.7	2,187.2	48.45	46.144	
5,500.0	5,404.6	5,605.3	5,353.2	19.6	30.4	71.48	-1,269.8	2,371.7	2,231.1	2,182.0	49.18	45.371	
5,600.0	5,502.5	5,751.0	5,493.5	20.0	31.1	71.20	-1,245.3	2,402.6	2,226.5	2,176.2	50.28	44.285	
5,700.0	5,600.3	5,850.4	5,589.5	20.4	31.6	71.03	-1,228.5	2,422.0	2,220.6	2,169.5	51.11	43.450	
5,800.0	5,698.2	5,960.7	5,696.7	20.8	32.1	70.92	-1,211.5	2,441.4	2,214.5	2,162.5	51.95	42.625	
5,900.0	5,796.0	6,079.5	5,812.9	21.2	32.5	70.88	-1,194.7	2,459.7	2,207.8	2,155.0	52.79	41.819	
6,000.0	5,893.8	6,181.2	5,912.8	21.6	32.9	70.90	-1,181.2	2,473.2	2,200.2	2,146.7	53.54	41.097	
6,100.0	5,991.7	6,280.2	6,010.7	22.0	33.2	71.02	-1,170.8	2,483.8	2,193.0	2,138.8	54.22	40.443	
6,200.0	6,089.5	6,381.9	6,111.6	22.4	33.4	71.22	-1,161.9	2,492.7	2,185.7	2,130.8	54.88	39.824	
6,300.0	6,187.3	6,481.1	6,210.3	22.8	33.6	71.47	-1,154.6	2,499.7	2,178.3	2,122.8	55.50	39.250	
6,400.0	6,285.2	6,576.3	6,305.2	23.2	33.8	71.78	-1,149.5	2,504.5	2,171.1	2,115.0	56.07	38.723	
6,500.0	6,383.0	6,672.5	6,401.3	23.7	33.9	72.15	-1,145.8	2,507.9	2,164.1	2,107.5	56.63	38.215	
6,600.0	6,480.8	6,760.4	6,489.1	24.1	34.0	72.52	-1,143.5	2,510.3	2,157.5	2,100.4	57.16	37.748	
6,700.0	6,578.7	6,856.3	6,585.0	24.5	34.1	72.98	-1,142.5	2,511.7	2,151.5	2,093.8	57.68	37.302	
6,800.0	6,676.5	6,970.2	6,698.9	24.9	34.1	73.57	-1,141.6	2,511.9	2,144.9	2,086.7	58.19	36.863	
6,900.0	6,774.3	7,058.6	6,787.3	25.3	34.2	74.04	-1,141.5	2,511.7	2,138.7	2,080.0	58.68	36.446	
7,000.0	6,872.2	7,152.9	6,881.6	25.7	34.3	74.54	-1,141.4	2,511.7	2,132.9	2,073.8	59.18	36.042	
7,019.1	6,890.8	7,171.8	6,900.5	25.8	34.3	74.64	-1,141.4	2,511.7	2,131.9	2,072.6	59.27	35.966	
7,050.0	6,921.1	7,202.4	6,931.1	25.9	34.3	60.01	-1,141.4	2,511.7	2,129.5	2,070.1	59.41	35.843	
7,100.0	6,970.2	7,258.6	6,987.3	26.0	34.3	34.57	-1,141.3	2,511.7	2,122.9	2,063.3	59.59	35.624	
7,150.0	7,019.0	7,314.0	7,042.7	26.2	34.4	13.95	-1,141.0	2,511.6	2,112.7	2,053.0	59.72	35.376	
7,200.0	7,067.2	7,359.3	7,088.0	26.3	34.4	-0.08	-1,140.8	2,511.5	2,099.3	2,039.5	59.80	35.105	
7,250.0	7,114.4	7,401.0	7,129.7	26.4	34.4	-9.67	-1,140.5	2,511.6	2,082.7	2,022.9	59.83	34.812	
7,300.0	7,160.3	7,446.3	7,175.0	26.4	34.5	-16.79	-1,140.2	2,511.7	2,063.2	2,003.4	59.81	34.498	
7,350.0	7,204.5	7,487.4	7,216.1	26.5	34.5	-22.59	-1,140.0	2,511.8	2,040.8	1,981.1	59.73	34.167	
7,400.0	7,246.6	7,528.0	7,256.7	26.5	34.5	-27.76	-1,139.9	2,511.9	2,015.8	1,956.2	59.60	33.821	
7,450.0	7,286.4	7,566.9	7,295.6	26.5	34.5	-32.71	-1,139.9	2,512.0	1,988.4	1,929.0	59.42	33.465	
7,500.0	7,323.5	7,604.5	7,333.2	26.5	34.6	-37.71	-1,139.9	2,512.1	1,958.7	1,899.6	59.18	33.100	
7,550.0	7,357.7	7,638.3	7,366.9	26.5	34.6	-42.88	-1,139.9	2,512.1	1,927.2	1,868.3	58.88	32.733	
7,600.0	7,388.7	7,667.8	7,396.5	26.5	34.6	-48.32	-1,139.9	2,512.1	1,894.1	1,835.6	58.52	32.369	
7,650.0	7,416.3	7,694.2	7,422.9	26.5	34.6	-54.05	-1,140.0	2,512.1	1,859.8	1,801.7	58.10	32.012	
7,700.0	7,440.2	7,718.0	7,446.7	26.5	34.6	-60.06	-1,140.0	2,512.0	1,824.5	1,766.9	57.62	31.668	
7,750.0	7,460.3	7,738.3	7,467.0	26.5	34.7	-66.20	-1,140.1	2,512.0	1,788.8	1,731.7	57.07	31.342	
7,800.0	7,476.4	7,755.3	7,484.0	26.5	34.7	-72.33	-1,140.1	2,512.0	1,752.9	1,696.4	56.47	31.040	
7,850.0	7,488.4	7,768.0	7,496.7	26.6	34.7	-78.20	-1,140.2	2,512.0	1,717.3	1,661.5	55.82	30.767	
7,900.0	7,496.2	7,776.3	7,505.0	26.6	34.7	-83.64	-1,140.2	2,512.0	1,682.3	1,627.2	55.11	30.528	
7,950.0	7,499.8	7,780.1	7,508.8	26.7	34.7	-88.49	-1,140.2	2,512.0	1,648.3	1,593.9	54.35	30.326	
7,966.7	7,500.0	7,780.4	7,509.1	26.7	34.7	-89.96	-1,140.2	2,512.0	1,637.2	1,583.1	54.09	30.267	
8,000.0	7,500.0	7,780.4	7,509.1	26.8	34.7	-89.96	-1,140.2	2,512.0	1,615.5	1,561.9	53.57	30.159	
8,100.0	7,500.0	7,780.6	7,509.3	27.0	34.7	-89.97	-1,140.2	2,512.0	1,552.7	1,500.8	51.95	29.889	
8,200.0	7,500.0	7,780.8	7,509.5	27.4	34.7	-89.98	-1,140.2	2,512.0	1,494.0	1,443.7	50.34	29.679	
8,300.0	7,500.0	7,781.0	7,509.7	27.9	34.7	-89.99	-1,140.2	2,512.0	1,439.9	1,391.1	48.84	29.480	
8,400.0	7,500.0	7,781.2	7,509.9	28.5	34.7	-90.00	-1,140.2	2,512.0	1,390.9	1,343.3	47.62	29.210	
8,500.0	7,500.0	7,781.4	7,510.1	29.1	34.7	-90.01	-1,140.2	2,512.0	1,347.5	1,300.7	46.83	28.774	
8,600.0	7,500.0	7,781.6	7,510.3	29.9	34.7	-90.01	-1,140.2	2,512.0	1,310.3	1,263.7	46.60	28.119	
8,700.0	7,500.0	7,781.8	7,510.5	30.8	34.7	-90.02	-1,140.2	2,512.0	1,279.9	1,233.0	46.93	27.273	
8,800.0	7,500.0	7,782.0	7,510.7	31.7	34.7	-90.03	-1,140.2	2,512.0	1,256.7	1,209.0	47.72	26.338	
8,900.0	7,500.0	7,782.2	7,510.9	32.7	34.7	-90.04	-1,140.2	2,512.0	1,241.2	1,192.4	48.80	25.433	
9,000.0	7,500.0	7,782.4	7,511.1	33.7	34.7	-90.05	-1,140.2	2,512.0	1,233.6	1,183.6	50.04	24.652	

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 2F-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 2F-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 33-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error:		0.0 ft				
Survey Program:		59-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					
9,044.0	7,500.0	7,782.5	7,511.2	34.2	34.7	-90.06	-1,140.2	2,512.0	1,232.8	1,182.2	50.61	24.361	CC, ES				
9,100.0	7,500.0	7,782.6	7,511.3	34.8	34.7	-90.06	-1,140.2	2,512.0	1,234.1	1,182.8	51.31	24.050					
9,200.0	7,500.0	7,782.8	7,511.5	36.0	34.7	-90.07	-1,140.2	2,512.0	1,242.7	1,190.1	52.54	23.652					
9,300.0	7,500.0	7,783.0	7,511.7	37.2	34.7	-90.08	-1,140.2	2,512.0	1,259.1	1,205.5	53.67	23.460					
9,400.0	7,500.0	7,783.2	7,511.9	38.4	34.7	-90.09	-1,140.2	2,512.0	1,283.2	1,228.5	54.70	23.458	SF				
9,500.0	7,500.0	7,783.4	7,512.1	39.7	34.7	-90.10	-1,140.2	2,512.0	1,314.5	1,258.8	55.64	23.624					
9,600.0	7,500.0	7,783.6	7,512.3	41.1	34.7	-90.10	-1,140.2	2,512.0	1,352.4	1,295.9	56.51	23.931					
9,700.0	7,500.0	7,783.8	7,512.5	42.4	34.7	-90.11	-1,140.2	2,512.0	1,396.5	1,339.2	57.35	24.350					
9,800.0	7,500.0	7,783.9	7,512.6	43.8	34.7	-90.12	-1,140.2	2,512.0	1,446.2	1,388.0	58.19	24.854					
9,900.0	7,500.0	7,784.1	7,512.8	45.2	34.7	-90.13	-1,140.2	2,512.0	1,500.9	1,441.8	59.04	25.421					
10,000.0	7,500.0	7,784.3	7,513.0	46.6	34.7	-90.14	-1,140.2	2,512.0	1,560.1	1,500.2	59.92	26.035					
10,100.0	7,500.0	7,784.5	7,513.2	48.1	34.7	-90.15	-1,140.2	2,512.0	1,623.3	1,562.5	60.82	26.688					
10,200.0	7,500.0	7,784.7	7,513.4	49.6	34.7	-90.16	-1,140.2	2,512.0	1,690.1	1,628.3	61.73	27.376					
10,300.0	7,500.0	7,784.9	7,513.6	51.1	34.7	-90.16	-1,140.2	2,512.0	1,760.0	1,697.3	62.64	28.097					
10,400.0	7,500.0	7,785.0	7,513.7	52.6	34.7	-90.17	-1,140.2	2,512.0	1,832.7	1,769.1	63.52	28.851					
10,500.0	7,500.0	7,785.2	7,513.9	54.1	34.7	-90.18	-1,140.2	2,512.0	1,907.9	1,843.5	64.37	29.638					
10,600.0	7,500.0	7,785.4	7,514.1	55.6	34.7	-90.19	-1,140.2	2,512.0	1,985.2	1,920.0	65.18	30.458					
10,700.0	7,500.0	7,785.6	7,514.3	57.2	34.7	-90.20	-1,140.2	2,512.0	2,064.5	1,998.6	65.94	31.310					
10,800.0	7,500.0	7,785.8	7,514.5	58.8	34.7	-90.21	-1,140.2	2,512.0	2,145.6	2,078.9	66.65	32.193					
10,900.0	7,500.0	7,785.9	7,514.6	60.3	34.7	-90.22	-1,140.2	2,512.0	2,228.2	2,160.9	67.31	33.104					
11,000.0	7,500.0	7,786.1	7,514.8	61.9	34.7	-90.22	-1,140.2	2,512.0	2,312.1	2,244.2	67.92	34.041					
11,100.0	7,500.0	7,786.3	7,515.0	63.5	34.7	-90.23	-1,140.2	2,512.0	2,397.3	2,328.8	68.49	35.002					
11,200.0	7,500.0	7,786.5	7,515.2	65.1	34.7	-90.24	-1,140.2	2,512.0	2,483.6	2,414.6	69.02	35.985					
11,300.0	7,500.0	7,786.6	7,515.3	66.7	34.7	-90.25	-1,140.2	2,512.0	2,570.9	2,501.4	69.50	36.989					
11,400.0	7,500.0	7,786.8	7,515.5	68.3	34.7	-90.26	-1,140.2	2,512.0	2,659.1	2,589.1	69.96	38.011					
11,500.0	7,500.0	7,787.0	7,515.7	70.0	34.7	-90.26	-1,140.2	2,512.0	2,748.1	2,677.7	70.38	39.049					
11,600.0	7,500.0	7,787.2	7,515.9	71.6	34.7	-90.27	-1,140.2	2,512.0	2,837.8	2,767.0	70.76	40.102					
11,700.0	7,500.0	7,787.3	7,516.0	73.2	34.7	-90.28	-1,140.2	2,512.0	2,928.2	2,857.1	71.13	41.169					
11,800.0	7,500.0	7,787.5	7,516.2	74.9	34.7	-90.29	-1,140.2	2,512.0	3,019.2	2,947.7	71.46	42.248					
11,900.0	7,500.0	7,787.7	7,516.4	76.5	34.7	-90.30	-1,140.2	2,512.0	3,110.8	3,039.0	71.78	43.338					
12,000.0	7,500.0	7,787.8	7,516.5	78.2	34.7	-90.30	-1,140.2	2,512.0	3,202.8	3,130.7	72.07	44.437					
12,100.0	7,500.0	7,788.0	7,516.7	79.8	34.7	-90.31	-1,140.2	2,512.0	3,295.3	3,223.0	72.35	45.546					
12,200.0	7,500.0	7,788.2	7,516.9	81.5	34.7	-90.32	-1,140.2	2,512.0	3,388.3	3,315.7	72.61	46.663					
12,300.0	7,500.0	7,788.3	7,517.0	83.1	34.7	-90.33	-1,140.2	2,512.0	3,481.6	3,408.7	72.86	47.787					
12,400.0	7,500.0	7,788.5	7,517.2	84.8	34.7	-90.33	-1,140.2	2,512.0	3,575.3	3,502.2	73.09	48.918					
12,500.0	7,500.0	7,788.7	7,517.4	86.5	34.7	-90.34	-1,140.2	2,512.0	3,669.3	3,596.0	73.31	50.054					
12,600.0	7,500.0	7,788.8	7,517.5	88.1	34.7	-90.35	-1,140.2	2,512.0	3,763.7	3,690.2	73.52	51.196					
12,700.0	7,500.0	7,789.0	7,517.7	89.8	34.7	-90.36	-1,140.2	2,512.0	3,858.3	3,784.6	73.71	52.342					
12,800.0	7,500.0	7,789.2	7,517.9	91.5	34.7	-90.36	-1,140.2	2,512.0	3,953.2	3,879.3	73.90	53.493					
12,900.0	7,500.0	7,789.3	7,518.0	93.2	34.7	-90.37	-1,140.2	2,512.0	4,048.3	3,974.2	74.08	54.648					
13,000.0	7,500.0	7,789.5	7,518.2	94.9	34.7	-90.38	-1,140.2	2,512.0	4,143.7	4,069.4	74.25	55.806					
13,100.0	7,500.0	7,789.6	7,518.3	96.5	34.7	-90.39	-1,140.2	2,512.0	4,239.2	4,164.8	74.42	56.967					
13,200.0	7,500.0	7,789.8	7,518.5	98.2	34.7	-90.39	-1,140.2	2,512.0	4,335.0	4,260.4	74.57	58.131					
13,300.0	7,500.0	7,790.0	7,518.7	99.9	34.7	-90.40	-1,140.2	2,512.0	4,431.0	4,356.3	74.73	59.297					
13,400.0	7,500.0	7,790.1	7,518.8	101.6	34.7	-90.41	-1,140.2	2,512.0	4,527.1	4,452.3	74.87	60.465					
13,500.0	7,500.0	7,790.3	7,519.0	103.3	34.7	-90.42	-1,140.2	2,512.0	4,623.4	4,548.4	75.01	61.636					
13,600.0	7,500.0	7,790.4	7,519.1	105.0	34.7	-90.42	-1,140.2	2,512.0	4,719.9	4,644.7	75.15	62.807					
13,700.0	7,500.0	7,790.6	7,519.3	106.7	34.7	-90.43	-1,140.2	2,512.0	4,816.5	4,741.2	75.28	63.981					
13,800.0	7,500.0	7,790.7	7,519.4	108.4	34.7	-90.44	-1,140.2	2,512.0	4,913.2	4,837.8	75.41	65.155					
13,900.0	7,500.0	7,790.9	7,519.6	110.1	34.7	-90.45	-1,140.2	2,512.0	5,010.1	4,934.5	75.53	66.330					
14,000.0	7,500.0	7,791.1	7,519.8	111.8	34.7	-90.45	-1,140.2	2,512.0	5,107.1	5,031.4	75.65	67.507					
14,100.0	7,500.0	7,791.2	7,519.9	113.5	34.7	-90.46	-1,140.2	2,512.0	5,204.2	5,128.4	75.77	68.683					

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 2F-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 2F-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 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 59-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)				
14,200.0	7,500.0	7,791.4	7,520.1	115.2	34.7	-90.47	-1,140.2	2,512.0	5,301.4	5,225.5	75.88	69.861		
14,300.0	7,500.0	7,791.5	7,520.2	116.9	34.7	-90.47	-1,140.2	2,512.0	5,398.7	5,322.7	76.00	71.039		
14,400.0	7,500.0	7,791.7	7,520.4	118.6	34.7	-90.48	-1,140.2	2,512.0	5,496.1	5,420.0	76.11	72.216		
14,500.0	7,500.0	7,791.8	7,520.5	120.4	34.7	-90.49	-1,140.2	2,512.0	5,593.6	5,517.4	76.21	73.395		
14,600.0	7,500.0	7,792.0	7,520.7	122.1	34.7	-90.50	-1,140.2	2,512.0	5,691.2	5,614.8	76.32	74.573		
14,700.0	7,500.0	7,792.1	7,520.8	123.8	34.7	-90.50	-1,140.2	2,512.0	5,788.8	5,712.4	76.42	75.751		
14,800.0	7,500.0	7,792.3	7,521.0	125.5	34.7	-90.51	-1,140.2	2,512.0	5,886.6	5,810.0	76.52	76.928		
14,900.0	7,500.0	7,792.4	7,521.1	127.2	34.7	-90.52	-1,140.2	2,512.0	5,984.4	5,907.8	76.62	78.106		
15,000.0	7,500.0	7,792.6	7,521.3	128.9	34.7	-90.52	-1,140.2	2,512.0	6,082.3	6,005.6	76.72	79.283		
15,100.0	7,500.0	7,792.7	7,521.4	130.6	34.7	-90.53	-1,140.2	2,512.0	6,180.2	6,103.4	76.81	80.460		
15,200.0	7,500.0	7,792.9	7,521.5	132.4	34.7	-90.54	-1,140.2	2,512.0	6,278.3	6,201.3	76.91	81.636		
15,300.0	7,500.0	7,793.0	7,521.7	134.1	34.7	-90.54	-1,140.2	2,512.0	6,376.3	6,299.3	77.00	82.811		
15,400.0	7,500.0	7,793.1	7,521.8	135.8	34.7	-90.55	-1,140.2	2,512.0	6,474.5	6,397.4	77.09	83.986		
15,500.0	7,500.0	7,793.3	7,522.0	137.5	34.7	-90.56	-1,140.2	2,512.0	6,572.7	6,495.5	77.18	85.160		
15,600.0	7,500.0	7,793.4	7,522.1	139.2	34.7	-90.56	-1,140.2	2,512.0	6,670.9	6,593.7	77.27	86.333		
15,700.0	7,500.0	7,793.6	7,522.3	141.0	34.7	-90.57	-1,140.2	2,512.0	6,769.2	6,691.9	77.36	87.506		
15,800.0	7,500.0	7,793.7	7,522.4	142.7	34.7	-90.58	-1,140.2	2,512.0	6,867.6	6,790.1	77.44	88.677		
15,841.7	7,500.0	7,793.8	7,522.5	143.4	34.7	-90.58	-1,140.2	2,512.0	6,908.6	6,831.1	77.48	89.165		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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							
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	-177.18	-983.2	-48.4	984.4					
100.0	100.0	88.0	88.0	0.2	0.2	-177.18	-983.2	-48.4	984.4	984.1	0.31	3,220.802		
200.0	200.0	188.0	188.0	0.3	0.3	-177.18	-983.2	-48.4	984.4	983.7	0.65	1,503.566		
300.0	300.0	288.0	288.0	0.5	0.5	-177.18	-983.2	-48.4	984.4	983.4	1.00	980.691	CC, ES	
400.0	400.0	388.0	388.0	0.7	0.7	116.49	-983.2	-48.4	984.8	983.4	1.35	727.643		
500.0	500.0	488.0	488.0	0.9	0.9	116.62	-983.2	-48.4	985.9	984.2	1.71	578.013		
600.0	599.9	587.9	587.9	1.0	1.0	116.83	-983.2	-48.4	987.9	985.8	2.06	478.723		
700.0	699.7	687.7	687.7	1.2	1.2	117.12	-983.2	-48.4	990.7	988.2	2.43	407.731		
800.0	799.4	787.4	787.4	1.4	1.4	117.49	-983.2	-48.4	994.3	991.5	2.81	354.274		
900.0	898.9	886.9	886.9	1.7	1.5	117.93	-983.2	-48.4	998.8	995.6	3.20	312.487		
1,000.0	998.3	986.3	986.3	1.9	1.7	118.45	-983.2	-48.4	1,004.1	1,000.5	3.60	278.906		
1,100.0	1,097.4	1,085.4	1,085.4	2.2	1.9	119.05	-983.2	-48.4	1,010.4	1,006.4	4.02	251.354		
1,200.0	1,196.3	1,184.3	1,184.3	2.5	2.1	119.70	-983.2	-48.4	1,017.8	1,013.3	4.46	228.389		
1,300.0	1,294.9	1,282.9	1,282.9	2.8	2.2	120.42	-983.2	-48.4	1,026.1	1,021.2	4.91	209.017		
1,400.0	1,393.3	1,381.3	1,381.3	3.2	2.4	121.20	-983.2	-48.4	1,035.6	1,030.2	5.38	192.526		
1,494.4	1,485.8	1,473.8	1,473.8	3.5	2.6	121.98	-983.2	-48.4	1,045.5	1,039.7	5.84	179.137		
1,500.0	1,491.2	1,479.2	1,479.2	3.5	2.6	122.04	-983.2	-48.4	1,046.2	1,040.3	5.86	178.415		
1,600.0	1,589.1	1,577.1	1,577.1	3.9	2.8	122.97	-983.2	-48.4	1,057.5	1,051.1	6.35	166.574		
1,700.0	1,686.9	1,674.9	1,674.9	4.3	2.9	123.89	-983.2	-48.4	1,069.0	1,062.2	6.83	156.479		
1,800.0	1,784.8	1,772.8	1,772.8	4.7	3.1	124.79	-983.2	-48.4	1,080.9	1,073.6	7.31	147.801		
1,900.0	1,882.6	1,870.6	1,870.6	5.1	3.3	125.67	-983.2	-48.4	1,093.0	1,085.2	7.79	140.280		
2,000.0	1,980.4	1,968.4	1,968.4	5.5	3.4	126.52	-983.2	-48.4	1,105.4	1,097.1	8.27	133.715		
2,100.0	2,078.3	2,066.3	2,066.3	5.9	3.6	127.37	-983.2	-48.4	1,118.0	1,109.2	8.74	127.947		
2,200.0	2,176.1	2,164.1	2,164.1	6.3	3.8	128.19	-983.2	-48.4	1,130.8	1,121.6	9.21	122.849		
2,300.0	2,273.9	2,261.9	2,261.9	6.7	3.9	128.99	-983.2	-48.4	1,143.9	1,134.2	9.67	118.317		
2,400.0	2,371.8	2,359.8	2,359.8	7.1	4.1	129.78	-983.2	-48.4	1,157.2	1,147.1	10.13	114.269		
2,500.0	2,469.6	2,457.6	2,457.6	7.5	4.3	130.55	-983.2	-48.4	1,170.7	1,160.2	10.58	110.637		
2,600.0	2,567.4	2,555.4	2,555.4	7.9	4.5	131.30	-983.2	-48.4	1,184.5	1,173.4	11.03	107.364		
2,700.0	2,665.3	2,653.3	2,653.3	8.3	4.6	132.03	-983.2	-48.4	1,198.4	1,186.9	11.48	104.404		
2,800.0	2,763.1	2,751.1	2,751.1	8.7	4.8	132.75	-983.2	-48.4	1,212.5	1,200.6	11.92	101.718		
2,900.0	2,860.9	2,848.9	2,848.9	9.1	5.0	133.45	-983.2	-48.4	1,226.8	1,214.5	12.36	99.271		
3,000.0	2,958.8	2,946.8	2,946.8	9.5	5.1	134.14	-983.2	-48.4	1,241.3	1,228.5	12.79	97.037		
3,100.0	3,056.6	3,044.6	3,044.6	9.9	5.3	134.81	-983.2	-48.4	1,256.0	1,242.7	13.22	94.991		
3,200.0	3,154.4	3,142.4	3,142.4	10.3	5.5	135.46	-983.2	-48.4	1,270.8	1,257.1	13.65	93.112		
3,300.0	3,252.3	3,240.3	3,240.3	10.7	5.7	136.10	-983.2	-48.4	1,285.8	1,271.7	14.07	91.383		
3,400.0	3,350.1	3,338.1	3,338.1	11.1	5.8	136.73	-983.2	-48.4	1,300.9	1,286.4	14.49	89.788		
3,500.0	3,447.9	3,435.9	3,435.9	11.5	6.0	137.34	-983.2	-48.4	1,316.2	1,301.3	14.90	88.314		
3,600.0	3,545.8	3,533.8	3,533.8	11.9	6.2	137.94	-983.2	-48.4	1,331.7	1,316.3	15.32	86.948		
3,700.0	3,643.6	3,631.6	3,631.6	12.3	6.3	138.52	-983.2	-48.4	1,347.2	1,331.5	15.72	85.682		
3,800.0	3,741.5	3,729.5	3,729.5	12.7	6.5	139.09	-983.2	-48.4	1,363.0	1,346.8	16.13	84.504		
3,900.0	3,839.3	3,827.3	3,827.3	13.1	6.7	139.65	-983.2	-48.4	1,378.8	1,362.3	16.53	83.408		
4,000.0	3,937.1	3,925.1	3,925.1	13.5	6.9	140.20	-983.2	-48.4	1,394.8	1,377.9	16.93	82.387		
4,100.0	4,035.0	4,023.0	4,023.0	13.9	7.0	140.73	-983.2	-48.4	1,410.9	1,393.6	17.33	81.433		
4,200.0	4,132.8	4,120.8	4,120.8	14.3	7.2	141.25	-983.2	-48.4	1,427.1	1,409.4	17.72	80.541		
4,300.0	4,230.6	4,218.6	4,218.6	14.7	7.4	141.76	-983.2	-48.4	1,443.5	1,425.3	18.11	79.706		
4,400.0	4,328.5	4,316.5	4,316.5	15.1	7.5	142.26	-983.2	-48.4	1,459.9	1,441.4	18.50	78.923		
4,500.0	4,426.3	4,414.3	4,414.3	15.5	7.7	142.75	-983.2	-48.4	1,476.5	1,457.6	18.88	78.188		
4,600.0	4,524.1	4,512.1	4,512.1	15.9	7.9	143.23	-983.2	-48.4	1,493.1	1,473.8	19.27	77.498		
4,700.0	4,622.0	4,610.0	4,610.0	16.3	8.0	143.69	-983.2	-48.4	1,509.9	1,490.2	19.65	76.848		
4,800.0	4,719.8	4,707.8	4,707.8	16.7	8.2	144.15	-983.2	-48.4	1,526.7	1,506.7	20.03	76.237		
4,900.0	4,817.6	4,805.6	4,805.6	17.2	8.4	144.60	-983.2	-48.4	1,543.7	1,523.3	20.40	75.661		
5,000.0	4,915.5	4,903.5	4,903.5	17.6	8.6	145.03	-983.2	-48.4	1,560.7	1,539.9	20.78	75.117		

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 2F-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 2F-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							
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	5,013.3	5,001.3	5,001.3	18.0	8.7	145.46	-983.2	-48.4	1,577.8	1,556.7	21.15	74.604		
5,200.0	5,111.1	5,099.1	5,099.1	18.4	8.9	145.88	-983.2	-48.4	1,595.0	1,573.5	21.52	74.119		
5,300.0	5,209.0	5,197.0	5,197.0	18.8	9.1	146.29	-983.2	-48.4	1,612.3	1,590.4	21.89	73.660		
5,400.0	5,306.8	5,294.8	5,294.8	19.2	9.2	146.69	-983.2	-48.4	1,629.7	1,607.4	22.26	73.226		
5,500.0	5,404.6	5,392.6	5,392.6	19.6	9.4	147.08	-983.2	-48.4	1,647.1	1,624.5	22.62	72.814		
5,600.0	5,502.5	5,490.5	5,490.5	20.0	9.6	147.47	-983.2	-48.4	1,664.7	1,641.7	22.98	72.424		
5,700.0	5,600.3	5,588.3	5,588.3	20.4	9.8	147.84	-983.2	-48.4	1,682.2	1,658.9	23.35	72.053		
5,800.0	5,698.2	5,686.2	5,686.2	20.8	9.9	148.21	-983.2	-48.4	1,699.9	1,676.2	23.71	71.701		
5,900.0	5,796.0	5,784.0	5,784.0	21.2	10.1	148.57	-983.2	-48.4	1,717.6	1,693.6	24.07	71.367		
6,000.0	5,893.8	5,881.8	5,881.8	21.6	10.3	148.93	-983.2	-48.4	1,735.4	1,711.0	24.43	71.049		
6,100.0	5,991.7	5,979.7	5,979.7	22.0	10.4	149.28	-983.2	-48.4	1,753.3	1,728.5	24.78	70.747		
6,200.0	6,089.5	6,077.5	6,077.5	22.4	10.6	149.62	-983.2	-48.4	1,771.2	1,746.1	25.14	70.459		
6,300.0	6,187.3	6,175.3	6,175.3	22.8	10.8	149.95	-983.2	-48.4	1,789.2	1,763.7	25.49	70.185		
6,400.0	6,285.2	6,273.2	6,273.2	23.2	10.9	150.28	-983.2	-48.4	1,807.2	1,781.4	25.85	69.923		
6,500.0	6,383.0	6,371.0	6,371.0	23.7	11.1	150.60	-983.2	-48.4	1,825.3	1,799.1	26.20	69.673		
6,600.0	6,480.8	6,468.8	6,468.8	24.1	11.3	150.91	-983.2	-48.4	1,843.5	1,816.9	26.55	69.435		
6,700.0	6,578.7	6,566.7	6,566.7	24.5	11.5	151.22	-983.2	-48.4	1,861.7	1,834.8	26.90	69.208		
6,800.0	6,676.5	6,664.5	6,664.5	24.9	11.6	151.52	-983.2	-48.4	1,879.9	1,852.7	27.25	68.990		
6,900.0	6,774.3	6,762.3	6,762.3	25.3	11.8	151.82	-983.2	-48.4	1,898.3	1,870.7	27.60	68.783		
7,000.0	6,872.2	6,860.2	6,860.2	25.7	12.0	152.11	-983.2	-48.4	1,916.6	1,888.7	27.95	68.584		
7,019.1	6,890.8	6,878.8	6,878.8	25.8	12.0	152.16	-983.2	-48.4	1,920.1	1,892.1	28.01	68.547		
7,050.0	6,921.1	6,909.1	6,909.1	25.9	12.1	137.31	-983.2	-48.4	1,925.2	1,897.0	28.13	68.444		
7,100.0	6,970.2	6,958.2	6,958.2	26.0	12.1	111.96	-983.2	-48.4	1,930.6	1,902.3	28.33	68.143		
7,150.0	7,019.0	7,007.0	7,007.0	26.2	12.2	92.04	-983.2	-48.4	1,932.7	1,904.2	28.55	67.701		
7,200.0	7,067.2	7,055.2	7,055.2	26.3	12.3	79.33	-983.2	-48.4	1,931.5	1,902.7	28.77	67.125		
7,250.0	7,114.4	7,102.4	7,102.4	26.4	12.4	71.66	-983.2	-48.4	1,927.0	1,898.0	29.01	66.422		
7,300.0	7,160.3	7,148.3	7,148.3	26.4	12.5	67.11	-983.2	-48.4	1,919.4	1,890.1	29.26	65.603		
7,350.0	7,204.5	7,192.5	7,192.5	26.5	12.6	64.55	-983.2	-48.4	1,908.7	1,879.2	29.51	64.676		
7,400.0	7,246.6	7,234.6	7,234.6	26.5	12.6	63.37	-983.2	-48.4	1,895.2	1,865.4	29.77	63.655		
7,450.0	7,286.4	7,274.4	7,274.4	26.5	12.7	63.19	-983.2	-48.4	1,878.9	1,848.9	30.04	62.550		
7,500.0	7,323.5	7,311.5	7,311.5	26.5	12.8	63.82	-983.2	-48.4	1,860.2	1,829.9	30.31	61.373		
7,550.0	7,357.7	7,345.7	7,345.7	26.5	12.8	65.10	-983.2	-48.4	1,839.3	1,808.7	30.59	60.138		
7,600.0	7,388.7	7,376.7	7,376.7	26.5	12.9	66.96	-983.2	-48.4	1,816.4	1,785.6	30.86	58.857		
7,650.0	7,416.3	7,404.3	7,404.3	26.5	12.9	69.29	-983.2	-48.4	1,791.8	1,760.7	31.14	57.542		
7,700.0	7,440.2	7,428.2	7,428.2	26.5	13.0	72.03	-983.2	-48.4	1,765.8	1,734.4	31.42	56.207		
7,750.0	7,460.3	7,448.3	7,448.3	26.5	13.0	75.10	-983.2	-48.4	1,738.7	1,707.0	31.69	54.863		
7,800.0	7,476.4	7,464.4	7,464.4	26.5	13.0	78.40	-983.2	-48.4	1,710.8	1,678.8	31.96	53.523		
7,850.0	7,488.4	7,476.4	7,476.4	26.6	13.0	81.86	-983.2	-48.4	1,682.3	1,650.1	32.23	52.197		
7,900.0	7,496.2	7,484.2	7,484.2	26.6	13.1	85.38	-983.2	-48.4	1,653.6	1,621.1	32.49	50.897		
7,950.0	7,499.8	7,487.8	7,487.8	26.7	13.1	88.86	-983.2	-48.4	1,624.9	1,592.1	32.74	49.631		
7,966.7	7,500.0	7,488.0	7,488.0	26.7	13.1	90.00	-983.2	-48.4	1,615.4	1,582.5	32.82	49.217		
8,000.0	7,500.0	7,488.0	7,488.0	26.8	13.1	90.00	-983.2	-48.4	1,596.6	1,563.6	32.99	48.403		
8,100.0	7,500.0	7,488.0	7,488.0	27.0	13.1	90.00	-983.2	-48.4	1,543.3	1,509.8	33.48	46.098		
8,200.0	7,500.0	7,488.0	7,488.0	27.4	13.1	90.00	-983.2	-48.4	1,494.8	1,460.8	33.97	44.006		
8,300.0	7,500.0	7,488.0	7,488.0	27.9	13.1	90.00	-983.2	-48.4	1,451.6	1,417.1	34.44	42.141		
8,400.0	7,500.0	7,488.0	7,488.0	28.5	13.1	90.00	-983.2	-48.4	1,414.1	1,379.2	34.90	40.519		
8,500.0	7,500.0	7,488.0	7,488.0	29.1	13.1	90.00	-983.2	-48.4	1,382.8	1,347.5	35.32	39.152		
8,600.0	7,500.0	7,488.0	7,488.0	29.9	13.1	90.00	-983.2	-48.4	1,358.3	1,322.6	35.70	38.052		
8,700.0	7,500.0	7,488.0	7,488.0	30.8	13.1	90.00	-983.2	-48.4	1,340.7	1,304.7	36.01	37.226		
8,800.0	7,500.0	7,488.0	7,488.0	31.7	13.1	90.00	-983.2	-48.4	1,330.4	1,294.2	36.27	36.681		
8,886.9	7,500.0	7,488.0	7,488.0	32.5	13.1	90.00	-983.2	-48.4	1,327.6	1,291.2	36.44	36.434		
8,900.0	7,500.0	7,488.0	7,488.0	32.7	13.1	90.00	-983.2	-48.4	1,327.7	1,291.2	36.46	36.418 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 2F-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 2F-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)	
9,000.0	7,500.0	7,488.0	7,488.0	33.7	13.1	90.00	-983.2	-48.4	1,332.4	1,295.8	36.57	36.435		
9,100.0	7,500.0	7,488.0	7,488.0	34.8	13.1	90.00	-983.2	-48.4	1,344.6	1,308.0	36.61	36.723		
9,200.0	7,500.0	7,488.0	7,488.0	36.0	13.1	90.00	-983.2	-48.4	1,364.0	1,327.4	36.59	37.273		
9,300.0	7,500.0	7,488.0	7,488.0	37.2	13.1	90.00	-983.2	-48.4	1,390.4	1,353.9	36.52	38.070		
9,400.0	7,500.0	7,488.0	7,488.0	38.4	13.1	90.00	-983.2	-48.4	1,423.3	1,386.9	36.40	39.097		
9,500.0	7,500.0	7,488.0	7,488.0	39.7	13.1	90.00	-983.2	-48.4	1,462.3	1,426.1	36.25	40.334		
9,600.0	7,500.0	7,488.0	7,488.0	41.1	13.1	90.00	-983.2	-48.4	1,507.0	1,470.9	36.08	41.762		
9,700.0	7,500.0	7,488.0	7,488.0	42.4	13.1	90.00	-983.2	-48.4	1,556.8	1,520.9	35.90	43.360		
9,800.0	7,500.0	7,488.0	7,488.0	43.8	13.1	90.00	-983.2	-48.4	1,611.3	1,575.6	35.72	45.109		
9,900.0	7,500.0	7,488.0	7,488.0	45.2	13.1	90.00	-983.2	-48.4	1,670.0	1,634.4	35.54	46.989		
10,000.0	7,500.0	7,488.0	7,488.0	46.6	13.1	90.00	-983.2	-48.4	1,732.5	1,697.1	35.37	48.982		
10,100.0	7,500.0	7,488.0	7,488.0	48.1	13.1	90.00	-983.2	-48.4	1,798.3	1,763.1	35.21	51.072		
10,200.0	7,500.0	7,488.0	7,488.0	49.6	13.1	90.00	-983.2	-48.4	1,867.3	1,832.2	35.07	53.245		
10,300.0	7,500.0	7,488.0	7,488.0	51.1	13.1	90.00	-983.2	-48.4	1,938.9	1,903.9	34.94	55.487		
10,400.0	7,500.0	7,488.0	7,488.0	52.6	13.1	90.00	-983.2	-48.4	2,012.9	1,978.1	34.83	57.787		
10,500.0	7,500.0	7,488.0	7,488.0	54.1	13.1	90.00	-983.2	-48.4	2,089.1	2,054.4	34.74	60.135		
10,600.0	7,500.0	7,488.0	7,488.0	55.6	13.1	90.00	-983.2	-48.4	2,167.3	2,132.6	34.66	62.521		
10,700.0	7,500.0	7,488.0	7,488.0	57.2	13.1	90.00	-983.2	-48.4	2,247.2	2,212.5	34.60	64.938		
10,800.0	7,500.0	7,488.0	7,488.0	58.8	13.1	90.00	-983.2	-48.4	2,328.6	2,294.0	34.56	67.379		
10,900.0	7,500.0	7,488.0	7,488.0	60.3	13.1	90.00	-983.2	-48.4	2,411.4	2,376.9	34.53	69.839		
11,000.0	7,500.0	7,488.0	7,488.0	61.9	13.1	90.00	-983.2	-48.4	2,495.5	2,461.0	34.51	72.312		
11,100.0	7,500.0	7,488.0	7,488.0	63.5	13.1	90.00	-983.2	-48.4	2,580.7	2,546.2	34.50	74.796		
11,200.0	7,500.0	7,488.0	7,488.0	65.1	13.1	90.00	-983.2	-48.4	2,667.0	2,632.5	34.51	77.285		
11,300.0	7,500.0	7,488.0	7,488.0	66.7	13.1	90.00	-983.2	-48.4	2,754.2	2,719.6	34.52	79.777		
11,400.0	7,500.0	7,488.0	7,488.0	68.3	13.1	90.00	-983.2	-48.4	2,842.2	2,807.6	34.55	82.270		
11,500.0	7,500.0	7,488.0	7,488.0	70.0	13.1	90.00	-983.2	-48.4	2,931.0	2,896.4	34.58	84.760		
11,600.0	7,500.0	7,488.0	7,488.0	71.6	13.1	90.00	-983.2	-48.4	3,020.5	2,985.8	34.62	87.247		
11,700.0	7,500.0	7,488.0	7,488.0	73.2	13.1	90.00	-983.2	-48.4	3,110.6	3,075.9	34.67	89.729		
11,800.0	7,500.0	7,488.0	7,488.0	74.9	13.1	90.00	-983.2	-48.4	3,201.3	3,166.6	34.72	92.204		
11,900.0	7,500.0	7,488.0	7,488.0	76.5	13.1	90.00	-983.2	-48.4	3,292.6	3,257.8	34.78	94.671		
12,000.0	7,500.0	7,488.0	7,488.0	78.2	13.1	90.00	-983.2	-48.4	3,384.3	3,349.5	34.84	97.129		
12,100.0	7,500.0	7,488.0	7,488.0	79.8	13.1	90.00	-983.2	-48.4	3,476.5	3,441.6	34.91	99.578		
12,200.0	7,500.0	7,488.0	7,488.0	81.5	13.1	90.00	-983.2	-48.4	3,569.2	3,534.2	34.99	102.016		
12,300.0	7,500.0	7,488.0	7,488.0	83.1	13.1	90.00	-983.2	-48.4	3,662.2	3,627.1	35.06	104.444		
12,400.0	7,500.0	7,488.0	7,488.0	84.8	13.1	90.00	-983.2	-48.4	3,755.5	3,720.4	35.14	106.860		
12,500.0	7,500.0	7,488.0	7,488.0	86.5	13.1	90.00	-983.2	-48.4	3,849.2	3,814.0	35.23	109.264		
12,600.0	7,500.0	7,488.0	7,488.0	88.1	13.1	90.00	-983.2	-48.4	3,943.3	3,907.9	35.32	111.656		
12,700.0	7,500.0	7,488.0	7,488.0	89.8	13.1	90.00	-983.2	-48.4	4,037.6	4,002.2	35.41	114.036		
12,800.0	7,500.0	7,488.0	7,488.0	91.5	13.1	90.00	-983.2	-48.4	4,132.1	4,096.6	35.50	116.403		
12,900.0	7,500.0	7,488.0	7,488.0	93.2	13.1	90.00	-983.2	-48.4	4,227.0	4,191.4	35.59	118.757		
13,000.0	7,500.0	7,488.0	7,488.0	94.9	13.1	90.00	-983.2	-48.4	4,322.0	4,286.3	35.69	121.099		
13,100.0	7,500.0	7,488.0	7,488.0	96.5	13.1	90.00	-983.2	-48.4	4,417.3	4,381.5	35.79	123.427		
13,200.0	7,500.0	7,488.0	7,488.0	98.2	13.1	90.00	-983.2	-48.4	4,512.8	4,476.9	35.89	125.742		
13,300.0	7,500.0	7,488.0	7,488.0	99.9	13.1	90.00	-983.2	-48.4	4,608.4	4,572.4	35.99	128.044		
13,400.0	7,500.0	7,488.0	7,488.0	101.6	13.1	90.00	-983.2	-48.4	4,704.3	4,668.2	36.09	130.332		
13,500.0	7,500.0	7,488.0	7,488.0	103.3	13.1	90.00	-983.2	-48.4	4,800.3	4,764.1	36.20	132.608		
13,600.0	7,500.0	7,488.0	7,488.0	105.0	13.1	90.00	-983.2	-48.4	4,896.5	4,860.2	36.31	134.870		
13,700.0	7,500.0	7,488.0	7,488.0	106.7	13.1	90.00	-983.2	-48.4	4,992.8	4,956.4	36.41	137.119		
13,800.0	7,500.0	7,488.0	7,488.0	108.4	13.1	90.00	-983.2	-48.4	5,089.3	5,052.7	36.52	139.355		
13,900.0	7,500.0	7,488.0	7,488.0	110.1	13.1	90.00	-983.2	-48.4	5,185.9	5,149.2	36.63	141.578		
14,000.0	7,500.0	7,488.0	7,488.0	111.8	13.1	90.00	-983.2	-48.4	5,282.6	5,245.9	36.74	143.788		
14,100.0	7,500.0	7,488.0	7,488.0	113.5	13.1	90.00	-983.2	-48.4	5,379.5	5,342.6	36.85	145.985		

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 2F-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 2F-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		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)						
14,200.0	7,500.0	7,488.0	7,488.0	115.2	13.1	90.00	-983.2	-48.4	5,476.4	5,439.5	36.96	148.169		
14,300.0	7,500.0	7,488.0	7,488.0	116.9	13.1	90.00	-983.2	-48.4	5,573.5	5,536.4	37.07	150.340		
14,400.0	7,500.0	7,488.0	7,488.0	118.6	13.1	90.00	-983.2	-48.4	5,670.7	5,633.5	37.19	152.498		
14,500.0	7,500.0	7,488.0	7,488.0	120.4	13.1	90.00	-983.2	-48.4	5,767.9	5,730.6	37.30	154.644		
14,600.0	7,500.0	7,488.0	7,488.0	122.1	13.1	90.00	-983.2	-48.4	5,865.3	5,827.9	37.41	156.777		
14,700.0	7,500.0	7,488.0	7,488.0	123.8	13.1	90.00	-983.2	-48.4	5,962.7	5,925.2	37.53	158.898		
14,800.0	7,500.0	7,488.0	7,488.0	125.5	13.1	90.00	-983.2	-48.4	6,060.3	6,022.6	37.64	161.006		
14,900.0	7,500.0	7,488.0	7,488.0	127.2	13.1	90.00	-983.2	-48.4	6,157.9	6,120.1	37.75	163.102		
15,000.0	7,500.0	7,488.0	7,488.0	128.9	13.1	90.00	-983.2	-48.4	6,255.6	6,217.7	37.87	165.186		
15,100.0	7,500.0	7,488.0	7,488.0	130.6	13.1	90.00	-983.2	-48.4	6,353.3	6,315.3	37.99	167.257		
15,200.0	7,500.0	7,488.0	7,488.0	132.4	13.1	90.00	-983.2	-48.4	6,451.1	6,413.0	38.10	169.317		
15,300.0	7,500.0	7,488.0	7,488.0	134.1	13.1	90.00	-983.2	-48.4	6,549.0	6,510.8	38.22	171.365		
15,400.0	7,500.0	7,488.0	7,488.0	135.8	13.1	90.00	-983.2	-48.4	6,647.0	6,608.7	38.33	173.401		
15,500.0	7,500.0	7,488.0	7,488.0	137.5	13.1	90.00	-983.2	-48.4	6,745.0	6,706.6	38.45	175.425		
15,600.0	7,500.0	7,488.0	7,488.0	139.2	13.1	90.00	-983.2	-48.4	6,843.1	6,804.5	38.57	177.438		
15,700.0	7,500.0	7,488.0	7,488.0	141.0	13.1	90.00	-983.2	-48.4	6,941.2	6,902.5	38.68	179.439		
15,800.0	7,500.0	7,488.0	7,488.0	142.7	13.1	90.00	-983.2	-48.4	7,039.4	7,000.6	38.80	181.429		
15,841.7	7,500.0	7,488.0	7,488.0	143.4	13.1	90.00	-983.2	-48.4	7,080.3	7,041.5	38.85	182.255		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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			
0.0	0.0	0.0	0.0	0.0	0.0	142.69	-1,199.2	913.9	1,507.7					
100.0	100.0	94.0	94.0	0.2	0.2	142.69	-1,199.2	913.9	1,507.7	1,507.4	0.32		4,769.671	
200.0	200.0	194.0	194.0	0.3	0.3	142.69	-1,199.2	913.9	1,507.7	1,507.0	0.67		2,266.660	
300.0	300.0	294.0	294.0	0.5	0.5	142.69	-1,199.2	913.9	1,507.7	1,506.7	1.01		1,486.552	
400.0	400.0	394.0	394.0	0.7	0.7	76.36	-1,199.2	913.9	1,507.5	1,506.1	1.36		1,105.259	
500.0	500.0	494.0	494.0	0.9	0.9	76.46	-1,199.2	913.9	1,506.9	1,505.2	1.72		877.668	
600.0	599.9	593.9	593.9	1.0	1.0	76.63	-1,199.2	913.9	1,505.9	1,503.8	2.08		725.193	
700.0	699.7	693.7	693.7	1.2	1.2	76.87	-1,199.2	913.9	1,504.5	1,502.0	2.45		615.046	
800.0	799.4	793.4	793.4	1.4	1.4	77.18	-1,199.2	913.9	1,502.7	1,499.9	2.83		531.179	
900.0	898.9	892.9	892.9	1.7	1.6	77.55	-1,199.2	913.9	1,500.6	1,497.4	3.23		464.837	
1,000.0	998.3	992.3	992.3	1.9	1.7	78.00	-1,199.2	913.9	1,498.2	1,494.5	3.65		410.851	
1,100.0	1,097.4	1,091.4	1,091.4	2.2	1.9	78.51	-1,199.2	913.9	1,495.5	1,491.4	4.09		365.972	
1,200.0	1,196.3	1,190.3	1,190.3	2.5	2.1	79.09	-1,199.2	913.9	1,492.6	1,488.1	4.55		328.052	
1,300.0	1,294.9	1,288.9	1,288.9	2.8	2.2	79.73	-1,199.2	913.9	1,489.5	1,484.5	5.04		295.609	
1,400.0	1,393.3	1,387.3	1,387.3	3.2	2.4	80.44	-1,199.2	913.9	1,486.3	1,480.8	5.55		267.578	
1,494.4	1,485.8	1,479.8	1,479.8	3.5	2.6	81.18	-1,199.2	913.9	1,483.3	1,477.2	6.07		244.474	
1,500.0	1,491.2	1,485.2	1,485.2	3.5	2.6	81.22	-1,199.2	913.9	1,483.1	1,477.0	6.10		243.219	
1,600.0	1,589.1	1,583.1	1,583.1	3.9	2.8	81.99	-1,199.2	913.9	1,480.0	1,473.4	6.65		222.610	
1,700.0	1,686.9	1,680.9	1,680.9	4.3	2.9	82.77	-1,199.2	913.9	1,477.2	1,470.0	7.21		205.025	
1,800.0	1,784.8	1,778.8	1,778.8	4.7	3.1	83.55	-1,199.2	913.9	1,474.7	1,466.9	7.77		189.890	
1,900.0	1,882.6	1,876.6	1,876.6	5.1	3.3	84.34	-1,199.2	913.9	1,472.5	1,464.1	8.33		176.755	
2,000.0	1,980.4	1,974.4	1,974.4	5.5	3.4	85.12	-1,199.2	913.9	1,470.5	1,461.6	8.90		165.271	
2,100.0	2,078.3	2,072.3	2,072.3	5.9	3.6	85.91	-1,199.2	913.9	1,468.9	1,459.4	9.47		155.161	
2,200.0	2,176.1	2,170.1	2,170.1	6.3	3.8	86.70	-1,199.2	913.9	1,467.5	1,457.5	10.04		146.205	
2,300.0	2,273.9	2,267.9	2,267.9	6.7	4.0	87.49	-1,199.2	913.9	1,466.4	1,455.8	10.61		138.227	
2,400.0	2,371.8	2,365.8	2,365.8	7.1	4.1	88.28	-1,199.2	913.9	1,465.6	1,454.5	11.18		131.085	
2,500.0	2,469.6	2,463.6	2,463.6	7.5	4.3	89.07	-1,199.2	913.9	1,465.2	1,453.4	11.75		124.660	
2,600.0	2,567.4	2,561.4	2,561.4	7.9	4.5	89.86	-1,199.2	913.9	1,465.0	1,452.6	12.33		118.857	
2,617.6	2,584.6	2,578.6	2,578.6	7.9	4.5	90.00	-1,199.2	913.9	1,465.0	1,452.5	12.43		117.894	
2,700.0	2,665.3	2,659.3	2,659.3	8.3	4.6	90.65	-1,199.2	913.9	1,465.1	1,452.2	12.90		113.595	
2,800.0	2,763.1	2,757.1	2,757.1	8.7	4.8	91.44	-1,199.2	913.9	1,465.4	1,452.0	13.47		108.807	
2,900.0	2,860.9	2,854.9	2,854.9	9.1	5.0	92.24	-1,199.2	913.9	1,466.1	1,452.1	14.04		104.437	
3,000.0	2,958.8	2,952.8	2,952.8	9.5	5.2	93.03	-1,199.2	913.9	1,467.1	1,452.5	14.61		100.436	
3,100.0	3,056.6	3,050.6	3,050.6	9.9	5.3	93.81	-1,199.2	913.9	1,468.4	1,453.2	15.17		96.764	
3,200.0	3,154.4	3,148.4	3,148.4	10.3	5.5	94.60	-1,199.2	913.9	1,469.9	1,454.2	15.74		93.385	
3,300.0	3,252.3	3,246.3	3,246.3	10.7	5.7	95.39	-1,199.2	913.9	1,471.7	1,455.4	16.30		90.268	
3,400.0	3,350.1	3,344.1	3,344.1	11.1	5.8	96.17	-1,199.2	913.9	1,473.9	1,457.0	16.87		87.388	
3,500.0	3,447.9	3,441.9	3,441.9	11.5	6.0	96.95	-1,199.2	913.9	1,476.3	1,458.9	17.43		84.722	
3,600.0	3,545.8	3,539.8	3,539.8	11.9	6.2	97.73	-1,199.2	913.9	1,479.0	1,461.0	17.98		82.248	
3,700.0	3,643.6	3,637.6	3,637.6	12.3	6.3	98.51	-1,199.2	913.9	1,482.0	1,463.4	18.54		79.950	
3,800.0	3,741.5	3,735.5	3,735.5	12.7	6.5	99.28	-1,199.2	913.9	1,485.3	1,466.2	19.09		77.811	
3,900.0	3,839.3	3,833.3	3,833.3	13.1	6.7	100.05	-1,199.2	913.9	1,488.8	1,469.2	19.64		75.819	
4,000.0	3,937.1	3,931.1	3,931.1	13.5	6.9	100.82	-1,199.2	913.9	1,492.6	1,472.4	20.18		73.960	
4,100.0	4,035.0	4,029.0	4,029.0	13.9	7.0	101.58	-1,199.2	913.9	1,496.7	1,476.0	20.72		72.223	
4,200.0	4,132.8	4,126.8	4,126.8	14.3	7.2	102.34	-1,199.2	913.9	1,501.1	1,479.9	21.26		70.600	
4,300.0	4,230.6	4,224.6	4,224.6	14.7	7.4	103.09	-1,199.2	913.9	1,505.8	1,484.0	21.80		69.080	
4,400.0	4,328.5	4,322.5	4,322.5	15.1	7.5	103.84	-1,199.2	913.9	1,510.7	1,488.4	22.33		67.655	
4,500.0	4,426.3	4,420.3	4,420.3	15.5	7.7	104.58	-1,199.2	913.9	1,515.9	1,493.0	22.86		66.320	
4,600.0	4,524.1	4,518.1	4,518.1	15.9	7.9	105.32	-1,199.2	913.9	1,521.3	1,497.9	23.38		65.067	
4,700.0	4,622.0	4,616.0	4,616.0	16.3	8.1	106.06	-1,199.2	913.9	1,527.0	1,503.1	23.90		63.889	
4,800.0	4,719.8	4,713.8	4,713.8	16.7	8.2	106.79	-1,199.2	913.9	1,533.0	1,508.6	24.42		62.783	
4,900.0	4,817.6	4,811.6	4,811.6	17.2	8.4	107.51	-1,199.2	913.9	1,539.2	1,514.3	24.93		61.743	

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 2F-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 2F-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 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)				
5,000.0	4,915.5	4,909.5	4,909.5	17.6	8.6	108.23	-1,199.2	913.9	1,545.7	1,520.3	25.44	60.764		
5,100.0	5,013.3	5,007.3	5,007.3	18.0	8.7	108.94	-1,199.2	913.9	1,552.4	1,526.5	25.94	59.843		
5,200.0	5,111.1	5,105.1	5,105.1	18.4	8.9	109.64	-1,199.2	913.9	1,559.4	1,533.0	26.44	58.975		
5,300.0	5,209.0	5,203.0	5,203.0	18.8	9.1	110.34	-1,199.2	913.9	1,566.6	1,539.7	26.94	58.158		
5,400.0	5,306.8	5,300.8	5,300.8	19.2	9.3	111.04	-1,199.2	913.9	1,574.1	1,546.6	27.43	57.387		
5,500.0	5,404.6	5,398.6	5,398.6	19.6	9.4	111.72	-1,199.2	913.9	1,581.8	1,553.8	27.92	56.661		
5,600.0	5,502.5	5,496.5	5,496.5	20.0	9.6	112.40	-1,199.2	913.9	1,589.7	1,561.3	28.40	55.976		
5,700.0	5,600.3	5,594.3	5,594.3	20.4	9.8	113.08	-1,199.2	913.9	1,597.8	1,568.9	28.88	55.330		
5,800.0	5,698.2	5,692.2	5,692.2	20.8	9.9	113.74	-1,199.2	913.9	1,606.2	1,576.8	29.35	54.720		
5,900.0	5,796.0	5,790.0	5,790.0	21.2	10.1	114.40	-1,199.2	913.9	1,614.8	1,585.0	29.82	54.145		
6,000.0	5,893.8	5,887.8	5,887.8	21.6	10.3	115.06	-1,199.2	913.9	1,623.6	1,593.3	30.29	53.603		
6,100.0	5,991.7	5,985.7	5,985.7	22.0	10.4	115.70	-1,199.2	913.9	1,632.6	1,601.9	30.75	53.091		
6,200.0	6,089.5	6,083.5	6,083.5	22.4	10.6	116.34	-1,199.2	913.9	1,641.9	1,610.7	31.21	52.608		
6,300.0	6,187.3	6,181.3	6,181.3	22.8	10.8	116.97	-1,199.2	913.9	1,651.3	1,619.7	31.66	52.152		
6,400.0	6,285.2	6,279.2	6,279.2	23.2	11.0	117.60	-1,199.2	913.9	1,661.0	1,628.9	32.11	51.722		
6,500.0	6,383.0	6,377.0	6,377.0	23.7	11.1	118.22	-1,199.2	913.9	1,670.8	1,638.3	32.56	51.316		
6,600.0	6,480.8	6,474.8	6,474.8	24.1	11.3	118.83	-1,199.2	913.9	1,680.9	1,647.9	33.00	50.933		
6,700.0	6,578.7	6,572.7	6,572.7	24.5	11.5	119.43	-1,199.2	913.9	1,691.1	1,657.7	33.44	50.572		
6,800.0	6,676.5	6,670.5	6,670.5	24.9	11.6	120.03	-1,199.2	913.9	1,701.6	1,667.7	33.87	50.232		
6,900.0	6,774.3	6,768.3	6,768.3	25.3	11.8	120.62	-1,199.2	913.9	1,712.2	1,677.9	34.30	49.911		
7,000.0	6,872.2	6,866.2	6,866.2	25.7	12.0	121.20	-1,199.2	913.9	1,723.0	1,688.3	34.73	49.609		
7,019.1	6,890.8	6,884.8	6,884.8	25.8	12.0	121.31	-1,199.2	913.9	1,725.1	1,690.3	34.81	49.553		
7,050.0	6,921.1	6,915.1	6,915.1	25.9	12.1	106.82	-1,199.2	913.9	1,727.6	1,692.7	34.95	49.436		
7,100.0	6,970.2	6,964.2	6,964.2	26.0	12.2	81.89	-1,199.2	913.9	1,728.3	1,693.2	35.17	49.142		
7,150.0	7,019.0	7,013.0	7,013.0	26.2	12.2	62.18	-1,199.2	913.9	1,724.8	1,689.4	35.40	48.726		
7,200.0	7,067.2	7,061.2	7,061.2	26.3	12.3	49.49	-1,199.2	913.9	1,717.0	1,681.4	35.63	48.191		
7,250.0	7,114.4	7,108.4	7,108.4	26.4	12.4	41.67	-1,199.2	913.9	1,705.1	1,669.2	35.86	47.543		
7,300.0	7,160.3	7,154.3	7,154.3	26.4	12.5	36.82	-1,199.2	913.9	1,689.1	1,653.0	36.10	46.788		
7,350.0	7,204.5	7,198.5	7,198.5	26.5	12.6	33.82	-1,199.2	913.9	1,669.3	1,632.9	36.34	45.934		
7,400.0	7,246.6	7,240.6	7,240.6	26.5	12.6	32.08	-1,199.2	913.9	1,645.6	1,609.1	36.58	44.987		
7,450.0	7,286.4	7,280.4	7,280.4	26.5	12.7	31.28	-1,199.2	913.9	1,618.5	1,581.6	36.82	43.956		
7,500.0	7,323.5	7,317.5	7,317.5	26.5	12.8	31.26	-1,199.2	913.9	1,587.9	1,550.9	37.06	42.848		
7,550.0	7,357.7	7,351.7	7,351.7	26.5	12.8	31.97	-1,199.2	913.9	1,554.3	1,517.0	37.30	41.672		
7,600.0	7,388.7	7,382.7	7,382.7	26.5	12.9	33.42	-1,199.2	913.9	1,517.9	1,480.3	37.54	40.437		
7,650.0	7,416.3	7,410.3	7,410.3	26.5	12.9	35.74	-1,199.2	913.9	1,478.9	1,441.1	37.77	39.153		
7,700.0	7,440.2	7,434.2	7,434.2	26.5	13.0	39.10	-1,199.2	913.9	1,437.6	1,399.6	38.00	37.829		
7,750.0	7,460.3	7,454.3	7,454.3	26.5	13.0	43.82	-1,199.2	913.9	1,394.5	1,356.2	38.23	36.474		
7,800.0	7,476.4	7,470.4	7,470.4	26.5	13.0	50.34	-1,199.2	913.9	1,349.7	1,311.3	38.46	35.097		
7,850.0	7,488.4	7,482.4	7,482.4	26.6	13.1	59.20	-1,199.2	913.9	1,303.7	1,265.0	38.68	33.708		
7,900.0	7,496.2	7,490.2	7,490.2	26.6	13.1	70.81	-1,199.2	913.9	1,256.8	1,217.9	38.89	32.317		
7,950.0	7,499.8	7,493.8	7,493.8	26.7	13.1	84.95	-1,199.2	913.9	1,209.4	1,170.3	39.10	30.932		
7,966.7	7,500.0	7,494.0	7,494.0	26.7	13.1	90.00	-1,199.2	913.9	1,193.6	1,154.4	39.17	30.472		
8,000.0	7,500.0	7,494.0	7,494.0	26.8	13.1	90.00	-1,199.2	913.9	1,161.9	1,122.6	39.31	29.557		
8,100.0	7,500.0	7,494.0	7,494.0	27.0	13.1	90.00	-1,199.2	913.9	1,067.4	1,027.6	39.76	26.844		
8,200.0	7,500.0	7,494.0	7,494.0	27.4	13.1	90.00	-1,199.2	913.9	974.1	933.8	40.26	24.191		
8,300.0	7,500.0	7,494.0	7,494.0	27.9	13.1	90.00	-1,199.2	913.9	882.1	841.3	40.82	21.611		
8,400.0	7,500.0	7,494.0	7,494.0	28.5	13.1	90.00	-1,199.2	913.9	792.2	750.8	41.43	19.119		
8,500.0	7,500.0	7,494.0	7,494.0	29.1	13.1	90.00	-1,199.2	913.9	705.0	662.9	42.10	16.744		
8,600.0	7,500.0	7,494.0	7,494.0	29.9	13.1	90.00	-1,199.2	913.9	621.6	578.8	42.80	14.523		
8,700.0	7,500.0	7,494.0	7,494.0	30.8	13.1	90.00	-1,199.2	913.9	543.9	500.4	43.46	12.515		
8,800.0	7,500.0	7,494.0	7,494.0	31.7	13.1	90.00	-1,199.2	913.9	474.6	430.7	43.90	10.812		
8,900.0	7,500.0	7,494.0	7,494.0	32.7	13.1	90.00	-1,199.2	913.9	417.9	374.2	43.75	9.553		

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 2F-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 2F-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		
9,000.0	7,500.0	7,494.0	7,494.0	33.7	13.1	90.00	-1,199.2	913.9	379.6	337.1	42.47	8.937 SF		
9,100.0	7,500.0	7,494.0	7,494.0	34.8	13.1	90.00	-1,199.2	913.9	365.3	325.6	39.72	9.198 ES		
9,102.9	7,500.0	7,494.0	7,494.0	34.9	13.1	90.00	-1,199.2	913.9	365.3	325.7	39.62	9.221 CC		
9,200.0	7,500.0	7,494.0	7,494.0	36.0	13.1	90.00	-1,199.2	913.9	378.0	341.9	36.05	10.485		
9,300.0	7,500.0	7,494.0	7,494.0	37.2	13.1	90.00	-1,199.2	913.9	415.1	382.3	32.77	12.667		
9,400.0	7,500.0	7,494.0	7,494.0	38.4	13.1	90.00	-1,199.2	913.9	470.9	440.1	30.75	15.314		
9,500.0	7,500.0	7,494.0	7,494.0	39.7	13.1	90.00	-1,199.2	913.9	539.6	509.6	29.96	18.010		
9,600.0	7,500.0	7,494.0	7,494.0	41.1	13.1	90.00	-1,199.2	913.9	616.9	586.9	29.95	20.596		
9,700.0	7,500.0	7,494.0	7,494.0	42.4	13.1	90.00	-1,199.2	913.9	700.0	669.6	30.32	23.085		
9,800.0	7,500.0	7,494.0	7,494.0	43.8	13.1	90.00	-1,199.2	913.9	787.0	756.2	30.83	25.524		
9,900.0	7,500.0	7,494.0	7,494.0	45.2	13.1	90.00	-1,199.2	913.9	876.8	845.4	31.38	27.943		
10,000.0	7,500.0	7,494.0	7,494.0	46.6	13.1	90.00	-1,199.2	913.9	968.6	936.7	31.90	30.359		
10,100.0	7,500.0	7,494.0	7,494.0	48.1	13.1	90.00	-1,199.2	913.9	1,061.9	1,029.5	32.40	32.776		
10,200.0	7,500.0	7,494.0	7,494.0	49.6	13.1	90.00	-1,199.2	913.9	1,156.3	1,123.4	32.85	35.197		
10,300.0	7,500.0	7,494.0	7,494.0	51.1	13.1	90.00	-1,199.2	913.9	1,251.6	1,218.3	33.27	37.620		
10,400.0	7,500.0	7,494.0	7,494.0	52.6	13.1	90.00	-1,199.2	913.9	1,347.5	1,313.9	33.65	40.044		
10,500.0	7,500.0	7,494.0	7,494.0	54.1	13.1	90.00	-1,199.2	913.9	1,444.0	1,410.0	34.00	42.467		
10,600.0	7,500.0	7,494.0	7,494.0	55.6	13.1	90.00	-1,199.2	913.9	1,541.0	1,506.7	34.33	44.888		
10,700.0	7,500.0	7,494.0	7,494.0	57.2	13.1	90.00	-1,199.2	913.9	1,638.3	1,603.7	34.63	47.304		
10,800.0	7,500.0	7,494.0	7,494.0	58.8	13.1	90.00	-1,199.2	913.9	1,735.9	1,701.0	34.92	49.715		
10,900.0	7,500.0	7,494.0	7,494.0	60.3	13.1	90.00	-1,199.2	913.9	1,833.8	1,798.6	35.18	52.120		
11,000.0	7,500.0	7,494.0	7,494.0	61.9	13.1	90.00	-1,199.2	913.9	1,931.9	1,896.5	35.44	54.517		
11,100.0	7,500.0	7,494.0	7,494.0	63.5	13.1	90.00	-1,199.2	913.9	2,030.2	1,994.5	35.68	56.907		
11,200.0	7,500.0	7,494.0	7,494.0	65.1	13.1	90.00	-1,199.2	913.9	2,128.6	2,092.7	35.90	59.288		
11,300.0	7,500.0	7,494.0	7,494.0	66.7	13.1	90.00	-1,199.2	913.9	2,227.2	2,191.1	36.12	61.660		
11,400.0	7,500.0	7,494.0	7,494.0	68.3	13.1	90.00	-1,199.2	913.9	2,325.9	2,289.6	36.33	64.023		
11,500.0	7,500.0	7,494.0	7,494.0	70.0	13.1	90.00	-1,199.2	913.9	2,424.7	2,388.2	36.53	66.376		
11,600.0	7,500.0	7,494.0	7,494.0	71.6	13.1	90.00	-1,199.2	913.9	2,523.6	2,486.9	36.72	68.719		
11,700.0	7,500.0	7,494.0	7,494.0	73.2	13.1	90.00	-1,199.2	913.9	2,622.6	2,585.7	36.91	71.052		
11,800.0	7,500.0	7,494.0	7,494.0	74.9	13.1	90.00	-1,199.2	913.9	2,721.7	2,684.6	37.09	73.375		
11,900.0	7,500.0	7,494.0	7,494.0	76.5	13.1	90.00	-1,199.2	913.9	2,820.8	2,783.5	37.27	75.687		
12,000.0	7,500.0	7,494.0	7,494.0	78.2	13.1	90.00	-1,199.2	913.9	2,920.0	2,882.6	37.44	77.989		
12,100.0	7,500.0	7,494.0	7,494.0	79.8	13.1	90.00	-1,199.2	913.9	3,019.2	2,981.6	37.61	80.280		
12,200.0	7,500.0	7,494.0	7,494.0	81.5	13.1	90.00	-1,199.2	913.9	3,118.5	3,080.8	37.77	82.560		
12,300.0	7,500.0	7,494.0	7,494.0	83.1	13.1	90.00	-1,199.2	913.9	3,217.9	3,179.9	37.93	84.830		
12,400.0	7,500.0	7,494.0	7,494.0	84.8	13.1	90.00	-1,199.2	913.9	3,317.2	3,279.1	38.09	87.088		
12,500.0	7,500.0	7,494.0	7,494.0	86.5	13.1	90.00	-1,199.2	913.9	3,416.6	3,378.4	38.24	89.336		
12,600.0	7,500.0	7,494.0	7,494.0	88.1	13.1	90.00	-1,199.2	913.9	3,516.1	3,477.7	38.40	91.574		
12,700.0	7,500.0	7,494.0	7,494.0	89.8	13.1	90.00	-1,199.2	913.9	3,615.6	3,577.0	38.55	93.800		
12,800.0	7,500.0	7,494.0	7,494.0	91.5	13.1	90.00	-1,199.2	913.9	3,715.1	3,676.4	38.69	96.016		
12,900.0	7,500.0	7,494.0	7,494.0	93.2	13.1	90.00	-1,199.2	913.9	3,814.6	3,775.8	38.84	98.220		
13,000.0	7,500.0	7,494.0	7,494.0	94.9	13.1	90.00	-1,199.2	913.9	3,914.1	3,875.2	38.98	100.414		
13,100.0	7,500.0	7,494.0	7,494.0	96.5	13.1	90.00	-1,199.2	913.9	4,013.7	3,974.6	39.12	102.598		
13,200.0	7,500.0	7,494.0	7,494.0	98.2	13.1	90.00	-1,199.2	913.9	4,113.3	4,074.0	39.26	104.771		
13,300.0	7,500.0	7,494.0	7,494.0	99.9	13.1	90.00	-1,199.2	913.9	4,212.9	4,173.5	39.40	106.933		
13,400.0	7,500.0	7,494.0	7,494.0	101.6	13.1	90.00	-1,199.2	913.9	4,312.6	4,273.0	39.53	109.084		
13,500.0	7,500.0	7,494.0	7,494.0	103.3	13.1	90.00	-1,199.2	913.9	4,412.2	4,372.5	39.67	111.226		
13,600.0	7,500.0	7,494.0	7,494.0	105.0	13.1	90.00	-1,199.2	913.9	4,511.9	4,472.1	39.80	113.356		
13,700.0	7,500.0	7,494.0	7,494.0	106.7	13.1	90.00	-1,199.2	913.9	4,611.5	4,571.6	39.93	115.476		
13,800.0	7,500.0	7,494.0	7,494.0	108.4	13.1	90.00	-1,199.2	913.9	4,711.2	4,671.2	40.07	117.586		
13,900.0	7,500.0	7,494.0	7,494.0	110.1	13.1	90.00	-1,199.2	913.9	4,810.9	4,770.7	40.20	119.686		
14,000.0	7,500.0	7,494.0	7,494.0	111.8	13.1	90.00	-1,199.2	913.9	4,910.7	4,870.3	40.33	121.775		

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 2F-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 2F-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		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)					
14,100.0	7,500.0	7,494.0	7,494.0	113.5	13.1	90.00	-1,199.2	913.9	5,010.4	4,969.9	40.45	123.855	
14,200.0	7,500.0	7,494.0	7,494.0	115.2	13.1	90.00	-1,199.2	913.9	5,110.1	5,069.5	40.58	125.924	
14,300.0	7,500.0	7,494.0	7,494.0	116.9	13.1	90.00	-1,199.2	913.9	5,209.9	5,169.2	40.71	127.983	
14,400.0	7,500.0	7,494.0	7,494.0	118.6	13.1	90.00	-1,199.2	913.9	5,309.6	5,268.8	40.83	130.032	
14,500.0	7,500.0	7,494.0	7,494.0	120.4	13.1	90.00	-1,199.2	913.9	5,409.4	5,368.4	40.96	132.071	
14,600.0	7,500.0	7,494.0	7,494.0	122.1	13.1	90.00	-1,199.2	913.9	5,509.2	5,468.1	41.08	134.101	
14,700.0	7,500.0	7,494.0	7,494.0	123.8	13.1	90.00	-1,199.2	913.9	5,609.0	5,567.8	41.21	136.120	
14,800.0	7,500.0	7,494.0	7,494.0	125.5	13.1	90.00	-1,199.2	913.9	5,708.8	5,667.4	41.33	138.130	
14,900.0	7,500.0	7,494.0	7,494.0	127.2	13.1	90.00	-1,199.2	913.9	5,808.6	5,767.1	41.45	140.131	
15,000.0	7,500.0	7,494.0	7,494.0	128.9	13.1	90.00	-1,199.2	913.9	5,908.4	5,866.8	41.57	142.121	
15,100.0	7,500.0	7,494.0	7,494.0	130.6	13.1	90.00	-1,199.2	913.9	6,008.2	5,966.5	41.69	144.102	
15,200.0	7,500.0	7,494.0	7,494.0	132.4	13.1	90.00	-1,199.2	913.9	6,108.0	6,066.2	41.81	146.074	
15,300.0	7,500.0	7,494.0	7,494.0	134.1	13.1	90.00	-1,199.2	913.9	6,207.8	6,165.9	41.93	148.037	
15,400.0	7,500.0	7,494.0	7,494.0	135.8	13.1	90.00	-1,199.2	913.9	6,307.6	6,265.6	42.05	149.990	
15,500.0	7,500.0	7,494.0	7,494.0	137.5	13.1	90.00	-1,199.2	913.9	6,407.5	6,365.3	42.17	151.933	
15,600.0	7,500.0	7,494.0	7,494.0	139.2	13.1	90.00	-1,199.2	913.9	6,507.3	6,465.0	42.29	153.868	
15,700.0	7,500.0	7,494.0	7,494.0	141.0	13.1	90.00	-1,199.2	913.9	6,607.2	6,564.8	42.41	155.793	
15,800.0	7,500.0	7,494.0	7,494.0	142.7	13.1	90.00	-1,199.2	913.9	6,707.0	6,664.5	42.53	157.710	
15,841.7	7,500.0	7,494.0	7,494.0	143.4	13.1	90.00	-1,199.2	913.9	6,748.6	6,706.0	42.58	158.506	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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		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	Separation Factor		
0.0	0.0	88.0	88.0	0.0	0.2	-24.95	131.1	-61.0	144.6					
100.0	100.0	188.0	188.0	0.2	0.3	-24.95	131.1	-61.0	144.6	144.2	0.48	301.221		
200.0	200.0	288.0	288.0	0.3	0.5	-24.95	131.1	-61.0	144.6	143.8	0.83	174.422		
300.0	300.0	388.0	388.0	0.5	0.7	-24.95	131.1	-61.0	144.6	143.5	1.18	122.750 CC		
400.0	400.0	488.0	488.0	0.7	0.9	-91.66	131.1	-61.0	144.7	143.1	1.53	94.669		
500.0	500.0	588.0	588.0	0.9	1.0	-92.70	131.1	-61.0	144.8	142.9	1.88	76.948		
600.0	599.9	687.9	687.9	1.0	1.2	-94.42	131.1	-61.0	145.0	142.8	2.24	64.706 ES		
700.0	699.7	787.7	787.7	1.2	1.4	-96.80	131.1	-61.0	145.6	143.0	2.61	55.762		
800.0	799.4	887.4	887.4	1.4	1.5	-99.82	131.1	-61.0	146.8	143.8	2.99	49.011		
900.0	898.9	986.9	986.9	1.7	1.7	-103.43	131.1	-61.0	148.7	145.3	3.39	43.849		
1,000.0	998.3	1,086.3	1,086.3	1.9	1.9	-107.54	131.1	-61.0	151.7	147.9	3.80	39.919		
1,100.0	1,097.4	1,185.4	1,185.4	2.2	2.1	-112.03	131.1	-61.0	156.2	152.0	4.22	37.000		
1,200.0	1,196.3	1,284.3	1,284.3	2.5	2.2	-116.77	131.1	-61.0	162.4	157.7	4.65	34.935		
1,300.0	1,294.9	1,382.9	1,382.9	2.8	2.4	-121.61	131.1	-61.0	170.5	165.4	5.07	33.607		
1,400.0	1,393.3	1,481.3	1,481.3	3.2	2.6	-126.40	131.1	-61.0	180.8	175.3	5.49	32.913		
1,494.4	1,485.8	1,573.8	1,573.8	3.5	2.7	-130.76	131.1	-61.0	192.7	186.8	5.88	32.761 SF		
1,500.0	1,491.2	1,579.2	1,579.2	3.5	2.8	-131.01	131.1	-61.0	193.5	187.6	5.90	32.768		
1,600.0	1,589.1	1,677.1	1,677.1	3.9	2.9	-135.28	131.1	-61.0	207.8	201.5	6.29	33.018		
1,700.0	1,686.9	1,774.9	1,774.9	4.3	3.1	-138.98	131.1	-61.0	223.1	216.5	6.67	33.464		
1,800.0	1,784.8	1,872.8	1,872.8	4.7	3.3	-142.21	131.1	-61.0	239.3	232.2	7.03	34.035		
1,900.0	1,882.6	1,970.6	1,970.6	5.1	3.4	-145.03	131.1	-61.0	256.0	248.7	7.38	34.681		
2,000.0	1,980.4	2,068.4	2,068.4	5.5	3.6	-147.50	131.1	-61.0	273.4	265.6	7.73	35.367		
2,100.0	2,078.3	2,166.3	2,166.3	5.9	3.8	-149.68	131.1	-61.0	291.1	283.1	8.07	36.071		
2,200.0	2,176.1	2,264.1	2,264.1	6.3	4.0	-151.61	131.1	-61.0	309.3	300.9	8.41	36.777		
2,300.0	2,273.9	2,361.9	2,361.9	6.7	4.1	-153.32	131.1	-61.0	327.7	319.0	8.75	37.474		
2,400.0	2,371.8	2,459.8	2,459.8	7.1	4.3	-154.85	131.1	-61.0	346.4	337.3	9.08	38.154		
2,500.0	2,469.6	2,557.6	2,557.6	7.5	4.5	-156.22	131.1	-61.0	365.3	355.9	9.41	38.815		
2,600.0	2,567.4	2,655.4	2,655.4	7.9	4.6	-157.46	131.1	-61.0	384.4	374.7	9.74	39.452		
2,700.0	2,665.3	2,753.3	2,753.3	8.3	4.8	-158.59	131.1	-61.0	403.7	393.6	10.08	40.065		
2,800.0	2,763.1	2,851.1	2,851.1	8.7	5.0	-159.61	131.1	-61.0	423.1	412.6	10.41	40.653		
2,900.0	2,860.9	2,948.9	2,948.9	9.1	5.1	-160.54	131.1	-61.0	442.6	431.8	10.74	41.216		
3,000.0	2,958.8	3,046.8	3,046.8	9.5	5.3	-161.39	131.1	-61.0	462.2	451.1	11.07	41.755		
3,100.0	3,056.6	3,144.6	3,144.6	9.9	5.5	-162.18	131.1	-61.0	481.9	470.5	11.40	42.269		
3,200.0	3,154.4	3,242.4	3,242.4	10.3	5.7	-162.90	131.1	-61.0	501.6	489.9	11.73	42.760		
3,300.0	3,252.3	3,340.3	3,340.3	10.7	5.8	-163.57	131.1	-61.0	521.5	509.4	12.06	43.230		
3,400.0	3,350.1	3,438.1	3,438.1	11.1	6.0	-164.18	131.1	-61.0	541.4	529.0	12.40	43.678		
3,500.0	3,447.9	3,535.9	3,535.9	11.5	6.2	-164.76	131.1	-61.0	561.4	548.7	12.73	44.106		
3,600.0	3,545.8	3,633.8	3,633.8	11.9	6.3	-165.29	131.1	-61.0	581.4	568.3	13.06	44.515		
3,700.0	3,643.6	3,731.6	3,731.6	12.3	6.5	-165.79	131.1	-61.0	601.5	588.1	13.39	44.906		
3,800.0	3,741.5	3,829.5	3,829.5	12.7	6.7	-166.26	131.1	-61.0	621.6	607.9	13.73	45.280		
3,900.0	3,839.3	3,927.3	3,927.3	13.1	6.9	-166.70	131.1	-61.0	641.7	627.7	14.06	45.638		
4,000.0	3,937.1	4,025.1	4,025.1	13.5	7.0	-167.11	131.1	-61.0	661.9	647.5	14.40	45.980		
4,100.0	4,035.0	4,123.0	4,123.0	13.9	7.2	-167.50	131.1	-61.0	682.1	667.4	14.73	46.308		
4,200.0	4,132.8	4,220.8	4,220.8	14.3	7.4	-167.86	131.1	-61.0	702.4	687.3	15.06	46.623		
4,300.0	4,230.6	4,318.6	4,318.6	14.7	7.5	-168.21	131.1	-61.0	722.6	707.2	15.40	46.924		
4,400.0	4,328.5	4,416.5	4,416.5	15.1	7.7	-168.53	131.1	-61.0	742.9	727.2	15.74	47.214		
4,500.0	4,426.3	4,514.3	4,514.3	15.5	7.9	-168.84	131.1	-61.0	763.2	747.2	16.07	47.491		
4,600.0	4,524.1	4,612.1	4,612.1	15.9	8.0	-169.14	131.1	-61.0	783.6	767.1	16.41	47.758		
4,700.0	4,622.0	4,710.0	4,710.0	16.3	8.2	-169.41	131.1	-61.0	803.9	787.2	16.74	48.015		
4,800.0	4,719.8	4,807.8	4,807.8	16.7	8.4	-169.68	131.1	-61.0	824.3	807.2	17.08	48.261		
4,900.0	4,817.6	4,905.6	4,905.6	17.2	8.6	-169.93	131.1	-61.0	844.7	827.2	17.42	48.499		
5,000.0	4,915.5	5,003.5	5,003.5	17.6	8.7	-170.17	131.1	-61.0	865.1	847.3	17.75	48.727		

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 2F-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 2F-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	5,013.3	5,101.3	5,101.3	18.0	8.9	-170.40	131.1	-61.0	885.5	867.4	18.09	48.947	
5,200.0	5,111.1	5,199.1	5,199.1	18.4	9.1	-170.62	131.1	-61.0	905.9	887.5	18.43	49.160	
5,300.0	5,209.0	5,297.0	5,297.0	18.8	9.2	-170.82	131.1	-61.0	926.3	907.6	18.76	49.364	
5,400.0	5,306.8	5,394.8	5,394.8	19.2	9.4	-171.02	131.1	-61.0	946.8	927.7	19.10	49.562	
5,500.0	5,404.6	5,492.6	5,492.6	19.6	9.6	-171.21	131.1	-61.0	967.2	947.8	19.44	49.753	
5,600.0	5,502.5	5,590.5	5,590.5	20.0	9.8	-171.40	131.1	-61.0	987.7	967.9	19.78	49.937	
5,700.0	5,600.3	5,688.3	5,688.3	20.4	9.9	-171.57	131.1	-61.0	1,008.2	988.1	20.12	50.116	
5,800.0	5,698.2	5,786.2	5,786.2	20.8	10.1	-171.74	131.1	-61.0	1,028.7	1,008.2	20.46	50.288	
5,900.0	5,796.0	5,884.0	5,884.0	21.2	10.3	-171.91	131.1	-61.0	1,049.2	1,028.4	20.79	50.455	
6,000.0	5,893.8	5,981.8	5,981.8	21.6	10.4	-172.06	131.1	-61.0	1,069.7	1,048.5	21.13	50.616	
6,100.0	5,991.7	6,079.7	6,079.7	22.0	10.6	-172.21	131.1	-61.0	1,090.2	1,068.7	21.47	50.772	
6,200.0	6,089.5	6,177.5	6,177.5	22.4	10.8	-172.36	131.1	-61.0	1,110.7	1,088.9	21.81	50.924	
6,300.0	6,187.3	6,275.3	6,275.3	22.8	11.0	-172.50	131.1	-61.0	1,131.2	1,109.1	22.15	51.071	
6,400.0	6,285.2	6,373.2	6,373.2	23.2	11.1	-172.63	131.1	-61.0	1,151.7	1,129.2	22.49	51.213	
6,500.0	6,383.0	6,471.0	6,471.0	23.7	11.3	-172.76	131.1	-61.0	1,172.3	1,149.4	22.83	51.351	
6,600.0	6,480.8	6,568.8	6,568.8	24.1	11.5	-172.88	131.1	-61.0	1,192.8	1,169.6	23.17	51.485	
6,700.0	6,578.7	6,666.7	6,666.7	24.5	11.6	-173.01	131.1	-61.0	1,213.4	1,189.8	23.51	51.615	
6,800.0	6,676.5	6,764.5	6,764.5	24.9	11.8	-173.12	131.1	-61.0	1,233.9	1,210.1	23.85	51.742	
6,900.0	6,774.3	6,862.3	6,862.3	25.3	12.0	-173.24	131.1	-61.0	1,254.5	1,230.3	24.19	51.864	
7,000.0	6,872.2	6,960.2	6,960.2	25.7	12.1	-173.35	131.1	-61.0	1,275.0	1,250.5	24.53	51.984	
7,019.1	6,890.8	6,978.8	6,978.8	25.8	12.2	-173.37	131.1	-61.0	1,278.9	1,254.4	24.59	52.006	
7,050.0	6,921.1	7,009.1	7,009.1	25.9	12.2	171.40	131.1	-61.0	1,285.1	1,260.4	24.69	52.039	
7,100.0	6,970.2	7,058.2	7,058.2	26.0	12.3	145.46	131.1	-61.0	1,293.9	1,269.1	24.86	52.055	
7,150.0	7,019.0	7,107.0	7,107.0	26.2	12.4	124.98	131.1	-61.0	1,301.5	1,276.5	25.02	52.019	
7,200.0	7,067.2	7,155.2	7,155.2	26.3	12.5	111.71	131.1	-61.0	1,307.8	1,282.7	25.18	51.935	
7,250.0	7,114.4	7,202.4	7,202.4	26.4	12.6	103.47	131.1	-61.0	1,312.9	1,287.6	25.34	51.806	
7,300.0	7,160.3	7,248.3	7,248.3	26.4	12.7	98.30	131.1	-61.0	1,316.9	1,291.4	25.50	51.639	
7,350.0	7,204.5	7,292.5	7,292.5	26.5	12.7	95.05	131.1	-61.0	1,319.9	1,294.2	25.66	51.441	
7,400.0	7,246.6	7,334.6	7,334.6	26.5	12.8	93.04	131.1	-61.0	1,322.1	1,296.3	25.81	51.220	
7,450.0	7,286.4	7,374.4	7,374.4	26.5	12.9	91.85	131.1	-61.0	1,323.7	1,297.7	25.96	50.986	
7,500.0	7,323.5	7,411.5	7,411.5	26.5	12.9	91.23	131.1	-61.0	1,324.8	1,298.7	26.11	50.747	
7,550.0	7,357.7	7,445.7	7,445.7	26.5	13.0	90.98	131.1	-61.0	1,325.8	1,299.6	26.25	50.513	
7,600.0	7,388.7	7,476.7	7,476.7	26.5	13.0	90.97	131.1	-61.0	1,326.9	1,300.5	26.38	50.293	
7,650.0	7,416.3	7,504.3	7,504.3	26.5	13.1	91.07	131.1	-61.0	1,328.3	1,301.7	26.51	50.096	
7,700.0	7,440.2	7,528.2	7,528.2	26.5	13.1	91.21	131.1	-61.0	1,330.1	1,303.5	26.64	49.930	
7,750.0	7,460.3	7,548.3	7,548.3	26.5	13.2	91.30	131.1	-61.0	1,332.6	1,305.8	26.76	49.801	
7,800.0	7,476.4	7,564.4	7,564.4	26.5	13.2	91.28	131.1	-61.0	1,335.9	1,309.1	26.87	49.714	
7,850.0	7,488.4	7,576.4	7,576.4	26.6	13.2	91.11	131.1	-61.0	1,340.2	1,313.2	26.98	49.674	
7,900.0	7,496.2	7,584.2	7,584.2	26.6	13.2	90.77	131.1	-61.0	1,345.5	1,318.4	27.08	49.681	
7,950.0	7,499.8	7,587.8	7,587.8	26.7	13.2	90.23	131.1	-61.0	1,351.8	1,324.7	27.18	49.735	
7,966.7	7,500.0	7,588.0	7,588.0	26.7	13.2	90.00	131.1	-61.0	1,354.2	1,327.0	27.21	49.764	
8,000.0	7,500.0	7,588.0	7,588.0	26.8	13.2	90.00	131.1	-61.0	1,359.3	1,332.1	27.27	49.841	
8,100.0	7,500.0	7,588.0	7,588.0	27.0	13.2	90.00	131.1	-61.0	1,379.6	1,352.1	27.46	50.239	
8,200.0	7,500.0	7,588.0	7,588.0	27.4	13.2	90.00	131.1	-61.0	1,406.7	1,379.0	27.65	50.878	
8,300.0	7,500.0	7,588.0	7,588.0	27.9	13.2	90.00	131.1	-61.0	1,440.2	1,412.4	27.84	51.738	
8,400.0	7,500.0	7,588.0	7,588.0	28.5	13.2	90.00	131.1	-61.0	1,479.8	1,451.7	28.02	52.803	
8,500.0	7,500.0	7,588.0	7,588.0	29.1	13.2	90.00	131.1	-61.0	1,524.9	1,496.6	28.21	54.052	
8,600.0	7,500.0	7,588.0	7,588.0	29.9	13.2	90.00	131.1	-61.0	1,575.0	1,546.6	28.40	55.467	
8,700.0	7,500.0	7,588.0	7,588.0	30.8	13.2	90.00	131.1	-61.0	1,629.8	1,601.2	28.58	57.028	
8,800.0	7,500.0	7,588.0	7,588.0	31.7	13.2	90.00	131.1	-61.0	1,688.7	1,659.9	28.76	58.719	
8,900.0	7,500.0	7,588.0	7,588.0	32.7	13.2	90.00	131.1	-61.0	1,751.3	1,722.4	28.94	60.523	
9,000.0	7,500.0	7,588.0	7,588.0	33.7	13.2	90.00	131.1	-61.0	1,817.3	1,788.2	29.11	62.425	

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 2F-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 2F-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			
9,100.0	7,500.0	7,588.0	7,588.0	34.8	13.2	90.00	131.1	-61.0	1,886.3	1,857.0	29.28	64.412			
9,200.0	7,500.0	7,588.0	7,588.0	36.0	13.2	90.00	131.1	-61.0	1,957.9	1,928.5	29.46	66.472			
9,300.0	7,500.0	7,588.0	7,588.0	37.2	13.2	90.00	131.1	-61.0	2,032.0	2,002.4	29.62	68.594			
9,400.0	7,500.0	7,588.0	7,588.0	38.4	13.2	90.00	131.1	-61.0	2,108.2	2,078.4	29.79	70.770			
9,500.0	7,500.0	7,588.0	7,588.0	39.7	13.2	90.00	131.1	-61.0	2,186.3	2,156.4	29.95	72.990			
9,600.0	7,500.0	7,588.0	7,588.0	41.1	13.2	90.00	131.1	-61.0	2,266.1	2,236.0	30.12	75.248			
9,700.0	7,500.0	7,588.0	7,588.0	42.4	13.2	90.00	131.1	-61.0	2,347.5	2,317.3	30.28	77.538			
9,800.0	7,500.0	7,588.0	7,588.0	43.8	13.2	90.00	131.1	-61.0	2,430.3	2,399.9	30.43	79.853			
9,900.0	7,500.0	7,588.0	7,588.0	45.2	13.2	90.00	131.1	-61.0	2,514.3	2,483.7	30.59	82.189			
10,000.0	7,500.0	7,588.0	7,588.0	46.6	13.2	90.00	131.1	-61.0	2,599.5	2,568.7	30.75	84.542			
10,100.0	7,500.0	7,588.0	7,588.0	48.1	13.2	90.00	131.1	-61.0	2,685.7	2,654.8	30.90	86.909			
10,200.0	7,500.0	7,588.0	7,588.0	49.6	13.2	90.00	131.1	-61.0	2,772.8	2,741.7	31.06	89.285			
10,300.0	7,500.0	7,588.0	7,588.0	51.1	13.2	90.00	131.1	-61.0	2,860.7	2,829.5	31.21	91.668			
10,400.0	7,500.0	7,588.0	7,588.0	52.6	13.2	90.00	131.1	-61.0	2,949.4	2,918.1	31.36	94.056			
10,500.0	7,500.0	7,588.0	7,588.0	54.1	13.2	90.00	131.1	-61.0	3,038.9	3,007.4	31.51	96.447			
10,600.0	7,500.0	7,588.0	7,588.0	55.6	13.2	90.00	131.1	-61.0	3,128.9	3,097.3	31.66	98.838			
10,700.0	7,500.0	7,588.0	7,588.0	57.2	13.2	90.00	131.1	-61.0	3,219.6	3,187.8	31.81	101.228			
10,800.0	7,500.0	7,588.0	7,588.0	58.8	13.2	90.00	131.1	-61.0	3,310.8	3,278.8	31.95	103.616			
10,900.0	7,500.0	7,588.0	7,588.0	60.3	13.2	90.00	131.1	-61.0	3,402.4	3,370.3	32.10	106.000			
11,000.0	7,500.0	7,588.0	7,588.0	61.9	13.2	90.00	131.1	-61.0	3,494.6	3,462.3	32.24	108.379			
11,100.0	7,500.0	7,588.0	7,588.0	63.5	13.2	90.00	131.1	-61.0	3,587.1	3,554.7	32.39	110.752			
11,200.0	7,500.0	7,588.0	7,588.0	65.1	13.2	90.00	131.1	-61.0	3,680.1	3,647.6	32.53	113.119			
11,300.0	7,500.0	7,588.0	7,588.0	66.7	13.2	90.00	131.1	-61.0	3,773.4	3,740.7	32.68	115.479			
11,400.0	7,500.0	7,588.0	7,588.0	68.3	13.2	90.00	131.1	-61.0	3,867.0	3,834.2	32.82	117.830			
11,500.0	7,500.0	7,588.0	7,588.0	70.0	13.2	90.00	131.1	-61.0	3,961.0	3,928.0	32.96	120.173			
11,600.0	7,500.0	7,588.0	7,588.0	71.6	13.2	90.00	131.1	-61.0	4,055.2	4,022.1	33.10	122.507			
11,700.0	7,500.0	7,588.0	7,588.0	73.2	13.2	90.00	131.1	-61.0	4,149.7	4,116.5	33.24	124.831			
11,800.0	7,500.0	7,588.0	7,588.0	74.9	13.2	90.00	131.1	-61.0	4,244.5	4,211.1	33.38	127.145			
11,900.0	7,500.0	7,588.0	7,588.0	76.5	13.2	90.00	131.1	-61.0	4,339.5	4,306.0	33.52	129.449			
12,000.0	7,500.0	7,588.0	7,588.0	78.2	13.2	90.00	131.1	-61.0	4,434.7	4,401.1	33.66	131.743			
12,100.0	7,500.0	7,588.0	7,588.0	79.8	13.2	90.00	131.1	-61.0	4,530.2	4,496.4	33.80	134.026			
12,200.0	7,500.0	7,588.0	7,588.0	81.5	13.2	90.00	131.1	-61.0	4,625.8	4,591.8	33.94	136.298			
12,300.0	7,500.0	7,588.0	7,588.0	83.1	13.2	90.00	131.1	-61.0	4,721.6	4,687.5	34.08	138.559			
12,400.0	7,500.0	7,588.0	7,588.0	84.8	13.2	90.00	131.1	-61.0	4,817.5	4,783.3	34.21	140.809			
12,500.0	7,500.0	7,588.0	7,588.0	86.5	13.2	90.00	131.1	-61.0	4,913.7	4,879.3	34.35	143.047			
12,600.0	7,500.0	7,588.0	7,588.0	88.1	13.2	90.00	131.1	-61.0	5,010.0	4,975.5	34.49	145.274			
12,700.0	7,500.0	7,588.0	7,588.0	89.8	13.2	90.00	131.1	-61.0	5,106.4	5,071.8	34.62	147.489			
12,800.0	7,500.0	7,588.0	7,588.0	91.5	13.2	90.00	131.1	-61.0	5,202.9	5,168.2	34.76	149.693			
12,900.0	7,500.0	7,588.0	7,588.0	93.2	13.2	90.00	131.1	-61.0	5,299.6	5,264.7	34.89	151.885			
13,000.0	7,500.0	7,588.0	7,588.0	94.9	13.2	90.00	131.1	-61.0	5,396.4	5,361.4	35.03	154.066			
13,100.0	7,500.0	7,588.0	7,588.0	96.5	13.2	90.00	131.1	-61.0	5,493.4	5,458.2	35.16	156.235			
13,200.0	7,500.0	7,588.0	7,588.0	98.2	13.2	90.00	131.1	-61.0	5,590.4	5,555.1	35.29	158.392			
13,300.0	7,500.0	7,588.0	7,588.0	99.9	13.2	90.00	131.1	-61.0	5,687.5	5,652.1	35.43	160.537			
13,400.0	7,500.0	7,588.0	7,588.0	101.6	13.2	90.00	131.1	-61.0	5,784.8	5,749.2	35.56	162.671			
13,500.0	7,500.0	7,588.0	7,588.0	103.3	13.2	90.00	131.1	-61.0	5,882.1	5,846.4	35.69	164.793			
13,600.0	7,500.0	7,588.0	7,588.0	105.0	13.2	90.00	131.1	-61.0	5,979.5	5,943.7	35.83	166.904			
13,700.0	7,500.0	7,588.0	7,588.0	106.7	13.2	90.00	131.1	-61.0	6,077.0	6,041.0	35.96	169.003			
13,800.0	7,500.0	7,588.0	7,588.0	108.4	13.2	90.00	131.1	-61.0	6,174.6	6,138.5	36.09	171.091			
13,900.0	7,500.0	7,588.0	7,588.0	110.1	13.2	90.00	131.1	-61.0	6,272.2	6,236.0	36.22	173.167			
14,000.0	7,500.0	7,588.0	7,588.0	111.8	13.2	90.00	131.1	-61.0	6,370.0	6,333.6	36.35	175.232			
14,100.0	7,500.0	7,588.0	7,588.0	113.5	13.2	90.00	131.1	-61.0	6,467.8	6,431.3	36.48	177.285			
14,200.0	7,500.0	7,588.0	7,588.0	115.2	13.2	90.00	131.1	-61.0	6,565.6	6,529.0	36.61	179.327			

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 2F-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 2F-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	
14,300.0	7,500.0	7,588.0	7,588.0	116.9	13.2	90.00	131.1	-61.0	6,663.5	6,626.8	36.74	181.358	
14,400.0	7,500.0	7,588.0	7,588.0	118.6	13.2	90.00	131.1	-61.0	6,761.5	6,724.7	36.87	183.377	
14,500.0	7,500.0	7,588.0	7,588.0	120.4	13.2	90.00	131.1	-61.0	6,859.6	6,822.6	37.00	185.386	
14,600.0	7,500.0	7,588.0	7,588.0	122.1	13.2	90.00	131.1	-61.0	6,957.7	6,920.5	37.13	187.384	
14,700.0	7,500.0	7,588.0	7,588.0	123.8	13.2	90.00	131.1	-61.0	7,055.8	7,018.6	37.26	189.370	
14,800.0	7,500.0	7,588.0	7,588.0	125.5	13.2	90.00	131.1	-61.0	7,154.0	7,116.6	37.39	191.346	
14,900.0	7,500.0	7,588.0	7,588.0	127.2	13.2	90.00	131.1	-61.0	7,252.3	7,214.8	37.52	193.311	
15,000.0	7,500.0	7,588.0	7,588.0	128.9	13.2	90.00	131.1	-61.0	7,350.6	7,312.9	37.64	195.265	
15,100.0	7,500.0	7,588.0	7,588.0	130.6	13.2	90.00	131.1	-61.0	7,448.9	7,411.2	37.77	197.208	
15,200.0	7,500.0	7,588.0	7,588.0	132.4	13.2	90.00	131.1	-61.0	7,547.3	7,509.4	37.90	199.141	
15,300.0	7,500.0	7,588.0	7,588.0	134.1	13.2	90.00	131.1	-61.0	7,645.8	7,607.7	38.03	201.064	
15,400.0	7,500.0	7,588.0	7,588.0	135.8	13.2	90.00	131.1	-61.0	7,744.2	7,706.1	38.15	202.976	
15,500.0	7,500.0	7,588.0	7,588.0	137.5	13.2	90.00	131.1	-61.0	7,842.7	7,804.5	38.28	204.878	
15,600.0	7,500.0	7,588.0	7,588.0	139.2	13.2	90.00	131.1	-61.0	7,941.3	7,902.9	38.41	206.769	
15,700.0	7,500.0	7,588.0	7,588.0	141.0	13.2	90.00	131.1	-61.0	8,039.9	8,001.3	38.53	208.650	
15,800.0	7,500.0	7,588.0	7,588.0	142.7	13.2	90.00	131.1	-61.0	8,138.5	8,099.8	38.66	210.522	
15,841.7	7,500.0	7,588.0	7,588.0	143.4	13.2	90.00	131.1	-61.0	8,179.6	8,140.9	38.71	211.298	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-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	44.3	44.3	0.0	0.1	38.61	1,576.2	1,258.9	2,017.3					
100.0	100.0	141.7	141.7	0.2	0.2	38.64	1,575.9	1,260.0	2,017.7	2,017.3	0.40		5,026.399	
200.0	200.0	247.1	247.1	0.3	0.4	38.69	1,575.0	1,261.5	2,017.9	2,017.1	0.76		2,648.363	
300.0	300.0	349.3	349.3	0.5	0.6	38.72	1,574.3	1,262.3	2,017.9	2,016.8	1.11		1,809.928	
400.0	400.0	454.4	454.4	0.7	0.8	-27.65	1,574.0	1,262.6	2,017.0	2,015.6	1.47		1,369.900	
500.0	500.0	556.7	556.7	0.9	1.0	-27.70	1,573.7	1,262.3	2,014.3	2,012.5	1.83		1,103.501	
600.0	599.9	666.6	666.6	1.0	1.2	-27.79	1,573.5	1,261.7	2,010.0	2,007.8	2.19		916.372	
700.0	699.7	778.1	778.0	1.2	1.4	-27.92	1,572.5	1,260.7	2,003.3	2,000.8	2.57		780.495	
800.0	799.4	881.4	881.4	1.4	1.5	-28.06	1,571.0	1,260.0	1,994.8	1,991.9	2.93		680.816	
900.0	898.9	984.1	984.0	1.7	1.7	-28.22	1,569.2	1,259.4	1,984.6	1,981.3	3.30		602.169	
1,000.0	998.3	1,085.4	1,085.3	1.9	1.9	-28.43	1,567.6	1,258.4	1,972.8	1,969.1	3.66		538.382	
1,100.0	1,097.4	1,191.8	1,191.7	2.2	2.1	-28.70	1,566.0	1,256.7	1,959.2	1,955.2	4.05		484.124	
1,200.0	1,196.3	1,289.8	1,289.6	2.5	2.3	-29.01	1,564.8	1,254.6	1,943.9	1,939.5	4.42		439.538	
1,300.0	1,294.9	1,389.2	1,389.1	2.8	2.4	-29.37	1,563.8	1,252.1	1,927.2	1,922.4	4.81		400.684	
1,400.0	1,393.3	1,483.5	1,483.2	3.2	2.6	-29.78	1,563.2	1,249.4	1,909.1	1,903.9	5.20		367.227	
1,494.4	1,485.8	1,571.2	1,570.9	3.5	2.8	-30.19	1,562.9	1,246.9	1,890.8	1,885.2	5.57		339.204	
1,500.0	1,491.2	1,576.3	1,576.1	3.5	2.8	-30.21	1,562.9	1,246.7	1,889.7	1,884.1	5.60		337.649	
1,600.0	1,589.1	1,676.8	1,676.5	3.9	3.0	-30.60	1,562.4	1,244.2	1,869.9	1,863.9	6.01		310.953	
1,700.0	1,686.9	1,768.6	1,768.2	4.3	3.1	-30.96	1,562.1	1,241.5	1,850.0	1,843.6	6.42		288.085	
1,800.0	1,784.8	1,863.4	1,863.1	4.7	3.3	-31.36	1,562.2	1,238.7	1,830.6	1,823.8	6.84		267.605	
1,900.0	1,882.6	1,954.2	1,953.8	5.1	3.4	-31.73	1,562.1	1,236.6	1,811.4	1,804.2	7.26		249.601	
2,000.0	1,980.4	2,042.2	2,041.8	5.5	3.6	-32.09	1,562.3	1,234.9	1,792.8	1,785.1	7.67		233.629	
2,100.0	2,078.3	2,136.3	2,135.9	5.9	3.8	-32.47	1,562.7	1,233.4	1,774.7	1,766.6	8.10		218.969	
2,200.0	2,176.1	2,235.6	2,235.2	6.3	3.9	-32.88	1,562.9	1,232.1	1,756.6	1,748.1	8.55		205.509	
2,300.0	2,273.9	2,333.0	2,332.6	6.7	4.1	-33.27	1,562.8	1,231.3	1,738.6	1,729.6	8.99		193.380	
2,400.0	2,371.8	2,428.9	2,428.4	7.1	4.3	-33.66	1,562.7	1,230.4	1,720.7	1,711.2	9.44		182.347	
2,500.0	2,469.6	2,515.4	2,515.0	7.5	4.4	-34.04	1,563.3	1,229.3	1,703.2	1,693.4	9.87		172.524	
2,600.0	2,567.4	2,602.5	2,602.0	7.9	4.6	-34.45	1,564.7	1,228.1	1,686.6	1,676.2	10.32		163.492	
2,700.0	2,665.3	2,706.9	2,706.4	8.3	4.8	-34.96	1,566.6	1,226.3	1,670.1	1,659.3	10.80		154.708	
2,800.0	2,763.1	2,812.3	2,811.7	8.7	4.9	-35.50	1,568.3	1,224.0	1,653.3	1,642.0	11.28		146.547	
2,900.0	2,860.9	2,908.0	2,907.5	9.1	5.1	-35.98	1,569.5	1,222.2	1,636.4	1,624.7	11.75		139.216	
3,000.0	2,958.8	3,000.0	2,999.4	9.5	5.3	-36.44	1,570.5	1,221.0	1,619.9	1,607.7	12.22		132.516	
3,100.0	3,056.6	3,092.4	3,091.8	9.9	5.4	-36.90	1,571.7	1,220.2	1,603.9	1,591.2	12.70		126.301	
3,200.0	3,154.4	3,195.9	3,195.3	10.3	5.6	-37.41	1,573.0	1,219.5	1,588.0	1,574.8	13.20		120.340	
3,300.0	3,252.3	3,311.8	3,311.1	10.7	5.8	-37.99	1,573.4	1,218.6	1,571.4	1,557.7	13.72		114.573	
3,400.0	3,350.1	3,415.2	3,414.5	11.1	6.0	-38.51	1,573.1	1,217.4	1,554.2	1,540.0	14.22		109.303	
3,500.0	3,447.9	3,524.2	3,523.5	11.5	6.2	-39.08	1,572.2	1,216.0	1,536.6	1,521.8	14.74		104.272	
3,600.0	3,545.8	3,630.1	3,629.4	11.9	6.4	-39.63	1,570.6	1,214.5	1,518.5	1,503.3	15.25		99.565	
3,700.0	3,643.6	3,733.9	3,733.2	12.3	6.6	-40.16	1,568.1	1,213.3	1,499.8	1,484.0	15.77		95.131	
3,800.0	3,741.5	3,822.9	3,822.2	12.7	6.7	-40.60	1,566.0	1,212.8	1,481.6	1,465.3	16.26		91.102	
3,900.0	3,839.3	3,927.7	3,927.0	13.1	6.9	-41.15	1,563.6	1,212.2	1,463.4	1,446.6	16.79		87.178	
4,000.0	3,937.1	4,032.0	4,031.2	13.5	7.1	-41.73	1,561.0	1,210.5	1,444.8	1,427.5	17.32		83.424	
4,100.0	4,035.0	4,130.1	4,129.2	13.9	7.3	-42.27	1,558.0	1,209.6	1,426.2	1,408.3	17.84		79.922	
4,200.0	4,132.8	4,228.0	4,227.1	14.3	7.4	-42.83	1,555.0	1,208.4	1,407.5	1,389.1	18.38		76.587	
4,300.0	4,230.6	4,318.2	4,317.2	14.7	7.6	-43.37	1,552.7	1,207.1	1,389.3	1,370.3	18.91		73.465	
4,400.0	4,328.5	4,400.0	4,399.0	15.1	7.7	-43.88	1,551.1	1,205.9	1,371.9	1,352.4	19.44		70.572	
4,500.0	4,426.3	4,491.1	4,490.1	15.5	7.9	-44.46	1,550.2	1,204.9	1,355.4	1,335.5	19.99		67.815	
4,600.0	4,524.1	4,585.3	4,584.3	15.9	8.1	-45.08	1,549.6	1,203.9	1,339.6	1,319.1	20.55		65.203	
4,700.0	4,622.0	4,687.3	4,686.3	16.3	8.3	-45.77	1,548.9	1,202.9	1,324.0	1,302.9	21.12		62.684	
4,800.0	4,719.8	4,782.2	4,781.2	16.7	8.4	-46.42	1,548.2	1,201.9	1,308.4	1,286.7	21.69		60.309	
4,900.0	4,817.6	4,880.0	4,879.0	17.2	8.6	-47.11	1,547.6	1,200.9	1,293.1	1,270.8	22.28		58.043	
5,000.0	4,915.5	4,976.4	4,975.4	17.6	8.8	-47.82	1,547.1	1,199.5	1,278.0	1,255.2	22.87		55.882	

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 2F-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 2F-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 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-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	5,013.3	5,066.9	5,065.8	18.0	8.9	-48.51	1,547.0	1,198.2	1,263.5	1,240.0	23.46	53.853		
5,200.0	5,111.1	5,162.4	5,161.3	18.4	9.1	-49.25	1,547.3	1,197.1	1,249.6	1,225.5	24.07	51.925		
5,300.0	5,209.0	5,259.3	5,258.2	18.8	9.3	-50.00	1,547.5	1,196.2	1,235.9	1,211.2	24.68	50.085		
5,400.0	5,306.8	5,350.1	5,349.1	19.2	9.4	-50.74	1,548.0	1,195.1	1,222.7	1,197.4	25.29	48.352		
5,500.0	5,404.6	5,444.8	5,443.8	19.6	9.6	-51.53	1,549.1	1,193.9	1,210.4	1,184.5	25.91	46.710		
5,600.0	5,502.5	5,543.4	5,542.3	20.0	9.8	-52.37	1,550.1	1,192.7	1,198.2	1,171.6	26.55	45.126		
5,700.0	5,600.3	5,640.3	5,639.2	20.4	9.9	-53.22	1,551.4	1,191.3	1,186.4	1,159.2	27.20	43.623		
5,800.0	5,698.2	5,739.1	5,738.0	20.8	10.1	-54.11	1,552.5	1,189.9	1,174.7	1,146.8	27.85	42.178		
5,900.0	5,796.0	5,832.8	5,831.7	21.2	10.3	-54.96	1,553.7	1,188.6	1,163.5	1,135.0	28.50	40.824		
6,000.0	5,893.8	5,928.3	5,927.1	21.6	10.4	-55.84	1,555.1	1,187.3	1,152.8	1,123.6	29.16	39.532		
6,100.0	5,991.7	6,021.6	6,020.5	22.0	10.6	-56.73	1,556.9	1,186.1	1,142.8	1,113.0	29.82	38.320		
6,200.0	6,089.5	6,120.9	6,119.8	22.4	10.8	-57.65	1,558.7	1,185.3	1,133.1	1,102.6	30.49	37.158		
6,300.0	6,187.3	6,218.8	6,217.6	22.8	10.9	-58.57	1,560.5	1,184.7	1,123.7	1,092.5	31.17	36.054		
6,400.0	6,285.2	6,318.3	6,317.1	23.2	11.1	-59.54	1,562.2	1,183.8	1,114.4	1,082.6	31.85	34.990		
6,500.0	6,383.0	6,413.3	6,412.0	23.7	11.3	-60.47	1,563.9	1,183.0	1,105.7	1,073.1	32.53	33.991		
6,600.0	6,480.8	6,513.5	6,512.2	24.1	11.4	-61.49	1,565.7	1,181.8	1,097.2	1,063.9	33.22	33.023		
6,700.0	6,578.7	6,610.0	6,608.7	24.5	11.6	-62.49	1,567.4	1,180.6	1,088.9	1,055.0	33.92	32.106		
6,800.0	6,676.5	6,700.0	6,698.7	24.9	11.8	-63.42	1,569.5	1,179.6	1,081.6	1,047.0	34.60	31.264		
6,900.0	6,774.3	6,789.0	6,787.6	25.3	11.9	-64.35	1,572.2	1,178.8	1,075.4	1,040.1	35.27	30.490		
7,000.0	6,872.2	6,884.7	6,883.3	25.7	12.1	-65.32	1,575.6	1,178.7	1,070.0	1,034.0	35.95	29.759		
7,019.1	6,890.8	6,903.0	6,901.6	25.8	12.1	-65.50	1,576.2	1,178.8	1,069.0	1,032.9	36.08	29.624		
7,047.2	6,918.4	6,929.5	6,928.1	25.9	12.2	-79.01	1,577.2	1,179.0	1,068.2	1,032.0	36.27	29.449 CC		
7,050.0	6,921.1	6,932.2	6,930.7	25.9	12.2	-80.43	1,577.3	1,179.0	1,068.3	1,032.0	36.29	29.434 ES		
7,100.0	6,970.2	6,979.3	6,977.8	26.0	12.3	-106.12	1,579.0	1,179.5	1,070.8	1,034.1	36.63	29.233		
7,150.0	7,019.0	7,024.7	7,023.2	26.2	12.3	-126.64	1,580.9	1,180.1	1,077.8	1,040.9	36.96	29.165 SF		
7,200.0	7,067.2	7,068.3	7,066.8	26.3	12.4	-140.22	1,582.8	1,180.8	1,089.4	1,052.1	37.27	29.231		
7,250.0	7,114.4	7,110.2	7,108.6	26.4	12.5	-149.03	1,584.8	1,181.6	1,105.4	1,067.8	37.56	29.427		
7,300.0	7,160.3	7,148.8	7,147.1	26.4	12.5	-154.98	1,586.8	1,182.4	1,125.8	1,087.9	37.84	29.753		
7,350.0	7,204.5	7,185.5	7,183.7	26.5	12.6	-159.24	1,588.9	1,183.2	1,150.3	1,112.2	38.09	30.201		
7,400.0	7,246.6	7,221.5	7,219.7	26.5	12.7	-162.44	1,591.2	1,184.2	1,178.8	1,140.5	38.32	30.761		
7,450.0	7,286.4	7,256.1	7,254.1	26.5	12.7	-164.97	1,593.6	1,185.3	1,210.9	1,172.4	38.53	31.424		
7,500.0	7,323.5	7,287.9	7,285.9	26.5	12.8	-167.03	1,595.8	1,186.4	1,246.3	1,207.6	38.72	32.186		
7,550.0	7,357.7	7,323.7	7,321.6	26.5	12.8	-168.86	1,598.3	1,187.8	1,284.7	1,245.8	38.91	33.017		
7,600.0	7,388.7	7,360.7	7,358.4	26.5	12.9	-170.57	1,600.7	1,189.3	1,325.6	1,286.5	39.09	33.912		
7,650.0	7,416.3	7,393.7	7,391.3	26.5	13.0	-172.23	1,602.7	1,190.6	1,368.7	1,329.5	39.24	34.878		
7,700.0	7,440.2	7,422.1	7,419.7	26.5	13.0	-174.01	1,604.2	1,191.8	1,413.7	1,374.3	39.37	35.907		
7,750.0	7,460.3	7,445.8	7,443.3	26.5	13.1	-176.17	1,605.4	1,192.8	1,460.4	1,420.9	39.48	36.994		
7,800.0	7,476.4	7,464.5	7,462.0	26.5	13.1	-179.26	1,606.2	1,193.6	1,508.3	1,468.8	39.56	38.131		
7,850.0	7,488.4	7,477.9	7,475.4	26.6	13.1	175.00	1,606.8	1,194.1	1,557.3	1,517.7	39.62	39.310		
7,900.0	7,496.2	7,485.9	7,483.3	26.6	13.1	158.32	1,607.1	1,194.5	1,606.9	1,567.3	39.65	40.525		
7,950.0	7,499.8	7,488.0	7,485.5	26.7	13.1	78.01	1,607.2	1,194.6	1,656.9	1,617.2	39.67	41.767		
7,966.7	7,500.0	7,487.4	7,484.9	26.7	13.1	52.85	1,607.2	1,194.5	1,673.5	1,633.8	39.67	42.184		
8,000.0	7,500.0	7,485.5	7,483.0	26.8	13.1	52.08	1,607.1	1,194.5	1,706.8	1,667.1	39.68	43.018		
8,100.0	7,500.0	7,479.7	7,477.1	27.0	13.1	49.78	1,606.9	1,194.2	1,806.6	1,766.9	39.69	45.516		
8,200.0	7,500.0	7,473.5	7,471.0	27.4	13.1	47.54	1,606.6	1,193.9	1,906.4	1,866.7	39.71	48.006		
8,300.0	7,500.0	7,467.1	7,464.6	27.9	13.1	45.36	1,606.4	1,193.7	2,006.2	1,966.5	39.74	50.486		
8,400.0	7,500.0	7,460.3	7,457.8	28.5	13.1	43.24	1,606.1	1,193.4	2,106.0	2,066.3	39.77	52.959		
8,500.0	7,500.0	7,453.1	7,450.6	29.1	13.1	41.20	1,605.7	1,193.1	2,205.8	2,166.0	39.80	55.423		
8,600.0	7,500.0	7,445.6	7,443.1	29.9	13.1	39.22	1,605.4	1,192.8	2,305.7	2,265.8	39.84	57.879		
8,700.0	7,500.0	7,437.6	7,435.2	30.8	13.0	37.31	1,605.0	1,192.4	2,405.5	2,365.6	39.87	60.328		
8,800.0	7,500.0	7,429.2	7,426.8	31.7	13.0	35.47	1,604.6	1,192.1	2,505.3	2,465.4	39.91	62.769		
8,900.0	7,500.0	7,420.3	7,417.9	32.7	13.0	33.70	1,604.1	1,191.7	2,605.1	2,565.2	39.95	65.204		

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 2F-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 2F-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 21-7 (EXISTING) - ENCANA WELL - G												Offset Site Error: 0.0 ft	
Survey Program: 100-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	7,410.8	7,408.4	33.7	13.0	32.00	1,603.6	1,191.3	2,704.9	2,665.0	39.99	67.632	
9,100.0	7,500.0	7,400.8	7,398.4	34.8	13.0	30.37	1,603.1	1,190.9	2,804.8	2,764.7	40.04	70.055	
9,200.0	7,500.0	7,389.7	7,387.4	36.0	13.0	28.76	1,602.5	1,190.5	2,904.6	2,864.5	40.08	72.474	
9,300.0	7,500.0	7,377.8	7,375.5	37.2	12.9	27.20	1,601.8	1,190.0	3,004.4	2,964.2	40.12	74.889	
9,400.0	7,500.0	7,365.1	7,362.8	38.4	12.9	25.72	1,601.0	1,189.5	3,104.1	3,064.0	40.16	77.302	
9,500.0	7,500.0	7,351.3	7,349.0	39.7	12.9	24.29	1,600.1	1,188.9	3,203.9	3,163.7	40.19	79.712	
9,600.0	7,500.0	7,336.4	7,334.2	41.1	12.9	22.92	1,599.2	1,188.3	3,303.7	3,263.4	40.23	82.122	
9,700.0	7,500.0	7,320.3	7,318.1	42.4	12.8	21.61	1,598.1	1,187.7	3,403.4	3,363.1	40.26	84.532	
9,800.0	7,500.0	7,302.7	7,300.6	43.8	12.8	20.36	1,596.9	1,187.0	3,503.1	3,462.8	40.29	86.945	
9,900.0	7,500.0	7,300.0	7,297.9	45.2	12.8	20.18	1,596.7	1,186.9	3,602.8	3,562.5	40.37	89.256	
10,000.0	7,500.0	7,300.0	7,297.9	46.6	12.8	20.18	1,596.7	1,186.9	3,702.6	3,662.1	40.45	91.541	
10,100.0	7,500.0	7,284.3	7,282.3	48.1	12.8	19.21	1,595.5	1,186.3	3,802.3	3,761.8	40.49	93.916	
10,200.0	7,500.0	7,279.0	7,277.0	49.6	12.8	18.89	1,595.2	1,186.1	3,902.0	3,861.5	40.55	96.216	
10,300.0	7,500.0	7,273.7	7,271.7	51.1	12.8	18.60	1,594.8	1,185.9	4,001.7	3,961.1	40.62	98.506	
10,400.0	7,500.0	7,268.5	7,266.5	52.6	12.8	18.31	1,594.4	1,185.7	4,101.5	4,060.8	40.69	100.786	
10,500.0	7,500.0	7,263.4	7,261.4	54.1	12.7	18.04	1,594.1	1,185.5	4,201.2	4,160.4	40.77	103.056	
10,600.0	7,500.0	7,258.3	7,256.4	55.6	12.7	17.78	1,593.7	1,185.3	4,301.0	4,260.1	40.84	105.317	
10,700.0	7,500.0	7,253.3	7,251.4	57.2	12.7	17.53	1,593.4	1,185.2	4,400.7	4,359.8	40.91	107.567	
10,800.0	7,500.0	7,248.4	7,246.4	58.8	12.7	17.29	1,593.0	1,185.0	4,500.4	4,459.5	40.98	109.807	
10,900.0	7,500.0	7,243.5	7,241.6	60.3	12.7	17.06	1,592.7	1,184.9	4,600.2	4,559.1	41.06	112.038	
11,000.0	7,500.0	7,238.6	7,236.8	61.9	12.7	16.83	1,592.4	1,184.7	4,700.0	4,658.8	41.13	114.259	
11,100.0	7,500.0	7,233.9	7,232.0	63.5	12.7	16.62	1,592.1	1,184.6	4,799.7	4,758.5	41.21	116.470	
11,200.0	7,500.0	7,229.2	7,227.3	65.1	12.7	16.41	1,591.8	1,184.4	4,899.5	4,858.2	41.29	118.671	
11,300.0	7,500.0	7,224.5	7,222.7	66.7	12.7	16.21	1,591.4	1,184.3	4,999.3	4,957.9	41.36	120.863	
11,400.0	7,500.0	7,219.9	7,218.1	68.3	12.7	16.02	1,591.1	1,184.1	5,099.0	5,057.6	41.44	123.045	
11,500.0	7,500.0	7,215.4	7,213.6	70.0	12.7	15.84	1,590.8	1,184.0	5,198.8	5,157.3	41.52	125.217	
11,600.0	7,500.0	7,200.0	7,198.2	71.6	12.6	15.24	1,589.9	1,183.6	5,298.6	5,257.0	41.57	127.467	
11,700.0	7,500.0	7,200.0	7,198.2	73.2	12.6	15.24	1,589.9	1,183.6	5,398.4	5,356.7	41.66	129.585	
11,800.0	7,500.0	7,200.0	7,198.2	74.9	12.6	15.24	1,589.9	1,183.6	5,498.1	5,456.4	41.75	131.694	
11,900.0	7,500.0	7,200.0	7,198.2	76.5	12.6	15.24	1,589.9	1,183.6	5,597.9	5,556.1	41.84	133.792	
12,000.0	7,500.0	7,200.0	7,198.2	78.2	12.6	15.24	1,589.9	1,183.6	5,697.7	5,655.8	41.93	135.881	
12,100.0	7,500.0	7,200.0	7,198.2	79.8	12.6	15.24	1,589.9	1,183.6	5,797.5	5,755.5	42.02	137.961	
12,200.0	7,500.0	7,200.0	7,198.2	81.5	12.6	15.24	1,589.9	1,183.6	5,897.3	5,855.2	42.11	140.031	
12,300.0	7,500.0	7,200.0	7,198.2	83.1	12.6	15.24	1,589.9	1,183.6	5,997.1	5,954.9	42.21	142.091	
12,400.0	7,500.0	7,200.0	7,198.2	84.8	12.6	15.24	1,589.9	1,183.6	6,096.9	6,054.7	42.30	144.143	
12,500.0	7,500.0	7,200.0	7,198.2	86.5	12.6	15.24	1,589.9	1,183.6	6,196.8	6,154.4	42.39	146.185	
12,600.0	7,500.0	7,175.5	7,173.8	88.1	12.6	14.38	1,588.3	1,183.0	6,296.5	6,254.1	42.42	148.432	
12,700.0	7,500.0	7,172.5	7,170.7	89.8	12.6	14.27	1,588.2	1,182.9	6,396.3	6,353.8	42.50	150.484	
12,800.0	7,500.0	7,169.5	7,167.7	91.5	12.6	14.18	1,588.0	1,182.9	6,496.1	6,453.5	42.59	152.527	
12,900.0	7,500.0	7,166.5	7,164.8	93.2	12.6	14.08	1,587.8	1,182.8	6,596.0	6,553.3	42.68	154.560	
13,000.0	7,500.0	7,163.6	7,161.9	94.9	12.6	13.99	1,587.6	1,182.7	6,695.8	6,653.0	42.76	156.585	
13,100.0	7,500.0	7,160.7	7,159.0	96.5	12.6	13.90	1,587.5	1,182.7	6,795.6	6,752.8	42.85	158.600	
13,200.0	7,500.0	7,157.9	7,156.2	98.2	12.6	13.81	1,587.3	1,182.6	6,895.4	6,852.5	42.93	160.607	
13,300.0	7,500.0	7,155.1	7,153.4	99.9	12.6	13.73	1,587.2	1,182.5	6,995.3	6,952.2	43.02	162.604	
13,400.0	7,500.0	7,152.4	7,150.7	101.6	12.6	13.65	1,587.0	1,182.5	7,095.1	7,052.0	43.11	164.593	
13,500.0	7,500.0	7,149.7	7,148.0	103.3	12.5	13.57	1,586.8	1,182.4	7,194.9	7,151.7	43.19	166.572	
13,600.0	7,500.0	7,147.0	7,145.3	105.0	12.5	13.49	1,586.7	1,182.3	7,294.8	7,251.5	43.28	168.543	
13,700.0	7,500.0	7,144.4	7,142.7	106.7	12.5	13.41	1,586.6	1,182.3	7,394.6	7,351.2	43.37	170.505	
13,800.0	7,500.0	7,141.8	7,140.1	108.4	12.5	13.34	1,586.4	1,182.2	7,494.4	7,451.0	43.46	172.459	
13,900.0	7,500.0	7,139.2	7,137.6	110.1	12.5	13.27	1,586.3	1,182.2	7,594.3	7,550.7	43.54	174.403	
14,000.0	7,500.0	7,136.7	7,135.0	111.8	12.5	13.19	1,586.1	1,182.1	7,694.1	7,650.5	43.63	176.339	
14,100.0	7,500.0	7,134.2	7,132.6	113.5	12.5	13.13	1,586.0	1,182.1	7,794.0	7,750.3	43.72	178.267	

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 2F-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 2F-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 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-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		
14,200.0	7,500.0	7,131.8	7,130.1	115.2	12.5	13.06	1,585.9	1,182.0	7,893.8	7,850.0	43.81	180.185		
14,300.0	7,500.0	7,129.4	7,127.7	116.9	12.5	12.99	1,585.7	1,182.0	7,993.7	7,949.8	43.90	182.096		
14,400.0	7,500.0	7,100.0	7,098.4	118.6	12.5	12.24	1,584.2	1,181.4	8,093.6	8,049.7	43.92	184.274		
14,500.0	7,500.0	7,100.0	7,098.4	120.4	12.5	12.24	1,584.2	1,181.4	8,193.5	8,149.5	44.02	186.144		
14,600.0	7,500.0	7,100.0	7,098.4	122.1	12.5	12.24	1,584.2	1,181.4	8,293.3	8,249.2	44.11	188.007		
14,700.0	7,500.0	7,100.0	7,098.4	123.8	12.5	12.24	1,584.2	1,181.4	8,393.2	8,349.0	44.21	189.861		
14,800.0	7,500.0	7,100.0	7,098.4	125.5	12.5	12.24	1,584.2	1,181.4	8,493.0	8,448.7	44.30	191.707		
14,900.0	7,500.0	7,100.0	7,098.4	127.2	12.5	12.24	1,584.2	1,181.4	8,592.9	8,548.5	44.40	193.546		
15,000.0	7,500.0	7,100.0	7,098.4	128.9	12.5	12.24	1,584.2	1,181.4	8,692.7	8,648.2	44.49	195.375		
15,100.0	7,500.0	7,100.0	7,098.4	130.6	12.5	12.24	1,584.2	1,181.4	8,792.6	8,748.0	44.59	197.197		
15,200.0	7,500.0	7,100.0	7,098.4	132.4	12.5	12.24	1,584.2	1,181.4	8,892.5	8,847.8	44.68	199.011		
15,300.0	7,500.0	7,100.0	7,098.4	134.1	12.5	12.24	1,584.2	1,181.4	8,992.3	8,947.5	44.78	200.817		
15,400.0	7,500.0	7,100.0	7,098.4	135.8	12.5	12.24	1,584.2	1,181.4	9,092.2	9,047.3	44.87	202.615		
15,500.0	7,500.0	7,100.0	7,098.4	137.5	12.5	12.24	1,584.2	1,181.4	9,192.1	9,147.1	44.97	204.406		
15,600.0	7,500.0	7,100.0	7,098.4	139.2	12.5	12.24	1,584.2	1,181.4	9,291.9	9,246.9	45.07	206.188		
15,700.0	7,500.0	7,100.0	7,098.4	141.0	12.5	12.24	1,584.2	1,181.4	9,391.8	9,346.7	45.16	207.963		
15,800.0	7,500.0	7,100.0	7,098.4	142.7	12.5	12.24	1,584.2	1,181.4	9,491.7	9,446.4	45.26	209.730		
15,841.7	7,500.0	7,100.0	7,098.4	143.4	12.5	12.24	1,584.2	1,181.4	9,533.3	9,488.0	45.30	210.464		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 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	52.2	52.2	0.0	0.1	37.03	1,594.1	1,202.6	1,996.8					
100.0	100.0	151.2	151.2	0.2	0.3	37.03	1,594.1	1,202.6	1,996.8	1,996.4	0.42	4,803.833		
200.0	200.0	246.4	246.4	0.3	0.4	37.02	1,594.4	1,202.4	1,997.0	1,996.2	0.76	2,639.645		
300.0	300.0	383.0	383.0	0.5	0.7	36.99	1,594.7	1,201.2	1,996.7	1,995.5	1.17	1,706.803		
400.0	400.0	526.2	526.0	0.7	0.9	-29.30	1,588.9	1,201.9	1,992.9	1,991.3	1.60	1,246.525		
500.0	500.0	811.0	807.6	0.9	1.7	-28.48	1,548.8	1,213.2	1,980.9	1,978.5	2.44	810.439		
600.0	599.9	902.0	896.6	1.0	2.0	-28.18	1,530.8	1,217.8	1,964.5	1,961.6	2.90	678.359		
700.0	699.7	1,119.4	1,108.4	1.2	3.0	-27.34	1,482.4	1,227.2	1,945.0	1,941.2	3.77	515.625		
800.0	799.4	1,290.1	1,271.6	1.4	3.8	-26.54	1,432.9	1,232.9	1,917.2	1,912.6	4.61	416.109		
900.0	898.9	1,393.0	1,369.1	1.7	4.4	-26.05	1,400.3	1,236.6	1,886.7	1,881.5	5.23	360.551		
1,000.0	998.3	1,492.2	1,462.8	1.9	5.0	-25.56	1,368.1	1,241.0	1,854.7	1,848.8	5.87	315.816		
1,100.0	1,097.4	1,574.7	1,540.7	2.2	5.5	-25.17	1,341.0	1,245.0	1,821.3	1,814.9	6.45	282.259		
1,200.0	1,196.3	1,653.3	1,615.0	2.5	5.9	-24.82	1,315.8	1,248.9	1,787.4	1,780.3	7.03	254.231		
1,300.0	1,294.9	1,748.7	1,705.1	2.8	6.5	-24.33	1,285.0	1,254.6	1,752.5	1,744.8	7.70	227.524		
1,400.0	1,393.3	1,833.9	1,785.4	3.2	7.0	-23.89	1,257.0	1,259.9	1,716.1	1,707.8	8.35	205.591		
1,494.4	1,485.8	1,949.0	1,894.0	3.5	7.7	-23.26	1,219.5	1,266.4	1,680.5	1,671.4	9.09	184.859		
1,500.0	1,491.2	1,949.0	1,894.0	3.5	7.7	-23.26	1,219.5	1,266.4	1,678.3	1,669.2	9.11	184.303		
1,600.0	1,589.1	2,028.1	1,968.8	3.9	8.1	-22.74	1,194.0	1,269.7	1,639.3	1,629.6	9.71	168.809		
1,700.0	1,686.9	2,091.0	2,028.5	4.3	8.5	-22.31	1,174.4	1,272.8	1,601.7	1,591.5	10.26	156.187		
1,800.0	1,784.8	2,181.8	2,114.9	4.7	9.0	-21.66	1,146.8	1,278.4	1,565.6	1,554.6	10.93	143.291		
1,900.0	1,882.6	2,289.2	2,216.5	5.1	9.7	-20.82	1,112.7	1,284.9	1,528.6	1,516.9	11.69	130.724		
2,000.0	1,980.4	2,382.4	2,304.4	5.5	10.2	-20.02	1,082.4	1,290.7	1,491.5	1,479.0	12.40	120.247		
2,100.0	2,078.3	2,475.7	2,392.7	5.9	10.8	-19.23	1,052.6	1,295.6	1,454.4	1,441.3	13.09	111.072		
2,200.0	2,176.1	2,567.0	2,479.3	6.3	11.3	-18.44	1,023.9	1,300.0	1,417.5	1,403.7	13.78	102.852		
2,300.0	2,273.9	2,659.7	2,567.2	6.7	11.8	-17.61	995.0	1,304.0	1,380.8	1,366.3	14.47	95.430		
2,400.0	2,371.8	2,759.3	2,661.7	7.1	12.4	-16.67	963.7	1,308.6	1,344.4	1,329.2	15.20	88.431		
2,500.0	2,469.6	2,900.3	2,794.4	7.5	13.3	-15.17	916.1	1,312.7	1,305.5	1,289.4	16.11	81.038		
2,600.0	2,567.4	2,983.0	2,871.6	7.9	13.8	-14.19	886.8	1,314.7	1,265.7	1,248.9	16.83	75.229		
2,700.0	2,665.3	3,068.7	2,951.7	8.3	14.4	-13.10	856.4	1,317.3	1,226.9	1,209.3	17.55	69.889		
2,800.0	2,763.1	3,148.0	3,026.0	8.7	14.9	-12.04	828.7	1,319.9	1,188.9	1,170.6	18.28	65.053		
2,900.0	2,860.9	3,244.4	3,116.2	9.1	15.5	-10.66	795.0	1,323.6	1,151.8	1,132.7	19.07	60.384		
3,000.0	2,958.8	3,346.0	3,211.3	9.5	16.1	-9.16	759.4	1,325.9	1,114.0	1,094.1	19.88	56.035		
3,100.0	3,056.6	3,423.2	3,283.8	9.9	16.6	-7.97	732.7	1,327.3	1,076.9	1,056.3	20.61	52.246		
3,200.0	3,154.4	3,487.7	3,344.6	10.3	17.0	-6.94	711.2	1,329.4	1,042.0	1,020.8	21.29	48.954		
3,300.0	3,252.3	3,561.4	3,414.5	10.7	17.4	-5.76	688.4	1,332.9	1,010.0	988.0	21.99	45.929		
3,400.0	3,350.1	3,641.1	3,490.4	11.1	17.8	-4.44	664.2	1,337.2	979.6	956.9	22.72	43.108		
3,500.0	3,447.9	3,719.6	3,565.2	11.5	18.2	-3.07	640.9	1,342.7	951.4	927.9	23.45	40.572		
3,600.0	3,545.8	3,817.4	3,659.1	11.9	18.7	-1.44	614.6	1,348.7	924.5	900.3	24.20	38.205		
3,700.0	3,643.6	3,947.3	3,784.9	12.3	19.3	0.56	582.5	1,351.9	896.0	871.0	25.01	35.818		
3,800.0	3,741.5	4,045.0	3,878.8	12.7	19.9	2.33	555.2	1,352.3	865.1	839.3	25.82	33.512		
3,900.0	3,839.3	4,115.2	3,945.8	13.1	20.3	3.79	534.4	1,354.0	836.2	809.7	26.57	31.473		
4,000.0	3,937.1	4,201.9	4,028.2	13.5	20.8	5.80	507.9	1,358.4	810.4	782.9	27.45	29.524		
4,100.0	4,035.0	4,306.4	4,126.6	13.9	21.4	8.58	473.1	1,363.9	785.1	756.6	28.51	27.539		
4,200.0	4,132.8	4,402.4	4,216.4	14.3	22.0	11.40	439.4	1,367.9	760.1	730.6	29.57	25.708		
4,300.0	4,230.6	4,481.0	4,289.9	14.7	22.5	13.85	411.7	1,371.4	737.2	706.7	30.53	24.146		
4,400.0	4,328.5	4,568.0	4,371.7	15.1	23.1	16.58	382.6	1,375.8	717.2	685.7	31.51	22.763		
4,500.0	4,426.3	4,656.0	4,455.5	15.5	23.5	19.23	356.0	1,380.5	699.7	667.2	32.42	21.579		
4,600.0	4,524.1	4,748.3	4,543.7	15.9	24.0	21.99	329.6	1,385.6	684.3	650.9	33.35	20.516		
4,700.0	4,622.0	4,852.6	4,643.9	16.3	24.5	25.15	300.9	1,390.5	669.9	635.5	34.34	19.509		
4,800.0	4,719.8	4,952.9	4,740.6	16.7	25.0	28.24	274.2	1,393.3	655.6	620.3	35.25	18.596		
4,900.0	4,817.6	5,043.3	4,828.2	17.2	25.4	30.97	252.0	1,396.1	643.1	607.1	36.02	17.852		
5,000.0	4,915.5	5,142.4	4,924.9	17.6	25.8	33.78	230.8	1,399.6	632.4	595.6	36.76	17.201		

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 2F-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 2F-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	
5,100.0	5,013.3	5,246.7	5,027.4	18.0	26.2	36.53	212.1	1,402.5	621.7	584.2	37.44	16.605	
5,200.0	5,111.1	5,347.9	5,127.4	18.4	26.5	39.04	196.8	1,404.9	611.1	573.1	38.04	16.067	
5,300.0	5,209.0	5,453.2	5,231.8	18.8	26.8	41.58	183.0	1,406.6	600.6	562.0	38.59	15.565	
5,400.0	5,306.8	5,560.0	5,338.0	19.2	27.0	44.02	171.7	1,407.6	589.5	550.4	39.07	15.088	
5,500.0	5,404.6	5,662.8	5,440.5	19.6	27.2	46.22	163.8	1,407.8	577.7	538.2	39.49	14.630	
5,600.0	5,502.5	5,762.8	5,540.4	20.0	27.3	48.18	158.7	1,408.6	566.2	526.4	39.83	14.216	
5,700.0	5,600.3	5,878.0	5,655.5	20.4	27.4	50.16	157.3	1,408.9	553.3	513.1	40.15	13.781	
5,800.0	5,698.2	5,974.2	5,751.7	20.8	27.4	51.86	157.2	1,407.8	539.1	498.7	40.45	13.329	
5,900.0	5,796.0	6,066.1	5,843.7	21.2	27.5	53.52	156.9	1,408.0	526.8	486.0	40.73	12.932	
6,000.0	5,893.8	6,166.2	5,943.7	21.6	27.6	55.35	156.9	1,408.7	515.2	474.2	40.99	12.568	
6,100.0	5,991.7	6,264.6	6,042.1	22.0	27.6	57.18	157.4	1,409.3	503.8	462.5	41.24	12.216	
6,200.0	6,089.5	6,360.4	6,138.0	22.4	27.7	59.03	157.9	1,410.2	493.2	451.7	41.47	11.893	
6,300.0	6,187.3	6,458.5	6,236.1	22.8	27.7	60.98	158.2	1,411.5	483.4	441.8	41.68	11.600	
6,400.0	6,285.2	6,558.2	6,335.7	23.2	27.8	63.07	158.6	1,412.3	474.1	432.2	41.86	11.325	
6,500.0	6,383.0	6,656.0	6,433.5	23.7	27.9	65.23	158.9	1,413.0	465.2	423.2	42.02	11.070	
6,600.0	6,480.8	6,753.4	6,530.9	24.1	28.0	67.46	159.1	1,413.6	457.1	414.9	42.15	10.844	
6,700.0	6,578.7	6,850.6	6,628.1	24.5	28.0	69.77	159.1	1,414.3	449.9	407.7	42.25	10.648	
6,800.0	6,676.5	6,947.8	6,725.3	24.9	28.1	72.15	159.0	1,415.1	443.7	401.4	42.32	10.483	
6,900.0	6,774.3	7,045.4	6,822.9	25.3	28.2	74.60	158.8	1,416.0	438.4	396.0	42.37	10.347	
7,000.0	6,872.2	7,141.6	6,919.1	25.7	28.3	77.06	158.5	1,417.0	434.1	391.8	42.39	10.241	
7,019.1	6,890.8	7,159.7	6,937.2	25.8	28.3	77.53	158.4	1,417.2	433.5	391.1	42.40	10.225	
7,050.0	6,921.1	7,189.0	6,966.5	25.9	28.3	63.50	158.1	1,417.6	431.9	389.5	42.40	10.187	
7,100.0	6,970.2	7,236.6	7,014.1	26.0	28.4	38.88	157.6	1,418.3	426.7	384.3	42.41	10.061	
7,150.0	7,019.0	7,284.6	7,062.1	26.2	28.4	18.94	156.9	1,419.0	418.2	375.7	42.45	9.852	
7,200.0	7,067.2	7,334.9	7,112.4	26.3	28.5	5.42	156.2	1,419.7	406.1	363.6	42.51	9.553	
7,250.0	7,114.4	7,384.1	7,161.5	26.4	28.5	-3.94	155.6	1,420.2	390.4	347.8	42.60	9.164	
7,300.0	7,160.3	7,431.7	7,209.2	26.4	28.6	-11.16	155.2	1,420.5	371.2	328.4	42.71	8.689	
7,350.0	7,204.5	7,477.5	7,255.0	26.5	28.6	-17.53	154.9	1,420.6	348.6	305.8	42.86	8.134	
7,400.0	7,246.6	7,521.1	7,298.5	26.5	28.6	-23.89	154.7	1,420.4	323.1	280.1	43.04	7.507	
7,450.0	7,286.4	7,562.1	7,339.6	26.5	28.7	-30.86	154.5	1,420.1	295.0	251.8	43.25	6.821	
7,500.0	7,323.5	7,600.3	7,377.7	26.5	28.7	-38.99	154.4	1,419.6	265.1	221.6	43.50	6.094	
7,550.0	7,357.7	7,634.9	7,412.4	26.5	28.7	-48.56	154.3	1,418.9	234.1	190.3	43.75	5.351	
7,600.0	7,388.7	7,665.6	7,443.1	26.5	28.7	-59.38	154.3	1,418.4	203.7	159.8	43.92	4.638	
7,650.0	7,416.3	7,693.0	7,470.4	26.5	28.8	-70.76	154.2	1,418.0	176.2	132.4	43.76	4.026	
7,700.0	7,440.2	7,716.7	7,494.1	26.5	28.8	-81.35	154.1	1,417.6	155.3	112.4	42.95	3.616	
7,750.0	7,460.3	7,736.6	7,514.1	26.5	28.8	-89.87	154.1	1,417.4	146.0	103.9	42.15	3.464	
7,756.3	7,462.5	7,738.9	7,516.3	26.5	28.8	-90.75	154.1	1,417.3	145.9	103.7	42.18	3.459 CC, ES, SF	
7,800.0	7,476.4	7,752.7	7,530.1	26.5	28.8	-95.56	154.1	1,417.2	152.0	108.7	43.31	3.510	
7,850.0	7,488.4	7,764.6	7,542.0	26.6	28.8	-98.14	154.1	1,417.1	172.8	127.8	45.02	3.839	
7,900.0	7,496.2	7,772.4	7,549.9	26.6	28.8	-97.41	154.0	1,417.0	204.5	158.8	45.74	4.471	
7,950.0	7,499.8	7,776.1	7,553.5	26.7	28.8	-93.05	154.0	1,416.9	243.1	197.3	45.79	5.309	
7,966.7	7,500.0	7,776.3	7,553.7	26.7	28.8	-90.72	154.0	1,416.9	257.0	211.3	45.74	5.618	
8,000.0	7,500.0	7,776.4	7,553.8	26.8	28.8	-90.75	154.0	1,416.9	285.7	240.1	45.60	6.265	
8,100.0	7,500.0	7,776.5	7,554.0	27.0	28.8	-90.82	154.0	1,416.9	376.4	331.3	45.12	8.343	
8,200.0	7,500.0	7,776.7	7,554.1	27.4	28.8	-90.89	154.0	1,416.9	470.9	426.1	44.75	10.523	
8,300.0	7,500.0	7,776.9	7,554.3	27.9	28.8	-90.96	154.0	1,416.9	567.3	522.8	44.50	12.747	
8,400.0	7,500.0	7,777.1	7,554.5	28.5	28.8	-91.03	154.0	1,416.9	664.7	620.4	44.35	14.989	
8,500.0	7,500.0	7,777.2	7,554.7	29.1	28.8	-91.10	154.0	1,416.9	762.8	718.6	44.25	17.238	
8,600.0	7,500.0	7,777.4	7,554.8	29.9	28.8	-91.17	154.0	1,416.9	861.4	817.2	44.20	19.488	
8,700.0	7,500.0	7,777.6	7,555.0	30.8	28.8	-91.25	154.0	1,416.9	960.2	916.0	44.18	21.736	
8,800.0	7,500.0	7,777.7	7,555.2	31.7	28.8	-91.32	154.0	1,416.9	1,059.3	1,015.1	44.17	23.980	
8,900.0	7,500.0	7,777.9	7,555.3	32.7	28.8	-91.39	154.0	1,416.9	1,158.5	1,114.3	44.19	26.218	

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 2F-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 2F-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							
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	7,778.1	7,555.5	33.7	28.8	-91.46	154.0	1,416.9	1,257.8	1,213.6	44.21	28.450		
9,100.0	7,500.0	7,778.3	7,555.7	34.8	28.8	-91.53	154.0	1,416.9	1,357.3	1,313.0	44.25	30.675		
9,200.0	7,500.0	7,778.4	7,555.8	36.0	28.8	-91.60	154.0	1,416.9	1,456.8	1,412.5	44.29	32.892		
9,300.0	7,500.0	7,778.6	7,556.0	37.2	28.8	-91.67	154.0	1,416.9	1,556.4	1,512.0	44.34	35.102		
9,400.0	7,500.0	7,778.8	7,556.2	38.4	28.8	-91.74	154.0	1,416.9	1,656.0	1,611.6	44.39	37.304		
9,500.0	7,500.0	7,778.9	7,556.4	39.7	28.8	-91.81	154.0	1,416.9	1,755.7	1,711.2	44.45	39.498		
9,600.0	7,500.0	7,779.1	7,556.5	41.1	28.8	-91.88	154.0	1,416.9	1,855.4	1,810.9	44.51	41.684		
9,700.0	7,500.0	7,779.3	7,556.7	42.4	28.8	-91.95	154.0	1,416.9	1,955.1	1,910.6	44.57	43.862		
9,800.0	7,500.0	7,779.4	7,556.9	43.8	28.8	-92.02	154.0	1,416.9	2,054.9	2,010.3	44.64	46.032		
9,900.0	7,500.0	7,779.6	7,557.0	45.2	28.8	-92.09	154.0	1,416.9	2,154.7	2,110.0	44.71	48.194		
10,000.0	7,500.0	7,779.8	7,557.2	46.6	28.8	-92.16	154.0	1,416.9	2,254.5	2,209.7	44.78	50.348		
10,100.0	7,500.0	7,779.9	7,557.4	48.1	28.8	-92.23	154.0	1,416.9	2,354.3	2,309.5	44.85	52.493		
10,200.0	7,500.0	7,780.1	7,557.5	49.6	28.8	-92.30	154.0	1,416.9	2,454.1	2,409.2	44.92	54.630		
10,300.0	7,500.0	7,780.3	7,557.7	51.1	28.8	-92.37	154.0	1,416.9	2,554.0	2,509.0	45.00	56.759		
10,400.0	7,500.0	7,780.5	7,557.9	52.6	28.8	-92.44	154.0	1,416.9	2,653.8	2,608.8	45.07	58.881		
10,500.0	7,500.0	7,780.6	7,558.0	54.1	28.8	-92.51	154.0	1,416.9	2,753.7	2,708.6	45.15	60.993		
10,600.0	7,500.0	7,780.8	7,558.2	55.6	28.8	-92.58	154.0	1,416.9	2,853.6	2,808.4	45.22	63.098		
10,700.0	7,500.0	7,781.0	7,558.4	57.2	28.8	-92.65	154.0	1,416.9	2,953.5	2,908.2	45.30	65.195		
10,800.0	7,500.0	7,781.1	7,558.5	58.8	28.8	-92.72	154.0	1,416.9	3,053.4	3,008.0	45.38	67.283		
10,900.0	7,500.0	7,781.3	7,558.7	60.3	28.8	-92.79	154.0	1,416.9	3,153.3	3,107.8	45.46	69.364		
11,000.0	7,500.0	7,781.5	7,558.9	61.9	28.8	-92.86	154.0	1,416.9	3,253.2	3,207.6	45.54	71.437		
11,100.0	7,500.0	7,781.6	7,559.0	63.5	28.8	-92.93	154.0	1,416.9	3,353.1	3,307.5	45.62	73.501		
11,200.0	7,500.0	7,781.8	7,559.2	65.1	28.8	-93.00	154.0	1,416.9	3,453.0	3,407.3	45.70	75.558		
11,300.0	7,500.0	7,782.0	7,559.4	66.7	28.8	-93.07	154.0	1,416.9	3,552.9	3,507.2	45.78	77.606		
11,400.0	7,500.0	7,782.1	7,559.6	68.3	28.8	-93.14	154.0	1,416.9	3,652.9	3,607.0	45.86	79.647		
11,500.0	7,500.0	7,782.3	7,559.7	70.0	28.8	-93.21	154.0	1,416.9	3,752.8	3,706.9	45.94	81.680		
11,600.0	7,500.0	7,782.5	7,559.9	71.6	28.8	-93.28	154.0	1,416.9	3,852.7	3,806.7	46.03	83.705		
11,700.0	7,500.0	7,782.6	7,560.0	73.2	28.8	-93.35	154.0	1,416.9	3,952.7	3,906.6	46.11	85.723		
11,800.0	7,500.0	7,782.8	7,560.2	74.9	28.8	-93.41	154.0	1,416.9	4,052.6	4,006.4	46.19	87.732		
11,900.0	7,500.0	7,783.0	7,560.4	76.5	28.8	-93.48	154.0	1,416.9	4,152.6	4,106.3	46.28	89.734		
12,000.0	7,500.0	7,783.1	7,560.5	78.2	28.8	-93.55	154.0	1,416.9	4,252.5	4,206.1	46.36	91.728		
12,100.0	7,500.0	7,783.3	7,560.7	79.8	28.8	-93.62	154.0	1,416.9	4,352.4	4,306.0	46.44	93.714		
12,200.0	7,500.0	7,783.5	7,560.9	81.5	28.8	-93.69	154.0	1,416.9	4,452.4	4,405.9	46.53	95.693		
12,300.0	7,500.0	7,783.6	7,561.0	83.1	28.8	-93.76	154.0	1,416.9	4,552.4	4,505.7	46.61	97.664		
12,400.0	7,500.0	7,783.8	7,561.2	84.8	28.8	-93.83	154.0	1,416.9	4,652.3	4,605.6	46.70	99.628		
12,500.0	7,500.0	7,784.0	7,561.4	86.5	28.8	-93.90	154.0	1,416.9	4,752.3	4,705.5	46.78	101.584		
12,600.0	7,500.0	7,784.1	7,561.5	88.1	28.8	-93.96	154.0	1,416.9	4,852.2	4,805.4	46.87	103.532		
12,700.0	7,500.0	7,784.3	7,561.7	89.8	28.8	-94.03	154.0	1,416.9	4,952.2	4,905.2	46.95	105.473		
12,800.0	7,500.0	7,784.4	7,561.9	91.5	28.8	-94.10	154.0	1,416.9	5,052.1	5,005.1	47.04	107.407		
12,900.0	7,500.0	7,784.6	7,562.0	93.2	28.8	-94.17	154.0	1,416.9	5,152.1	5,105.0	47.12	109.333		
13,000.0	7,500.0	7,784.8	7,562.2	94.9	28.8	-94.24	154.0	1,416.9	5,252.1	5,204.9	47.21	111.252		
13,100.0	7,500.0	7,784.9	7,562.4	96.5	28.8	-94.30	154.0	1,416.9	5,352.0	5,304.7	47.29	113.164		
13,200.0	7,500.0	7,785.1	7,562.5	98.2	28.8	-94.37	154.0	1,416.9	5,452.0	5,404.6	47.38	115.068		
13,300.0	7,500.0	7,785.3	7,562.7	99.9	28.8	-94.44	154.0	1,416.9	5,552.0	5,504.5	47.47	116.965		
13,400.0	7,500.0	7,785.4	7,562.9	101.6	28.8	-94.51	154.0	1,416.8	5,651.9	5,604.4	47.55	118.855		
13,500.0	7,500.0	7,785.6	7,563.0	103.3	28.8	-94.58	154.0	1,416.8	5,751.9	5,704.3	47.64	120.737		
13,600.0	7,500.0	7,785.8	7,563.2	105.0	28.8	-94.64	154.0	1,416.8	5,851.9	5,804.2	47.73	122.612		
13,700.0	7,500.0	7,785.9	7,563.3	106.7	28.8	-94.71	154.0	1,416.8	5,951.9	5,904.0	47.81	124.480		
13,800.0	7,500.0	7,786.1	7,563.5	108.4	28.8	-94.78	154.0	1,416.8	6,051.8	6,003.9	47.90	126.342		
13,900.0	7,500.0	7,786.3	7,563.7	110.1	28.8	-94.85	154.0	1,416.8	6,151.8	6,103.8	47.99	128.196		
14,000.0	7,500.0	7,786.4	7,563.8	111.8	28.8	-94.91	154.0	1,416.8	6,251.8	6,203.7	48.07	130.042		
14,100.0	7,500.0	7,786.6	7,564.0	113.5	28.8	-94.98	154.0	1,416.8	6,351.8	6,303.6	48.16	131.882		

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 2F-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 2F-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		
14,200.0	7,500.0	7,786.7	7,564.2	115.2	28.8	-95.05	154.0	1,416.8	6,451.7	6,403.5	48.25	133.715		
14,300.0	7,500.0	7,786.9	7,564.3	116.9	28.8	-95.12	154.0	1,416.8	6,551.7	6,503.4	48.34	135.541		
14,400.0	7,500.0	7,787.1	7,564.5	118.6	28.8	-95.18	154.0	1,416.8	6,651.7	6,603.3	48.43	137.361		
14,500.0	7,500.0	7,787.2	7,564.6	120.4	28.8	-95.25	154.0	1,416.8	6,751.7	6,703.2	48.51	139.173		
14,600.0	7,500.0	7,787.4	7,564.8	122.1	28.8	-95.32	154.0	1,416.8	6,851.6	6,803.0	48.60	140.978		
14,700.0	7,500.0	7,787.6	7,565.0	123.8	28.8	-95.38	154.0	1,416.8	6,951.6	6,902.9	48.69	142.777		
14,800.0	7,500.0	7,787.7	7,565.1	125.5	28.8	-95.45	154.0	1,416.8	7,051.6	7,002.8	48.78	144.569		
14,900.0	7,500.0	7,787.9	7,565.3	127.2	28.8	-95.52	154.0	1,416.8	7,151.6	7,102.7	48.87	146.354		
15,000.0	7,500.0	7,788.0	7,565.5	128.9	28.8	-95.58	154.0	1,416.8	7,251.6	7,202.6	48.95	148.132		
15,100.0	7,500.0	7,788.2	7,565.6	130.6	28.8	-95.65	154.0	1,416.8	7,351.6	7,302.5	49.04	149.904		
15,200.0	7,500.0	7,788.4	7,565.8	132.4	28.8	-95.72	154.0	1,416.8	7,451.5	7,402.4	49.13	151.669		
15,300.0	7,500.0	7,788.5	7,565.9	134.1	28.8	-95.78	154.0	1,416.8	7,551.5	7,502.3	49.22	153.427		
15,400.0	7,500.0	7,788.7	7,566.1	135.8	28.8	-95.85	154.0	1,416.8	7,651.5	7,602.2	49.31	155.179		
15,500.0	7,500.0	7,788.8	7,566.3	137.5	28.8	-95.92	154.0	1,416.8	7,751.5	7,702.1	49.40	156.924		
15,600.0	7,500.0	7,789.0	7,566.4	139.2	28.8	-95.98	154.0	1,416.8	7,851.5	7,802.0	49.49	158.663		
15,700.0	7,500.0	7,789.2	7,566.6	141.0	28.8	-96.05	154.0	1,416.8	7,951.5	7,901.9	49.57	160.395		
15,800.0	7,500.0	7,789.3	7,566.7	142.7	28.8	-96.11	154.0	1,416.8	8,051.4	8,001.8	49.66	162.121		
15,841.7	7,500.0	7,789.4	7,566.8	143.4	28.8	-96.14	154.0	1,416.8	8,093.1	8,043.4	49.70	162.838		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	105.8	105.7	0.0	0.2	37.18	1,583.8	1,201.3	1,988.6					
100.0	100.0	306.4	306.1	0.2	0.6	37.24	1,574.2	1,196.7	1,983.4	1,982.7	0.69	2,877.875		
200.0	200.0	503.1	501.6	0.3	1.1	37.47	1,553.4	1,190.8	1,973.1	1,971.9	1.23	1,604.386		
300.0	300.0	616.9	614.2	0.5	1.5	37.70	1,537.2	1,188.2	1,960.5	1,958.8	1.64	1,195.649		
400.0	400.0	755.2	750.4	0.7	1.9	-28.38	1,513.3	1,185.7	1,944.7	1,942.6	2.13	914.247		
500.0	500.0	868.2	861.2	0.9	2.4	-28.14	1,491.6	1,184.2	1,926.5	1,923.9	2.58	747.294		
600.0	599.9	940.3	932.1	1.0	2.6	-28.03	1,478.2	1,183.8	1,907.6	1,904.6	2.94	649.580		
700.0	699.7	1,082.5	1,071.7	1.2	3.2	-27.76	1,451.0	1,182.8	1,887.0	1,883.5	3.48	542.256		
800.0	799.4	1,306.7	1,289.2	1.4	4.2	-27.20	1,397.4	1,177.5	1,860.1	1,855.8	4.28	434.758		
900.0	898.9	1,442.4	1,419.1	1.7	4.9	-26.86	1,358.4	1,172.3	1,827.1	1,822.2	4.88	374.493		
1,000.0	998.3	1,564.5	1,535.1	1.9	5.6	-26.54	1,320.7	1,167.5	1,791.0	1,785.5	5.47	327.268		
1,100.0	1,097.4	1,687.7	1,651.4	2.2	6.4	-26.18	1,280.3	1,162.6	1,752.1	1,746.0	6.09	287.483		
1,200.0	1,196.3	1,878.3	1,828.2	2.5	7.7	-25.38	1,209.9	1,153.3	1,708.1	1,701.1	7.00	243.998		
1,300.0	1,294.9	1,973.4	1,915.1	2.8	8.4	-24.99	1,171.3	1,148.7	1,660.4	1,652.8	7.63	217.702		
1,400.0	1,393.3	2,078.6	2,010.5	3.2	9.1	-24.51	1,127.6	1,143.2	1,610.4	1,602.1	8.30	193.952		
1,494.4	1,485.8	2,174.7	2,097.3	3.5	9.9	-24.02	1,086.4	1,138.5	1,561.5	1,552.5	8.97	174.124		
1,500.0	1,491.2	2,181.0	2,102.9	3.5	9.9	-23.97	1,083.7	1,138.2	1,558.5	1,549.5	9.01	172.965		
1,600.0	1,589.1	2,309.4	2,217.0	3.9	11.0	-22.79	1,025.0	1,132.1	1,504.2	1,494.4	9.86	152.536		
1,700.0	1,686.9	2,386.0	2,284.7	4.3	11.6	-22.04	989.5	1,127.5	1,449.0	1,438.5	10.50	137.969		
1,800.0	1,784.8	2,461.6	2,351.8	4.7	12.2	-21.28	955.0	1,122.7	1,394.4	1,383.2	11.15	125.031		
1,900.0	1,882.6	2,527.5	2,410.6	5.1	12.7	-20.57	925.4	1,118.9	1,340.6	1,328.9	11.78	113.813		
2,000.0	1,980.4	2,604.3	2,479.4	5.5	13.3	-19.72	891.7	1,114.7	1,288.1	1,275.6	12.45	103.460		
2,100.0	2,078.3	2,690.8	2,557.2	5.9	14.0	-18.74	854.4	1,109.0	1,235.6	1,222.5	13.17	93.856		
2,200.0	2,176.1	2,763.6	2,622.6	6.3	14.6	-17.82	822.6	1,104.7	1,183.6	1,169.7	13.87	85.353		
2,300.0	2,273.9	2,829.6	2,682.1	6.7	15.1	-16.91	794.3	1,101.8	1,133.2	1,118.6	14.57	77.790		
2,400.0	2,371.8	2,950.8	2,790.9	7.1	16.1	-15.11	741.4	1,094.4	1,081.4	1,066.0	15.48	69.851		
2,500.0	2,469.6	3,035.1	2,866.5	7.5	16.7	-13.73	704.4	1,088.4	1,029.6	1,013.3	16.29	63.222		
2,600.0	2,567.4	3,119.5	2,942.2	7.9	17.4	-12.28	667.8	1,081.4	977.8	960.7	17.10	57.172		
2,700.0	2,665.3	3,203.3	3,017.6	8.3	18.0	-10.71	631.9	1,074.5	926.8	908.8	17.95	51.618		
2,800.0	2,763.1	3,289.2	3,094.4	8.7	18.7	-8.89	594.3	1,067.1	875.6	856.7	18.88	46.384		
2,900.0	2,860.9	3,363.5	3,160.9	9.1	19.3	-7.08	561.5	1,061.8	826.0	806.2	19.83	41.650		
3,000.0	2,958.8	3,456.0	3,243.6	9.5	20.1	-4.60	520.6	1,054.3	776.6	755.7	20.91	37.147		
3,100.0	3,056.6	3,528.3	3,308.1	9.9	20.6	-2.40	488.5	1,048.9	728.8	706.8	22.00	33.121		
3,200.0	3,154.4	3,608.0	3,379.3	10.3	21.3	0.32	453.0	1,043.9	683.1	659.9	23.23	29.409		
3,300.0	3,252.3	3,699.0	3,460.6	10.7	22.0	3.78	412.7	1,037.5	638.8	614.2	24.59	25.978		
3,400.0	3,350.1	3,784.3	3,537.2	11.1	22.7	7.33	375.6	1,030.3	595.7	569.7	26.01	22.900		
3,500.0	3,447.9	3,867.1	3,612.0	11.5	23.3	11.03	341.2	1,022.6	554.7	527.3	27.49	20.182		
3,600.0	3,545.8	3,947.3	3,685.0	11.9	23.9	14.92	308.9	1,015.1	516.7	487.6	29.05	17.784		
3,700.0	3,643.6	4,024.3	3,755.2	12.3	24.5	19.10	277.8	1,008.6	482.6	451.9	30.72	15.711		
3,800.0	3,741.5	4,107.4	3,830.8	12.7	25.1	24.15	243.8	1,002.7	453.4	420.9	32.52	13.943		
3,900.0	3,839.3	4,182.1	3,898.4	13.1	25.7	29.18	212.4	997.8	429.7	395.4	34.22	12.556		
4,000.0	3,937.1	4,260.3	3,969.1	13.5	26.3	34.83	179.1	994.6	413.9	378.2	35.76	11.575		
4,100.0	4,035.0	4,345.1	4,045.7	13.9	26.9	41.21	143.0	991.3	404.9	367.9	37.05	10.930		
4,175.3	4,108.6	4,407.9	4,102.7	14.2	27.4	45.97	116.6	989.0	402.8	365.1	37.70	10.686		
4,200.0	4,132.8	4,427.6	4,120.4	14.3	27.5	47.49	108.2	988.3	403.1	365.3	37.84	10.652		
4,300.0	4,230.6	4,506.9	4,191.0	14.7	28.2	53.81	72.2	984.7	409.4	371.4	38.04	10.764		
4,400.0	4,328.5	4,589.5	4,263.7	15.1	28.9	60.40	33.2	980.0	423.6	385.9	37.71	11.235		
4,500.0	4,426.3	4,674.7	4,338.8	15.5	29.6	66.78	-6.6	975.0	444.8	407.8	36.96	12.035		
4,600.0	4,524.1	4,770.4	4,424.8	15.9	30.3	73.07	-48.5	970.5	470.5	434.4	36.15	13.015		
4,700.0	4,622.0	4,875.7	4,521.4	16.3	31.0	78.92	-89.9	966.3	497.7	462.3	35.43	14.050		
4,800.0	4,719.8	4,985.7	4,624.3	16.7	31.7	84.17	-128.6	961.7	524.9	490.2	34.73	15.113		
4,900.0	4,817.6	5,085.2	4,718.5	17.2	32.3	88.39	-160.4	956.7	551.8	517.9	33.91	16.275		

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 2F-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 2F-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	
5,000.0	4,915.5	5,202.5	4,830.8	17.6	32.9	92.65	-193.8	951.7	578.2	544.8	33.32	17.353	
5,100.0	5,013.3	5,325.1	4,949.8	18.0	33.4	96.44	-222.7	947.2	602.0	569.2	32.82	18.341	
5,200.0	5,111.1	5,442.1	5,064.8	18.4	33.8	99.52	-244.1	944.0	622.5	590.1	32.39	19.221	
5,300.0	5,209.0	5,553.9	5,175.1	18.8	34.1	102.20	-261.7	940.9	641.7	609.8	31.98	20.068	
5,400.0	5,306.8	5,679.0	5,299.4	19.2	34.4	104.95	-275.7	937.4	657.4	625.8	31.67	20.760	
5,500.0	5,404.6	5,801.1	5,421.1	19.6	34.6	107.45	-285.0	933.9	670.7	639.4	31.38	21.376	
5,600.0	5,502.5	5,915.0	5,534.8	20.0	34.7	109.55	-289.8	932.0	681.6	650.4	31.17	21.866	
5,700.0	5,600.3	6,030.1	5,650.0	20.4	34.8	111.60	-291.8	929.9	690.7	659.7	31.02	22.265	
5,800.0	5,698.2	6,131.3	5,751.1	20.8	34.8	113.35	-291.7	928.0	698.6	667.7	30.94	22.579	
5,900.0	5,796.0	6,227.8	5,847.6	21.2	34.9	114.97	-291.6	926.4	707.2	676.3	30.94	22.857	
6,000.0	5,893.8	6,324.3	5,944.1	21.6	35.0	116.56	-291.7	924.7	716.5	685.5	31.01	23.108	
6,100.0	5,991.7	6,421.8	6,041.6	22.0	35.0	118.12	-291.8	923.0	726.5	695.3	31.14	23.328	
6,200.0	6,089.5	6,520.7	6,140.4	22.4	35.1	119.65	-292.0	921.5	736.9	705.6	31.34	23.514	
6,300.0	6,187.3	6,622.5	6,242.2	22.8	35.1	121.14	-291.7	920.4	747.4	715.8	31.60	23.655	
6,400.0	6,285.2	6,720.6	6,340.3	23.2	35.2	122.51	-291.1	919.8	758.0	726.1	31.91	23.752	
6,500.0	6,383.0	6,815.9	6,435.7	23.7	35.2	123.81	-290.7	919.2	769.3	737.0	32.27	23.835	
6,600.0	6,480.8	6,912.2	6,532.0	24.1	35.3	125.08	-290.6	918.6	781.2	748.5	32.67	23.913	
6,700.0	6,578.7	7,008.7	6,628.5	24.5	35.3	126.33	-290.7	917.8	793.6	760.5	33.09	23.985	
6,800.0	6,676.5	7,104.9	6,724.7	24.9	35.4	127.54	-290.8	916.8	806.6	773.1	33.53	24.057	
6,900.0	6,774.3	7,201.2	6,820.9	25.3	35.5	128.73	-291.0	915.6	820.1	786.1	33.98	24.132	
7,000.0	6,872.2	7,298.4	6,918.2	25.7	35.6	129.91	-291.3	914.2	834.1	799.6	34.45	24.209	
7,019.1	6,890.8	7,317.0	6,936.7	25.8	35.6	130.13	-291.4	913.9	836.8	802.3	34.54	24.224	
7,050.0	6,921.1	7,347.1	6,966.8	25.9	35.6	115.75	-291.5	913.5	840.4	805.7	34.70	24.221	
7,100.0	6,970.2	7,396.2	7,015.9	26.0	35.6	91.11	-291.6	912.7	843.0	808.1	34.97	24.107	
7,150.0	7,019.0	7,445.2	7,064.9	26.2	35.7	71.82	-291.7	911.9	841.6	806.3	35.27	23.863	
7,200.0	7,067.2	7,493.5	7,113.2	26.3	35.7	59.68	-291.8	911.0	836.2	800.6	35.59	23.492	
7,250.0	7,114.4	7,540.8	7,160.5	26.4	35.7	52.56	-291.8	910.2	826.9	791.0	35.95	23.001	
7,300.0	7,160.3	7,586.9	7,206.6	26.4	35.8	48.56	-291.8	909.3	814.0	777.6	36.35	22.393	
7,350.0	7,204.5	7,631.2	7,250.9	26.5	35.8	46.61	-291.8	908.4	797.4	760.6	36.79	21.678	
7,400.0	7,246.6	7,673.5	7,293.2	26.5	35.8	46.11	-291.8	907.6	777.6	740.3	37.27	20.863	
7,450.0	7,286.4	7,713.4	7,333.1	26.5	35.8	46.77	-291.7	906.8	754.7	716.9	37.81	19.960	
7,500.0	7,323.5	7,751.1	7,370.8	26.5	35.9	48.46	-291.6	906.1	729.0	690.6	38.41	18.979	
7,550.0	7,357.7	7,785.7	7,405.4	26.5	35.9	51.08	-291.5	905.5	701.0	661.9	39.09	17.934	
7,600.0	7,388.7	7,817.0	7,436.6	26.5	35.9	54.56	-291.4	904.8	670.9	631.0	39.84	16.840	
7,650.0	7,416.3	7,844.7	7,464.3	26.5	35.9	58.84	-291.2	904.3	639.2	598.5	40.68	15.715	
7,700.0	7,440.2	7,868.6	7,488.2	26.5	35.9	63.77	-291.1	903.8	606.5	564.9	41.61	14.577	
7,750.0	7,460.3	7,888.7	7,508.3	26.5	35.9	69.13	-290.9	903.4	573.3	530.7	42.63	13.448	
7,800.0	7,476.4	7,904.9	7,524.5	26.5	35.9	74.64	-290.8	903.1	540.2	496.5	43.75	12.349	
7,850.0	7,488.4	7,916.9	7,536.6	26.6	36.0	79.89	-290.7	902.9	508.0	463.0	44.94	11.304	
7,900.0	7,496.2	7,924.6	7,544.2	26.6	36.0	84.54	-290.7	902.8	477.2	431.0	46.17	10.337	
7,950.0	7,499.8	7,927.9	7,547.5	26.7	36.0	88.30	-290.6	902.7	448.8	401.4	47.38	9.472	
7,966.7	7,500.0	7,928.0	7,547.6	26.7	36.0	89.33	-290.6	902.7	440.0	392.2	47.78	9.209	
8,000.0	7,500.0	7,927.7	7,547.3	26.8	36.0	89.29	-290.6	902.7	423.7	375.2	48.52	8.732	
8,100.0	7,500.0	7,926.9	7,546.5	27.0	36.0	89.16	-290.7	902.8	388.1	337.9	50.25	7.724	
8,194.4	7,500.0	7,926.1	7,545.7	27.4	36.0	89.05	-290.7	902.8	376.5	325.7	50.78	7.413 CC, ES, SF	
8,200.0	7,500.0	7,926.1	7,545.7	27.4	36.0	89.04	-290.7	902.8	376.5	325.7	50.78	7.415	
8,300.0	7,500.0	7,925.3	7,544.9	27.9	36.0	88.91	-290.7	902.8	391.0	340.8	50.23	7.783	
8,400.0	7,500.0	7,924.4	7,544.1	28.5	36.0	88.79	-290.7	902.8	428.9	379.8	49.17	8.723	
8,500.0	7,500.0	7,923.6	7,543.3	29.1	36.0	88.67	-290.7	902.8	484.9	436.9	47.93	10.116	
8,600.0	7,500.0	7,922.8	7,542.5	29.9	36.0	88.55	-290.7	902.8	553.4	506.7	46.68	11.853	
8,700.0	7,500.0	7,922.0	7,541.7	30.8	36.0	88.43	-290.7	902.8	630.3	584.8	45.56	13.837	
8,800.0	7,500.0	7,921.2	7,540.9	31.7	36.0	88.30	-290.7	902.8	713.0	668.5	44.59	15.992	

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

Anticollision Report

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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 2F-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
8,900.0	7,500.0	7,920.4	7,540.1	32.7	36.0	88.18	-290.7	902.9	799.7	755.9	43.79	18.264	
9,000.0	7,500.0	7,919.7	7,539.3	33.7	36.0	88.06	-290.7	902.9	889.2	846.0	43.13	20.616	
9,100.0	7,500.0	7,918.9	7,538.5	34.8	36.0	87.94	-290.7	902.9	980.7	938.1	42.60	23.021	
9,200.0	7,500.0	7,918.1	7,537.7	36.0	36.0	87.82	-290.7	902.9	1,073.7	1,031.5	42.17	25.460	
9,300.0	7,500.0	7,917.3	7,536.9	37.2	36.0	87.70	-290.7	902.9	1,167.9	1,126.1	41.83	27.922	
9,400.0	7,500.0	7,916.5	7,536.1	38.4	36.0	87.59	-290.7	902.9	1,263.0	1,221.4	41.55	30.397	
9,500.0	7,500.0	7,915.7	7,535.4	39.7	36.0	87.47	-290.7	902.9	1,358.7	1,317.4	41.33	32.879	
9,600.0	7,500.0	7,915.0	7,534.6	41.1	36.0	87.35	-290.7	903.0	1,455.1	1,413.9	41.15	35.362	
9,700.0	7,500.0	7,914.2	7,533.8	42.4	36.0	87.23	-290.8	903.0	1,551.9	1,510.9	41.01	37.843	
9,800.0	7,500.0	7,913.4	7,533.0	43.8	36.0	87.11	-290.8	903.0	1,649.1	1,608.2	40.90	40.320	
9,900.0	7,500.0	7,912.7	7,532.3	45.2	36.0	87.00	-290.8	903.0	1,746.6	1,705.8	40.82	42.791	
10,000.0	7,500.0	7,911.9	7,531.5	46.6	36.0	86.88	-290.8	903.0	1,844.4	1,803.6	40.76	45.254	
10,100.0	7,500.0	7,911.1	7,530.7	48.1	36.0	86.77	-290.8	903.0	1,942.4	1,901.6	40.71	47.708	
10,200.0	7,500.0	7,910.4	7,530.0	49.6	36.0	86.65	-290.8	903.0	2,040.5	1,999.9	40.69	50.152	
10,300.0	7,500.0	7,909.6	7,529.2	51.1	36.0	86.54	-290.8	903.1	2,138.9	2,098.2	40.67	52.586	
10,400.0	7,500.0	7,908.9	7,528.5	52.6	36.0	86.42	-290.8	903.1	2,237.4	2,196.7	40.67	55.010	
10,500.0	7,500.0	7,908.1	7,527.7	54.1	36.0	86.31	-290.8	903.1	2,336.0	2,295.4	40.68	57.422	
10,600.0	7,500.0	7,907.4	7,527.0	55.6	36.0	86.19	-290.8	903.1	2,434.8	2,394.1	40.70	59.823	
10,700.0	7,500.0	7,906.6	7,526.2	57.2	35.9	86.08	-290.8	903.1	2,533.6	2,492.9	40.73	62.212	
10,800.0	7,500.0	7,905.9	7,525.5	58.8	35.9	85.97	-290.8	903.1	2,632.6	2,591.8	40.76	64.589	
10,900.0	7,500.0	7,905.1	7,524.8	60.3	35.9	85.86	-290.8	903.1	2,731.6	2,690.8	40.80	66.954	
11,000.0	7,500.0	7,904.4	7,524.0	61.9	35.9	85.74	-290.8	903.1	2,830.6	2,789.8	40.84	69.308	
11,100.0	7,500.0	7,903.7	7,523.3	63.5	35.9	85.63	-290.8	903.2	2,929.8	2,888.9	40.89	71.650	
11,200.0	7,500.0	7,902.9	7,522.6	65.1	35.9	85.52	-290.8	903.2	3,029.0	2,988.0	40.94	73.980	
11,300.0	7,500.0	7,902.2	7,521.8	66.7	35.9	85.41	-290.8	903.2	3,128.2	3,087.2	41.00	76.297	
11,400.0	7,500.0	7,901.5	7,521.1	68.3	35.9	85.30	-290.9	903.2	3,227.5	3,186.5	41.06	78.603	
11,500.0	7,500.0	7,900.7	7,520.4	70.0	35.9	85.19	-290.9	903.2	3,326.8	3,285.7	41.12	80.897	
11,600.0	7,500.0	7,900.0	7,519.6	71.6	35.9	85.08	-290.9	903.2	3,426.2	3,385.0	41.19	83.180	
11,700.0	7,500.0	7,899.3	7,518.9	73.2	35.9	84.97	-290.9	903.2	3,525.6	3,484.4	41.26	85.450	
11,800.0	7,500.0	7,898.6	7,518.2	74.9	35.9	84.86	-290.9	903.3	3,625.1	3,583.7	41.33	87.709	
11,900.0	7,500.0	7,897.9	7,517.5	76.5	35.9	84.76	-290.9	903.3	3,724.5	3,683.1	41.40	89.956	
12,000.0	7,500.0	7,897.2	7,516.8	78.2	35.9	84.65	-290.9	903.3	3,824.0	3,782.6	41.48	92.192	
12,100.0	7,500.0	7,896.4	7,516.1	79.8	35.9	84.54	-290.9	903.3	3,923.6	3,882.0	41.56	94.416	
12,200.0	7,500.0	7,895.7	7,515.4	81.5	35.9	84.43	-290.9	903.3	4,023.1	3,981.5	41.63	96.629	
12,300.0	7,500.0	7,895.0	7,514.7	83.1	35.9	84.33	-290.9	903.3	4,122.7	4,081.0	41.71	98.830	
12,400.0	7,500.0	7,894.3	7,514.0	84.8	35.9	84.22	-290.9	903.3	4,222.3	4,180.5	41.80	101.020	
12,500.0	7,500.0	7,893.6	7,513.3	86.5	35.9	84.11	-290.9	903.3	4,321.9	4,280.0	41.88	103.199	
12,600.0	7,500.0	7,892.9	7,512.6	88.1	35.9	84.01	-290.9	903.4	4,421.5	4,379.5	41.96	105.367	
12,700.0	7,500.0	7,892.2	7,511.9	89.8	35.9	83.90	-290.9	903.4	4,521.1	4,479.1	42.05	107.523	
12,800.0	7,500.0	7,891.5	7,511.2	91.5	35.9	83.80	-290.9	903.4	4,620.8	4,578.7	42.13	109.669	
12,900.0	7,500.0	7,890.9	7,510.5	93.2	35.9	83.69	-290.9	903.4	4,720.5	4,678.3	42.22	111.804	
13,000.0	7,500.0	7,886.0	7,505.6	94.9	35.9	82.96	-291.0	903.5	4,820.2	4,777.9	42.30	113.956	
13,100.0	7,500.0	7,886.0	7,505.6	96.5	35.9	82.96	-291.0	903.5	4,919.9	4,877.5	42.39	116.066	
13,200.0	7,500.0	7,886.0	7,505.6	98.2	35.9	82.96	-291.0	903.5	5,019.6	4,977.1	42.48	118.164	
13,300.0	7,500.0	7,886.0	7,505.6	99.9	35.9	82.96	-291.0	903.5	5,119.3	5,076.7	42.57	120.252	
13,400.0	7,500.0	7,886.0	7,505.6	101.6	35.9	82.96	-291.0	903.5	5,219.0	5,176.4	42.66	122.329	
13,500.0	7,500.0	7,886.0	7,505.6	103.3	35.9	82.96	-291.0	903.5	5,318.8	5,276.0	42.76	124.396	
13,600.0	7,500.0	7,886.0	7,505.6	105.0	35.9	82.96	-291.0	903.5	5,418.5	5,375.7	42.85	126.453	
13,700.0	7,500.0	7,886.0	7,505.6	106.7	35.9	82.96	-291.0	903.5	5,518.3	5,475.3	42.94	128.499	
13,800.0	7,500.0	7,886.0	7,505.6	108.4	35.9	82.96	-291.0	903.5	5,618.0	5,575.0	43.04	130.535	
13,900.0	7,500.0	7,886.0	7,505.6	110.1	35.9	82.96	-291.0	903.5	5,717.8	5,674.7	43.13	132.561	
14,000.0	7,500.0	7,886.0	7,505.6	111.8	35.9	82.96	-291.0	903.5	5,817.6	5,774.4	43.23	134.577	

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 2F-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 2F-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	
14,100.0	7,500.0	7,886.0	7,505.6	113.5	35.9	82.96	-291.0	903.5	5,917.4	5,874.1	43.32	136.583	
14,200.0	7,500.0	7,886.0	7,505.6	115.2	35.9	82.96	-291.0	903.5	6,017.2	5,973.8	43.42	138.579	
14,300.0	7,500.0	7,886.0	7,505.6	116.9	35.9	82.96	-291.0	903.5	6,117.0	6,073.5	43.52	140.565	
14,400.0	7,500.0	7,886.0	7,505.6	118.6	35.9	82.96	-291.0	903.5	6,216.8	6,173.2	43.61	142.541	
14,500.0	7,500.0	7,886.0	7,505.6	120.4	35.9	82.96	-291.0	903.5	6,316.6	6,272.9	43.71	144.508	
14,600.0	7,500.0	7,886.0	7,505.6	122.1	35.9	82.96	-291.0	903.5	6,416.5	6,372.6	43.81	146.465	
14,700.0	7,500.0	7,886.0	7,505.6	123.8	35.9	82.96	-291.0	903.5	6,516.3	6,472.4	43.91	148.413	
14,800.0	7,500.0	7,886.0	7,505.6	125.5	35.9	82.96	-291.0	903.5	6,616.1	6,572.1	44.00	150.351	
14,900.0	7,500.0	7,886.0	7,505.6	127.2	35.9	82.96	-291.0	903.5	6,716.0	6,671.8	44.10	152.280	
15,000.0	7,500.0	7,886.0	7,505.6	128.9	35.9	82.96	-291.0	903.5	6,815.8	6,771.6	44.20	154.200	
15,100.0	7,500.0	7,886.0	7,505.6	130.6	35.9	82.96	-291.0	903.5	6,915.6	6,871.3	44.30	156.111	
15,200.0	7,500.0	7,886.0	7,505.6	132.4	35.9	82.96	-291.0	903.5	7,015.5	6,971.1	44.40	158.012	
15,300.0	7,500.0	7,886.0	7,505.6	134.1	35.9	82.96	-291.0	903.5	7,115.4	7,070.9	44.50	159.904	
15,400.0	7,500.0	7,886.0	7,505.6	135.8	35.9	82.96	-291.0	903.5	7,215.2	7,170.6	44.60	161.787	
15,500.0	7,500.0	7,886.0	7,505.6	137.5	35.9	82.96	-291.0	903.5	7,315.1	7,270.4	44.70	163.662	
15,600.0	7,500.0	7,886.0	7,505.6	139.2	35.9	82.96	-291.0	903.5	7,414.9	7,370.1	44.80	165.527	
15,700.0	7,500.0	7,886.0	7,505.6	141.0	35.9	82.96	-291.0	903.5	7,514.8	7,469.9	44.90	167.384	
15,800.0	7,500.0	7,886.0	7,505.6	142.7	35.9	82.96	-291.0	903.5	7,614.7	7,569.7	45.00	169.232	
15,841.7	7,500.0	7,886.0	7,505.6	143.4	35.9	82.96	-291.0	903.5	7,656.3	7,611.3	45.04	169.999	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	
0.0	0.0	33.1	33.1	0.0	0.1	46.17	801.1	834.4	1,156.7				
100.0	100.0	121.8	121.8	0.2	0.2	46.19	801.3	835.4	1,157.7	1,157.3	0.37	3,169.409	
200.0	200.0	219.9	219.8	0.3	0.4	46.25	801.6	837.3	1,159.3	1,158.6	0.71	1,627.897	
300.0	300.0	332.7	332.7	0.5	0.6	46.29	801.7	838.7	1,160.2	1,159.1	1.08	1,070.849	
400.0	400.0	436.3	436.2	0.7	0.8	-20.09	801.8	838.8	1,159.6	1,158.1	1.44	806.288	
500.0	500.0	535.9	535.8	0.9	0.9	-20.16	802.3	838.8	1,157.4	1,155.6	1.79	647.832	
600.0	599.9	639.5	639.5	1.0	1.1	-20.26	802.3	838.6	1,153.3	1,151.1	2.14	538.092	
700.0	699.7	744.3	744.3	1.2	1.3	-20.40	802.3	838.3	1,147.3	1,144.8	2.50	458.371	
800.0	799.4	848.1	848.1	1.4	1.5	-20.61	802.2	837.1	1,139.0	1,136.2	2.86	397.857	
900.0	898.9	947.6	947.6	1.7	1.7	-20.87	802.3	835.8	1,129.2	1,126.0	3.22	350.900	
1,000.0	998.3	1,048.8	1,048.7	1.9	1.8	-21.16	802.0	834.5	1,117.5	1,114.0	3.58	312.232	
1,100.0	1,097.4	1,149.3	1,149.2	2.2	2.0	-21.49	801.7	833.3	1,104.2	1,100.3	3.94	280.041	
1,200.0	1,196.3	1,250.0	1,250.0	2.5	2.2	-21.88	801.3	831.6	1,089.1	1,084.8	4.31	252.541	
1,300.0	1,294.9	1,345.2	1,345.1	2.8	2.3	-22.33	801.2	829.9	1,072.4	1,067.8	4.68	229.198	
1,400.0	1,393.3	1,438.8	1,438.7	3.2	2.5	-22.83	801.5	828.4	1,054.7	1,049.7	5.05	208.834	
1,494.4	1,485.8	1,531.5	1,531.3	3.5	2.7	-23.38	802.0	827.0	1,036.8	1,031.4	5.42	191.413	
1,500.0	1,491.2	1,537.1	1,537.0	3.5	2.7	-23.41	802.1	826.9	1,035.7	1,030.2	5.44	190.431	
1,600.0	1,589.1	1,634.6	1,634.4	3.9	2.9	-23.95	802.4	825.3	1,015.8	1,010.0	5.83	174.212	
1,700.0	1,686.9	1,727.3	1,727.1	4.3	3.0	-24.49	803.1	824.0	996.5	990.2	6.22	160.162	
1,800.0	1,784.8	1,824.5	1,824.3	4.7	3.2	-25.08	804.0	822.8	977.4	970.8	6.63	147.522	
1,900.0	1,882.6	1,921.7	1,921.6	5.1	3.4	-25.70	805.0	821.4	958.5	951.4	7.04	136.216	
2,000.0	1,980.4	2,015.1	2,014.9	5.5	3.5	-26.34	806.3	820.0	939.9	932.5	7.45	126.192	
2,100.0	2,078.3	2,106.2	2,106.0	5.9	3.7	-26.97	808.0	819.1	922.1	914.2	7.86	117.269	
2,200.0	2,176.1	2,200.0	2,199.8	6.3	3.9	-27.65	810.0	818.6	904.9	896.6	8.29	109.171	
2,300.0	2,273.9	2,296.9	2,296.6	6.7	4.0	-28.37	812.3	818.2	888.2	879.5	8.73	101.775	
2,400.0	2,371.8	2,399.1	2,398.8	7.1	4.2	-29.14	814.4	818.0	871.4	862.3	9.18	94.925	
2,500.0	2,469.6	2,501.3	2,501.0	7.5	4.4	-29.91	815.9	817.8	854.3	844.7	9.64	88.636	
2,600.0	2,567.4	2,600.3	2,600.0	7.9	4.6	-30.68	816.9	817.6	837.1	827.0	10.10	82.880	
2,700.0	2,665.3	2,700.0	2,699.7	8.3	4.7	-31.49	817.9	817.2	819.7	809.2	10.57	77.549	
2,800.0	2,763.1	2,797.1	2,796.8	8.7	4.9	-32.30	818.6	816.8	802.5	791.5	11.05	72.649	
2,900.0	2,860.9	2,897.4	2,897.1	9.1	5.1	-33.18	819.4	816.4	785.4	773.8	11.54	68.077	
3,000.0	2,958.8	2,995.7	2,995.4	9.5	5.3	-34.12	820.3	815.4	768.2	756.2	12.04	63.816	
3,100.0	3,056.6	3,094.2	3,093.8	9.9	5.4	-35.13	821.2	814.2	751.2	738.7	12.55	59.848	
3,200.0	3,154.4	3,194.0	3,193.6	10.3	5.6	-36.18	822.0	812.9	734.3	721.2	13.08	56.134	
3,300.0	3,252.3	3,290.8	3,290.4	10.7	5.8	-37.28	822.8	811.4	717.4	703.8	13.62	52.678	
3,400.0	3,350.1	3,385.3	3,385.0	11.1	5.9	-38.41	823.8	809.9	701.2	687.0	14.17	49.483	
3,500.0	3,447.9	3,480.7	3,480.3	11.5	6.1	-39.58	825.1	808.8	685.6	670.8	14.73	46.535	
3,600.0	3,545.8	3,573.7	3,573.3	11.9	6.3	-40.73	826.5	808.3	670.8	655.5	15.30	43.835	
3,700.0	3,643.6	3,666.3	3,665.9	12.3	6.4	-41.92	828.6	808.2	657.1	641.2	15.88	41.367	
3,800.0	3,741.5	3,765.6	3,765.1	12.7	6.6	-43.25	831.3	808.2	644.2	627.7	16.49	39.059	
3,900.0	3,839.3	3,869.8	3,869.3	13.1	6.8	-44.73	833.6	807.6	630.9	613.8	17.13	36.839	
4,000.0	3,937.1	3,971.7	3,971.2	13.5	7.0	-46.22	834.8	807.0	617.1	599.3	17.77	34.734	
4,100.0	4,035.0	4,075.9	4,075.3	13.9	7.2	-47.85	835.5	805.8	603.0	584.6	18.43	32.719	
4,200.0	4,132.8	4,172.9	4,172.3	14.3	7.3	-49.49	835.6	803.8	588.7	569.6	19.11	30.809	
4,300.0	4,230.6	4,271.3	4,270.8	14.7	7.5	-51.26	836.0	801.8	575.1	555.3	19.81	29.039	
4,400.0	4,328.5	4,368.9	4,368.4	15.1	7.7	-53.02	835.9	800.3	561.8	541.3	20.51	27.394	
4,500.0	4,426.3	4,464.9	4,464.3	15.5	7.8	-54.84	836.1	798.8	549.3	528.0	21.23	25.873	
4,600.0	4,524.1	4,557.7	4,557.1	15.9	8.0	-56.79	836.9	796.4	537.9	515.9	21.97	24.481	
4,700.0	4,622.0	4,655.1	4,654.4	16.3	8.2	-58.91	838.5	794.1	527.9	505.2	22.73	23.227	
4,800.0	4,719.8	4,755.3	4,754.7	16.7	8.4	-61.11	839.5	792.1	518.2	494.7	23.49	22.054	
4,900.0	4,817.6	4,856.0	4,855.3	17.2	8.5	-63.39	840.1	790.1	508.8	484.5	24.27	20.968	
5,000.0	4,915.5	4,956.3	4,955.6	17.6	8.7	-65.66	839.9	789.0	499.5	474.4	25.03	19.956	

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 2F-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 2F-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		
5,100.0	5,013.3	5,052.2	5,051.4	18.0	8.9	-67.92	839.6	787.7	490.8	465.0	25.79	19.031		
5,200.0	5,111.1	5,147.2	5,146.5	18.4	9.0	-70.26	839.8	786.3	483.6	457.1	26.55	18.216		
5,300.0	5,209.0	5,244.5	5,243.8	18.8	9.2	-72.75	840.3	784.4	477.6	450.3	27.31	17.490		
5,400.0	5,306.8	5,342.0	5,341.2	19.2	9.4	-75.33	840.7	782.4	472.4	444.4	28.05	16.842		
5,500.0	5,404.6	5,439.8	5,439.0	19.6	9.6	-77.84	841.4	781.3	468.4	439.7	28.77	16.281		
5,600.0	5,502.5	5,538.3	5,537.5	20.0	9.7	-80.42	841.7	780.2	465.1	435.6	29.47	15.780		
5,700.0	5,600.3	5,634.6	5,633.8	20.4	9.9	-82.98	842.2	779.0	462.9	432.7	30.14	15.355		
5,800.0	5,698.2	5,731.5	5,730.7	20.8	10.1	-85.63	842.8	777.3	461.9	431.1	30.79	15.002		
5,845.2	5,742.4	5,776.0	5,775.1	21.0	10.2	-86.87	843.0	776.3	461.8	430.7	31.07	14.863 CC		
5,900.0	5,796.0	5,829.3	5,828.5	21.2	10.3	-88.36	843.2	775.2	462.0	430.6	31.40	14.710 ES		
6,000.0	5,893.8	5,926.4	5,925.5	21.6	10.4	-91.05	843.7	773.1	463.2	431.2	31.98	14.484		
6,100.0	5,991.7	6,024.7	6,023.9	22.0	10.6	-93.74	844.2	771.2	465.4	432.9	32.52	14.313		
6,200.0	6,089.5	6,123.1	6,122.2	22.4	10.8	-96.47	844.3	768.9	468.5	435.5	33.02	14.190		
6,300.0	6,187.3	6,220.4	6,219.5	22.8	10.9	-99.16	844.1	766.5	472.6	439.1	33.47	14.121		
6,400.0	6,285.2	6,318.2	6,317.2	23.2	11.1	-101.79	844.0	764.2	477.7	443.8	33.88	14.100 SF		
6,500.0	6,383.0	6,415.4	6,414.5	23.7	11.3	-104.30	844.1	762.3	483.7	449.5	34.25	14.121		
6,600.0	6,480.8	6,508.8	6,507.8	24.1	11.5	-106.61	844.8	760.4	491.3	456.7	34.59	14.204		
6,700.0	6,578.7	6,611.8	6,610.8	24.5	11.6	-109.03	845.7	758.9	499.4	464.5	34.92	14.300		
6,800.0	6,676.5	6,707.5	6,706.5	24.9	11.8	-111.20	846.4	757.6	508.1	472.9	35.21	14.431		
6,900.0	6,774.3	6,808.5	6,807.4	25.3	12.0	-113.44	846.8	756.3	517.3	481.8	35.48	14.581		
7,000.0	6,872.2	6,902.5	6,901.4	25.7	12.2	-115.49	846.9	754.8	527.4	491.7	35.70	14.770		
7,019.1	6,890.8	6,920.5	6,919.4	25.8	12.2	-115.87	846.9	754.5	529.4	493.7	35.74	14.811		
7,050.0	6,921.1	6,949.7	6,948.6	25.9	12.2	-131.38	847.0	753.8	533.4	497.6	35.80	14.901		
7,100.0	6,970.2	6,997.0	6,995.9	26.0	12.3	-157.93	847.2	752.7	542.3	506.4	35.88	15.115		
7,150.0	7,019.0	7,049.5	7,048.4	26.2	12.4	-179.24	847.4	751.6	553.8	517.9	35.98	15.392		
7,200.0	7,067.2	7,100.0	7,098.9	26.3	12.5	166.57	847.4	750.7	567.6	531.5	36.09	15.727		
7,250.0	7,114.4	7,146.0	7,144.9	26.4	12.6	157.22	847.2	750.0	583.7	547.5	36.19	16.131		
7,300.0	7,160.3	7,189.1	7,188.0	26.4	12.7	150.70	847.0	749.0	602.5	566.3	36.28	16.608		
7,350.0	7,204.5	7,232.1	7,231.0	26.5	12.7	145.89	846.8	747.8	623.9	587.5	36.38	17.152		
7,400.0	7,246.6	7,273.7	7,272.6	26.5	12.8	142.09	846.5	746.5	647.7	611.2	36.46	17.762		
7,450.0	7,286.4	7,315.2	7,314.0	26.5	12.9	138.92	846.1	745.1	673.8	637.2	36.55	18.436		
7,500.0	7,323.5	7,358.6	7,357.4	26.5	13.0	136.22	845.0	743.4	702.0	665.4	36.62	19.168		
7,550.0	7,357.7	7,399.9	7,398.6	26.5	13.0	133.63	843.2	741.6	732.1	695.4	36.68	19.961		
7,600.0	7,388.7	7,480.6	7,479.0	26.5	13.2	133.28	837.5	739.8	763.2	726.5	36.70	20.794		
7,650.0	7,416.3	7,520.6	7,518.9	26.5	13.2	131.05	833.5	740.2	795.1	758.4	36.71	21.657		
7,700.0	7,440.2	7,544.3	7,542.4	26.5	13.3	127.76	831.5	740.7	829.4	792.6	36.74	22.576		
7,750.0	7,460.3	7,564.1	7,562.2	26.5	13.3	123.86	830.0	741.2	865.7	829.0	36.75	23.560		
7,800.0	7,476.4	7,580.0	7,578.1	26.5	13.3	119.19	828.9	741.7	904.0	867.3	36.74	24.603		
7,850.0	7,488.4	7,600.0	7,598.0	26.6	13.4	114.36	827.7	742.4	944.0	907.3	36.73	25.701		
7,900.0	7,496.2	7,600.0	7,598.0	26.6	13.4	107.04	827.7	742.4	985.2	948.5	36.70	26.841		
7,950.0	7,499.8	7,600.0	7,598.0	26.7	13.4	99.11	827.7	742.4	1,027.4	990.7	36.67	28.020		
7,966.7	7,500.0	7,600.0	7,598.0	26.7	13.4	96.38	827.7	742.4	1,041.6	1,005.0	36.65	28.419		
8,000.0	7,500.0	7,600.0	7,598.0	26.8	13.4	96.38	827.7	742.4	1,070.3	1,033.6	36.63	29.222		
8,100.0	7,500.0	7,600.0	7,598.0	27.0	13.4	96.38	827.7	742.4	1,157.7	1,121.2	36.54	31.679		
8,200.0	7,500.0	7,600.0	7,598.0	27.4	13.4	96.38	827.7	742.4	1,247.0	1,210.6	36.47	34.193		
8,300.0	7,500.0	7,600.0	7,598.0	27.9	13.4	96.38	827.7	742.4	1,337.9	1,301.5	36.41	36.748		
8,400.0	7,500.0	7,619.9	7,617.9	28.5	13.4	98.47	826.8	743.1	1,429.7	1,393.3	36.38	39.299		
8,500.0	7,500.0	7,622.8	7,620.8	29.1	13.4	98.78	826.6	743.2	1,522.7	1,486.4	36.35	41.893		
8,600.0	7,500.0	7,625.6	7,623.6	29.9	13.4	99.08	826.5	743.3	1,616.5	1,580.2	36.33	44.500		
8,700.0	7,500.0	7,628.3	7,626.3	30.8	13.4	99.36	826.4	743.4	1,711.1	1,674.7	36.32	47.115		
8,800.0	7,500.0	7,630.9	7,628.9	31.7	13.4	99.63	826.3	743.5	1,806.2	1,769.9	36.32	49.732		
8,900.0	7,500.0	7,633.4	7,631.4	32.7	13.4	99.89	826.2	743.6	1,901.8	1,865.4	36.33	52.350		

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 2F-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 2F-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,500.0	7,635.8	7,633.8	33.7	13.4	100.14	826.1	743.6	1,997.8	1,961.5	36.35	54.965		
9,100.0	7,500.0	7,638.2	7,636.1	34.8	13.4	100.38	826.0	743.7	2,094.2	2,057.8	36.37	57.574		
9,200.0	7,500.0	7,640.4	7,638.3	36.0	13.4	100.61	825.9	743.8	2,190.9	2,154.5	36.41	60.178		
9,300.0	7,500.0	7,642.5	7,640.5	37.2	13.4	100.84	825.8	743.8	2,287.9	2,251.5	36.45	62.773		
9,400.0	7,500.0	7,644.6	7,642.6	38.4	13.4	101.05	825.7	743.9	2,385.1	2,348.7	36.49	65.359		
9,500.0	7,500.0	7,646.6	7,644.6	39.7	13.4	101.26	825.6	744.0	2,482.6	2,446.1	36.54	67.934		
9,600.0	7,500.0	7,648.6	7,646.5	41.1	13.4	101.46	825.6	744.0	2,580.2	2,543.6	36.60	70.499		
9,700.0	7,500.0	7,650.4	7,648.4	42.4	13.4	101.65	825.5	744.1	2,678.1	2,641.4	36.66	73.053		
9,800.0	7,500.0	7,652.3	7,650.2	43.8	13.5	101.84	825.4	744.1	2,776.0	2,739.3	36.72	75.595		
9,900.0	7,500.0	7,654.0	7,651.9	45.2	13.5	102.02	825.4	744.2	2,874.1	2,837.4	36.79	78.124		
10,000.0	7,500.0	7,655.7	7,653.6	46.6	13.5	102.20	825.3	744.2	2,972.4	2,935.5	36.86	80.640		
10,100.0	7,500.0	7,657.4	7,655.3	48.1	13.5	102.37	825.2	744.3	3,070.7	3,033.8	36.93	83.144		
10,200.0	7,500.0	7,659.0	7,656.9	49.6	13.5	102.53	825.2	744.3	3,169.2	3,132.2	37.01	85.634		
10,300.0	7,500.0	7,660.5	7,658.4	51.1	13.5	102.69	825.1	744.3	3,267.7	3,230.6	37.09	88.111		
10,400.0	7,500.0	7,662.0	7,659.9	52.6	13.5	102.85	825.1	744.4	3,366.3	3,329.2	37.17	90.575		
10,500.0	7,500.0	7,663.5	7,661.4	54.1	13.5	102.99	825.0	744.4	3,465.0	3,427.8	37.25	93.025		
10,600.0	7,500.0	7,664.9	7,662.8	55.6	13.5	103.14	825.0	744.4	3,563.8	3,526.5	37.33	95.462		
10,700.0	7,500.0	7,666.3	7,664.2	57.2	13.5	103.28	825.0	744.5	3,662.6	3,625.2	37.42	97.885		
10,800.0	7,500.0	7,667.6	7,665.5	58.8	13.5	103.42	824.9	744.5	3,761.5	3,724.0	37.50	100.294		
10,900.0	7,500.0	7,668.9	7,666.9	60.3	13.5	103.55	824.9	744.5	3,860.5	3,822.9	37.59	102.690		
11,000.0	7,500.0	7,670.2	7,668.1	61.9	13.5	103.68	824.8	744.6	3,959.5	3,921.8	37.68	105.073		
11,100.0	7,500.0	7,700.0	7,697.9	63.5	13.5	106.67	824.1	745.1	4,058.8	4,021.0	37.84	107.273		
11,200.0	7,500.0	7,700.0	7,697.9	65.1	13.5	106.67	824.1	745.1	4,157.9	4,119.9	37.93	109.631		
11,300.0	7,500.0	7,700.0	7,697.9	66.7	13.5	106.67	824.1	745.1	4,257.0	4,219.0	38.02	111.976		
11,400.0	7,500.0	7,700.0	7,697.9	68.3	13.5	106.67	824.1	745.1	4,356.1	4,318.0	38.11	114.308		
11,500.0	7,500.0	7,700.0	7,697.9	70.0	13.5	106.67	824.1	745.1	4,455.3	4,417.1	38.20	116.627		
11,600.0	7,500.0	7,700.0	7,697.9	71.6	13.5	106.67	824.1	745.1	4,554.6	4,516.3	38.30	118.932		
11,700.0	7,500.0	7,700.0	7,697.9	73.2	13.5	106.67	824.1	745.1	4,653.8	4,615.4	38.39	121.225		
11,800.0	7,500.0	7,700.0	7,697.9	74.9	13.5	106.67	824.1	745.1	4,753.1	4,714.6	38.49	123.506		
11,900.0	7,500.0	7,700.0	7,697.9	76.5	13.5	106.67	824.1	745.1	4,852.5	4,813.9	38.58	125.773		
12,000.0	7,500.0	7,700.0	7,697.9	78.2	13.5	106.67	824.1	745.1	4,951.8	4,913.1	38.68	128.028		
12,100.0	7,500.0	7,700.0	7,697.9	79.8	13.5	106.67	824.1	745.1	5,051.2	5,012.4	38.77	130.270		
12,200.0	7,500.0	7,700.0	7,697.9	81.5	13.5	106.67	824.1	745.1	5,150.6	5,111.7	38.87	132.499		
12,300.0	7,500.0	7,700.0	7,697.9	83.1	13.5	106.67	824.1	745.1	5,250.0	5,211.0	38.97	134.716		
12,400.0	7,500.0	7,700.0	7,697.9	84.8	13.5	106.67	824.1	745.1	5,349.5	5,310.4	39.07	136.921		
12,500.0	7,500.0	7,700.0	7,697.9	86.5	13.5	106.67	824.1	745.1	5,448.9	5,409.7	39.17	139.113		
12,600.0	7,500.0	7,700.0	7,697.9	88.1	13.5	106.67	824.1	745.1	5,548.4	5,509.1	39.27	141.294		
12,700.0	7,500.0	7,700.0	7,697.9	89.8	13.5	106.67	824.1	745.1	5,647.9	5,608.5	39.37	143.462		
12,800.0	7,500.0	7,700.0	7,697.9	91.5	13.5	106.67	824.1	745.1	5,747.4	5,708.0	39.47	145.618		
12,900.0	7,500.0	7,700.0	7,697.9	93.2	13.5	106.67	824.1	745.1	5,847.0	5,807.4	39.57	147.762		
13,000.0	7,500.0	7,700.0	7,697.9	94.9	13.5	106.67	824.1	745.1	5,946.5	5,906.8	39.67	149.895		
13,100.0	7,500.0	7,700.0	7,697.9	96.5	13.5	106.67	824.1	745.1	6,046.1	6,006.3	39.77	152.016		
13,200.0	7,500.0	7,700.0	7,697.9	98.2	13.5	106.67	824.1	745.1	6,145.7	6,105.8	39.87	154.125		
13,300.0	7,500.0	7,700.0	7,697.9	99.9	13.5	106.67	824.1	745.1	6,245.3	6,205.3	39.98	156.223		
13,400.0	7,500.0	7,700.0	7,697.9	101.6	13.5	106.67	824.1	745.1	6,344.9	6,304.8	40.08	158.309		
13,500.0	7,500.0	7,700.0	7,697.9	103.3	13.5	106.67	824.1	745.1	6,444.5	6,404.3	40.18	160.384		
13,600.0	7,500.0	7,700.0	7,697.9	105.0	13.5	106.67	824.1	745.1	6,544.1	6,503.8	40.28	162.448		
13,700.0	7,500.0	7,700.0	7,697.9	106.7	13.5	106.67	824.1	745.1	6,643.8	6,603.4	40.39	164.500		
13,800.0	7,500.0	7,700.0	7,697.9	108.4	13.5	106.67	824.1	745.1	6,743.4	6,702.9	40.49	166.542		
13,900.0	7,500.0	7,700.0	7,697.9	110.1	13.5	106.67	824.1	745.1	6,843.1	6,802.5	40.59	168.572		
14,000.0	7,500.0	7,700.0	7,697.9	111.8	13.5	106.67	824.1	745.1	6,942.7	6,902.0	40.70	170.592		
14,100.0	7,500.0	7,700.0	7,697.9	113.5	13.5	106.67	824.1	745.1	7,042.4	7,001.6	40.80	172.601		

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 2F-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 2F-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 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		
14,200.0	7,500.0	7,700.0	7,697.9	115.2	13.5	106.67	824.1	745.1	7,142.1	7,101.2	40.91	174.599		
14,300.0	7,500.0	7,700.0	7,697.9	116.9	13.5	106.67	824.1	745.1	7,241.8	7,200.8	41.01	176.587		
14,400.0	7,500.0	7,700.0	7,697.9	118.6	13.5	106.67	824.1	745.1	7,341.5	7,300.4	41.11	178.564		
14,500.0	7,500.0	7,700.0	7,697.9	120.4	13.5	106.67	824.1	745.1	7,441.2	7,400.0	41.22	180.531		
14,600.0	7,500.0	7,700.0	7,697.9	122.1	13.5	106.67	824.1	745.1	7,541.0	7,499.6	41.32	182.487		
14,700.0	7,500.0	7,700.0	7,697.9	123.8	13.5	106.67	824.1	745.1	7,640.7	7,599.3	41.43	184.433		
14,800.0	7,500.0	7,700.0	7,697.9	125.5	13.5	106.67	824.1	745.1	7,740.4	7,698.9	41.53	186.369		
14,900.0	7,500.0	7,700.0	7,697.9	127.2	13.5	106.67	824.1	745.1	7,840.2	7,798.5	41.64	188.295		
15,000.0	7,500.0	7,700.0	7,697.9	128.9	13.5	106.67	824.1	745.1	7,939.9	7,898.2	41.74	190.211		
15,100.0	7,500.0	7,700.0	7,697.9	130.6	13.5	106.67	824.1	745.1	8,039.7	7,997.8	41.85	192.117		
15,200.0	7,500.0	7,700.0	7,697.9	132.4	13.5	106.67	824.1	745.1	8,139.4	8,097.5	41.95	194.013		
15,300.0	7,500.0	7,700.0	7,697.9	134.1	13.5	106.67	824.1	745.1	8,239.2	8,197.1	42.06	195.899		
15,400.0	7,500.0	7,700.0	7,697.9	135.8	13.5	106.67	824.1	745.1	8,339.0	8,296.8	42.16	197.776		
15,500.0	7,500.0	7,700.0	7,697.9	137.5	13.5	106.67	824.1	745.1	8,438.8	8,396.5	42.27	199.643		
15,600.0	7,500.0	7,700.0	7,697.9	139.2	13.5	106.67	824.1	745.1	8,538.5	8,496.2	42.37	201.501		
15,700.0	7,500.0	7,700.0	7,697.9	141.0	13.5	106.67	824.1	745.1	8,638.3	8,595.9	42.48	203.349		
15,800.0	7,500.0	7,700.0	7,697.9	142.7	13.5	106.67	824.1	745.1	8,738.1	8,695.5	42.59	205.188		
15,841.7	7,500.0	7,700.0	7,697.9	143.4	13.5	106.67	824.1	745.1	8,779.7	8,737.1	42.63	205.952		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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		
0.0	0.0	0.0	0.0	0.0	0.0	91.41	-0.4	15.1	15.1					
100.0	100.0	100.0	100.0	0.2	0.2	91.41	-0.4	15.1	15.1	14.8	0.30	49.782		
200.0	200.0	200.0	200.0	0.3	0.3	91.41	-0.4	15.1	15.1	14.5	0.65	23.160		
248.5	248.5	248.6	248.6	0.4	0.4	91.82	-0.5	14.9	14.9	14.1	0.82	18.172		
300.0	300.0	300.2	300.2	0.5	0.5	93.23	-0.8	14.4	14.4	13.4	1.00	14.344		
400.0	400.0	400.3	400.3	0.7	0.7	36.02	-2.1	12.1	11.6	10.2	1.35	8.531		
500.0	500.0	500.2	500.0	0.9	0.9	71.81	-4.3	8.3	7.7	5.9	1.72	4.443		
521.1	521.0	521.2	521.0	0.9	0.9	86.22	-4.9	7.3	7.4	5.6	1.81	4.107	CC, ES, SF	
600.0	599.9	599.6	599.2	1.0	1.1	135.03	-7.3	3.1	11.3	9.2	2.07	5.449		
700.0	699.7	699.0	698.5	1.2	1.3	158.74	-10.0	-2.9	22.1	19.7	2.41	9.190		
800.0	799.4	798.1	797.4	1.4	1.5	168.55	-11.3	-8.7	35.1	32.3	2.75	12.766		
900.0	898.9	896.9	896.0	1.7	1.7	173.29	-12.7	-14.5	50.2	47.1	3.09	16.237		
1,000.0	998.3	995.4	994.3	1.9	1.9	175.94	-14.0	-20.3	67.2	63.8	3.44	19.563		
1,100.0	1,097.4	1,093.6	1,092.4	2.2	2.1	177.57	-15.3	-26.1	86.0	82.2	3.78	22.760		
1,200.0	1,196.3	1,191.5	1,190.0	2.5	2.3	178.63	-16.6	-31.8	106.6	102.5	4.12	25.852		
1,300.0	1,294.9	1,288.9	1,287.3	2.8	2.5	179.37	-18.0	-37.6	128.9	124.4	4.47	28.860		
1,400.0	1,393.3	1,386.0	1,384.2	3.2	2.6	179.88	-19.3	-43.3	152.9	148.1	4.81	31.800		
1,494.4	1,485.8	1,477.2	1,475.3	3.5	2.8	-179.76	-20.5	-48.6	177.1	172.0	5.13	34.525		
1,500.0	1,491.2	1,482.6	1,480.7	3.5	2.8	-179.74	-20.6	-49.0	178.6	173.5	5.15	34.684		
1,600.0	1,589.1	1,579.0	1,576.9	3.9	3.0	-179.46	-21.9	-54.6	205.1	199.6	5.49	37.352		
1,700.0	1,686.9	1,675.5	1,673.2	4.3	3.2	-179.24	-23.2	-60.3	231.5	225.7	5.83	39.708		
1,800.0	1,784.8	1,771.9	1,769.4	4.7	3.4	-179.07	-24.5	-66.0	258.0	251.8	6.17	41.804		
1,900.0	1,882.6	1,868.3	1,865.7	5.1	3.6	-178.93	-25.8	-71.6	284.5	278.0	6.51	43.681		
2,000.0	1,980.4	1,964.8	1,961.9	5.5	3.8	-178.82	-27.1	-77.3	311.0	304.1	6.85	45.371		
2,100.0	2,078.3	2,061.2	2,058.2	5.9	4.0	-178.72	-28.4	-83.0	337.4	330.2	7.19	46.901		
2,200.0	2,176.1	2,157.6	2,154.4	6.3	4.2	-178.64	-29.7	-88.6	363.9	356.4	7.54	48.293		
2,300.0	2,273.9	2,254.1	2,250.7	6.7	4.4	-178.56	-31.0	-94.3	390.4	382.5	7.88	49.565		
2,400.0	2,371.8	2,350.5	2,347.0	7.1	4.6	-178.50	-32.3	-100.0	416.9	408.6	8.22	50.731		
2,500.0	2,469.6	2,446.9	2,443.2	7.5	4.8	-178.45	-33.6	-105.6	443.3	434.8	8.56	51.804		
2,600.0	2,567.4	2,543.4	2,539.5	7.9	5.0	-178.40	-34.9	-111.3	469.8	460.9	8.90	52.794		
2,700.0	2,665.3	2,639.8	2,635.7	8.3	5.2	-178.35	-36.2	-117.0	496.3	487.0	9.24	53.712		
2,800.0	2,763.1	2,736.2	2,732.0	8.7	5.4	-178.31	-37.5	-122.6	522.8	513.2	9.58	54.565		
2,900.0	2,860.9	2,832.6	2,828.2	9.1	5.6	-178.28	-38.8	-128.3	549.2	539.3	9.92	55.359		
3,000.0	2,958.8	2,929.1	2,924.5	9.5	5.8	-178.25	-40.1	-134.0	575.7	565.4	10.26	56.100		
3,100.0	3,056.6	3,025.5	3,020.7	9.9	6.0	-178.22	-41.4	-139.6	602.2	591.6	10.60	56.793		
3,200.0	3,154.4	3,121.9	3,117.0	10.3	6.2	-178.19	-42.7	-145.3	628.7	617.7	10.94	57.443		
3,300.0	3,252.3	3,218.4	3,213.2	10.7	6.4	-178.16	-44.0	-151.0	655.1	643.9	11.28	58.054		
3,400.0	3,350.1	3,314.8	3,309.5	11.1	6.6	-178.14	-45.3	-156.6	681.6	670.0	11.63	58.629		
3,500.0	3,447.9	3,411.2	3,405.8	11.5	6.8	-178.12	-46.6	-162.3	708.1	696.1	11.97	59.172		
3,600.0	3,545.8	3,507.7	3,502.0	11.9	7.0	-178.10	-47.9	-168.0	734.6	722.3	12.31	59.684		
3,700.0	3,643.6	3,604.1	3,598.3	12.3	7.2	-178.08	-49.2	-173.6	761.1	748.4	12.65	60.169		
3,800.0	3,741.5	3,700.5	3,694.5	12.7	7.4	-178.06	-50.5	-179.3	787.5	774.5	12.99	60.628		
3,900.0	3,839.3	3,797.0	3,790.8	13.1	7.6	-178.05	-51.8	-185.0	814.0	800.7	13.33	61.064		
4,000.0	3,937.1	3,893.4	3,887.0	13.5	7.7	-178.03	-53.1	-190.7	840.5	826.8	13.67	61.478		
4,100.0	4,035.0	3,989.8	3,983.3	13.9	7.9	-178.02	-54.4	-196.3	867.0	853.0	14.01	61.872		
4,200.0	4,132.8	4,086.2	4,079.5	14.3	8.1	-178.01	-55.7	-202.0	893.4	879.1	14.35	62.247		
4,300.0	4,230.6	4,182.7	4,175.8	14.7	8.3	-177.99	-57.0	-207.7	919.9	905.2	14.69	62.605		
4,400.0	4,328.5	4,279.1	4,272.1	15.1	8.5	-177.98	-58.3	-213.3	946.4	931.4	15.04	62.946		
4,500.0	4,426.3	4,375.5	4,368.3	15.5	8.7	-177.97	-59.6	-219.0	972.9	957.5	15.38	63.273		
4,600.0	4,524.1	4,472.0	4,464.6	15.9	8.9	-177.96	-60.9	-224.7	999.4	983.6	15.72	63.585		
4,700.0	4,622.0	4,568.4	4,560.8	16.3	9.1	-177.95	-62.2	-230.3	1,025.8	1,009.8	16.06	63.884		
4,800.0	4,719.8	4,664.8	4,657.1	16.7	9.3	-177.94	-63.5	-236.0	1,052.3	1,035.9	16.40	64.170		

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 2F-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 2F-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						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		
4,900.0	4,817.6	4,761.3	4,753.3	17.2	9.5	-177.93	-64.8	-241.7	1,078.8	1,062.1	16.74	64.445		
5,000.0	4,915.5	4,857.7	4,849.6	17.6	9.7	-177.92	-66.1	-247.3	1,105.3	1,088.2	17.08	64.709		
5,100.0	5,013.3	4,954.1	4,945.8	18.0	9.9	-177.91	-67.4	-253.0	1,131.7	1,114.3	17.42	64.963		
5,200.0	5,111.1	5,050.6	5,042.1	18.4	10.1	-177.91	-68.7	-258.7	1,158.2	1,140.5	17.76	65.207		
5,300.0	5,209.0	5,147.0	5,138.4	18.8	10.3	-177.90	-70.0	-264.3	1,184.7	1,166.6	18.10	65.441		
5,400.0	5,306.8	5,243.4	5,234.6	19.2	10.5	-177.89	-71.3	-270.0	1,211.2	1,192.7	18.44	65.667		
5,500.0	5,404.6	5,339.8	5,330.9	19.6	10.7	-177.89	-72.6	-275.7	1,237.7	1,218.9	18.79	65.885		
5,600.0	5,502.5	5,436.3	5,427.1	20.0	10.9	-177.88	-73.9	-281.3	1,264.1	1,245.0	19.13	66.095		
5,700.0	5,600.3	5,532.7	5,523.4	20.4	11.1	-177.87	-75.2	-287.0	1,290.6	1,271.2	19.47	66.298		
5,800.0	5,698.2	5,629.1	5,619.6	20.8	11.3	-177.87	-76.5	-292.7	1,317.1	1,297.3	19.81	66.493		
5,900.0	5,796.0	5,725.6	5,715.9	21.2	11.5	-177.86	-77.8	-298.3	1,343.6	1,323.4	20.15	66.682		
6,000.0	5,893.8	5,822.0	5,812.1	21.6	11.7	-177.86	-79.1	-304.0	1,370.1	1,349.6	20.49	66.865		
6,100.0	5,991.7	5,918.4	5,908.4	22.0	11.9	-177.85	-80.4	-309.7	1,396.5	1,375.7	20.83	67.042		
6,200.0	6,089.5	6,014.9	6,004.6	22.4	12.1	-177.84	-81.7	-315.3	1,423.0	1,401.8	21.17	67.213		
6,300.0	6,187.3	6,111.3	6,100.9	22.8	12.3	-177.84	-83.0	-321.0	1,449.5	1,428.0	21.51	67.379		
6,400.0	6,285.2	6,207.7	6,197.2	23.2	12.5	-177.84	-84.3	-326.7	1,476.0	1,454.1	21.85	67.539		
6,500.0	6,383.0	6,304.2	6,293.4	23.7	12.7	-177.83	-85.6	-332.4	1,502.4	1,480.3	22.19	67.695		
6,600.0	6,480.8	6,400.6	6,389.7	24.1	12.9	-177.83	-86.9	-338.0	1,528.9	1,506.4	22.54	67.845		
6,700.0	6,578.7	6,497.0	6,485.9	24.5	13.1	-177.82	-88.2	-343.7	1,555.4	1,532.5	22.88	67.992		
6,800.0	6,676.5	6,593.4	6,582.2	24.9	13.3	-177.82	-89.5	-349.4	1,581.9	1,558.7	23.22	68.134		
6,900.0	6,774.3	6,689.9	6,678.4	25.3	13.4	-177.81	-90.8	-355.0	1,608.4	1,584.8	23.56	68.272		
7,000.0	6,872.2	6,786.3	6,774.7	25.7	13.6	-177.81	-92.1	-360.7	1,634.8	1,610.9	23.90	68.406		
7,019.1	6,890.8	6,804.7	6,793.1	25.8	13.7	-177.81	-92.3	-361.8	1,639.9	1,615.9	23.96	68.431		
7,050.0	6,921.1	6,834.6	6,822.9	25.9	13.7	166.82	-92.7	-363.5	1,647.8	1,623.7	24.07	68.463		
7,100.0	6,970.2	6,883.0	6,871.2	26.0	13.8	140.65	-93.4	-366.4	1,659.3	1,635.1	24.23	68.468		
7,150.0	7,019.0	6,931.3	6,919.4	26.2	13.9	119.93	-94.0	-369.2	1,669.2	1,644.8	24.40	68.413		
7,200.0	7,067.2	6,978.9	6,967.0	26.3	14.0	106.41	-94.7	-372.0	1,677.4	1,652.9	24.56	68.298		
7,250.0	7,114.4	7,025.7	7,013.7	26.4	14.1	97.92	-95.3	-374.8	1,684.1	1,659.4	24.72	68.127		
7,300.0	7,160.3	7,071.2	7,059.1	26.4	14.2	92.51	-95.9	-377.4	1,689.2	1,664.3	24.88	67.901		
7,350.0	7,204.5	7,115.1	7,102.9	26.5	14.3	89.02	-96.5	-380.0	1,692.9	1,667.8	25.03	67.627		
7,400.0	7,246.6	7,157.0	7,144.7	26.5	14.4	86.79	-97.1	-382.5	1,695.2	1,670.0	25.19	67.308		
7,450.0	7,286.4	7,324.0	7,309.9	26.5	14.7	88.64	-79.4	-392.2	1,695.4	1,669.8	25.69	66.007		
7,500.0	7,323.5	7,440.6	7,419.0	26.5	14.9	90.80	-39.2	-398.6	1,692.7	1,666.6	26.05	64.985		
7,550.0	7,357.7	7,486.3	7,459.1	26.5	15.0	91.39	-17.6	-401.0	1,689.4	1,663.1	26.25	64.365		
7,600.0	7,388.7	7,502.6	7,473.0	26.5	15.0	91.27	-9.1	-401.8	1,686.4	1,660.1	26.34	64.021		
7,650.0	7,416.3	7,504.5	7,474.7	26.5	15.0	90.82	-8.0	-401.9	1,683.9	1,657.5	26.40	63.775		
7,700.0	7,440.2	7,498.5	7,469.6	26.5	15.0	90.21	-11.2	-401.6	1,682.1	1,655.6	26.45	63.598		
7,750.0	7,460.3	7,487.7	7,460.3	26.5	15.0	89.52	-16.9	-401.1	1,680.7	1,654.2	26.49	63.450		
7,800.0	7,476.4	7,473.7	7,448.3	26.5	14.9	88.79	-23.8	-400.4	1,679.9	1,653.3	26.53	63.324		
7,850.0	7,488.4	7,457.6	7,434.1	26.6	14.9	88.06	-31.5	-399.5	1,679.5	1,652.9	26.57	63.212		
7,883.9	7,494.1	7,445.8	7,423.7	26.6	14.9	87.57	-36.9	-398.9	1,679.4	1,652.8	26.61	63.101		
7,900.0	7,496.2	7,440.0	7,418.5	26.6	14.9	87.34	-39.5	-398.6	1,679.4	1,652.8	26.62	63.078		
7,950.0	7,499.8	7,421.3	7,401.5	26.7	14.8	86.66	-47.4	-397.6	1,679.6	1,652.9	26.70	62.915		
7,966.7	7,500.0	7,414.9	7,395.7	26.7	14.8	86.44	-50.0	-397.3	1,679.7	1,653.0	26.72	62.855		
8,000.0	7,500.0	7,402.6	7,384.3	26.8	14.8	86.05	-54.8	-396.6	1,680.3	1,653.5	26.78	62.734		
8,100.0	7,500.0	7,372.1	7,355.9	27.0	14.8	85.08	-65.5	-394.9	1,685.4	1,658.4	27.00	62.410		
8,200.0	7,500.0	7,350.0	7,334.9	27.4	14.7	84.36	-72.4	-393.7	1,695.8	1,668.6	27.27	62.183		
8,300.0	7,500.0	7,330.4	7,316.1	27.9	14.7	83.72	-77.8	-392.6	1,711.7	1,684.2	27.56	62.102		
8,400.0	7,500.0	7,315.5	7,301.7	28.5	14.7	83.23	-81.5	-391.7	1,733.0	1,705.1	27.88	62.160		
8,500.0	7,500.0	7,300.0	7,286.6	29.1	14.7	82.72	-84.9	-390.8	1,759.5	1,731.3	28.20	62.385		
8,600.0	7,500.0	7,300.0	7,286.6	29.9	14.7	82.72	-84.9	-390.8	1,791.2	1,762.6	28.56	62.712		
8,700.0	7,500.0	7,284.5	7,271.4	30.8	14.6	82.20	-87.9	-389.9	1,827.6	1,798.7	28.88	63.272		

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 2F-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 2F-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		
8,800.0	7,500.0	7,277.0	7,264.1	31.7	14.6	81.95	-89.2	-389.5	1,868.6	1,839.3	29.22	63.951		
8,900.0	7,500.0	7,270.6	7,257.7	32.7	14.6	81.74	-90.2	-389.1	1,913.9	1,884.3	29.55	64.771		
9,000.0	7,500.0	7,250.0	7,237.4	33.7	14.6	81.05	-93.1	-387.9	1,963.3	1,933.5	29.84	65.805		
9,100.0	7,500.0	7,250.0	7,237.4	34.8	14.6	81.05	-93.1	-387.9	2,016.2	1,986.1	30.16	66.858		
9,200.0	7,500.0	7,250.0	7,237.4	36.0	14.6	81.05	-93.1	-387.9	2,072.6	2,042.2	30.47	68.030		
9,300.0	7,500.0	7,250.0	7,237.4	37.2	14.6	81.05	-93.1	-387.9	2,132.2	2,101.5	30.76	69.313		
9,400.0	7,500.0	7,250.0	7,237.4	38.4	14.6	81.05	-93.1	-387.9	2,194.8	2,163.7	31.05	70.694		
9,500.0	7,500.0	7,250.0	7,237.4	39.7	14.6	81.05	-93.1	-387.9	2,260.0	2,228.7	31.32	72.165		
9,600.0	7,500.0	7,250.0	7,237.4	41.1	14.6	81.05	-93.1	-387.9	2,327.7	2,296.2	31.58	73.716		
9,700.0	7,500.0	7,250.0	7,237.4	42.4	14.6	81.05	-93.1	-387.9	2,397.7	2,365.9	31.83	75.339		
9,800.0	7,500.0	7,250.0	7,237.4	43.8	14.6	81.05	-93.1	-387.9	2,469.7	2,437.7	32.06	77.027		
9,900.0	7,500.0	7,250.0	7,237.4	45.2	14.6	81.05	-93.1	-387.9	2,543.7	2,511.4	32.29	78.772		
10,000.0	7,500.0	7,250.0	7,237.4	46.6	14.6	81.05	-93.1	-387.9	2,619.3	2,586.8	32.51	80.567		
10,100.0	7,500.0	7,250.0	7,237.4	48.1	14.6	81.05	-93.1	-387.9	2,696.6	2,663.8	32.72	82.407		
10,200.0	7,500.0	7,228.5	7,216.1	49.6	14.5	80.33	-95.3	-386.7	2,774.9	2,742.0	32.87	84.420		
10,300.0	7,500.0	7,226.9	7,214.4	51.1	14.5	80.27	-95.4	-386.6	2,854.8	2,821.8	33.06	86.346		
10,400.0	7,500.0	7,225.3	7,212.9	52.6	14.5	80.22	-95.6	-386.5	2,936.0	2,902.8	33.25	88.302		
10,500.0	7,500.0	7,223.9	7,211.4	54.1	14.5	80.17	-95.7	-386.4	3,018.3	2,984.9	33.43	90.285		
10,600.0	7,500.0	7,222.5	7,210.0	55.6	14.5	80.12	-95.8	-386.3	3,101.7	3,068.1	33.61	92.290		
10,700.0	7,500.0	7,221.2	7,208.8	57.2	14.5	80.08	-95.9	-386.3	3,186.0	3,152.2	33.78	94.315		
10,800.0	7,500.0	7,200.0	7,187.6	58.8	14.5	79.37	-97.0	-385.0	3,271.5	3,237.6	33.89	96.526		
10,900.0	7,500.0	7,200.0	7,187.6	60.3	14.5	79.37	-97.0	-385.0	3,357.5	3,323.4	34.06	98.573		
11,000.0	7,500.0	7,200.0	7,187.6	61.9	14.5	79.37	-97.0	-385.0	3,444.2	3,410.0	34.23	100.633		
11,100.0	7,500.0	7,200.0	7,187.6	63.5	14.5	79.37	-97.0	-385.0	3,531.6	3,497.3	34.39	102.703		
11,200.0	7,500.0	7,200.0	7,187.6	65.1	14.5	79.37	-97.0	-385.0	3,619.7	3,585.2	34.55	104.782		
11,300.0	7,500.0	7,200.0	7,187.6	66.7	14.5	79.37	-97.0	-385.0	3,708.4	3,673.7	34.70	106.867		
11,400.0	7,500.0	7,200.0	7,187.6	68.3	14.5	79.37	-97.0	-385.0	3,797.6	3,762.8	34.85	108.957		
11,500.0	7,500.0	7,200.0	7,187.6	70.0	14.5	79.37	-97.0	-385.0	3,887.4	3,852.4	35.01	111.050		
11,600.0	7,500.0	7,200.0	7,187.6	71.6	14.5	79.37	-97.0	-385.0	3,977.7	3,942.5	35.15	113.146		
11,700.0	7,500.0	7,200.0	7,187.6	73.2	14.5	79.37	-97.0	-385.0	4,068.4	4,033.1	35.30	115.243		
11,800.0	7,500.0	7,200.0	7,187.6	74.9	14.5	79.37	-97.0	-385.0	4,159.5	4,124.1	35.45	117.341		
11,900.0	7,500.0	7,200.0	7,187.6	76.5	14.5	79.37	-97.0	-385.0	4,251.0	4,215.4	35.59	119.438		
12,000.0	7,500.0	7,200.0	7,187.6	78.2	14.5	79.37	-97.0	-385.0	4,342.9	4,307.2	35.73	121.533		
12,100.0	7,500.0	7,200.0	7,187.6	79.8	14.5	79.37	-97.0	-385.0	4,435.2	4,399.3	35.88	123.626		
12,200.0	7,500.0	7,200.0	7,187.6	81.5	14.5	79.37	-97.0	-385.0	4,527.8	4,491.8	36.02	125.716		
12,300.0	7,500.0	7,200.0	7,187.6	83.1	14.5	79.37	-97.0	-385.0	4,620.7	4,584.5	36.15	127.802		
12,400.0	7,500.0	7,200.0	7,187.6	84.8	14.5	79.37	-97.0	-385.0	4,713.9	4,677.6	36.29	129.884		
12,500.0	7,500.0	7,200.0	7,187.6	86.5	14.5	79.37	-97.0	-385.0	4,807.3	4,770.9	36.43	131.962		
12,600.0	7,500.0	7,200.0	7,187.6	88.1	14.5	79.37	-97.0	-385.0	4,901.0	4,864.5	36.57	134.034		
12,700.0	7,500.0	7,200.0	7,187.6	89.8	14.5	79.37	-97.0	-385.0	4,995.0	4,958.3	36.70	136.101		
12,800.0	7,500.0	7,200.0	7,187.6	91.5	14.5	79.37	-97.0	-385.0	5,089.2	5,052.4	36.83	138.163		
12,900.0	7,500.0	7,200.0	7,187.6	93.2	14.5	79.37	-97.0	-385.0	5,183.6	5,146.6	36.97	140.218		
13,000.0	7,500.0	7,200.0	7,187.6	94.9	14.5	79.37	-97.0	-385.0	5,278.2	5,241.1	37.10	142.266		
13,100.0	7,500.0	7,200.0	7,187.6	96.5	14.5	79.37	-97.0	-385.0	5,373.0	5,335.8	37.23	144.308		
13,200.0	7,500.0	7,200.0	7,187.6	98.2	14.5	79.37	-97.0	-385.0	5,468.0	5,430.7	37.36	146.343		
13,300.0	7,500.0	7,200.0	7,187.6	99.9	14.5	79.37	-97.0	-385.0	5,563.2	5,525.7	37.50	148.370		
13,400.0	7,500.0	7,200.0	7,187.6	101.6	14.5	79.37	-97.0	-385.0	5,658.5	5,620.9	37.63	150.390		
13,500.0	7,500.0	7,200.0	7,187.6	103.3	14.5	79.37	-97.0	-385.0	5,754.0	5,716.3	37.76	152.403		
13,600.0	7,500.0	7,200.0	7,187.6	105.0	14.5	79.37	-97.0	-385.0	5,849.7	5,811.8	37.88	154.408		
13,700.0	7,500.0	7,200.0	7,187.6	106.7	14.5	79.37	-97.0	-385.0	5,945.5	5,907.5	38.01	156.405		
13,800.0	7,500.0	7,200.0	7,187.6	108.4	14.5	79.37	-97.0	-385.0	6,041.4	6,003.3	38.14	158.394		
13,900.0	7,500.0	7,200.0	7,187.6	110.1	14.5	79.37	-97.0	-385.0	6,137.5	6,099.2	38.27	160.375		

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 2F-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 2F-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		
14,000.0	7,500.0	7,200.0	7,187.6	111.8	14.5	79.37	-97.0	-385.0	6,233.6	6,195.2	38.40	162.348		
14,100.0	7,500.0	7,200.0	7,187.6	113.5	14.5	79.37	-97.0	-385.0	6,329.9	6,291.4	38.52	164.312		
14,200.0	7,500.0	7,200.0	7,187.6	115.2	14.5	79.37	-97.0	-385.0	6,426.3	6,387.7	38.65	166.269		
14,300.0	7,500.0	7,200.0	7,187.6	116.9	14.5	79.37	-97.0	-385.0	6,522.9	6,484.1	38.78	168.216		
14,400.0	7,500.0	7,200.0	7,187.6	118.6	14.5	79.37	-97.0	-385.0	6,619.5	6,580.6	38.90	170.156		
14,500.0	7,500.0	7,200.0	7,187.6	120.4	14.5	79.37	-97.0	-385.0	6,716.2	6,677.2	39.03	172.087		
14,600.0	7,500.0	7,200.0	7,187.6	122.1	14.5	79.37	-97.0	-385.0	6,813.0	6,773.9	39.15	174.010		
14,700.0	7,500.0	7,200.0	7,187.6	123.8	14.5	79.37	-97.0	-385.0	6,909.9	6,870.7	39.28	175.924		
14,800.0	7,500.0	7,200.0	7,187.6	125.5	14.5	79.37	-97.0	-385.0	7,006.9	6,967.5	39.40	177.829		
14,900.0	7,500.0	7,200.0	7,187.6	127.2	14.5	79.37	-97.0	-385.0	7,104.0	7,064.5	39.53	179.726		
15,000.0	7,500.0	7,200.0	7,187.6	128.9	14.5	79.37	-97.0	-385.0	7,201.2	7,161.5	39.65	181.615		
15,100.0	7,500.0	7,200.0	7,187.6	130.6	14.5	79.37	-97.0	-385.0	7,298.4	7,258.6	39.77	183.494		
15,200.0	7,500.0	7,200.0	7,187.6	132.4	14.5	79.37	-97.0	-385.0	7,395.7	7,355.8	39.90	185.366		
15,300.0	7,500.0	7,200.0	7,187.6	134.1	14.5	79.37	-97.0	-385.0	7,493.1	7,453.1	40.02	187.228		
15,400.0	7,500.0	7,200.0	7,187.6	135.8	14.5	79.37	-97.0	-385.0	7,590.5	7,550.4	40.14	189.083		
15,500.0	7,500.0	7,200.0	7,187.6	137.5	14.5	79.37	-97.0	-385.0	7,688.0	7,647.8	40.27	190.928		
15,600.0	7,500.0	7,200.0	7,187.6	139.2	14.5	79.37	-97.0	-385.0	7,785.6	7,745.2	40.39	192.766		
15,700.0	7,500.0	7,200.0	7,187.6	141.0	14.5	79.37	-97.0	-385.0	7,883.2	7,842.7	40.51	194.594		
15,800.0	7,500.0	7,200.0	7,187.6	142.7	14.5	79.37	-97.0	-385.0	7,980.9	7,940.3	40.63	196.415		
15,841.7	7,500.0	7,200.0	7,187.6	143.4	14.5	79.37	-97.0	-385.0	8,021.7	7,981.0	40.68	197.171		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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		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	90.95	-0.4	22.4	22.4					
100.0	100.0	100.0	100.0	0.2	0.2	90.95	-0.4	22.4	22.4	22.1	0.30	73.738		
200.0	200.0	200.0	200.0	0.3	0.3	90.95	-0.4	22.4	22.4	21.7	0.65	34.306		
300.0	300.0	300.0	300.0	0.5	0.5	90.95	-0.4	22.4	22.4	21.4	1.00	22.353		
400.0	400.0	400.2	400.2	0.7	0.7	27.43	-1.0	21.8	21.1	19.7	1.35	15.590		
500.0	500.0	500.3	500.2	0.9	0.9	38.39	-3.1	20.1	17.5	15.8	1.71	10.269		
600.0	599.9	600.0	599.8	1.0	1.0	66.86	-6.4	17.3	13.9	11.8	2.08	6.699		
625.0	624.8	624.8	624.7	1.1	1.1	77.34	-7.4	16.6	13.7	11.5	2.17	6.305 CC, ES, SF		
700.0	699.7	699.5	699.3	1.2	1.2	106.46	-9.9	14.7	15.6	13.1	2.44	6.376		
800.0	799.4	799.2	798.9	1.4	1.4	130.70	-12.3	13.4	22.1	19.3	2.79	7.906		
900.0	898.9	899.0	898.7	1.7	1.6	143.44	-13.8	13.5	30.4	27.3	3.14	9.694		
1,000.0	998.3	998.3	998.0	1.9	1.7	151.44	-14.9	14.1	40.6	37.1	3.49	11.644		
1,100.0	1,097.4	1,097.5	1,097.2	2.2	1.9	156.92	-16.0	14.7	52.9	49.1	3.84	13.778		
1,200.0	1,196.3	1,196.4	1,196.1	2.5	2.1	160.82	-17.1	15.2	67.1	62.9	4.19	16.019		
1,300.0	1,294.9	1,295.0	1,294.7	2.8	2.3	163.67	-18.2	15.8	83.1	78.6	4.54	18.327		
1,400.0	1,393.3	1,393.3	1,393.0	3.2	2.4	165.84	-19.3	16.3	101.0	96.1	4.88	20.678		
1,494.4	1,485.8	1,485.9	1,485.5	3.5	2.6	167.44	-20.4	16.9	119.5	114.3	5.21	22.926		
1,500.0	1,491.2	1,491.3	1,491.0	3.5	2.6	167.53	-20.4	16.9	120.6	115.4	5.23	23.059		
1,600.0	1,589.1	1,589.2	1,588.8	3.9	2.8	168.84	-21.5	17.5	141.1	135.5	5.58	25.295		
1,700.0	1,686.9	1,687.0	1,686.7	4.3	2.9	169.82	-22.6	18.0	161.6	155.7	5.92	27.278		
1,800.0	1,784.8	1,784.9	1,784.5	4.7	3.1	170.58	-23.7	18.6	182.2	175.9	6.27	29.048		
1,900.0	1,882.6	1,882.7	1,882.3	5.1	3.3	171.18	-24.8	19.1	202.7	196.1	6.62	30.635		
2,000.0	1,980.4	1,980.5	1,980.2	5.5	3.5	171.67	-25.9	19.7	223.3	216.4	6.96	32.067		
2,100.0	2,078.3	2,078.4	2,078.0	5.9	3.6	172.08	-27.0	20.2	243.9	236.6	7.31	33.366		
2,200.0	2,176.1	2,176.2	2,175.8	6.3	3.8	172.43	-28.1	20.8	264.5	256.9	7.66	34.548		
2,300.0	2,273.9	2,274.1	2,273.7	6.7	4.0	172.72	-29.2	21.3	285.1	277.1	8.00	35.628		
2,400.0	2,371.8	2,371.9	2,371.5	7.1	4.2	172.98	-30.3	21.9	305.8	297.4	8.35	36.620		
2,500.0	2,469.6	2,469.8	2,469.3	7.5	4.3	173.20	-31.4	22.4	326.4	317.7	8.70	37.534		
2,600.0	2,567.4	2,567.6	2,567.2	7.9	4.5	173.40	-32.5	23.0	347.0	338.0	9.04	38.377		
2,700.0	2,665.3	2,665.4	2,665.0	8.3	4.7	173.57	-33.6	23.5	367.7	358.3	9.39	39.159		
2,800.0	2,763.1	2,763.3	2,762.8	8.7	4.8	173.73	-34.7	24.1	388.3	378.6	9.74	39.885		
2,900.0	2,860.9	2,861.1	2,860.7	9.1	5.0	173.87	-35.8	24.7	409.0	398.9	10.08	40.562		
3,000.0	2,958.8	2,959.0	2,958.5	9.5	5.2	174.00	-36.9	25.2	429.6	419.2	10.43	41.194		
3,100.0	3,056.6	3,056.8	3,056.3	9.9	5.4	174.11	-38.0	25.8	450.3	439.5	10.78	41.786		
3,200.0	3,154.4	3,154.6	3,154.2	10.3	5.5	174.22	-39.1	26.3	470.9	459.8	11.12	42.341		
3,300.0	3,252.3	3,252.5	3,252.0	10.7	5.7	174.32	-40.2	26.9	491.6	480.1	11.47	42.862		
3,400.0	3,350.1	3,350.3	3,349.8	11.1	5.9	174.40	-41.3	27.4	512.2	500.4	11.81	43.353		
3,500.0	3,447.9	3,448.2	3,447.7	11.5	6.0	174.49	-42.4	28.0	532.9	520.7	12.16	43.816		
3,600.0	3,545.8	3,546.0	3,545.5	11.9	6.2	174.56	-43.5	28.5	553.5	541.0	12.51	44.254		
3,700.0	3,643.6	3,643.8	3,643.3	12.3	6.4	174.63	-44.6	29.1	574.2	561.3	12.85	44.668		
3,800.0	3,741.5	3,741.7	3,741.2	12.7	6.6	174.70	-45.7	29.6	594.8	581.6	13.20	45.061		
3,900.0	3,839.3	3,839.5	3,839.0	13.1	6.7	174.76	-46.8	30.2	615.5	601.9	13.55	45.433		
4,000.0	3,937.1	3,937.4	3,936.8	13.5	6.9	174.82	-47.9	30.8	636.1	622.2	13.89	45.787		
4,100.0	4,035.0	4,035.2	4,034.7	13.9	7.1	174.87	-49.0	31.3	656.8	642.6	14.24	46.123		
4,200.0	4,132.8	4,133.1	4,132.5	14.3	7.2	174.92	-50.1	31.9	677.4	662.9	14.59	46.444		
4,300.0	4,230.6	4,230.9	4,230.3	14.7	7.4	174.97	-51.2	32.4	698.1	683.2	14.93	46.750		
4,400.0	4,328.5	4,328.7	4,328.2	15.1	7.6	175.01	-52.3	33.0	718.8	703.5	15.28	47.042		
4,500.0	4,426.3	4,426.6	4,426.0	15.5	7.8	175.05	-53.4	33.5	739.4	723.8	15.63	47.321		
4,600.0	4,524.1	4,524.4	4,523.8	15.9	7.9	175.09	-54.5	34.1	760.1	744.1	15.97	47.588		
4,700.0	4,622.0	4,622.3	4,621.7	16.3	8.1	175.13	-55.6	34.6	780.7	764.4	16.32	47.844		
4,800.0	4,719.8	4,720.1	4,719.5	16.7	8.3	175.17	-56.7	35.2	801.4	784.7	16.66	48.089		
4,900.0	4,817.6	4,817.9	4,817.3	17.2	8.5	175.20	-57.8	35.7	822.1	805.1	17.01	48.324		

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 2F-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 2F-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: 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
5,000.0	4,915.5	4,915.8	4,915.2	17.6	8.6	175.23	-58.9	36.3	842.7	825.4	17.36	48.550	
5,100.0	5,013.3	5,013.6	5,013.0	18.0	8.8	175.26	-60.0	36.8	863.4	845.7	17.70	48.767	
5,200.0	5,111.1	5,111.5	5,110.8	18.4	9.0	175.29	-61.1	37.4	884.0	866.0	18.05	48.976	
5,300.0	5,209.0	5,209.3	5,208.7	18.8	9.1	175.32	-62.2	38.0	904.7	886.3	18.40	49.177	
5,400.0	5,306.8	5,307.2	5,306.5	19.2	9.3	175.35	-63.3	38.5	925.4	906.6	18.74	49.370	
5,500.0	5,404.6	5,405.0	5,404.4	19.6	9.5	175.37	-64.4	39.1	946.0	926.9	19.09	49.556	
5,600.0	5,502.5	5,502.8	5,502.2	20.0	9.7	175.40	-65.5	39.6	966.7	947.3	19.44	49.736	
5,700.0	5,600.3	5,600.7	5,600.0	20.4	9.8	175.42	-66.6	40.2	987.4	967.6	19.78	49.910	
5,800.0	5,698.2	5,698.5	5,697.9	20.8	10.0	175.44	-67.7	40.7	1,008.0	987.9	20.13	50.077	
5,900.0	5,796.0	5,796.4	5,795.7	21.2	10.2	175.46	-68.8	41.3	1,028.7	1,008.2	20.48	50.239	
6,000.0	5,893.8	5,894.2	5,893.5	21.6	10.3	175.48	-69.9	41.8	1,049.3	1,028.5	20.82	50.396	
6,100.0	5,991.7	5,992.0	5,991.4	22.0	10.5	175.50	-71.0	42.4	1,070.0	1,048.8	21.17	50.547	
6,200.0	6,089.5	6,089.9	6,089.2	22.4	10.7	175.52	-72.1	42.9	1,090.7	1,069.2	21.51	50.693	
6,300.0	6,187.3	6,187.7	6,187.0	22.8	10.9	175.54	-73.2	43.5	1,111.3	1,089.5	21.86	50.835	
6,400.0	6,285.2	6,285.6	6,284.9	23.2	11.0	175.56	-74.3	44.0	1,132.0	1,109.8	22.21	50.973	
6,500.0	6,383.0	6,383.4	6,382.7	23.7	11.2	175.58	-75.4	44.6	1,152.7	1,130.1	22.55	51.106	
6,600.0	6,480.8	6,481.2	6,480.5	24.1	11.4	175.59	-76.5	45.2	1,173.3	1,150.4	22.90	51.235	
6,700.0	6,578.7	6,579.1	6,578.4	24.5	11.5	175.61	-77.6	45.7	1,194.0	1,170.7	23.25	51.361	
6,800.0	6,676.5	6,676.9	6,676.2	24.9	11.7	175.62	-78.7	46.3	1,214.6	1,191.1	23.59	51.482	
6,900.0	6,774.3	6,774.8	6,774.0	25.3	11.9	175.64	-79.8	46.8	1,235.3	1,211.4	23.94	51.600	
7,000.0	6,872.2	6,872.6	6,871.9	25.7	12.1	175.65	-80.9	47.4	1,256.0	1,231.7	24.29	51.715	
7,019.1	6,890.8	6,891.3	6,890.5	25.8	12.1	175.66	-81.2	47.5	1,259.9	1,235.6	24.35	51.737	
7,050.0	6,921.1	7,050.0	7,048.3	25.9	12.3	161.40	-68.5	48.1	1,265.9	1,241.2	24.69	51.268	
7,100.0	6,970.2	7,802.9	7,499.5	26.0	16.1	162.13	466.5	41.2	1,253.3	1,224.0	29.24	42.860	
7,150.0	7,019.0	7,784.8	7,498.4	26.2	15.9	142.35	448.4	41.6	1,242.0	1,212.7	29.28	42.417	
7,200.0	7,067.2	7,761.8	7,496.2	26.3	15.6	129.07	425.6	41.9	1,232.5	1,203.3	29.20	42.206	
7,250.0	7,114.4	7,737.7	7,492.9	26.4	15.4	120.32	401.6	42.3	1,224.8	1,195.7	29.08	42.119	
7,300.0	7,160.3	7,713.0	7,488.5	26.4	15.2	114.21	377.4	42.7	1,218.8	1,189.8	28.93	42.136	
7,350.0	7,204.5	7,688.2	7,483.1	26.5	14.9	109.64	353.1	43.1	1,214.5	1,185.7	28.75	42.245	
7,400.0	7,246.6	7,663.2	7,476.5	26.5	14.7	105.99	329.0	43.5	1,211.7	1,183.2	28.55	42.439	
7,450.0	7,286.4	7,638.1	7,468.9	26.5	14.5	102.92	305.2	43.9	1,210.5	1,182.1	28.34	42.709	
7,469.6	7,301.2	7,628.3	7,465.6	26.5	14.4	101.83	296.0	44.0	1,210.4	1,182.1	28.26	42.829	
7,500.0	7,323.5	7,613.1	7,460.2	26.5	14.3	100.22	281.7	44.3	1,210.6	1,182.5	28.13	43.044	
7,550.0	7,357.7	7,588.0	7,450.5	26.5	14.1	97.76	258.6	44.6	1,212.0	1,184.1	27.90	43.434	
7,600.0	7,388.7	7,562.9	7,439.9	26.5	13.9	95.49	235.9	44.9	1,214.5	1,186.8	27.69	43.866	
7,650.0	7,416.3	7,537.9	7,428.2	26.5	13.8	93.35	213.7	45.3	1,218.0	1,190.5	27.47	44.330	
7,700.0	7,440.2	7,512.8	7,415.6	26.5	13.6	91.33	192.1	45.6	1,222.3	1,195.0	27.28	44.811	
7,750.0	7,460.3	7,487.8	7,402.0	26.5	13.5	89.40	171.0	45.9	1,227.2	1,200.1	27.09	45.298	
7,800.0	7,476.4	7,462.8	7,387.6	26.5	13.3	87.58	150.6	46.2	1,232.6	1,205.7	26.93	45.775	
7,850.0	7,488.4	7,437.8	7,372.3	26.6	13.2	85.86	130.9	46.4	1,238.4	1,211.6	26.79	46.233	
7,900.0	7,496.2	7,412.9	7,356.2	26.6	13.1	84.26	111.9	46.7	1,244.4	1,217.8	26.67	46.660	
7,950.0	7,499.8	7,388.0	7,339.3	26.7	13.0	82.77	93.6	46.9	1,250.5	1,223.9	26.58	47.047	
7,966.7	7,500.0	7,379.7	7,333.5	26.7	13.0	82.31	87.6	47.0	1,252.5	1,225.9	26.56	47.163	
8,000.0	7,500.0	7,363.6	7,322.0	26.8	12.9	81.78	76.4	47.1	1,256.8	1,230.3	26.52	47.396	
8,100.0	7,500.0	7,320.4	7,289.7	27.0	12.8	80.31	47.8	47.4	1,273.2	1,246.8	26.46	48.123	
8,200.0	7,500.0	7,284.0	7,260.7	27.4	12.7	79.00	25.7	47.6	1,295.2	1,268.8	26.46	48.946	
8,300.0	7,500.0	7,250.0	7,232.5	27.9	12.6	77.74	6.7	47.8	1,322.9	1,296.4	26.49	49.932	
8,400.0	7,500.0	7,226.5	7,212.4	28.5	12.6	76.85	-5.4	47.9	1,356.3	1,329.7	26.60	50.997	
8,500.0	7,500.0	7,200.0	7,189.1	29.1	12.6	75.83	-18.1	48.0	1,395.2	1,368.6	26.68	52.288	
8,600.0	7,500.0	7,183.9	7,174.7	29.9	12.5	75.20	-25.2	48.1	1,439.4	1,412.5	26.83	53.645	
8,700.0	7,500.0	7,166.6	7,159.0	30.8	12.5	74.52	-32.5	48.1	1,488.4	1,461.4	26.97	55.183	
8,800.0	7,500.0	7,150.0	7,143.7	31.7	12.5	73.86	-39.0	48.1	1,541.9	1,514.8	27.11	56.867	

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 2F-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 2F-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	
8,900.0	7,500.0	7,150.0	7,143.7	32.7	12.5	73.86	-39.0	48.1	1,599.6	1,572.3	27.34	58.517	
9,000.0	7,500.0	7,125.9	7,121.2	33.7	12.4	72.90	-47.6	48.2	1,660.9	1,633.4	27.44	60.523	
9,100.0	7,500.0	7,100.0	7,096.7	34.8	12.4	71.86	-55.8	48.2	1,725.9	1,698.3	27.54	62.673	
9,200.0	7,500.0	7,100.0	7,096.7	36.0	12.4	71.86	-55.8	48.2	1,793.5	1,765.8	27.75	64.628	
9,300.0	7,500.0	7,100.0	7,096.7	37.2	12.4	71.86	-55.8	48.2	1,864.1	1,836.1	27.96	66.670	
9,400.0	7,500.0	7,100.0	7,096.7	38.4	12.4	71.86	-55.8	48.2	1,937.2	1,909.1	28.16	68.787	
9,500.0	7,500.0	7,081.5	7,078.9	39.7	12.4	71.11	-61.0	48.2	2,012.4	1,984.1	28.28	71.149	
9,600.0	7,500.0	7,074.8	7,072.4	41.1	12.4	70.85	-62.8	48.2	2,089.6	2,061.2	28.45	73.443	
9,700.0	7,500.0	7,050.0	7,048.3	42.4	12.3	69.85	-68.5	48.1	2,169.0	2,140.4	28.54	75.989	
9,800.0	7,500.0	7,050.0	7,048.3	43.8	12.3	69.85	-68.5	48.1	2,249.5	2,220.7	28.73	78.288	
9,900.0	7,500.0	7,050.0	7,048.3	45.2	12.3	69.85	-68.5	48.1	2,331.4	2,302.5	28.92	80.620	
10,000.0	7,500.0	7,050.0	7,048.3	46.6	12.3	69.85	-68.5	48.1	2,414.8	2,385.7	29.10	82.979	
10,100.0	7,500.0	7,050.0	7,048.3	48.1	12.3	69.85	-68.5	48.1	2,499.3	2,470.1	29.28	85.361	
10,200.0	7,500.0	7,050.0	7,048.3	49.6	12.3	69.85	-68.5	48.1	2,585.0	2,555.5	29.45	87.761	
10,300.0	7,500.0	7,050.0	7,048.3	51.1	12.3	69.85	-68.5	48.1	2,671.7	2,642.0	29.63	90.175	
10,400.0	7,500.0	7,050.0	7,048.3	52.6	12.3	69.85	-68.5	48.1	2,759.2	2,729.4	29.80	92.600	
10,500.0	7,500.0	7,050.0	7,048.3	54.1	12.3	69.85	-68.5	48.1	2,847.6	2,817.6	29.96	95.032	
10,600.0	7,500.0	7,050.0	7,048.3	55.6	12.3	69.85	-68.5	48.1	2,936.7	2,906.6	30.13	97.470	
10,700.0	7,500.0	7,027.1	7,025.9	57.2	12.3	68.94	-72.9	48.1	3,026.0	2,995.8	30.22	100.144	
10,800.0	7,500.0	7,024.3	7,023.1	58.8	12.3	68.82	-73.4	48.1	3,116.3	3,085.9	30.37	102.613	
10,900.0	7,500.0	7,021.6	7,020.4	60.3	12.3	68.72	-73.9	48.1	3,207.2	3,176.7	30.52	105.079	
11,000.0	7,500.0	7,000.0	6,999.0	61.9	12.3	67.86	-77.0	48.0	3,298.9	3,268.3	30.61	107.768	
11,100.0	7,500.0	7,000.0	6,999.0	63.5	12.3	67.86	-77.0	48.0	3,390.7	3,359.9	30.77	110.196	
11,200.0	7,500.0	7,000.0	6,999.0	65.1	12.3	67.86	-77.0	48.0	3,482.9	3,451.9	30.93	112.619	
11,300.0	7,500.0	7,000.0	6,999.0	66.7	12.3	67.86	-77.0	48.0	3,575.5	3,544.4	31.08	115.038	
11,400.0	7,500.0	7,000.0	6,999.0	68.3	12.3	67.86	-77.0	48.0	3,668.5	3,637.3	31.24	117.449	
11,500.0	7,500.0	7,000.0	6,999.0	70.0	12.3	67.86	-77.0	48.0	3,761.9	3,730.5	31.39	119.854	
11,600.0	7,500.0	7,000.0	6,999.0	71.6	12.3	67.86	-77.0	48.0	3,855.6	3,824.1	31.54	122.250	
11,700.0	7,500.0	7,000.0	6,999.0	73.2	12.3	67.86	-77.0	48.0	3,949.6	3,918.0	31.69	124.637	
11,800.0	7,500.0	7,000.0	6,999.0	74.9	12.3	67.86	-77.0	48.0	4,043.9	4,012.1	31.84	127.016	
11,900.0	7,500.0	7,000.0	6,999.0	76.5	12.3	67.86	-77.0	48.0	4,138.5	4,106.5	31.99	129.384	
12,000.0	7,500.0	7,000.0	6,999.0	78.2	12.3	67.86	-77.0	48.0	4,233.3	4,201.2	32.13	131.743	
12,100.0	7,500.0	7,000.0	6,999.0	79.8	12.3	67.86	-77.0	48.0	4,328.4	4,296.1	32.28	134.091	
12,200.0	7,500.0	7,000.0	6,999.0	81.5	12.3	67.86	-77.0	48.0	4,423.7	4,391.3	32.43	136.428	
12,300.0	7,500.0	7,000.0	6,999.0	83.1	12.3	67.86	-77.0	48.0	4,519.2	4,486.6	32.57	138.754	
12,400.0	7,500.0	7,000.0	6,999.0	84.8	12.3	67.86	-77.0	48.0	4,614.8	4,582.1	32.71	141.068	
12,500.0	7,500.0	7,000.0	6,999.0	86.5	12.3	67.86	-77.0	48.0	4,710.7	4,677.8	32.86	143.372	
12,600.0	7,500.0	7,000.0	6,999.0	88.1	12.3	67.86	-77.0	48.0	4,806.7	4,773.7	33.00	145.663	
12,700.0	7,500.0	7,000.0	6,999.0	89.8	12.3	67.86	-77.0	48.0	4,902.9	4,869.7	33.14	147.943	
12,800.0	7,500.0	7,000.0	6,999.0	91.5	12.3	67.86	-77.0	48.0	4,999.2	4,965.9	33.28	150.211	
12,900.0	7,500.0	7,000.0	6,999.0	93.2	12.3	67.86	-77.0	48.0	5,095.7	5,062.3	33.42	152.467	
13,000.0	7,500.0	7,000.0	6,999.0	94.9	12.3	67.86	-77.0	48.0	5,192.3	5,158.7	33.56	154.710	
13,100.0	7,500.0	7,000.0	6,999.0	96.5	12.3	67.86	-77.0	48.0	5,289.0	5,255.3	33.70	156.942	
13,200.0	7,500.0	7,000.0	6,999.0	98.2	12.3	67.86	-77.0	48.0	5,385.9	5,352.0	33.84	159.162	
13,300.0	7,500.0	7,000.0	6,999.0	99.9	12.3	67.86	-77.0	48.0	5,482.8	5,448.8	33.98	161.369	
13,400.0	7,500.0	7,000.0	6,999.0	101.6	12.3	67.86	-77.0	48.0	5,579.9	5,545.8	34.11	163.564	
13,500.0	7,500.0	7,000.0	6,999.0	103.3	12.3	67.86	-77.0	48.0	5,677.1	5,642.8	34.25	165.747	
13,600.0	7,500.0	7,000.0	6,999.0	105.0	12.3	67.86	-77.0	48.0	5,774.3	5,739.9	34.39	167.918	
13,700.0	7,500.0	7,000.0	6,999.0	106.7	12.3	67.86	-77.0	48.0	5,871.7	5,837.2	34.52	170.077	
13,800.0	7,500.0	7,000.0	6,999.0	108.4	12.3	67.86	-77.0	48.0	5,969.1	5,934.5	34.66	172.224	
13,900.0	7,500.0	7,000.0	6,999.0	110.1	12.3	67.86	-77.0	48.0	6,066.7	6,031.9	34.79	174.358	
14,000.0	7,500.0	7,000.0	6,999.0	111.8	12.3	67.86	-77.0	48.0	6,164.3	6,129.3	34.93	176.481	

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 2F-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 2F-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)	
14,100.0	7,500.0	7,000.0	6,999.0	113.5	12.3	67.86	-77.0	48.0	6,262.0	6,226.9	35.06	178.591		
14,200.0	7,500.0	6,976.4	6,975.6	115.2	12.2	66.93	-79.5	47.9	6,359.2	6,324.1	35.14	180.985		
14,300.0	7,500.0	6,975.7	6,974.9	116.9	12.2	66.90	-79.5	47.9	6,457.0	6,421.7	35.27	183.081		
14,400.0	7,500.0	6,975.0	6,974.2	118.6	12.2	66.88	-79.6	47.9	6,554.8	6,519.5	35.40	185.166		
14,500.0	7,500.0	6,974.4	6,973.6	120.4	12.2	66.85	-79.6	47.9	6,652.8	6,617.2	35.53	187.239		
14,600.0	7,500.0	6,973.7	6,972.9	122.1	12.2	66.83	-79.7	47.9	6,750.8	6,715.1	35.66	189.300		
14,700.0	7,500.0	6,973.1	6,972.3	123.8	12.2	66.80	-79.7	47.9	6,848.8	6,813.0	35.79	191.349		
14,800.0	7,500.0	6,950.0	6,949.2	125.5	12.2	65.90	-81.1	47.8	6,947.4	6,911.5	35.87	193.703		
14,900.0	7,500.0	6,950.0	6,949.2	127.2	12.2	65.90	-81.1	47.8	7,045.5	7,009.5	36.00	195.721		
15,000.0	7,500.0	6,950.0	6,949.2	128.9	12.2	65.90	-81.1	47.8	7,143.7	7,107.5	36.13	197.728		
15,100.0	7,500.0	6,950.0	6,949.2	130.6	12.2	65.90	-81.1	47.8	7,241.9	7,205.6	36.26	199.724		
15,200.0	7,500.0	6,950.0	6,949.2	132.4	12.2	65.90	-81.1	47.8	7,340.2	7,303.8	36.39	201.708		
15,300.0	7,500.0	6,950.0	6,949.2	134.1	12.2	65.90	-81.1	47.8	7,438.5	7,402.0	36.52	203.682		
15,400.0	7,500.0	6,950.0	6,949.2	135.8	12.2	65.90	-81.1	47.8	7,536.8	7,500.2	36.65	205.644		
15,500.0	7,500.0	6,950.0	6,949.2	137.5	12.2	65.90	-81.1	47.8	7,635.3	7,598.5	36.78	207.596		
15,600.0	7,500.0	6,950.0	6,949.2	139.2	12.2	65.90	-81.1	47.8	7,733.7	7,696.8	36.91	209.536		
15,700.0	7,500.0	6,950.0	6,949.2	141.0	12.2	65.90	-81.1	47.8	7,832.2	7,795.1	37.04	211.466		
15,800.0	7,500.0	6,950.0	6,949.2	142.7	12.2	65.90	-81.1	47.8	7,930.7	7,893.5	37.17	213.385		
15,841.7	7,500.0	6,950.0	6,949.2	143.4	12.2	65.90	-81.1	47.8	7,971.8	7,934.6	37.22	214.182		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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							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	90.73	-0.4	29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.73	-0.4	29.9	29.9	29.6	0.30	98.620		
200.0	200.0	200.0	200.0	0.3	0.3	90.73	-0.4	29.9	29.9	29.3	0.65	45.882		
300.0	300.0	300.0	300.0	0.5	0.5	90.73	-0.4	29.9	29.9	28.9	1.00	29.895		
400.0	400.0	400.0	400.0	0.7	0.7	25.07	-0.4	29.9	29.2	27.8	1.35	21.582		
500.0	500.0	500.0	500.0	0.9	0.8	27.45	-0.4	29.9	26.8	25.1	1.70	15.761		
600.0	599.9	599.9	599.9	1.0	1.0	32.48	-0.4	29.9	23.0	21.0	2.05	11.213		
700.0	699.7	699.4	699.4	1.2	1.2	42.28	-0.5	30.8	19.0	16.6	2.41	7.876		
800.0	799.4	798.9	798.9	1.4	1.4	58.93	-0.8	33.4	16.4	13.6	2.80	5.870		
850.2	849.3	848.9	848.8	1.6	1.5	69.61	-1.0	35.3	16.1	13.0	3.01	5.334 CC, ES		
900.0	898.9	898.5	898.4	1.7	1.6	80.65	-1.2	37.7	16.5	13.2	3.22	5.106 SF		
1,000.0	998.3	998.2	997.9	1.9	1.7	101.54	-1.8	43.1	19.4	15.7	3.65	5.304		
1,100.0	1,097.4	1,097.8	1,097.4	2.2	1.9	119.15	-2.4	48.6	24.9	20.9	4.05	6.147		
1,200.0	1,196.3	1,197.3	1,196.7	2.5	2.1	132.02	-3.1	54.0	33.1	28.6	4.43	7.474		
1,300.0	1,294.9	1,296.5	1,295.8	2.8	2.3	141.05	-3.7	59.5	43.6	38.8	4.78	9.111		
1,400.0	1,393.3	1,395.6	1,394.7	3.2	2.5	147.46	-4.3	64.9	56.2	51.0	5.13	10.943		
1,494.4	1,485.8	1,488.9	1,487.8	3.5	2.7	151.91	-4.8	70.0	69.9	64.4	5.46	12.789		
1,500.0	1,491.2	1,494.4	1,493.3	3.5	2.7	152.14	-4.9	70.3	70.7	65.2	5.48	12.901		
1,600.0	1,589.1	1,593.1	1,591.9	3.9	2.9	155.48	-5.5	75.8	86.3	80.5	5.83	14.795		
1,700.0	1,686.9	1,691.7	1,690.4	4.3	3.1	157.80	-6.1	81.2	102.1	95.9	6.19	16.495		
1,800.0	1,784.8	1,790.4	1,788.9	4.7	3.3	159.49	-6.7	86.6	118.0	111.4	6.55	18.020		
1,900.0	1,882.6	1,889.1	1,887.4	5.1	3.5	160.78	-7.3	92.0	134.0	127.1	6.91	19.393		
2,000.0	1,980.4	1,987.8	1,986.0	5.5	3.7	161.80	-7.9	97.4	150.0	142.7	7.27	20.633		
2,100.0	2,078.3	2,086.4	2,084.5	5.9	3.9	162.61	-8.5	102.8	166.1	158.4	7.63	21.758		
2,200.0	2,176.1	2,185.1	2,183.0	6.3	4.0	163.29	-9.1	108.2	182.2	174.2	8.00	22.782		
2,300.0	2,273.9	2,283.8	2,281.6	6.7	4.2	163.85	-9.7	113.7	198.3	189.9	8.36	23.718		
2,400.0	2,371.8	2,382.5	2,380.1	7.1	4.4	164.33	-10.3	119.1	214.4	205.7	8.72	24.576		
2,500.0	2,469.6	2,481.1	2,478.6	7.5	4.6	164.75	-10.9	124.5	230.6	221.5	9.09	25.366		
2,600.0	2,567.4	2,579.8	2,577.1	7.9	4.8	165.11	-11.5	129.9	246.7	237.3	9.45	26.095		
2,700.0	2,665.3	2,678.5	2,675.7	8.3	5.0	165.42	-12.1	135.3	262.9	253.1	9.82	26.770		
2,800.0	2,763.1	2,777.2	2,774.2	8.7	5.2	165.70	-12.7	140.7	279.0	268.9	10.18	27.397		
2,900.0	2,860.9	2,875.9	2,872.7	9.1	5.4	165.95	-13.3	146.1	295.2	284.7	10.55	27.981		
3,000.0	2,958.8	2,974.5	2,971.2	9.5	5.6	166.17	-13.9	151.6	311.4	300.5	10.92	28.525		
3,100.0	3,056.6	3,073.2	3,069.8	9.9	5.8	166.37	-14.5	157.0	327.6	316.3	11.28	29.035		
3,200.0	3,154.4	3,171.9	3,168.3	10.3	6.0	166.55	-15.1	162.4	343.8	332.1	11.65	29.512		
3,300.0	3,252.3	3,270.6	3,266.8	10.7	6.2	166.71	-15.7	167.8	360.0	347.9	12.01	29.960		
3,400.0	3,350.1	3,369.2	3,365.3	11.1	6.4	166.87	-16.3	173.2	376.1	363.8	12.38	30.382		
3,500.0	3,447.9	3,467.9	3,463.9	11.5	6.6	167.00	-16.9	178.6	392.3	379.6	12.75	30.779		
3,600.0	3,545.8	3,566.6	3,562.4	11.9	6.8	167.13	-17.5	184.0	408.5	395.4	13.11	31.155		
3,700.0	3,643.6	3,665.3	3,660.9	12.3	7.0	167.25	-18.1	189.5	424.7	411.3	13.48	31.510		
3,800.0	3,741.5	3,763.9	3,759.4	12.7	7.2	167.36	-18.7	194.9	440.9	427.1	13.85	31.846		
3,900.0	3,839.3	3,862.6	3,858.0	13.1	7.4	167.46	-19.3	200.3	457.1	442.9	14.21	32.165		
4,000.0	3,937.1	3,961.3	3,956.5	13.5	7.6	167.55	-19.9	205.7	473.3	458.8	14.58	32.467		
4,100.0	4,035.0	4,060.0	4,055.0	13.9	7.8	167.64	-20.5	211.1	489.5	474.6	14.95	32.755		
4,200.0	4,132.8	4,158.6	4,153.5	14.3	8.0	167.72	-21.1	216.5	505.8	490.4	15.31	33.029		
4,300.0	4,230.6	4,257.3	4,252.1	14.7	8.2	167.80	-21.7	222.0	522.0	506.3	15.68	33.291		
4,400.0	4,328.5	4,356.0	4,350.6	15.1	8.4	167.87	-22.3	227.4	538.2	522.1	16.05	33.540		
4,500.0	4,426.3	4,454.7	4,449.1	15.5	8.6	167.94	-22.9	232.8	554.4	538.0	16.41	33.778		
4,600.0	4,524.1	4,553.3	4,547.6	15.9	8.7	168.01	-23.5	238.2	570.6	553.8	16.78	34.006		
4,700.0	4,622.0	4,652.0	4,646.2	16.3	8.9	168.07	-24.1	243.6	586.8	569.6	17.15	34.224		
4,800.0	4,719.8	4,750.7	4,744.7	16.7	9.1	168.13	-24.7	249.0	603.0	585.5	17.51	34.433		
4,900.0	4,817.6	4,849.4	4,843.2	17.2	9.3	168.18	-25.3	254.4	619.2	601.3	17.88	34.633		

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 2F-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 2F-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		
5,000.0	4,915.5	4,948.0	4,941.7	17.6	9.5	168.23	-25.9	259.9	635.4	617.2	18.25	34.826	
5,100.0	5,013.3	5,046.7	5,040.3	18.0	9.7	168.28	-26.5	265.3	651.6	633.0	18.61	35.010	
5,200.0	5,111.1	5,145.4	5,138.8	18.4	9.9	168.33	-27.1	270.7	667.8	648.9	18.98	35.188	
5,300.0	5,209.0	5,244.1	5,237.3	18.8	10.1	168.37	-27.7	276.1	684.1	664.7	19.35	35.359	
5,400.0	5,306.8	5,342.7	5,335.8	19.2	10.3	168.42	-28.3	281.5	700.3	680.6	19.71	35.523	
5,500.0	5,404.6	5,441.4	5,434.4	19.6	10.5	168.46	-28.9	286.9	716.5	696.4	20.08	35.682	
5,600.0	5,502.5	5,540.1	5,532.9	20.0	10.7	168.50	-29.5	292.3	732.7	712.2	20.45	35.834	
5,700.0	5,600.3	5,638.8	5,631.4	20.4	10.9	168.53	-30.1	297.8	748.9	728.1	20.81	35.982	
5,800.0	5,698.2	5,737.4	5,729.9	20.8	11.1	168.57	-30.7	303.2	765.1	743.9	21.18	36.124	
5,900.0	5,796.0	5,836.1	5,828.5	21.2	11.3	168.60	-31.3	308.6	781.3	759.8	21.55	36.261	
6,000.0	5,893.8	5,934.8	5,927.0	21.6	11.5	168.63	-31.9	314.0	797.6	775.6	21.91	36.394	
6,100.0	5,991.7	6,033.5	6,025.5	22.0	11.7	168.67	-32.5	319.4	813.8	791.5	22.28	36.523	
6,200.0	6,089.5	6,132.1	6,124.0	22.4	11.9	168.70	-33.1	324.8	830.0	807.3	22.65	36.647	
6,300.0	6,187.3	6,230.8	6,222.6	22.8	12.1	168.73	-33.7	330.2	846.2	823.2	23.02	36.767	
6,400.0	6,285.2	6,329.5	6,321.1	23.2	12.3	168.75	-34.3	335.7	862.4	839.0	23.38	36.884	
6,500.0	6,383.0	6,428.2	6,419.6	23.7	12.5	168.78	-34.9	341.1	878.6	854.9	23.75	36.997	
6,600.0	6,480.8	6,526.9	6,518.1	24.1	12.7	168.81	-35.5	346.5	894.8	870.7	24.12	37.106	
6,700.0	6,578.7	6,625.5	6,616.7	24.5	12.9	168.83	-36.1	351.9	911.1	886.6	24.48	37.212	
6,800.0	6,676.5	6,724.2	6,715.2	24.9	13.1	168.86	-36.7	357.3	927.3	902.4	24.85	37.315	
6,900.0	6,774.3	6,822.9	6,813.7	25.3	13.3	168.88	-37.3	362.7	943.5	918.3	25.22	37.415	
7,000.0	6,872.2	6,921.6	6,912.2	25.7	13.5	168.90	-37.9	368.1	959.7	934.1	25.58	37.513	
7,019.1	6,890.8	6,940.4	6,931.0	25.8	13.5	168.91	-38.0	369.2	962.8	937.2	25.65	37.531	
7,050.0	6,921.1	6,971.0	6,961.6	25.9	13.6	153.94	-38.2	370.9	967.4	941.6	25.77	37.539	
7,100.0	6,970.2	7,020.5	7,011.0	26.0	13.7	128.50	-38.5	373.6	972.7	946.8	25.95	37.484	
7,150.0	7,019.0	7,069.8	7,060.2	26.2	13.8	108.62	-38.8	376.3	975.7	949.5	26.12	37.353	
7,200.0	7,067.2	7,118.5	7,108.8	26.3	13.9	96.05	-39.1	379.0	976.2	949.9	26.28	37.152	
7,250.0	7,114.4	7,166.2	7,156.5	26.4	14.0	88.62	-39.4	381.6	974.5	948.1	26.42	36.888	
7,300.0	7,160.3	7,220.9	7,203.6	26.4	14.4	91.90	11.7	394.2	966.4	940.3	26.18	36.915	
7,350.0	7,204.5	7,255.8	7,238.7	26.5	14.8	96.45	81.2	399.3	951.4	925.7	25.70	37.011	
7,400.0	7,246.6	7,311.7	7,294.1	26.5	15.0	98.66	117.6	401.0	935.5	909.7	25.74	36.340	
7,450.0	7,286.4	7,333.8	7,316.8	26.5	15.0	99.52	133.2	401.6	920.7	894.8	25.95	35.483	
7,500.0	7,323.5	7,339.4	7,320.7	26.5	15.1	99.62	137.2	401.8	907.8	881.6	26.18	34.679	
7,550.0	7,357.7	7,365.8	7,346.7	26.5	15.1	99.26	134.6	401.7	897.0	870.6	26.39	33.994	
7,600.0	7,388.7	7,362.6	7,341.7	26.5	15.0	98.57	128.1	401.4	888.5	861.9	26.56	33.449	
7,650.0	7,416.3	7,361.9	7,341.6	26.5	15.0	97.62	119.1	401.1	882.2	855.5	26.70	33.045	
7,700.0	7,440.2	7,359.6	7,338.4	26.5	14.9	96.47	108.7	400.6	878.2	851.4	26.80	32.774	
7,750.0	7,460.3	7,351.6	7,330.7	26.5	14.9	95.13	97.5	400.1	876.3	849.5	26.87	32.612	
7,771.1	7,467.6	7,347.0	7,326.1	26.5	14.8	94.53	92.6	399.9	876.2	849.3	26.90	32.568	
7,800.0	7,476.4	7,333.3	7,312.4	26.5	14.8	93.66	85.9	399.6	876.5	849.6	26.92	32.558	
7,850.0	7,488.4	7,324.0	7,303.1	26.6	14.7	92.06	74.1	398.9	878.5	851.5	26.96	32.590	
7,900.0	7,496.2	7,314.0	7,293.1	26.6	14.7	90.38	62.4	398.3	882.2	855.2	26.99	32.688	
7,950.0	7,499.8	7,304.0	7,283.1	26.7	14.6	88.45	49.2	397.4	887.3	860.3	26.99	32.876	
7,966.7	7,500.0	7,300.0	7,279.1	26.7	14.6	88.25	49.2	397.4	889.3	862.2	27.05	32.873	
8,000.0	7,500.0	7,292.9	7,272.0	26.8	14.6	87.31	40.3	396.7	893.9	866.8	27.05	33.041	
8,100.0	7,500.0	7,285.0	7,264.1	27.0	14.5	85.46	24.3	395.4	913.6	886.4	27.19	33.597	
8,200.0	7,500.0	7,277.9	7,257.0	27.4	14.4	83.73	11.3	394.2	941.9	914.6	27.36	34.425	
8,300.0	7,500.0	7,270.0	7,249.1	27.9	14.4	82.57	3.4	393.3	978.7	951.0	27.63	35.418	
8,400.0	7,500.0	7,262.5	7,241.6	28.5	14.3	81.25	-4.7	392.3	1,023.1	995.2	27.87	36.706	
8,500.0	7,500.0	7,255.0	7,234.1	29.1	14.3	79.63	-13.5	391.0	1,074.6	1,046.5	28.09	38.262	
8,600.0	7,500.0	7,247.5	7,226.6	29.9	14.3	79.63	-13.5	391.0	1,131.9	1,103.4	28.52	39.685	
8,700.0	7,500.0	7,240.0	7,219.1	30.8	14.3	79.63	-13.5	391.0	1,194.9	1,166.0	28.94	41.292	
8,800.0	7,500.0	7,232.5	7,211.6	31.7	14.2	78.15	-20.5	389.8	1,262.0	1,232.9	29.13	43.324	

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 2F-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 2F-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				
8,900.0	7,500.0	7,300.0	7,289.2	32.7	14.2	76.68	-26.3	388.6	1,333.5	1,304.2	29.30	45.511				
9,000.0	7,500.0	7,300.0	7,289.2	33.7	14.2	76.68	-26.3	388.6	1,407.9	1,378.3	29.65	47.483				
9,100.0	7,500.0	7,300.0	7,289.2	34.8	14.2	76.68	-26.3	388.6	1,485.4	1,455.4	29.98	49.549				
9,200.0	7,500.0	7,300.0	7,289.2	36.0	14.2	76.68	-26.3	388.6	1,565.3	1,535.1	30.28	51.694				
9,300.0	7,500.0	7,300.0	7,289.2	37.2	14.2	76.68	-26.3	388.6	1,647.5	1,616.9	30.56	53.903				
9,400.0	7,500.0	7,300.0	7,289.2	38.4	14.2	76.68	-26.3	388.6	1,731.6	1,700.7	30.83	56.164				
9,500.0	7,500.0	7,277.9	7,267.5	39.7	14.2	75.39	-30.6	387.5	1,816.7	1,785.7	30.95	58.696				
9,600.0	7,500.0	7,273.5	7,263.2	41.1	14.2	75.13	-31.3	387.3	1,903.5	1,872.4	31.17	61.075				
9,700.0	7,500.0	7,269.4	7,259.2	42.4	14.1	74.89	-32.0	387.1	1,991.6	1,960.2	31.38	63.476				
9,800.0	7,500.0	7,250.0	7,240.0	43.8	14.1	73.77	-34.8	386.1	2,080.9	2,049.4	31.49	66.080				
9,900.0	7,500.0	7,250.0	7,240.0	45.2	14.1	73.77	-34.8	386.1	2,170.8	2,139.1	31.70	68.470				
10,000.0	7,500.0	7,250.0	7,240.0	46.6	14.1	73.77	-34.8	386.1	2,261.6	2,229.7	31.91	70.873				
10,100.0	7,500.0	7,250.0	7,240.0	48.1	14.1	73.77	-34.8	386.1	2,353.1	2,321.0	32.11	73.286				
10,200.0	7,500.0	7,250.0	7,240.0	49.6	14.1	73.77	-34.8	386.1	2,445.3	2,413.0	32.30	75.704				
10,300.0	7,500.0	7,250.0	7,240.0	51.1	14.1	73.77	-34.8	386.1	2,538.0	2,505.6	32.49	78.125				
10,400.0	7,500.0	7,250.0	7,240.0	52.6	14.1	73.77	-34.8	386.1	2,631.3	2,598.7	32.67	80.548				
10,500.0	7,500.0	7,250.0	7,240.0	54.1	14.1	73.77	-34.8	386.1	2,725.1	2,692.3	32.84	82.970				
10,600.0	7,500.0	7,250.0	7,240.0	55.6	14.1	73.77	-34.8	386.1	2,819.3	2,786.3	33.02	85.389				
10,700.0	7,500.0	7,250.0	7,240.0	57.2	14.1	73.77	-34.8	386.1	2,913.9	2,880.7	33.19	87.804				
10,800.0	7,500.0	7,250.0	7,240.0	58.8	14.1	73.77	-34.8	386.1	3,008.8	2,975.5	33.35	90.213				
10,900.0	7,500.0	7,250.0	7,240.0	60.3	14.1	73.77	-34.8	386.1	3,104.1	3,070.6	33.52	92.617				
11,000.0	7,500.0	7,250.0	7,240.0	61.9	14.1	73.77	-34.8	386.1	3,199.6	3,166.0	33.68	95.013				
11,100.0	7,500.0	7,250.0	7,240.0	63.5	14.1	73.77	-34.8	386.1	3,295.4	3,261.6	33.83	97.401				
11,200.0	7,500.0	7,250.0	7,240.0	65.1	14.1	73.77	-34.8	386.1	3,391.5	3,357.5	33.99	99.780				
11,300.0	7,500.0	7,250.0	7,240.0	66.7	14.1	73.77	-34.8	386.1	3,487.8	3,453.6	34.14	102.150				
11,400.0	7,500.0	7,250.0	7,240.0	68.3	14.1	73.77	-34.8	386.1	3,584.2	3,550.0	34.30	104.510				
11,500.0	7,500.0	7,250.0	7,240.0	70.0	14.1	73.77	-34.8	386.1	3,680.9	3,646.5	34.45	106.860				
11,600.0	7,500.0	7,250.0	7,240.0	71.6	14.1	73.77	-34.8	386.1	3,777.7	3,743.2	34.59	109.200				
11,700.0	7,500.0	7,227.2	7,217.4	73.2	14.1	72.46	-37.2	384.9	3,874.2	3,839.6	34.66	111.784				
11,800.0	7,500.0	7,226.1	7,216.3	74.9	14.1	72.40	-37.3	384.8	3,971.3	3,936.5	34.80	114.116				
11,900.0	7,500.0	7,225.0	7,215.2	76.5	14.1	72.34	-37.4	384.8	4,068.6	4,033.6	34.94	116.436				
12,000.0	7,500.0	7,224.0	7,214.2	78.2	14.1	72.28	-37.5	384.7	4,165.9	4,130.9	35.08	118.744				
12,100.0	7,500.0	7,223.0	7,213.2	79.8	14.1	72.22	-37.6	384.6	4,263.4	4,228.2	35.22	121.041				
12,200.0	7,500.0	7,222.1	7,212.2	81.5	14.1	72.17	-37.7	384.6	4,361.0	4,325.7	35.36	123.325				
12,300.0	7,500.0	7,200.0	7,190.3	83.1	14.0	70.92	-39.0	383.4	4,459.2	4,423.7	35.43	125.871				
12,400.0	7,500.0	7,200.0	7,190.3	84.8	14.0	70.92	-39.0	383.4	4,556.9	4,521.4	35.57	128.121				
12,500.0	7,500.0	7,200.0	7,190.3	86.5	14.0	70.92	-39.0	383.4	4,654.8	4,619.1	35.71	130.360				
12,600.0	7,500.0	7,200.0	7,190.3	88.1	14.0	70.92	-39.0	383.4	4,752.7	4,716.9	35.85	132.586				
12,700.0	7,500.0	7,200.0	7,190.3	89.8	14.0	70.92	-39.0	383.4	4,850.8	4,814.8	35.98	134.800				
12,800.0	7,500.0	7,200.0	7,190.3	91.5	14.0	70.92	-39.0	383.4	4,948.9	4,912.8	36.12	137.003				
12,900.0	7,500.0	7,200.0	7,190.3	93.2	14.0	70.92	-39.0	383.4	5,047.1	5,010.8	36.26	139.194				
13,000.0	7,500.0	7,200.0	7,190.3	94.9	14.0	70.92	-39.0	383.4	5,145.3	5,108.9	36.40	141.372				
13,100.0	7,500.0	7,200.0	7,190.3	96.5	14.0	70.92	-39.0	383.4	5,243.6	5,207.1	36.53	143.539				
13,200.0	7,500.0	7,200.0	7,190.3	98.2	14.0	70.92	-39.0	383.4	5,342.0	5,305.4	36.67	145.695				
13,300.0	7,500.0	7,200.0	7,190.3	99.9	14.0	70.92	-39.0	383.4	5,440.5	5,403.7	36.80	147.838				
13,400.0	7,500.0	7,200.0	7,190.3	101.6	14.0	70.92	-39.0	383.4	5,539.0	5,502.0	36.93	149.970				
13,500.0	7,500.0	7,200.0	7,190.3	103.3	14.0	70.92	-39.0	383.4	5,637.5	5,600.4	37.07	152.089				
13,600.0	7,500.0	7,200.0	7,190.3	105.0	14.0	70.92	-39.0	383.4	5,736.1	5,698.9	37.20	154.198				
13,700.0	7,500.0	7,200.0	7,190.3	106.7	14.0	70.92	-39.0	383.4	5,834.8	5,797.4	37.33	156.294				
13,800.0	7,500.0	7,200.0	7,190.3	108.4	14.0	70.92	-39.0	383.4	5,933.5	5,896.0	37.46	158.380				
13,900.0	7,500.0	7,200.0	7,190.3	110.1	14.0	70.92	-39.0	383.4	6,032.2	5,994.6	37.59	160.453				
14,000.0	7,500.0	7,200.0	7,190.3	111.8	14.0	70.92	-39.0	383.4	6,131.0	6,093.2	37.73	162.516				

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 2F-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 2F-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		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)						
14,100.0	7,500.0	7,200.0	7,190.3	113.5	14.0	70.92	-39.0	383.4	6,229.8	6,191.9	37.86	164.567		
14,200.0	7,500.0	7,200.0	7,190.3	115.2	14.0	70.92	-39.0	383.4	6,328.6	6,290.7	37.99	166.606		
14,300.0	7,500.0	7,200.0	7,190.3	116.9	14.0	70.92	-39.0	383.4	6,427.5	6,389.4	38.12	168.635		
14,400.0	7,500.0	7,200.0	7,190.3	118.6	14.0	70.92	-39.0	383.4	6,526.5	6,488.2	38.24	170.653		
14,500.0	7,500.0	7,200.0	7,190.3	120.4	14.0	70.92	-39.0	383.4	6,625.4	6,587.0	38.37	172.659		
14,600.0	7,500.0	7,200.0	7,190.3	122.1	14.0	70.92	-39.0	383.4	6,724.4	6,685.9	38.50	174.655		
14,700.0	7,500.0	7,200.0	7,190.3	123.8	14.0	70.92	-39.0	383.4	6,823.4	6,784.8	38.63	176.640		
14,800.0	7,500.0	7,200.0	7,190.3	125.5	14.0	70.92	-39.0	383.4	6,922.5	6,883.7	38.76	178.613		
14,900.0	7,500.0	7,200.0	7,190.3	127.2	14.0	70.92	-39.0	383.4	7,021.5	6,982.6	38.88	180.577		
15,000.0	7,500.0	7,200.0	7,190.3	128.9	14.0	70.92	-39.0	383.4	7,120.6	7,081.6	39.01	182.529		
15,100.0	7,500.0	7,200.0	7,190.3	130.6	14.0	70.92	-39.0	383.4	7,219.7	7,180.6	39.14	184.472		
15,200.0	7,500.0	7,200.0	7,190.3	132.4	14.0	70.92	-39.0	383.4	7,318.9	7,279.6	39.26	186.403		
15,300.0	7,500.0	7,200.0	7,190.3	134.1	14.0	70.92	-39.0	383.4	7,418.1	7,378.7	39.39	188.325		
15,400.0	7,500.0	7,200.0	7,190.3	135.8	14.0	70.92	-39.0	383.4	7,517.3	7,477.7	39.52	190.236		
15,500.0	7,500.0	7,200.0	7,190.3	137.5	14.0	70.92	-39.0	383.4	7,616.5	7,576.8	39.64	192.137		
15,600.0	7,500.0	7,200.0	7,190.3	139.2	14.0	70.92	-39.0	383.4	7,715.7	7,675.9	39.77	194.028		
15,700.0	7,500.0	7,200.0	7,190.3	141.0	14.0	70.92	-39.0	383.4	7,815.0	7,775.1	39.89	195.908		
15,800.0	7,500.0	7,200.0	7,190.3	142.7	14.0	70.92	-39.0	383.4	7,914.2	7,874.2	40.02	197.779		
15,841.7	7,500.0	7,200.0	7,190.3	143.4	14.0	70.92	-39.0	383.4	7,955.6	7,915.5	40.07	198.556		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 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	90.58	-0.4	37.5	37.5					
100.0	100.0	100.0	100.0	0.2	0.2	90.58	-0.4	37.5	37.5	37.2	0.30	123.501		
200.0	200.0	200.0	200.0	0.3	0.3	90.58	-0.4	37.5	37.5	36.9	0.65	57.458		
300.0	300.0	300.0	300.0	0.5	0.5	90.58	-0.4	37.5	37.5	36.5	1.00	37.438		
400.0	400.0	400.0	400.0	0.7	0.7	24.78	-0.4	37.5	36.7	35.4	1.35	27.174		
500.0	500.0	500.0	500.0	0.9	0.8	26.62	-0.4	37.5	34.4	32.7	1.70	20.197		
600.0	599.9	599.3	599.3	1.0	1.0	30.27	-0.5	38.4	31.4	29.3	2.05	15.293		
700.0	699.7	698.7	698.7	1.2	1.2	36.32	-0.7	40.9	28.9	26.5	2.41	11.983		
800.0	799.4	798.1	798.0	1.4	1.4	45.08	-1.2	45.2	27.2	24.4	2.78	9.767		
877.1	876.2	874.8	874.6	1.6	1.5	53.51	-1.7	49.7	26.7	23.6	3.09	8.643 CC		
900.0	898.9	897.6	897.2	1.7	1.6	56.21	-1.9	51.2	26.8	23.6	3.18	8.399 ES		
1,000.0	998.3	997.0	996.4	1.9	1.8	68.35	-2.7	58.9	28.1	24.4	3.63	7.722		
1,100.0	1,097.4	1,096.6	1,095.5	2.2	2.0	79.99	-3.7	68.2	31.2	27.1	4.13	7.548 SF		
1,200.0	1,196.3	1,196.2	1,194.7	2.5	2.2	91.70	-4.7	77.6	35.5	30.8	4.66	7.610		
1,300.0	1,294.9	1,295.8	1,293.8	2.8	2.4	102.94	-5.7	87.1	41.3	36.1	5.20	7.947		
1,400.0	1,393.3	1,395.2	1,392.7	3.2	2.7	113.05	-6.7	96.5	48.9	43.2	5.70	8.581		
1,494.4	1,485.8	1,488.8	1,486.0	3.5	2.9	121.26	-7.7	105.4	58.0	51.9	6.15	9.433		
1,500.0	1,491.2	1,494.4	1,491.5	3.5	2.9	121.71	-7.7	105.9	58.6	52.4	6.17	9.491		
1,600.0	1,589.1	1,593.5	1,590.1	3.9	3.1	128.39	-8.8	115.4	69.7	63.1	6.61	10.545		
1,700.0	1,686.9	1,692.6	1,688.8	4.3	3.3	133.20	-9.8	124.8	81.5	74.5	7.04	11.582		
1,800.0	1,784.8	1,791.7	1,787.4	4.7	3.6	136.78	-10.8	134.2	93.7	86.2	7.46	12.565		
1,900.0	1,882.6	1,890.8	1,886.1	5.1	3.8	139.53	-11.8	143.6	106.2	98.3	7.88	13.479		
2,000.0	1,980.4	1,989.9	1,984.7	5.5	4.0	141.69	-12.8	153.0	118.9	110.6	8.30	14.323		
2,100.0	2,078.3	2,089.0	2,083.4	5.9	4.3	143.44	-13.8	162.4	131.7	123.0	8.72	15.099		
2,200.0	2,176.1	2,188.1	2,182.0	6.3	4.5	144.88	-14.8	171.8	144.6	135.4	9.14	15.813		
2,300.0	2,273.9	2,287.2	2,280.7	6.7	4.8	146.08	-15.9	181.3	157.6	148.0	9.57	16.470		
2,400.0	2,371.8	2,386.3	2,379.3	7.1	5.0	147.10	-16.9	190.7	170.6	160.6	9.99	17.076		
2,500.0	2,469.6	2,485.4	2,478.0	7.5	5.2	147.97	-17.9	200.1	183.7	173.3	10.42	17.635		
2,600.0	2,567.4	2,584.5	2,576.6	7.9	5.5	148.73	-18.9	209.5	196.8	186.0	10.84	18.153		
2,700.0	2,665.3	2,683.6	2,675.3	8.3	5.7	149.39	-19.9	218.9	210.0	198.7	11.27	18.634		
2,800.0	2,763.1	2,782.7	2,773.9	8.7	5.9	149.97	-20.9	228.3	223.2	211.5	11.70	19.081		
2,900.0	2,860.9	2,881.8	2,872.6	9.1	6.2	150.49	-21.9	237.7	236.4	224.2	12.12	19.497		
3,000.0	2,958.8	2,980.9	2,971.2	9.5	6.4	150.96	-23.0	247.1	249.6	237.0	12.55	19.885		
3,100.0	3,056.6	3,080.0	3,069.9	9.9	6.6	151.37	-24.0	256.6	262.8	249.8	12.98	20.249		
3,200.0	3,154.4	3,179.1	3,168.5	10.3	6.9	151.75	-25.0	266.0	276.0	262.6	13.41	20.589		
3,300.0	3,252.3	3,278.2	3,267.2	10.7	7.1	152.09	-26.0	275.4	289.3	275.5	13.84	20.909		
3,400.0	3,350.1	3,377.3	3,365.8	11.1	7.4	152.41	-27.0	284.8	302.6	288.3	14.26	21.210		
3,500.0	3,447.9	3,476.4	3,464.5	11.5	7.6	152.69	-28.0	294.2	315.8	301.1	14.69	21.494		
3,600.0	3,545.8	3,575.5	3,563.1	11.9	7.8	152.96	-29.0	303.6	329.1	314.0	15.12	21.762		
3,700.0	3,643.6	3,674.6	3,661.8	12.3	8.1	153.20	-30.0	313.0	342.4	326.8	15.55	22.015		
3,800.0	3,741.5	3,773.7	3,760.4	12.7	8.3	153.42	-31.1	322.5	355.7	339.7	15.98	22.255		
3,900.0	3,839.3	3,872.9	3,859.1	13.1	8.6	153.63	-32.1	331.9	369.0	352.6	16.41	22.482		
4,000.0	3,937.1	3,972.0	3,957.7	13.5	8.8	153.83	-33.1	341.3	382.3	365.4	16.84	22.697		
4,100.0	4,035.0	4,071.1	4,056.4	13.9	9.0	154.01	-34.1	350.7	395.6	378.3	17.27	22.902		
4,200.0	4,132.8	4,170.2	4,155.0	14.3	9.3	154.18	-35.1	360.1	408.9	391.2	17.70	23.098		
4,300.0	4,230.6	4,269.3	4,253.7	14.7	9.5	154.34	-36.1	369.5	422.2	404.1	18.13	23.283		
4,400.0	4,328.5	4,368.4	4,352.3	15.1	9.7	154.48	-37.1	378.9	435.5	417.0	18.56	23.461		
4,500.0	4,426.3	4,467.5	4,451.0	15.5	10.0	154.62	-38.2	388.4	448.8	429.8	18.99	23.630		
4,600.0	4,524.1	4,566.6	4,549.6	15.9	10.2	154.76	-39.2	397.8	462.2	442.7	19.42	23.792		
4,700.0	4,622.0	4,665.7	4,648.3	16.3	10.5	154.88	-40.2	407.2	475.5	455.6	19.86	23.947		
4,800.0	4,719.8	4,764.8	4,746.9	16.7	10.7	155.00	-41.2	416.6	488.8	468.5	20.29	24.095		
4,900.0	4,817.6	4,863.9	4,845.6	17.2	10.9	155.11	-42.2	426.0	502.1	481.4	20.72	24.237		

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 2F-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 2F-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	
5,000.0	4,915.5	4,963.0	4,944.2	17.6	11.2	155.22	-43.2	435.4	515.4	494.3	21.15	24.373	
5,100.0	5,013.3	5,062.1	5,042.9	18.0	11.4	155.32	-44.2	444.8	528.8	507.2	21.58	24.504	
5,200.0	5,111.1	5,161.2	5,141.5	18.4	11.7	155.41	-45.3	454.3	542.1	520.1	22.01	24.630	
5,300.0	5,209.0	5,260.3	5,240.2	18.8	11.9	155.50	-46.3	463.7	555.4	533.0	22.44	24.751	
5,400.0	5,306.8	5,359.4	5,338.8	19.2	12.1	155.59	-47.3	473.1	568.8	545.9	22.87	24.868	
5,500.0	5,404.6	5,458.5	5,437.5	19.6	12.4	155.67	-48.3	482.5	582.1	558.8	23.30	24.980	
5,600.0	5,502.5	5,557.6	5,536.2	20.0	12.6	155.75	-49.3	491.9	595.4	571.7	23.73	25.088	
5,700.0	5,600.3	5,656.7	5,634.8	20.4	12.9	155.83	-50.3	501.3	608.8	584.6	24.17	25.192	
5,800.0	5,698.2	5,755.8	5,733.5	20.8	13.1	155.90	-51.3	510.7	622.1	597.5	24.60	25.292	
5,900.0	5,796.0	5,854.9	5,832.1	21.2	13.3	155.97	-52.3	520.1	635.4	610.4	25.03	25.389	
6,000.0	5,893.8	5,954.0	5,930.8	21.6	13.6	156.03	-53.4	529.6	648.8	623.3	25.46	25.483	
6,100.0	5,991.7	6,053.1	6,029.4	22.0	13.8	156.10	-54.4	539.0	662.1	636.2	25.89	25.574	
6,200.0	6,089.5	6,152.2	6,128.1	22.4	14.0	156.16	-55.4	548.4	675.5	649.1	26.32	25.662	
6,300.0	6,187.3	6,251.3	6,226.7	22.8	14.3	156.22	-56.4	557.8	688.8	662.1	26.75	25.747	
6,400.0	6,285.2	6,350.4	6,325.4	23.2	14.5	156.28	-57.4	567.2	702.2	675.0	27.18	25.829	
6,500.0	6,383.0	6,449.5	6,424.0	23.7	14.8	156.33	-58.4	576.6	715.5	687.9	27.62	25.908	
6,600.0	6,480.8	6,548.7	6,522.7	24.1	15.0	156.38	-59.4	586.0	728.8	700.8	28.05	25.985	
6,700.0	6,578.7	6,647.8	6,621.3	24.5	15.2	156.43	-60.5	595.5	742.2	713.7	28.48	26.060	
6,800.0	6,676.5	6,746.9	6,720.0	24.9	15.5	156.48	-61.5	604.9	755.5	726.6	28.91	26.133	
6,900.0	6,774.3	6,846.0	6,818.6	25.3	15.7	156.53	-62.5	614.3	768.9	739.5	29.34	26.203	
7,000.0	6,872.2	6,945.1	6,917.3	25.7	16.0	156.57	-63.5	623.7	782.2	752.4	29.77	26.272	
7,019.1	6,890.8	7,861.8	7,500.0	25.8	20.1	-160.47	513.1	685.4	772.9	748.5	24.38	31.697	
7,050.0	6,921.1	7,863.6	7,500.0	25.9	20.2	-172.33	514.8	685.4	753.0	728.1	24.93	30.204	
7,100.0	6,970.2	7,863.0	7,500.0	26.0	20.2	166.24	514.2	685.4	722.4	696.6	25.80	27.997	
7,150.0	7,019.0	7,858.0	7,500.0	26.2	20.1	149.07	509.2	685.4	694.2	667.6	26.64	26.059	
7,200.0	7,067.2	7,831.0	7,499.4	26.3	19.9	136.25	482.3	685.0	668.8	641.9	26.87	24.889	
7,250.0	7,114.4	7,804.0	7,497.5	26.4	19.6	127.79	455.3	684.6	646.3	619.2	27.13	23.822	
7,300.0	7,160.3	7,777.5	7,494.5	26.4	19.4	121.82	429.1	684.0	626.9	599.5	27.42	22.861	
7,350.0	7,204.5	7,751.5	7,490.3	26.5	19.2	117.22	403.4	683.3	610.9	583.2	27.71	22.049	
7,400.0	7,246.6	7,725.7	7,485.0	26.5	19.0	113.34	378.1	682.6	598.3	570.4	27.97	21.394	
7,450.0	7,286.4	7,700.0	7,478.6	26.5	18.8	109.84	353.3	681.7	589.3	561.1	28.17	20.920	
7,500.0	7,323.5	7,674.5	7,471.2	26.5	18.6	106.52	328.9	680.7	583.8	555.5	28.32	20.614	
7,550.0	7,357.7	7,649.0	7,462.7	26.5	18.4	103.26	304.9	679.7	581.6	553.2	28.39	20.484	
7,558.1	7,362.9	7,644.9	7,461.2	26.5	18.4	102.74	301.1	679.5	581.6	553.2	28.40	20.476	
7,600.0	7,388.7	7,623.6	7,453.1	26.5	18.2	100.00	281.4	678.5	582.7	554.3	28.42	20.504	
7,650.0	7,416.3	7,598.3	7,442.6	26.5	18.1	96.72	258.3	677.3	586.6	558.3	28.38	20.669	
7,700.0	7,440.2	7,573.0	7,431.1	26.5	17.9	93.41	235.8	675.9	593.2	564.9	28.32	20.943	
7,750.0	7,460.3	7,550.0	7,419.8	26.5	17.8	90.28	215.9	674.6	602.0	573.7	28.30	21.269	
7,800.0	7,476.4	7,522.4	7,405.2	26.5	17.6	86.83	192.6	673.0	612.6	584.4	28.17	21.747	
7,850.0	7,488.4	7,500.0	7,392.5	26.6	17.5	83.80	174.1	671.6	624.7	596.6	28.18	22.167	
7,900.0	7,496.2	7,472.0	7,375.7	26.6	17.4	80.50	151.8	669.8	638.0	609.9	28.08	22.719	
7,950.0	7,499.8	7,450.0	7,361.7	26.7	17.3	77.72	134.9	668.2	652.0	623.8	28.17	23.144	
7,966.7	7,500.0	7,438.4	7,354.1	26.7	17.3	76.59	126.2	667.4	656.7	628.6	28.10	23.374	
8,000.0	7,500.0	7,422.1	7,343.1	26.8	17.2	75.64	114.2	666.2	666.8	638.7	28.13	23.700	
8,100.0	7,500.0	7,377.9	7,311.6	27.0	17.0	73.00	83.5	662.9	702.5	674.1	28.37	24.765	
8,200.0	7,500.0	7,350.0	7,290.5	27.4	16.9	71.29	65.3	660.7	746.4	717.4	28.99	25.744	
8,300.0	7,500.0	7,300.0	7,250.6	27.9	16.8	68.17	35.4	656.6	797.6	768.6	29.03	27.473	
8,400.0	7,500.0	7,280.1	7,234.1	28.5	16.7	66.93	24.5	654.9	855.4	825.6	29.74	28.761	
8,500.0	7,500.0	7,250.0	7,208.3	29.1	16.7	65.05	9.2	652.3	919.0	888.9	30.16	30.473	
8,600.0	7,500.0	7,235.0	7,195.2	29.9	16.6	64.12	2.0	650.9	987.5	956.7	30.77	32.089	
8,700.0	7,500.0	7,216.5	7,178.8	30.8	16.6	62.98	-6.3	649.3	1,060.2	1,028.9	31.29	33.886	
8,800.0	7,500.0	7,200.0	7,163.9	31.7	16.5	61.97	-13.3	647.8	1,136.3	1,104.6	31.77	35.763	

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 2F-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 2F-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 (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		
8,900.0	7,500.0	7,200.0	7,163.9	32.7	16.5	61.97	-13.3	647.8	1,215.7	1,183.2	32.43	37.490		
9,000.0	7,500.0	7,172.9	7,139.0	33.7	16.5	60.34	-23.8	645.3	1,297.0	1,264.4	32.63	39.754		
9,100.0	7,500.0	7,150.0	7,117.7	34.8	16.4	58.99	-31.8	643.2	1,380.8	1,348.0	32.83	42.056		
9,200.0	7,500.0	7,150.0	7,117.7	36.0	16.4	58.99	-31.8	643.2	1,466.1	1,432.8	33.31	44.016		
9,300.0	7,500.0	7,150.0	7,117.7	37.2	16.4	58.99	-31.8	643.2	1,553.2	1,519.5	33.73	46.044		
9,400.0	7,500.0	7,150.0	7,117.7	38.4	16.4	58.99	-31.8	643.2	1,641.8	1,607.6	34.11	48.126		
9,500.0	7,500.0	7,125.0	7,094.0	39.7	16.4	57.54	-39.5	640.8	1,730.9	1,696.7	34.21	50.599		
9,600.0	7,500.0	7,100.0	7,070.0	41.1	16.3	56.13	-46.1	638.5	1,821.6	1,787.3	34.29	53.122		
9,700.0	7,500.0	7,100.0	7,070.0	42.4	16.3	56.13	-46.1	638.5	1,912.7	1,878.1	34.60	55.276		
9,800.0	7,500.0	7,100.0	7,070.0	43.8	16.3	56.13	-46.1	638.5	2,004.6	1,969.7	34.89	57.456		
9,900.0	7,500.0	7,100.0	7,070.0	45.2	16.3	56.13	-46.1	638.5	2,097.2	2,062.1	35.16	59.654		
10,000.0	7,500.0	7,100.0	7,070.0	46.6	16.3	56.13	-46.1	638.5	2,190.5	2,155.1	35.41	61.866		
10,100.0	7,500.0	7,100.0	7,070.0	48.1	16.3	56.13	-46.1	638.5	2,284.4	2,248.7	35.64	64.089		
10,200.0	7,500.0	7,100.0	7,070.0	49.6	16.3	56.13	-46.1	638.5	2,378.8	2,342.9	35.87	66.320		
10,300.0	7,500.0	7,100.0	7,070.0	51.1	16.3	56.13	-46.1	638.5	2,473.6	2,437.5	36.08	68.555		
10,400.0	7,500.0	7,076.6	7,047.3	52.6	16.3	54.85	-51.4	636.3	2,568.2	2,532.1	36.12	71.095		
10,500.0	7,500.0	7,072.9	7,043.7	54.1	16.3	54.65	-52.1	635.9	2,663.5	2,627.2	36.30	73.380		
10,600.0	7,500.0	7,050.0	7,021.3	55.6	16.2	53.44	-56.2	633.7	2,759.6	2,723.3	36.34	75.938		
10,700.0	7,500.0	7,050.0	7,021.3	57.2	16.2	53.44	-56.2	633.7	2,855.4	2,818.9	36.53	78.165		
10,800.0	7,500.0	7,050.0	7,021.3	58.8	16.2	53.44	-56.2	633.7	2,951.5	2,914.8	36.71	80.390		
10,900.0	7,500.0	7,050.0	7,021.3	60.3	16.2	53.44	-56.2	633.7	3,047.8	3,011.0	36.89	82.613		
11,000.0	7,500.0	7,050.0	7,021.3	61.9	16.2	53.44	-56.2	633.7	3,144.4	3,107.4	37.07	84.830		
11,100.0	7,500.0	7,050.0	7,021.3	63.5	16.2	53.44	-56.2	633.7	3,241.2	3,204.0	37.24	87.043		
11,200.0	7,500.0	7,050.0	7,021.3	65.1	16.2	53.44	-56.2	633.7	3,338.2	3,300.8	37.40	89.250		
11,300.0	7,500.0	7,050.0	7,021.3	66.7	16.2	53.44	-56.2	633.7	3,435.3	3,397.7	37.56	91.451		
11,400.0	7,500.0	7,050.0	7,021.3	68.3	16.2	53.44	-56.2	633.7	3,532.6	3,494.9	37.72	93.645		
11,500.0	7,500.0	7,050.0	7,021.3	70.0	16.2	53.44	-56.2	633.7	3,630.1	3,592.2	37.88	95.832		
11,600.0	7,500.0	7,050.0	7,021.3	71.6	16.2	53.44	-56.2	633.7	3,727.6	3,689.6	38.03	98.010		
11,700.0	7,500.0	7,050.0	7,021.3	73.2	16.2	53.44	-56.2	633.7	3,825.4	3,787.2	38.18	100.181		
11,800.0	7,500.0	7,050.0	7,021.3	74.9	16.2	53.44	-56.2	633.7	3,923.2	3,884.8	38.33	102.344		
11,900.0	7,500.0	7,050.0	7,021.3	76.5	16.2	53.44	-56.2	633.7	4,021.1	3,982.6	38.48	104.498		
12,000.0	7,500.0	7,050.0	7,021.3	78.2	16.2	53.44	-56.2	633.7	4,119.1	4,080.5	38.63	106.643		
12,100.0	7,500.0	7,050.0	7,021.3	79.8	16.2	53.44	-56.2	633.7	4,217.3	4,178.5	38.77	108.779		
12,200.0	7,500.0	7,050.0	7,021.3	81.5	16.2	53.44	-56.2	633.7	4,315.5	4,276.6	38.91	110.906		
12,300.0	7,500.0	7,050.0	7,021.3	83.1	16.2	53.44	-56.2	633.7	4,413.8	4,374.7	39.05	113.024		
12,400.0	7,500.0	7,050.0	7,021.3	84.8	16.2	53.44	-56.2	633.7	4,512.1	4,472.9	39.19	115.132		
12,500.0	7,500.0	7,050.0	7,021.3	86.5	16.2	53.44	-56.2	633.7	4,610.6	4,571.2	39.33	117.231		
12,600.0	7,500.0	7,027.1	6,998.8	88.1	16.2	52.26	-59.4	631.5	4,708.6	4,669.2	39.36	119.637		
12,700.0	7,500.0	7,025.8	6,997.5	89.8	16.2	52.20	-59.6	631.4	4,807.1	4,767.6	39.49	121.736		
12,800.0	7,500.0	7,024.6	6,996.2	91.5	16.1	52.13	-59.7	631.3	4,905.6	4,866.0	39.62	123.825		
12,900.0	7,500.0	7,023.4	6,995.1	93.2	16.1	52.07	-59.9	631.2	5,004.2	4,964.5	39.75	125.904		
13,000.0	7,500.0	7,000.0	6,971.9	94.9	16.1	50.92	-62.1	628.9	5,103.4	5,063.6	39.77	128.312		
13,100.0	7,500.0	7,000.0	6,971.9	96.5	16.1	50.92	-62.1	628.9	5,202.1	5,162.2	39.91	130.354		
13,200.0	7,500.0	7,000.0	6,971.9	98.2	16.1	50.92	-62.1	628.9	5,300.8	5,260.7	40.04	132.387		
13,300.0	7,500.0	7,000.0	6,971.9	99.9	16.1	50.92	-62.1	628.9	5,399.5	5,359.4	40.17	134.411		
13,400.0	7,500.0	7,000.0	6,971.9	101.6	16.1	50.92	-62.1	628.9	5,498.4	5,458.1	40.30	136.425		
13,500.0	7,500.0	7,000.0	6,971.9	103.3	16.1	50.92	-62.1	628.9	5,597.2	5,556.8	40.43	138.429		
13,600.0	7,500.0	7,000.0	6,971.9	105.0	16.1	50.92	-62.1	628.9	5,696.1	5,655.5	40.56	140.424		
13,700.0	7,500.0	7,000.0	6,971.9	106.7	16.1	50.92	-62.1	628.9	5,795.0	5,754.3	40.69	142.409		
13,800.0	7,500.0	7,000.0	6,971.9	108.4	16.1	50.92	-62.1	628.9	5,894.0	5,853.2	40.82	144.384		
13,900.0	7,500.0	7,000.0	6,971.9	110.1	16.1	50.92	-62.1	628.9	5,993.0	5,952.1	40.95	146.350		
14,000.0	7,500.0	7,000.0	6,971.9	111.8	16.1	50.92	-62.1	628.9	6,092.0	6,051.0	41.08	148.307		

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 2F-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 2F-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		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)				
14,100.0	7,500.0	7,000.0	6,971.9	113.5	16.1	50.92	-62.1	628.9	6,191.1	6,149.9	41.20	150.254		
14,200.0	7,500.0	7,000.0	6,971.9	115.2	16.1	50.92	-62.1	628.9	6,290.2	6,248.9	41.33	152.192		
14,300.0	7,500.0	7,000.0	6,971.9	116.9	16.1	50.92	-62.1	628.9	6,389.3	6,347.9	41.46	154.121		
14,400.0	7,500.0	7,000.0	6,971.9	118.6	16.1	50.92	-62.1	628.9	6,488.5	6,446.9	41.58	156.040		
14,500.0	7,500.0	7,000.0	6,971.9	120.4	16.1	50.92	-62.1	628.9	6,587.7	6,545.9	41.71	157.950		
14,600.0	7,500.0	7,000.0	6,971.9	122.1	16.1	50.92	-62.1	628.9	6,686.9	6,645.0	41.83	159.851		
14,700.0	7,500.0	7,000.0	6,971.9	123.8	16.1	50.92	-62.1	628.9	6,786.1	6,744.1	41.96	161.743		
14,800.0	7,500.0	7,000.0	6,971.9	125.5	16.1	50.92	-62.1	628.9	6,885.3	6,843.2	42.08	163.625		
14,900.0	7,500.0	7,000.0	6,971.9	127.2	16.1	50.92	-62.1	628.9	6,984.6	6,942.4	42.20	165.498		
15,000.0	7,500.0	7,000.0	6,971.9	128.9	16.1	50.92	-62.1	628.9	7,083.9	7,041.6	42.33	167.363		
15,100.0	7,500.0	7,000.0	6,971.9	130.6	16.1	50.92	-62.1	628.9	7,183.2	7,140.7	42.45	169.218		
15,200.0	7,500.0	7,000.0	6,971.9	132.4	16.1	50.92	-62.1	628.9	7,282.5	7,239.9	42.57	171.065		
15,300.0	7,500.0	7,000.0	6,971.9	134.1	16.1	50.92	-62.1	628.9	7,381.9	7,339.2	42.69	172.903		
15,400.0	7,500.0	7,000.0	6,971.9	135.8	16.1	50.92	-62.1	628.9	7,481.2	7,438.4	42.82	174.732		
15,500.0	7,500.0	7,000.0	6,971.9	137.5	16.1	50.92	-62.1	628.9	7,580.6	7,537.7	42.94	176.552		
15,600.0	7,500.0	7,000.0	6,971.9	139.2	16.1	50.92	-62.1	628.9	7,680.0	7,636.9	43.06	178.364		
15,700.0	7,500.0	7,000.0	6,971.9	141.0	16.1	50.92	-62.1	628.9	7,779.4	7,736.2	43.18	180.167		
15,800.0	7,500.0	7,000.0	6,971.9	142.7	16.1	50.92	-62.1	628.9	7,878.8	7,835.5	43.30	181.961		
15,841.7	7,500.0	7,000.0	6,971.9	143.4	16.1	50.92	-62.1	628.9	7,920.3	7,876.9	43.35	182.706		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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									
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	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	24.57	-0.4	45.1	44.3	42.9	1.35	32.766			
500.0	500.0	499.2	499.2	0.9	0.8	26.08	-0.4	45.9	42.8	41.1	1.70	25.165			
600.0	599.9	598.5	598.4	1.0	1.0	28.81	-0.6	48.5	41.5	39.4	2.05	20.243			
700.0	699.7	697.7	697.6	1.2	1.2	32.80	-0.9	52.8	40.6	38.2	2.40	16.872			
800.0	799.4	796.9	796.6	1.4	1.4	38.04	-1.3	58.8	40.2	37.4	2.77	14.505			
807.9	807.3	804.8	804.5	1.5	1.4	38.51	-1.3	59.3	40.2	37.4	2.80	14.350 CC			
900.0	898.9	896.2	895.6	1.7	1.6	44.35	-1.8	66.5	40.5	37.4	3.16	12.844 ES			
1,000.0	998.3	995.4	994.3	1.9	1.8	51.37	-2.5	75.9	41.8	38.3	3.58	11.701			
1,100.0	1,097.4	1,094.5	1,092.8	2.2	2.1	58.62	-3.2	87.0	44.3	40.3	4.05	10.952			
1,200.0	1,196.3	1,194.3	1,191.8	2.5	2.3	66.24	-4.0	99.1	47.5	42.9	4.58	10.358			
1,300.0	1,294.9	1,293.9	1,290.7	2.8	2.6	74.67	-4.9	111.2	50.9	45.7	5.19	9.808			
1,400.0	1,393.3	1,393.5	1,389.6	3.2	2.8	83.68	-5.7	123.3	55.1	49.2	5.85	9.413			
1,494.4	1,485.8	1,487.4	1,482.7	3.5	3.1	92.37	-6.5	134.8	60.1	53.6	6.49	9.259			
1,500.0	1,491.2	1,492.9	1,488.2	3.5	3.1	92.88	-6.5	135.4	60.4	53.9	6.53	9.258 SF			
1,600.0	1,589.1	1,592.2	1,586.8	3.9	3.4	101.11	-7.3	147.5	67.3	60.1	7.17	9.381			
1,700.0	1,686.9	1,691.6	1,685.4	4.3	3.6	107.73	-8.2	159.6	75.3	67.5	7.78	9.681			
1,800.0	1,784.8	1,790.9	1,784.0	4.7	3.9	113.03	-9.0	171.7	84.1	75.7	8.34	10.073			
1,900.0	1,882.6	1,890.3	1,882.6	5.1	4.2	117.30	-9.8	183.7	93.4	84.5	8.89	10.508			
2,000.0	1,980.4	1,989.6	1,981.2	5.5	4.4	120.78	-10.6	195.8	103.2	93.8	9.42	10.957			
2,100.0	2,078.3	2,089.0	2,079.8	5.9	4.7	123.65	-11.4	207.9	113.3	103.4	9.94	11.401			
2,200.0	2,176.1	2,188.3	2,178.5	6.3	5.0	126.05	-12.3	220.0	123.6	113.2	10.45	11.831			
2,300.0	2,273.9	2,287.6	2,277.1	6.7	5.2	128.08	-13.1	232.0	134.1	123.2	10.96	12.244			
2,400.0	2,371.8	2,387.0	2,375.7	7.1	5.5	129.81	-13.9	244.1	144.8	133.3	11.46	12.636			
2,500.0	2,469.6	2,486.3	2,474.3	7.5	5.8	131.30	-14.7	256.2	155.6	143.6	11.96	13.006			
2,600.0	2,567.4	2,585.7	2,572.9	7.9	6.0	132.60	-15.5	268.3	166.4	154.0	12.46	13.356			
2,700.0	2,665.3	2,685.0	2,671.5	8.3	6.3	133.74	-16.4	280.4	177.4	164.4	12.96	13.686			
2,800.0	2,763.1	2,784.4	2,770.1	8.7	6.6	134.74	-17.2	292.4	188.4	174.9	13.46	13.997			
2,900.0	2,860.9	2,883.7	2,868.7	9.1	6.9	135.64	-18.0	304.5	199.4	185.4	13.95	14.290			
3,000.0	2,958.8	2,983.0	2,967.3	9.5	7.1	136.44	-18.8	316.6	210.5	196.0	14.45	14.565			
3,100.0	3,056.6	3,082.4	3,065.9	9.9	7.4	137.16	-19.6	328.7	221.6	206.7	14.95	14.826			
3,200.0	3,154.4	3,181.7	3,164.5	10.3	7.7	137.81	-20.5	340.7	232.8	217.3	15.44	15.071			
3,300.0	3,252.3	3,281.1	3,263.1	10.7	7.9	138.41	-21.3	352.8	244.0	228.0	15.94	15.303			
3,400.0	3,350.1	3,380.4	3,361.7	11.1	8.2	138.95	-22.1	364.9	255.2	238.7	16.44	15.523			
3,500.0	3,447.9	3,479.8	3,460.3	11.5	8.5	139.44	-22.9	377.0	266.4	249.5	16.93	15.731			
3,600.0	3,545.8	3,579.1	3,558.9	11.9	8.8	139.90	-23.7	389.0	277.6	260.2	17.43	15.928			
3,700.0	3,643.6	3,678.4	3,657.5	12.3	9.0	140.32	-24.6	401.1	288.9	271.0	17.93	16.115			
3,800.0	3,741.5	3,777.8	3,756.1	12.7	9.3	140.70	-25.4	413.2	300.2	281.8	18.42	16.293			
3,900.0	3,839.3	3,877.1	3,854.7	13.1	9.6	141.06	-26.2	425.3	311.5	292.5	18.92	16.461			
4,000.0	3,937.1	3,976.5	3,953.3	13.5	9.9	141.40	-27.0	437.4	322.8	303.3	19.42	16.622			
4,100.0	4,035.0	4,075.8	4,051.9	13.9	10.1	141.71	-27.8	449.4	334.1	314.2	19.91	16.776			
4,200.0	4,132.8	4,175.1	4,150.5	14.3	10.4	142.00	-28.7	461.5	345.4	325.0	20.41	16.922			
4,300.0	4,230.6	4,274.5	4,249.1	14.7	10.7	142.28	-29.5	473.6	356.7	335.8	20.91	17.061			
4,400.0	4,328.5	4,373.8	4,347.7	15.1	10.9	142.53	-30.3	485.7	368.1	346.7	21.41	17.195			
4,500.0	4,426.3	4,473.2	4,446.3	15.5	11.2	142.77	-31.1	497.7	379.4	357.5	21.90	17.322			
4,600.0	4,524.1	4,572.5	4,544.9	15.9	11.5	143.00	-31.9	509.8	390.8	368.4	22.40	17.445			
4,700.0	4,622.0	4,671.9	4,643.5	16.3	11.8	143.21	-32.8	521.9	402.1	379.2	22.90	17.562			
4,800.0	4,719.8	4,771.2	4,742.1	16.7	12.0	143.42	-33.6	534.0	413.5	390.1	23.39	17.674			
4,900.0	4,817.6	4,870.5	4,840.7	17.2	12.3	143.61	-34.4	546.0	424.8	400.9	23.89	17.782			

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 2F-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 2F-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							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	4,915.5	4,969.9	4,939.3	17.6	12.6	143.79	-35.2	558.1	436.2	411.8	24.39	17.885		
5,100.0	5,013.3	5,069.2	5,037.9	18.0	12.9	143.96	-36.1	570.2	447.6	422.7	24.89	17.985		
5,200.0	5,111.1	5,168.6	5,136.5	18.4	13.1	144.13	-36.9	582.3	458.9	433.6	25.38	18.081		
5,300.0	5,209.0	5,267.9	5,235.1	18.8	13.4	144.28	-37.7	594.4	470.3	444.4	25.88	18.173		
5,400.0	5,306.8	5,367.3	5,333.7	19.2	13.7	144.43	-38.5	606.4	481.7	455.3	26.38	18.262		
5,500.0	5,404.6	5,466.6	5,432.3	19.6	14.0	144.57	-39.3	618.5	493.1	466.2	26.88	18.347		
5,600.0	5,502.5	5,565.9	5,530.9	20.0	14.2	144.71	-40.2	630.6	504.5	477.1	27.37	18.430		
5,700.0	5,600.3	5,665.3	5,629.5	20.4	14.5	144.84	-41.0	642.7	515.9	488.0	27.87	18.509		
5,800.0	5,698.2	5,764.6	5,728.1	20.8	14.8	144.96	-41.8	654.7	527.3	498.9	28.37	18.586		
5,900.0	5,796.0	5,864.0	5,826.7	21.2	15.1	145.08	-42.6	666.8	538.7	509.8	28.87	18.661		
6,000.0	5,893.8	5,963.3	5,925.3	21.6	15.3	145.19	-43.4	678.9	550.1	520.7	29.36	18.733		
6,100.0	5,991.7	6,062.7	6,023.9	22.0	15.6	145.30	-44.3	691.0	561.5	531.6	29.86	18.802		
6,200.0	6,089.5	6,162.0	6,122.5	22.4	15.9	145.41	-45.1	703.0	572.9	542.5	30.36	18.869		
6,300.0	6,187.3	6,261.3	6,221.1	22.8	16.1	145.51	-45.9	715.1	584.3	553.4	30.86	18.935		
6,400.0	6,285.2	6,360.7	6,319.7	23.2	16.4	145.60	-46.7	727.2	595.7	564.3	31.36	18.998		
6,500.0	6,383.0	6,460.0	6,418.3	23.7	16.7	145.70	-47.5	739.3	607.1	575.2	31.85	19.059		
6,600.0	6,480.8	6,559.4	6,516.9	24.1	17.0	145.79	-48.4	751.4	618.5	586.1	32.35	19.118		
6,700.0	6,578.7	6,658.7	6,615.5	24.5	17.2	145.87	-49.2	763.4	629.9	597.1	32.85	19.176		
6,800.0	6,676.5	6,758.1	6,714.2	24.9	17.5	145.96	-50.0	775.5	641.3	608.0	33.35	19.232		
6,900.0	6,774.3	6,857.4	6,812.8	25.3	17.8	146.04	-50.8	787.6	652.7	618.9	33.85	19.286		
7,000.0	6,872.2	6,956.7	6,911.4	25.7	18.1	146.11	-51.6	799.7	664.2	629.8	34.34	19.339		
7,019.1	6,890.8	6,975.7	6,930.2	25.8	18.1	146.13	-51.8	802.0	666.3	631.9	34.44	19.349		
7,050.0	6,921.1	7,006.5	6,960.7	25.9	18.2	131.40	-52.1	805.7	669.2	634.6	34.59	19.345		
7,100.0	6,970.2	7,056.3	7,010.2	26.0	18.3	106.34	-52.5	811.8	670.8	636.0	34.82	19.266		
7,150.0	7,019.0	7,106.0	7,059.5	26.2	18.5	86.82	-52.9	817.8	668.8	633.8	35.01	19.105		
7,200.0	7,067.2	7,155.0	7,108.2	26.3	18.6	74.64	-53.3	823.8	663.2	628.1	35.15	18.867		
7,250.0	7,114.4	7,203.1	7,155.9	26.4	18.7	67.65	-53.7	829.6	654.3	619.0	35.25	18.559		
7,300.0	7,160.3	7,251.3	7,203.1	26.4	19.6	78.63	29.7	866.9	633.7	602.1	31.68	20.003		
7,350.0	7,204.5	7,297.5	7,247.7	26.5	20.0	92.22	113.7	879.2	600.4	572.5	27.82	21.583		
7,400.0	7,246.6	7,340.3	7,291.6	26.5	20.2	99.56	145.0	882.4	565.9	539.3	26.52	21.339		
7,450.0	7,286.4	7,381.6	7,332.9	26.5	20.2	103.42	153.6	883.2	532.8	506.7	26.17	20.364		
7,500.0	7,323.5	7,419.2	7,370.3	26.5	20.2	105.35	151.8	883.1	502.3	476.2	26.17	19.197		
7,550.0	7,357.7	7,453.9	7,404.1	26.5	20.2	106.04	144.5	882.4	475.1	448.8	26.30	18.065		
7,600.0	7,388.7	7,485.8	7,436.0	26.5	20.1	105.83	134.1	881.4	451.6	425.2	26.46	17.071		
7,650.0	7,416.3	7,513.4	7,463.6	26.5	20.1	104.90	122.1	880.1	432.5	405.9	26.60	16.259		
7,700.0	7,440.2	7,537.3	7,487.5	26.5	20.0	103.34	109.1	878.6	418.2	391.5	26.72	15.651		
7,750.0	7,460.3	7,559.4	7,509.6	26.5	19.9	101.24	95.7	877.0	408.9	382.0	26.83	15.237		
7,800.0	7,476.4	7,575.5	7,525.7	26.5	19.9	98.64	82.2	875.3	404.6	377.6	26.99	14.994		
7,818.0	7,481.2	7,580.3	7,530.5	26.5	19.8	97.61	77.4	874.6	404.3	377.2	27.06	14.939		
7,850.0	7,488.4	7,600.0	7,522.5	26.6	19.8	95.64	68.9	873.4	405.3	378.1	27.21	14.894		
7,900.0	7,496.2	7,578.2	7,505.2	26.6	19.7	92.25	55.8	871.4	410.4	382.9	27.55	14.900		
7,950.0	7,499.8	7,556.1	7,487.3	26.7	19.7	88.62	43.1	869.3	419.6	391.6	28.00	14.987		
7,966.7	7,500.0	7,550.0	7,482.2	26.7	19.7	87.51	39.7	868.7	423.5	395.3	28.21	15.012		
8,000.0	7,500.0	7,534.4	7,469.1	26.8	19.6	85.71	31.4	867.2	432.4	403.8	28.57	15.136		
8,100.0	7,500.0	7,500.0	7,439.5	27.0	19.5	81.71	14.2	863.7	469.6	439.5	30.10	15.603		
8,200.0	7,500.0	7,467.7	7,410.8	27.4	19.4	77.98	-0.2	860.3	520.6	489.0	31.59	16.479		
8,300.0	7,500.0	7,450.0	7,394.8	27.9	19.4	75.96	-7.5	858.4	582.4	549.2	33.27	17.509		
8,400.0	7,500.0	7,423.2	7,370.0	28.5	19.3	72.95	-17.4	855.5	652.4	618.0	34.39	18.969		
8,500.0	7,500.0	7,400.0	7,348.3	29.1	19.3	70.41	-25.1	852.9	728.6	693.4	35.25	20.670		
8,600.0	7,500.0	7,400.0	7,348.3	29.9	19.3	70.41	-25.1	852.9	809.4	773.0	36.39	22.242		
8,700.0	7,500.0	7,379.3	7,328.6	30.8	19.2	68.21	-31.2	850.6	893.5	856.5	36.93	24.192		
8,800.0	7,500.0	7,368.4	7,318.3	31.7	19.2	67.09	-34.2	849.3	980.3	942.8	37.51	26.135		

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 2F-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 2F-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,500.0	7,350.0	7,300.6	32.7	19.1	65.22	-38.6	847.2	1,069.3	1,031.4	37.86	28.241		
9,000.0	7,500.0	7,350.0	7,300.6	33.7	19.1	65.22	-38.6	847.2	1,159.7	1,121.3	38.40	30.202		
9,100.0	7,500.0	7,350.0	7,300.6	34.8	19.1	65.22	-38.6	847.2	1,251.6	1,212.7	38.85	32.216		
9,200.0	7,500.0	7,350.0	7,300.6	36.0	19.1	65.22	-38.6	847.2	1,344.6	1,305.4	39.24	34.269		
9,300.0	7,500.0	7,330.4	7,281.5	37.2	19.1	63.29	-42.8	844.9	1,438.1	1,398.7	39.37	36.525		
9,400.0	7,500.0	7,325.0	7,276.2	38.4	19.1	62.77	-43.8	844.3	1,532.6	1,492.9	39.63	38.670		
9,500.0	7,500.0	7,320.0	7,271.4	39.7	19.1	62.31	-44.7	843.7	1,627.6	1,587.7	39.87	40.825		
9,600.0	7,500.0	7,300.0	7,251.8	41.1	19.0	60.45	-47.9	841.3	1,723.5	1,683.5	39.95	43.143		
9,700.0	7,500.0	7,300.0	7,251.8	42.4	19.0	60.45	-47.9	841.3	1,819.3	1,779.1	40.19	45.265		
9,800.0	7,500.0	7,300.0	7,251.8	43.8	19.0	60.45	-47.9	841.3	1,915.6	1,875.2	40.42	47.394		
9,900.0	7,500.0	7,300.0	7,251.8	45.2	19.0	60.45	-47.9	841.3	2,012.3	1,971.7	40.63	49.525		
10,000.0	7,500.0	7,300.0	7,251.8	46.6	19.0	60.45	-47.9	841.3	2,109.3	2,068.4	40.83	51.658		
10,100.0	7,500.0	7,300.0	7,251.8	48.1	19.0	60.45	-47.9	841.3	2,206.5	2,165.5	41.02	53.791		
10,200.0	7,500.0	7,300.0	7,251.8	49.6	19.0	60.45	-47.9	841.3	2,304.0	2,262.8	41.20	55.922		
10,300.0	7,500.0	7,300.0	7,251.8	51.1	19.0	60.45	-47.9	841.3	2,401.7	2,360.3	41.37	58.049		
10,400.0	7,500.0	7,300.0	7,251.8	52.6	19.0	60.45	-47.9	841.3	2,499.5	2,458.0	41.54	60.173		
10,500.0	7,500.0	7,300.0	7,251.8	54.1	19.0	60.45	-47.9	841.3	2,597.5	2,555.8	41.70	62.292		
10,600.0	7,500.0	7,300.0	7,251.8	55.6	19.0	60.45	-47.9	841.3	2,695.7	2,653.9	41.86	64.406		
10,700.0	7,500.0	7,300.0	7,251.8	57.2	19.0	60.45	-47.9	841.3	2,794.0	2,752.0	42.01	66.514		
10,800.0	7,500.0	7,300.0	7,251.8	58.8	19.0	60.45	-47.9	841.3	2,892.4	2,850.3	42.15	68.615		
10,900.0	7,500.0	7,300.0	7,251.8	60.3	19.0	60.45	-47.9	841.3	2,991.0	2,948.7	42.30	70.710		
11,000.0	7,500.0	7,278.2	7,230.3	61.9	18.9	58.52	-50.6	838.7	3,089.1	3,046.8	42.31	73.014		
11,100.0	7,500.0	7,276.5	7,228.7	63.5	18.9	58.38	-50.8	838.5	3,187.7	3,145.3	42.44	75.112		
11,200.0	7,500.0	7,275.0	7,227.2	65.1	18.9	58.25	-50.9	838.3	3,286.4	3,243.9	42.57	77.201		
11,300.0	7,500.0	7,273.6	7,225.8	66.7	18.9	58.13	-51.1	838.1	3,385.2	3,342.5	42.70	79.283		
11,400.0	7,500.0	7,272.2	7,224.4	68.3	18.9	58.01	-51.2	838.0	3,484.1	3,441.3	42.83	81.356		
11,500.0	7,500.0	7,250.0	7,202.4	70.0	18.9	56.16	-52.9	835.3	3,583.4	3,540.6	42.83	83.663		
11,600.0	7,500.0	7,250.0	7,202.4	71.6	18.9	56.16	-52.9	835.3	3,682.3	3,639.4	42.96	85.706		
11,700.0	7,500.0	7,250.0	7,202.4	73.2	18.9	56.16	-52.9	835.3	3,781.3	3,738.2	43.10	87.742		
11,800.0	7,500.0	7,250.0	7,202.4	74.9	18.9	56.16	-52.9	835.3	3,880.3	3,837.1	43.23	89.768		
11,900.0	7,500.0	7,250.0	7,202.4	76.5	18.9	56.16	-52.9	835.3	3,979.4	3,936.0	43.35	91.787		
12,000.0	7,500.0	7,250.0	7,202.4	78.2	18.9	56.16	-52.9	835.3	4,078.5	4,035.0	43.48	93.797		
12,100.0	7,500.0	7,250.0	7,202.4	79.8	18.9	56.16	-52.9	835.3	4,177.7	4,134.1	43.61	95.799		
12,200.0	7,500.0	7,250.0	7,202.4	81.5	18.9	56.16	-52.9	835.3	4,276.9	4,233.1	43.73	97.792		
12,300.0	7,500.0	7,250.0	7,202.4	83.1	18.9	56.16	-52.9	835.3	4,376.1	4,332.2	43.86	99.776		
12,400.0	7,500.0	7,250.0	7,202.4	84.8	18.9	56.16	-52.9	835.3	4,475.4	4,431.4	43.98	101.753		
12,500.0	7,500.0	7,250.0	7,202.4	86.5	18.9	56.16	-52.9	835.3	4,574.7	4,530.6	44.11	103.720		
12,600.0	7,500.0	7,250.0	7,202.4	88.1	18.9	56.16	-52.9	835.3	4,674.0	4,629.8	44.23	105.679		
12,700.0	7,500.0	7,250.0	7,202.4	89.8	18.9	56.16	-52.9	835.3	4,773.4	4,729.0	44.35	107.630		
12,800.0	7,500.0	7,250.0	7,202.4	91.5	18.9	56.16	-52.9	835.3	4,872.7	4,828.3	44.47	109.572		
12,900.0	7,500.0	7,250.0	7,202.4	93.2	18.9	56.16	-52.9	835.3	4,972.2	4,927.6	44.59	111.505		
13,000.0	7,500.0	7,250.0	7,202.4	94.9	18.9	56.16	-52.9	835.3	5,071.6	5,026.9	44.71	113.430		
13,100.0	7,500.0	7,250.0	7,202.4	96.5	18.9	56.16	-52.9	835.3	5,171.0	5,126.2	44.83	115.347		
13,200.0	7,500.0	7,250.0	7,202.4	98.2	18.9	56.16	-52.9	835.3	5,270.5	5,225.6	44.95	117.255		
13,300.0	7,500.0	7,250.0	7,202.4	99.9	18.9	56.16	-52.9	835.3	5,370.0	5,324.9	45.07	119.155		
13,400.0	7,500.0	7,250.0	7,202.4	101.6	18.9	56.16	-52.9	835.3	5,469.5	5,424.3	45.19	121.046		
13,500.0	7,500.0	7,250.0	7,202.4	103.3	18.9	56.16	-52.9	835.3	5,569.1	5,523.7	45.30	122.929		
13,600.0	7,500.0	7,250.0	7,202.4	105.0	18.9	56.16	-52.9	835.3	5,668.6	5,623.2	45.42	124.803		
13,700.0	7,500.0	7,250.0	7,202.4	106.7	18.9	56.16	-52.9	835.3	5,768.2	5,722.6	45.54	126.670		
13,800.0	7,500.0	7,250.0	7,202.4	108.4	18.9	56.16	-52.9	835.3	5,867.7	5,822.1	45.65	128.528		
13,900.0	7,500.0	7,250.0	7,202.4	110.1	18.9	56.16	-52.9	835.3	5,967.3	5,921.6	45.77	130.378		
14,000.0	7,500.0	7,250.0	7,202.4	111.8	18.9	56.16	-52.9	835.3	6,066.9	6,021.0	45.89	132.219		

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 2F-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 2F-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		
14,100.0	7,500.0	7,250.0	7,202.4	113.5	18.9	56.16	-52.9	835.3	6,166.6	6,120.6	46.00	134.053		
14,200.0	7,500.0	7,250.0	7,202.4	115.2	18.9	56.16	-52.9	835.3	6,266.2	6,220.1	46.12	135.878		
14,300.0	7,500.0	7,250.0	7,202.4	116.9	18.9	56.16	-52.9	835.3	6,365.8	6,319.6	46.23	137.696		
14,400.0	7,500.0	7,250.0	7,202.4	118.6	18.9	56.16	-52.9	835.3	6,465.5	6,419.1	46.35	139.505		
14,500.0	7,500.0	7,250.0	7,202.4	120.4	18.9	56.16	-52.9	835.3	6,565.1	6,518.7	46.46	141.307		
14,600.0	7,500.0	7,250.0	7,202.4	122.1	18.9	56.16	-52.9	835.3	6,664.8	6,618.2	46.57	143.100		
14,700.0	7,500.0	7,250.0	7,202.4	123.8	18.9	56.16	-52.9	835.3	6,764.5	6,717.8	46.69	144.886		
14,800.0	7,500.0	7,250.0	7,202.4	125.5	18.9	56.16	-52.9	835.3	6,864.2	6,817.4	46.80	146.664		
14,900.0	7,500.0	7,250.0	7,202.4	127.2	18.9	56.16	-52.9	835.3	6,963.9	6,917.0	46.92	148.434		
15,000.0	7,500.0	7,250.0	7,202.4	128.9	18.9	56.16	-52.9	835.3	7,063.6	7,016.6	47.03	150.197		
15,100.0	7,500.0	7,250.0	7,202.4	130.6	18.9	56.16	-52.9	835.3	7,163.3	7,116.2	47.14	151.952		
15,200.0	7,500.0	7,250.0	7,202.4	132.4	18.9	56.16	-52.9	835.3	7,263.0	7,215.8	47.26	153.699		
15,300.0	7,500.0	7,250.0	7,202.4	134.1	18.9	56.16	-52.9	835.3	7,362.8	7,315.4	47.37	155.438		
15,400.0	7,500.0	7,250.0	7,202.4	135.8	18.9	56.16	-52.9	835.3	7,462.5	7,415.0	47.48	157.170		
15,500.0	7,500.0	7,250.0	7,202.4	137.5	18.9	56.16	-52.9	835.3	7,562.3	7,514.7	47.59	158.895		
15,600.0	7,500.0	7,250.0	7,202.4	139.2	18.9	56.16	-52.9	835.3	7,662.0	7,614.3	47.71	160.612		
15,700.0	7,500.0	7,250.0	7,202.4	141.0	18.9	56.16	-52.9	835.3	7,761.8	7,714.0	47.82	162.322		
15,800.0	7,500.0	7,250.0	7,202.4	142.7	18.9	56.16	-52.9	835.3	7,861.5	7,813.6	47.93	164.024		
15,841.7	7,500.0	7,250.0	7,202.4	143.4	18.9	56.16	-52.9	835.3	7,903.1	7,855.1	47.98	164.732		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	
0.0	0.0	0.0	0.0	0.0	0.0	90.80	-0.7	52.6	52.6				
100.0	100.0	100.0	100.0	0.2	0.2	90.80	-0.7	52.6	52.6	52.3	0.30	173.278	
200.0	200.0	200.0	200.0	0.3	0.3	90.80	-0.7	52.6	52.6	52.0	0.65	80.616	
300.0	300.0	300.0	300.0	0.5	0.5	90.80	-0.7	52.6	52.6	51.6	1.00	52.527 CC	
400.0	400.0	399.1	399.1	0.7	0.7	24.69	-0.6	53.5	52.7	51.3	1.35	39.044	
500.0	500.0	498.2	498.2	0.9	0.9	25.44	-0.3	56.0	52.9	51.2	1.70	31.150	
600.0	599.9	597.3	597.2	1.0	1.0	26.67	0.3	60.3	53.2	51.2	2.05	25.994 ES	
700.0	699.7	696.4	696.0	1.2	1.2	28.37	1.1	66.2	53.7	51.3	2.40	22.382	
800.0	799.4	795.4	794.8	1.4	1.4	30.51	2.1	73.8	54.5	51.7	2.76	19.726	
900.0	898.9	894.5	893.4	1.7	1.7	33.04	3.4	83.2	55.4	52.3	3.13	17.700	
1,000.0	998.3	993.5	991.8	1.9	1.9	35.91	4.9	94.2	56.7	53.2	3.52	16.105	
1,100.0	1,097.4	1,092.5	1,090.0	2.2	2.2	39.04	6.6	106.8	58.4	54.5	3.94	14.814	
1,200.0	1,196.3	1,191.5	1,187.9	2.5	2.5	42.37	8.5	121.2	60.5	56.1	4.40	13.741	
1,300.0	1,294.9	1,290.5	1,285.5	2.8	2.8	45.81	10.7	137.2	63.1	58.2	4.92	12.831	
1,400.0	1,393.3	1,389.4	1,382.8	3.2	3.1	49.27	13.1	154.9	66.2	60.7	5.49	12.047	
1,494.4	1,485.8	1,483.1	1,474.8	3.5	3.5	52.58	15.6	173.1	69.5	63.4	6.10	11.386	
1,500.0	1,491.2	1,488.7	1,480.2	3.5	3.5	52.79	15.7	174.2	69.7	63.5	6.14	11.346	
1,600.0	1,589.1	1,588.5	1,578.1	3.9	3.8	56.37	18.4	193.9	73.2	66.3	6.85	10.691	
1,700.0	1,686.9	1,688.4	1,675.9	4.3	4.2	59.60	21.0	213.5	77.0	69.4	7.59	10.147	
1,800.0	1,784.8	1,788.2	1,773.8	4.7	4.6	62.53	23.7	233.2	81.0	72.6	8.35	9.696	
1,900.0	1,882.6	1,888.1	1,871.6	5.1	5.0	65.17	26.3	252.8	85.2	76.0	9.14	9.323	
2,000.0	1,980.4	1,987.9	1,969.5	5.5	5.4	67.56	29.0	272.5	89.5	79.6	9.94	9.013	
2,100.0	2,078.3	2,087.7	2,067.3	5.9	5.7	69.72	31.6	292.2	94.0	83.3	10.74	8.755	
2,200.0	2,176.1	2,187.6	2,165.2	6.3	6.1	71.69	34.3	311.8	98.7	87.1	11.56	8.538	
2,300.0	2,273.9	2,287.4	2,263.0	6.7	6.5	73.48	37.0	331.5	103.4	91.0	12.37	8.357	
2,400.0	2,371.8	2,387.3	2,360.9	7.1	6.9	75.11	39.6	351.1	108.2	95.0	13.19	8.203	
2,500.0	2,469.6	2,487.1	2,458.7	7.5	7.3	76.60	42.3	370.8	113.1	99.1	14.01	8.072	
2,600.0	2,567.4	2,586.9	2,556.6	7.9	7.7	77.96	44.9	390.4	118.1	103.3	14.84	7.960	
2,700.0	2,665.3	2,686.8	2,654.4	8.3	8.1	79.22	47.6	410.1	123.1	107.5	15.66	7.864	
2,800.0	2,763.1	2,786.6	2,752.3	8.7	8.4	80.37	50.2	429.7	128.2	111.7	16.48	7.781	
2,900.0	2,860.9	2,886.4	2,850.1	9.1	8.8	81.44	52.9	449.4	133.3	116.1	17.30	7.709	
3,000.0	2,958.8	2,986.3	2,948.0	9.5	9.2	82.42	55.6	469.1	138.5	120.4	18.12	7.647	
3,100.0	3,056.6	3,086.1	3,045.8	9.9	9.6	83.34	58.2	488.7	143.7	124.8	18.93	7.592	
3,200.0	3,154.4	3,186.0	3,143.6	10.3	10.0	84.19	60.9	508.4	149.0	129.2	19.75	7.544	
3,300.0	3,252.3	3,285.8	3,241.5	10.7	10.4	84.99	63.5	528.0	154.3	133.7	20.57	7.502	
3,400.0	3,350.1	3,385.6	3,339.3	11.1	10.8	85.73	66.2	547.7	159.6	138.2	21.38	7.464	
3,500.0	3,447.9	3,485.5	3,437.2	11.5	11.2	86.42	68.8	567.3	164.9	142.7	22.19	7.431	
3,600.0	3,545.8	3,585.3	3,535.0	11.9	11.6	87.07	71.5	587.0	170.3	147.3	23.00	7.402	
3,700.0	3,643.6	3,685.1	3,632.9	12.3	12.0	87.68	74.2	606.6	175.6	151.8	23.81	7.376	
3,800.0	3,741.5	3,785.0	3,730.7	12.7	12.3	88.25	76.8	626.3	181.0	156.4	24.62	7.352	
3,900.0	3,839.3	3,884.8	3,828.6	13.1	12.7	88.79	79.5	646.0	186.5	161.0	25.43	7.331	
4,000.0	3,937.1	3,984.7	3,926.4	13.5	13.1	89.30	82.1	665.6	191.9	165.6	26.24	7.313	
4,100.0	4,035.0	4,084.5	4,024.3	13.9	13.5	89.79	84.8	685.3	197.3	170.3	27.05	7.296	
4,200.0	4,132.8	4,184.3	4,122.1	14.3	13.9	90.24	87.4	704.9	202.8	174.9	27.85	7.281	
4,300.0	4,230.6	4,284.2	4,220.0	14.7	14.3	90.67	90.1	724.6	208.2	179.6	28.66	7.267	
4,400.0	4,328.5	4,384.0	4,317.8	15.1	14.7	91.08	92.8	744.2	213.7	184.3	29.46	7.255	
4,500.0	4,426.3	4,483.9	4,415.7	15.5	15.1	91.47	95.4	763.9	219.2	188.9	30.26	7.243	
4,600.0	4,524.1	4,583.7	4,513.5	15.9	15.5	91.84	98.1	783.5	224.7	193.6	31.07	7.233	
4,700.0	4,622.0	4,683.5	4,611.4	16.3	15.9	92.20	100.7	803.2	230.2	198.4	31.87	7.224	
4,800.0	4,719.8	4,783.4	4,709.2	16.7	16.3	92.53	103.4	822.9	235.7	203.1	32.67	7.216	
4,900.0	4,817.6	4,883.2	4,807.1	17.2	16.7	92.85	106.0	842.5	241.3	207.8	33.47	7.208	
5,000.0	4,915.5	4,983.0	4,904.9	17.6	17.1	93.16	108.7	862.2	246.8	212.5	34.27	7.201	

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 2F-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 2F-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							
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	5,013.3	5,082.9	5,002.8	18.0	17.4	93.45	111.4	881.8	252.3	217.3	35.07	7.195	
5,200.0	5,111.1	5,182.7	5,100.6	18.4	17.8	93.73	114.0	901.5	257.9	222.0	35.87	7.189	
5,300.0	5,209.0	5,282.6	5,198.5	18.8	18.2	94.00	116.7	921.1	263.4	226.8	36.67	7.184	
5,400.0	5,306.8	5,382.4	5,296.3	19.2	18.6	94.26	119.3	940.8	269.0	231.5	37.47	7.179	
5,500.0	5,404.6	5,482.2	5,394.2	19.6	19.0	94.51	122.0	960.4	274.5	236.3	38.27	7.175	
5,600.0	5,502.5	5,582.1	5,492.0	20.0	19.4	94.74	124.6	980.1	280.1	241.0	39.06	7.171	
5,700.0	5,600.3	5,681.9	5,589.9	20.4	19.8	94.97	127.3	999.8	285.7	245.8	39.86	7.167	
5,800.0	5,698.2	5,781.8	5,687.7	20.8	20.2	95.19	130.0	1,019.4	291.2	250.6	40.66	7.164	
5,900.0	5,796.0	5,881.6	5,785.6	21.2	20.6	95.40	132.6	1,039.1	296.8	255.4	41.45	7.160	
6,000.0	5,893.8	5,981.4	5,883.4	21.6	21.0	95.61	135.3	1,058.7	302.4	260.2	42.25	7.158	
6,100.0	5,991.7	6,081.3	5,981.3	22.0	21.4	95.80	137.9	1,078.4	308.0	264.9	43.04	7.155	
6,200.0	6,089.5	6,181.1	6,079.1	22.4	21.8	95.99	140.6	1,098.0	313.6	269.7	43.84	7.153	
6,300.0	6,187.3	6,280.9	6,177.0	22.8	22.2	96.17	143.2	1,117.7	319.2	274.5	44.63	7.151	
6,400.0	6,285.2	6,380.8	6,274.8	23.2	22.5	96.35	145.9	1,137.4	324.8	279.3	45.43	7.149	
6,500.0	6,383.0	6,480.6	6,372.6	23.7	22.9	96.52	148.6	1,157.0	330.4	284.1	46.22	7.147	
6,600.0	6,480.8	6,580.5	6,470.5	24.1	23.3	96.68	151.2	1,176.7	336.0	288.9	47.02	7.145	
6,700.0	6,578.7	6,680.3	6,568.3	24.5	23.7	96.84	153.9	1,196.3	341.6	293.8	47.81	7.144	
6,800.0	6,676.5	6,780.1	6,666.2	24.9	24.1	97.00	156.5	1,216.0	347.2	298.6	48.61	7.143	
6,900.0	6,774.3	6,880.0	6,764.0	25.3	24.5	97.15	159.2	1,235.6	352.8	303.4	49.40	7.141	
7,000.0	6,872.2	6,979.8	6,861.9	25.7	24.9	97.29	161.8	1,255.3	358.4	308.2	50.19	7.140	
7,019.1	6,890.8	6,998.9	6,880.6	25.8	25.0	97.32	162.3	1,259.0	359.5	309.1	50.35	7.140	
7,050.0	6,921.1	7,029.8	6,910.8	25.9	25.1	82.71	163.2	1,265.1	360.4	309.8	50.58	7.125	
7,100.0	6,970.2	7,088.3	6,968.2	26.0	25.3	57.23	164.9	1,276.6	368.4	307.4	51.00	7.028	
7,150.0	7,019.0	7,206.2	7,082.1	26.2	25.8	35.15	183.0	1,299.7	346.3	295.5	50.80	6.817	
7,200.0	7,067.2	7,303.2	7,171.7	26.3	26.3	17.54	215.5	1,317.9	322.2	272.8	49.36	6.528	
7,250.0	7,114.4	7,375.8	7,234.3	26.4	26.6	1.60	249.6	1,330.8	289.5	242.0	47.57	6.087	
7,300.0	7,160.3	7,426.6	7,275.4	26.4	26.9	-15.28	278.2	1,339.3	251.6	205.7	45.95	5.476	
7,350.0	7,204.5	7,460.5	7,301.4	26.5	27.1	-33.82	299.4	1,344.7	211.3	166.7	44.57	4.741	
7,400.0	7,246.6	7,481.9	7,317.2	26.5	27.2	-51.64	313.5	1,348.0	171.3	128.2	43.09	3.976	
7,450.0	7,286.4	7,494.0	7,325.9	26.5	27.3	-65.10	321.7	1,349.8	135.3	94.8	40.52	3.339	
7,500.0	7,323.5	7,499.3	7,329.6	26.5	27.3	-72.64	325.4	1,350.5	109.5	74.6	34.93	3.136 SF	
7,538.6	7,350.2	7,499.8	7,329.9	26.5	27.3	-74.59	325.7	1,350.6	102.5	73.7	28.80	3.560	
7,550.0	7,357.7	7,499.4	7,329.6	26.5	27.3	-74.58	325.4	1,350.6	103.1	75.8	27.36	3.770	
7,600.0	7,388.7	7,495.5	7,326.9	26.5	27.3	-71.64	322.7	1,350.0	119.3	92.8	26.59	4.489	
7,650.0	7,416.3	7,488.6	7,322.0	26.5	27.3	-64.63	318.0	1,349.0	150.7	120.1	30.57	4.929	
7,700.0	7,440.2	7,479.3	7,315.3	26.5	27.2	-54.83	311.7	1,347.6	189.2	155.0	34.14	5.541	
7,750.0	7,460.3	7,468.0	7,307.0	26.5	27.1	-44.09	304.2	1,345.8	230.7	193.9	36.77	6.275	
7,800.0	7,476.4	7,450.0	7,293.5	26.5	27.0	-32.81	292.6	1,343.0	273.3	235.1	38.23	7.149	
7,850.0	7,488.4	7,441.0	7,286.6	26.6	27.0	-25.93	287.0	1,341.6	315.7	275.4	40.36	7.823	
7,900.0	7,496.2	7,425.8	7,274.8	26.6	26.9	-19.48	277.8	1,339.1	357.6	315.9	41.72	8.571	
7,950.0	7,499.8	7,400.0	7,254.2	26.7	26.8	-13.65	262.8	1,334.9	398.6	356.4	42.25	9.436	
7,966.7	7,500.0	7,400.0	7,254.2	26.7	26.8	-12.77	262.8	1,334.9	411.8	368.8	43.01	9.575	
8,000.0	7,500.0	7,400.0	7,254.2	26.8	26.8	-12.77	262.8	1,334.9	438.7	394.3	44.37	9.887	
8,100.0	7,500.0	7,364.3	7,224.6	27.0	26.6	-10.21	243.7	1,328.8	521.4	475.7	45.68	11.413	
8,200.0	7,500.0	7,350.0	7,212.5	27.4	26.5	-9.31	236.6	1,326.3	607.3	559.9	47.38	12.817	
8,300.0	7,500.0	7,318.0	7,184.8	27.9	26.4	-7.48	221.8	1,320.6	695.1	647.1	47.96	14.493	
8,400.0	7,500.0	7,300.0	7,168.8	28.5	26.3	-6.57	214.2	1,317.3	784.8	736.0	48.76	16.095	
8,500.0	7,500.0	7,283.3	7,153.7	29.1	26.2	-5.78	207.6	1,314.2	875.9	826.6	49.38	17.740	
8,600.0	7,500.0	7,269.0	7,140.8	29.9	26.1	-5.16	202.3	1,311.6	968.2	918.4	49.90	19.405	
8,700.0	7,500.0	7,250.0	7,123.2	30.8	26.0	-4.38	195.8	1,308.0	1,061.5	1,011.3	50.21	21.144	
8,800.0	7,500.0	7,250.0	7,123.2	31.7	26.0	-4.38	195.8	1,308.0	1,155.5	1,104.8	50.79	22.750	
8,900.0	7,500.0	7,250.0	7,123.2	32.7	26.0	-4.38	195.8	1,308.0	1,250.5	1,199.2	51.27	24.388	

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 2F-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 2F-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		
9,000.0	7,500.0	7,226.1	7,100.9	33.7	25.9	-3.48	188.4	1,303.5	1,345.4	1,294.1	51.31	26.222		
9,100.0	7,500.0	7,200.0	7,076.3	34.8	25.8	-2.61	181.5	1,298.5	1,441.5	1,390.2	51.29	28.103		
9,200.0	7,500.0	7,200.0	7,076.3	36.0	25.8	-2.61	181.5	1,298.5	1,537.4	1,485.7	51.64	29.771		
9,300.0	7,500.0	7,200.0	7,076.3	37.2	25.8	-2.61	181.5	1,298.5	1,633.7	1,581.8	51.94	31.453		
9,400.0	7,500.0	7,200.0	7,076.3	38.4	25.8	-2.61	181.5	1,298.5	1,730.5	1,678.3	52.21	33.146		
9,500.0	7,500.0	7,200.0	7,076.3	39.7	25.8	-2.61	181.5	1,298.5	1,827.6	1,775.2	52.45	34.846		
9,600.0	7,500.0	7,200.0	7,076.3	41.1	25.8	-2.61	181.5	1,298.5	1,925.0	1,872.4	52.67	36.551		
9,700.0	7,500.0	7,200.0	7,076.3	42.4	25.8	-2.61	181.5	1,298.5	2,022.7	1,969.8	52.87	38.260		
9,800.0	7,500.0	7,177.0	7,054.3	43.8	25.7	-1.91	176.3	1,294.0	2,120.0	2,067.2	52.81	40.145		
9,900.0	7,500.0	7,172.7	7,050.3	45.2	25.7	-1.79	175.5	1,293.2	2,217.8	2,164.9	52.95	41.888		
10,000.0	7,500.0	7,150.0	7,028.3	46.6	25.6	-1.16	171.4	1,288.8	2,316.2	2,263.3	52.89	43.797		
10,100.0	7,500.0	7,150.0	7,028.3	48.1	25.6	-1.16	171.4	1,288.8	2,414.2	2,361.1	53.05	45.504		
10,200.0	7,500.0	7,150.0	7,028.3	49.6	25.6	-1.16	171.4	1,288.8	2,512.3	2,459.1	53.21	47.212		
10,300.0	7,500.0	7,150.0	7,028.3	51.1	25.6	-1.16	171.4	1,288.8	2,610.6	2,557.3	53.37	48.919		
10,400.0	7,500.0	7,150.0	7,028.3	52.6	25.6	-1.16	171.4	1,288.8	2,709.0	2,655.5	53.51	50.625		
10,500.0	7,500.0	7,150.0	7,028.3	54.1	25.6	-1.16	171.4	1,288.8	2,807.6	2,753.9	53.65	52.329		
10,600.0	7,500.0	7,150.0	7,028.3	55.6	25.6	-1.16	171.4	1,288.8	2,906.2	2,852.4	53.79	54.031		
10,700.0	7,500.0	7,150.0	7,028.3	57.2	25.6	-1.16	171.4	1,288.8	3,004.9	2,951.0	53.92	55.730		
10,800.0	7,500.0	7,150.0	7,028.3	58.8	25.6	-1.16	171.4	1,288.8	3,103.7	3,049.7	54.05	57.427		
10,900.0	7,500.0	7,150.0	7,028.3	60.3	25.6	-1.16	171.4	1,288.8	3,202.6	3,148.4	54.17	59.120		
11,000.0	7,500.0	7,150.0	7,028.3	61.9	25.6	-1.16	171.4	1,288.8	3,301.5	3,247.2	54.29	60.810		
11,100.0	7,500.0	7,150.0	7,028.3	63.5	25.6	-1.16	171.4	1,288.8	3,400.5	3,346.1	54.41	62.496		
11,200.0	7,500.0	7,150.0	7,028.3	65.1	25.6	-1.16	171.4	1,288.8	3,499.6	3,445.1	54.53	64.179		
11,300.0	7,500.0	7,150.0	7,028.3	66.7	25.6	-1.16	171.4	1,288.8	3,598.7	3,544.1	54.64	65.858		
11,400.0	7,500.0	7,150.0	7,028.3	68.3	25.6	-1.16	171.4	1,288.8	3,697.9	3,643.1	54.76	67.532		
11,500.0	7,500.0	7,150.0	7,028.3	70.0	25.6	-1.16	171.4	1,288.8	3,797.1	3,742.2	54.87	69.203		
11,600.0	7,500.0	7,150.0	7,028.3	71.6	25.6	-1.16	171.4	1,288.8	3,896.3	3,841.3	54.98	70.869		
11,700.0	7,500.0	7,128.1	7,007.0	73.2	25.5	-0.61	168.3	1,284.5	3,995.1	3,940.2	54.91	72.752		
11,800.0	7,500.0	7,126.6	7,005.6	74.9	25.5	-0.58	168.2	1,284.2	4,094.4	4,039.3	55.01	74.427		
11,900.0	7,500.0	7,125.2	7,004.2	76.5	25.5	-0.54	168.0	1,283.9	4,193.6	4,138.5	55.11	76.097		
12,000.0	7,500.0	7,123.8	7,002.9	78.2	25.5	-0.51	167.8	1,283.6	4,293.0	4,237.8	55.21	77.763		
12,100.0	7,500.0	7,122.5	7,001.6	79.8	25.5	-0.48	167.7	1,283.4	4,392.3	4,337.0	55.30	79.424		
12,200.0	7,500.0	7,100.0	6,979.6	81.5	25.4	0.03	165.6	1,278.9	4,492.1	4,436.9	55.24	81.327		
12,300.0	7,500.0	7,100.0	6,979.6	83.1	25.4	0.03	165.6	1,278.9	4,591.5	4,536.1	55.34	82.966		
12,400.0	7,500.0	7,100.0	6,979.6	84.8	25.4	0.03	165.6	1,278.9	4,690.8	4,635.4	55.45	84.601		
12,500.0	7,500.0	7,100.0	6,979.6	86.5	25.4	0.03	165.6	1,278.9	4,790.2	4,734.7	55.55	86.231		
12,600.0	7,500.0	7,100.0	6,979.6	88.1	25.4	0.03	165.6	1,278.9	4,889.6	4,834.0	55.65	87.856		
12,700.0	7,500.0	7,100.0	6,979.6	89.8	25.4	0.03	165.6	1,278.9	4,989.1	4,933.3	55.76	89.477		
12,800.0	7,500.0	7,100.0	6,979.6	91.5	25.4	0.03	165.6	1,278.9	5,088.5	5,032.7	55.86	91.093		
12,900.0	7,500.0	7,100.0	6,979.6	93.2	25.4	0.03	165.6	1,278.9	5,188.0	5,132.1	55.96	92.704		
13,000.0	7,500.0	7,100.0	6,979.6	94.9	25.4	0.03	165.6	1,278.9	5,287.5	5,231.5	56.07	94.310		
13,100.0	7,500.0	7,100.0	6,979.6	96.5	25.4	0.03	165.6	1,278.9	5,387.1	5,330.9	56.17	95.912		
13,200.0	7,500.0	7,100.0	6,979.6	98.2	25.4	0.03	165.6	1,278.9	5,486.6	5,430.3	56.27	97.508		
13,300.0	7,500.0	7,100.0	6,979.6	99.9	25.4	0.03	165.6	1,278.9	5,586.2	5,529.8	56.37	99.100		
13,400.0	7,500.0	7,100.0	6,979.6	101.6	25.4	0.03	165.6	1,278.9	5,685.7	5,629.3	56.47	100.687		
13,500.0	7,500.0	7,100.0	6,979.6	103.3	25.4	0.03	165.6	1,278.9	5,785.3	5,728.7	56.57	102.270		
13,600.0	7,500.0	7,100.0	6,979.6	105.0	25.4	0.03	165.6	1,278.9	5,884.9	5,828.3	56.67	103.847		
13,700.0	7,500.0	7,100.0	6,979.6	106.7	25.4	0.03	165.6	1,278.9	5,984.5	5,927.8	56.77	105.420		
13,800.0	7,500.0	7,100.0	6,979.6	108.4	25.4	0.03	165.6	1,278.9	6,084.2	6,027.3	56.87	106.988		
13,900.0	7,500.0	7,100.0	6,979.6	110.1	25.4	0.03	165.6	1,278.9	6,183.8	6,126.8	56.97	108.550		
14,000.0	7,500.0	7,100.0	6,979.6	111.8	25.4	0.03	165.6	1,278.9	6,283.5	6,226.4	57.07	110.109		
14,100.0	7,500.0	7,100.0	6,979.6	113.5	25.4	0.03	165.6	1,278.9	6,383.1	6,325.9	57.16	111.662		

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 2F-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 2F-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		
14,200.0	7,500.0	7,100.0	6,979.6	115.2	25.4	0.03	165.6	1,278.9	6,482.8	6,425.5	57.26	113.210		
14,300.0	7,500.0	7,100.0	6,979.6	116.9	25.4	0.03	165.6	1,278.9	6,582.5	6,525.1	57.36	114.754		
14,400.0	7,500.0	7,100.0	6,979.6	118.6	25.4	0.03	165.6	1,278.9	6,682.2	6,624.7	57.46	116.293		
14,500.0	7,500.0	7,100.0	6,979.6	120.4	25.4	0.03	165.6	1,278.9	6,781.9	6,724.3	57.56	117.827		
14,600.0	7,500.0	7,100.0	6,979.6	122.1	25.4	0.03	165.6	1,278.9	6,881.6	6,823.9	57.66	119.356		
14,700.0	7,500.0	7,100.0	6,979.6	123.8	25.4	0.03	165.6	1,278.9	6,981.3	6,923.5	57.75	120.880		
14,800.0	7,500.0	7,100.0	6,979.6	125.5	25.4	0.03	165.6	1,278.9	7,081.0	7,023.2	57.85	122.400		
14,900.0	7,500.0	7,100.0	6,979.6	127.2	25.4	0.03	165.6	1,278.9	7,180.7	7,122.8	57.95	123.915		
15,000.0	7,500.0	7,100.0	6,979.6	128.9	25.4	0.03	165.6	1,278.9	7,280.5	7,222.4	58.05	125.425		
15,100.0	7,500.0	7,100.0	6,979.6	130.6	25.4	0.03	165.6	1,278.9	7,380.2	7,322.1	58.14	126.930		
15,200.0	7,500.0	7,100.0	6,979.6	132.4	25.4	0.03	165.6	1,278.9	7,480.0	7,421.7	58.24	128.431		
15,300.0	7,500.0	7,100.0	6,979.6	134.1	25.4	0.03	165.6	1,278.9	7,579.8	7,521.4	58.34	129.927		
15,400.0	7,500.0	7,100.0	6,979.6	135.8	25.4	0.03	165.6	1,278.9	7,679.5	7,621.1	58.44	131.418		
15,500.0	7,500.0	7,100.0	6,979.6	137.5	25.4	0.03	165.6	1,278.9	7,779.3	7,720.8	58.53	132.905		
15,600.0	7,500.0	7,100.0	6,979.6	139.2	25.4	0.03	165.6	1,278.9	7,879.1	7,820.4	58.63	134.386		
15,700.0	7,500.0	7,100.0	6,979.6	141.0	25.4	0.03	165.6	1,278.9	7,978.9	7,920.1	58.73	135.864		
15,800.0	7,500.0	7,100.0	6,979.6	142.7	25.4	0.03	165.6	1,278.9	8,078.6	8,019.8	58.82	137.336		
15,841.7	7,500.0	7,100.0	6,979.6	143.4	25.4	0.03	165.6	1,278.9	8,120.2	8,061.4	58.86	137.948		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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		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	90.71	-0.7	59.9	59.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.71	-0.7	59.9	59.9	59.6	0.30	197.238		
200.0	200.0	200.0	200.0	0.3	0.3	90.71	-0.7	59.9	59.9	59.2	0.65	91.763		
203.3	203.3	203.3	203.3	0.3	0.3	90.71	-0.7	59.9	59.9	59.2	0.66	90.155 CC		
300.0	300.0	299.5	299.5	0.5	0.5	90.74	-0.8	60.1	60.1	59.1	1.00	60.058 ES		
400.0	400.0	398.4	398.4	0.7	0.7	24.96	-1.1	61.8	61.0	59.7	1.35	45.267		
500.0	500.0	497.4	497.3	0.9	0.9	26.44	-1.7	65.2	62.1	60.4	1.70	36.613		
600.0	599.9	596.3	596.0	1.0	1.0	28.75	-2.6	70.2	63.4	61.3	2.05	30.990		
700.0	699.7	695.1	694.6	1.2	1.2	31.82	-3.7	76.9	65.0	62.6	2.40	27.107		
800.0	799.4	793.8	793.0	1.4	1.5	35.52	-5.2	85.3	67.1	64.3	2.76	24.328		
900.0	898.9	892.5	891.1	1.7	1.7	39.74	-7.0	95.3	69.8	66.7	3.13	22.291		
1,000.0	998.3	991.0	989.0	1.9	2.0	44.30	-9.1	107.0	73.4	69.8	3.53	20.773		
1,100.0	1,097.4	1,089.5	1,086.5	2.2	2.2	49.03	-11.4	120.3	77.8	73.9	3.97	19.618		
1,200.0	1,196.3	1,187.8	1,183.6	2.5	2.5	53.76	-14.0	135.3	83.4	78.9	4.45	18.723		
1,300.0	1,294.9	1,285.9	1,280.3	2.8	2.9	58.33	-17.0	151.9	90.0	85.0	5.00	18.017		
1,400.0	1,393.3	1,383.9	1,376.5	3.2	3.2	62.64	-20.2	170.0	97.9	92.3	5.61	17.455		
1,494.4	1,485.8	1,476.3	1,467.0	3.5	3.6	66.40	-23.4	188.6	106.5	100.2	6.25	17.030		
1,500.0	1,491.2	1,481.8	1,472.3	3.5	3.6	66.62	-23.6	189.8	107.0	100.7	6.29	17.010		
1,600.0	1,589.1	1,579.4	1,567.5	3.9	4.0	69.89	-27.4	211.1	117.6	110.6	7.01	16.789		
1,700.0	1,686.9	1,676.9	1,662.2	4.3	4.4	72.14	-31.4	234.0	129.9	122.2	7.74	16.788		
1,800.0	1,784.8	1,775.0	1,757.1	4.7	4.9	73.57	-35.7	258.5	143.5	135.1	8.48	16.925		
1,900.0	1,882.6	1,876.0	1,854.7	5.1	5.4	74.34	-38.9	284.4	156.7	147.4	9.25	16.930		
2,000.0	1,980.4	1,977.4	1,952.6	5.5	5.8	74.58	-40.4	310.6	168.6	158.6	10.03	16.813		
2,100.0	2,078.3	2,078.8	2,050.8	5.9	6.3	74.77	-40.8	336.0	179.3	168.5	10.79	16.613		
2,200.0	2,176.1	2,179.8	2,148.9	6.3	6.7	75.35	-41.3	359.7	188.9	177.4	11.57	16.325		
2,300.0	2,273.9	2,279.3	2,245.8	6.7	7.2	75.96	-41.7	382.6	198.3	186.0	12.36	16.052		
2,400.0	2,371.8	2,378.8	2,342.6	7.1	7.6	76.51	-42.1	405.5	207.7	194.6	13.14	15.808		
2,500.0	2,469.6	2,478.4	2,439.5	7.5	8.1	77.02	-42.5	428.4	217.2	203.2	13.93	15.589		
2,600.0	2,567.4	2,577.9	2,536.4	7.9	8.5	77.48	-42.9	451.3	226.6	211.9	14.72	15.391		
2,700.0	2,665.3	2,677.4	2,633.2	8.3	8.9	77.91	-43.3	474.2	236.1	220.6	15.52	15.212		
2,800.0	2,763.1	2,777.0	2,730.1	8.7	9.4	78.30	-43.8	497.1	245.6	229.2	16.32	15.050		
2,900.0	2,860.9	2,876.5	2,826.9	9.1	9.8	78.67	-44.2	520.1	255.0	237.9	17.11	14.902		
3,000.0	2,958.8	2,976.0	2,923.8	9.5	10.3	79.01	-44.6	543.0	264.5	246.6	17.91	14.766		
3,100.0	3,056.6	3,075.6	3,020.7	9.9	10.7	79.32	-45.0	565.9	274.0	255.3	18.72	14.642		
3,200.0	3,154.4	3,175.1	3,117.5	10.3	11.1	79.62	-45.4	588.8	283.5	264.0	19.52	14.527		
3,300.0	3,252.3	3,274.7	3,214.4	10.7	11.6	79.89	-45.8	611.7	293.1	272.7	20.32	14.421		
3,400.0	3,350.1	3,374.2	3,311.3	11.1	12.0	80.15	-46.2	634.6	302.6	281.5	21.13	14.323		
3,500.0	3,447.9	3,473.7	3,408.1	11.5	12.5	80.39	-46.7	657.5	312.1	290.2	21.93	14.231		
3,600.0	3,545.8	3,573.3	3,505.0	11.9	12.9	80.62	-47.1	680.5	321.6	298.9	22.74	14.147		
3,700.0	3,643.6	3,672.8	3,601.8	12.3	13.4	80.84	-47.5	703.4	331.2	307.6	23.54	14.067		
3,800.0	3,741.5	3,772.3	3,698.7	12.7	13.8	81.04	-47.9	726.3	340.7	316.4	24.35	13.993		
3,900.0	3,839.3	3,871.9	3,795.6	13.1	14.2	81.23	-48.3	749.2	350.3	325.1	25.16	13.924		
4,000.0	3,937.1	3,971.4	3,892.4	13.5	14.7	81.41	-48.7	772.1	359.8	333.9	25.96	13.858		
4,100.0	4,035.0	4,071.0	3,989.3	13.9	15.1	81.58	-49.1	795.0	369.4	342.6	26.77	13.797		
4,200.0	4,132.8	4,170.5	4,086.2	14.3	15.6	81.75	-49.6	817.9	378.9	351.3	27.58	13.739		
4,300.0	4,230.6	4,270.0	4,183.0	14.7	16.0	81.90	-50.0	840.8	388.5	360.1	28.39	13.684		
4,400.0	4,328.5	4,369.6	4,279.9	15.1	16.5	82.05	-50.4	863.8	398.0	368.8	29.20	13.633		
4,500.0	4,426.3	4,469.1	4,376.7	15.5	16.9	82.19	-50.8	886.7	407.6	377.6	30.01	13.584		
4,600.0	4,524.1	4,568.6	4,473.6	15.9	17.3	82.32	-51.2	909.6	417.2	386.4	30.82	13.538		
4,700.0	4,622.0	4,668.2	4,570.5	16.3	17.8	82.45	-51.6	932.5	426.7	395.1	31.63	13.494		
4,800.0	4,719.8	4,767.7	4,667.3	16.7	18.2	82.58	-52.0	955.4	436.3	403.9	32.43	13.452		
4,900.0	4,817.6	4,867.2	4,764.2	17.2	18.7	82.69	-52.5	978.3	445.9	412.6	33.24	13.412		

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 2F-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 2F-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	
5,000.0	4,915.5	4,966.8	4,861.1	17.6	19.1	82.81	-52.9	1,001.2	455.5	421.4	34.05	13.374	
5,100.0	5,013.3	5,066.3	4,957.9	18.0	19.6	82.91	-53.3	1,024.1	465.0	430.2	34.87	13.338	
5,200.0	5,111.1	5,165.9	5,054.8	18.4	20.0	83.02	-53.7	1,047.1	474.6	438.9	35.68	13.304	
5,300.0	5,209.0	5,265.4	5,151.6	18.8	20.5	83.12	-54.1	1,070.0	484.2	447.7	36.49	13.271	
5,400.0	5,306.8	5,364.9	5,248.5	19.2	20.9	83.21	-54.5	1,092.9	493.8	456.5	37.30	13.239	
5,500.0	5,404.6	5,464.5	5,345.4	19.6	21.3	83.31	-54.9	1,115.8	503.4	465.2	38.11	13.209	
5,600.0	5,502.5	5,564.0	5,442.2	20.0	21.8	83.39	-55.4	1,138.7	512.9	474.0	38.92	13.180	
5,700.0	5,600.3	5,663.5	5,539.1	20.4	22.2	83.48	-55.8	1,161.6	522.5	482.8	39.73	13.152	
5,800.0	5,698.2	5,763.1	5,636.0	20.8	22.7	83.56	-56.2	1,184.5	532.1	491.6	40.54	13.126	
5,900.0	5,796.0	5,862.6	5,732.8	21.2	23.1	83.64	-56.6	1,207.4	541.7	500.3	41.35	13.100	
6,000.0	5,893.8	5,962.1	5,829.7	21.6	23.6	83.72	-57.0	1,230.4	551.3	509.1	42.16	13.075	
6,100.0	5,991.7	6,061.7	5,926.5	22.0	24.0	83.79	-57.4	1,253.3	560.9	517.9	42.97	13.052	
6,200.0	6,089.5	6,161.2	6,023.4	22.4	24.5	83.86	-57.8	1,276.2	570.5	526.7	43.78	13.029	
6,300.0	6,187.3	6,260.8	6,120.3	22.8	24.9	83.93	-58.3	1,299.1	580.0	535.5	44.60	13.007	
6,400.0	6,285.2	6,360.3	6,217.1	23.2	25.3	84.00	-58.7	1,322.0	589.6	544.2	45.41	12.986	
6,500.0	6,383.0	6,459.8	6,314.0	23.7	25.8	84.06	-59.1	1,344.9	599.2	553.0	46.22	12.965	
6,600.0	6,480.8	6,559.4	6,410.9	24.1	26.2	84.13	-59.5	1,367.8	608.8	561.8	47.03	12.945	
6,700.0	6,578.7	6,658.9	6,507.7	24.5	26.7	84.19	-59.9	1,390.8	618.4	570.6	47.84	12.926	
6,800.0	6,676.5	6,758.4	6,604.6	24.9	27.1	84.25	-60.3	1,413.7	628.0	579.4	48.65	12.908	
6,900.0	6,774.3	6,858.0	6,701.4	25.3	27.6	84.30	-60.7	1,436.6	637.6	588.1	49.46	12.890	
7,000.0	6,872.2	6,957.5	6,798.3	25.7	28.0	84.36	-61.2	1,459.5	647.2	596.9	50.28	12.873	
7,019.1	6,890.8	6,976.5	6,816.8	25.8	28.1	84.37	-61.2	1,463.9	649.0	598.6	50.43	12.870	
7,050.0	6,921.1	7,007.3	6,846.8	25.9	28.2	69.82	-61.4	1,471.0	651.3	600.6	50.66	12.855	
7,100.0	6,970.2	7,057.3	6,895.4	26.0	28.5	44.43	-61.6	1,482.5	651.8	600.8	50.97	12.788	
7,150.0	7,019.0	7,107.0	6,943.8	26.2	28.7	23.81	-61.8	1,493.9	648.5	597.3	51.19	12.668	
7,200.0	7,067.2	7,156.1	6,991.5	26.3	28.9	9.74	-62.0	1,505.2	641.5	590.2	51.33	12.498	
7,250.0	7,114.4	7,204.2	7,038.3	26.4	29.1	0.00	-62.2	1,516.3	630.9	579.5	51.36	12.284	
7,300.0	7,160.3	7,250.9	7,083.8	26.4	29.3	-7.35	-62.4	1,527.0	616.8	565.6	51.27	12.032	
7,350.0	7,204.5	7,296.0	7,127.7	26.5	29.5	-13.52	-62.6	1,537.4	599.5	548.5	51.03	11.748	
7,400.0	7,246.6	7,339.0	7,169.5	26.5	29.7	-19.19	-62.7	1,547.3	579.3	528.7	50.62	11.443	
7,450.0	7,286.4	7,489.3	7,314.5	26.5	30.4	-32.33	-46.3	1,581.5	553.4	503.8	49.68	11.139	
7,500.0	7,323.5	7,587.9	7,405.4	26.5	30.8	-47.90	-14.7	1,602.8	520.2	473.0	47.20	11.022	
7,550.0	7,357.7	7,634.4	7,446.0	26.5	31.0	-60.26	5.6	1,612.3	485.3	440.6	44.69	10.860	
7,600.0	7,388.7	7,654.7	7,463.3	26.5	31.0	-69.00	15.6	1,616.4	451.5	409.1	42.38	10.653	
7,650.0	7,416.3	7,660.8	7,468.4	26.5	31.1	-74.78	18.6	1,617.6	420.2	380.3	39.90	10.532	
7,700.0	7,440.2	7,658.3	7,466.3	26.5	31.1	-78.28	17.4	1,617.1	392.6	355.5	37.11	10.577	
7,750.0	7,460.3	7,650.5	7,459.7	26.5	31.0	-79.99	13.4	1,615.6	369.7	335.6	34.04	10.859	
7,800.0	7,476.4	7,639.0	7,450.0	26.5	31.0	-80.27	7.8	1,613.3	352.4	321.4	30.93	11.394	
7,850.0	7,488.4	7,624.9	7,437.9	26.6	30.9	-79.34	1.2	1,610.4	341.3	312.9	28.38	12.023	
7,900.0	7,496.2	7,609.0	7,424.0	26.6	30.9	-77.36	-5.9	1,607.2	336.7	309.5	27.19	12.385	
7,909.8	7,497.2	7,605.7	7,421.1	26.6	30.8	-76.87	-7.3	1,606.5	336.6	309.4	27.17	12.390	
7,950.0	7,499.8	7,591.6	7,408.7	26.7	30.8	-74.48	-13.2	1,603.6	338.6	310.8	27.81	12.178	
7,966.7	7,500.0	7,585.6	7,403.3	26.7	30.8	-73.34	-15.6	1,602.4	340.6	312.2	28.39	11.996	
8,000.0	7,500.0	7,574.0	7,392.9	26.8	30.7	-71.53	-20.1	1,599.9	346.6	316.6	30.05	11.534	
8,100.0	7,500.0	7,550.0	7,371.1	27.0	30.6	-67.78	-28.8	1,594.8	379.9	342.6	37.25	10.196	
8,200.0	7,500.0	7,522.4	7,345.6	27.4	30.5	-63.50	-37.5	1,588.8	432.0	388.3	43.72	9.881 SF	
8,300.0	7,500.0	7,500.0	7,324.6	27.9	30.4	-60.08	-43.7	1,583.9	497.9	449.3	48.57	10.252	
8,400.0	7,500.0	7,500.0	7,324.6	28.5	30.4	-60.08	-43.7	1,583.9	573.1	520.7	52.41	10.936	
8,500.0	7,500.0	7,477.7	7,303.6	29.1	30.3	-56.77	-48.9	1,578.9	654.2	599.7	54.52	11.999	
8,600.0	7,500.0	7,467.6	7,293.9	29.9	30.3	-55.28	-51.1	1,576.7	739.7	683.5	56.19	13.165	
8,700.0	7,500.0	7,450.0	7,277.1	30.8	30.2	-52.79	-54.4	1,572.7	828.4	771.2	57.23	14.475	
8,800.0	7,500.0	7,450.0	7,277.1	31.7	30.2	-52.79	-54.4	1,572.7	919.0	860.8	58.26	15.774	

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 2F-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 2F-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						
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
8,900.0	7,500.0	7,450.0	7,277.1	32.7	30.2	-52.79	-54.4	1,572.7	1,011.4	952.4	59.04	17.130	
9,000.0	7,500.0	7,450.0	7,277.1	33.7	30.2	-52.79	-54.4	1,572.7	1,105.2	1,045.5	59.65	18.526	
9,100.0	7,500.0	7,450.0	7,277.1	34.8	30.2	-52.79	-54.4	1,572.7	1,199.9	1,139.8	60.14	19.952	
9,200.0	7,500.0	7,429.6	7,257.5	36.0	30.1	-49.99	-57.5	1,568.1	1,294.9	1,234.6	60.28	21.483	
9,300.0	7,500.0	7,425.5	7,253.6	37.2	30.1	-49.44	-58.0	1,567.2	1,390.9	1,330.3	60.57	22.963	
9,400.0	7,500.0	7,421.9	7,250.0	38.4	30.1	-48.96	-58.5	1,566.3	1,487.3	1,426.5	60.82	24.453	
9,500.0	7,500.0	7,418.6	7,246.8	39.7	30.1	-48.52	-58.9	1,565.6	1,584.2	1,523.1	61.04	25.952	
9,600.0	7,500.0	7,400.0	7,228.9	41.1	30.0	-46.14	-60.7	1,561.3	1,681.7	1,620.6	61.06	27.542	
9,700.0	7,500.0	7,400.0	7,228.9	42.4	30.0	-46.14	-60.7	1,561.3	1,779.1	1,717.8	61.27	29.037	
9,800.0	7,500.0	7,400.0	7,228.9	43.8	30.0	-46.14	-60.7	1,561.3	1,876.8	1,815.3	61.46	30.537	
9,900.0	7,500.0	7,400.0	7,228.9	45.2	30.0	-46.14	-60.7	1,561.3	1,974.7	1,913.0	61.63	32.040	
10,000.0	7,500.0	7,400.0	7,228.9	46.6	30.0	-46.14	-60.7	1,561.3	2,072.8	2,011.0	61.79	33.545	
10,100.0	7,500.0	7,400.0	7,228.9	48.1	30.0	-46.14	-60.7	1,561.3	2,171.1	2,109.1	61.94	35.052	
10,200.0	7,500.0	7,400.0	7,228.9	49.6	30.0	-46.14	-60.7	1,561.3	2,269.5	2,207.4	62.08	36.558	
10,300.0	7,500.0	7,400.0	7,228.9	51.1	30.0	-46.14	-60.7	1,561.3	2,368.1	2,305.8	62.21	38.065	
10,400.0	7,500.0	7,400.0	7,228.9	52.6	30.0	-46.14	-60.7	1,561.3	2,466.7	2,404.4	62.34	39.572	
10,500.0	7,500.0	7,400.0	7,228.9	54.1	30.0	-46.14	-60.7	1,561.3	2,565.5	2,503.1	62.46	41.077	
10,600.0	7,500.0	7,400.0	7,228.9	55.6	30.0	-46.14	-60.7	1,561.3	2,664.4	2,601.8	62.57	42.581	
10,700.0	7,500.0	7,400.0	7,228.9	57.2	30.0	-46.14	-60.7	1,561.3	2,763.3	2,700.7	62.68	44.084	
10,800.0	7,500.0	7,400.0	7,228.9	58.8	30.0	-46.14	-60.7	1,561.3	2,862.4	2,799.6	62.79	45.585	
10,900.0	7,500.0	7,400.0	7,228.9	60.3	30.0	-46.14	-60.7	1,561.3	2,961.5	2,898.6	62.90	47.084	
11,000.0	7,500.0	7,400.0	7,228.9	61.9	30.0	-46.14	-60.7	1,561.3	3,060.6	2,997.6	63.00	48.580	
11,100.0	7,500.0	7,400.0	7,228.9	63.5	30.0	-46.14	-60.7	1,561.3	3,159.8	3,096.7	63.10	50.075	
11,200.0	7,500.0	7,400.0	7,228.9	65.1	30.0	-46.14	-60.7	1,561.3	3,259.1	3,195.9	63.20	51.566	
11,300.0	7,500.0	7,400.0	7,228.9	66.7	30.0	-46.14	-60.7	1,561.3	3,358.4	3,295.1	63.30	53.055	
11,400.0	7,500.0	7,400.0	7,228.9	68.3	30.0	-46.14	-60.7	1,561.3	3,457.7	3,394.3	63.40	54.542	
11,500.0	7,500.0	7,400.0	7,228.9	70.0	30.0	-46.14	-60.7	1,561.3	3,557.1	3,493.6	63.49	56.025	
11,600.0	7,500.0	7,400.0	7,228.9	71.6	30.0	-46.14	-60.7	1,561.3	3,656.5	3,592.9	63.58	57.506	
11,700.0	7,500.0	7,400.0	7,228.9	73.2	30.0	-46.14	-60.7	1,561.3	3,755.9	3,692.3	63.68	58.984	
11,800.0	7,500.0	7,400.0	7,228.9	74.9	30.0	-46.14	-60.7	1,561.3	3,855.4	3,791.6	63.77	60.458	
11,900.0	7,500.0	7,400.0	7,228.9	76.5	30.0	-46.14	-60.7	1,561.3	3,954.9	3,891.0	63.86	61.929	
12,000.0	7,500.0	7,400.0	7,228.9	78.2	30.0	-46.14	-60.7	1,561.3	4,054.4	3,990.5	63.95	63.398	
12,100.0	7,500.0	7,400.0	7,228.9	79.8	30.0	-46.14	-60.7	1,561.3	4,154.0	4,089.9	64.04	64.863	
12,200.0	7,500.0	7,400.0	7,228.9	81.5	30.0	-46.14	-60.7	1,561.3	4,253.5	4,189.4	64.13	66.325	
12,300.0	7,500.0	7,400.0	7,228.9	83.1	30.0	-46.14	-60.7	1,561.3	4,353.1	4,288.9	64.22	67.783	
12,400.0	7,500.0	7,400.0	7,228.9	84.8	30.0	-46.14	-60.7	1,561.3	4,452.7	4,388.4	64.31	69.238	
12,500.0	7,500.0	7,400.0	7,228.9	86.5	30.0	-46.14	-60.7	1,561.3	4,552.4	4,488.0	64.40	70.690	
12,600.0	7,500.0	7,400.0	7,228.9	88.1	30.0	-46.14	-60.7	1,561.3	4,652.0	4,587.5	64.49	72.138	
12,700.0	7,500.0	7,400.0	7,228.9	89.8	30.0	-46.14	-60.7	1,561.3	4,751.6	4,687.1	64.57	73.583	
12,800.0	7,500.0	7,400.0	7,228.9	91.5	30.0	-46.14	-60.7	1,561.3	4,851.3	4,786.6	64.66	75.025	
12,900.0	7,500.0	7,400.0	7,228.9	93.2	30.0	-46.14	-60.7	1,561.3	4,951.0	4,886.2	64.75	76.463	
13,000.0	7,500.0	7,376.8	7,206.3	94.9	29.9	-43.31	-62.2	1,556.0	5,050.2	4,985.5	64.64	78.125	
13,100.0	7,500.0	7,376.4	7,205.9	96.5	29.9	-43.26	-62.3	1,555.9	5,149.8	5,085.1	64.73	79.564	
13,200.0	7,500.0	7,375.9	7,205.5	98.2	29.9	-43.21	-62.3	1,555.8	5,249.5	5,184.7	64.81	80.999	
13,300.0	7,500.0	7,375.5	7,205.1	99.9	29.9	-43.16	-62.3	1,555.7	5,349.3	5,284.4	64.89	82.431	
13,400.0	7,500.0	7,375.1	7,204.7	101.6	29.9	-43.11	-62.3	1,555.6	5,449.0	5,384.0	64.98	83.859	
13,500.0	7,500.0	7,374.7	7,204.3	103.3	29.9	-43.07	-62.3	1,555.5	5,548.7	5,483.6	65.06	85.284	
13,600.0	7,500.0	7,374.4	7,204.0	105.0	29.9	-43.02	-62.3	1,555.4	5,648.4	5,583.3	65.15	86.705	
13,700.0	7,500.0	7,374.0	7,203.6	106.7	29.9	-42.98	-62.3	1,555.4	5,748.2	5,683.0	65.23	88.123	
13,800.0	7,500.0	7,373.7	7,203.3	108.4	29.9	-42.94	-62.4	1,555.3	5,847.9	5,782.6	65.31	89.537	
13,900.0	7,500.0	7,373.3	7,202.9	110.1	29.9	-42.90	-62.4	1,555.2	5,947.7	5,882.3	65.40	90.948	
14,000.0	7,500.0	7,373.0	7,202.6	111.8	29.9	-42.86	-62.4	1,555.1	6,047.5	5,982.0	65.48	92.355	

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 2F-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 2F-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 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		
14,100.0	7,500.0	7,372.7	7,202.3	113.5	29.9	-42.82	-62.4	1,555.1	6,147.3	6,081.7	65.56	93.758		
14,200.0	7,500.0	7,349.2	7,179.4	115.2	29.8	-40.16	-62.8	1,549.6	6,247.6	6,182.1	65.46	95.443		
14,300.0	7,500.0	7,349.2	7,179.4	116.9	29.8	-40.16	-62.8	1,549.6	6,347.3	6,281.8	65.55	96.839		
14,400.0	7,500.0	7,349.2	7,179.4	118.6	29.8	-40.16	-62.8	1,549.6	6,447.1	6,381.5	65.63	98.231		
14,500.0	7,500.0	7,349.2	7,179.4	120.4	29.8	-40.16	-62.8	1,549.6	6,546.9	6,481.2	65.72	99.620		
14,600.0	7,500.0	7,349.2	7,179.4	122.1	29.8	-40.16	-62.8	1,549.6	6,646.7	6,580.9	65.81	101.005		
14,700.0	7,500.0	7,349.2	7,179.4	123.8	29.8	-40.16	-62.8	1,549.6	6,746.5	6,680.6	65.89	102.386		
14,800.0	7,500.0	7,349.2	7,179.4	125.5	29.8	-40.16	-62.8	1,549.6	6,846.3	6,780.3	65.98	103.764		
14,900.0	7,500.0	7,349.2	7,179.4	127.2	29.8	-40.16	-62.8	1,549.6	6,946.1	6,880.1	66.07	105.139		
15,000.0	7,500.0	7,349.2	7,179.4	128.9	29.8	-40.16	-62.8	1,549.6	7,046.0	6,979.8	66.15	106.509		
15,100.0	7,500.0	7,349.2	7,179.4	130.6	29.8	-40.16	-62.8	1,549.6	7,145.8	7,079.5	66.24	107.877		
15,200.0	7,500.0	7,349.2	7,179.4	132.4	29.8	-40.16	-62.8	1,549.6	7,245.6	7,179.3	66.33	109.241		
15,300.0	7,500.0	7,349.2	7,179.4	134.1	29.8	-40.16	-62.8	1,549.6	7,345.4	7,279.0	66.41	110.601		
15,400.0	7,500.0	7,349.2	7,179.4	135.8	29.8	-40.16	-62.8	1,549.6	7,445.3	7,378.8	66.50	111.958		
15,500.0	7,500.0	7,349.2	7,179.4	137.5	29.8	-40.16	-62.8	1,549.6	7,545.1	7,478.5	66.59	113.311		
15,600.0	7,500.0	7,349.2	7,179.4	139.2	29.8	-40.16	-62.8	1,549.6	7,645.0	7,578.3	66.67	114.661		
15,700.0	7,500.0	7,349.2	7,179.4	141.0	29.8	-40.16	-62.8	1,549.6	7,744.8	7,678.1	66.76	116.007		
15,800.0	7,500.0	7,349.2	7,179.4	142.7	29.8	-40.16	-62.8	1,549.6	7,844.7	7,777.8	66.85	117.350		
15,841.7	7,500.0	7,349.2	7,179.4	143.4	29.8	-40.16	-62.8	1,549.6	7,886.3	7,819.4	66.88	117.909		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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		
0.0	0.0	0.0	0.0	0.0	0.0	90.63	-0.7	67.5	67.5					
100.0	100.0	100.0	100.0	0.2	0.2	90.63	-0.7	67.5	67.5	67.2	0.30	222.120		
200.0	200.0	200.0	200.0	0.3	0.3	90.63	-0.7	67.5	67.5	66.8	0.65	103.339 CC, ES		
300.0	300.0	298.8	298.8	0.5	0.5	90.64	-0.8	68.3	68.3	67.3	1.00	68.339		
400.0	400.0	397.6	397.6	0.7	0.7	24.60	-0.8	70.9	70.1	68.8	1.35	52.070		
500.0	500.0	496.4	496.2	0.9	0.9	25.49	-1.0	75.1	72.0	70.4	1.69	42.543		
600.0	599.9	595.1	594.8	1.0	1.1	26.91	-1.2	81.1	74.2	72.1	2.04	36.322		
700.0	699.7	693.7	693.1	1.2	1.3	28.79	-1.4	88.7	76.5	74.1	2.39	31.970		
800.0	799.4	792.3	791.2	1.4	1.5	31.07	-1.7	98.0	79.2	76.4	2.75	28.778		
900.0	898.9	890.8	889.1	1.7	1.7	33.69	-2.0	109.0	82.2	79.1	3.12	26.346		
1,000.0	998.3	989.2	986.7	1.9	2.0	36.58	-2.4	121.7	85.6	82.1	3.50	24.433		
1,100.0	1,097.4	1,087.6	1,084.0	2.2	2.3	39.67	-2.9	136.0	89.6	85.7	3.92	22.877		
1,200.0	1,196.3	1,185.8	1,181.0	2.5	2.6	42.88	-3.4	152.0	94.2	89.8	4.37	21.571		
1,300.0	1,294.9	1,284.0	1,277.5	2.8	3.0	46.13	-3.9	169.6	99.4	94.6	4.86	20.443		
1,400.0	1,393.3	1,382.0	1,373.6	3.2	3.3	49.37	-4.5	188.9	105.4	100.0	5.42	19.445		
1,494.4	1,485.8	1,474.4	1,463.9	3.5	3.7	52.37	-5.1	208.5	111.8	105.7	6.01	18.601		
1,500.0	1,491.2	1,479.9	1,469.3	3.5	3.7	52.55	-5.2	209.7	112.2	106.1	6.04	18.556		
1,600.0	1,589.1	1,577.7	1,564.4	3.9	4.2	55.29	-5.8	232.2	120.2	113.5	6.71	17.925		
1,700.0	1,686.9	1,675.3	1,659.0	4.3	4.6	57.28	-6.6	256.2	130.0	122.6	7.39	17.589		
1,800.0	1,784.8	1,772.7	1,753.0	4.7	5.1	58.62	-7.4	281.8	141.3	133.2	8.08	17.484 SF		
1,900.0	1,882.6	1,869.8	1,846.2	5.1	5.6	59.40	-8.2	308.9	154.0	145.3	8.77	17.560		
2,000.0	1,980.4	1,966.5	1,938.7	5.5	6.1	59.73	-9.1	337.5	168.2	158.7	9.46	17.784		
2,100.0	2,078.3	2,063.1	2,030.4	5.9	6.7	59.72	-10.0	367.6	183.7	173.5	10.13	18.133		
2,200.0	2,176.1	2,161.8	2,124.0	6.3	7.3	59.59	-11.0	399.0	199.8	188.9	10.82	18.464		
2,300.0	2,273.9	2,260.5	2,217.6	6.7	7.8	59.47	-12.0	430.3	215.8	204.3	11.51	18.751		
2,400.0	2,371.8	2,359.2	2,311.1	7.1	8.4	59.38	-13.0	461.7	231.9	219.7	12.21	19.001		
2,500.0	2,469.6	2,457.9	2,404.7	7.5	9.0	59.29	-13.9	493.1	248.0	235.1	12.90	19.221		
2,600.0	2,567.4	2,556.6	2,498.3	7.9	9.6	59.22	-14.9	524.5	264.1	250.5	13.60	19.415		
2,700.0	2,665.3	2,655.3	2,591.8	8.3	10.2	59.16	-15.9	555.9	280.2	265.9	14.30	19.588		
2,800.0	2,763.1	2,754.0	2,685.4	8.7	10.8	59.10	-16.9	587.3	296.3	281.2	15.01	19.743		
2,900.0	2,860.9	2,852.7	2,779.0	9.1	11.4	59.05	-17.8	618.7	312.3	296.6	15.71	19.883		
3,000.0	2,958.8	2,951.4	2,872.5	9.5	12.0	59.00	-18.8	650.1	328.4	312.0	16.41	20.010		
3,100.0	3,056.6	3,050.1	2,966.1	9.9	12.6	58.96	-19.8	681.5	344.5	327.4	17.12	20.125		
3,200.0	3,154.4	3,148.8	3,059.7	10.3	13.2	58.92	-20.8	712.9	360.6	342.8	17.82	20.230		
3,300.0	3,252.3	3,247.5	3,153.2	10.7	13.7	58.88	-21.7	744.3	376.7	358.1	18.53	20.326		
3,400.0	3,350.1	3,346.2	3,246.8	11.1	14.3	58.85	-22.7	775.7	392.8	373.5	19.24	20.414		
3,500.0	3,447.9	3,444.9	3,340.4	11.5	14.9	58.82	-23.7	807.1	408.8	388.9	19.95	20.496		
3,600.0	3,545.8	3,543.6	3,433.9	11.9	15.5	58.79	-24.7	838.5	424.9	404.3	20.66	20.572		
3,700.0	3,643.6	3,642.3	3,527.5	12.3	16.1	58.77	-25.6	869.9	441.0	419.7	21.37	20.642		
3,800.0	3,741.5	3,741.0	3,621.1	12.7	16.7	58.74	-26.6	901.3	457.1	435.0	22.07	20.707		
3,900.0	3,839.3	3,839.7	3,714.6	13.1	17.3	58.72	-27.6	932.7	473.2	450.4	22.78	20.768		
4,000.0	3,937.1	3,938.4	3,808.2	13.5	17.9	58.70	-28.6	964.0	489.3	465.8	23.50	20.825		
4,100.0	4,035.0	4,037.1	3,901.8	13.9	18.5	58.68	-29.5	995.4	505.4	481.2	24.21	20.878		
4,200.0	4,132.8	4,135.8	3,995.3	14.3	19.1	58.66	-30.5	1,026.8	521.4	496.5	24.92	20.928		
4,300.0	4,230.6	4,234.4	4,088.9	14.7	19.7	58.65	-31.5	1,058.2	537.5	511.9	25.63	20.975		
4,400.0	4,328.5	4,333.1	4,182.5	15.1	20.3	58.63	-32.5	1,089.6	553.6	527.3	26.34	21.019		
4,500.0	4,426.3	4,431.8	4,276.0	15.5	20.9	58.61	-33.4	1,121.0	569.7	542.7	27.05	21.061		
4,600.0	4,524.1	4,530.5	4,369.6	15.9	21.5	58.60	-34.4	1,152.4	585.8	558.0	27.76	21.100		
4,700.0	4,622.0	4,629.2	4,463.2	16.3	22.1	58.59	-35.4	1,183.8	601.9	573.4	28.47	21.138		
4,800.0	4,719.8	4,727.9	4,556.7	16.7	22.7	58.57	-36.4	1,215.2	618.0	588.8	29.19	21.173		
4,900.0	4,817.6	4,826.6	4,650.3	17.2	23.3	58.56	-37.3	1,246.6	634.0	604.1	29.90	21.207		
5,000.0	4,915.5	4,925.3	4,743.9	17.6	23.9	58.55	-38.3	1,278.0	650.1	619.5	30.61	21.239		

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 2F-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 2F-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							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	5,013.3	5,024.0	4,837.4	18.0	24.5	58.54	-39.3	1,309.4	666.2	634.9	31.32	21.269		
5,200.0	5,111.1	5,122.7	4,931.0	18.4	25.1	58.53	-40.3	1,340.8	682.3	650.3	32.04	21.298		
5,300.0	5,209.0	5,221.4	5,024.6	18.8	25.7	58.52	-41.2	1,372.2	698.4	665.6	32.75	21.326		
5,400.0	5,306.8	5,320.1	5,118.1	19.2	26.3	58.51	-42.2	1,403.6	714.5	681.0	33.46	21.352		
5,500.0	5,404.6	5,418.8	5,211.7	19.6	26.9	58.50	-43.2	1,435.0	730.6	696.4	34.17	21.377		
5,600.0	5,502.5	5,517.5	5,305.3	20.0	27.5	58.49	-44.1	1,466.4	746.6	711.8	34.89	21.401		
5,700.0	5,600.3	5,616.2	5,398.8	20.4	28.1	58.48	-45.1	1,497.8	762.7	727.1	35.60	21.424		
5,800.0	5,698.2	5,714.9	5,492.4	20.8	28.7	58.47	-46.1	1,529.1	778.8	742.5	36.31	21.447		
5,900.0	5,796.0	5,813.6	5,586.0	21.2	29.3	58.47	-47.1	1,560.5	794.9	757.9	37.03	21.468		
6,000.0	5,893.8	5,912.3	5,679.5	21.6	29.9	58.46	-48.0	1,591.9	811.0	773.3	37.74	21.488		
6,100.0	5,991.7	6,011.0	5,773.1	22.0	30.5	58.45	-49.0	1,623.3	827.1	788.6	38.45	21.508		
6,200.0	6,089.5	6,109.7	5,866.7	22.4	31.1	58.44	-50.0	1,654.7	843.2	804.0	39.17	21.527		
6,300.0	6,187.3	6,208.4	5,960.2	22.8	31.7	58.44	-51.0	1,686.1	859.2	819.4	39.88	21.545		
6,400.0	6,285.2	6,307.1	6,053.8	23.2	32.3	58.43	-51.9	1,717.5	875.3	834.7	40.60	21.562		
6,500.0	6,383.0	6,405.8	6,147.4	23.7	32.9	58.42	-52.9	1,748.9	891.4	850.1	41.31	21.579		
6,600.0	6,480.8	6,504.5	6,240.9	24.1	33.5	58.42	-53.9	1,780.3	907.5	865.5	42.02	21.595		
6,700.0	6,578.7	6,603.2	6,334.5	24.5	34.1	58.41	-54.9	1,811.7	923.6	880.9	42.74	21.611		
6,800.0	6,676.5	6,701.9	6,428.1	24.9	34.7	58.41	-55.8	1,843.1	939.7	896.2	43.45	21.626		
6,900.0	6,774.3	6,800.6	6,521.6	25.3	35.3	58.40	-56.8	1,874.5	955.8	911.6	44.17	21.641		
7,000.0	6,872.2	6,899.3	6,615.2	25.7	35.9	58.40	-57.8	1,905.9	971.9	927.0	44.88	21.655		
7,019.1	6,890.8	6,918.1	6,633.1	25.8	36.0	58.40	-58.0	1,911.9	974.9	929.9	45.02	21.657		
7,050.0	6,921.1	6,948.7	6,662.0	25.9	36.2	44.09	-58.3	1,921.6	979.4	934.2	45.19	21.671		
7,100.0	6,970.2	6,998.2	6,709.0	26.0	36.5	19.05	-58.8	1,937.4	984.7	939.3	45.33	21.721		
7,150.0	7,019.0	7,047.6	6,755.8	26.2	36.8	-1.26	-59.3	1,953.0	987.4	942.1	45.29	21.801		
7,200.0	7,067.2	7,096.3	6,802.0	26.3	37.1	-15.02	-59.7	1,968.6	987.7	942.6	45.07	21.915		
7,250.0	7,114.4	7,144.1	6,847.3	26.4	37.4	-24.40	-60.2	1,983.8	985.7	941.0	44.66	22.072		
7,300.0	7,160.3	7,190.6	6,891.4	26.4	37.7	-31.29	-60.7	1,998.5	981.5	937.4	44.05	22.283		
7,350.0	7,204.5	8,162.7	7,500.0	26.5	41.6	-87.18	530.3	2,145.2	973.5	946.4	27.19	35.806		
7,400.0	7,246.6	7,870.5	7,432.5	26.5	40.8	-74.36	249.3	2,149.7	952.9	919.3	33.55	28.404		
7,450.0	7,286.4	7,827.7	7,411.5	26.5	40.6	-75.72	212.1	2,146.3	933.5	899.9	33.64	27.754		
7,500.0	7,323.5	7,796.7	7,394.8	26.5	40.5	-77.09	186.2	2,143.2	916.5	883.3	33.14	27.654		
7,550.0	7,357.7	7,768.5	7,378.4	26.5	40.4	-78.01	163.5	2,139.9	901.9	869.5	32.36	27.874		
7,600.0	7,388.7	7,741.5	7,361.8	26.5	40.3	-78.48	142.5	2,136.4	889.7	858.4	31.38	28.355		
7,650.0	7,416.3	7,715.0	7,344.7	26.5	40.2	-78.53	122.7	2,132.5	880.1	849.8	30.31	29.040		
7,700.0	7,440.2	7,688.9	7,327.0	26.5	40.1	-78.20	104.0	2,128.4	872.9	843.7	29.23	29.859		
7,750.0	7,460.3	7,663.0	7,308.6	26.5	40.0	-77.52	86.3	2,124.0	868.1	839.8	28.28	30.700		
7,800.0	7,476.4	7,637.2	7,289.6	26.5	39.9	-76.52	69.5	2,119.2	865.6	838.1	27.55	31.420		
7,833.1	7,484.8	7,620.3	7,276.8	26.5	39.9	-75.71	58.9	2,115.9	865.2	837.9	27.25	31.746		
7,850.0	7,488.4	7,611.6	7,270.1	26.6	39.8	-75.25	53.7	2,114.2	865.3	838.1	27.16	31.862		
7,900.0	7,496.2	7,586.0	7,249.9	26.6	39.7	-73.72	38.8	2,108.9	866.9	839.8	27.18	31.900		
7,950.0	7,499.8	7,560.5	7,229.3	26.7	39.6	-71.97	24.9	2,103.3	870.4	842.7	27.64	31.490		
7,966.7	7,500.0	7,552.0	7,222.3	26.7	39.6	-71.34	20.5	2,101.4	871.9	844.0	27.89	31.263		
8,000.0	7,500.0	7,535.9	7,208.8	26.8	39.5	-70.42	12.4	2,097.7	875.5	847.0	28.55	30.671		
8,100.0	7,500.0	7,495.5	7,174.3	27.0	39.3	-68.07	-6.1	2,087.9	892.4	860.9	31.52	28.314		
8,200.0	7,500.0	7,464.4	7,147.0	27.4	39.2	-66.21	-18.6	2,080.0	918.2	882.7	35.50	25.866		
8,300.0	7,500.0	7,439.8	7,124.9	27.9	39.1	-64.72	-27.4	2,073.5	952.7	912.7	40.00	23.815		
8,400.0	7,500.0	7,419.9	7,106.9	28.5	38.9	-63.51	-33.8	2,068.1	995.4	950.9	44.43	22.404		
8,500.0	7,500.0	7,400.0	7,088.7	29.1	38.9	-62.30	-39.5	2,062.5	1,045.3	996.8	48.51	21.549		
8,600.0	7,500.0	7,400.0	7,088.7	29.9	38.9	-62.30	-39.5	2,062.5	1,101.9	1,049.4	52.44	21.010		
8,700.0	7,500.0	7,378.4	7,068.7	30.8	38.7	-60.97	-45.0	2,056.3	1,163.8	1,108.3	55.52	20.961		
8,800.0	7,500.0	7,368.4	7,059.4	31.7	38.7	-60.36	-47.2	2,053.5	1,230.6	1,172.3	58.34	21.094		
8,900.0	7,500.0	7,350.0	7,042.2	32.7	38.6	-59.23	-51.0	2,048.1	1,301.6	1,241.0	60.62	21.472		

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 2F-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 2F-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		
9,000.0	7,500.0	7,350.0	7,042.2	33.7	38.6	-59.23	-51.0	2,048.1	1,376.0	1,313.2	62.81	21.907		
9,100.0	7,500.0	7,350.0	7,042.2	34.8	38.6	-59.23	-51.0	2,048.1	1,453.4	1,388.7	64.68	22.470		
9,200.0	7,500.0	7,350.0	7,042.2	36.0	38.6	-59.23	-51.0	2,048.1	1,533.4	1,467.2	66.29	23.134		
9,300.0	7,500.0	7,350.0	7,042.2	37.2	38.6	-59.23	-51.0	2,048.1	1,615.7	1,548.0	67.67	23.878		
9,400.0	7,500.0	7,329.8	7,023.2	38.4	38.5	-58.00	-54.4	2,042.1	1,699.5	1,630.9	68.59	24.779		
9,500.0	7,500.0	7,325.5	7,019.2	39.7	38.4	-57.74	-55.0	2,040.8	1,785.1	1,715.5	69.57	25.658		
9,600.0	7,500.0	7,321.7	7,015.6	41.1	38.4	-57.50	-55.6	2,039.6	1,872.1	1,801.6	70.43	26.581		
9,700.0	7,500.0	7,300.0	6,995.1	42.4	38.3	-56.19	-58.2	2,033.0	1,960.6	1,889.7	70.95	27.634		
9,800.0	7,500.0	7,300.0	6,995.1	43.8	38.3	-56.19	-58.2	2,033.0	2,049.8	1,978.1	71.66	28.604		
9,900.0	7,500.0	7,300.0	6,995.1	45.2	38.3	-56.19	-58.2	2,033.0	2,139.9	2,067.6	72.29	29.602		
10,000.0	7,500.0	7,300.0	6,995.1	46.6	38.3	-56.19	-58.2	2,033.0	2,230.9	2,158.0	72.85	30.622		
10,100.0	7,500.0	7,300.0	6,995.1	48.1	38.3	-56.19	-58.2	2,033.0	2,322.6	2,249.2	73.35	31.662		
10,200.0	7,500.0	7,300.0	6,995.1	49.6	38.3	-56.19	-58.2	2,033.0	2,415.0	2,341.2	73.81	32.720		
10,300.0	7,500.0	7,300.0	6,995.1	51.1	38.3	-56.19	-58.2	2,033.0	2,507.9	2,433.7	74.22	33.791		
10,400.0	7,500.0	7,300.0	6,995.1	52.6	38.3	-56.19	-58.2	2,033.0	2,601.4	2,526.8	74.59	34.875		
10,500.0	7,500.0	7,300.0	6,995.1	54.1	38.3	-56.19	-58.2	2,033.0	2,695.3	2,620.4	74.93	35.970		
10,600.0	7,500.0	7,300.0	6,995.1	55.6	38.3	-56.19	-58.2	2,033.0	2,789.7	2,714.5	75.25	37.075		
10,700.0	7,500.0	7,300.0	6,995.1	57.2	38.3	-56.19	-58.2	2,033.0	2,884.5	2,808.9	75.53	38.187		
10,800.0	7,500.0	7,300.0	6,995.1	58.8	38.3	-56.19	-58.2	2,033.0	2,979.5	2,903.7	75.80	39.307		
10,900.0	7,500.0	7,300.0	6,995.1	60.3	38.3	-56.19	-58.2	2,033.0	3,074.9	2,998.9	76.05	40.433		
11,000.0	7,500.0	7,300.0	6,995.1	61.9	38.3	-56.19	-58.2	2,033.0	3,170.6	3,094.4	76.28	41.564		
11,100.0	7,500.0	7,300.0	6,995.1	63.5	38.3	-56.19	-58.2	2,033.0	3,266.6	3,190.1	76.50	42.701		
11,200.0	7,500.0	7,300.0	6,995.1	65.1	38.3	-56.19	-58.2	2,033.0	3,362.8	3,286.1	76.70	43.841		
11,300.0	7,500.0	7,300.0	6,995.1	66.7	38.3	-56.19	-58.2	2,033.0	3,459.2	3,382.3	76.90	44.984		
11,400.0	7,500.0	7,300.0	6,995.1	68.3	38.3	-56.19	-58.2	2,033.0	3,555.8	3,478.7	77.08	46.131		
11,500.0	7,500.0	7,300.0	6,995.1	70.0	38.3	-56.19	-58.2	2,033.0	3,652.5	3,575.3	77.25	47.280		
11,600.0	7,500.0	7,300.0	6,995.1	71.6	38.3	-56.19	-58.2	2,033.0	3,749.5	3,672.1	77.42	48.432		
11,700.0	7,500.0	7,300.0	6,995.1	73.2	38.3	-56.19	-58.2	2,033.0	3,846.6	3,769.0	77.58	49.585		
11,800.0	7,500.0	7,300.0	6,995.1	74.9	38.3	-56.19	-58.2	2,033.0	3,943.8	3,866.1	77.73	50.740		
11,900.0	7,500.0	7,300.0	6,995.1	76.5	38.3	-56.19	-58.2	2,033.0	4,041.2	3,963.3	77.87	51.896		
12,000.0	7,500.0	7,300.0	6,995.1	78.2	38.3	-56.19	-58.2	2,033.0	4,138.7	4,060.7	78.01	53.054		
12,100.0	7,500.0	7,300.0	6,995.1	79.8	38.3	-56.19	-58.2	2,033.0	4,236.3	4,158.2	78.14	54.212		
12,200.0	7,500.0	7,277.9	6,974.2	81.5	38.2	-54.86	-60.0	2,026.2	4,333.6	4,255.6	78.03	55.541		
12,300.0	7,500.0	7,277.2	6,973.5	83.1	38.2	-54.81	-60.0	2,025.9	4,431.4	4,353.3	78.14	56.709		
12,400.0	7,500.0	7,276.5	6,972.8	84.8	38.2	-54.77	-60.1	2,025.7	4,529.3	4,451.1	78.26	57.877		
12,500.0	7,500.0	7,275.8	6,972.1	86.5	38.2	-54.73	-60.1	2,025.5	4,627.3	4,548.9	78.37	59.044		
12,600.0	7,500.0	7,275.1	6,971.5	88.1	38.2	-54.69	-60.2	2,025.3	4,725.4	4,646.9	78.48	60.212		
12,700.0	7,500.0	7,274.5	6,970.9	89.8	38.2	-54.65	-60.2	2,025.1	4,823.5	4,744.9	78.59	61.380		
12,800.0	7,500.0	7,273.9	6,970.3	91.5	38.2	-54.61	-60.2	2,024.9	4,921.7	4,843.1	78.69	62.547		
12,900.0	7,500.0	7,273.3	6,969.8	93.2	38.2	-54.58	-60.3	2,024.7	5,020.0	4,941.2	78.79	63.713		
13,000.0	7,500.0	7,272.7	6,969.2	94.9	38.1	-54.55	-60.3	2,024.6	5,118.4	5,039.5	78.89	64.879		
13,100.0	7,500.0	7,250.0	6,947.7	96.5	38.0	-53.20	-61.1	2,017.4	5,217.3	5,138.5	78.74	66.260		
13,200.0	7,500.0	7,250.0	6,947.7	98.2	38.0	-53.20	-61.1	2,017.4	5,315.7	5,236.9	78.84	67.422		
13,300.0	7,500.0	7,250.0	6,947.7	99.9	38.0	-53.20	-61.1	2,017.4	5,414.2	5,335.3	78.94	68.583		
13,400.0	7,500.0	7,250.0	6,947.7	101.6	38.0	-53.20	-61.1	2,017.4	5,512.8	5,433.8	79.04	69.744		
13,500.0	7,500.0	7,250.0	6,947.7	103.3	38.0	-53.20	-61.1	2,017.4	5,611.4	5,532.3	79.14	70.903		
13,600.0	7,500.0	7,250.0	6,947.7	105.0	38.0	-53.20	-61.1	2,017.4	5,710.1	5,630.8	79.24	72.062		
13,700.0	7,500.0	7,250.0	6,947.7	106.7	38.0	-53.20	-61.1	2,017.4	5,808.8	5,729.5	79.33	73.219		
13,800.0	7,500.0	7,250.0	6,947.7	108.4	38.0	-53.20	-61.1	2,017.4	5,907.6	5,828.1	79.43	74.376		
13,900.0	7,500.0	7,250.0	6,947.7	110.1	38.0	-53.20	-61.1	2,017.4	6,006.3	5,926.8	79.52	75.531		
14,000.0	7,500.0	7,250.0	6,947.7	111.8	38.0	-53.20	-61.1	2,017.4	6,105.2	6,025.6	79.61	76.685		
14,100.0	7,500.0	7,250.0	6,947.7	113.5	38.0	-53.20	-61.1	2,017.4	6,204.1	6,124.3	79.71	77.837		

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 2F-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 2F-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									
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		
14,200.0	7,500.0	7,250.0	6,947.7	115.2	38.0	-53.20	-61.1	2,017.4	6,303.0	6,223.2	79.80	78.989			
14,300.0	7,500.0	7,250.0	6,947.7	116.9	38.0	-53.20	-61.1	2,017.4	6,401.9	6,322.0	79.89	80.139			
14,400.0	7,500.0	7,250.0	6,947.7	118.6	38.0	-53.20	-61.1	2,017.4	6,500.9	6,420.9	79.97	81.287			
14,500.0	7,500.0	7,250.0	6,947.7	120.4	38.0	-53.20	-61.1	2,017.4	6,599.9	6,519.8	80.06	82.434			
14,600.0	7,500.0	7,250.0	6,947.7	122.1	38.0	-53.20	-61.1	2,017.4	6,698.9	6,618.8	80.15	83.580			
14,700.0	7,500.0	7,250.0	6,947.7	123.8	38.0	-53.20	-61.1	2,017.4	6,798.0	6,717.7	80.24	84.724			
14,800.0	7,500.0	7,250.0	6,947.7	125.5	38.0	-53.20	-61.1	2,017.4	6,897.1	6,816.7	80.32	85.867			
14,900.0	7,500.0	7,250.0	6,947.7	127.2	38.0	-53.20	-61.1	2,017.4	6,996.2	6,915.8	80.41	87.008			
15,000.0	7,500.0	7,250.0	6,947.7	128.9	38.0	-53.20	-61.1	2,017.4	7,095.3	7,014.8	80.49	88.148			
15,100.0	7,500.0	7,250.0	6,947.7	130.6	38.0	-53.20	-61.1	2,017.4	7,194.5	7,113.9	80.58	89.285			
15,200.0	7,500.0	7,250.0	6,947.7	132.4	38.0	-53.20	-61.1	2,017.4	7,293.7	7,213.0	80.66	90.422			
15,300.0	7,500.0	7,250.0	6,947.7	134.1	38.0	-53.20	-61.1	2,017.4	7,392.9	7,312.1	80.75	91.556			
15,400.0	7,500.0	7,250.0	6,947.7	135.8	38.0	-53.20	-61.1	2,017.4	7,492.1	7,411.3	80.83	92.689			
15,500.0	7,500.0	7,250.0	6,947.7	137.5	38.0	-53.20	-61.1	2,017.4	7,591.4	7,510.4	80.91	93.820			
15,600.0	7,500.0	7,250.0	6,947.7	139.2	38.0	-53.20	-61.1	2,017.4	7,690.6	7,609.6	81.00	94.950			
15,700.0	7,500.0	7,250.0	6,947.7	141.0	38.0	-53.20	-61.1	2,017.4	7,789.9	7,708.8	81.08	96.078			
15,800.0	7,500.0	7,250.0	6,947.7	142.7	38.0	-53.20	-61.1	2,017.4	7,889.2	7,808.1	81.16	97.204			
15,841.7	7,500.0	7,250.0	6,947.7	143.4	38.0	-53.20	-61.1	2,017.4	7,930.6	7,849.4	81.20	97.673			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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						
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	-90.02	0.0	-37.5	37.5				
100.0	100.0	100.0	100.0	0.2	0.2	-90.02	0.0	-37.5	37.5	37.2	0.30	123.495	CC, ES
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-37.5	37.5	36.9	0.65	57.455	
300.0	300.0	299.6	299.6	0.5	0.5	-89.01	0.7	-38.0	38.1	37.1	1.00	37.996	
400.0	400.0	399.1	399.0	0.7	0.7	-153.06	2.7	-39.7	40.6	39.2	1.35	29.984	
500.0	500.0	498.4	498.3	0.9	0.9	-150.52	6.0	-42.4	45.9	44.1	1.71	26.854	
600.0	599.9	597.4	597.1	1.0	1.1	-148.19	10.7	-46.2	54.0	51.9	2.07	26.095	
700.0	699.7	696.1	695.4	1.2	1.3	-146.30	16.7	-51.0	64.9	62.4	2.44	26.631	
800.0	799.4	794.5	793.5	1.4	1.5	-144.90	23.9	-56.8	78.5	75.7	2.81	27.899	
900.0	898.9	893.3	891.8	1.7	1.7	-144.36	31.4	-62.9	93.8	90.6	3.20	29.308	
1,000.0	998.3	991.9	989.9	1.9	2.0	-144.47	38.9	-68.9	110.6	107.0	3.60	30.729	
1,100.0	1,097.4	1,090.3	1,087.8	2.2	2.2	-144.98	46.4	-75.0	128.7	124.7	4.00	32.150	
1,200.0	1,196.3	1,188.3	1,185.4	2.5	2.4	-145.72	53.8	-81.0	148.3	143.8	4.42	33.571	
1,300.0	1,294.9	1,286.0	1,282.6	2.8	2.7	-146.59	61.2	-87.0	169.3	164.4	4.84	34.995	
1,400.0	1,393.3	1,383.4	1,379.5	3.2	2.9	-147.52	68.6	-93.0	191.8	186.5	5.26	36.427	
1,494.4	1,485.8	1,475.0	1,470.7	3.5	3.1	-148.42	75.6	-98.6	214.4	208.7	5.67	37.790	
1,500.0	1,491.2	1,480.4	1,476.1	3.5	3.1	-148.48	76.0	-99.0	215.8	210.1	5.70	37.872	
1,600.0	1,589.1	1,577.3	1,572.5	3.9	3.4	-149.45	83.4	-104.9	240.4	234.3	6.13	39.233	
1,700.0	1,686.9	1,674.1	1,668.8	4.3	3.6	-150.23	90.7	-110.9	265.2	258.6	6.56	40.422	
1,800.0	1,784.8	1,770.9	1,765.2	4.7	3.8	-150.88	98.1	-116.8	290.0	283.0	6.99	41.470	
1,900.0	1,882.6	1,867.8	1,861.6	5.1	4.1	-151.43	105.4	-122.8	314.8	307.4	7.42	42.399	
2,000.0	1,980.4	1,964.6	1,957.9	5.5	4.3	-151.90	112.8	-128.7	339.6	331.8	7.86	43.229	
2,100.0	2,078.3	2,061.4	2,054.3	5.9	4.5	-152.31	120.2	-134.7	364.5	356.2	8.29	43.974	
2,200.0	2,176.1	2,158.2	2,150.7	6.3	4.8	-152.66	127.5	-140.6	389.3	380.6	8.72	44.647	
2,300.0	2,273.9	2,255.1	2,247.0	6.7	5.0	-152.97	134.9	-146.6	414.2	405.1	9.15	45.258	
2,400.0	2,371.8	2,351.9	2,343.4	7.1	5.2	-153.25	142.2	-152.5	439.1	429.5	9.58	45.814	
2,500.0	2,469.6	2,448.7	2,439.8	7.5	5.5	-153.49	149.6	-158.5	464.0	454.0	10.02	46.324	
2,600.0	2,567.4	2,545.6	2,536.1	7.9	5.7	-153.71	157.0	-164.4	488.9	478.5	10.45	46.791	
2,700.0	2,665.3	2,642.4	2,632.5	8.3	5.9	-153.91	164.3	-170.4	513.8	503.0	10.88	47.222	
2,800.0	2,763.1	2,739.2	2,728.9	8.7	6.2	-154.09	171.7	-176.3	538.8	527.5	11.31	47.620	
2,900.0	2,860.9	2,836.1	2,825.2	9.1	6.4	-154.26	179.0	-182.3	563.7	551.9	11.75	47.990	
3,000.0	2,958.8	2,932.9	2,921.6	9.5	6.7	-154.41	186.4	-188.2	588.6	576.4	12.18	48.333	
3,100.0	3,056.6	3,029.7	3,018.0	9.9	6.9	-154.55	193.8	-194.2	613.5	600.9	12.61	48.653	
3,200.0	3,154.4	3,126.6	3,114.3	10.3	7.1	-154.68	201.1	-200.1	638.5	625.4	13.04	48.952	
3,300.0	3,252.3	3,223.4	3,210.7	10.7	7.4	-154.79	208.5	-206.1	663.4	649.9	13.48	49.232	
3,400.0	3,350.1	3,320.2	3,307.1	11.1	7.6	-154.90	215.8	-212.0	688.4	674.5	13.91	49.495	
3,500.0	3,447.9	3,417.1	3,403.5	11.5	7.8	-155.01	223.2	-218.0	713.3	699.0	14.34	49.742	
3,600.0	3,545.8	3,513.9	3,499.8	11.9	8.1	-155.10	230.6	-223.9	738.2	723.5	14.77	49.974	
3,700.0	3,643.6	3,610.7	3,596.2	12.3	8.3	-155.19	237.9	-229.9	763.2	748.0	15.20	50.194	
3,800.0	3,741.5	3,707.6	3,692.6	12.7	8.5	-155.27	245.3	-235.8	788.1	772.5	15.64	50.401	
3,900.0	3,839.3	3,804.4	3,788.9	13.1	8.8	-155.35	252.6	-241.8	813.1	797.0	16.07	50.598	
4,000.0	3,937.1	3,901.2	3,885.3	13.5	9.0	-155.43	260.0	-247.7	838.0	821.5	16.50	50.784	
4,100.0	4,035.0	3,998.1	3,981.7	13.9	9.2	-155.49	267.4	-253.7	863.0	846.1	16.93	50.960	
4,200.0	4,132.8	4,094.9	4,078.0	14.3	9.5	-155.56	274.7	-259.6	887.9	870.6	17.37	51.128	
4,300.0	4,230.6	4,191.7	4,174.4	14.7	9.7	-155.62	282.1	-265.6	912.9	895.1	17.80	51.288	
4,400.0	4,328.5	4,288.6	4,270.8	15.1	10.0	-155.68	289.4	-271.5	937.8	919.6	18.23	51.440	
4,500.0	4,426.3	4,385.4	4,367.1	15.5	10.2	-155.74	296.8	-277.5	962.8	944.1	18.66	51.585	
4,600.0	4,524.1	4,482.2	4,463.5	15.9	10.4	-155.79	304.2	-283.4	987.8	968.7	19.10	51.724	
4,700.0	4,622.0	4,579.0	4,559.9	16.3	10.7	-155.84	311.5	-289.4	1,012.7	993.2	19.53	51.856	
4,800.0	4,719.8	4,675.9	4,656.2	16.7	10.9	-155.89	318.9	-295.3	1,037.7	1,017.7	19.96	51.983	
4,900.0	4,817.6	4,772.7	4,752.6	17.2	11.1	-155.93	326.2	-301.3	1,062.6	1,042.2	20.39	52.104	
5,000.0	4,915.5	4,869.5	4,849.0	17.6	11.4	-155.98	333.6	-307.2	1,087.6	1,066.8	20.83	52.220	

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 2F-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 2F-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				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	5,013.3	4,966.4	4,945.3	18.0	11.6	-156.02	341.0	-313.2	1,112.5	1,091.3	21.26	52.332	
5,200.0	5,111.1	5,063.2	5,041.7	18.4	11.8	-156.06	348.3	-319.1	1,137.5	1,115.8	21.69	52.439	
5,300.0	5,209.0	5,160.0	5,138.1	18.8	12.1	-156.09	355.7	-325.1	1,162.5	1,140.3	22.12	52.542	
5,400.0	5,306.8	5,256.9	5,234.5	19.2	12.3	-156.13	363.0	-331.0	1,187.4	1,164.9	22.56	52.641	
5,500.0	5,404.6	5,353.7	5,330.8	19.6	12.6	-156.17	370.4	-337.0	1,212.4	1,189.4	22.99	52.737	
5,600.0	5,502.5	5,450.5	5,427.2	20.0	12.8	-156.20	377.8	-342.9	1,237.4	1,213.9	23.42	52.829	
5,700.0	5,600.3	5,547.4	5,523.6	20.4	13.0	-156.23	385.1	-348.9	1,262.3	1,238.5	23.85	52.917	
5,800.0	5,698.2	5,644.2	5,619.9	20.8	13.3	-156.26	392.5	-354.8	1,287.3	1,263.0	24.29	53.003	
5,900.0	5,796.0	5,741.0	5,716.3	21.2	13.5	-156.29	399.8	-360.8	1,312.2	1,287.5	24.72	53.085	
6,000.0	5,893.8	5,837.9	5,812.7	21.6	13.7	-156.32	407.2	-366.7	1,337.2	1,312.0	25.15	53.164	
6,100.0	5,991.7	5,934.7	5,909.0	22.0	14.0	-156.35	414.6	-372.7	1,362.2	1,336.6	25.58	53.241	
6,200.0	6,089.5	6,031.5	6,005.4	22.4	14.2	-156.37	421.9	-378.6	1,387.1	1,361.1	26.02	53.316	
6,300.0	6,187.3	6,128.4	6,101.8	22.8	14.4	-156.40	429.3	-384.6	1,412.1	1,385.6	26.45	53.388	
6,400.0	6,285.2	6,225.2	6,198.1	23.2	14.7	-156.42	436.6	-390.5	1,437.1	1,410.2	26.88	53.457	
6,500.0	6,383.0	6,322.0	6,294.5	23.7	14.9	-156.45	444.0	-396.5	1,462.0	1,434.7	27.31	53.525	
6,600.0	6,480.8	6,418.9	6,390.9	24.1	15.2	-156.47	451.4	-402.4	1,487.0	1,459.2	27.75	53.590	
6,700.0	6,578.7	6,515.7	6,487.2	24.5	15.4	-156.49	458.7	-408.4	1,511.9	1,483.8	28.18	53.653	
6,800.0	6,676.5	6,612.5	6,583.6	24.9	15.6	-156.51	466.1	-414.3	1,536.9	1,508.3	28.61	53.715	
6,900.0	6,774.3	6,709.4	6,680.0	25.3	15.9	-156.54	473.4	-420.3	1,561.9	1,532.8	29.05	53.774	
7,000.0	6,872.2	6,806.2	6,776.3	25.7	16.1	-156.56	480.8	-426.2	1,586.8	1,557.4	29.48	53.832	
7,019.1	6,890.8	6,824.7	6,794.7	25.8	16.1	-156.56	482.2	-427.4	1,591.6	1,562.0	29.56	53.843	
7,050.0	6,921.1	6,854.6	6,824.5	25.9	16.2	-171.97	484.5	-429.2	1,599.3	1,569.6	29.68	53.884	
7,100.0	6,970.2	6,902.8	6,872.5	26.0	16.3	161.68	488.1	-432.2	1,611.8	1,581.9	29.85	53.998	
7,150.0	7,019.0	6,950.4	6,919.9	26.2	16.5	140.63	491.8	-435.1	1,624.1	1,594.1	29.99	54.152	
7,200.0	7,067.2	6,997.1	6,966.3	26.3	16.6	126.65	495.3	-438.0	1,636.4	1,606.3	30.11	54.344	
7,250.0	7,114.4	7,042.5	7,011.5	26.4	16.7	117.58	498.8	-440.8	1,648.5	1,618.3	30.21	54.576	
7,300.0	7,160.3	7,086.2	7,055.0	26.4	16.8	111.44	502.1	-443.4	1,660.6	1,630.3	30.27	54.851	
7,350.0	7,204.5	7,128.0	7,096.6	26.5	16.9	107.10	505.3	-446.0	1,672.6	1,642.3	30.32	55.169	
7,400.0	7,246.6	7,169.6	7,138.1	26.5	17.0	103.92	508.3	-448.6	1,684.7	1,654.3	30.33	55.537	
7,450.0	7,286.4	7,217.6	7,185.9	26.5	17.0	101.62	508.8	-451.5	1,696.7	1,666.4	30.31	55.985	
7,500.0	7,323.5	7,268.8	7,236.9	26.5	17.1	99.88	504.9	-454.7	1,708.5	1,678.3	30.21	56.548	
7,550.0	7,357.7	7,324.3	7,291.4	26.5	17.1	98.60	495.6	-458.0	1,720.1	1,690.1	30.05	57.238	
7,600.0	7,388.7	7,384.9	7,349.7	26.5	17.0	97.69	479.4	-461.6	1,731.3	1,701.5	29.81	58.068	
7,650.0	7,416.3	7,451.8	7,411.7	26.5	16.9	97.10	454.5	-465.5	1,741.9	1,712.4	29.50	59.053	
7,700.0	7,440.2	7,526.6	7,477.0	26.5	16.7	96.82	418.3	-469.5	1,751.9	1,722.8	29.10	60.211	
7,750.0	7,460.3	7,610.8	7,544.1	26.5	16.5	96.78	367.8	-473.6	1,760.8	1,732.2	28.63	61.506	
7,800.0	7,476.4	7,705.9	7,610.1	26.5	16.3	96.96	299.7	-477.7	1,768.6	1,740.4	28.14	62.846	
7,850.0	7,488.4	7,812.5	7,669.6	26.6	16.0	97.25	211.5	-481.4	1,774.7	1,747.0	27.74	63.978	
7,900.0	7,496.2	7,929.8	7,715.0	26.6	16.0	97.55	103.6	-484.2	1,779.0	1,751.4	27.59	64.488	
7,950.0	7,499.8	8,054.8	7,738.2	26.7	16.1	97.73	-18.9	-485.6	1,781.0	1,753.2	27.85	63.953	
7,966.7	7,500.0	8,097.2	7,740.0	26.7	16.2	97.74	-61.4	-485.7	1,781.2	1,753.1	28.05	63.502	
8,000.0	7,500.0	8,132.1	7,740.0	26.8	16.3	97.74	-96.2	-485.7	1,781.2	1,752.8	28.34	62.858	
8,100.0	7,500.0	8,232.1	7,740.0	27.0	16.8	97.74	-196.2	-485.7	1,781.2	1,751.8	29.38	60.632	
8,200.0	7,500.0	8,332.1	7,740.0	27.4	17.4	97.74	-296.2	-485.7	1,781.2	1,750.4	30.78	57.875	
8,300.0	7,500.0	8,432.1	7,740.0	27.9	18.2	97.74	-396.2	-485.7	1,781.2	1,748.7	32.49	54.824	
8,400.0	7,500.0	8,532.1	7,740.0	28.5	19.1	97.74	-496.2	-485.7	1,781.2	1,746.7	34.47	51.675	
8,500.0	7,500.0	8,632.1	7,740.0	29.1	20.1	97.74	-596.2	-485.7	1,781.2	1,744.5	36.67	48.571	
8,600.0	7,500.0	8,732.1	7,740.0	29.9	21.2	97.74	-696.2	-485.7	1,781.2	1,742.1	39.06	45.601	
8,700.0	7,500.0	8,832.1	7,740.0	30.8	22.4	97.74	-796.2	-485.7	1,781.2	1,739.6	41.60	42.814	
8,800.0	7,500.0	8,932.1	7,740.0	31.7	23.7	97.74	-896.2	-485.7	1,781.2	1,736.9	44.27	40.232	
8,900.0	7,500.0	9,032.1	7,740.0	32.7	25.0	97.74	-996.2	-485.7	1,781.2	1,734.1	47.05	37.859	
9,000.0	7,500.0	9,132.1	7,740.0	33.7	26.4	97.74	-1,096.2	-485.7	1,781.2	1,731.2	49.91	35.687	

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 2F-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 2F-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	
9,100.0	7,500.0	9,232.1	7,740.0	34.8	27.8	97.74	-1,196.2	-485.7	1,781.2	1,728.3	52.85	33.703	
9,200.0	7,500.0	9,332.1	7,740.0	36.0	29.3	97.74	-1,296.2	-485.7	1,781.2	1,725.3	55.85	31.894	
9,300.0	7,500.0	9,432.1	7,740.0	37.2	30.7	97.74	-1,396.2	-485.7	1,781.2	1,722.3	58.90	30.241	
9,400.0	7,500.0	9,532.1	7,740.0	38.4	32.3	97.74	-1,496.2	-485.7	1,781.2	1,719.2	61.99	28.731	
9,500.0	7,500.0	9,632.1	7,740.0	39.7	33.8	97.74	-1,596.2	-485.7	1,781.2	1,716.0	65.13	27.348	
9,600.0	7,500.0	9,732.1	7,740.0	41.1	35.3	97.74	-1,696.2	-485.7	1,781.2	1,712.9	68.30	26.079	
9,700.0	7,500.0	9,832.1	7,740.0	42.4	36.9	97.74	-1,796.2	-485.7	1,781.2	1,709.7	71.49	24.913	
9,800.0	7,500.0	9,932.1	7,740.0	43.8	38.5	97.74	-1,896.2	-485.7	1,781.2	1,706.4	74.72	23.839	
9,900.0	7,500.0	10,032.1	7,740.0	45.2	40.1	97.74	-1,996.2	-485.7	1,781.2	1,703.2	77.96	22.847	
10,000.0	7,500.0	10,132.1	7,740.0	46.6	41.7	97.74	-2,096.2	-485.7	1,781.2	1,699.9	81.22	21.929	
10,100.0	7,500.0	10,232.1	7,740.0	48.1	43.4	97.74	-2,196.2	-485.7	1,781.2	1,696.7	84.50	21.078	
10,200.0	7,500.0	10,332.1	7,740.0	49.6	45.0	97.74	-2,296.2	-485.7	1,781.2	1,693.4	87.80	20.287	
10,300.0	7,500.0	10,432.1	7,740.0	51.1	46.6	97.74	-2,396.2	-485.7	1,781.2	1,690.1	91.11	19.551	
10,400.0	7,500.0	10,532.1	7,740.0	52.6	48.3	97.74	-2,496.2	-485.7	1,781.2	1,686.7	94.43	18.863	
10,500.0	7,500.0	10,632.1	7,740.0	54.1	49.9	97.74	-2,596.2	-485.7	1,781.2	1,683.4	97.76	18.220	
10,600.0	7,500.0	10,732.1	7,740.0	55.6	51.6	97.74	-2,696.2	-485.7	1,781.2	1,680.1	101.10	17.618	
10,700.0	7,500.0	10,832.1	7,740.0	57.2	53.3	97.74	-2,796.2	-485.7	1,781.2	1,676.7	104.45	17.053	
10,800.0	7,500.0	10,932.1	7,740.0	58.8	55.0	97.74	-2,896.2	-485.7	1,781.2	1,673.4	107.81	16.522	
10,900.0	7,500.0	11,032.1	7,740.0	60.3	56.6	97.74	-2,996.2	-485.7	1,781.2	1,670.0	111.17	16.022	
11,000.0	7,500.0	11,132.1	7,740.0	61.9	58.3	97.74	-3,096.2	-485.7	1,781.2	1,666.6	114.54	15.550	
11,100.0	7,500.0	11,232.1	7,740.0	63.5	60.0	97.74	-3,196.2	-485.7	1,781.2	1,663.2	117.92	15.105	
11,200.0	7,500.0	11,332.1	7,740.0	65.1	61.7	97.74	-3,296.2	-485.7	1,781.2	1,659.9	121.31	14.683	
11,300.0	7,500.0	11,432.1	7,740.0	66.7	63.4	97.74	-3,396.2	-485.7	1,781.2	1,656.5	124.69	14.284	
11,400.0	7,500.0	11,532.1	7,740.0	68.3	65.1	97.74	-3,496.2	-485.7	1,781.2	1,653.1	128.09	13.906	
11,500.0	7,500.0	11,632.1	7,740.0	70.0	66.8	97.74	-3,596.2	-485.7	1,781.2	1,649.7	131.49	13.546	
11,600.0	7,500.0	11,732.1	7,740.0	71.6	68.5	97.74	-3,696.2	-485.7	1,781.2	1,646.3	134.89	13.205	
11,700.0	7,500.0	11,832.1	7,740.0	73.2	70.2	97.74	-3,796.2	-485.7	1,781.2	1,642.9	138.29	12.880	
11,800.0	7,500.0	11,932.1	7,740.0	74.9	71.9	97.74	-3,896.2	-485.7	1,781.2	1,639.5	141.70	12.570	
11,900.0	7,500.0	12,032.1	7,740.0	76.5	73.6	97.74	-3,996.2	-485.7	1,781.2	1,636.0	145.11	12.274	
12,000.0	7,500.0	12,132.1	7,740.0	78.2	75.3	97.74	-4,096.2	-485.7	1,781.2	1,632.6	148.53	11.992	
12,100.0	7,500.0	12,232.1	7,740.0	79.8	77.1	97.74	-4,196.2	-485.7	1,781.2	1,629.2	151.95	11.722	
12,200.0	7,500.0	12,332.1	7,740.0	81.5	78.8	97.74	-4,296.2	-485.7	1,781.2	1,625.8	155.37	11.464	
12,300.0	7,500.0	12,432.1	7,740.0	83.1	80.5	97.74	-4,396.2	-485.7	1,781.2	1,622.4	158.79	11.217	
12,400.0	7,500.0	12,532.1	7,740.0	84.8	82.2	97.74	-4,496.2	-485.7	1,781.2	1,618.9	162.22	10.980	
12,500.0	7,500.0	12,632.1	7,740.0	86.5	83.9	97.74	-4,596.2	-485.7	1,781.2	1,615.5	165.64	10.753	
12,600.0	7,500.0	12,732.1	7,740.0	88.1	85.7	97.74	-4,696.2	-485.7	1,781.2	1,612.1	169.07	10.535	
12,700.0	7,500.0	12,832.1	7,740.0	89.8	87.4	97.74	-4,796.2	-485.7	1,781.2	1,608.7	172.50	10.325	
12,800.0	7,500.0	12,932.1	7,740.0	91.5	89.1	97.74	-4,896.2	-485.7	1,781.2	1,605.2	175.94	10.124	
12,900.0	7,500.0	13,032.1	7,740.0	93.2	90.8	97.74	-4,996.2	-485.7	1,781.2	1,601.8	179.37	9.930	
13,000.0	7,500.0	13,132.1	7,740.0	94.9	92.6	97.74	-5,096.2	-485.7	1,781.2	1,598.4	182.81	9.743	
13,100.0	7,500.0	13,232.1	7,740.0	96.5	94.3	97.74	-5,196.2	-485.7	1,781.2	1,594.9	186.25	9.564	
13,200.0	7,500.0	13,332.1	7,740.0	98.2	96.0	97.74	-5,296.2	-485.7	1,781.2	1,591.5	189.68	9.390	
13,300.0	7,500.0	13,432.1	7,740.0	99.9	97.8	97.74	-5,396.2	-485.7	1,781.2	1,588.0	193.12	9.223	
13,400.0	7,500.0	13,532.1	7,740.0	101.6	99.5	97.74	-5,496.2	-485.7	1,781.2	1,584.6	196.57	9.061	
13,500.0	7,500.0	13,632.1	7,740.0	103.3	101.2	97.74	-5,596.2	-485.7	1,781.2	1,581.2	200.01	8.905	
13,600.0	7,500.0	13,732.1	7,740.0	105.0	102.9	97.74	-5,696.2	-485.7	1,781.2	1,577.7	203.45	8.755	
13,700.0	7,500.0	13,832.1	7,740.0	106.7	104.7	97.74	-5,796.2	-485.7	1,781.2	1,574.3	206.90	8.609	
13,800.0	7,500.0	13,932.1	7,740.0	108.4	106.4	97.74	-5,896.2	-485.7	1,781.2	1,570.8	210.35	8.468	
13,900.0	7,500.0	14,032.1	7,740.0	110.1	108.1	97.74	-5,996.2	-485.7	1,781.2	1,567.4	213.79	8.331	
14,000.0	7,500.0	14,132.1	7,740.0	111.8	109.9	97.74	-6,096.2	-485.7	1,781.2	1,563.9	217.24	8.199	
14,100.0	7,500.0	14,232.1	7,740.0	113.5	111.6	97.74	-6,196.2	-485.7	1,781.2	1,560.5	220.69	8.071	
14,200.0	7,500.0	14,332.1	7,740.0	115.2	113.4	97.74	-6,296.2	-485.7	1,781.2	1,557.0	224.14	7.947	

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 2F-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 2F-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		
14,300.0	7,500.0	14,432.1	7,740.0	116.9	115.1	97.74	-6,396.2	-485.7	1,781.2	1,553.6	227.59	7.826		
14,400.0	7,500.0	14,532.1	7,740.0	118.6	116.8	97.74	-6,496.2	-485.7	1,781.2	1,550.1	231.04	7.709		
14,500.0	7,500.0	14,632.1	7,740.0	120.4	118.6	97.74	-6,596.2	-485.7	1,781.2	1,546.7	234.49	7.596		
14,600.0	7,500.0	14,732.1	7,740.0	122.1	120.3	97.74	-6,696.2	-485.7	1,781.2	1,543.2	237.95	7.486		
14,700.0	7,500.0	14,832.1	7,740.0	123.8	122.0	97.74	-6,796.2	-485.7	1,781.2	1,539.8	241.40	7.378		
14,800.0	7,500.0	14,932.1	7,740.0	125.5	123.8	97.74	-6,896.2	-485.7	1,781.2	1,536.3	244.85	7.274		
14,900.0	7,500.0	15,032.1	7,740.0	127.2	125.5	97.74	-6,996.2	-485.7	1,781.2	1,532.9	248.31	7.173		
15,000.0	7,500.0	15,132.1	7,740.0	128.9	127.3	97.74	-7,096.2	-485.7	1,781.2	1,529.4	251.76	7.075		
15,100.0	7,500.0	15,232.1	7,740.0	130.6	129.0	97.74	-7,196.2	-485.7	1,781.2	1,525.9	255.22	6.979		
15,200.0	7,500.0	15,332.1	7,740.0	132.4	130.7	97.74	-7,296.2	-485.7	1,781.2	1,522.5	258.68	6.886		
15,300.0	7,500.0	15,432.1	7,740.0	134.1	132.5	97.74	-7,396.2	-485.7	1,781.2	1,519.0	262.13	6.795		
15,400.0	7,500.0	15,532.1	7,740.0	135.8	134.2	97.74	-7,496.2	-485.7	1,781.2	1,515.6	265.59	6.706		
15,500.0	7,500.0	15,632.1	7,740.0	137.5	136.0	97.74	-7,596.2	-485.7	1,781.2	1,512.1	269.05	6.620		
15,600.0	7,500.0	15,732.1	7,740.0	139.2	137.7	97.74	-7,696.2	-485.7	1,781.2	1,508.7	272.51	6.536		
15,700.0	7,500.0	15,832.1	7,740.0	141.0	139.5	97.74	-7,796.2	-485.7	1,781.2	1,505.2	275.97	6.454		
15,800.0	7,500.0	15,932.1	7,740.0	142.7	141.2	97.74	-7,896.2	-485.7	1,781.2	1,501.7	279.43	6.374		
15,800.0	7,500.0	15,932.1	7,740.0	142.7	141.2	97.74	-7,896.2	-485.7	1,781.2	1,501.7	279.43	6.374		
15,841.7	7,500.0	15,949.8	7,740.0	143.4	141.5	97.74	-7,913.9	-485.7	1,781.3	1,501.1	280.24	6.356 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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							
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	-90.02	0.0	-29.9	29.9				
100.0	100.0	100.0	100.0	0.2	0.2	-90.02	0.0	-29.9	29.9	29.6	0.30	98.612	
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-29.9	29.9	29.3	0.65	45.878	
300.0	300.0	300.0	300.0	0.5	0.5	-90.02	0.0	-29.9	29.9	28.9	1.00	29.893 CC, ES	
400.0	400.0	399.6	399.6	0.7	0.7	-155.80	0.7	-30.5	31.3	30.0	1.35	23.178	
500.0	500.0	499.2	499.1	0.9	0.9	-154.32	2.6	-32.2	35.4	33.7	1.70	20.802	
600.0	599.9	598.5	598.3	1.0	1.0	-152.49	5.9	-34.9	42.3	40.2	2.06	20.541	
700.0	699.7	697.4	697.1	1.2	1.2	-150.73	10.5	-38.8	51.9	49.5	2.42	21.450	
800.0	799.4	796.7	796.1	1.4	1.4	-149.73	15.9	-43.3	63.7	60.9	2.79	22.849	
900.0	898.9	895.8	895.0	1.7	1.6	-149.69	21.1	-47.7	77.0	73.9	3.16	24.351	
1,000.0	998.3	994.7	993.7	1.9	1.8	-150.18	26.4	-52.1	91.8	88.3	3.54	25.918	
1,100.0	1,097.4	1,093.3	1,092.1	2.2	2.0	-150.97	31.7	-56.6	108.2	104.2	3.93	27.531	
1,200.0	1,196.3	1,191.7	1,190.2	2.5	2.2	-151.91	37.0	-61.0	126.0	121.7	4.32	29.183	
1,300.0	1,294.9	1,291.4	1,289.6	2.8	2.5	-152.72	42.8	-64.9	145.0	140.2	4.72	30.680	
1,400.0	1,393.3	1,391.4	1,389.3	3.2	2.7	-153.17	49.8	-67.6	164.2	159.1	5.15	31.912	
1,494.4	1,485.8	1,485.2	1,482.8	3.5	2.9	-153.38	57.4	-69.0	182.8	177.3	5.55	32.910	
1,500.0	1,491.2	1,490.7	1,488.3	3.5	2.9	-153.39	57.9	-69.1	183.9	178.4	5.58	32.970	
1,600.0	1,589.1	1,588.6	1,585.9	3.9	3.1	-153.67	66.0	-70.3	204.1	198.1	6.01	33.958	
1,700.0	1,686.9	1,686.6	1,683.5	4.3	3.3	-153.90	74.2	-71.5	224.3	217.8	6.44	34.801	
1,800.0	1,784.8	1,784.5	1,781.1	4.7	3.5	-154.09	82.4	-72.7	244.4	237.6	6.88	35.529	
1,900.0	1,882.6	1,882.5	1,878.7	5.1	3.7	-154.26	90.5	-74.0	264.6	257.3	7.32	36.162	
2,000.0	1,980.4	1,980.4	1,976.3	5.5	4.0	-154.39	98.7	-75.2	284.8	277.0	7.76	36.717	
2,100.0	2,078.3	2,078.3	2,073.9	5.9	4.2	-154.52	106.9	-76.4	305.0	296.8	8.20	37.209	
2,200.0	2,176.1	2,176.3	2,171.5	6.3	4.4	-154.62	115.0	-77.6	325.1	316.5	8.64	37.646	
2,300.0	2,273.9	2,274.2	2,269.0	6.7	4.6	-154.71	123.2	-78.8	345.3	336.2	9.08	38.038	
2,400.0	2,371.8	2,372.2	2,366.6	7.1	4.8	-154.80	131.4	-80.1	365.5	356.0	9.52	38.391	
2,500.0	2,469.6	2,470.1	2,464.2	7.5	5.0	-154.87	139.5	-81.3	385.7	375.7	9.96	38.711	
2,600.0	2,567.4	2,568.1	2,561.8	7.9	5.3	-154.94	147.7	-82.5	405.9	395.5	10.41	39.001	
2,700.0	2,665.3	2,666.0	2,659.4	8.3	5.5	-155.00	155.9	-83.7	426.0	415.2	10.85	39.267	
2,800.0	2,763.1	2,763.9	2,757.0	8.7	5.7	-155.05	164.0	-85.0	446.2	434.9	11.29	39.510	
2,900.0	2,860.9	2,861.9	2,854.6	9.1	5.9	-155.11	172.2	-86.2	466.4	454.7	11.74	39.733	
3,000.0	2,958.8	2,959.8	2,952.2	9.5	6.2	-155.15	180.4	-87.4	486.6	474.4	12.18	39.940	
3,100.0	3,056.6	3,057.8	3,049.8	9.9	6.4	-155.19	188.5	-88.6	506.8	494.1	12.63	40.131	
3,200.0	3,154.4	3,155.7	3,147.4	10.3	6.6	-155.23	196.7	-89.9	527.0	513.9	13.07	40.308	
3,300.0	3,252.3	3,253.6	3,245.0	10.7	6.8	-155.27	204.9	-91.1	547.1	533.6	13.52	40.473	
3,400.0	3,350.1	3,351.6	3,342.6	11.1	7.0	-155.30	213.0	-92.3	567.3	553.4	13.96	40.627	
3,500.0	3,447.9	3,449.5	3,440.2	11.5	7.3	-155.33	221.2	-93.5	587.5	573.1	14.41	40.770	
3,600.0	3,545.8	3,547.5	3,537.8	11.9	7.5	-155.36	229.4	-94.8	607.7	592.8	14.86	40.905	
3,700.0	3,643.6	3,645.4	3,635.3	12.3	7.7	-155.39	237.5	-96.0	627.9	612.6	15.30	41.032	
3,800.0	3,741.5	3,743.4	3,732.9	12.7	7.9	-155.42	245.7	-97.2	648.1	632.3	15.75	41.151	
3,900.0	3,839.3	3,841.3	3,830.5	13.1	8.1	-155.44	253.8	-98.4	668.2	652.0	16.19	41.263	
4,000.0	3,937.1	3,939.2	3,928.1	13.5	8.4	-155.46	262.0	-99.6	688.4	671.8	16.64	41.369	
4,100.0	4,035.0	4,037.2	4,025.7	13.9	8.6	-155.49	270.2	-100.9	708.6	691.5	17.09	41.469	
4,200.0	4,132.8	4,135.1	4,123.3	14.3	8.8	-155.51	278.3	-102.1	728.8	711.3	17.53	41.564	
4,300.0	4,230.6	4,233.1	4,220.9	14.7	9.0	-155.53	286.5	-103.3	749.0	731.0	17.98	41.654	
4,400.0	4,328.5	4,331.0	4,318.5	15.1	9.3	-155.54	294.7	-104.5	769.2	750.7	18.43	41.739	
4,500.0	4,426.3	4,428.9	4,416.1	15.5	9.5	-155.56	302.8	-105.8	789.3	770.5	18.87	41.820	
4,600.0	4,524.1	4,526.9	4,513.7	15.9	9.7	-155.58	311.0	-107.0	809.5	790.2	19.32	41.897	
4,700.0	4,622.0	4,624.8	4,611.3	16.3	9.9	-155.59	319.2	-108.2	829.7	809.9	19.77	41.971	
4,800.0	4,719.8	4,722.8	4,708.9	16.7	10.1	-155.61	327.3	-109.4	849.9	829.7	20.22	42.041	
4,900.0	4,817.6	4,820.7	4,806.5	17.2	10.4	-155.62	335.5	-110.7	870.1	849.4	20.66	42.108	
5,000.0	4,915.5	4,918.6	4,904.1	17.6	10.6	-155.64	343.7	-111.9	890.3	869.2	21.11	42.172	

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 2F-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 2F-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	
5,100.0	5,013.3	5,016.6	5,001.6	18.0	10.8	-155.65	351.8	-113.1	910.4	888.9	21.56	42.234	
5,200.0	5,111.1	5,114.5	5,099.2	18.4	11.0	-155.66	360.0	-114.3	930.6	908.6	22.00	42.292	
5,300.0	5,209.0	5,212.5	5,196.8	18.8	11.3	-155.67	368.2	-115.6	950.8	928.4	22.45	42.349	
5,400.0	5,306.8	5,310.4	5,294.4	19.2	11.5	-155.68	376.3	-116.8	971.0	948.1	22.90	42.403	
5,500.0	5,404.6	5,408.4	5,392.0	19.6	11.7	-155.70	384.5	-118.0	991.2	967.8	23.35	42.455	
5,600.0	5,502.5	5,506.3	5,489.6	20.0	11.9	-155.71	392.7	-119.2	1,011.4	987.6	23.79	42.505	
5,700.0	5,600.3	5,604.2	5,587.2	20.4	12.2	-155.72	400.8	-120.4	1,031.6	1,007.3	24.24	42.553	
5,800.0	5,698.2	5,702.2	5,684.8	20.8	12.4	-155.73	409.0	-121.7	1,051.7	1,027.1	24.69	42.599	
5,900.0	5,796.0	5,800.1	5,782.4	21.2	12.6	-155.73	417.2	-122.9	1,071.9	1,046.8	25.14	42.643	
6,000.0	5,893.8	5,898.1	5,880.0	21.6	12.8	-155.74	425.3	-124.1	1,092.1	1,066.5	25.58	42.686	
6,100.0	5,991.7	5,996.0	5,977.6	22.0	13.0	-155.75	433.5	-125.3	1,112.3	1,086.3	26.03	42.728	
6,200.0	6,089.5	6,093.9	6,075.2	22.4	13.3	-155.76	441.7	-126.6	1,132.5	1,106.0	26.48	42.767	
6,300.0	6,187.3	6,191.9	6,172.8	22.8	13.5	-155.77	449.8	-127.8	1,152.7	1,125.7	26.93	42.806	
6,400.0	6,285.2	6,289.8	6,270.3	23.2	13.7	-155.78	458.0	-129.0	1,172.9	1,145.5	27.38	42.843	
6,500.0	6,383.0	6,387.8	6,367.9	23.7	13.9	-155.78	466.2	-130.2	1,193.0	1,165.2	27.82	42.879	
6,600.0	6,480.8	6,485.7	6,465.5	24.1	14.2	-155.79	474.3	-131.5	1,213.2	1,185.0	28.27	42.914	
6,700.0	6,578.7	6,583.7	6,563.1	24.5	14.4	-155.80	482.5	-132.7	1,233.4	1,204.7	28.72	42.948	
6,800.0	6,676.5	6,681.6	6,660.7	24.9	14.6	-155.81	490.7	-133.9	1,253.6	1,224.4	29.17	42.981	
6,900.0	6,774.3	6,779.5	6,758.3	25.3	14.8	-155.81	498.8	-135.1	1,273.8	1,244.2	29.61	43.012	
7,000.0	6,872.2	6,877.5	6,855.9	25.7	15.1	-155.82	507.0	-136.4	1,294.0	1,263.9	30.06	43.043	
7,019.1	6,890.8	6,896.2	6,874.5	25.8	15.1	-155.82	508.6	-136.6	1,297.8	1,267.7	30.15	43.049	
7,050.0	6,921.1	6,926.5	6,904.8	25.9	15.1	-171.08	510.5	-137.0	1,304.1	1,273.8	30.25	43.112	
7,100.0	6,970.2	6,975.5	6,953.8	26.0	15.2	162.67	510.3	-137.6	1,314.2	1,283.9	30.34	43.321	
7,150.0	7,019.0	7,024.6	7,002.7	26.2	15.2	141.58	505.9	-138.2	1,324.3	1,293.9	30.34	43.649	
7,200.0	7,067.2	7,073.8	7,051.1	26.3	15.2	127.44	497.4	-138.8	1,334.2	1,303.9	30.26	44.091	
7,250.0	7,114.4	7,123.1	7,098.7	26.4	15.1	118.08	484.6	-139.4	1,343.9	1,313.8	30.11	44.640	
7,300.0	7,160.3	7,172.6	7,145.2	26.4	15.0	111.60	467.8	-140.0	1,353.4	1,323.5	29.89	45.287	
7,350.0	7,204.5	7,222.2	7,190.2	26.5	14.8	106.87	446.9	-140.5	1,362.5	1,332.9	29.61	46.021	
7,400.0	7,246.6	7,272.1	7,233.4	26.5	14.7	103.26	422.2	-141.1	1,371.2	1,342.0	29.28	46.827	
7,450.0	7,286.4	7,322.1	7,274.5	26.5	14.5	100.42	393.6	-141.6	1,379.4	1,350.5	28.93	47.685	
7,500.0	7,323.5	7,372.3	7,313.0	26.5	14.3	98.12	361.4	-142.1	1,387.1	1,358.6	28.56	48.570	
7,550.0	7,357.7	7,422.8	7,348.8	26.5	14.2	96.24	325.9	-142.5	1,394.2	1,366.0	28.19	49.452	
7,600.0	7,388.7	7,473.4	7,381.4	26.5	14.0	94.69	287.1	-142.9	1,400.6	1,372.7	27.85	50.294	
7,650.0	7,416.3	7,524.3	7,410.5	26.5	13.8	93.42	245.5	-143.3	1,406.3	1,378.7	27.55	51.053	
7,700.0	7,440.2	7,575.3	7,436.0	26.5	13.7	92.38	201.2	-143.6	1,411.2	1,383.9	27.30	51.685	
7,750.0	7,460.3	7,626.5	7,457.4	26.5	13.6	91.55	154.7	-143.9	1,415.4	1,388.2	27.14	52.146	
7,800.0	7,476.4	7,677.9	7,474.7	26.5	13.6	90.91	106.4	-144.1	1,418.7	1,391.6	27.08	52.397	
7,850.0	7,488.4	7,729.4	7,487.6	26.6	13.6	90.45	56.6	-144.3	1,421.2	1,394.1	27.12	52.408	
7,900.0	7,496.2	7,780.9	7,496.0	26.6	13.7	90.15	5.7	-144.4	1,422.8	1,395.5	27.27	52.167	
7,950.0	7,499.8	7,832.5	7,499.8	26.7	13.8	90.01	-45.7	-144.4	1,423.6	1,396.0	27.55	51.677	
7,966.7	7,500.0	7,849.7	7,500.0	26.7	13.9	90.00	-62.9	-144.4	1,423.6	1,395.9	27.66	51.470	
8,000.0	7,500.0	7,883.0	7,500.0	26.8	14.0	90.00	-96.2	-144.4	1,423.6	1,395.7	27.93	50.972	
8,100.0	7,500.0	7,983.0	7,500.0	27.0	14.6	90.00	-196.2	-144.4	1,423.6	1,394.6	29.00	49.090	
8,200.0	7,500.0	8,083.0	7,500.0	27.4	15.3	90.00	-296.2	-144.4	1,423.6	1,393.2	30.43	46.781	
8,300.0	7,500.0	8,183.0	7,500.0	27.9	16.2	90.00	-396.2	-144.4	1,423.6	1,391.4	32.18	44.234	
8,400.0	7,500.0	8,283.0	7,500.0	28.5	17.2	90.00	-496.2	-144.4	1,423.6	1,389.4	34.21	41.618	
8,500.0	7,500.0	8,383.0	7,500.0	29.1	18.3	90.00	-596.2	-144.4	1,423.6	1,387.2	36.46	39.051	
8,600.0	7,500.0	8,483.0	7,500.0	29.9	19.5	90.00	-696.2	-144.4	1,423.6	1,384.7	38.89	36.605	
8,700.0	7,500.0	8,583.0	7,500.0	30.8	20.8	90.00	-796.2	-144.4	1,423.6	1,382.1	41.48	34.320	
8,800.0	7,500.0	8,683.0	7,500.0	31.7	22.1	90.00	-896.2	-144.4	1,423.6	1,379.4	44.20	32.210	
8,900.0	7,500.0	8,783.0	7,500.0	32.7	23.6	90.00	-996.2	-144.4	1,423.6	1,376.6	47.02	30.277	
9,000.0	7,500.0	8,883.0	7,500.0	33.7	25.0	90.00	-1,096.2	-144.4	1,423.6	1,373.7	49.93	28.513	

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 2F-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 2F-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							
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	8,983.0	7,500.0	34.8	26.5	90.00	-1,196.2	-144.4	1,423.6	1,370.7	52.91	26.906	
9,200.0	7,500.0	9,083.0	7,500.0	36.0	28.0	90.00	-1,296.2	-144.4	1,423.6	1,367.7	55.95	25.443	
9,300.0	7,500.0	9,183.0	7,500.0	37.2	29.6	90.00	-1,396.2	-144.4	1,423.6	1,364.6	59.05	24.110	
9,400.0	7,500.0	9,283.0	7,500.0	38.4	31.1	90.00	-1,496.2	-144.4	1,423.6	1,361.4	62.19	22.893	
9,500.0	7,500.0	9,383.0	7,500.0	39.7	32.7	90.00	-1,596.2	-144.4	1,423.6	1,358.2	65.36	21.780	
9,600.0	7,500.0	9,483.0	7,500.0	41.1	34.3	90.00	-1,696.2	-144.4	1,423.6	1,355.0	68.57	20.761	
9,700.0	7,500.0	9,583.0	7,500.0	42.4	35.9	90.00	-1,796.2	-144.4	1,423.6	1,351.8	71.81	19.826	
9,800.0	7,500.0	9,683.0	7,500.0	43.8	37.6	90.00	-1,896.2	-144.4	1,423.6	1,348.5	75.07	18.964	
9,900.0	7,500.0	9,783.0	7,500.0	45.2	39.2	90.00	-1,996.2	-144.4	1,423.6	1,345.3	78.35	18.170	
10,000.0	7,500.0	9,883.0	7,500.0	46.6	40.8	90.00	-2,096.2	-144.4	1,423.6	1,342.0	81.65	17.435	
10,100.0	7,500.0	9,983.0	7,500.0	48.1	42.5	90.00	-2,196.2	-144.4	1,423.6	1,338.6	84.97	16.755	
10,200.0	7,500.0	10,083.0	7,500.0	49.6	44.2	90.00	-2,296.2	-144.4	1,423.6	1,335.3	88.30	16.122	
10,300.0	7,500.0	10,183.0	7,500.0	51.1	45.8	90.00	-2,396.2	-144.4	1,423.6	1,332.0	91.65	15.534	
10,400.0	7,500.0	10,283.0	7,500.0	52.6	47.5	90.00	-2,496.2	-144.4	1,423.6	1,328.6	95.00	14.985	
10,500.0	7,500.0	10,383.0	7,500.0	54.1	49.2	90.00	-2,596.2	-144.4	1,423.6	1,325.2	98.37	14.472	
10,600.0	7,500.0	10,483.0	7,500.0	55.6	50.9	90.00	-2,696.2	-144.4	1,423.6	1,321.9	101.75	13.991	
10,700.0	7,500.0	10,583.0	7,500.0	57.2	52.6	90.00	-2,796.2	-144.4	1,423.6	1,318.5	105.13	13.541	
10,800.0	7,500.0	10,683.0	7,500.0	58.8	54.3	90.00	-2,896.2	-144.4	1,423.6	1,315.1	108.53	13.117	
10,900.0	7,500.0	10,783.0	7,500.0	60.3	56.0	90.00	-2,996.2	-144.4	1,423.6	1,311.7	111.93	12.719	
11,000.0	7,500.0	10,883.0	7,500.0	61.9	57.7	90.00	-3,096.2	-144.4	1,423.6	1,308.3	115.34	12.343	
11,100.0	7,500.0	10,983.0	7,500.0	63.5	59.4	90.00	-3,196.2	-144.4	1,423.6	1,304.9	118.75	11.988	
11,200.0	7,500.0	11,083.0	7,500.0	65.1	61.1	90.00	-3,296.2	-144.4	1,423.6	1,301.4	122.17	11.653	
11,300.0	7,500.0	11,183.0	7,500.0	66.7	62.8	90.00	-3,396.2	-144.4	1,423.6	1,298.0	125.59	11.335	
11,400.0	7,500.0	11,283.0	7,500.0	68.3	64.5	90.00	-3,496.2	-144.4	1,423.6	1,294.6	129.02	11.034	
11,500.0	7,500.0	11,383.0	7,500.0	70.0	66.2	90.00	-3,596.2	-144.4	1,423.6	1,291.2	132.45	10.748	
11,600.0	7,500.0	11,483.0	7,500.0	71.6	68.0	90.00	-3,696.2	-144.4	1,423.6	1,287.7	135.89	10.476	
11,700.0	7,500.0	11,583.0	7,500.0	73.2	69.7	90.00	-3,796.2	-144.4	1,423.6	1,284.3	139.33	10.218	
11,800.0	7,500.0	11,683.0	7,500.0	74.9	71.4	90.00	-3,896.2	-144.4	1,423.6	1,280.8	142.77	9.971	
11,900.0	7,500.0	11,783.0	7,500.0	76.5	73.1	90.00	-3,996.2	-144.4	1,423.6	1,277.4	146.21	9.736	
12,000.0	7,500.0	11,883.0	7,500.0	78.2	74.8	90.00	-4,096.2	-144.4	1,423.6	1,273.9	149.66	9.512	
12,100.0	7,500.0	11,983.0	7,500.0	79.8	76.6	90.00	-4,196.2	-144.4	1,423.6	1,270.5	153.11	9.298	
12,200.0	7,500.0	12,083.0	7,500.0	81.5	78.3	90.00	-4,296.2	-144.4	1,423.6	1,267.0	156.57	9.093	
12,300.0	7,500.0	12,183.0	7,500.0	83.1	80.0	90.00	-4,396.2	-144.4	1,423.6	1,263.6	160.03	8.896	
12,400.0	7,500.0	12,283.0	7,500.0	84.8	81.8	90.00	-4,496.2	-144.4	1,423.6	1,260.1	163.48	8.708	
12,500.0	7,500.0	12,383.0	7,500.0	86.5	83.5	90.00	-4,596.2	-144.4	1,423.6	1,256.7	166.94	8.527	
12,600.0	7,500.0	12,483.0	7,500.0	88.1	85.2	90.00	-4,696.2	-144.4	1,423.6	1,253.2	170.41	8.354	
12,700.0	7,500.0	12,583.0	7,500.0	89.8	86.9	90.00	-4,796.2	-144.4	1,423.6	1,249.7	173.87	8.188	
12,800.0	7,500.0	12,683.0	7,500.0	91.5	88.7	90.00	-4,896.2	-144.4	1,423.6	1,246.3	177.34	8.028	
12,900.0	7,500.0	12,783.0	7,500.0	93.2	90.4	90.00	-4,996.2	-144.4	1,423.6	1,242.8	180.81	7.874	
13,000.0	7,500.0	12,883.0	7,500.0	94.9	92.1	90.00	-5,096.2	-144.4	1,423.6	1,239.3	184.27	7.725	
13,100.0	7,500.0	12,983.0	7,500.0	96.5	93.9	90.00	-5,196.2	-144.4	1,423.6	1,235.9	187.75	7.583	
13,200.0	7,500.0	13,083.0	7,500.0	98.2	95.9	90.00	-5,296.2	-143.5	1,422.7	1,231.0	191.76	7.419	
13,300.0	7,500.0	13,183.0	7,500.0	99.9	97.7	90.00	-5,396.2	-142.2	1,421.5	1,226.3	195.24	7.281	
13,400.0	7,500.0	13,283.0	7,500.0	101.6	99.4	90.00	-5,496.2	-141.0	1,420.2	1,221.5	198.71	7.147	
13,500.0	7,500.0	13,383.0	7,500.0	103.3	101.1	90.00	-5,596.2	-139.7	1,419.0	1,216.8	202.19	7.018	
13,600.0	7,500.0	13,483.0	7,500.0	105.0	102.9	90.00	-5,696.2	-138.5	1,417.7	1,212.1	205.66	6.894	
13,700.0	7,500.0	13,583.0	7,500.0	106.7	104.6	90.00	-5,796.2	-137.2	1,416.5	1,207.4	209.14	6.773	
13,800.0	7,500.0	13,683.0	7,500.0	108.4	106.3	90.00	-5,896.2	-136.0	1,415.2	1,202.6	212.62	6.656	
13,900.0	7,500.0	13,783.0	7,500.0	110.1	108.1	90.00	-5,996.2	-134.7	1,414.0	1,197.9	216.10	6.543	
14,000.0	7,500.0	13,883.0	7,500.0	111.8	109.8	90.00	-6,096.2	-133.4	1,412.7	1,193.2	219.58	6.434	
14,100.0	7,500.0	13,983.0	7,500.0	113.5	111.6	90.00	-6,196.2	-132.2	1,411.5	1,188.4	223.06	6.328	
14,200.0	7,500.0	14,083.0	7,500.0	115.2	113.3	90.00	-6,296.2	-130.9	1,410.2	1,183.7	226.54	6.225	

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 2F-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 2F-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									
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		
14,300.0	7,500.0	14,200.8	7,500.0	116.9	115.0	90.00	-6,413.9	-129.7	1,409.0	1,179.0	230.03	6.125			
14,400.0	7,500.0	14,300.8	7,500.0	118.6	116.8	90.00	-6,513.9	-128.4	1,407.7	1,174.2	233.51	6.029			
14,500.0	7,500.0	14,400.7	7,500.0	120.4	118.5	90.00	-6,613.8	-127.2	1,406.5	1,169.5	237.00	5.935			
14,600.0	7,500.0	14,500.7	7,500.0	122.1	120.3	90.00	-6,713.8	-125.9	1,405.2	1,164.8	240.48	5.843			
14,700.0	7,500.0	14,600.7	7,500.0	123.8	122.0	90.00	-6,813.8	-124.7	1,404.0	1,160.0	243.97	5.755			
14,800.0	7,500.0	14,700.7	7,500.0	125.5	123.8	90.00	-6,913.8	-123.4	1,402.7	1,155.3	247.45	5.669			
14,900.0	7,500.0	14,800.7	7,500.0	127.2	125.5	90.00	-7,013.8	-122.2	1,401.5	1,150.5	250.94	5.585			
15,000.0	7,500.0	14,900.7	7,500.0	128.9	127.2	90.00	-7,113.8	-120.9	1,400.2	1,145.8	254.43	5.503			
15,100.0	7,500.0	15,000.7	7,500.0	130.6	129.0	90.00	-7,213.7	-119.7	1,399.0	1,141.1	257.92	5.424			
15,200.0	7,500.0	15,100.7	7,500.0	132.4	130.7	90.00	-7,313.7	-118.4	1,397.7	1,136.3	261.40	5.347			
15,300.0	7,500.0	15,200.7	7,500.0	134.1	132.5	90.00	-7,413.7	-117.2	1,396.5	1,131.6	264.89	5.272			
15,400.0	7,500.0	15,300.7	7,500.0	135.8	134.2	90.00	-7,513.7	-115.9	1,395.2	1,126.8	268.38	5.199			
15,500.0	7,500.0	15,400.7	7,500.0	137.5	136.0	90.00	-7,613.7	-114.7	1,394.0	1,122.1	271.87	5.127			
15,600.0	7,500.0	15,500.7	7,500.0	139.2	137.7	90.00	-7,713.7	-113.4	1,392.7	1,117.4	275.36	5.058			
15,700.0	7,500.0	15,600.7	7,500.0	141.0	139.5	90.00	-7,813.6	-112.2	1,391.5	1,112.6	278.86	4.990			
15,800.0	7,500.0	15,700.6	7,500.0	142.7	141.2	90.00	-7,913.6	-110.9	1,390.2	1,107.9	282.35	4.924			
15,822.8	7,500.0	15,706.0	7,500.0	143.1	141.3	90.00	-7,919.0	-110.9	1,390.0	1,107.4	282.60	4.919 SF			
15,841.7	7,500.0	15,706.0	7,500.0	143.4	141.3	90.00	-7,919.0	-110.9	1,390.2	1,107.6	282.62	4.919			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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	-90.02	0.0	-22.4	22.4				
100.0	100.0	100.0	100.0	0.2	0.2	-90.02	0.0	-22.4	22.4	22.1	0.30	73.728	
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-22.4	22.4	21.7	0.65	34.301	
300.0	300.0	300.0	300.0	0.5	0.5	-90.02	0.0	-22.4	22.4	21.4	1.00	22.350	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-157.25	0.0	-22.4	23.2	21.8	1.35	17.167	
500.0	500.0	500.2	500.2	0.9	0.9	-157.78	0.8	-22.0	25.2	23.5	1.70	14.816	
600.0	599.9	600.3	600.3	1.0	1.0	-156.39	3.1	-20.8	28.0	26.0	2.06	13.638	
700.0	699.7	700.5	700.3	1.2	1.2	-153.72	7.1	-18.9	31.7	29.3	2.42	13.118	
800.0	799.4	800.6	800.3	1.4	1.4	-150.34	12.5	-16.2	36.4	33.6	2.80	13.005	
900.0	898.9	900.6	900.0	1.7	1.6	-146.73	19.6	-12.7	42.0	38.8	3.20	13.150	
1,000.0	998.3	1,000.3	999.3	1.9	1.8	-144.19	27.4	-8.8	49.1	45.4	3.62	13.570	
1,100.0	1,097.4	1,100.0	1,098.6	2.2	2.0	-143.34	35.1	-5.0	57.5	53.5	4.04	14.227	
1,200.0	1,196.3	1,199.5	1,197.7	2.5	2.3	-143.59	42.9	-1.1	67.4	62.9	4.48	15.049	
1,300.0	1,294.9	1,298.8	1,296.7	2.8	2.5	-144.51	50.7	2.7	78.7	73.7	4.92	16.003	
1,400.0	1,393.3	1,398.0	1,395.5	3.2	2.7	-145.80	58.4	6.5	91.4	86.0	5.35	17.068	
1,494.4	1,485.8	1,491.4	1,488.5	3.5	2.9	-147.19	65.7	10.2	104.8	99.0	5.77	18.167	
1,500.0	1,491.2	1,497.0	1,494.0	3.5	2.9	-147.28	66.1	10.4	105.6	99.8	5.79	18.235	
1,600.0	1,589.1	1,595.8	1,592.5	3.9	3.2	-148.65	73.9	14.2	120.5	114.3	6.22	19.365	
1,700.0	1,686.9	1,694.6	1,691.0	4.3	3.4	-149.73	81.6	18.0	135.5	128.8	6.66	20.355	
1,800.0	1,784.8	1,793.5	1,789.4	4.7	3.6	-150.59	89.3	21.8	150.5	143.4	7.09	21.229	
1,900.0	1,882.6	1,892.3	1,887.9	5.1	3.8	-151.30	97.0	25.7	165.5	158.0	7.52	22.005	
2,000.0	1,980.4	1,991.2	1,986.4	5.5	4.1	-151.88	104.7	29.5	180.6	172.6	7.96	22.697	
2,100.0	2,078.3	2,090.0	2,084.9	5.9	4.3	-152.38	112.5	33.3	195.7	187.3	8.39	23.319	
2,200.0	2,176.1	2,188.9	2,183.3	6.3	4.5	-152.81	120.2	37.1	210.8	201.9	8.83	23.881	
2,300.0	2,273.9	2,287.7	2,281.8	6.7	4.7	-153.17	127.9	40.9	225.9	216.6	9.26	24.391	
2,400.0	2,371.8	2,386.5	2,380.3	7.1	5.0	-153.50	135.6	44.8	241.0	231.3	9.69	24.855	
2,500.0	2,469.6	2,485.4	2,478.7	7.5	5.2	-153.78	143.3	48.6	256.1	245.9	10.13	25.279	
2,600.0	2,567.4	2,584.2	2,577.2	7.9	5.4	-154.03	151.1	52.4	271.2	260.6	10.57	25.669	
2,700.0	2,665.3	2,683.1	2,675.7	8.3	5.6	-154.26	158.8	56.2	286.3	275.3	11.00	26.028	
2,800.0	2,763.1	2,781.9	2,774.1	8.7	5.9	-154.46	166.5	60.1	301.4	290.0	11.44	26.360	
2,900.0	2,860.9	2,880.8	2,872.6	9.1	6.1	-154.65	174.2	63.9	316.6	304.7	11.87	26.667	
3,000.0	2,958.8	2,979.6	2,971.1	9.5	6.3	-154.81	181.9	67.7	331.7	319.4	12.31	26.953	
3,100.0	3,056.6	3,078.5	3,069.5	9.9	6.5	-154.97	189.6	71.5	346.8	334.1	12.74	27.219	
3,200.0	3,154.4	3,177.3	3,168.0	10.3	6.8	-155.11	197.4	75.3	362.0	348.8	13.18	27.467	
3,300.0	3,252.3	3,276.1	3,266.5	10.7	7.0	-155.24	205.1	79.2	377.1	363.5	13.61	27.700	
3,400.0	3,350.1	3,375.0	3,364.9	11.1	7.2	-155.35	212.8	83.0	392.3	378.2	14.05	27.918	
3,500.0	3,447.9	3,473.8	3,463.4	11.5	7.5	-155.46	220.5	86.8	407.4	392.9	14.49	28.123	
3,600.0	3,545.8	3,572.7	3,561.9	11.9	7.7	-155.57	228.2	90.6	422.6	407.6	14.92	28.316	
3,700.0	3,643.6	3,671.5	3,660.3	12.3	7.9	-155.66	236.0	94.5	437.7	422.3	15.36	28.498	
3,800.0	3,741.5	3,770.4	3,758.8	12.7	8.1	-155.75	243.7	98.3	452.8	437.0	15.80	28.670	
3,900.0	3,839.3	3,869.2	3,857.3	13.1	8.4	-155.83	251.4	102.1	468.0	451.8	16.23	28.832	
4,000.0	3,937.1	3,968.0	3,955.7	13.5	8.6	-155.91	259.1	105.9	483.1	466.5	16.67	28.987	
4,100.0	4,035.0	4,066.9	4,054.2	13.9	8.8	-155.98	266.8	109.7	498.3	481.2	17.10	29.133	
4,200.0	4,132.8	4,165.7	4,152.7	14.3	9.1	-156.05	274.6	113.6	513.4	495.9	17.54	29.272	
4,300.0	4,230.6	4,264.6	4,251.1	14.7	9.3	-156.12	282.3	117.4	528.6	510.6	17.98	29.404	
4,400.0	4,328.5	4,363.4	4,349.6	15.1	9.5	-156.18	290.0	121.2	543.7	525.3	18.41	29.530	
4,500.0	4,426.3	4,462.3	4,448.1	15.5	9.7	-156.24	297.7	125.0	558.9	540.0	18.85	29.650	
4,600.0	4,524.1	4,561.1	4,546.5	15.9	10.0	-156.29	305.4	128.9	574.0	554.8	19.29	29.765	
4,700.0	4,622.0	4,660.0	4,645.0	16.3	10.2	-156.34	313.1	132.7	589.2	569.5	19.72	29.874	
4,800.0	4,719.8	4,758.8	4,743.5	16.7	10.4	-156.39	320.9	136.5	604.4	584.2	20.16	29.979	
4,900.0	4,817.6	4,857.6	4,842.0	17.2	10.7	-156.44	328.6	140.3	619.5	598.9	20.60	30.079	
5,000.0	4,915.5	4,956.5	4,940.4	17.6	10.9	-156.48	336.3	144.1	634.7	613.6	21.03	30.175	

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 2F-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 2F-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	5,013.3	5,055.3	5,038.9	18.0	11.1	-156.53	344.0	148.0	649.8	628.3	21.47	30.268	
5,200.0	5,111.1	5,154.2	5,137.4	18.4	11.3	-156.57	351.7	151.8	665.0	643.1	21.91	30.356	
5,300.0	5,209.0	5,253.0	5,235.8	18.8	11.6	-156.61	359.5	155.6	680.1	657.8	22.34	30.441	
5,400.0	5,306.8	5,351.9	5,334.3	19.2	11.8	-156.64	367.2	159.4	695.3	672.5	22.78	30.523	
5,500.0	5,404.6	5,450.7	5,432.8	19.6	12.0	-156.68	374.9	163.3	710.4	687.2	23.22	30.602	
5,600.0	5,502.5	5,549.6	5,531.2	20.0	12.3	-156.71	382.6	167.1	725.6	701.9	23.65	30.678	
5,700.0	5,600.3	5,648.4	5,629.7	20.4	12.5	-156.74	390.3	170.9	740.8	716.7	24.09	30.751	
5,800.0	5,698.2	5,747.2	5,728.2	20.8	12.7	-156.78	398.1	174.7	755.9	731.4	24.53	30.821	
5,900.0	5,796.0	5,846.1	5,826.6	21.2	12.9	-156.81	405.8	178.5	771.1	746.1	24.96	30.889	
6,000.0	5,893.8	5,944.9	5,925.1	21.6	13.2	-156.84	413.5	182.4	786.2	760.8	25.40	30.955	
6,100.0	5,991.7	6,043.8	6,023.6	22.0	13.4	-156.86	421.2	186.2	801.4	775.5	25.84	31.018	
6,200.0	6,089.5	6,142.6	6,122.0	22.4	13.6	-156.89	428.9	190.0	816.5	790.3	26.27	31.079	
6,300.0	6,187.3	6,241.5	6,220.5	22.8	13.9	-156.92	436.6	193.8	831.7	805.0	26.71	31.139	
6,400.0	6,285.2	6,340.3	6,319.0	23.2	14.1	-156.94	444.4	197.7	846.9	819.7	27.15	31.196	
6,500.0	6,383.0	6,439.1	6,417.4	23.7	14.3	-156.96	452.1	201.5	862.0	834.4	27.58	31.251	
6,600.0	6,480.8	6,538.0	6,515.9	24.1	14.5	-156.99	459.8	205.3	877.2	849.1	28.02	31.305	
6,700.0	6,578.7	6,636.8	6,614.4	24.5	14.8	-157.01	467.5	209.1	892.3	863.9	28.46	31.357	
6,800.0	6,676.5	6,735.7	6,712.8	24.9	15.0	-157.03	475.2	212.9	907.5	878.6	28.89	31.408	
6,900.0	6,774.3	6,834.5	6,811.3	25.3	15.2	-157.05	483.0	216.8	922.6	893.3	29.33	31.457	
7,000.0	6,872.2	6,933.4	6,909.8	25.7	15.5	-157.07	490.7	220.6	937.8	908.0	29.77	31.505	
7,019.1	6,890.8	6,952.2	6,928.6	25.8	15.5	-157.08	492.2	221.3	940.7	910.8	29.85	31.514	
7,050.0	6,921.1	6,982.8	6,959.0	25.9	15.6	-172.14	494.5	222.5	945.4	915.4	29.98	31.532	
7,100.0	6,970.2	7,032.0	7,008.0	26.0	15.7	162.14	498.4	224.4	952.9	922.7	30.20	31.551	
7,150.0	7,019.0	7,080.6	7,056.4	26.2	15.8	141.83	502.2	226.3	960.4	930.0	30.44	31.547	
7,200.0	7,067.2	7,128.2	7,103.9	26.3	15.9	128.66	505.9	228.1	967.9	937.2	30.70	31.525	
7,250.0	7,114.4	7,175.9	7,151.5	26.4	16.0	120.43	508.9	230.0	975.6	944.6	30.95	31.523	
7,300.0	7,160.3	7,225.6	7,201.0	26.4	16.0	115.08	508.1	231.9	983.3	952.2	31.11	31.603	
7,350.0	7,204.5	7,276.8	7,252.0	26.5	16.0	111.45	502.8	233.9	991.1	959.9	31.19	31.778	
7,400.0	7,246.6	7,330.0	7,304.1	26.5	16.0	108.92	492.6	235.9	998.8	967.6	31.16	32.056	
7,450.0	7,286.4	7,385.1	7,356.9	26.5	15.9	107.11	476.9	237.9	1,006.4	975.4	31.02	32.443	
7,500.0	7,323.5	7,442.5	7,409.9	26.5	15.8	105.81	455.2	240.0	1,013.8	983.0	30.77	32.944	
7,550.0	7,357.7	7,502.2	7,462.6	26.5	15.7	104.88	427.1	242.1	1,020.8	990.4	30.42	33.563	
7,600.0	7,388.7	7,564.5	7,514.0	26.5	15.5	104.23	392.2	244.0	1,027.5	997.6	29.96	34.294	
7,650.0	7,416.3	7,629.3	7,563.2	26.5	15.3	103.78	350.2	246.0	1,033.7	1,004.2	29.44	35.113	
7,700.0	7,440.2	7,696.6	7,609.0	26.5	15.1	103.49	300.9	247.7	1,039.2	1,010.3	28.88	35.983	
7,750.0	7,460.3	7,766.5	7,650.1	26.5	14.9	103.31	244.4	249.3	1,044.0	1,015.7	28.35	36.827	
7,800.0	7,476.4	7,838.7	7,685.0	26.5	14.7	103.22	181.3	250.7	1,048.0	1,020.1	27.91	37.550	
7,850.0	7,488.4	7,912.8	7,712.2	26.6	14.7	103.17	112.4	251.7	1,051.0	1,023.4	27.64	38.025	
7,900.0	7,496.2	7,988.4	7,730.7	26.6	14.7	103.16	39.1	252.5	1,053.0	1,025.4	27.61	38.137	
7,950.0	7,499.8	8,064.9	7,739.4	26.7	14.9	103.16	-36.8	252.8	1,054.0	1,026.1	27.87	37.815	
7,966.7	7,500.0	8,090.5	7,740.0	26.7	15.0	103.16	-62.4	252.8	1,054.0	1,026.0	28.02	37.615	
8,000.0	7,500.0	8,124.4	7,740.0	26.8	15.1	103.16	-96.2	252.8	1,054.0	1,025.7	28.30	37.248	
8,100.0	7,500.0	8,224.4	7,740.0	27.0	15.6	103.16	-196.2	252.8	1,054.0	1,024.7	29.32	35.953	
8,200.0	7,500.0	8,324.4	7,740.0	27.4	16.3	103.16	-296.2	252.8	1,054.0	1,023.4	30.69	34.350	
8,300.0	7,500.0	8,424.4	7,740.0	27.9	17.1	103.16	-396.2	252.8	1,054.0	1,021.7	32.36	32.575	
8,400.0	7,500.0	8,524.4	7,740.0	28.5	18.1	103.16	-496.2	252.8	1,054.0	1,019.8	34.29	30.739	
8,500.0	7,500.0	8,624.4	7,740.0	29.1	19.1	103.16	-596.2	252.8	1,054.0	1,017.6	36.44	28.925	
8,600.0	7,500.0	8,724.4	7,740.0	29.9	20.3	103.16	-696.2	252.8	1,054.0	1,015.3	38.77	27.184	
8,700.0	7,500.0	8,824.4	7,740.0	30.8	21.5	103.16	-796.2	252.8	1,054.0	1,012.8	41.26	25.547	
8,800.0	7,500.0	8,924.4	7,740.0	31.7	22.9	103.16	-896.2	252.8	1,054.0	1,010.2	43.87	24.027	
8,900.0	7,500.0	9,024.4	7,740.0	32.7	24.2	103.16	-996.2	252.8	1,054.0	1,007.5	46.58	22.627	
9,000.0	7,500.0	9,124.4	7,740.0	33.7	25.6	103.16	-1,096.2	252.8	1,054.0	1,004.7	49.39	21.343	

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 2F-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 2F-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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,100.0	7,500.0	9,224.4	7,740.0	34.8	27.1	103.16	-1,196.2	252.8	1,054.0	1,001.8	52.26	20.168	
9,200.0	7,500.0	9,324.4	7,740.0	36.0	28.6	103.16	-1,296.2	252.8	1,054.0	998.8	55.20	19.095	
9,300.0	7,500.0	9,424.4	7,740.0	37.2	30.1	103.16	-1,396.2	252.8	1,054.0	995.9	58.19	18.114	
9,400.0	7,500.0	9,524.4	7,740.0	38.4	31.6	103.16	-1,496.2	252.8	1,054.0	992.8	61.22	17.216	
9,500.0	7,500.0	9,624.4	7,740.0	39.7	33.2	103.16	-1,596.2	252.8	1,054.0	989.8	64.30	16.393	
9,600.0	7,500.0	9,724.4	7,740.0	41.1	34.8	103.16	-1,696.2	252.8	1,054.0	986.6	67.40	15.638	
9,700.0	7,500.0	9,824.4	7,740.0	42.4	36.4	103.16	-1,796.2	252.8	1,054.0	983.5	70.54	14.943	
9,800.0	7,500.0	9,924.4	7,740.0	43.8	38.0	103.16	-1,896.2	252.8	1,054.0	980.3	73.70	14.302	
9,900.0	7,500.0	10,024.4	7,740.0	45.2	39.6	103.16	-1,996.2	252.8	1,054.0	977.2	76.88	13.710	
10,000.0	7,500.0	10,124.4	7,740.0	46.6	41.3	103.16	-2,096.2	252.8	1,054.0	974.0	80.08	13.162	
10,100.0	7,500.0	10,224.4	7,740.0	48.1	42.9	103.16	-2,196.2	252.8	1,054.0	970.7	83.30	12.654	
10,200.0	7,500.0	10,324.4	7,740.0	49.6	44.6	103.16	-2,296.2	252.8	1,054.0	967.5	86.53	12.181	
10,300.0	7,500.0	10,424.4	7,740.0	51.1	46.2	103.16	-2,396.2	252.8	1,054.0	964.3	89.78	11.740	
10,400.0	7,500.0	10,524.4	7,740.0	52.6	47.9	103.16	-2,496.2	252.8	1,054.0	961.0	93.04	11.329	
10,500.0	7,500.0	10,624.4	7,740.0	54.1	49.6	103.16	-2,596.2	252.8	1,054.0	957.7	96.31	10.944	
10,600.0	7,500.0	10,724.4	7,740.0	55.6	51.2	103.16	-2,696.2	252.8	1,054.0	954.5	99.59	10.584	
10,700.0	7,500.0	10,824.4	7,740.0	57.2	52.9	103.16	-2,796.2	252.8	1,054.0	951.2	102.88	10.245	
10,800.0	7,500.0	10,924.4	7,740.0	58.8	54.6	103.16	-2,896.2	252.8	1,054.0	947.9	106.18	9.927	
10,900.0	7,500.0	11,024.4	7,740.0	60.3	56.3	103.16	-2,996.2	252.8	1,054.0	944.6	109.48	9.628	
11,000.0	7,500.0	11,124.4	7,740.0	61.9	58.0	103.16	-3,096.2	252.8	1,054.0	941.3	112.79	9.345	
11,100.0	7,500.0	11,224.4	7,740.0	63.5	59.7	103.16	-3,196.2	252.8	1,054.0	937.9	116.11	9.078	
11,200.0	7,500.0	11,324.4	7,740.0	65.1	61.4	103.16	-3,296.2	252.8	1,054.0	934.6	119.43	8.825	
11,300.0	7,500.0	11,424.4	7,740.0	66.7	63.1	103.16	-3,396.2	252.8	1,054.0	931.3	122.76	8.586	
11,400.0	7,500.0	11,524.4	7,740.0	68.3	64.8	103.16	-3,496.2	252.8	1,054.0	928.0	126.10	8.359	
11,500.0	7,500.0	11,624.4	7,740.0	70.0	66.5	103.16	-3,596.2	252.8	1,054.0	924.6	129.43	8.144	
11,600.0	7,500.0	11,724.4	7,740.0	71.6	68.2	103.16	-3,696.2	252.8	1,054.0	921.3	132.77	7.939	
11,700.0	7,500.0	11,824.4	7,740.0	73.2	69.9	103.16	-3,796.2	252.8	1,054.0	917.9	136.12	7.744	
11,800.0	7,500.0	11,924.4	7,740.0	74.9	71.6	103.16	-3,896.2	252.8	1,054.0	914.6	139.47	7.558	
11,900.0	7,500.0	12,024.4	7,740.0	76.5	73.4	103.16	-3,996.2	252.8	1,054.0	911.2	142.82	7.380	
12,000.0	7,500.0	12,124.4	7,740.0	78.2	75.1	103.16	-4,096.2	252.8	1,054.0	907.9	146.18	7.211	
12,100.0	7,500.0	12,224.4	7,740.0	79.8	76.8	103.16	-4,196.2	252.8	1,054.1	904.5	149.53	7.049	
12,200.0	7,500.0	12,324.4	7,740.0	81.5	78.5	103.16	-4,296.2	252.8	1,054.1	901.2	152.89	6.894	
12,300.0	7,500.0	12,424.4	7,740.0	83.1	80.3	103.16	-4,396.2	252.8	1,054.1	897.8	156.26	6.746	
12,400.0	7,500.0	12,524.4	7,740.0	84.8	82.0	103.16	-4,496.2	252.8	1,054.1	894.4	159.62	6.603	
12,500.0	7,500.0	12,624.4	7,740.0	86.5	83.7	103.16	-4,596.2	252.8	1,054.1	891.1	162.99	6.467	
12,600.0	7,500.0	12,724.4	7,740.0	88.1	85.4	103.16	-4,696.2	252.8	1,054.1	887.7	166.36	6.336	
12,700.0	7,500.0	12,824.4	7,740.0	89.8	87.2	103.16	-4,796.2	252.8	1,054.1	884.3	169.73	6.210	
12,800.0	7,500.0	12,924.4	7,740.0	91.5	88.9	103.16	-4,896.2	252.8	1,054.1	880.9	173.10	6.089	
12,900.0	7,500.0	13,024.4	7,740.0	93.2	90.6	103.16	-4,996.2	252.8	1,054.1	877.6	176.48	5.973	
13,000.0	7,500.0	13,124.4	7,740.0	94.9	92.4	103.16	-5,096.2	252.8	1,054.1	874.2	179.85	5.861	
13,100.0	7,500.0	13,224.4	7,740.0	96.5	94.1	103.16	-5,196.2	252.8	1,054.1	870.8	183.23	5.753	
13,200.0	7,500.0	13,324.4	7,740.0	98.2	95.8	103.16	-5,296.2	252.8	1,054.1	867.4	186.61	5.648	
13,300.0	7,500.0	13,424.4	7,740.0	99.9	97.5	103.16	-5,396.2	252.8	1,054.1	864.1	189.99	5.548	
13,400.0	7,500.0	13,524.4	7,740.0	101.6	99.3	103.16	-5,496.2	252.8	1,054.1	860.7	193.37	5.451	
13,500.0	7,500.0	13,624.4	7,740.0	103.3	101.0	103.16	-5,596.2	252.8	1,054.1	857.3	196.76	5.357	
13,600.0	7,500.0	13,724.4	7,740.0	105.0	102.8	103.16	-5,696.2	252.8	1,054.1	853.9	200.14	5.267	
13,700.0	7,500.0	13,824.4	7,740.0	106.7	104.5	103.16	-5,796.2	252.8	1,054.1	850.5	203.53	5.179	
13,800.0	7,500.0	13,924.4	7,740.0	108.4	106.2	103.16	-5,896.2	252.8	1,054.1	847.1	206.91	5.094	
13,900.0	7,500.0	14,024.4	7,740.0	110.1	108.0	103.16	-5,996.2	252.8	1,054.1	843.8	210.30	5.012	
14,000.0	7,500.0	14,124.4	7,740.0	111.8	109.7	103.16	-6,096.2	252.8	1,054.1	840.4	213.69	4.933	
14,100.0	7,500.0	14,224.4	7,740.0	113.5	111.4	103.16	-6,196.2	252.8	1,054.1	837.0	217.08	4.856	
14,200.0	7,500.0	14,324.4	7,740.0	115.2	113.2	103.16	-6,296.2	252.8	1,054.1	833.6	220.47	4.781	

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 2F-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 2F-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	Vertical	Measured Depth	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		
14,300.0	7,500.0	14,424.4	7,740.0	116.9	114.9	103.16	-6,396.2	252.8	1,054.1	830.2	223.86	4.709		
14,400.0	7,500.0	14,524.4	7,740.0	118.6	116.7	103.16	-6,496.2	252.8	1,054.1	826.8	227.25	4.638		
14,500.0	7,500.0	14,624.4	7,740.0	120.4	118.4	103.16	-6,596.2	252.8	1,054.1	823.4	230.64	4.570		
14,600.0	7,500.0	14,724.4	7,740.0	122.1	120.1	103.16	-6,696.2	252.8	1,054.1	820.0	234.04	4.504		
14,700.0	7,500.0	14,824.4	7,740.0	123.8	121.9	103.16	-6,796.2	252.8	1,054.1	816.6	237.43	4.439		
14,800.0	7,500.0	14,924.4	7,740.0	125.5	123.6	103.16	-6,896.2	252.8	1,054.1	813.2	240.82	4.377		
14,900.0	7,500.0	15,024.4	7,740.0	127.2	125.4	103.16	-6,996.2	252.8	1,054.1	809.8	244.22	4.316		
15,000.0	7,500.0	15,124.4	7,740.0	128.9	127.1	103.16	-7,096.2	252.8	1,054.1	806.4	247.62	4.257		
15,100.0	7,500.0	15,224.4	7,740.0	130.6	128.8	103.16	-7,196.2	252.8	1,054.1	803.0	251.01	4.199		
15,200.0	7,500.0	15,324.4	7,740.0	132.4	130.6	103.16	-7,296.2	252.8	1,054.1	799.6	254.41	4.143		
15,300.0	7,500.0	15,424.4	7,740.0	134.1	132.3	103.16	-7,396.2	252.8	1,054.1	796.2	257.81	4.089		
15,400.0	7,500.0	15,524.4	7,740.0	135.8	134.1	103.16	-7,496.2	252.8	1,054.1	792.8	261.20	4.035		
15,500.0	7,500.0	15,624.4	7,740.0	137.5	135.8	103.16	-7,596.2	252.8	1,054.1	789.5	264.60	3.984		
15,600.0	7,500.0	15,724.4	7,740.0	139.2	137.6	103.16	-7,696.2	252.8	1,054.1	786.1	268.00	3.933		
15,700.0	7,500.0	15,824.4	7,740.0	141.0	139.3	103.16	-7,796.2	252.8	1,054.1	782.7	271.40	3.884		
15,800.0	7,500.0	15,924.4	7,740.0	142.7	141.1	103.16	-7,896.2	252.8	1,054.1	779.3	274.80	3.836		
15,800.0	7,500.0	15,924.4	7,740.0	142.7	141.1	103.16	-7,896.2	252.8	1,054.1	779.3	274.80	3.836		
15,841.7	7,500.0	15,953.0	7,740.0	143.4	141.6	103.16	-7,924.8	252.8	1,054.1	778.5	275.65	3.824 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 2D-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	-90.03	0.0	-15.1	15.1					
100.0	100.0	100.0	100.0	0.2	0.2	-90.03	0.0	-15.1	15.1	14.8	0.30	49.767		
200.0	200.0	200.0	200.0	0.3	0.3	-90.03	0.0	-15.1	15.1	14.5	0.65	23.153		
300.0	300.0	300.0	300.0	0.5	0.5	-90.03	0.0	-15.1	15.1	14.1	1.00	15.086	CC, ES	
400.0	400.0	400.0	400.0	0.7	0.7	-157.65	0.0	-15.1	15.9	14.6	1.35	11.782		
500.0	500.0	500.0	500.0	0.9	0.8	-160.75	0.0	-15.1	18.4	16.7	1.70	10.800		
600.0	599.9	600.1	600.1	1.0	1.0	-162.86	0.7	-14.6	21.9	19.8	2.05	10.675		
700.0	699.7	700.4	700.3	1.2	1.2	-162.80	2.7	-12.9	25.8	23.4	2.40	10.752		
800.0	799.4	800.6	800.5	1.4	1.4	-161.42	6.1	-10.1	30.2	27.5	2.76	10.940		
900.0	898.9	900.9	900.6	1.7	1.6	-159.26	10.8	-6.2	35.0	31.9	3.13	11.194		
1,000.0	998.3	1,001.2	1,000.5	1.9	1.8	-156.68	16.9	-1.2	40.4	36.9	3.51	11.487		
1,100.0	1,097.4	1,101.4	1,100.3	2.2	2.0	-153.91	24.3	4.9	46.3	42.4	3.92	11.794		
1,200.0	1,196.3	1,201.7	1,199.9	2.5	2.2	-151.10	33.1	12.2	52.8	48.4	4.37	12.094		
1,300.0	1,294.9	1,301.4	1,298.9	2.8	2.5	-149.06	42.5	19.9	60.4	55.6	4.83	12.518		
1,400.0	1,393.3	1,401.0	1,397.7	3.2	2.7	-148.24	51.9	27.6	69.6	64.3	5.30	13.139		
1,494.4	1,485.8	1,494.8	1,490.9	3.5	3.0	-148.25	60.7	34.9	79.6	73.9	5.74	13.864		
1,500.0	1,491.2	1,500.4	1,496.4	3.5	3.0	-148.27	61.3	35.4	80.3	74.5	5.77	13.911		
1,600.0	1,589.1	1,599.7	1,595.0	3.9	3.3	-148.58	70.6	43.1	91.6	85.4	6.24	14.675		
1,700.0	1,686.9	1,699.1	1,693.6	4.3	3.5	-148.83	80.0	50.8	102.9	96.2	6.72	15.324		
1,800.0	1,784.8	1,798.5	1,792.2	4.7	3.8	-149.02	89.4	58.5	114.2	107.0	7.19	15.881		
1,900.0	1,882.6	1,897.8	1,890.9	5.1	4.0	-149.19	98.7	66.2	125.6	117.9	7.67	16.364		
2,000.0	1,980.4	1,997.2	1,989.5	5.5	4.3	-149.32	108.1	73.9	136.9	128.7	8.15	16.786		
2,100.0	2,078.3	2,096.5	2,088.1	5.9	4.6	-149.44	117.4	81.6	148.2	139.6	8.64	17.157		
2,200.0	2,176.1	2,195.9	2,186.7	6.3	4.8	-149.53	126.8	89.3	159.5	150.4	9.12	17.487		
2,300.0	2,273.9	2,295.2	2,285.3	6.7	5.1	-149.62	136.2	97.1	170.8	161.2	9.61	17.781		
2,400.0	2,371.8	2,394.6	2,383.9	7.1	5.4	-149.69	145.5	104.8	182.2	172.1	10.09	18.045		
2,500.0	2,469.6	2,494.0	2,482.5	7.5	5.6	-149.76	154.9	112.5	193.5	182.9	10.58	18.283		
2,600.0	2,567.4	2,593.3	2,581.1	7.9	5.9	-149.82	164.3	120.2	204.8	193.7	11.07	18.500		
2,700.0	2,665.3	2,692.7	2,679.8	8.3	6.2	-149.87	173.6	127.9	216.1	204.6	11.56	18.696		
2,800.0	2,763.1	2,792.0	2,778.4	8.7	6.5	-149.92	183.0	135.6	227.5	215.4	12.05	18.876		
2,900.0	2,860.9	2,891.4	2,877.0	9.1	6.7	-149.96	192.4	143.3	238.8	226.2	12.54	19.042		
3,000.0	2,958.8	2,990.7	2,975.6	9.5	7.0	-150.00	201.7	151.0	250.1	237.1	13.03	19.194		
3,100.0	3,056.6	3,090.1	3,074.2	9.9	7.3	-150.03	211.1	158.8	261.4	247.9	13.52	19.334		
3,200.0	3,154.4	3,189.5	3,172.8	10.3	7.5	-150.07	220.4	166.5	272.8	258.7	14.01	19.464		
3,300.0	3,252.3	3,288.8	3,271.4	10.7	7.8	-150.10	229.8	174.2	284.1	269.6	14.50	19.585		
3,400.0	3,350.1	3,388.2	3,370.1	11.1	8.1	-150.12	239.2	181.9	295.4	280.4	15.00	19.698		
3,500.0	3,447.9	3,487.5	3,468.7	11.5	8.4	-150.15	248.5	189.6	306.7	291.2	15.49	19.803		
3,600.0	3,545.8	3,586.9	3,567.3	11.9	8.6	-150.17	257.9	197.3	318.0	302.1	15.98	19.901		
3,700.0	3,643.6	3,686.2	3,665.9	12.3	8.9	-150.19	267.3	205.0	329.4	312.9	16.47	19.993		
3,800.0	3,741.5	3,785.6	3,764.5	12.7	9.2	-150.22	276.6	212.7	340.7	323.7	16.97	20.080		
3,900.0	3,839.3	3,884.9	3,863.1	13.1	9.4	-150.23	286.0	220.5	352.0	334.6	17.46	20.161		
4,000.0	3,937.1	3,984.3	3,961.7	13.5	9.7	-150.25	295.4	228.2	363.3	345.4	17.95	20.238		
4,100.0	4,035.0	4,083.7	4,060.3	13.9	10.0	-150.27	304.7	235.9	374.7	356.2	18.45	20.311		
4,200.0	4,132.8	4,183.0	4,159.0	14.3	10.3	-150.29	314.1	243.6	386.0	367.1	18.94	20.379		
4,300.0	4,230.6	4,282.4	4,257.6	14.7	10.5	-150.30	323.4	251.3	397.3	377.9	19.43	20.444		
4,400.0	4,328.5	4,381.7	4,356.2	15.1	10.8	-150.32	332.8	259.0	408.6	388.7	19.93	20.506		
4,500.0	4,426.3	4,481.1	4,454.8	15.5	11.1	-150.33	342.2	266.7	420.0	399.5	20.42	20.564		
4,600.0	4,524.1	4,580.4	4,553.4	15.9	11.3	-150.34	351.5	274.4	431.3	410.4	20.92	20.620		
4,700.0	4,622.0	4,679.8	4,652.0	16.3	11.6	-150.35	360.9	282.2	442.6	421.2	21.41	20.673		
4,800.0	4,719.8	4,779.2	4,750.6	16.7	11.9	-150.37	370.3	289.9	453.9	432.0	21.90	20.724		
4,900.0	4,817.6	4,878.5	4,849.3	17.2	12.2	-150.38	379.6	297.6	465.3	442.9	22.40	20.772		
5,000.0	4,915.5	4,977.9	4,947.9	17.6	12.4	-150.39	389.0	305.3	476.6	453.7	22.89	20.818		

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 2F-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 2F-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 2D-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	5,013.3	5,077.2	5,046.5	18.0	12.7	-150.40	398.4	313.0	487.9	464.5	23.39	20.862		
5,200.0	5,111.1	5,176.6	5,145.1	18.4	13.0	-150.41	407.7	320.7	499.2	475.4	23.88	20.904		
5,300.0	5,209.0	5,275.9	5,243.7	18.8	13.3	-150.42	417.1	328.4	510.6	486.2	24.38	20.945		
5,400.0	5,306.8	5,375.3	5,342.3	19.2	13.5	-150.42	426.4	336.1	521.9	497.0	24.87	20.983		
5,500.0	5,404.6	5,474.7	5,440.9	19.6	13.8	-150.43	435.8	343.9	533.2	507.8	25.37	21.021		
5,600.0	5,502.5	5,574.0	5,539.5	20.0	14.1	-150.44	445.2	351.6	544.5	518.7	25.86	21.056		
5,700.0	5,600.3	5,673.4	5,638.2	20.4	14.4	-150.45	454.5	359.3	555.9	529.5	26.36	21.091		
5,800.0	5,698.2	5,772.7	5,736.8	20.8	14.6	-150.46	463.9	367.0	567.2	540.3	26.85	21.124		
5,900.0	5,796.0	5,872.1	5,835.4	21.2	14.9	-150.46	473.3	374.7	578.5	551.2	27.35	21.156		
6,000.0	5,893.8	5,971.4	5,934.0	21.6	15.2	-150.47	482.6	382.4	589.8	562.0	27.84	21.186		
6,100.0	5,991.7	6,070.8	6,032.6	22.0	15.4	-150.48	492.0	390.1	601.2	572.8	28.34	21.216		
6,200.0	6,089.5	6,170.2	6,131.2	22.4	15.7	-150.48	501.4	397.8	612.5	583.7	28.83	21.244		
6,300.0	6,187.3	6,269.5	6,229.8	22.8	16.0	-150.49	510.7	405.5	623.8	594.5	29.33	21.272		
6,400.0	6,285.2	6,368.9	6,328.5	23.2	16.3	-150.49	520.1	413.3	635.1	605.3	29.82	21.298		
6,500.0	6,383.0	6,468.2	6,427.1	23.7	16.5	-150.50	529.4	421.0	646.5	616.1	30.32	21.324		
6,600.0	6,480.8	6,567.6	6,525.7	24.1	16.8	-150.51	538.8	428.7	657.8	627.0	30.81	21.349		
6,700.0	6,578.7	6,666.9	6,624.3	24.5	17.1	-150.51	548.2	436.4	669.1	637.8	31.31	21.373		
6,800.0	6,676.5	6,766.3	6,722.9	24.9	17.4	-150.52	557.5	444.1	680.4	648.6	31.80	21.396		
6,900.0	6,774.3	6,865.6	6,821.5	25.3	17.6	-150.52	566.9	451.8	691.8	659.5	32.30	21.419		
7,000.0	6,872.2	6,971.2	6,926.4	25.7	17.9	-150.72	574.5	460.0	702.9	670.2	32.71	21.491		
7,019.1	6,890.8	6,992.6	6,947.7	25.8	17.9	-150.91	574.2	461.7	704.9	672.1	32.72	21.545		
7,050.0	6,921.1	7,026.9	6,981.9	25.9	17.9	-166.22	572.0	464.4	708.0	675.3	32.66	21.675		
7,100.0	6,970.2	7,081.9	7,036.2	26.0	17.9	167.43	564.3	468.6	713.1	680.6	32.47	21.961		
7,150.0	7,019.0	7,136.2	7,088.7	26.2	17.9	146.21	551.6	472.7	718.2	686.1	32.17	22.327		
7,200.0	7,067.2	7,189.7	7,139.2	26.3	17.8	131.90	534.2	476.7	723.3	691.5	31.77	22.765		
7,250.0	7,114.4	7,242.5	7,187.1	26.4	17.7	122.36	512.6	480.4	728.4	697.1	31.31	23.264		
7,300.0	7,160.3	7,294.5	7,232.3	26.4	17.6	115.67	487.0	483.9	733.3	702.5	30.79	23.813		
7,350.0	7,204.5	7,345.9	7,274.4	26.5	17.4	110.70	457.8	487.2	738.2	707.9	30.26	24.398		
7,400.0	7,246.6	7,396.5	7,313.2	26.5	17.2	106.84	425.4	490.3	742.8	713.1	29.71	25.001		
7,450.0	7,286.4	7,446.5	7,348.6	26.5	17.1	103.72	390.1	493.0	747.3	718.2	29.19	25.607		
7,500.0	7,323.5	7,495.9	7,380.3	26.5	16.9	101.13	352.5	495.5	751.6	722.9	28.69	26.194		
7,550.0	7,357.7	7,544.7	7,408.4	26.5	16.8	98.95	312.7	497.7	755.6	727.3	28.26	26.742		
7,600.0	7,388.7	7,592.9	7,432.8	26.5	16.6	97.08	271.2	499.6	759.3	731.4	27.88	27.232		
7,650.0	7,416.3	7,640.5	7,453.4	26.5	16.5	95.48	228.2	501.2	762.7	735.1	27.59	27.646		
7,700.0	7,440.2	7,687.6	7,470.2	26.5	16.4	94.10	184.2	502.6	765.7	738.3	27.38	27.967		
7,750.0	7,460.3	7,734.3	7,483.2	26.5	16.4	92.92	139.5	503.6	768.3	741.0	27.26	28.186		
7,800.0	7,476.4	7,780.5	7,492.5	26.5	16.4	91.92	94.2	504.3	770.5	743.3	27.23	28.296		
7,850.0	7,488.4	7,826.3	7,498.1	26.6	16.4	91.09	48.8	504.7	772.3	745.0	27.29	28.297		
7,900.0	7,496.2	7,871.7	7,500.0	26.6	16.5	90.42	3.4	504.9	773.6	746.1	27.43	28.201		
7,950.0	7,499.8	7,921.4	7,500.0	26.7	16.6	90.03	-46.2	504.9	774.2	746.5	27.71	27.944		
7,966.7	7,500.0	7,938.0	7,500.0	26.7	16.6	90.00	-62.9	504.9	774.3	746.5	27.83	27.825		
8,000.0	7,500.0	7,971.4	7,500.0	26.8	16.7	90.00	-96.2	504.9	774.3	746.2	28.09	27.567		
8,100.0	7,500.0	8,071.4	7,500.0	27.0	17.2	90.00	-196.2	504.9	774.3	745.1	29.14	26.568		
8,200.0	7,500.0	8,171.4	7,500.0	27.4	17.8	90.00	-296.2	504.9	774.3	743.7	30.57	25.330		
8,300.0	7,500.0	8,271.4	7,500.0	27.9	18.6	90.00	-396.2	504.9	774.3	742.0	32.31	23.963		
8,400.0	7,500.0	8,371.4	7,500.0	28.5	19.4	90.00	-496.2	504.9	774.3	740.0	34.33	22.557		
8,500.0	7,500.0	8,471.4	7,500.0	29.1	20.4	90.00	-596.2	504.9	774.3	737.7	36.57	21.174		
8,600.0	7,500.0	8,571.4	7,500.0	29.9	21.5	90.00	-696.2	504.9	774.3	735.3	39.00	19.856		
8,700.0	7,500.0	8,671.4	7,500.0	30.8	22.7	90.00	-796.2	504.9	774.3	732.7	41.58	18.622		
8,800.0	7,500.0	8,771.4	7,500.0	31.7	24.0	90.00	-896.2	504.9	774.3	730.0	44.29	17.482		
8,900.0	7,500.0	8,871.4	7,500.0	32.7	25.3	90.00	-996.2	504.9	774.3	727.2	47.11	16.437		
9,000.0	7,500.0	8,971.4	7,500.0	33.7	26.6	90.00	-1,096.2	504.9	774.3	724.3	50.01	15.483		

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 2F-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 2F-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 2D-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	
9,100.0	7,500.0	9,071.4	7,500.0	34.8	28.0	90.00	-1,196.2	504.9	774.3	721.3	52.99	14.613	
9,200.0	7,500.0	9,171.4	7,500.0	36.0	29.5	90.00	-1,296.2	504.9	774.3	718.3	56.03	13.820	
9,300.0	7,500.0	9,271.4	7,500.0	37.2	30.9	90.00	-1,396.2	504.9	774.3	715.2	59.12	13.098	
9,400.0	7,500.0	9,371.4	7,500.0	38.4	32.4	90.00	-1,496.2	504.9	774.3	712.0	62.25	12.438	
9,500.0	7,500.0	9,471.4	7,500.0	39.7	34.0	90.00	-1,596.2	504.9	774.3	708.9	65.42	11.835	
9,600.0	7,500.0	9,571.4	7,500.0	41.1	35.5	90.00	-1,696.2	504.9	774.3	705.7	68.63	11.282	
9,700.0	7,500.0	9,671.4	7,500.0	42.4	37.1	90.00	-1,796.2	504.9	774.3	702.4	71.86	10.775	
9,800.0	7,500.0	9,771.4	7,500.0	43.8	38.7	90.00	-1,896.2	504.9	774.3	699.2	75.12	10.307	
9,900.0	7,500.0	9,871.4	7,500.0	45.2	40.2	90.00	-1,996.2	504.9	774.3	695.9	78.40	9.876	
10,000.0	7,500.0	9,971.4	7,500.0	46.6	41.9	90.00	-2,096.2	504.9	774.3	692.6	81.70	9.477	
10,100.0	7,500.0	10,071.4	7,500.0	48.1	43.5	90.00	-2,196.2	504.9	774.3	689.3	85.02	9.108	
10,200.0	7,500.0	10,171.4	7,500.0	49.6	45.1	90.00	-2,296.2	504.9	774.3	685.9	88.35	8.764	
10,300.0	7,500.0	10,271.4	7,500.0	51.1	46.7	90.00	-2,396.2	504.9	774.3	682.6	91.69	8.445	
10,400.0	7,500.0	10,371.4	7,500.0	52.6	48.4	90.00	-2,496.2	504.9	774.3	679.2	95.05	8.147	
10,500.0	7,500.0	10,471.4	7,500.0	54.1	50.0	90.00	-2,596.2	504.9	774.3	675.9	98.41	7.868	
10,600.0	7,500.0	10,571.4	7,500.0	55.6	51.7	90.00	-2,696.2	504.9	774.3	672.5	101.79	7.607	
10,700.0	7,500.0	10,671.4	7,500.0	57.2	53.4	90.00	-2,796.2	504.9	774.3	669.1	105.17	7.362	
10,800.0	7,500.0	10,771.4	7,500.0	58.8	55.0	90.00	-2,896.2	504.9	774.3	665.7	108.56	7.132	
10,900.0	7,500.0	10,871.4	7,500.0	60.3	56.7	90.00	-2,996.2	504.9	774.3	662.3	111.96	6.916	
11,000.0	7,500.0	10,971.4	7,500.0	61.9	58.4	90.00	-3,096.2	504.9	774.3	658.9	115.37	6.711	
11,100.0	7,500.0	11,071.4	7,500.0	63.5	60.1	90.00	-3,196.2	504.9	774.3	655.5	118.78	6.519	
11,200.0	7,500.0	11,171.4	7,500.0	65.1	61.8	90.00	-3,296.2	504.9	774.3	652.1	122.20	6.336	
11,300.0	7,500.0	11,281.5	7,500.0	66.7	63.6	90.00	-3,406.3	505.1	774.1	647.9	126.18	6.135	
11,400.0	7,500.0	11,418.3	7,500.0	68.3	66.0	90.00	-3,543.0	510.2	770.4	639.0	131.47	5.860	
11,500.0	7,500.0	11,525.0	7,500.0	70.0	67.8	90.00	-3,649.5	517.5	763.5	628.3	135.22	5.647	
11,600.0	7,500.0	11,624.7	7,500.0	71.6	69.5	90.00	-3,749.0	524.5	756.6	617.9	138.65	5.457	
11,700.0	7,500.0	11,724.5	7,500.0	73.2	71.2	90.00	-3,848.5	531.4	749.6	607.5	142.09	5.276	
11,800.0	7,500.0	11,824.3	7,500.0	74.9	72.9	90.00	-3,948.0	538.4	742.6	597.1	145.52	5.103	
11,900.0	7,500.0	11,924.0	7,500.0	76.5	74.7	90.00	-4,047.6	545.3	735.6	586.7	148.97	4.938	
12,000.0	7,500.0	12,023.8	7,500.0	78.2	76.4	90.00	-4,147.1	552.3	728.7	576.2	152.41	4.781	
12,100.0	7,500.0	12,123.5	7,500.0	79.8	78.1	90.00	-4,246.6	559.3	721.7	565.8	155.86	4.630	
12,200.0	7,500.0	12,217.5	7,500.0	81.5	79.7	90.00	-4,340.3	565.7	714.8	555.8	159.02	4.495	
12,300.0	7,500.0	12,300.0	7,500.0	83.1	81.1	90.00	-4,422.7	569.6	710.1	548.5	161.59	4.394	
12,400.0	7,500.0	12,377.6	7,500.0	84.8	82.5	90.00	-4,500.3	571.1	708.1	544.3	163.76	4.324	
12,500.0	7,500.0	12,475.2	7,500.0	86.5	84.1	90.00	-4,597.9	571.4	707.8	540.7	167.07	4.237	
12,600.0	7,500.0	12,575.2	7,500.0	88.1	85.9	90.00	-4,697.9	571.6	707.6	537.0	170.54	4.149	
12,700.0	7,500.0	12,675.2	7,500.0	89.8	87.6	90.00	-4,797.9	571.8	707.3	533.3	174.00	4.065	
12,800.0	7,500.0	12,775.2	7,500.0	91.5	89.3	90.00	-4,897.9	572.1	707.1	529.6	177.47	3.984	
12,900.0	7,500.0	12,875.2	7,500.0	93.2	91.0	90.00	-4,997.9	572.3	706.9	525.9	180.93	3.907	
13,000.0	7,500.0	12,975.2	7,500.0	94.9	92.8	90.00	-5,097.9	572.5	706.6	522.2	184.40	3.832	
13,100.0	7,500.0	13,075.2	7,500.0	96.5	94.5	90.00	-5,197.9	572.8	706.4	518.5	187.87	3.760	
13,200.0	7,500.0	13,175.2	7,500.0	98.2	96.2	90.00	-5,297.9	573.0	706.2	514.8	191.35	3.691	
13,300.0	7,500.0	13,275.2	7,500.0	99.9	97.9	90.00	-5,397.9	573.3	705.9	511.1	194.82	3.624	
13,400.0	7,500.0	13,375.2	7,500.0	101.6	99.7	90.00	-5,497.9	573.5	705.7	507.4	198.29	3.559	
13,500.0	7,500.0	13,475.2	7,500.0	103.3	101.4	90.00	-5,597.9	573.7	705.5	503.7	201.77	3.496	
13,600.0	7,500.0	13,575.2	7,500.0	105.0	103.1	90.00	-5,697.9	574.0	705.2	500.0	205.24	3.436	
13,700.0	7,500.0	13,675.2	7,500.0	106.7	104.8	90.00	-5,797.9	574.2	705.0	496.3	208.72	3.378	
13,800.0	7,500.0	13,775.2	7,500.0	108.4	106.6	90.00	-5,897.9	574.4	704.7	492.5	212.20	3.321	
13,900.0	7,500.0	13,875.2	7,500.0	110.1	108.3	90.00	-5,997.9	574.7	704.5	488.8	215.68	3.266	
14,000.0	7,500.0	13,975.2	7,500.0	111.8	110.0	90.00	-6,097.9	574.9	704.3	485.1	219.16	3.213	
14,100.0	7,500.0	14,075.2	7,500.0	113.5	111.8	90.00	-6,197.9	575.2	704.0	481.4	222.64	3.162	
14,200.0	7,500.0	14,175.2	7,500.0	115.2	113.5	90.00	-6,297.9	575.4	703.8	477.7	226.12	3.112	

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 2F-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 2F-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 2D-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	Vertical	Measured Depth	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		
14,300.0	7,500.0	14,275.2	7,500.0	116.9	115.2	90.00	-6,397.9	575.6	703.6	473.9	229.61	3.064		
14,400.0	7,500.0	14,375.2	7,500.0	118.6	117.0	90.00	-6,497.9	575.9	703.3	470.2	233.09	3.017		
14,500.0	7,500.0	14,475.2	7,500.0	120.4	118.7	90.00	-6,597.9	576.1	703.1	466.5	236.58	2.972		
14,600.0	7,500.0	14,575.2	7,500.0	122.1	120.5	90.00	-6,697.9	576.3	702.8	462.8	240.06	2.928		
14,700.0	7,500.0	14,675.2	7,500.0	123.8	122.2	90.00	-6,797.9	576.6	702.6	459.1	243.55	2.885		
14,800.0	7,500.0	14,775.2	7,500.0	125.5	123.9	90.00	-6,897.9	576.8	702.4	455.3	247.03	2.843		
14,900.0	7,500.0	14,875.2	7,500.0	127.2	125.7	90.00	-6,997.9	577.0	702.1	451.6	250.52	2.803		
15,000.0	7,500.0	14,975.2	7,500.0	128.9	127.4	90.00	-7,097.9	577.3	701.9	447.9	254.01	2.763		
15,100.0	7,500.0	15,075.2	7,500.0	130.6	129.1	90.00	-7,197.9	577.5	701.7	444.2	257.50	2.725		
15,200.0	7,500.0	15,175.2	7,500.0	132.4	130.9	90.00	-7,297.9	577.8	701.4	440.4	260.98	2.688		
15,300.0	7,500.0	15,275.2	7,500.0	134.1	132.6	90.00	-7,397.9	578.0	701.2	436.7	264.47	2.651		
15,400.0	7,500.0	15,375.2	7,500.0	135.8	134.4	90.00	-7,497.9	578.2	700.9	433.0	267.96	2.616		
15,500.0	7,500.0	15,475.2	7,500.0	137.5	136.1	90.00	-7,597.9	578.5	700.7	429.3	271.45	2.581		
15,600.0	7,500.0	15,575.2	7,500.0	139.2	137.8	90.00	-7,697.9	578.7	700.5	425.5	274.94	2.548		
15,700.0	7,500.0	15,675.2	7,500.0	141.0	139.6	90.00	-7,797.9	578.9	700.2	421.8	278.43	2.515		
15,800.0	7,500.0	15,775.2	7,500.0	142.7	141.3	90.00	-7,897.9	579.2	700.0	418.1	281.93	2.483		
15,832.2	7,500.0	15,805.8	7,500.0	143.3	141.9	90.00	-7,928.5	579.3	699.9	417.0	282.95	2.474 SF		
15,841.7	7,500.0	15,805.8	7,500.0	143.4	141.9	90.00	-7,928.5	579.3	700.0	417.3	282.65	2.477		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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									
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	-90.00	0.0	-7.6	7.6						
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-7.6	7.6	7.3	0.30	24.883			
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-7.6	7.6	6.9	0.65	11.577			
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-7.6	7.6	6.6	1.00	7.543 CC, ES			
400.0	400.0	400.0	400.0	0.7	0.7	-158.76	0.0	-7.6	8.4	7.0	1.35	6.191			
500.0	500.0	500.0	500.0	0.9	0.8	-163.77	0.0	-7.6	10.8	9.1	1.70	6.378			
600.0	599.9	599.9	599.9	1.0	1.0	-168.40	0.0	-7.6	15.1	13.0	2.05	7.359			
700.0	699.7	699.7	699.7	1.2	1.2	-171.73	0.0	-7.6	21.1	18.7	2.40	8.797			
800.0	799.4	799.4	799.4	1.4	1.4	-173.96	0.0	-7.6	28.9	26.1	2.75	10.516			
900.0	898.9	898.9	898.9	1.7	1.5	-175.45	0.0	-7.6	38.4	35.3	3.09	12.417			
1,000.0	998.3	998.3	998.3	1.9	1.7	-176.48	0.0	-7.6	49.7	46.3	3.44	14.443			
1,100.0	1,097.4	1,098.4	1,098.4	2.2	1.9	-176.97	0.5	-6.9	62.0	58.2	3.79	16.338			
1,200.0	1,196.3	1,198.8	1,198.8	2.5	2.1	-176.95	2.2	-4.9	74.3	70.1	4.14	17.929			
1,300.0	1,294.9	1,299.4	1,299.2	2.8	2.3	-176.63	4.9	-1.4	86.7	82.2	4.49	19.285			
1,400.0	1,393.3	1,400.1	1,399.8	3.2	2.4	-176.13	8.7	3.4	99.1	94.3	4.85	20.454			
1,494.4	1,485.8	1,495.4	1,494.8	3.5	2.6	-175.54	13.4	9.2	111.0	105.8	5.18	21.417			
1,500.0	1,491.2	1,501.1	1,500.4	3.5	2.6	-175.50	13.7	9.6	111.7	106.5	5.20	21.470			
1,600.0	1,589.1	1,602.3	1,601.2	3.9	2.8	-174.76	19.7	17.2	123.4	117.8	5.56	22.185			
1,700.0	1,686.9	1,704.0	1,702.2	4.3	3.1	-173.87	26.9	26.2	133.4	127.5	5.93	22.516			
1,800.0	1,784.8	1,805.8	1,803.2	4.7	3.3	-172.84	35.3	36.7	141.9	135.6	6.30	22.522			
1,900.0	1,882.6	1,908.0	1,904.2	5.1	3.6	-171.64	44.8	48.5	148.7	142.0	6.68	22.251			
2,000.0	1,980.4	2,007.9	2,002.9	5.5	3.9	-170.43	54.7	61.0	154.7	147.6	7.08	21.848			
2,100.0	2,078.3	2,107.7	2,101.3	5.9	4.1	-169.30	64.6	73.4	160.7	153.2	7.49	21.469			
2,200.0	2,176.1	2,207.5	2,199.8	6.3	4.4	-168.26	74.5	85.8	166.8	158.9	7.90	21.110			
2,300.0	2,273.9	2,307.2	2,298.3	6.7	4.7	-167.29	84.4	98.2	173.0	164.6	8.33	20.772			
2,400.0	2,371.8	2,407.0	2,396.8	7.1	5.0	-166.39	94.3	110.6	179.1	170.4	8.76	20.451			
2,500.0	2,469.6	2,506.8	2,495.3	7.5	5.3	-165.54	104.2	123.0	185.4	176.2	9.20	20.147			
2,600.0	2,567.4	2,606.5	2,593.8	7.9	5.6	-164.76	114.1	135.4	191.6	182.0	9.65	19.859			
2,700.0	2,665.3	2,706.3	2,692.3	8.3	5.9	-164.02	124.1	147.8	197.9	187.8	10.11	19.586			
2,800.0	2,763.1	2,806.1	2,790.8	8.7	6.2	-163.33	134.0	160.3	204.3	193.7	10.57	19.328			
2,900.0	2,860.9	2,905.8	2,889.3	9.1	6.6	-162.68	143.9	172.7	210.6	199.6	11.04	19.082			
3,000.0	2,958.8	3,005.6	2,987.8	9.5	6.9	-162.06	153.8	185.1	217.0	205.5	11.51	18.850			
3,100.0	3,056.6	3,105.4	3,086.3	9.9	7.2	-161.49	163.7	197.5	223.4	211.4	11.99	18.630			
3,200.0	3,154.4	3,205.2	3,184.8	10.3	7.5	-160.94	173.6	209.9	229.8	217.4	12.48	18.421			
3,300.0	3,252.3	3,304.9	3,283.3	10.7	7.8	-160.43	183.5	222.3	236.3	223.3	12.97	18.222			
3,400.0	3,350.1	3,404.7	3,381.8	11.1	8.1	-159.94	193.4	234.7	242.8	229.3	13.46	18.034			
3,500.0	3,447.9	3,504.5	3,480.3	11.5	8.5	-159.48	203.3	247.1	249.2	235.3	13.96	17.855			
3,600.0	3,545.8	3,604.2	3,578.8	11.9	8.8	-159.04	213.2	259.5	255.7	241.3	14.46	17.686			
3,700.0	3,643.6	3,704.0	3,677.3	12.3	9.1	-158.62	223.1	271.9	262.2	247.3	14.96	17.524			
3,800.0	3,741.5	3,803.8	3,775.8	12.7	9.4	-158.22	233.0	284.3	268.8	253.3	15.47	17.371			
3,900.0	3,839.3	3,903.5	3,874.3	13.1	9.7	-157.85	242.9	296.8	275.3	259.3	15.98	17.224			
4,000.0	3,937.1	4,003.3	3,972.8	13.5	10.1	-157.48	252.8	309.2	281.9	265.4	16.50	17.085			
4,100.0	4,035.0	4,103.1	4,071.3	13.9	10.4	-157.14	262.7	321.6	288.4	271.4	17.01	16.952			
4,200.0	4,132.8	4,202.9	4,169.8	14.3	10.7	-156.81	272.6	334.0	295.0	277.5	17.53	16.825			
4,300.0	4,230.6	4,302.6	4,268.3	14.7	11.0	-156.50	282.6	346.4	301.6	283.5	18.05	16.705			
4,400.0	4,328.5	4,402.4	4,366.8	15.1	11.4	-156.20	292.5	358.8	308.1	289.6	18.58	16.589			
4,500.0	4,426.3	4,502.2	4,465.3	15.5	11.7	-155.91	302.4	371.2	314.7	295.6	19.10	16.479			
4,600.0	4,524.1	4,601.9	4,563.8	15.9	12.0	-155.63	312.3	383.6	321.3	301.7	19.63	16.373			
4,700.0	4,622.0	4,701.7	4,662.3	16.3	12.3	-155.37	322.2	396.0	328.0	307.8	20.15	16.272			
4,800.0	4,719.8	4,801.5	4,760.8	16.7	12.6	-155.11	332.1	408.4	334.6	313.9	20.68	16.175			
4,900.0	4,817.6	4,901.2	4,859.3	17.2	13.0	-154.86	342.0	420.8	341.2	320.0	21.22	16.082			
5,000.0	4,915.5	5,001.0	4,957.8	17.6	13.3	-154.63	351.9	433.3	347.8	326.1	21.75	15.993			

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 2F-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 2F-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						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	5,013.3	5,100.8	5,056.3	18.0	13.6	-154.40	361.8	445.7	354.5	332.2	22.28	15.908	
5,200.0	5,111.1	5,200.6	5,154.8	18.4	13.9	-154.18	371.7	458.1	361.1	338.3	22.82	15.826	
5,300.0	5,209.0	5,300.3	5,253.3	18.8	14.3	-153.97	381.6	470.5	367.7	344.4	23.35	15.747	
5,400.0	5,306.8	5,400.1	5,351.8	19.2	14.6	-153.77	391.5	482.9	374.4	350.5	23.89	15.671	
5,500.0	5,404.6	5,499.9	5,450.3	19.6	14.9	-153.57	401.4	495.3	381.1	356.6	24.43	15.598	
5,600.0	5,502.5	5,599.6	5,548.8	20.0	15.3	-153.38	411.3	507.7	387.7	362.7	24.97	15.527	
5,700.0	5,600.3	5,699.4	5,647.3	20.4	15.6	-153.20	421.2	520.1	394.4	368.9	25.51	15.460	
5,800.0	5,698.2	5,799.2	5,745.8	20.8	15.9	-153.02	431.1	532.5	401.0	375.0	26.05	15.394	
5,900.0	5,796.0	5,898.9	5,844.3	21.2	16.2	-152.85	441.1	544.9	407.7	381.1	26.59	15.331	
6,000.0	5,893.8	5,998.7	5,942.8	21.6	16.6	-152.69	451.0	557.3	414.4	387.2	27.14	15.271	
6,100.0	5,991.7	6,098.5	6,041.3	22.0	16.9	-152.53	460.9	569.8	421.1	393.4	27.68	15.212	
6,200.0	6,089.5	6,198.3	6,139.8	22.4	17.2	-152.37	470.8	582.2	427.7	399.5	28.22	15.155	
6,300.0	6,187.3	6,298.0	6,238.3	22.8	17.5	-152.22	480.7	594.6	434.4	405.7	28.77	15.101	
6,400.0	6,285.2	6,397.8	6,336.8	23.2	17.9	-152.07	490.6	607.0	441.1	411.8	29.31	15.048	
6,500.0	6,383.0	6,497.6	6,435.3	23.7	18.2	-151.93	500.5	619.4	447.8	417.9	29.86	14.996	
6,600.0	6,480.8	6,597.3	6,533.8	24.1	18.5	-151.80	510.4	631.8	454.5	424.1	30.41	14.947	
6,700.0	6,578.7	6,697.1	6,632.3	24.5	18.8	-151.66	520.3	644.2	461.2	430.2	30.95	14.899	
6,800.0	6,676.5	6,796.9	6,730.8	24.9	19.2	-151.53	530.2	656.6	467.9	436.4	31.50	14.852	
6,900.0	6,774.3	6,896.6	6,829.3	25.3	19.5	-151.41	540.1	669.0	474.6	442.5	32.05	14.807	
7,000.0	6,872.2	6,996.4	6,927.8	25.7	19.8	-151.28	550.0	681.4	481.3	448.7	32.60	14.763	
7,019.1	6,890.8	7,015.5	6,946.6	25.8	19.9	-151.26	551.9	683.8	482.6	449.9	32.70	14.755	
7,050.0	6,921.1	7,046.3	6,977.0	25.9	20.0	-165.98	555.0	687.6	484.7	451.8	32.89	14.737	
7,100.0	6,970.2	7,095.8	7,025.9	26.0	20.2	169.03	559.9	693.8	488.6	455.3	33.29	14.676	
7,150.0	7,019.0	7,144.7	7,074.2	26.2	20.3	149.59	564.7	699.9	493.0	459.1	33.82	14.577	
7,200.0	7,067.2	7,192.7	7,121.5	26.3	20.5	137.44	569.5	705.8	498.1	463.7	34.47	14.452	
7,250.0	7,114.4	7,252.2	7,180.5	26.4	20.6	130.56	572.3	713.5	503.7	468.6	35.08	14.360	
7,300.0	7,160.3	7,314.2	7,241.8	26.4	20.7	126.47	568.6	721.9	509.2	473.7	35.43	14.372	
7,350.0	7,204.5	7,378.9	7,304.8	26.5	20.8	124.02	557.6	731.0	514.3	478.8	35.48	14.497	
7,400.0	7,246.6	7,446.1	7,368.5	26.5	20.8	122.55	538.8	740.9	519.0	483.8	35.19	14.748	
7,450.0	7,286.4	7,515.9	7,431.9	26.5	20.8	121.68	511.3	751.2	523.0	488.4	34.54	15.141	
7,500.0	7,323.5	7,588.1	7,493.3	26.5	20.7	121.16	475.0	761.9	526.2	492.6	33.56	15.680	
7,550.0	7,357.7	7,662.4	7,551.1	26.5	20.6	120.83	429.8	772.8	528.4	496.1	32.29	16.366	
7,600.0	7,388.7	7,738.2	7,603.6	26.5	20.5	120.58	376.2	783.5	529.5	498.7	30.83	17.173	
7,650.0	7,416.3	7,815.2	7,649.2	26.5	20.4	120.33	315.1	793.8	529.4	500.1	29.35	18.037	
7,700.0	7,440.2	7,892.5	7,686.3	26.5	20.3	120.02	248.1	803.4	528.1	500.1	28.03	18.839	
7,750.0	7,460.3	7,969.6	7,714.0	26.5	20.3	119.61	176.7	812.1	525.5	498.4	27.08	19.409	
7,800.0	7,476.4	8,045.7	7,731.7	26.5	20.3	119.10	103.1	819.6	521.7	495.1	26.63	19.590	
7,850.0	7,488.4	8,120.4	7,739.5	26.6	20.4	118.47	29.1	825.8	516.8	490.1	26.79	19.296	
7,900.0	7,496.2	8,177.5	7,740.0	26.6	20.6	118.10	-27.8	829.9	511.5	484.3	27.22	18.795	
7,950.0	7,499.8	8,227.2	7,740.0	26.7	20.7	118.22	-77.4	833.3	507.4	479.7	27.66	18.345	
7,966.7	7,500.0	8,243.9	7,740.0	26.7	20.8	118.36	-94.0	834.5	506.3	478.5	27.81	18.205	
8,000.0	7,500.0	8,277.1	7,740.0	26.8	20.9	118.48	-127.2	836.8	504.2	476.1	28.12	17.928	
8,100.0	7,500.0	8,376.9	7,740.0	27.0	21.4	118.86	-226.7	843.8	498.1	468.8	29.27	17.014	
8,200.0	7,500.0	8,474.3	7,740.0	27.4	22.0	119.24	-323.9	850.5	492.1	461.5	30.58	16.089	
8,300.0	7,500.0	8,567.2	7,740.0	27.9	22.7	119.54	-416.7	855.7	487.2	455.3	31.90	15.270	
8,400.0	7,500.0	8,660.3	7,740.0	28.5	23.4	119.76	-509.7	859.5	483.7	450.3	33.35	14.505	
8,500.0	7,500.0	8,753.5	7,740.0	29.1	24.2	119.89	-602.8	861.7	481.6	446.7	34.90	13.798	
8,596.8	7,500.0	8,843.7	7,740.0	29.9	25.1	119.94	-693.0	862.4	480.9	444.4	36.50	13.175	
8,600.0	7,500.0	8,846.9	7,740.0	29.9	25.1	119.94	-696.2	862.4	480.9	444.4	36.57	13.151	
8,700.0	7,500.0	8,946.9	7,740.0	30.8	26.1	119.94	-796.2	862.4	480.9	442.2	38.73	12.416	
8,800.0	7,500.0	9,046.9	7,740.0	31.7	27.2	119.94	-896.2	862.4	480.9	439.9	41.00	11.729	
8,900.0	7,500.0	9,146.9	7,740.0	32.7	28.4	119.94	-996.2	862.4	480.9	437.6	43.37	11.090	

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 2F-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 2F-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							
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	9,246.9	7,740.0	33.7	29.6	119.94	-1,096.2	862.4	480.9	435.1	45.81	10.498	
9,100.0	7,500.0	9,347.2	7,740.0	34.8	30.9	119.94	-1,196.5	862.4	480.9	432.6	48.34	9.949	
9,200.0	7,500.0	9,451.1	7,740.0	36.0	32.2	119.98	-1,300.4	863.2	480.3	429.1	51.18	9.383	
9,300.0	7,500.0	9,551.0	7,740.0	37.2	33.6	120.04	-1,400.4	864.2	479.4	425.6	53.79	8.913	
9,400.0	7,500.0	9,651.0	7,740.0	38.4	35.0	120.10	-1,500.4	865.2	478.6	422.1	56.43	8.481	
9,500.0	7,500.0	9,751.0	7,740.0	39.7	36.4	120.16	-1,600.4	866.2	477.7	418.6	59.10	8.082	
9,600.0	7,500.0	9,851.0	7,740.0	41.1	37.9	120.22	-1,700.3	867.2	476.8	415.0	61.81	7.715	
9,700.0	7,500.0	9,951.0	7,740.0	42.4	39.4	120.28	-1,800.3	868.2	476.0	411.4	64.53	7.376	
9,800.0	7,500.0	10,051.0	7,740.0	43.8	40.9	120.34	-1,900.3	869.2	475.1	407.8	67.28	7.062	
9,900.0	7,500.0	10,151.0	7,740.0	45.2	42.4	120.40	-2,000.3	870.2	474.3	404.2	70.04	6.771	
10,000.0	7,500.0	10,251.0	7,740.0	46.6	43.9	120.46	-2,100.3	871.2	473.4	400.6	72.82	6.501	
10,100.0	7,500.0	10,351.0	7,740.0	48.1	45.5	120.53	-2,200.3	872.1	472.5	396.9	75.61	6.250	
10,200.0	7,500.0	10,451.0	7,740.0	49.6	47.1	120.59	-2,300.3	873.1	471.7	393.3	78.41	6.015	
10,300.0	7,500.0	10,551.0	7,740.0	51.1	48.6	120.65	-2,400.3	874.1	470.8	389.6	81.23	5.796	
10,400.0	7,500.0	10,651.0	7,740.0	52.6	50.2	120.71	-2,500.3	875.1	470.0	385.9	84.05	5.592	
10,500.0	7,500.0	10,751.0	7,740.0	54.1	51.8	120.77	-2,600.3	876.1	469.1	382.2	86.87	5.400	
10,600.0	7,500.0	10,851.0	7,740.0	55.6	53.5	120.83	-2,700.2	877.1	468.3	378.6	89.70	5.220	
10,700.0	7,500.0	10,951.0	7,740.0	57.2	55.1	120.90	-2,800.2	878.1	467.4	374.9	92.54	5.051	
10,800.0	7,500.0	11,051.0	7,740.0	58.8	56.7	120.96	-2,900.2	879.1	466.5	371.2	95.38	4.891	
10,900.0	7,500.0	11,151.0	7,740.0	60.3	58.3	121.02	-3,000.2	880.1	465.7	367.5	98.22	4.741	
11,000.0	7,500.0	11,251.0	7,740.0	61.9	60.0	121.09	-3,100.2	881.1	464.8	363.8	101.07	4.599	
11,100.0	7,500.0	11,351.0	7,740.0	63.5	61.6	121.15	-3,200.2	882.1	464.0	360.1	103.92	4.465	
11,200.0	7,500.0	11,451.0	7,740.0	65.1	63.3	121.21	-3,300.2	883.1	463.1	356.4	106.77	4.338	
11,300.0	7,500.0	11,550.9	7,740.0	66.7	65.0	121.28	-3,400.2	884.1	462.3	352.7	109.62	4.217	
11,400.0	7,500.0	11,650.9	7,740.0	68.3	66.6	121.34	-3,500.2	885.1	461.4	349.0	112.47	4.103	
11,500.0	7,500.0	11,750.9	7,740.0	70.0	68.3	121.41	-3,600.2	886.1	460.6	345.3	115.32	3.994	
11,600.0	7,500.0	11,850.9	7,740.0	71.6	70.0	121.47	-3,700.1	887.1	459.7	341.6	118.17	3.890	
11,700.0	7,500.0	11,950.9	7,740.0	73.2	71.6	121.54	-3,800.1	888.1	458.9	337.9	121.02	3.792	
11,800.0	7,500.0	12,050.9	7,740.0	74.9	73.3	121.60	-3,900.1	889.1	458.0	334.2	123.87	3.698	
11,900.0	7,500.0	12,150.9	7,740.0	76.5	75.0	121.67	-4,000.1	890.1	457.2	330.5	126.72	3.608	
12,000.0	7,500.0	12,250.9	7,740.0	78.2	76.7	121.73	-4,100.1	891.1	456.3	326.8	129.56	3.522	
12,100.0	7,500.0	12,350.9	7,740.0	79.8	78.4	121.80	-4,200.1	892.1	455.5	323.1	132.40	3.440	
12,200.0	7,500.0	12,450.9	7,740.0	81.5	80.1	121.86	-4,300.1	893.0	454.7	319.4	135.25	3.362	
12,300.0	7,500.0	12,550.9	7,740.0	83.1	81.8	121.93	-4,400.1	894.0	453.8	315.7	138.09	3.286	
12,400.0	7,500.0	12,650.9	7,740.0	84.8	83.5	122.00	-4,500.1	895.0	453.0	312.0	140.92	3.214	
12,500.0	7,500.0	12,750.9	7,740.0	86.5	85.2	122.06	-4,600.1	896.0	452.1	308.4	143.76	3.145	
12,600.0	7,500.0	12,850.9	7,740.0	88.1	86.9	122.13	-4,700.0	897.0	451.3	304.7	146.59	3.078	
12,700.0	7,500.0	12,950.9	7,740.0	89.8	88.6	122.20	-4,800.0	898.0	450.4	301.0	149.42	3.015	
12,800.0	7,500.0	13,050.9	7,740.0	91.5	90.3	122.26	-4,900.0	899.0	449.6	297.3	152.24	2.953	
12,900.0	7,500.0	13,150.9	7,740.0	93.2	92.0	122.33	-5,000.0	900.0	448.8	293.7	155.07	2.894	
13,000.0	7,500.0	13,250.9	7,740.0	94.9	93.7	122.40	-5,100.0	901.0	447.9	290.0	157.89	2.837	
13,100.0	7,500.0	13,350.9	7,740.0	96.5	95.4	122.47	-5,200.0	902.0	447.1	286.4	160.70	2.782	
13,200.0	7,500.0	13,450.9	7,740.0	98.2	97.1	122.54	-5,300.0	903.0	446.2	282.7	163.52	2.729	
13,300.0	7,500.0	13,550.9	7,740.0	99.9	98.8	122.61	-5,400.0	904.0	445.4	279.1	166.32	2.678	
13,400.0	7,500.0	13,650.8	7,740.0	101.6	100.6	122.68	-5,500.0	905.0	444.6	275.4	169.13	2.628	
13,500.0	7,500.0	13,750.8	7,740.0	103.3	102.3	122.75	-5,600.0	906.0	443.7	271.8	171.93	2.581	
13,600.0	7,500.0	13,850.8	7,740.0	105.0	104.0	122.81	-5,699.9	907.0	442.9	268.2	174.73	2.535	
13,700.0	7,500.0	13,950.8	7,740.0	106.7	105.7	122.88	-5,799.9	908.0	442.0	264.5	177.52	2.490	
13,800.0	7,500.0	14,050.8	7,740.0	108.4	107.4	122.96	-5,899.9	909.0	441.2	260.9	180.31	2.447	
13,900.0	7,500.0	14,150.8	7,740.0	110.1	109.2	123.03	-5,999.9	910.0	440.4	257.3	183.09	2.405	
14,000.0	7,500.0	14,250.8	7,740.0	111.8	110.9	123.10	-6,099.9	911.0	439.5	253.7	185.87	2.365	
14,100.0	7,500.0	14,350.8	7,740.0	113.5	112.6	123.17	-6,199.9	912.0	438.7	250.1	188.64	2.326	

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 2F-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 2F-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							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		
14,200.0	7,500.0	14,450.8	7,740.0	115.2	114.3	123.24	-6,299.9	913.0	437.9	246.5	191.41	2.288		
14,300.0	7,500.0	14,550.8	7,740.0	116.9	116.1	123.31	-6,399.9	914.0	437.0	242.9	194.18	2.251		
14,400.0	7,500.0	14,650.8	7,740.0	118.6	117.8	123.38	-6,499.9	914.9	436.2	239.3	196.94	2.215		
14,500.0	7,500.0	14,750.8	7,740.0	120.4	119.5	123.45	-6,599.9	915.9	435.4	235.7	199.70	2.180		
14,600.0	7,500.0	14,850.8	7,740.0	122.1	121.2	123.53	-6,699.8	916.9	434.5	232.1	202.45	2.146		
14,700.0	7,500.0	14,950.8	7,740.0	123.8	123.0	123.60	-6,799.8	917.9	433.7	228.5	205.19	2.114		
14,800.0	7,500.0	15,050.8	7,740.0	125.5	124.7	123.67	-6,899.8	918.9	432.9	225.0	207.93	2.082		
14,900.0	7,500.0	15,150.8	7,740.0	127.2	126.4	123.75	-6,999.8	919.9	432.1	221.4	210.67	2.051		
15,000.0	7,500.0	15,250.8	7,740.0	128.9	128.2	123.82	-7,099.8	920.9	431.2	217.8	213.40	2.021		
15,100.0	7,500.0	15,350.8	7,740.0	130.6	129.9	123.89	-7,199.8	921.9	430.4	214.3	216.13	1.991		
15,200.0	7,500.0	15,450.8	7,740.0	132.4	131.6	123.97	-7,299.8	922.9	429.6	210.7	218.84	1.963		
15,300.0	7,500.0	15,550.8	7,740.0	134.1	133.4	124.04	-7,399.8	923.9	428.8	207.2	221.56	1.935		
15,400.0	7,500.0	15,650.7	7,740.0	135.8	135.1	124.12	-7,499.8	924.9	427.9	203.7	224.27	1.908		
15,500.0	7,500.0	15,750.7	7,740.0	137.5	136.8	124.19	-7,599.8	925.9	427.1	200.1	226.97	1.882		
15,600.0	7,500.0	15,850.7	7,740.0	139.2	138.6	124.27	-7,699.7	926.9	426.3	196.6	229.67	1.856		
15,700.0	7,500.0	15,950.7	7,740.0	141.0	140.3	124.34	-7,799.7	927.9	425.5	193.1	232.36	1.831		
15,800.0	7,500.0	16,050.7	7,740.0	142.7	142.0	124.42	-7,899.7	928.9	424.6	189.6	235.04	1.807		
15,837.4	7,500.0	16,084.2	7,740.0	143.3	142.6	124.44	-7,933.2	929.2	424.4	188.7	235.66	1.801 SF		
15,841.7	7,500.0	16,084.2	7,740.0	143.4	142.6	124.44	-7,933.2	929.2	424.4	189.0	235.34	1.803		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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				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	92.79	-0.4	7.6	7.6					
100.0	100.0	100.0	100.0	0.2	0.2	92.79	-0.4	7.6	7.6	7.3	0.30	24.913		
187.5	187.5	187.5	187.5	0.3	0.3	90.00	0.0	7.6	7.6	6.9	0.61	12.393 CC		
200.0	200.0	200.0	200.0	0.3	0.3	87.83	0.3	7.6	7.6	6.9	0.65	11.571 ES		
300.0	300.0	299.7	299.6	0.5	0.5	54.39	5.4	7.6	9.3	8.3	1.01	9.201		
400.0	400.0	399.4	399.0	0.7	0.7	-33.01	12.4	8.7	14.5	13.1	1.36	10.654		
500.0	500.0	499.1	498.4	0.9	0.9	-41.28	19.5	11.6	20.0	18.3	1.70	11.743		
600.0	599.9	598.7	597.7	1.0	1.2	-45.09	26.5	16.2	25.2	23.1	2.05	12.261		
700.0	699.7	698.5	696.9	1.2	1.4	-46.93	33.7	22.6	29.9	27.4	2.42	12.354		
800.0	799.4	798.2	796.1	1.4	1.6	-47.71	40.8	30.7	34.0	31.2	2.80	12.148		
900.0	898.9	897.9	895.0	1.7	1.9	-47.79	48.1	40.5	37.6	34.4	3.20	11.738		
1,000.0	998.3	997.6	993.8	1.9	2.2	-47.39	55.3	52.0	40.6	36.9	3.62	11.194		
1,100.0	1,097.4	1,097.3	1,092.4	2.2	2.5	-46.57	62.6	65.3	43.0	38.9	4.07	10.568		
1,200.0	1,196.3	1,197.0	1,190.7	2.5	2.8	-45.39	69.9	80.2	44.8	40.3	4.53	9.902		
1,300.0	1,294.9	1,296.7	1,288.7	2.8	3.2	-43.84	77.3	96.9	46.2	41.2	5.00	9.227		
1,400.0	1,393.3	1,396.3	1,386.3	3.2	3.5	-41.89	84.7	115.3	47.0	41.5	5.48	8.568		
1,494.4	1,485.8	1,490.4	1,478.2	3.5	3.9	-39.67	91.7	134.2	47.3	41.4	5.93	7.978		
1,500.0	1,491.2	1,495.9	1,483.6	3.5	3.9	-39.52	92.1	135.3	47.3	41.4	5.96	7.946		
1,600.0	1,589.1	1,595.5	1,580.4	3.9	4.4	-35.97	99.5	157.1	48.0	41.7	6.37	7.548		
1,700.0	1,686.9	1,695.3	1,677.2	4.3	4.8	-31.31	107.0	180.1	49.7	43.0	6.68	7.441		
1,800.0	1,784.8	1,795.2	1,774.1	4.7	5.2	-26.91	114.5	203.3	51.7	44.7	6.95	7.436		
1,900.0	1,882.6	1,895.1	1,871.0	5.1	5.7	-22.85	122.0	226.5	54.0	46.8	7.20	7.495		
2,000.0	1,980.4	1,995.0	1,967.9	5.5	6.1	-19.14	129.4	249.6	56.5	49.1	7.44	7.596		
2,100.0	2,078.3	2,094.9	2,064.8	5.9	6.6	-15.77	136.9	272.8	59.2	51.6	7.67	7.720		
2,200.0	2,176.1	2,194.8	2,161.7	6.3	7.0	-12.70	144.4	295.9	62.2	54.3	7.92	7.853		
2,300.0	2,273.9	2,294.7	2,258.6	6.7	7.5	-9.91	151.9	319.1	65.3	57.1	8.17	7.987		
2,400.0	2,371.8	2,394.6	2,355.5	7.1	8.0	-7.38	159.4	342.2	68.5	60.1	8.44	8.112		
2,500.0	2,469.6	2,494.5	2,452.4	7.5	8.4	-5.08	166.8	365.4	71.9	63.1	8.73	8.227		
2,600.0	2,567.4	2,594.4	2,549.3	7.9	8.9	-2.99	174.3	388.6	75.3	66.3	9.05	8.327		
2,700.0	2,665.3	2,694.3	2,646.2	8.3	9.3	-1.09	181.8	411.7	78.9	69.5	9.38	8.413		
2,800.0	2,763.1	2,794.2	2,743.1	8.7	9.8	0.65	189.3	434.9	82.5	72.8	9.72	8.484		
2,900.0	2,860.9	2,894.1	2,840.0	9.1	10.3	2.24	196.7	458.0	86.2	76.1	10.09	8.543		
3,000.0	2,958.8	2,994.0	2,936.9	9.5	10.7	3.70	204.2	481.2	90.0	79.5	10.47	8.589		
3,100.0	3,056.6	3,093.9	3,033.8	9.9	11.2	5.04	211.7	504.3	93.8	82.9	10.87	8.626		
3,200.0	3,154.4	3,193.8	3,130.7	10.3	11.7	6.27	219.2	527.5	97.6	86.4	11.28	8.653		
3,300.0	3,252.3	3,293.7	3,227.6	10.7	12.1	7.41	226.7	550.7	101.5	89.8	11.71	8.673		
3,400.0	3,350.1	3,393.6	3,324.4	11.1	12.6	8.47	234.1	573.8	105.5	93.3	12.14	8.686		
3,500.0	3,447.9	3,493.5	3,421.3	11.5	13.1	9.45	241.6	597.0	109.5	96.9	12.59	8.695		
3,600.0	3,545.8	3,593.4	3,518.2	11.9	13.5	10.36	249.1	620.1	113.5	100.4	13.04	8.699		
3,700.0	3,643.6	3,693.3	3,615.1	12.3	14.0	11.21	256.6	643.3	117.5	104.0	13.51	8.700		
3,800.0	3,741.5	3,793.2	3,712.0	12.7	14.5	12.00	264.1	666.5	121.6	107.6	13.98	8.698		
3,900.0	3,839.3	3,893.1	3,808.9	13.1	14.9	12.74	271.5	689.6	125.6	111.2	14.45	8.694		
4,000.0	3,937.1	3,993.1	3,905.8	13.5	15.4	13.43	279.0	712.8	129.7	114.8	14.93	8.689		
4,100.0	4,035.0	4,093.0	4,002.7	13.9	15.9	14.09	286.5	735.9	133.8	118.4	15.42	8.681		
4,200.0	4,132.8	4,192.9	4,099.6	14.3	16.3	14.70	294.0	759.1	138.0	122.1	15.91	8.673		
4,300.0	4,230.6	4,292.8	4,196.5	14.7	16.8	15.27	301.4	782.2	142.1	125.7	16.40	8.665		
4,400.0	4,328.5	4,392.7	4,293.4	15.1	17.3	15.82	308.9	805.4	146.3	129.4	16.90	8.655		
4,500.0	4,426.3	4,492.6	4,390.3	15.5	17.7	16.33	316.4	828.6	150.5	133.1	17.40	8.646		
4,600.0	4,524.1	4,592.5	4,487.2	15.9	18.2	16.82	323.9	851.7	154.6	136.7	17.91	8.636		
4,700.0	4,622.0	4,692.4	4,584.1	16.3	18.7	17.28	331.4	874.9	158.8	140.4	18.41	8.626		
4,800.0	4,719.8	4,792.3	4,681.0	16.7	19.1	17.72	338.8	898.0	163.0	144.1	18.92	8.616		
4,900.0	4,817.6	4,892.2	4,777.9	17.2	19.6	18.13	346.3	921.2	167.3	147.8	19.43	8.606		

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 2F-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 2F-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							
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
5,000.0	4,915.5	4,992.1	4,874.8	17.6	20.1	18.53	353.8	944.3	171.5	151.5	19.95	8.596	
5,100.0	5,013.3	5,092.0	4,971.7	18.0	20.5	18.90	361.3	967.5	175.7	155.2	20.46	8.586	
5,200.0	5,111.1	5,191.9	5,068.6	18.4	21.0	19.26	368.8	990.7	179.9	159.0	20.98	8.576	
5,300.0	5,209.0	5,291.8	5,165.5	18.8	21.5	19.60	376.2	1,013.8	184.2	162.7	21.50	8.567	
5,400.0	5,306.8	5,391.7	5,262.3	19.2	21.9	19.93	383.7	1,037.0	188.4	166.4	22.02	8.557	
5,500.0	5,404.6	5,491.6	5,359.2	19.6	22.4	20.24	391.2	1,060.1	192.7	170.1	22.54	8.548	
5,600.0	5,502.5	5,591.5	5,456.1	20.0	22.9	20.54	398.7	1,083.3	196.9	173.9	23.06	8.540	
5,700.0	5,600.3	5,691.4	5,553.0	20.4	23.3	20.82	406.2	1,106.5	201.2	177.6	23.59	8.531	
5,800.0	5,698.2	5,791.3	5,649.9	20.8	23.8	21.09	413.6	1,129.6	205.5	181.4	24.11	8.523	
5,900.0	5,796.0	5,891.2	5,746.8	21.2	24.3	21.36	421.1	1,152.8	209.8	185.1	24.64	8.514	
6,000.0	5,893.8	5,991.1	5,843.7	21.6	24.8	21.61	428.6	1,175.9	214.0	188.9	25.16	8.506	
6,100.0	5,991.7	6,091.0	5,940.6	22.0	25.2	21.85	436.1	1,199.1	218.3	192.6	25.69	8.499	
6,200.0	6,089.5	6,190.9	6,037.5	22.4	25.7	22.08	443.5	1,222.2	222.6	196.4	26.22	8.491	
6,300.0	6,187.3	6,290.8	6,134.4	22.8	26.2	22.31	451.0	1,245.4	226.9	200.1	26.74	8.484	
6,400.0	6,285.2	6,390.7	6,231.3	23.2	26.6	22.52	458.5	1,268.6	231.2	203.9	27.27	8.477	
6,500.0	6,383.0	6,490.7	6,328.2	23.7	27.1	22.73	466.0	1,291.7	235.5	207.7	27.80	8.470	
6,600.0	6,480.8	6,590.6	6,425.1	24.1	27.6	22.93	473.5	1,314.9	239.8	211.4	28.33	8.463	
6,700.0	6,578.7	6,690.5	6,522.0	24.5	28.0	23.13	480.9	1,338.0	244.1	215.2	28.86	8.457	
6,800.0	6,676.5	6,790.4	6,618.9	24.9	28.5	23.31	488.4	1,361.2	248.4	219.0	29.39	8.451	
6,900.0	6,774.3	6,890.3	6,715.8	25.3	29.0	23.49	495.9	1,384.3	252.7	222.8	29.92	8.445	
7,000.0	6,872.2	6,990.2	6,812.7	25.7	29.4	23.67	503.4	1,407.5	257.0	226.5	30.45	8.439	
7,019.1	6,890.8	7,009.2	6,831.2	25.8	29.5	23.70	504.8	1,411.9	257.8	227.3	30.56	8.438	
7,050.0	6,921.1	7,040.1	6,861.1	25.9	29.7	9.06	507.1	1,419.1	259.1	228.5	30.62	8.465	
7,100.0	6,970.2	7,089.9	6,909.3	26.0	29.9	-16.94	510.8	1,430.6	261.3	231.0	30.30	8.624	
7,150.0	7,019.0	7,139.0	6,957.0	26.2	30.1	-38.67	514.5	1,442.0	263.6	234.1	29.53	8.927	
7,200.0	7,067.2	7,187.2	7,003.8	26.3	30.4	-54.23	518.1	1,453.2	266.6	238.2	28.43	9.378	
7,250.0	7,114.4	7,234.1	7,049.3	26.4	30.6	-65.61	521.6	1,464.0	270.7	243.5	27.19	9.956	
7,300.0	7,160.3	7,279.3	7,093.1	26.4	30.8	-74.52	525.0	1,474.5	276.7	250.5	26.15	10.582	
7,350.0	7,204.5	7,322.5	7,135.0	26.5	31.0	-81.83	528.3	1,484.5	282.2	259.5	25.69	11.103	
7,400.0	7,246.6	7,372.0	7,183.1	26.5	31.2	-88.67	530.3	1,496.0	296.5	270.3	26.15	11.337	
7,450.0	7,286.4	7,426.0	7,235.5	26.5	31.4	-94.72	527.8	1,508.6	309.6	282.3	27.36	11.318	
7,500.0	7,323.5	7,483.8	7,291.1	26.5	31.6	-100.09	519.4	1,521.8	324.2	295.3	28.89	11.222	
7,550.0	7,357.7	7,546.2	7,349.9	26.5	31.8	-104.88	504.0	1,535.9	339.8	309.4	30.36	11.194	
7,600.0	7,388.7	7,614.0	7,411.5	26.5	31.9	-109.20	479.8	1,550.6	355.8	324.4	31.44	11.318	
7,650.0	7,416.3	7,688.2	7,475.2	26.5	32.0	-113.06	445.1	1,565.9	371.7	339.8	31.88	11.657	
7,700.0	7,440.2	7,769.6	7,539.4	26.5	32.1	-116.48	397.6	1,581.2	386.7	355.2	31.54	12.262	
7,750.0	7,460.3	7,858.7	7,601.4	26.5	32.2	-119.39	335.5	1,596.0	400.2	369.9	30.33	13.194	
7,800.0	7,476.4	7,955.6	7,657.4	26.5	32.2	-121.74	257.6	1,609.4	411.4	383.0	28.40	14.487	
7,850.0	7,488.4	8,059.6	7,702.3	26.6	32.3	-123.41	164.6	1,620.1	419.5	393.4	26.13	16.055	
7,900.0	7,496.2	8,168.6	7,731.0	26.6	32.4	-124.33	59.9	1,627.0	424.0	399.7	24.27	17.469	
7,950.0	7,499.8	8,275.3	7,740.0	26.7	32.5	-124.45	-46.2	1,629.1	424.5	400.9	23.62	17.970	
7,966.7	7,500.0	8,291.9	7,740.0	26.7	32.5	-124.44	-62.9	1,629.1	424.3	400.6	23.74	17.873	
7,966.7	7,500.0	8,291.9	7,740.0	26.7	32.5	-124.44	-62.9	1,629.1	424.3	400.6	23.74	17.873	
8,000.0	7,500.0	8,325.3	7,740.0	26.8	32.5	-124.44	-96.2	1,629.1	424.3	400.3	24.01	17.673	
8,100.0	7,500.0	8,425.3	7,740.0	27.0	32.8	-124.44	-196.2	1,629.1	424.3	399.4	24.98	16.985	
8,200.0	7,500.0	8,525.3	7,740.0	27.4	33.1	-124.44	-296.2	1,629.1	424.3	398.1	26.24	16.170	
8,300.0	7,500.0	8,625.3	7,740.0	27.9	33.5	-124.44	-396.2	1,629.1	424.3	396.6	27.75	15.292	
8,400.0	7,500.0	8,725.3	7,740.0	28.5	34.0	-124.44	-496.2	1,629.1	424.3	394.9	29.47	14.401	
8,500.0	7,500.0	8,825.3	7,740.0	29.1	34.5	-124.44	-596.2	1,629.1	424.3	393.0	31.36	13.533	
8,600.0	7,500.0	8,925.3	7,740.0	29.9	35.2	-124.44	-696.2	1,629.1	424.3	391.0	33.39	12.708	
8,700.0	7,500.0	9,025.3	7,740.0	30.8	35.9	-124.44	-796.2	1,629.1	424.3	388.8	35.55	11.937	
8,800.0	7,500.0	9,125.3	7,740.0	31.7	36.7	-124.44	-896.2	1,629.1	424.3	386.5	37.81	11.224	

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 2F-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 2F-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)			
8,900.0	7,500.0	9,225.3	7,740.0	32.7	37.5	-124.44	-996.2	1,629.1	424.3	384.2	40.15	10.570	
9,000.0	7,500.0	9,325.3	7,740.0	33.7	38.4	-124.44	-1,096.2	1,629.1	424.3	381.8	42.56	9.972	
9,100.0	7,500.0	9,425.3	7,740.0	34.8	39.4	-124.44	-1,196.2	1,629.1	424.3	379.3	45.02	9.425	
9,200.0	7,500.0	9,525.3	7,740.0	36.0	40.4	-124.44	-1,296.2	1,629.1	424.3	376.8	47.54	8.926	
9,300.0	7,500.0	9,625.3	7,740.0	37.2	41.5	-124.44	-1,396.2	1,629.1	424.3	374.3	50.10	8.470	
9,400.0	7,500.0	9,725.3	7,740.0	38.4	42.6	-124.44	-1,496.2	1,629.1	424.3	371.7	52.69	8.053	
9,500.0	7,500.0	9,825.3	7,740.0	39.7	43.8	-124.44	-1,596.2	1,629.1	424.3	369.0	55.32	7.671	
9,600.0	7,500.0	9,925.3	7,740.0	41.1	45.0	-124.44	-1,696.2	1,629.1	424.3	366.4	57.97	7.321	
9,700.0	7,500.0	10,025.3	7,740.0	42.4	46.2	-124.44	-1,796.2	1,629.1	424.3	363.7	60.64	6.998	
9,800.0	7,500.0	10,125.3	7,740.0	43.8	47.5	-124.44	-1,896.2	1,629.1	424.3	361.0	63.33	6.700	
9,900.0	7,500.0	10,225.3	7,740.0	45.2	48.8	-124.44	-1,996.2	1,629.1	424.3	358.3	66.05	6.425	
10,000.0	7,500.0	10,325.3	7,740.0	46.6	50.1	-124.44	-2,096.2	1,629.1	424.3	355.6	68.77	6.170	
10,100.0	7,500.0	10,425.3	7,740.0	48.1	51.5	-124.44	-2,196.2	1,629.1	424.3	352.8	71.51	5.934	
10,200.0	7,500.0	10,525.3	7,740.0	49.6	52.8	-124.44	-2,296.2	1,629.1	424.3	350.1	74.27	5.714	
10,300.0	7,500.0	10,625.3	7,740.0	51.1	54.2	-124.44	-2,396.2	1,629.1	424.3	347.3	77.03	5.509	
10,400.0	7,500.0	10,725.3	7,740.0	52.6	55.7	-124.44	-2,496.2	1,629.1	424.3	344.5	79.80	5.317	
10,500.0	7,500.0	10,825.3	7,740.0	54.1	57.1	-124.44	-2,596.2	1,629.1	424.3	341.8	82.59	5.138	
10,600.0	7,500.0	10,925.3	7,740.0	55.6	58.6	-124.44	-2,696.2	1,629.1	424.3	339.0	85.38	4.970	
10,700.0	7,500.0	11,025.3	7,740.0	57.2	60.0	-124.44	-2,796.2	1,629.1	424.3	336.2	88.17	4.813	
10,800.0	7,500.0	11,125.3	7,740.0	58.8	61.5	-124.44	-2,896.2	1,629.1	424.3	333.4	90.98	4.664	
10,900.0	7,500.0	11,225.3	7,740.0	60.3	63.0	-124.44	-2,996.2	1,629.1	424.3	330.6	93.79	4.525	
11,000.0	7,500.0	11,325.3	7,740.0	61.9	64.5	-124.44	-3,096.2	1,629.1	424.3	327.7	96.60	4.393	
11,100.0	7,500.0	11,425.3	7,740.0	63.5	66.1	-124.44	-3,196.2	1,629.1	424.3	324.9	99.42	4.268	
11,200.0	7,500.0	11,525.3	7,740.0	65.1	67.6	-124.44	-3,296.2	1,629.1	424.3	322.1	102.25	4.150	
11,300.0	7,500.0	11,625.3	7,740.0	66.7	69.2	-124.44	-3,396.2	1,629.1	424.3	319.3	105.08	4.038	
11,400.0	7,500.0	11,725.3	7,740.0	68.3	70.7	-124.44	-3,496.2	1,629.1	424.3	316.4	107.91	3.932	
11,500.0	7,500.0	11,825.3	7,740.0	70.0	72.3	-124.44	-3,596.2	1,629.1	424.3	313.6	110.75	3.832	
11,600.0	7,500.0	11,925.3	7,740.0	71.6	73.9	-124.44	-3,696.2	1,629.1	424.3	310.8	113.59	3.736	
11,700.0	7,500.0	12,025.3	7,740.0	73.2	75.5	-124.44	-3,796.2	1,629.1	424.3	307.9	116.43	3.645	
11,800.0	7,500.0	12,125.3	7,740.0	74.9	77.1	-124.44	-3,896.2	1,629.1	424.3	305.1	119.27	3.558	
11,900.0	7,500.0	12,225.3	7,740.0	76.5	78.6	-124.44	-3,996.2	1,629.1	424.3	302.2	122.12	3.475	
12,000.0	7,500.0	12,325.3	7,740.0	78.2	80.3	-124.44	-4,096.2	1,629.1	424.3	299.4	124.97	3.396	
12,100.0	7,500.0	12,425.3	7,740.0	79.8	81.9	-124.44	-4,196.2	1,629.1	424.3	296.5	127.83	3.320	
12,200.0	7,500.0	12,525.3	7,740.0	81.5	83.5	-124.44	-4,296.2	1,629.1	424.3	293.7	130.68	3.247	
12,300.0	7,500.0	12,625.3	7,740.0	83.1	85.1	-124.44	-4,396.2	1,629.1	424.3	290.8	133.54	3.178	
12,400.0	7,500.0	12,725.3	7,740.0	84.8	86.7	-124.44	-4,496.2	1,629.1	424.3	288.0	136.40	3.111	
12,500.0	7,500.0	12,825.3	7,740.0	86.5	88.4	-124.44	-4,596.2	1,629.1	424.3	285.1	139.26	3.047	
12,600.0	7,500.0	12,925.3	7,740.0	88.1	90.0	-124.44	-4,696.2	1,629.1	424.3	282.2	142.12	2.986	
12,700.0	7,500.0	13,025.3	7,740.0	89.8	91.7	-124.44	-4,796.2	1,629.1	424.3	279.4	144.98	2.927	
12,800.0	7,500.0	13,125.3	7,740.0	91.5	93.3	-124.44	-4,896.2	1,629.1	424.3	276.5	147.85	2.870	
12,900.0	7,500.0	13,225.3	7,740.0	93.2	94.9	-124.44	-4,996.2	1,629.1	424.3	273.6	150.72	2.816	
13,000.0	7,500.0	13,325.3	7,740.0	94.9	96.6	-124.44	-5,096.2	1,629.1	424.3	270.8	153.58	2.763	
13,100.0	7,500.0	13,425.3	7,740.0	96.5	98.3	-124.44	-5,196.2	1,629.1	424.3	267.9	156.45	2.712	
13,200.0	7,500.0	13,525.3	7,740.0	98.2	99.9	-124.44	-5,296.2	1,629.1	424.3	265.0	159.32	2.663	
13,300.0	7,500.0	13,625.3	7,740.0	99.9	101.6	-124.44	-5,396.2	1,629.1	424.3	262.2	162.20	2.616	
13,400.0	7,500.0	13,725.3	7,740.0	101.6	103.3	-124.44	-5,496.2	1,629.1	424.3	259.3	165.07	2.571	
13,500.0	7,500.0	13,825.3	7,740.0	103.3	104.9	-124.44	-5,596.2	1,629.1	424.3	256.4	167.94	2.527	
13,600.0	7,500.0	13,925.3	7,740.0	105.0	106.6	-124.44	-5,696.2	1,629.1	424.3	253.5	170.82	2.484	
13,700.0	7,500.0	14,025.3	7,740.0	106.7	108.3	-124.44	-5,796.2	1,629.1	424.3	250.7	173.69	2.443	
13,800.0	7,500.0	14,125.3	7,740.0	108.4	109.9	-124.44	-5,896.2	1,629.1	424.3	247.8	176.57	2.403	
13,900.0	7,500.0	14,225.3	7,740.0	110.1	111.6	-124.44	-5,996.2	1,629.1	424.3	244.9	179.45	2.365	
14,000.0	7,500.0	14,325.3	7,740.0	111.8	113.3	-124.44	-6,096.2	1,629.1	424.3	242.0	182.32	2.327	

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 2F-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 2F-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

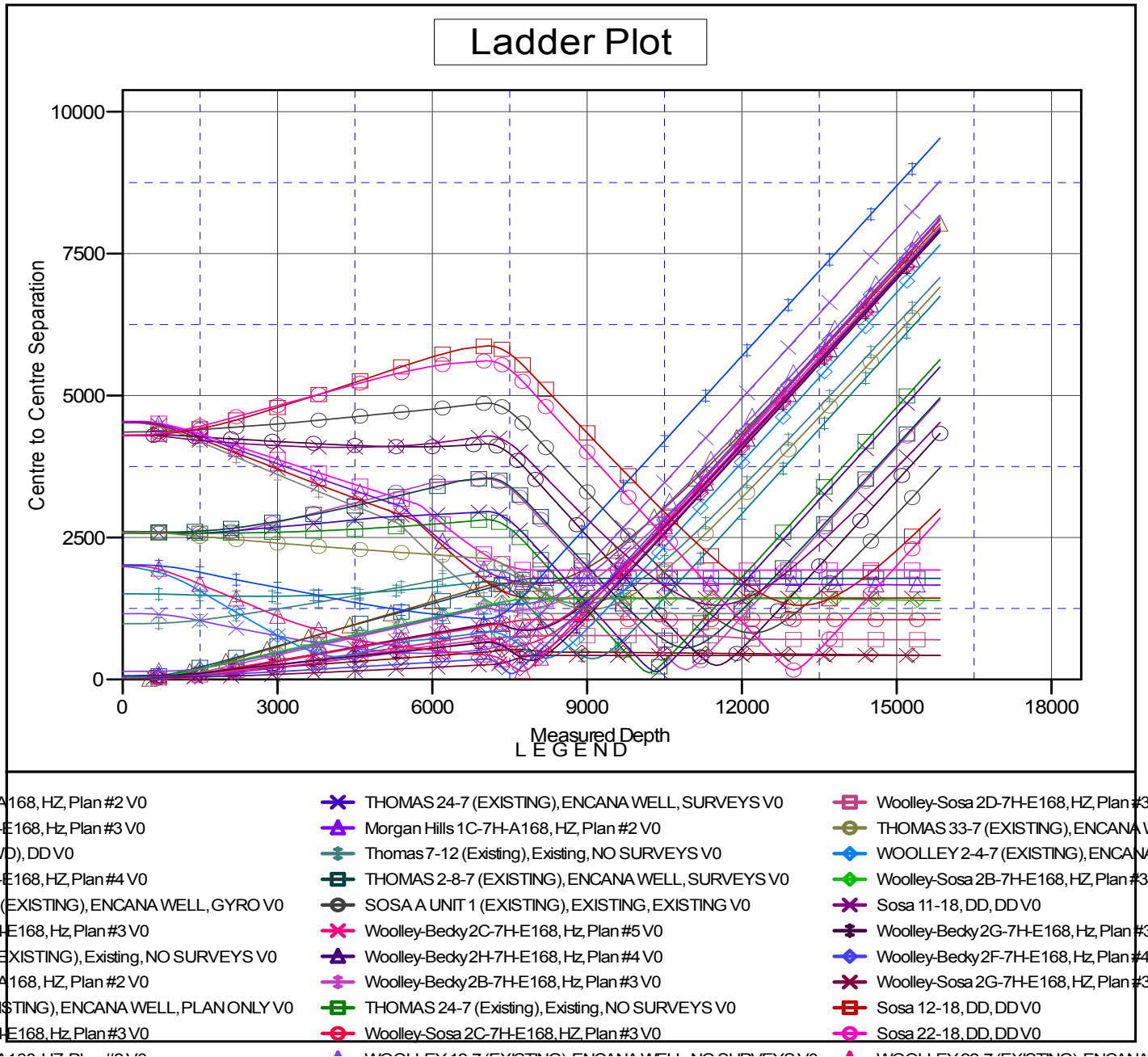
Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
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)				
14,100.0	7,500.0	14,425.3	7,740.0	113.5	115.0	-124.44	-6,196.2	1,629.1	424.3	239.1	185.20	2.291		
14,200.0	7,500.0	14,525.3	7,740.0	115.2	116.7	-124.44	-6,296.2	1,629.1	424.3	236.3	188.08	2.256		
14,300.0	7,500.0	14,625.3	7,740.0	116.9	118.4	-124.44	-6,396.2	1,629.1	424.3	233.4	190.96	2.222		
14,400.0	7,500.0	14,725.3	7,740.0	118.6	120.1	-124.44	-6,496.2	1,629.1	424.3	230.5	193.84	2.189		
14,500.0	7,500.0	14,825.3	7,740.0	120.4	121.8	-124.44	-6,596.2	1,629.1	424.3	227.6	196.72	2.157		
14,600.0	7,500.0	14,925.3	7,740.0	122.1	123.4	-124.44	-6,696.2	1,629.1	424.3	224.7	199.61	2.126		
14,700.0	7,500.0	15,025.3	7,740.0	123.8	125.1	-124.44	-6,796.2	1,629.1	424.3	221.9	202.49	2.096		
14,800.0	7,500.0	15,125.3	7,740.0	125.5	126.8	-124.44	-6,896.2	1,629.1	424.3	219.0	205.37	2.066		
14,900.0	7,500.0	15,225.3	7,740.0	127.2	128.5	-124.44	-6,996.2	1,629.1	424.3	216.1	208.25	2.038		
15,000.0	7,500.0	15,325.3	7,740.0	128.9	130.2	-124.44	-7,096.2	1,629.1	424.4	213.2	211.14	2.010		
15,100.0	7,500.0	15,425.3	7,740.0	130.6	131.9	-124.44	-7,196.2	1,629.1	424.4	210.3	214.02	1.983		
15,200.0	7,500.0	15,525.3	7,740.0	132.4	133.6	-124.44	-7,296.2	1,629.1	424.4	207.4	216.91	1.956		
15,300.0	7,500.0	15,625.3	7,740.0	134.1	135.3	-124.44	-7,396.2	1,629.1	424.4	204.6	219.79	1.931		
15,400.0	7,500.0	15,725.3	7,740.0	135.8	137.1	-124.44	-7,496.2	1,629.1	424.4	201.7	222.68	1.906		
15,500.0	7,500.0	15,825.3	7,740.0	137.5	138.8	-124.44	-7,596.2	1,629.1	424.4	198.8	225.56	1.881		
15,600.0	7,500.0	15,925.3	7,740.0	139.2	140.5	-124.44	-7,696.2	1,629.1	424.4	195.9	228.45	1.858		
15,700.0	7,500.0	16,025.3	7,740.0	141.0	142.2	-124.44	-7,796.2	1,629.1	424.4	193.0	231.34	1.834		
15,800.0	7,500.0	16,125.3	7,740.0	142.7	143.9	-124.44	-7,896.2	1,629.1	424.4	190.1	234.23	1.812		
15,841.7	7,500.0	16,166.9	7,740.0	143.4	144.6	-124.44	-7,937.9	1,629.1	424.4	188.9	235.43	1.802 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2F-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 2F-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 2F-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